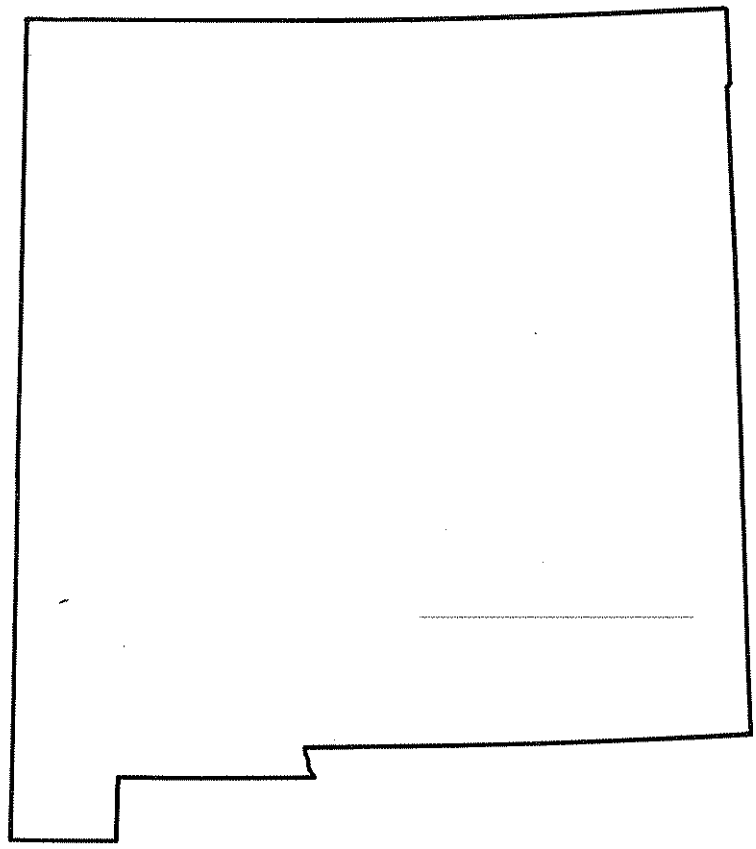
Water Resources Data
New Mexico
Water Year 1986



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-86-1
Prepared in cooperation with the State of New Mexico
and with other agencies

October 1, 1978

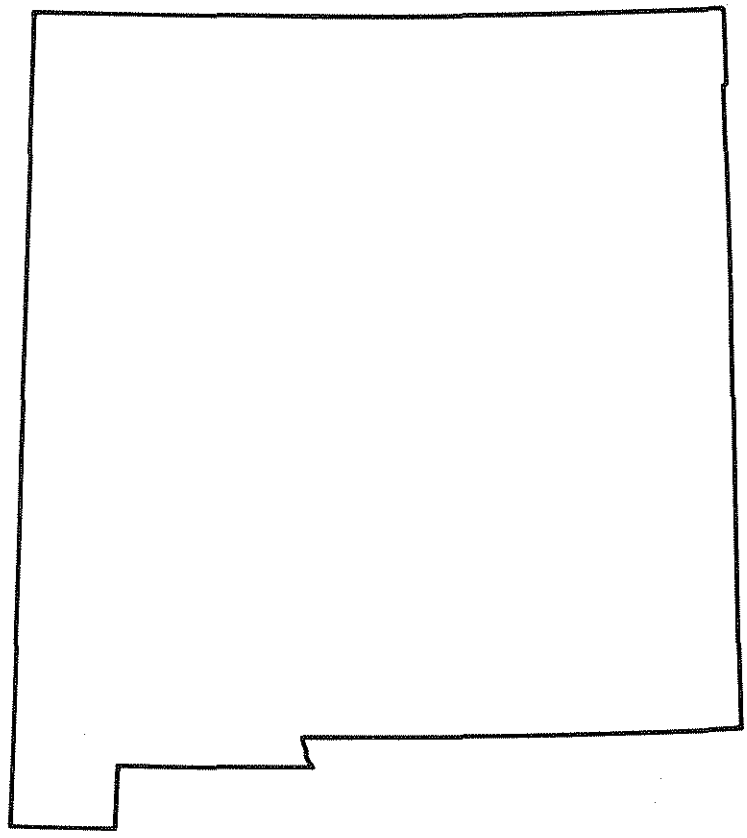
FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

Water Resources Data New Mexico Water Year 1986

by Linda V. Beal and Robert L. Gold



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-86-1
Prepared in cooperation with the State of New Mexico
and with other agencies

DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information on the
water program in New Mexico write to
District Chief, Water Resources Division
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4501 Indian School Rd. NE, Suite 200
Albuquerque, New Mexico 87110

1987

PREFACE

This report was prepared by personnel of the New Mexico District of the Water Resources Division of the U.S. Geological Survey under the supervision of Robert L. Knutilla, District Chief, and James F. Blakey, Regional Hydrologist, Central Region. It was done in cooperation with various water agencies in the State of New Mexico.

This report is one of a series issued for each State. General direction for the series is by Phillip Cohen, Chief Hydrologist, U.S. Geological Survey, and James F. Daniel, Assistant Chief Hydrologist for Scientific Information Management.

ACKNOWLEDGMENTS

Publication of the annual water-data report requires the combined efforts of a large part of the New Mexico District staff. The following people contributed to the production of the 1986 water year report:

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16. Abstract (Limit: 200 words)

Water resources data for the 1986 water year for New Mexico consist of records of discharge and water quality of streams; stage, contents and water quality of lakes and reservoirs; and water levels and water quality in wells and springs. This report contains discharge records for 166 gaging stations; stage and contents for 24 lakes and reservoirs; water quality for 64 gaging stations and 168 wells; and water levels at 111 observation wells. Also included are 135 crest-stage partial-record stations. Additional water data were collected at various sites, not involved in the systematic data collection program, and are published as miscellaneous measurements. Also, one seepage investigation is published this year. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Mexico.

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Department of Commerce

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[Letters after station name designate type of data: (c) chemical, (d) discharge, (e) elevation, stage or contents, (m) microbiological, (s) sediment, (t) water temperature]

GROUND-WATER LEVELS

GROUND-WATER LEVELS

WATER-RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1986

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of New Mexico each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - New Mexico."

Water-resources data for the current year for New Mexico consist of records of discharge and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 166 gaging stations (3 of which are low flow only); stage and contents for 24 lakes and reservoirs; water quality for 64 gaging stations, 2 partial-record stations, 2 reservoirs, 1 spring, 7 miscellaneous sampling sites, and 168 wells; and water levels at 111 observation wells. Also included are 135 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data collection program, and are published as miscellaneous measurements. One seepage investigation was made during the year. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Mexico.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series, then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities of the United States or may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a state-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released in separate reports. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a state-boundary basis.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NM-86-1." These water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

COOPERATION

The U.S. Geological Survey and agencies of the State of New Mexico have had joint-funding agreements for the collection of streamflow records since 1930 and for water-quality records since 1940. Organizations that assisted in collecting the data in this report through joint-funding agreement with the Survey are:

New Mexico State Engineer Office, S.E. Reynolds, State Engineer.

New Mexico Interstate Stream Commission, S.E. Reynolds, Secretary.

Pecos River Commission, W.E. Hale, Federal representative and Chairman;
Walter Gerrells, Commissioner for New Mexico;
B.L. Moody, Commissioner for Texas.

New Mexico State Highway and Transportation Department, Dewey Lonsberry, Secretary.

Costilla Creek Compact Commission, S.E. Reynolds, Commissioner for New Mexico;
J.A. Danielson, Commissioner for Colorado.

Albuquerque Metropolitan Arroyo Flood Control Authority, R.E. Leonard,
Executive Engineer.

City of Raton, Roger Carlson, Mayor.

Vermejo Conservancy District, N.C. Stillinger,
Attorney at Law.

City of Alamogordo, Dan Malone, City Manager.

Financial assistance for the collection of water-resources data published in this report was provided by the Corps of Engineers, U.S. Army, for 29 gaging stations; by the Bureau of Reclamation, U.S. Department of Interior, for 8 gaging stations; by the Bureau of Indian Affairs, U.S. Department of Interior, for 8 gaging stations; and by the Bureau of Land Management, U.S. Department of Interior, for 3 gaging stations.

Assistance in the form of services was provided by the Carlsbad Irrigation District.

Some data have been collected by contractors in accordance with U.S. Geological Survey specifications and under Geological Survey quality control. Organizations that provided data are recognized in the station description.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Perennial streams in New Mexico generally are in mountainous regions in the north-central, south-central, and southwestern parts of the State. Other perennial streams include the San Juan and Animas Rivers in northwestern New Mexico, which originate in the San Juan Mountains of southwestern Colorado. Several reaches of the Pecos River south of Santa Rosa have perennial flow under natural conditions that is maintained by relatively large spring discharges. Large discharges in perennial streams normally are the result of spring snowmelt in the mountains, which may last several months.

Ephemeral streams are present in the remainder of the State. Some of these streams, such as the Rio Puerco, have deeply incised channels; whereas others, especially those on the eastern plains, are swales without any well-defined channel. Large discharges in ephemeral streams generally are caused by intense, short-duration thunderstorms (normally occurring from mid-June to mid-October); the discharge usually lasts for only a few hours.

During water year 1986, streamflow throughout the State generally was well above normal as a result of greater than average snowpack. The quantity of streamflow was most notable along the Rio Grande where streamflow has been above normal since about 1979. At the gaging station, 08276500 (Rio Grande below Taos Junction Bridge near Taos), 1986 monthly mean flows ranged from a low of 149 percent of normal in August to a high of 809 percent of normal in July. The effect of the continued above normal streamflow was reflected in the combined storage at Elephant Butte and Caballo reservoirs, which ranged from 86 to 94 percent of combined capacity throughout the water year.

Gaging stations operated on other streams in the State also recorded monthly streamflows well above normal. For example, at two index stations, 08378500 (Pecos River near Pecos), and 08408500 (Delaware River near Red Bluff), a majority of monthly mean discharges were considered excessive. Excessive discharge is defined as a discharge greater than the 75-percent quartile. This means that the discharge was greater than 75-percent of the monthly mean discharges arranged in order of magnitude for water years 1951-80. Deficient discharges (less than the 25-percent quartile) were recorded from time to time at some gaging stations, but were not as common as the excessive discharges.

Discharge for water year 1986 at four index streamflow-gaging stations compared to median annual discharge for water years 1951-80 at the same stations is listed in the table below:

Station number	Station name	Discharge for water year 1986, in acre-feet	Median annual discharge for water years 1951-80, in acre-feet	Percent of median
08276500	Rio Grande below Taos Junction Bridge	1,010,000	388,700	260
09430500	Gila River near Gila	153,300	79,950	192
08378500	Pecos River near Pecos	84,680	56,090	151
08408500	Delaware River near Red Bluff	10,560	7,570	139

The combined storage in the 12 major reservoirs in the State increased by 116,000 acre-feet during water year 1986. The storage totaled 5,303,000 acre-feet on September 30, 1986. The total combined capacity of these reservoirs is 7,623,000 acre-feet.

Water-Quality Conditions

Dissolved-solids concentrations in surface water at gaging stations continued to be near normal throughout the State during the water year with the exceptions of the NASQAN stations 08358300 (Rio Grande Conveyance Channel at San Marcial), 08358400 (Rio Grande Floodway at San Marcial), and 09368000 (San Juan River at Shiprock). The median specific conductance at these three stations was about two-thirds of normal.

Median values of specific conductance for water year 1986 at selected daily stations compared to median values of specific conductance for water years 1976-85 at the same stations are listed in the table below:

Station number	Station name	Median specific conductance, in microsiemens per centimeter at 25 °Celsius, for water year 1986	Median specific conductance, in microsiemens per centimeter at 25 °Celsius, for water years 1976-85	Percent of median
08313000	Rio Grande at Otowi	300	311	96
08330000	Rio Grande at Albuquerque	358	394	91
08358300	Rio Grande CC at San Marcial	884	1,200	74
08358400	Rio Grande FW at San Marcial	470	684	69
08405000	Pecos River at Carlsbad 1/	3,360	3,490	96
09368000	San Juan River at Shiprock	374	547	68

1/ Data collection discontinued July 1986.

Suspended-sediment loads for water year 1986 at four index stations compared to median suspended-sediment loads for water years 1974-83 at the same stations are listed in the table below:

Station number	Station name	Suspended-sediment load for water year 1986, in tons	Median suspended-sediment load for water years 1974-83, in tons	Percent of median
08313000	Rio Grande at Otowi	1,517,335	1,497,000	101
08330000	Rio Grande at Albuquerque	338,542	949,500	36
08396500	Pecos River near Artesia	417,707	333,100	125
09368000	San Juan River at Shiprock	2,660,035	4,821,000	55

Ground-Water Levels

Ground-water levels are measured periodically in a network of about 6,000 observation wells in order to record changes in water levels and ground-water storage. Water levels in about 1,200 wells are measured annually and the remaining 4,800 wells are scheduled to be measured at 5-year intervals, so that wells in different areas are measured each year (fig. 1). The areas of water-level measurements are in eight of the nine major surface-water drainage basins; most are in areas where ground water is used in large quantities for irrigation, municipal, or industrial purposes. Seventeen selected wells in various parts of the State are equipped with continuous water-level recorders.

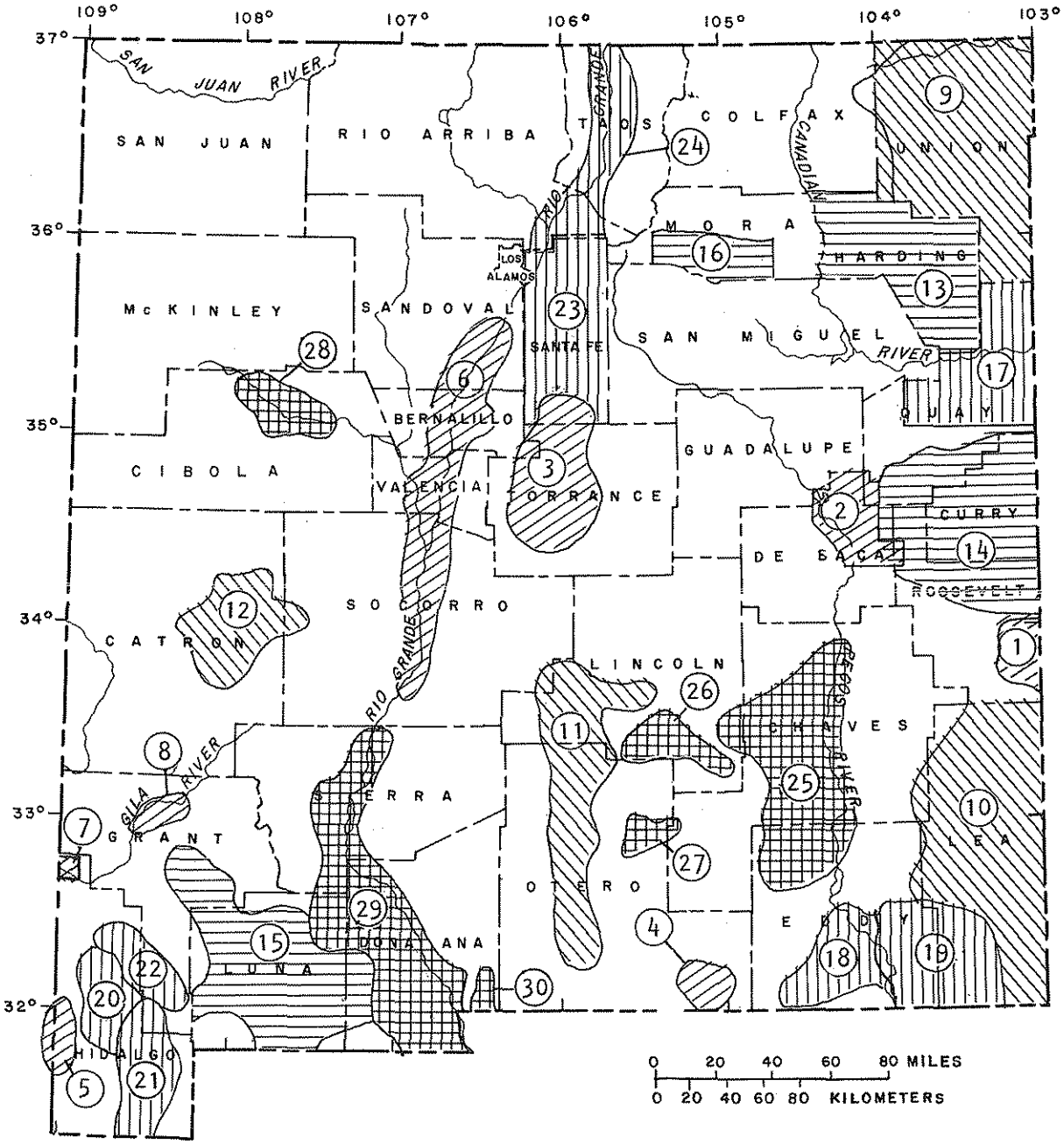
Hydrographs of water levels in wells (fig. 2) in the four quadrants of the State illustrate the water-level trends for the last 20 years (or the period of record available for the Union County well). The well in Cibola County is in an area where the mining industry has acquired most of the water rights. A decrease in ground-water withdrawals for agriculture and mining operations may be responsible for the general rise in water levels in the well in Cibola County. The wells in Luna, Union, and Chaves Counties are in areas of intensive irrigation. The water level in the recorder well in Luna County (Mimbres Valley) remained about the same as the previous year and continued to be higher than the average for the past 20 years. The water level in the well in Union County continued to decline, which is typical of wells on the High Plains of northeastern New Mexico. The water level in the recorder well in Chaves County has yearly fluctuations that are typical of the Roswell artesian basin. The general trend for the water level in the vicinity of this well since the mid-1970's has been a decrease in depth to water. During this time, the average annual precipitation at the Roswell and Artesia weather stations has increased several inches. The indicated decrease in depth to water may have resulted from both a decrease in withdrawals for irrigation and an increase in recharge to the aquifer.

SPECIAL NETWORKS AND PROGRAMS

Hyrdrologic Bench-Mark Network includes 57 stations in small drainage basins around the country whose purpose is to provide hydrologic and water-quality data for basins 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 the natural from human-induced changes in other basins that have been developed, and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Included in this program are stations 08377900 (Rio Mora near Terrero), and 09430600 (Mogollon Creek near Cliff).

National Steam-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so stations in NASQAN generally are located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey in consultation with the Water Resources Council. The objectives of NASQAN are: (1) To obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting; (2) to describe the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; (3) to detect changes or trends with time in the pattern of occurrence of water-quality characteristics; and (4) to provide a nationally consistent data base useful for water-quality assessment and hydrologic research. Included in this network are stations 07227140 (Canadian River above New Mexico-Texas State line), 08251500 (Rio Grande near Labotos, Colo.), 08313000 (Rio Grande at Otowi Bridge, near San Ildefonso), 08358300 (Rio Grande Conveyance Channel at San Marcial), 08358400 (Rio Grande Floodway at San Marcial), 08364000 (Rio Grande at El Paso, Tex.), 08370500 (Rio Grande below Old Fort Quitman, Tex.), 08384500 (Pecos River below Sumner Dam), 08407500 (Pecos River near Red Bluff), 08477110 (Mimbres River at Mimbres), 08481500 (Tularosa Creek near Bent), 09364500 (Animas River at Farmington), 09368000 (San Juan River at Shiprock), and 09431500 (Gila River near Redrock).

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States. Included in this program are stations 08313000 (Rio Grande at Otowi Bridge, near San Ildefonso), 08358300 (Rio Grande Conveyance Channel at San Marcial), 08358400 (Rio Grande Floodway at San Marcial), 09368000 (San Juan River at Shiprock), and 09431500 (Gila River near Redrock).



1. CAUSEY-LINGO
2. FT. SUMNER
3. ESTANCIA
4. SALT BASIN
5. SAN SIMON
6. MIDDLE RIO GRANDE
7. VIRDEN
8. GILA RIVER VALLEY
9. N. HIGH PLAINS
10. TATUM-LOVINGTON-HOBBS
11. TULAROSA BASIN
12. SAN AGUSTIN PLAINS
13. HARDING COUNTY
14. CURRY COUNTY-HOUSE-PORTALES
15. MIMBRES BASIN
16. MORA AREA
17. TUCUMCARI-NARA VISA
18. CARLSBAD
19. CAPITAN REEF
20. ANIMAS
21. PLAYAS
22. LORDSBURG
23. SANTA FE COUNTY
24. UPPER RIO GRANDE
25. ROSWELL BASIN
26. RIO HONDO
27. RIO PENASCO
28. GRANTS-BLUEWATER
29. LOWER RIO GRANDE
30. HUECO

Figure 1.--Areas of 5-year ground-water level monitoring in New Mexico showing years measured or scheduled for measurement.

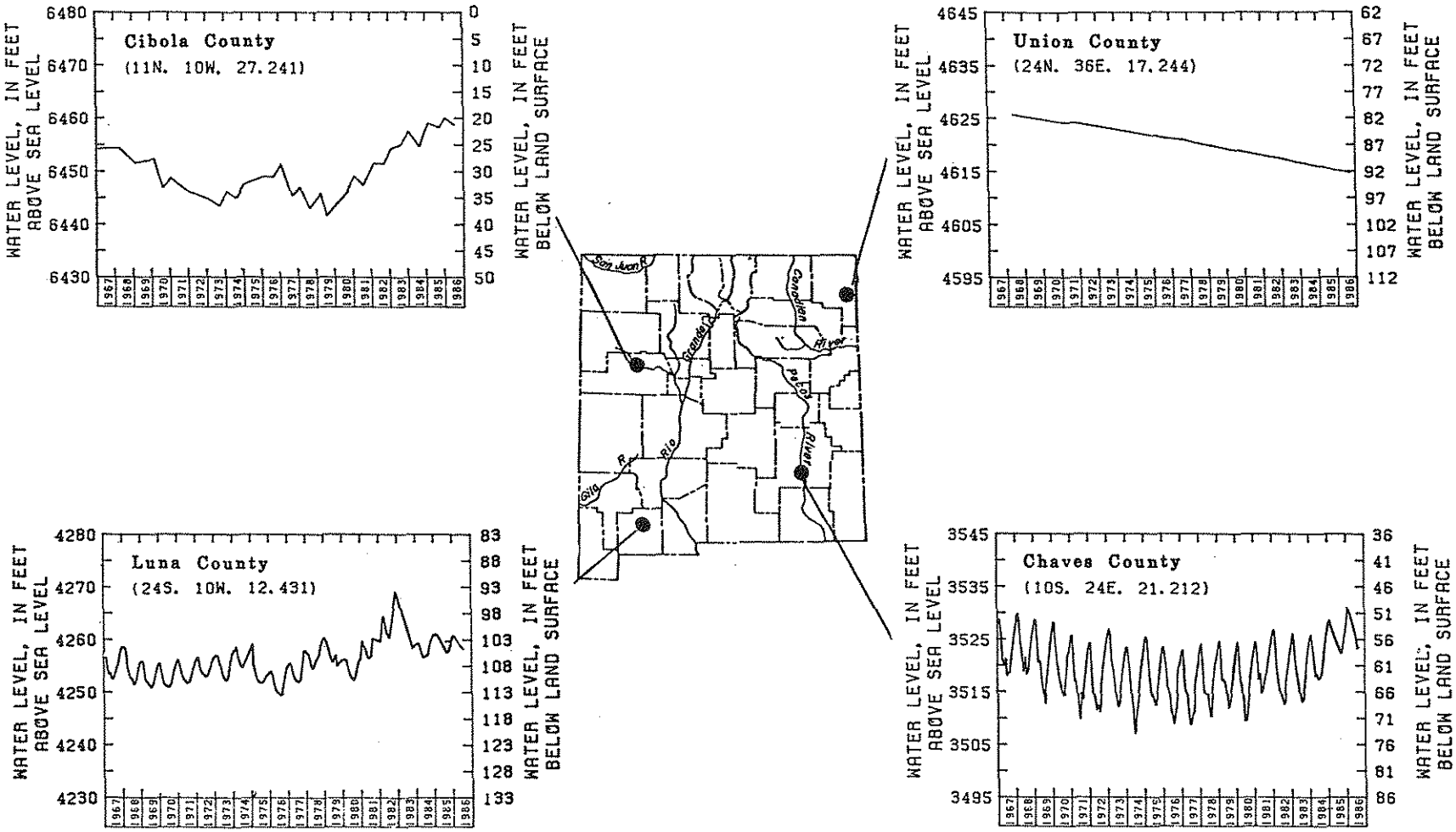


Figure 2.—Ground-water levels for the last 20 years or period of record.

Surveillance network stations are surface-water stations selected for water-quality examinations for water-quality control purposes. These stations are usually located at key regulatory streamflow gaging stations or near the state lines. Data for major inorganic constituents, nutrients, dissolved oxygen, and bacteria are collected at all these stations. Data for trace elements, radiochemicals, and pesticides are collected at some of these stations. Included in this network are stations 07221500, Canadian River near Sanchez; 08276500, Rio Grande below Taos Junction Bridge, near Taos; 08313000, Rio Grande at Otowi Bridge, near San Ildefonso; 08319000, Rio Grande at San Felipe; 08331000, Rio Grande at Isleta; 08354800, Rio Grande Conveyance Channel at San Acacia; 08354900, Rio Grande Floodway at San Acacia; 08358300, Rio Grande Conveyance Channel at San Marcial; 08358400, Rio Grande Floodway at San Marcial; 08383500, Pecos River near Puerto de Luna; 08386000, Pecos River near Acme; 08396500, Pecos River near Artesia; and 09368000, San Juan River at Shiprock.

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1985 water year which began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 5 and 6. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether stream site or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous measurements are made.

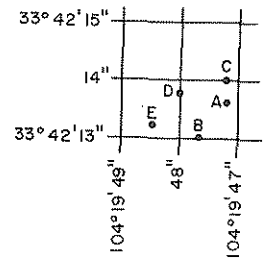
Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 08313000, which appears just to the left of the station name, includes the two-digit part number "08" plus the six-digit downstream-order number "313000." The part number designates the major river basin. Records in this report are in Part 07 (Lower Mississippi River Basin), Part 08 (Western Gulf of Mexico Basin), and Part 09 (Colorado River Basin).

Latitude-Longitude System

The identification numbers for wells, springs, and miscellaneous sites are assigned according to the grid system of latitude and longitude. The system provides the geographic location of the well, spring, or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 3 below.



Coordinates for miscellaneous site C (334214104194701)

Coordinates for wells
D (334213104194801)
E (334213104194802)

Coordinates for well A (334213104194701) and miscellaneous site B (334213104194702)

Figure 3.--System for numbering wells, springs, and miscellaneous sites.

Local Well Numbers

To provide an additional means of identification and a cross reference to records in older reports, most wells and springs have been assigned a local identifier based on the system of public land surveys. In areas covered by such surveys, the local identifier consists of a series of numbers and letters separated by periods, giving the township, range, section, and tract within a section, in that order. The letters N or S locate the township north or south of the New Mexico base line. The letters E or W locate the range east or west of the New Mexico principal meridian. A zero in a tract number indicates that the well or spring is centrally positioned or has not been located accurately enough to be placed within a tract or quarter section. Three digits in a tract number can locate a well or spring to the nearest 10-acre tract, while six digits will locate a site to the nearest 0.16-acre tract. This numbering system is illustrated in WDR NM-75-1 and WSP 1855. In the Navajo Reservation, where public land surveys have not been made, the local identifier is based on a different system of letters and numbers. In the example NR032.0156x0736, the first two letters indicate that the well is in the Navajo Reservation. The three-digit number to the left of the decimal indicates one of a series of special quadrangle maps on which the well is located. The two numbers to the right of the decimal separated by the letter x are the coordinates of the well in hundredths of a mile from the northeast corner of the area on the map. The first coordinate indicates the distance west; the second the distance south. The above well is located on map No. 032, 1.56 miles west and 7.36 miles south of the northeast corner.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by the table title "Crest-stage partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all partial-record stations for which data are given in this report is shown in figure 7.

Data Collection and Computation

The data obtained at a complete-record gaging station 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. Continuous records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations, or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If it is necessary to define extremes of discharge outside the range of the current meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by the personnel making the measurements are applied to the gage heights before discharges are determined from the curves or tables. This shifting-control method is also used if the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control. At some northern 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 gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes of observations, and comparable records of discharge for other stations in the same or nearby basins for comparable periods of time.

In computing records of lake or reservoir contents, it is necessary to have curves or tables available from surveys. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes in contents are determined.

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

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, prior and subsequent records, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts; the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record are identified by date in this paragraph of the station description for water-discharge records. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or possibly future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream locations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

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

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

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

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations (miscellaneous sites). Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretations of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair" within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values of less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to three significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

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

Other Data Available

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

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

Records of Surface-Water Quality

Surface-water quality samples usually are collected at or near gaging stations, because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records of surface-water quality appear in this report are shown in figure 5.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references appear on the list of publications following this section. Detailed information on collecting, treating, and shipping samples may also be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the District office whose address is given on the back of the title page of this report.

Water Temperature

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

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

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

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

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

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Microbiological data on coliform and streptococcal bacteria appear in this report. Methods for the collection and analysis of aquatic biological and aquatic microbiological samples are described by Slack and others (1973). (See reference 5-A4.)

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of daily values of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually..

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in New Mexico are shown in figure 8.

Data Collection and Computation

Measurements of water levels are made in many types of wells, under varying conditions of access and at different temperatures, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used are those that will ensure consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

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

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for many sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the timeof sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STORage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices. (See address given on the back of the title page.)

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
MS 437 National Center
Reston, Virginia 22092

Parameter Codes

The five-digit codes shown in parentheses in the column headings of the tables in this report are parameter codes that uniquely identify a specific constituent. These are standard codes used to identify the data stored in the files of WATSTORE. These codes are identical to those used in the U.S. Environmental Protection Agency (EPA) data system, STORET. The EPA assigns and approves all requests for new codes.

DEFINITION OF TERMS

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

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons or 1,233.49 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

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

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

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, coccal bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

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

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

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

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

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

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

Bottom material: See Bed material.

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

Cfs-day is the volume of water represented by the flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,445 cubic meters.

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

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

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

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

Cubic feet per second per square mile [$(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s, 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 or 0.02832 cubic meters per second.

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

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

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

Discharge-weighted average: See Weighted average.

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

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

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

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

Drainage area of a stream at a 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.

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

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

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

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

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

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element sorbed per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of dry sediment per liter of water-sediment mixture.

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

Organism is any living entity.

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

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

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

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

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

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

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

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

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

Pesticides are chemical compounds used to control the growth of undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

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

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

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

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

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

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

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

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

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

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

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

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period was uniformly distributed on it.

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

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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

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

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

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

Suspended-sediment load is a general term referring to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Total sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total sediment discharge.

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

Solute is any substance that is dissolved in water.

Solution is the homogeneous mixture of solutes and water. The solutes usually comprise a very small fraction of the total weight of the mixture. For this reason, the terms "solution" and "water" are used interchangeably.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

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

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

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature, whether on a chart, tape, or any other medium.

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

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

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

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

Water year in Geological Survey reports dealing with surface water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980 is called the "1980 water year."

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

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open- File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing,* by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. *Computation of continuous records of streamflow,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge,* by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment.* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply,* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy.* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples.* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sedments,* by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells.* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters.* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

Figure 4.-- Map of New Mexico showing location of hydrologic units.

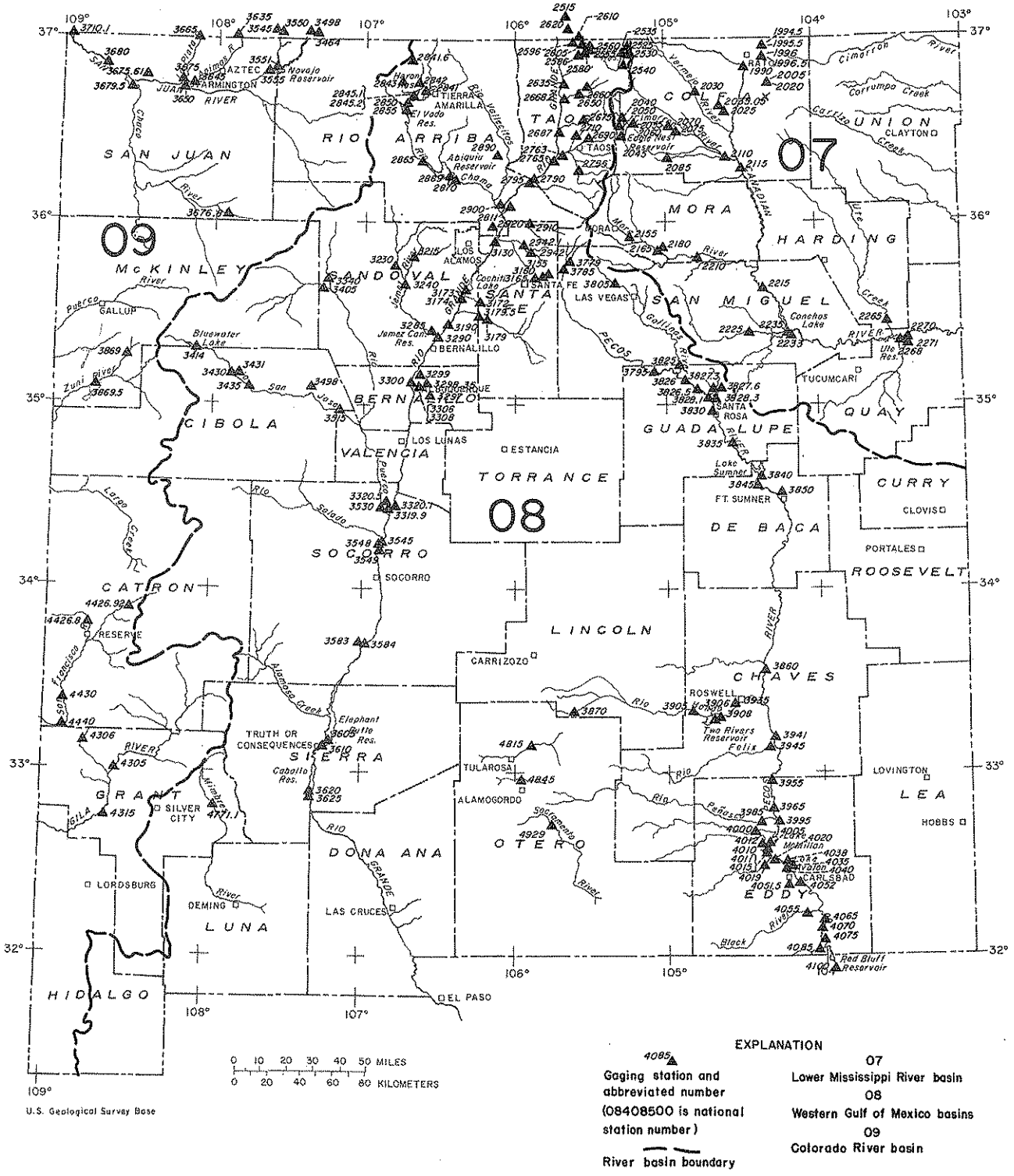


Figure 5. -- Map of New Mexico showing location of surface-water gaging stations.

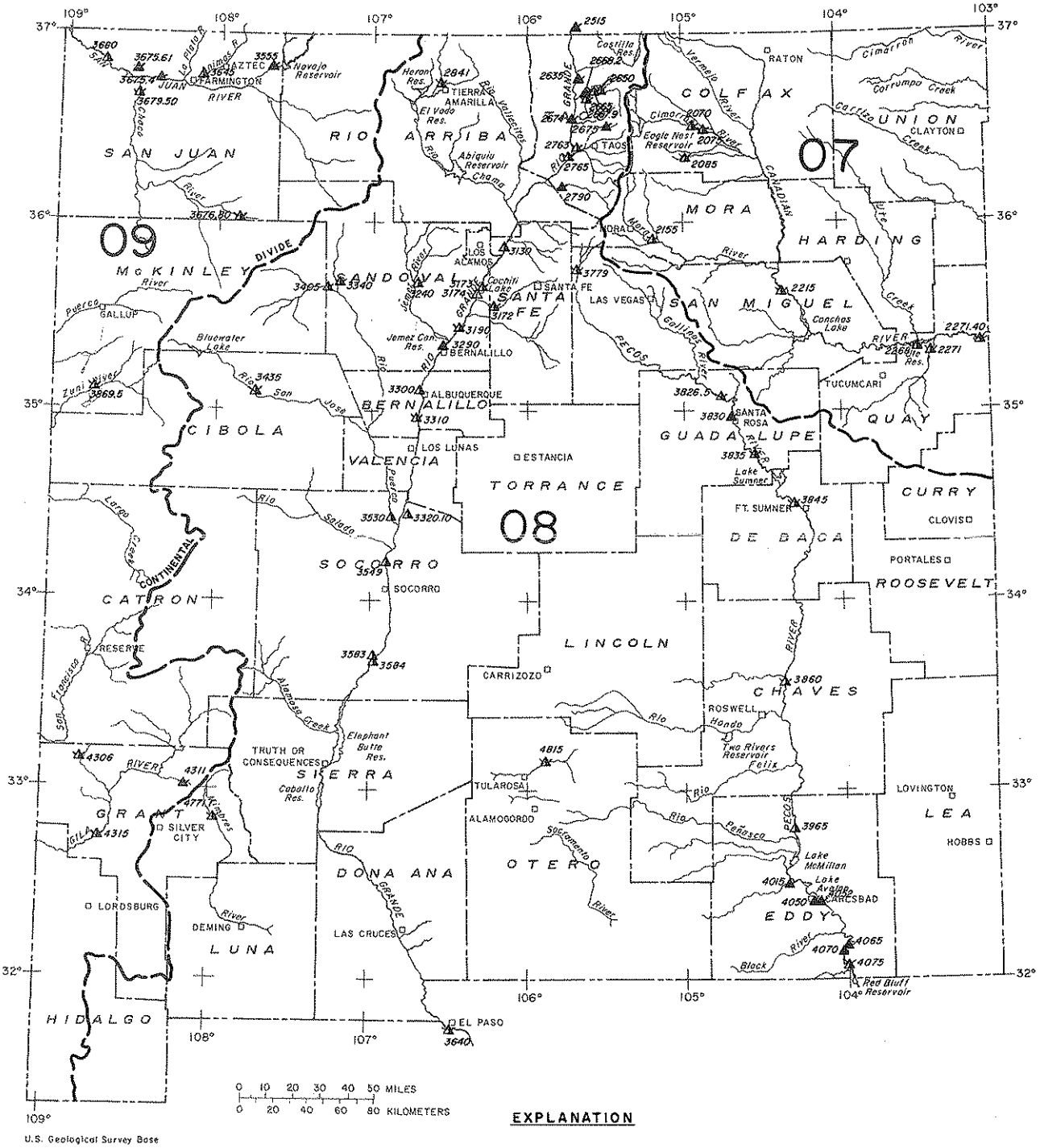


Figure 6 -- Map of New Mexico showing location of water-quality gaging stations.

LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07199000 CANADIAN RIVER NEAR HEBRON, NM

LOCATION.--Lat 36°47'14", long 104°27'42", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, near right bank at downstream end of bridge pier on U.S. Highways 64 and 85, 3.1 mi north of Hebron, 5.0 mi upstream from Chicorica Creek, 8.0 mi south of Raton, and at mile 888.1.

DRAINAGE AREA.--229 mi².

PERIOD OF RECORD.--June 1946 to September 1986 (discontinued).

REVISED RECORDS.--WSP 1281: 1946, 1947-48(P), 1949. WSP 1921: 1960(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,248 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1921 for history of changes prior to Aug. 18, 1965.

REMARKS.--Estimated daily discharges: Oct. 13-22, Nov. 20-22, Dec. 3, 10-22, Feb. 16 to Mar. 10, and Sept. 8-30. Records poor. Diversions upstream from station for irrigation of a few hundred acres. Part or all of low flow can be diverted to left bank 1.6 mi upstream from station for stock water, off-channel storage and irrigation. Several observations of water temperature taken during year.

AVERAGE DISCHARGE.--40 years, 8.45 ft³/s, 6,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,400 ft³/s, June 17, 1965, gage height, 28.2 ft, from floodmarks, present datum, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1942 reached a stage of about 28 ft, present datum, at site 150 ft upstream, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	1530	1,150	4.89	June 22	2145	2,180	5.45
June 9	0115	2,320	5.52	June 26	1700	*4,860	*6.71

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.7	5.9	7.6	.00	.08	.06	.12	14	8.1	.22	14
2	11	6.7	2.3	8.5	.00	.08	.08	.12	28	18	.18	4.1
3	10	6.7	2.0	7.3	.00	.08	.31	.11	107	.95	.15	1.6
4	10	6.9	6.3	8.5	.00	.08	.17	.10	32	.91	.15	1.9
5	10	6.8	6.0	8.5	.00	.08	.12	.08	11	10	.14	1.4
6	9.8	6.8	6.0	12	.00	.08	.10	.10	128	1.3	.13	6.1
7	9.5	6.8	5.8	6.9	.00	.08	.08	.11	63	1.0	.12	15
8	9.5	7.1	5.5	7.6	.00	.08	.17	.10	363	.20	.13	10
9	12	6.6	6.0	14	.00	.08	.17	.11	614	.18	.12	6.4
10	12	6.1	5.0	9.6	.01	.08	.09	.10	130	.17	.13	4.4
11	81	5.8	1.1	5.4	1.1	.09	.11	.08	84	.16	.12	3.0
12	30	5.8	1.1	1.3	6.7	.09	.08	.08	55	.14	.12	2.3
13	22	6.3	1.1	.00	5.7	.13	.06	.06	42	.11	.09	1.7
14	17	6.7	1.1	.00	11	.12	.07	.06	50	.10	.09	1.3
15	14	7.2	1.3	.00	4.9	.08	.08	.07	42	.10	8.7	1.0
16	13	6.9	1.4	.00	1.5	.07	.12	.08	41	.11	.32	1.2
17	11	6.8	1.6	.00	.40	.08	.09	.09	40	.09	.30	.90
18	10	6.7	1.8	.00	.10	.06	.12	.08	49	.07	.22	.62
19	9.2	6.1	2.0	2.9	.09	.08	.16	.07	77	.16	.04	.52
20	8.6	5.0	2.4	9.8	.08	.09	.11	.07	52	.90	.04	.44
21	7.8	3.5	2.8	4.1	.08	.06	.11	.04	57	.17	.04	.60
22	7.2	3.1	3.5	5.0	.08	.07	.15	.05	151	20	.08	.40
23	6.8	5.4	7.7	4.7	.08	.05	.12	.06	48	.41	49	.30
24	7.0	5.4	7.0	2.5	.08	.04	.11	.12	29	.22	4.3	.25
25	7.1	5.6	6.9	.04	.08	.04	.13	.10	35	.20	1.1	.22
26	7.1	5.7	7.4	.03	.08	.03	.15	.08	535	.19	.12	.20
27	6.9	6.2	8.1	.02	.08	.04	.11	.04	32	.17	.11	.17
28	6.8	6.5	10	.01	.08	.03	.13	.08	3.1	.17	.10	.66
29	6.6	6.3	7.0	.01	---	.04	.11	1.0	1.7	.16	10	.30
30	7.1	6.2	8.3	.00	---	.04	.11	.19	.41	.15	.44	.20
31	4.8	---	5.4	.00	---	.05	---	.96	---	7.4	.32	---
TOTAL	396.8	184.4	139.8	126.31	32.22	2.18	3.58	4.51	2914.21	71.99	77.12	81.18
MEAN	12.8	6.15	4.51	4.07	1.15	.07	.12	.15	97.1	2.32	2.49	2.71
MAX	81	7.2	10	14	11	.13	.31	1.0	614	20	49	15
MIN	4.8	3.1	1.1	.00	.00	.03	.06	.04	.41	.07	.04	.17
AC-FT	787	366	277	251	64	4.3	7.1	8.9	5780	143	153	161

CAL YR 1985	TOTAL	5383.81	MEAN	14.8	MAX	670	MIN	.00	AC-FT	10680
WTR YR 1986	TOTAL	4034.30	MEAN	11.1	MAX	614	MIN	.00	AC-FT	8000

07199450 LAKE MALOYA NEAR RATON, NM

LOCATION.--Lat 36°59'02", long 104°22'24", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, near spillway of dam on Chicorica Creek, 6.5 mi northeast of Raton, and at mile 21.5.

DRAINAGE AREA.--20.8 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam, completed in 1907; capacity, 59 acre-ft. Reservoir enlarged in 1916; capacity, 1,130 acre-ft, spillway elevation, 7,479.0 ft. Reservoir enlarged again in 1948; capacity, 3,690 acre-ft, spillway elevation, 7,511.0 ft. Elevation of lowest outlet, 7,439.0 ft. No dead storage. Water is for municipal use of city of Raton. See table below for total monthly diversion, in acre-feet, from Lake Maloya and Lake Alice for municipal supply for city of Raton. Monthend elevation estimated for June.

COOPERATION.--Month-end elevations and contents provided by city of Raton. Capacity table provided by New Mexico Interstate Stream Commission.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,970 acre-ft, May 31, 1975, elevation, 7,510.79 ft; maximum elevation observed, 7,512.00 ft, April 30, 1983; minimum observed, 911 acre-ft, Feb. 28, 1979, elevation, 7,479.85 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,720 acre-ft, June 30, elevation, 7,510.24 ft; minimum observed, 3,140 acre-ft, Sept. 30, elevation, 7,506.32 ft.

07199550 LAKE ALICE NEAR RATON, NM

LOCATION.--Lat 36°57'15", long 104°23'06", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, near spillway of dam on Chicorica Creek, 4.4 mi northeast of Raton, and at mile 19.2.

DRAINAGE AREA.--29.4 mi².

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

GAGE.--Nonrecording gage. Elevation of gage is National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam, completed in 1892; capacity 100 acre-ft, spillway elevation, 7,078.0 ft. Reservoir rehabilitated in 1941; capacity, 71 acre-ft, spillway elevation, 7,089.6 ft. Elevation of lowest outlet, 7,064.1 ft. No dead storage. Water is for municipal use of city of Raton. See table below for total monthly diversion, in acre-feet, from Lake Maloya and Lake Alice for municipal supply for city of Raton.

COOPERATION.--Monthend elevations and contents provided by city of Raton.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 73 acre-ft, Apr. 30, May 31, 1983, elevation, 7,090 ft; minimum observed, 40 acre-ft, May 31, 1978, elevation, 7,083.27 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 71 acre-ft all year, elevation, 7,089.60 ft; minimum observed, 71 acre-ft all year.

MONTHEND ELEVATION AND CONTENTS AND MONTHLY DIVERSIONS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

	07199450 LAKE MALOYA			07199550 LAKE ALICE			
	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Monthly diversions from Lake Maloya and Lake Alice (acre-feet)
Sept. 30, 1985	7,509.35	3,490	+40	7,089.60	71	-	-
Oct. 31	7,510.00	3,570	+80	7,089.60	71	0	109
Nov. 30	7,509.98	3,570	0	7,089.60	71	0	104
Dec. 31	7,510.00	3,570	0	7,089.60	71	0	120
CAL YR 1985	-	-	0	-	-	0	1,653
Jan. 31, 1986	7,509.75	3,540	-30	7,089.60	71	0	118
Feb. 28	7,510.30	3,610	+70	7,089.60	71	0	108
Mar. 31	7,510.42	3,620	+10	7,089.60	71	0	133
Apr. 30	7,511.10	3,690	+70	7,089.60	71	0	148
May 31	7,507.51	3,480	-210	7,089.60	71	0	203
June 30	7,511.23	3,720	+240	7,089.60	71	0	145
July 31	7,510.24	3,600	-120	7,089.60	71	0	188
Aug. 31	7,506.41	3,160	-440	7,089.60	71	0	177
Sept. 30	7,506.32	3,140	-20	7,089.60	71	0	151
WTR YR 1986	-	-	-350	-	-	0	1,704

07199600 CHICORICA CREEK NEAR YANKEE, NM

LOCATION.--Lat 36°55'50", long 104°22'24", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on right bank 1.0 mi upstream from East Fork, 1.8 mi downstream from Lake Alice, 2.8 mi southwest of Yankee, 4.2 mi northeast of Raton, 4.1 mi downstream from Lake Maloya, and at mile 17.4.

DRAINAGE AREA.--32.5 mi².

PERIOD OF RECORD.--May 1975 to September 1979, October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 10 to Feb. 17. Records fair. Flow regulated by Lake Maloya (station 07199450) and Lake Alice (station 07199550). See tabulation of monthly diversion from these reservoirs for municipal supply of city of Raton published with reservoir records.

AVERAGE DISCHARGE.--7 years (water years 1976-79, 1984-86), 3.22 ft³/s, 2,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152 ft³/s, May 5, 1984, gage height, 3.05 ft; maximum gage height, 3.10 ft, June 3, 1986, from rating curve extended above 70 ft³/s on basis of slope-area measurement at gage height 9.25 ft; no flow for several days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965, reached a stage of 9.25 ft, present datum, from floodmarks (discharge, 2,230 ft³/s, by slope-area measurements).
The flood of May 18, 1955, was computed as 2,230 ft³/s by a flow-over-dam measurement of peak flow at Lake Maloya (4.1 mi upstream) and according to a local resident, exceeded the flood of June 1965 at present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 143 ft³/s, June 3, gage height, 3.10 ft, from rating curve extended as described above; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	1.0	.24	.07	.10	.26	.26	4.7	4.2	3.7	17	.61
2	.29	.51	.23	.08	.10	.24	.30	35	55	2.9	17	.04
3	.24	.46	.22	.08	.09	.32	.98	24	111	2.2	17	.01
4	.25	.39	.20	.08	.09	.25	.90	14	64	1.8	17	.00
5	.20	.38	.19	.08	.08	.33	1.1	8.2	54	1.9	17	.00
6	.24	.41	.18	.08	.08	.22	1.1	5.7	45	1.8	17	.00
7	.24	.36	.17	.08	.07	.25	.98	3.8	37	1.6	17	.01
8	.20	.35	.16	.08	.06	.25	7.3	2.4	50	1.8	17	.00
9	.33	.33	.15	.09	.06	.27	14	2.3	88	2.6	17	.00
10	.57	.32	.14	.09	.06	.23	14	1.9	58	3.1	17	.00
11	4.8	.33	.14	.09	.05	.26	12	1.4	45	3.6	11	.00
12	.80	.33	.10	.09	.05	.28	11	1.1	30	2.6	1.7	.00
13	.86	.29	.07	.08	.05	.27	8.7	1.2	22	2.2	2.7	.00
14	.93	.45	.06	.08	.05	.35	6.7	.69	17	1.7	4.2	.00
15	.55	.34	.06	.09	.08	.32	4.4	8.6	15	1.0	2.1	.00
16	.47	.36	.06	.09	.12	.27	2.2	18	12	.71	.11	.00
17	.78	.41	.07	.08	.19	.27	2.2	10	10	.61	.06	.00
18	.60	.37	.07	.08	.25	.39	2.2	20	9.1	.42	.04	.00
19	.42	.29	.08	.08	.27	.33	2.9	20	8.5	.80	.03	.00
20	.41	.31	.08	.08	.26	.35	4.0	20	7.9	1.7	.02	.00
21	.39	.32	.08	.09	.25	.33	3.5	20	7.6	2.3	.02	.00
22	.37	.31	.08	.08	.22	.34	3.8	20	7.4	2.9	.08	.00
23	.35	.35	.08	.08	.23	.31	3.3	20	6.2	2.0	.50	.00
24	.34	.33	.08	.09	.23	.29	2.4	20	6.1	1.5	.03	.00
25	.33	.28	.08	.08	.24	.29	1.8	19	6.1	.99	.02	.00
26	.34	.28	.09	.08	.27	.28	1.4	4.6	7.1	.72	.01	.00
27	.32	.28	.09	.07	.29	.26	1.8	20	7.0	.45	.01	.00
28	.32	.27	.10	.08	.22	.27	1.0	20	5.8	.25	.01	.00
29	.42	.28	.09	.09	---	.27	.96	22	4.9	1.3	.01	.00
30	.28	.28	.08	.09	---	.26	1.1	18	4.8	14	.00	.00
31	.35	---	.07	.11	---	.28	---	1.4	---	17	.00	---
TOTAL	17.31	10.97	3.59	2.59	4.11	8.89	118.28	387.99	805.7	82.15	192.65	.67
MEAN	.56	.37	.12	.08	.15	.29	3.94	12.5	26.9	2.65	6.21	.02
MAX	4.8	1.0	.24	.11	.29	.39	14	35	111	17	17	.61
MIN	.20	.27	.06	.07	.05	.22	.26	.69	4.2	.25	.00	.00
AC-FT	34	22	7.1	5.1	8.2	18	235	770	1600	163	382	1.3

CAL YR 1985	TOTAL	1734.00	MEAN	4.75	MAX	79	MIN	.00	AC-FT	3440
WTR YR 1986	TOTAL	1634.90	MEAN	4.48	MAX	111	MIN	.00	AC-FT	3240

07199650 EAST FORK CHICORICA CREEK NEAR YANKEE, NM

LOCATION.--Lat 36°55'18", long 104°21'44", in NW¼ sec.14, T.31 N., R.24 E., Colfax County, Hydrologic Unit 11080001, on right bank 600 ft downstream from bridge on State Highway 72, 0.6 mi upstream from mouth and 2.6 mi southeast of Yankee.

DRAINAGE AREA.--23.9 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184 ft³/s, June 8, 1986, gage height, 4.16 ft from rating curve extended above 30 ft³/s by; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 184 ft³/s, June 8, gage height, 4.16 ft, from rating curve extended above 30 ft³/s; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.10	.00	.00	.00	.00	.00	3.0	16	.59	.11	2.1
2	.03	.10	.00	.00	.00	.00	.00	1.7	47	.97	.09	.33
3	.01	.10	.00	.00	.00	.00	.00	.32	13	.60	.09	.11
4	.00	.08	.00	.00	.00	.00	.00	.23	12	.44	.14	.08
5	.00	.07	.00	.00	.00	.00	.10	.22	19	.45	.10	.07
6	.01	.08	.00	.00	.00	.00	.15	.20	12	.61	.03	.04
7	.00	.08	.00	.00	.00	.00	.16	.19	8.4	.40	.00	.07
8	.00	.07	.00	.00	.00	.00	.18	.19	36	1.5	.00	.09
9	.01	.06	.00	.00	.00	.00	.26	.19	40	2.5	.00	.10
10	.10	.06	.00	.00	.00	.00	.21	.18	12	1.3	.00	.06
11	1.6	.06	.00	.00	.00	.00	.15	.17	8.9	2.1	.00	.04
12	.12	.06	.00	.00	.00	.00	.11	.16	5.4	.69	.00	.00
13	.09	.06	.00	.00	.00	.00	.10	.15	3.6	.87	.00	.00
14	.12	.06	.00	.00	.00	.00	.08	.15	2.7	.44	.08	.06
15	.08	.03	.00	.00	.00	.00	.06	.14	2.2	.31	5.1	.02
16	.07	.02	.00	.00	.00	.00	.05	.15	1.6	.28	.13	.00
17	.10	.02	.00	.00	.00	.00	.04	.22	1.3	.33	.07	.00
18	.07	.01	.00	.00	.00	.00	.04	.24	1.2	.23	.02	.00
19	.06	.00	.00	.00	.00	.00	.05	.52	1.1	.21	.00	.00
20	.05	.00	.00	.00	.00	.00	.03	.41	1.0	.36	.00	.00
21	.05	.00	.00	.00	.00	.00	.06	.32	.93	.88	.00	.00
22	.05	.00	.00	.00	.00	.00	.18	.30	.88	1.4	.11	.00
23	.04	.00	.00	.00	.00	.00	.17	.34	.71	.32	.14	.00
24	.04	.00	.00	.00	.00	.00	.15	.37	.80	.23	.04	.00
25	.04	.00	.00	.00	.00	.00	.15	.35	.74	.20	.00	.00
26	.04	.00	.00	.00	.00	.00	.16	.36	7.7	.19	.02	.00
27	.04	.00	.00	.00	.00	.00	.15	.34	3.6	.17	.00	.00
28	.04	.00	.00	.00	.00	.00	.14	.32	1.4	.14	.00	.00
29	.04	.00	.00	.00	---	.00	.12	.66	.91	.11	.00	.00
30	.04	.00	.00	.00	---	.00	.11	1.5	.78	.05	.00	.00
31	.05	---	.00	.00	---	.00	---	1.6	---	.06	.00	---
TOTAL	3.03	1.12	.00	.00	.00	.00	3.16	15.19	262.85	18.93	6.27	3.17
MEAN	.10	.04	.00	.00	.00	.00	.11	.49	8.76	.61	.20	.11
MAX	1.6	.10	.00	.00	.00	.00	.26	3.0	47	2.5	5.1	2.1
MIN	.00	.00	.00	.00	.00	.00	.00	.14	.71	.05	.00	.00
AC-FT	6.0	2.2	.00	.00	.00	.00	6.3	30	521	38	12	6.3

CAL YR 1985	TOTAL	611.44	MEAN	1.68	MAX	35	MIN	.00	AC-FT	1210
WTR YR 1986	TOTAL	313.72	MEAN	.86	MAX	47	MIN	.00	AC-FT	622

07200500 CHICORICA CREEK NEAR RATON, NM

LOCATION.--Lat 36°48'32", long 104°23'35", in N½ sec.28, T.30 N., R.24 E., (projected), Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on left bank 400 ft upstream from St. Louis, Rocky Mountain and Pacific Railroad crossing (abandoned), 1.3 mi upstream from Raton Creek, 4.0 mi upstream from Una de Gato Creek, 6.9 mi southeast of Raton, and at mile 8.5.

DRAINAGE AREA.--87.0 mi², approximately.

PERIOD OF RECORD.--July 10, 1910 to June 9, 1914, at site 500 ft downstream, at different datum. June 9 to July 14, 1914, October 1983 to current year. Discharge measurements and gage heights only for some periods.

GAGE.--Water-stage recorder. Elevation of gage is 6,265 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 13-21, Dec. 4 to Feb. 19, Mar. 1-4, May 1-15, and Sept. 5, 6, 14. Records poor. Flow partly regulated by Lake Maloya and Lake Alice.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft³/s, June 12, 1913, gage height, 11.2 ft, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 336 ft³/s, June 9, gage height, 6.12 ft, from rating curve extended above 100 ft³/s; no flow Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.2	.20	.11	.07	.23	.10	.40	14	2.6	23	5.6
2	1.4	1.5	.14	.11	.07	.21	.13	27	85	6.0	22	4.3
3	1.2	1.2	.29	.11	.08	.19	.91	33	114	1.1	21	.51
4	1.2	1.2	.12	.10	.07	.17	.62	12	69	.57	21	1.0
5	1.1	1.1	.11	.10	.08	.17	.49	9.0	76	9.2	21	.65
6	1.0	1.1	.10	.10	.08	.21	.36	7.0	79	4.2	21	.55
7	.91	1.1	.09	.10	.08	.24	.24	5.4	62	4.3	21	.47
8	.91	1.1	.08	.10	.08	.24	.36	4.4	92	9.7	21	.21
9	1.4	1.0	.05	.10	.08	.24	7.1	3.6	185	6.9	21	.07
10	1.5	1.1	.05	.10	.08	.13	9.6	2.6	92	4.8	22	.06
11	12	1.0	.05	.10	.09	.24	7.5	2.1	74	6.2	20	.09
12	5.3	1.0	.06	.10	.09	.24	6.7	1.6	52	4.1	4.0	.14
13	4.3	.84	.07	.10	.09	.49	5.3	1.3	37	3.7	2.8	.51
14	3.6	1.0	.07	.10	.11	.49	4.2	2.5	31	2.9	4.7	.50
15	3.3	.75	.07	.10	.13	.36	4.3	6.0	27	2.2	18	.40
16	2.8	.81	.07	.10	.16	.24	1.4	16	22	4.3	2.6	.11
17	2.3	.58	.07	.10	.17	.24	.74	7.4	19	4.6	.99	.08
18	1.9	.59	.07	.10	.19	.24	1.7	19	17	3.6	.45	.05
19	1.5	.48	.07	.10	.21	.24	2.1	17	15	6.5	.09	.03
20	1.2	.87	.07	.10	.20	.24	2.6	15	14	7.1	.48	.00
21	.98	.46	.08	.10	.16	.24	2.4	15	13	7.5	.98	.02
22	.83	.39	.09	.10	.12	.24	2.8	15	13	12	2.2	.01
23	.39	.37	.10	.10	.13	.13	4.1	16	10	8.4	12	.06
24	.41	.32	.10	.10	.10	.13	3.2	17	7.3	5.6	2.8	.10
25	.40	.28	.10	.10	.11	.13	2.8	19	5.1	4.3	1.6	.09
26	.47	.23	.10	.09	.51	.10	2.4	5.8	18	3.0	.54	.11
27	.49	.25	.10	.09	.29	.13	.93	12	14	2.4	.18	.08
28	.49	.26	.10	.09	.28	.10	.83	16	5.4	1.6	.06	.08
29	.54	.21	.10	.08	---	.10	.72	22	2.8	.94	.03	.23
30	.93	.15	.10	.07	---	.10	.55	22	2.0	16	.09	.65
31	1.0	---	.11	.07	---	.10	---	5.2	---	42	.26	---
TOTAL	57.25	22.44	2.98	3.02	3.91	6.55	77.18	357.30	1266.6	198.31	288.85	16.76
MEAN	1.85	.75	.10	.10	.14	.21	2.57	11.5	42.2	6.40	9.32	.56
MAX	12	1.5	.29	.11	.51	.49	9.6	33	185	42	23	5.6
MIN	.39	.15	.05	.07	.07	.10	.10	.40	2.0	.57	.03	.00
AC-FT	114	45	5.9	6.0	7.8	13	153	709	2510	393	573	33

CAL YR 1985	TOTAL	2359.53	MEAN	6.46	MAX	92	MIN	.01	AC-FT	4680
WTR YR 1986	TOTAL	2301.15	MEAN	6.30	MAX	185	MIN	.00	AC-FT	4560

07202000 CHICORICA CREEK NEAR HEBRON, NM

LOCATION.--Lat 36°46'11", long 104°23'42", in SW¼NE¼SE¼ sec.4, T.29 N., R.24 E., Colfax County, Hydrologic Unit 11080001, on downstream wingwall of left abutment of highway bridge near east boundary of Maxwell Grant, 900 ft downstream from Una de Gato Creek, 4.4 mi northeast of Hebron, 9.5 mi south of Raton, and at mile 5.0.

DRAINAGE AREA.--381 mi².

PERIOD OF RECORD.--January 24, 1945 to January 10, 1952. October 1983 to current year.

REVISED RECORDS.--WSP 1177 1948 (M).

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 30 to Jan. 29, Oct. 1-21, Mar. 30 to Apr. 13, and May 6-13. Records fair. Diversion for 2,500 acres upstream from station for irrigation.

AVERAGE DISCHARGE.--9 years (water years 1946-51, 1984-86), 13.8 ft³/s, 10,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,530 ft³/s, May 31, 1948, from rating curve extended above 600 ft³/s on basis of contracted opening determination; minimum daily, 0.09 ft³/s at times .

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 20 ft, from floodmarks (discharge about 15,000 ft³/s), date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0130	*938	*6.64	No other peak greater than base discharge.			

Minimum daily discharge, 0.09 ft³/s, Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	1.3	4.8	2.2	.56	2.5	.45	1.0	39	3.5	40	12
2	11	1.2	4.6	2.2	.59	2.0	.49	18	156	32	25	22
3	11	2.9	4.0	2.2	.59	2.2	1.1	16	191	4.8	25	.82
4	10	3.1	3.8	2.1	.52	.99	17	14	126	4.1	27	3.7
5	9.6	3.5	3.6	2.1	.49	1.9	11	11	131	25	26	1.4
6	9.6	3.6	3.5	2.1	.49	.81	4.1	8.5	142	16	26	.23
7	9.6	4.0	3.3	2.1	.46	1.1	3.1	6.7	109	6.5	25	.39
8	9.0	3.9	3.2	2.1	.45	.55	2.1	5.3	134	16	26	.62
9	10	4.5	3.0	2.0	.48	.76	16	4.1	433	12	27	.12
10	13	4.7	2.9	2.0	.50	.59	27	3.0	139	6.0	28	.10
11	23	4.6	2.8	2.0	.52	.74	25	2.2	108	6.4	27	.10
12	20	4.8	2.7	2.0	.57	.98	25	1.7	77	4.2	6.6	.10
13	13	4.4	2.7	1.9	1.0	1.6	19	1.4	56	3.3	4.1	.09
14	17	5.7	2.7	1.9	1.3	4.1	15	3.6	46	3.6	5.1	.17
15	15	5.8	2.7	1.9	2.5	4.5	17	8.4	37	2.8	29	.10
16	12	7.2	2.7	1.8	.78	1.9	7.9	19	30	1.4	6.5	.13
17	10	7.6	2.6	1.8	.61	1.5	4.7	9.0	25	2.8	3.6	.24
18	8.6	6.7	2.6	1.8	.66	1.4	2.7	19	22	1.3	2.6	.37
19	7.2	5.1	2.6	1.8	.63	2.1	3.0	20	26	2.3	1.8	.26
20	6.1	5.0	2.5	1.8	.60	1.5	3.5	17	19	9.6	1.3	.21
21	5.4	5.0	2.5	1.8	.35	1.0	3.9	18	15	20	1.4	.17
22	4.1	4.8	2.4	1.8	.40	1.3	3.1	18	14	10	3.8	.19
23	2.2	5.2	2.4	1.7	1.4	.77	5.7	19	14	5.9	14	.23
24	2.3	6.1	2.4	1.7	1.8	.51	5.0	22	9.6	3.8	4.6	.28
25	2.3	6.5	2.4	1.6	2.3	.94	4.6	25	7.2	2.7	2.0	.23
26	2.3	5.8	2.4	1.5	1.5	.41	4.4	15	53	2.0	2.1	.17
27	2.3	5.3	2.4	1.3	1.5	.38	3.3	14	49	2.2	.53	.14
28	2.4	5.2	2.4	1.2	1.3	.35	2.7	22	9.1	.63	.39	.13
29	2.5	6.6	2.3	1.1	---	.49	1.6	34	5.4	.35	.31	.12
30	3.0	5.0	2.3	.76	---	.49	1.2	43	3.8	7.5	.45	.30
31	2.9	---	2.3	.62	---	.40	---	24	---	77	.44	---
TOTAL	268.4	145.1	89.5	54.88	24.85	40.76	240.64	442.9	2226.1	295.68	392.62	45.11
MEAN	8.66	4.84	2.89	1.77	.89	1.31	8.02	14.3	74.2	9.54	12.7	1.50
MAX	23	7.6	4.8	2.2	2.5	4.5	27	43	433	77	40	22
MIN	2.2	1.2	2.3	.62	.35	.35	.45	1.0	3.8	.35	.31	.09
AC-FT	532	288	178	109	49	81	477	878	4420	586	779	89

CAL YR 1985	TOTAL	3912.05	MEAN	10.7	MAX	108	MIN	.09	AC-FT	7760
WTR YR 1986	TOTAL	4266.54	MEAN	11.7	MAX	433	MIN	.09	AC-FT	8460

07202500 EAGLE TAIL DITCH NEAR MAXWELL, NM

LOCATION.--Lat 36°38'55", long 104°33'31", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on left bank 25 ft upstream from concrete drop structure, 300 ft upstream from Crow Creek, and 7.5 mi north of Maxwell.

PERIOD OF RECORD.--December 1944 to July 1950 (monthly discharge only October 1945 to July 1950), May 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 1975, at site about 200 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair except those for winter period, which are poor. Eagle Tail ditch diverts water from Chicorica Creek for use near Maxwell. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years (water years 1946-49, 1976-86), 6.51 ft³/s, 4,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 217 ft³/s, Aug. 27, 1946, from rating curve extended above 85 ft³/s; no flow at times each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 182 ft³/s, June 9, from rating curve extended above 85 ft³/s; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.5	2.9	.00	.00	.00	.00	.00	17	3.7	.62	4.8
2	2.3	2.5	2.4	.00	.00	.00	.00	.25	79	25	.84	19
3	1.9	2.0	3.0	.00	.00	.00	.00	23	118	7.8	1.0	4.6
4	1.5	3.2	2.5	.00	.00	.00	.00	14	110	3.5	1.2	2.3
5	1.3	3.3	3.1	.00	.00	.00	3.3	8.3	87	2.9	1.5	4.3
6	1.3	3.3	3.4	.00	.00	.00	1.9	5.2	68	25	1.8	4.1
7	1.2	3.4	3.5	.00	.00	.00	.00	3.1	108	8.1	2.6	13
8	.87	3.4	3.2	.00	.00	.00	.00	2.2	72	6.6	2.0	9.4
9	.84	3.4	3.2	.00	.00	.00	.00	1.2	92	16	1.4	2.3
10	4.1	3.3	3.4	.00	.00	.00	.60	.51	1.1	7.2	1.9	.73
11	30	3.2	4.4	.00	.00	.00	4.6	.14	.08	4.4	1.4	.43
12	30	3.2	4.1	.00	.00	.00	4.1	.05	.00	3.8	1.0	.35
13	7.3	3.3	4.3	.00	.00	.00	3.6	.01	.00	3.5	.89	3.2
14	8.5	3.4	4.0	.00	.00	.00	2.5	.00	.00	4.0	.82	3.9
15	7.2	3.5	3.6	.00	.00	.00	1.4	.00	.00	5.4	.69	.96
16	4.8	3.6	4.1	.00	.00	.00	1.6	.00	.00	5.5	.53	.43
17	4.4	4.2	2.7	.00	.00	.00	.84	11	.00	6.1	.45	.20
18	4.9	4.0	1.0	.00	.00	.00	.00	8.9	12	4.9	.72	.42
19	4.4	2.8	.59	.00	.00	.00	.00	17	17	7.4	1.2	.55
20	3.9	2.5	.44	.00	.00	.00	.00	16	13	16	.74	.32
21	3.7	2.4	.42	.00	.00	.00	.00	14	10	17	.55	.13
22	3.6	2.6	.24	.00	.00	.00	.01	15	9.2	20	.42	.06
23	3.5	2.9	.13	.00	.00	.00	.85	15	9.9	16	5.1	.02
24	3.5	3.0	.06	.00	.00	.00	1.2	17	8.2	10	6.5	.00
25	3.5	2.8	.01	.00	.00	.00	1.1	18	6.5	5.0	3.1	.00
26	3.4	3.1	.00	.00	.00	.00	.86	28	5.2	2.5	4.5	.00
27	3.4	2.9	.00	.00	.00	.00	.54	8.1	83	1.0	1.4	.00
28	3.3	2.7	.00	.00	.00	.00	.21	14	13	.60	.70	.00
29	3.3	2.8	.00	.00	---	.00	.00	8.7	7.2	.26	2.4	.00
30	3.2	3.0	.00	.00	---	.00	.00	30	4.9	.35	29	.00
31	3.6	---	.00	.00	---	.00	---	30	---	.46	.69	---
TOTAL	161.51	93.2	60.69	.00	.00	.00	29.21	308.66	951.28	239.97	77.66	75.50
MEAN	5.21	3.11	1.96	.00	.00	.00	.97	9.96	31.7	7.74	2.51	2.52
MAX	30	4.2	4.4	.00	.00	.00	4.6	30	118	25	29	19
MIN	.84	2.0	.00	.00	.00	.00	.00	.00	.00	.26	.42	.00
AC-FT	320	185	120	.00	.00	.00	58	612	1890	476	154	150

CAL YR 1985	TOTAL	2766.69	MEAN	7.58	MAX	112	MIN	.00	AC-FT	5490
WTR YR 1986	TOTAL	1997.68	MEAN	5.47	MAX	118	MIN	.00	AC-FT	3960

07203000 VERMEJO RIVER NEAR DAWSON, NM

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on left bank 1.3 mi north of Dawson, 2.3 mi upstream from Rail Canyon, and at mile 28.2.

DRAINAGE AREA.--301 mi².

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.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,365 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1311 or 1731 for history of changes prior to Sept. 24, 1953.

REMARKS.--Estimated daily discharges: Nov. 18, 19, and Dec. 2 to Mar. 5. Records fair except those for winter period, which are poor. Diversions for irrigation of small acreage and mountain meadows upstream from station.

AVERAGE DISCHARGE.--62 years (water years 1916-17, 1920, 1928-86), 18.3 ft³/s, 13,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1926).--Maximum discharge, 12,600 ft³/s, June 17, 1965, gage height, 15.25 ft, from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Aug. 2, 1921, when discharge probably exceeded 10,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 7	0215	*1,120	*6.03	No other peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	8.2	6.1	3.6	4.5	4.8	6.6	6.2	38	28	22	33
2	9.0	8.5	5.8	3.9	4.5	4.5	7.7	6.0	50	23	21	24
3	7.8	9.0	6.4	3.9	4.5	4.8	8.3	8.0	62	24	25	14
4	7.9	8.9	5.8	3.7	4.5	4.5	6.7	11	47	47	21	11
5	7.9	9.1	5.4	3.7	4.5	4.9	5.8	11	42	27	18	10
6	7.9	8.4	4.8	4.8	4.5	5.0	5.6	11	51	34	17	11
7	8.1	8.4	5.0	5.2	4.3	4.5	5.6	11	42	26	20	199
8	8.3	8.4	5.4	5.2	4.0	4.7	5.8	11	68	27	20	92
9	9.3	8.6	5.2	4.8	3.6	5.2	6.8	9.2	68	38	18	26
10	11	9.1	5.1	4.5	3.8	5.6	6.3	10	47	35	47	19
11	16	8.6	4.7	4.5	3.8	4.6	5.6	11	46	28	20	16
12	16	8.9	4.5	4.5	3.9	5.0	5.5	11	37	25	25	15
13	13	8.8	4.0	4.5	4.2	5.9	5.9	9.1	33	24	16	14
14	14	8.9	4.2	4.1	4.4	5.5	6.0	6.9	30	23	14	13
15	11	8.0	4.4	4.5	4.0	5.1	4.8	8.6	28	22	15	11
16	11	8.6	4.7	4.5	3.6	5.4	4.8	9.0	26	30	13	10
17	11	9.5	4.5	4.6	3.3	5.1	4.5	11	36	29	14	8.9
18	11	8.7	4.5	4.5	2.7	4.9	4.6	12	42	47	13	8.2
19	11	8.0	4.7	4.1	3.4	4.8	6.3	11	29	31	12	7.8
20	11	6.6	4.7	4.0	4.5	4.8	7.5	11	29	57	10	7.4
21	11	8.8	4.0	3.6	5.0	4.9	7.1	10	26	111	11	7.2
22	10	8.9	3.7	3.7	4.4	4.5	6.5	11	25	80	18	7.2
23	9.2	7.0	3.7	3.7	3.8	4.9	7.1	10	53	68	38	6.8
24	8.6	7.4	3.6	3.8	3.5	4.9	7.2	9.5	62	49	24	6.8
25	8.8	7.6	3.5	3.9	3.4	5.0	7.2	12	41	44	34	6.5
26	8.2	6.8	3.9	4.0	4.3	5.0	7.0	15	34	38	24	6.4
27	8.2	7.7	3.8	4.1	5.4	5.0	8.2	11	33	34	18	6.4
28	8.2	7.3	3.6	4.3	5.0	5.3	8.1	11	28	29	16	6.4
29	8.2	6.9	3.8	4.1	---	5.8	7.2	16	25	26	14	6.4
30	8.2	6.4	3.8	4.2	---	6.2	7.0	24	56	24	30	6.5
31	8.2	---	3.8	4.5	---	6.4	---	26	---	25	28	---
TOTAL	308.6	246.0	141.1	131.0	115.3	157.5	193.3	350.5	1234	1153	636	616.9
MEAN	9.95	8.20	4.55	4.23	4.12	5.08	6.44	11.3	41.1	37.2	20.5	20.6
MAX	16	9.5	6.4	5.2	5.4	6.4	8.3	26	68	111	47	199
MIN	7.8	6.4	3.5	3.6	2.7	4.5	4.5	6.0	25	22	10	6.4
AC-FT	612	488	280	260	229	312	383	695	2450	2290	1260	1220

CAL YR 1985	TOTAL	9395.6	MEAN	25.7	MAX	162	MIN	1.6	AC-FT	18640
WTR YR 1986	TOTAL	5283.2	MEAN	14.5	MAX	199	MIN	2.7	AC-FT	10480

07203505 VERMEJO DITCH NEAR COLFAX, NM

LOCATION.--Lat 36°34'18", long 104°41'53", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on right bank 2.0 mi southeast of Colfax, and 4.9 mi downstream from head.

PERIOD OF RECORD.--December 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,155 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 19, 1985 at site 0.8 mi downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 1 to Feb. 20, Feb. 24, 25, July 26 to Aug. 2, Aug. 5-9, 14-19, and Sept. 9-30. Records poor. Vermejo ditch diverts water from Vermejo River for use on the Vermejo Project. Three small diversions from Vermejo ditch upstream from gage. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 229 ft^3/s, June 8, 1986; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 229 ft^3/s, June 8; minimum daily, 1.8 ft^3/s, Mar. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	9.8	6.0	3.6	4.7	4.2	3.7	3.6	53	60	12	32
2	6.7	10	5.9	3.8	4.7	2.9	4.2	3.4	53	59	12	34
3	6.3	9.7	6.2	3.8	4.7	2.9	5.1	3.8	75	59	79	24
4	6.2	9.3	5.8	3.6	4.7	2.9	5.2	5.7	55	64	52	22
5	6.0	9.3	5.4	3.8	4.6	2.5	3.8	6.5	46	59	40	21
6	5.9	9.2	4.8	3.9	4.7	2.1	3.4	7.2	56	59	34	20
7	5.6	9.3	5.4	5.1	4.6	2.1	3.3	7.2	46	118	35	66
8	5.8	8.5	5.4	5.1	4.2	1.9	3.3	7.1	229	102	35	66
9	5.6	7.6	5.2	4.8	4.0	1.8	4.4	7.4	170	67	33	45
10	5.7	8.2	4.6	4.5	4.2	2.0	4.3	6.3	75	45	69	19
11	15	8.9	4.5	4.4	4.0	2.5	3.5	7.4	76	34	51	12
12	18	8.9	4.2	4.4	4.3	2.2	3.1	6.7	58	29	86	11
13	14	9.0	4.1	4.4	4.5	3.4	3.0	6.6	46	48	59	10
14	14	9.8	4.3	4.4	4.7	3.2	3.1	6.0	39	29	48	9.0
15	12	9.1	4.7	4.4	4.3	2.8	3.7	5.7	37	27	42	8.6
16	11	7.1	4.7	4.4	3.1	2.7	3.2	7.2	33	31	35	7.9
17	11	6.5	4.3	4.4	3.0	2.7	2.5	9.2	37	31	35	7.5
18	11	8.2	4.5	4.4	3.8	2.8	2.3	10	92	48	20	7.2
19	11	8.9	4.7	4.2	4.5	2.6	3.8	9.5	54	46	10	7.0
20	11	8.3	4.3	4.0	5.4	2.7	4.6	8.3	39	66	9.3	6.8
21	11	8.0	3.8	4.0	5.3	2.3	4.7	7.7	39	111	8.9	6.6
22	10	5.0	3.7	4.0	4.5	2.3	4.3	7.7	38	123	20	6.3
23	8.9	8.6	3.7	4.0	4.7	2.3	4.1	8.4	85	88	53	6.1
24	8.4	9.6	3.6	6.4	4.0	2.4	4.4	8.5	84	62	36	5.9
25	8.1	9.1	3.5	5.5	4.4	2.4	4.4	14	60	49	36	5.7
26	7.3	8.8	3.8	4.1	4.6	2.4	4.4	24	82	33	23	5.6
27	7.9	8.8	3.7	4.1	4.6	2.4	5.1	15	84	27	19	5.4
28	8.6	8.0	3.6	4.5	4.5	2.5	5.5	15	62	21	18	5.2
29	8.4	8.3	3.7	4.4	---	2.6	5.2	17	59	16	18	5.1
30	8.3	9.1	3.7	4.5	---	2.8	5.2	19	75	14	35	5.0
31	8.9	---	3.6	4.7	---	3.2	---	22	---	13	26	---
TOTAL	284.3	258.9	139.4	135.6	123.3	80.5	120.8	293.1	2037	1638	1089.2	492.9
MEAN	9.17	8.63	4.50	4.37	4.40	2.60	4.03	9.45	67.9	52.8	35.1	16.4
MAX	18	10	6.2	6.4	5.4	4.2	5.5	24	229	123	86	66
MIN	5.6	5.0	3.5	3.6	3.0	1.8	2.3	3.4	33	13	8.9	5.0
AC-FT	564	514	276	269	245	160	240	581	4040	3250	2160	978

CAL YR 1985	TOTAL	6723.09	MEAN	18.4	MAX	117	MIN	.36	AC-FT	13340
WTR YR 1986	TOTAL	6693.0	MEAN	18.3	MAX	229	MIN	1.8	AC-FT	13280

07204000 MORENO CREEK AT EAGLE NEST, NM

LOCATION.--Lat 36°33'14", long 105°16'03", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on right bank 175 ft upstream from U.S. Highway 64, 250 ft northwest of intersection of U.S. Highway 64 and State Highway 38, about 1,000 ft upstream from high-water line of Eagle Nest Lake at Eagle Nest.

DRAINAGE AREA.--73.8 mi².

PERIOD OF RECORD.--April 1928 to October 1955 and June 1964 to current year (no winter records except water year 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.

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

GAGE.--Water-stage recorder. Concrete control since Oct. 3, 1952. Datum of gage is 8,197.39 ft above National Geodetic Vertical Datum of 1929. See WSP 1921 for history of changes prior to Oct. 26, 1955. Oct. 26, 1955 to Nov. 12, 1974, water-stage recorder at site 160 ft downstream at datum 1.41 ft lower.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 1,200 acres upstream from station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 240 ft³/s, Sept. 1, 1946, gage height, 3.10 ft, site and datum then in use; maximum gage height, 3.55 ft, May 12, 1973; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35 ft³/s and maximum (*);

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	1730	*49	*2.61	No other peak greater than base discharge.			

Minimum discharge determined, 2.0 ft³/s, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6						---	14	25	6.1	3.6	2.6
2	2.5						---	15	36	5.4	3.6	2.5
3	2.4						---	16	45	5.2	3.4	2.3
4	2.3						---	19	40	5.4	3.1	2.2
5	2.3						---	18	36	6.1	3.0	2.3
6	2.3						---	17	30	14	2.9	2.4
7	5.0						---	15	25	8.5	3.0	3.0
8	5.1						---	14	24	9.2	2.9	6.7
9	4.0						---	15	31	14	2.9	4.5
10	6.0						---	14	23	11	5.1	4.1
11	9.6						---	12	22	9.5	5.1	5.7
12	7.1						---	11	18	8.3	3.7	4.3
13	5.5						---	9.5	16	7.7	3.3	3.8
14	5.4						---	7.8	14	7.3	3.1	4.9
15	4.7						---	5.2	12	7.0	3.2	4.1
16	4.3						---	5.2	11	7.0	2.7	3.7
17	4.5						---	5.9	14	8.7	2.4	3.8
18	5.0						---	6.4	12	7.5	2.4	3.5
19	4.9						---	5.9	11	7.1	2.3	3.3
20	4.5						---	5.4	12	7.7	2.4	3.1
21	4.1						---	5.2	11	8.2	2.7	2.9
22	3.9						7.7	5.0	8.3	7.7	2.4	2.8
23	3.7						7.6	5.1	6.8	7.1	2.9	2.7
24	3.6						7.8	5.3	7.3	6.0	4.3	2.8
25	3.5						9.3	5.5	8.8	5.3	5.0	2.9
26	3.5						16	6.1	8.1	4.9	4.0	2.8
27	3.5						15	5.8	8.1	4.5	3.4	2.7
28	3.5						14	7.1	7.0	4.0	3.0	2.6
29	---						14	9.8	7.4	3.7	2.8	2.7
30	---						14	16	6.8	3.5	2.8	3.0
31	---						---	16	---	3.3	2.9	---
TOTAL	---						---	318.2	536.6	220.9	100.3	100.7
MEAN	---						---	10.3	17.9	7.13	3.24	3.36
MAX	---						---	19	45	14	5.1	6.7
MIN	---						---	5.0	6.8	3.3	2.3	2.2
AC-FT	---						---	631	1060	438	199	200

07204500 CIENEGUILLA CREEK NEAR EAGLE NEST, NM

LOCATION.--Lat 36°29'07", long 105°15'54", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on right bank 0.1 mi downstream from Schoolhouse Draw, 0.4 mi upstream from high-water line of Eagle Nest Lake, 0.5 mi east of U.S. Highway 64, and 4.7 mi south of Eagle Nest.

DRAINAGE AREA.--56 mi².

PERIOD OF RECORD.--April 1928 to September 1955 and June 1964 to current year (no winter records except in water years 1932, 1948 and 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.

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

GAGE.--Water-stage recorder. Concrete control since Sept. 25, 1947. Elevation of gage is 8,195 ft above National Geodetic Vertical Datum of 1929, 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 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 1,000 acres upstream from station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 505 ft³/s, June 16, 1965, gage height, 5.61 ft, from rating curve extended above 110 ft³/s; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s and maximum (*);

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1245	*85	*4.16	No other peak greater than base discharge.			

Minimum discharge determined, 1.9 ft³/s, Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1						---	30	37	11	5.4	4.2
2	2.1						---	28	43	10	5.2	4.1
3	2.0						---	27	42	9.7	4.9	3.4
4	1.9						---	24	36	11	4.8	3.1
5	1.9						---	22	45	11	4.6	4.0
6	1.9						---	20	36	24	3.8	4.5
7	4.2						---	18	28	13	3.8	4.4
8	4.1						---	17	32	13	4.2	10
9	3.2						---	16	74	15	4.2	6.0
10	5.4						---	14	51	13	6.3	6.6
11	12						---	12	50	10	28	10
12	7.9						---	11	39	8.3	8.8	6.3
13	4.9						---	9.8	31	6.9	6.6	5.4
14	4.8						---	8.7	28	6.9	5.7	14
15	4.2						---	7.0	23	8.2	5.3	9.3
16	3.9						---	7.7	21	9.5	4.0	6.7
17	5.1						---	10	25	17	3.8	6.2
18	4.8						---	11	26	16	3.8	5.2
19	4.3						---	8.8	20	16	3.8	4.6
20	4.0						---	6.8	18	16	3.4	4.1
21	3.8						---	5.7	16	26	3.3	3.9
22	3.6						19	5.0	14	16	3.6	3.8
23	3.3						19	4.7	15	13	4.3	3.7
24	3.3						18	4.9	20	11	5.3	4.4
25	3.2						17	4.6	26	9.1	6.2	4.9
26	3.2						34	4.7	21	8.5	8.8	4.9
27	3.2						43	4.5	20	7.8	6.7	4.5
28	3.3						33	6.7	17	6.6	5.4	4.2
29	---						42	11	15	5.9	4.7	5.1
30	---						33	15	13	5.4	4.4	4.8
31	---						---	16	---	5.1	4.4	---
TOTAL	---						---	391.6	882	359.9	177.5	166.3
MEAN	---						---	12.6	29.4	11.6	5.73	5.54
MAX	---						---	30	74	26	28	14
MIN	---						---	4.5	13	5.1	3.3	3.1
AC-FT	---						---	777	1750	714	352	330

07205000 SIXMILE CREEK NEAR EAGLE NEST, NM

LOCATION.--Lat 36°31'07", long 105°16'29", Colfax County, Hydrologic Unit 11080002, 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 mi southwest of Eagle Nest.

DRAINAGE AREA.--10.5 mi².

PERIOD OF RECORD.--April 1928 to September 1955 (no winter records in water years 1929-31, 1933-55), July 1958 to current year (no winter records subsequent to water year 1975). 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.

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

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 National Geodetic Vertical Datum of 1929. 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.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years (water years 1932, 1959-75), 2.51 ft³/s, 1,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1930-55 and SINCE 1957).--Maximum discharge, 128 ft³/s, Aug. 5, 1969, gage height, 2.86 ft, from rating curve extended above 32 ft³/s; maximum gage height recorded, 3.38 ft, Apr. 2, 1937 (ice jam), site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 26	1130	*25	*1.51	June 9	0145	21	1.40

Minimum discharge determined, 0.05 ft³/s, Oct. 14-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0						---	11	11	5.8	.84	1.6
2	1.6						---	9.8	10	5.1	.82	1.6
3	.65						---	9.9	13	4.8	.89	1.5
4	.14						---	9.2	11	4.6	.77	1.5
5	.08						---	8.2	12	4.9	.72	1.6
6	.08						---	6.7	11	5.8	.96	1.6
7	.63						---	5.7	11	5.0	1.1	1.9
8	.12						---	5.1	14	4.8	.87	4.0
9	.14						---	4.0	18	4.5	.78	1.9
10	.28						---	3.5	19	4.1	1.1	2.2
11	.64						---	3.2	17	3.8	1.1	2.2
12	.09						---	2.8	14	3.6	.79	1.7
13	.08						---	2.7	12	3.5	.72	1.6
14	.06						---	2.6	11	2.1	1.1	1.9
15	.05						---	2.5	9.2	2.0	1.8	1.7
16	.06						---	2.5	8.2	2.1	1.7	1.6
17	.24						---	3.2	7.8	2.1	1.8	1.6
18	.76						---	3.0	7.5	1.9	1.8	1.5
19	1.2						---	2.6	8.0	1.7	1.6	1.4
20	1.6						---	2.3	7.9	1.6	1.6	1.3
21	1.7						---	2.1	6.7	1.6	1.6	1.3
22	1.7						7.0	2.1	6.3	1.5	1.6	1.4
23	1.6						8.2	2.1	6.2	1.4	1.7	1.5
24	1.7						8.8	2.1	6.9	1.2	1.7	1.6
25	1.8						9.7	2.1	6.9	.95	1.7	1.6
26	1.9						19	2.3	7.1	.87	1.9	1.6
27	2.0						15	2.3	8.2	.83	1.7	1.6
28	2.1						12	2.8	7.1	.77	1.6	1.5
29	---						12	4.8	6.8	.64	1.6	1.6
30	---						13	5.5	6.3	.60	1.6	1.6
31	---						---	4.6	---	.76	1.6	---
TOTAL	---						---	133.3	301.1	84.92	41.16	51.2
MEAN	---						---	4.30	10.0	2.74	1.33	1.71
MAX	---						---	11	19	5.8	1.9	4.0
MIN	---						---	2.1	6.2	.60	.72	1.3
AC-FT	---						---	264	597	168	82	102

07205500 EAGLE NEST LAKE NEAR EAGLE NEST, NM

LOCATION.--Lat 36°31'53", long 105°13'44", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, at upstream face of Eagle Nest Dam on Cimarron River, 2.5 mi southeast of Eagle Nest, 6.7 mi west of Ute Park, and at mile 48.7.

DRAINAGE AREA.--167 mi².

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. Prior to January 1972 published as Eagle Nest Reservoir.

REVISED RECORDS.--WSP 1281: Drainage area.

GAGE.--Nonrecording gage usually read several times a month at random intervals. Datum of gage is 8,056.8 ft above National Geodetic Vertical Datum of 1929. Prior to October 1964 gage heights were raised by addition of 8,000 ft and called elevations.

REMARKS.--Lake 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 ft, 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 upstream from reservoir.

COOPERATION.--Supplemental gage readings provided by Cimarron River watermaster.

EXTREMES FOR 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.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 77,430 acre-ft, July 10, gage height, 136.30 ft; minimum observed, 71,000 acre-ft, Dec. 31, gage height, 133.55 ft.

Capacity table (gage height in feet, and contents, in acre-feet)
(Based on data provided by New Mexico State Engineer Office in 1950)

125	53,050	135	74,350
130	63,170	140	86,590

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72030	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	72800	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	77430	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	73420	---	---	---	---
22	---	---	---	---	---	---	74240	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	72050	---	---	---	72610	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	72030	---	---	---	---	74120	---	77050	---	---	75180
31	72050	---	71000	71300	---	73300	---	73300	---	76240	75430	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
(†)	134.01	134.00	133.55	133.68	134.35	134.55	134.90	134.55	136.24	134.80	135.46	135.35
(††)	+20	-20	-1030	+300	+1310	+690	+820	-820	+3750	-810	-810	-250

(†) GAGE HEIGHT, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

07206000 CIMARRON RIVER BELOW EAGLE NEST DAM, NM

LOCATION.--Lat 36°31'55", long 105°13'43", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on left bank 300 ft downstream from Eagle Nest Dam, 2.5 mi southeast of Eagle Nest, 6.7 mi west of Ute Park, and at mile 48.6.

DRAINAGE AREA.--167 mi².

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

REVISED RECORDS.--WSP 1281: Drainage area.

GAGE.--Water-stage recorder. Parshall flume since May 15, 1951. Elevation of gage is 8,080 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 15, 1951, at datum 0.81 ft higher.

REMARKS.--Estimated daily discharges: Dec. 21 to Feb. 26. Records good except for estimated daily discharges, which are poor. Flow regulated by Eagle Nest Lake (station 07205500). Diversions for irrigation of 2,500 acres upstream from station.

AVERAGE DISCHARGE.--36 years, 13.6 ft³/s, 9,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 205 ft³/s, June 14, 1955; maximum gage height, 3.04 ft, April 20, 1983; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 85 ft³/s, May 5; minimum daily, 0.52 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	.52	.57	.63	.63	6.4	3.1	70	19	1.2	46	13
2	.92	.52	.63	.63	.63	6.4	3.1	70	8.4	1.2	46	19
3	.85	.52	.63	.63	.63	6.4	3.3	70	2.0	1.2	46	19
4	11	1.9	.63	.63	.63	6.4	3.4	79	2.0	1.3	46	19
5	15	4.3	.63	.63	.63	6.7	8.0	85	1.9	1.4	46	14
6	15	4.3	.63	.63	.63	3.4	15	82	1.8	2.2	46	11
7	15	4.5	.63	.63	.63	1.4	2.0	80	1.7	8.9	42	11
8	15	4.8	.63	.63	.63	1.5	6.3	58	1.6	8.6	38	1.2
9	15	5.1	.63	.63	.63	1.5	7.1	40	3.6	8.6	38	1.1
10	15	5.2	49	.63	.63	1.5	7.4	40	3.5	8.6	38	1.7
11	15	5.0	62	.63	.63	1.3	7.5	40	3.4	8.6	38	1.3
12	14	4.9	55	.63	.63	1.4	7.6	40	3.0	11	38	1.2
13	12	5.0	55	.63	.63	1.4	7.7	40	2.9	17	38	1.3
14	12	4.9	55	.63	.63	1.4	11	40	2.8	17	38	1.3
15	11	4.9	55	.63	.63	1.4	13	40	2.4	17	35	1.3
16	9.8	5.1	55	.63	.63	1.5	13	41	2.1	17	30	1.2
17	9.9	5.3	55	.63	.63	1.6	14	41	1.8	17	30	1.2
18	10	5.3	55	.63	.63	1.7	14	41	1.5	17	30	.96
19	10	5.9	55	.63	.63	1.8	14	42	1.2	17	38	1.3
20	10	6.0	55	.63	.63	1.8	14	42	1.1	21	44	1.2
21	9.9	3.1	15	.63	.63	2.0	17	30	1.1	23	44	1.8
22	3.5	.73	.63	.63	.63	2.0	22	21	1.4	23	38	10
23	.52	.64	.63	.63	.63	2.2	24	21	1.3	19	1.4	14
24	.52	.62	.63	.63	.63	2.2	25	21	1.2	14	7.9	15
25	.52	.56	.63	.63	.63	2.3	31	22	1.1	14	12	15
26	.52	.60	.63	.63	.63	2.4	31	22	1.4	14	5.7	15
27	.52	.59	.63	.63	.63	2.5	41	22	1.3	14	1.1	15
28	.52	.52	.63	.63	3.9	2.6	49	27	1.1	23	.96	15
29	.52	.52	.63	.63	---	2.6	51	36	1.1	37	1.6	15
30	.52	.52	.63	.63	---	2.9	61	26	1.1	42	1.2	15
31	.52	---	.63	.63	---	2.9	---	19	---	43	1.2	---
TOTAL	241.35	92.36	632.91	19.53	20.91	83.5	526.5	1348	79.8	468.8	906.06	253.06
MEAN	7.79	3.08	20.4	.63	.75	2.69	17.6	43.5	2.66	15.1	29.2	8.44
MAX	15	6.0	62	.63	3.9	6.7	61	85	19	43	46	19
MIN	.52	.52	.57	.63	.63	1.3	2.0	19	1.1	1.2	.96	.96
AC-FT	479	183	1260	39	41	166	1040	2670	158	930	1800	502

CAL YR 1985	TOTAL	5355.16	MEAN	14.7	MAX	115	MIN	.17	AC-FT	10620
WTR YR 1986	TOTAL	4672.78	MEAN	12.8	MAX	85	MIN	.52	AC-FT	9270

07207000 CIMARRON RIVER NEAR CIMARRON, NM

LOCATION.--Lat 36°31'11", long 104°58'42", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on right bank 1,200 ft downstream from Turkey Creek Canyon, 3.6 mi west of Cimarron, and at mile 31.6.

DRAINAGE AREA.--294 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1281: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 6, 1963. Datum of gage is 6,599.58 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 11 to Jan. 24, Feb. 6-18, and Sept. 2-30. Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by Eagle Nest Lake (station 07205500). Diversions upstream from station for irrigation of about 3,500 acres, part of which is downstream from station. Philmont ditch (formerly known as Cimarroncito ditch) diverts from left bank 1.5 mi upstream from station, flumes under river 0.9 mi upstream and bypasses station for off-channel storage and irrigation downstream; Cimarron Diversion pipeline 300 ft upstream from station for city of Raton Water Supply started June, 1983. See tabulation below for monthly diversions.

AVERAGE DISCHARGE.--36 years, 20.9 ft³/s, 15,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft³/s, June 17, 1965, gage height, 12.42 ft, from floodmark, from rating curve extended above 800 ft³/s on basis of slope-area measurements at gage heights 4.88 ft and 12.42 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 197 ft³/s, at 1645 hours June 9, gage height, 2.70 ft; maximum gage height, 3.47 ft, Dec. 15 from ice jam; minimum daily, 3.0 ft³/s, Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.1	7.6	6.4	5.3	6.7	6.5	61	60	17	36	8.5
2	7.8	8.0	7.1	6.8	5.2	8.1	7.5	62	110	16	35	21
3	4.3	7.9	8.7	7.4	5.0	7.6	7.7	64	135	15	36	26
4	3.6	7.7	9.2	8.2	3.6	7.5	7.3	71	132	14	36	22
5	13	8.1	8.6	8.6	3.7	7.9	6.9	78	118	14	36	19
6	14	10	8.2	8.8	3.4	8.0	10	76	111	14	36	14
7	14	11	5.4	8.2	3.2	6.8	11	75	96	14	36	12
8	15	11	6.4	6.8	3.2	5.3	10	68	110	17	33	6.0
9	16	11	7.3	6.4	3.3	5.2	14	46	103	18	31	4.0
10	20	11	7.7	6.4	3.3	5.5	14	43	82	17	39	4.5
11	24	11	22	6.6	3.4	5.1	14	41	77	16	36	5.2
12	22	11	20	6.6	3.5	5.3	14	40	67	15	34	3.5
13	20	11	19	6.6	3.6	5.6	14	38	54	18	33	3.5
14	20	12	17	6.4	3.6	5.3	14	38	47	20	33	4.0
15	19	13	17	6.0	3.7	5.2	17	37	41	19	33	4.0
16	17	15	18	5.6	3.7	4.6	17	39	36	20	26	4.0
17	17	12	19	5.4	3.7	4.5	18	42	38	21	25	3.7
18	14	12	19	5.4	5.7	4.5	18	41	34	21	25	3.0
19	13	13	18	5.4	3.7	4.5	20	41	29	23	26	3.0
20	12	17	18	5.5	3.8	4.7	19	39	27	24	35	3.3
21	14	20	17	6.0	4.3	4.7	20	37	24	25	36	6.0
22	16	17	14	5.6	4.7	5.0	22	26	22	25	44	14
23	11	10	10	5.5	5.8	4.9	25	26	20	24	24	16
24	9.0	9.2	7.0	6.0	5.6	5.2	26	24	20	17	13	17
25	8.6	8.6	6.0	6.8	5.1	5.2	31	25	22	14	16	17
26	8.3	8.2	5.8	9.0	5.0	5.5	37	26	23	14	20	17
27	7.9	7.9	6.0	11	5.3	5.3	39	24	22	14	14	17
28	7.9	7.5	6.7	6.9	5.0	5.4	48	23	20	14	11	17
29	7.9	6.5	7.0	5.9	---	5.8	50	35	19	25	8.6	17
30	7.9	6.0	6.9	5.8	---	6.1	54	35	18	35	8.5	17
31	7.9	---	6.5	5.4	---	6.1	---	26	---	37	9.1	---
TOTAL	407.1	321.7	356.1	207.4	118.4	177.1	611.9	1347	1717	597	864.2	329.2
MEAN	13.1	10.7	11.5	6.69	4.23	5.71	20.4	43.5	57.2	19.3	27.9	11.0
MAX	24	20	22	11	5.8	8.1	54	78	135	37	44	26
MIN	3.6	6.0	5.4	5.4	3.2	4.5	6.5	23	18	14	8.5	3.0
AC-FT	807	638	706	411	235	351	1210	2670	3410	1180	1710	653
(†)	---	---	---	---	---	---	---	---	---	131	254	305
(††)	---	---	---	---	---	---	40	32	160	166	354	166

CAL YR 1985 TOTAL 10679.5 MEAN 29.3 MAX 173 MIN 1.0 AC-FT 21180
WTR YR 1986 TOTAL 7054.1 MEAN 19.3 MAX 135 MIN 3.0 AC-FT 13990 (†) 690 (††) 918

(†) DIVERSION, IN ACRE-FEET, BY PHILMONT DITCH, DATA FURNISHED BY CIMARRON RIVER WATERMASTER
(††) DIVERSION, IN ACRE-FEET, RATON DIVERSION, DATA FURNISHED BY CIMARRON RIVER WATERMASTER

07207000 CIMARRON RIVER NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)
OCT											
25...	1000	8.4	375	430	8.30	8.30	12.0	7.0	9.8	<10	180
MAR											
04...	1300	7.4	325	398	7.80	8.40	13.0	2.5	--	--	170
MAY											
20...	1300	38	257	211	8.50	8.20	25.0	16.0	8.1	--	87
JUL											
08...	1330	18	314	290	8.50	8.20	20.0	18.0	7.8	26	130

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT											
25...	32	57	10	17	0.6	1.6	152	50	7.2	0.30	9.5
MAR											
04...	22	52	10	18	0.6	1.4	149	37	9.4	0.30	11
MAY											
20...	2	24	6.6	9.9	0.5	2.0	85	19	2.4	0.30	5.9
JUL											
08...	9	39	6.8	10	0.4	2.2	116	27	6.0	0.20	11

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
OCT										
25...	240	<0.100	<0.100	0.020	0.18	<0.010	0.010	2.5	--	--
MAR										
04...	230	--	--	--	--	--	--	--	3	2
MAY										
20...	120	--	--	--	--	--	--	--	--	--
JUL										
08...	170	<0.100	<0.100	0.020	0.28	0.020	<0.010	3.0	--	--

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT										
25...	20	--	--	--	--	--	--	31	--	--
MAR										
04...	30	<1	1	<10	<10	4	3	130	4	<1
MAY										
20...	20	--	--	--	--	--	--	110	--	--
JUL										
08...	30	--	--	--	--	--	--	35	--	--

07207000 CIMARRON RIVER NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)
OCT										
25...	--	--	--	--	--	--	27	0.61	--	--
MAR										
04...	<0.10	<0.1	2	2	20	23	4	0.08	79	--
MAY										
20...	--	--	--	--	--	--	20	2.1	86	--
JUL										
08...	--	--	--	--	--	--	19	0.92	93	0

07207500 PONIL CREEK NEAR CIMARRON, NM

LOCATION.--Lat 36°34'25", long 104°56'46", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on left bank 1.6 mi downstream from confluence of North and South Ponil Creeks, and 4.7 mi northwest of Cimarron.

DRAINAGE AREA.--171 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1281: Drainage area. WSP 1731: 1920.

GAGE.--Water-stage recorder. Elevation of gage is 6,630 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 8, 1922, at site 0.1 mi downstream at different datum. May 8, 1922 to Aug. 8, 1929, at site 0.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 1-7, Dec. 9 to Jan. 5, Jan. 7-11, 26, and Feb. 5-12. Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 250 acres upstream from station. Diversions 1,000 ft downstream from station for irrigation of about 300 acres.

AVERAGE DISCHARGE.--47 years (water years 1916-25, 1928, 1951-86), 11.2 ft³/s, 8,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,630 ft³/s, June 17, 1965, gage height, 11.13 ft, from rating curve extended above 230 ft³/s on basis of slope-area measurements at gage heights 3.56 ft, 5.80 ft, 7.15 ft, and 11.13 ft; no flow many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge for flood of Aug. 8, 1929, which destroyed gage, was estimated as 5,200 ft³/s by State Engineer.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	0815	*268	*3.26	No other peak greater than base discharge.			

Minimum discharge, 0.63 ft³/s, Jan. 24; could have been less during ice period.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.6	2.7	2.0	1.8	3.2	7.8	20	59	18	3.7	3.8
2	2.6	3.5	2.3	2.2	1.8	3.1	9.0	20	211	15	3.6	3.1
3	2.4	3.4	2.4	2.2	1.8	3.1	8.8	20	254	13	4.1	2.6
4	2.2	3.3	2.5	2.1	1.8	3.0	8.2	22	205	12	3.3	3.1
5	2.2	3.3	2.0	2.0	1.3	2.9	7.8	22	152	11	2.9	3.4
6	2.1	3.2	2.5	3.0	1.5	2.9	7.8	22	115	16	2.3	3.0
7	1.9	3.0	3.0	3.0	1.4	3.0	8.0	20	83	13	2.1	4.7
8	2.6	2.8	3.1	1.7	1.1	2.8	9.8	18	69	16	2.7	12
9	2.7	2.7	3.0	2.0	1.0	3.0	10	17	74	19	2.6	8.2
10	3.9	2.7	2.5	2.5	1.0	3.0	9.6	15	59	14	8.4	6.2
11	8.7	2.7	1.5	2.5	1.0	2.9	9.4	13	57	10	6.0	6.1
12	9.4	2.7	1.5	5.6	1.0	3.1	9.0	11	47	8.6	3.6	5.4
13	8.2	2.6	1.5	5.0	5.5	3.3	8.6	9.9	39	9.0	3.0	4.9
14	8.1	3.2	1.6	5.1	2.3	3.1	7.6	9.0	35	8.4	3.0	5.6
15	6.7	2.7	1.7	4.9	2.6	2.9	7.7	8.5	30	7.0	2.9	5.2
16	6.0	3.0	1.8	4.3	2.5	2.5	7.2	8.3	28	6.4	2.0	4.1
17	5.8	4.0	2.0	3.6	2.1	2.6	7.6	10	38	7.4	1.6	3.8
18	5.6	3.4	2.0	2.2	2.3	2.5	6.8	9.3	34	7.1	1.4	3.4
19	8.0	3.3	1.8	2.5	2.7	2.1	8.5	9.7	29	25	1.2	3.1
20	7.1	2.8	2.5	2.7	3.1	2.5	9.8	7.7	26	18	1.0	2.8
21	5.7	3.2	2.3	1.8	2.7	2.2	12	6.8	23	15	1.1	2.5
22	5.4	3.6	2.0	1.8	2.3	2.4	19	6.0	19	13	6.2	2.3
23	6.5	3.3	2.0	2.5	2.5	2.5	24	5.7	22	12	4.1	2.6
24	6.5	3.0	2.0	1.9	2.4	2.9	23	5.6	27	9.0	3.7	2.8
25	6.3	2.8	2.0	2.0	2.4	3.7	21	5.3	27	7.1	4.1	2.8
26	4.7	3.0	2.0	2.0	2.8	4.0	23	6.0	24	6.2	5.6	2.8
27	4.1	3.0	2.0	2.6	3.2	4.5	24	5.6	23	4.9	5.1	2.7
28	3.9	2.9	2.1	3.2	3.3	5.3	23	5.7	20	4.1	4.1	2.6
29	3.6	3.1	2.3	2.7	---	6.0	22	8.2	19	3.6	3.7	2.6
30	3.5	3.0	2.3	2.3	---	6.4	21	11	18	3.0	3.4	3.3
31	3.5	---	2.0	1.8	---	6.7	---	13	---	2.8	3.7	---
TOTAL	152.8	92.8	66.9	85.7	61.2	104.1	381.0	371.3	1866	334.6	106.2	121.5
MEAN	4.93	3.09	2.16	2.76	2.19	3.36	12.7	12.0	62.2	10.8	3.43	4.05
MAX	9.4	4.0	3.1	5.6	5.5	6.7	24	22	254	25	8.4	12
MIN	1.9	2.6	1.5	1.7	1.0	2.1	6.8	5.3	18	2.8	1.0	2.3
AC-FT	303	184	133	170	121	206	756	736	3700	664	211	241

CAL YR 1985	TOTAL	7766.31	MEAN	21.3	MAX	223	MIN	.53	AC-FT	15400
WTR YR 1986	TOTAL	3744.1	MEAN	10.3	MAX	254	MIN	1.0	AC-FT	7430

07207500 PONIL CREEK NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
23...	1400	7.1	250	299	8.30	8.30	20.0	13.5	9.3
MAR									
04...	1500	2.9	205	250	7.70	8.40	14.0	5.0	--
MAY									
20...	1500	7.8	--	309	7.80	8.10	26.0	20.0	7.2
JUL									
08...	1530	13	192	202	8.60	8.10	24.0	20.0	6.8

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT									
23...	120	6	33	9.1	14	0.6	1.1	114	25
MAR									
04...	100	5	28	7.4	12	0.5	0.70	95	18
MAY									
20...	87	0	24	6.5	9.4	0.5	0.90	134	18
JUL									
08...	85	2	24	6.1	8.9	0.4	1.2	83	19

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
23...	3.4	0.40	10	160	10	26	28	0.54	--
MAR									
04...	3.2	0.30	8.2	130	<10	43	4	0.03	92
MAY									
20...	5.9	0.40	10	160	20	77	8	0.17	99
JUL									
08...	2.5	0.20	10	120	30	110	--	--	--

07208500 RAYADO CREEK AT SAUBLE RANCH, NEAR CIMARRON, NM

LOCATION.--Lat 36°22'20", long 104°58'10", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on right bank at Sauble Ranch (Carson-Maxwell Base Camp of Philmont Scout Ranch), 2.5 mi upstream from State Highway 21, 4.0 mi downstream from Bonito Creek, and 9.8 mi southwest of Cimarron.

DRAINAGE AREA.--65 mi².

WATER-DISCHARGE RECORDS

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.

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

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1976. Elevation of gage is 6,720 ft above National Geodetic Vertical Datum of 1929, 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.

REMARKS.--Estimated daily discharges: Nov. 16-20, 29, 30, Dec. 1, 2, 7-15, Jan. 22-27, and Feb. 5-11. Water-discharge records good except for estimated daily discharges, which are fair. No diversion upstream from station.

AVERAGE DISCHARGE.--67 years (water years 1912, 1914, 1916-20, 1924, 1928-86), 13.9 ft³/s, 10,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1909-12, and SINCE 1913).--Maximum discharge, 9,000 ft³/s, June 17, 1965, gage height, 11.5 ft, from floodmarks, from rating curve extended above 70 ft³/s on basis of field estimate of peak flow; minimum, 0.03 ft³/s, Dec. 3, 1950, but may have been less during periods of ice effect.

EXTREMES OUTSIDE PERIOD OF RECORD.--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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0600	*304	*4.02	Aug. 26	1130	117	3.42

Minimum discharge, 1.1 ft³/s, Nov. 19, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.7	3.3	7.0	3.9	7.8	14	27	54	22	10	30
2	4.7	5.4	4.0	4.9	4.0	7.5	14	26	76	20	10	28
3	4.6	5.2	5.9	3.9	4.0	7.2	13	26	92	20	10	23
4	4.4	5.1	4.2	6.9	3.8	6.6	12	27	97	20	9.5	22
5	4.5	5.1	8.6	11	3.8	6.9	12	26	114	24	9.3	21
6	4.4	5.0	5.2	5.3	3.5	6.7	13	26	128	26	9.3	20
7	5.0	4.7	4.0	4.9	3.0	6.8	13	24	107	23	9.6	18
8	5.3	4.8	3.4	12	2.5	6.8	14	22	118	36	9.6	25
9	5.0	4.7	3.1	7.1	2.0	7.0	13	21	240	47	9.7	19
10	6.3	4.5	3.5	4.7	2.0	5.5	13	19	172	33	13	19
11	14	4.7	2.5	4.6	2.0	6.2	13	17	155	26	20	20
12	8.9	4.6	2.5	3.6	5.7	6.5	13	16	123	21	12	18
13	7.2	4.4	2.5	4.4	4.8	6.3	13	15	103	19	11	16
14	8.3	4.7	2.8	3.9	4.4	6.4	12	14	85	18	10	25
15	7.2	2.4	3.0	4.0	4.4	5.8	12	13	72	17	11	21
16	6.7	2.4	3.9	3.4	4.5	5.0	12	13	65	16	9.7	20
17	7.2	2.5	4.1	3.4	4.3	5.9	12	14	75	19	8.9	19
18	6.8	2.7	6.1	3.4	4.8	4.6	11	14	62	17	9.6	18
19	6.6	2.9	3.8	3.4	5.9	5.9	12	14	51	18	8.4	17
20	6.4	3.1	6.5	3.5	6.8	5.1	14	11	46	17	7.9	16
21	6.0	10	4.5	3.6	6.2	4.9	16	9.9	41	19	9.3	15
22	5.7	6.0	4.0	3.1	5.7	6.3	16	9.3	35	19	19	14
23	5.5	5.4	3.9	3.0	5.3	7.3	15	9.1	33	16	25	13
24	5.4	5.3	5.3	3.0	5.2	9.3	15	8.9	38	14	27	14
25	5.1	5.4	6.1	3.0	6.3	11	16	9.2	42	13	34	13
26	5.1	5.9	3.8	3.5	7.9	11	20	12	36	13	80	13
27	5.1	5.5	7.1	3.7	9.4	11	21	9.9	33	12	74	13
28	5.4	4.4	6.6	3.8	8.4	13	21	10	29	11	53	12
29	5.1	4.2	4.8	3.7	---	13	27	13	26	10	42	11
30	5.1	4.0	3.9	3.8	---	13	27	16	24	10	39	11
31	5.1	---	4.5	4.0	---	13	---	17	---	10	35	---
TOTAL	187.1	140.7	137.4	143.5	134.5	239.3	449	509.3	2372	606	645.8	544
MEAN	6.04	4.69	4.43	4.63	4.80	7.72	15.0	16.4	79.1	19.5	20.8	18.1
MAX	14	10	8.6	12	9.4	13	27	27	240	47	80	30
MIN	4.4	2.4	2.5	3.0	2.0	4.6	11	8.9	24	10	7.9	11
AC-FT	371	279	273	285	267	475	891	1010	4700	1200	1280	1080

CAL YR 1985	TOTAL	7731.3	MEAN	21.2	MAX	195	MIN	2.4	AC-FT	15340
WTR YR 1986	TOTAL	6108.6	MEAN	16.7	MAX	240	MIN	2.0	AC-FT	12120

07208500 RAYADO CREEK AT SAUBLE RANCH, NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
23...	1100	5.6	122	152	--	8.30	12.0	9.0	10.0
MAR									
04...	1000	6.1	109	141	7.70	8.30	12.0	2.0	--
MAY									
20...	1000	12	100	106	7.60	7.70	25.0	11.0	8.3
JUL									
08...	1100	25	118	126	8.40	7.60	24.0	18.0	7.4

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT									
23...	61	0	16	5.2	5.2	0.3	1.7	62	9.7
MAR									
04...	56	0	14	5.0	5.1	0.3	2.2	61	7.9
MAY									
20...	39	0	10	3.3	4.1	0.3	4.2	41	6.8
JUL									
08...	57	0	15	4.7	4.3	0.3	1.6	57	5.5

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
23...	2.4	0.20	19	97	10	35	11	0.17	--
MAR									
04...	2.8	0.30	18	92	<10	100	3	0.05	--
MAY									
20...	4.5	0.30	17	75	<10	120	9	0.29	97
JUL									
08...	1.7	0.20	21	88	30	220	27	1.8	97

07211000 CIMARRON RIVER AT SPRINGER, NM

LOCATION.--Lat 36°21'37", long 104°35'53", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on left bank at Springer, 400 ft downstream from bridge on State Highway 199, 0.3 mi upstream from Salado Creek, and at mile 8.2.

DRAINAGE AREA.--1,032 mi².

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.

REVISED RECORDS.--WSP 827: 1934-36(M). WSP 1281: 1942, 1945-46(M).

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1954. Elevation of gage is 5,770 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1311 or 1731 for history of changes prior to July 17, 1942.

REMARKS.--Estimated daily discharges: Dec. 3, 10-30, Feb. 6-11, and Feb. 26 to Mar. 11. Records good. Flow partly regulated by Eagle Nest Lake (station 07205500). Diversions for irrigation of about 23,000 acres upstream from station and a few hundred acres between station and mouth. Several observations of water tempterature were made during the year.

AVERAGE DISCHARGE.--62 years (water years 1921, 1925, 1927-86), 17.3 ft³/s, 12,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1930).--Maximum discharge, 29,500 ft³/s, June 18, 1965, gage height, 19.96 ft, from floodmarks, from rating curve extended above 1,800 ft³/s on basis of contracted-opening measurement of peak flow; no flow at times in 1954, 1956-57, 1978, 1983, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 22 ft, Sept. 29, 1904 (backwater from debris on railroad bridge). Another major flood occurred June 11, 1913. Maximum discharge of these floods probably extended 10,000 ft³/s, but probably were less than the 1965 flood.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 7	2015	*375	*5.56	No other peak greater than base discharge.			

Minimum discharge, not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	4.5	5.4	3.9	2.9	3.1	3.8	2.3	34	45	4.3	17
2	4.9	4.2	6.0	9.6	2.7	3.3	4.0	2.7	63	35	3.6	13
3	4.4	4.5	6.0	13	2.6	3.5	4.0	2.4	39	31	5.1	9.9
4	3.9	6.7	5.2	12	2.6	3.6	4.2	2.1	50	21	5.1	49
5	3.8	7.8	7.0	12	2.7	3.0	4.0	1.9	69	28	4.5	26
6	3.7	7.6	4.6	11	2.7	5.2	3.9	1.7	153	35	3.7	17
7	3.9	7.5	4.8	9.5	2.9	5.9	3.6	2.4	195	56	3.5	31
8	7.9	8.2	4.7	9.4	2.9	2.6	3.5	1.9	117	42	2.7	32
9	7.2	11	4.5	8.8	3.0	2.6	3.7	1.9	260	51	2.5	25
10	7.1	11	4.5	10	3.2	2.6	3.7	1.5	343	54	4.3	14
11	12	12	4.6	10	3.3	2.6	3.5	1.6	310	42	7.8	9.6
12	11	11	5.0	10	4.6	3.7	3.2	2.4	286	33	5.6	8.1
13	8.4	11	5.3	9.1	6.4	4.2	3.0	3.6	211	28	4.0	7.1
14	8.2	11	5.7	7.7	6.6	4.6	2.6	4.5	171	26	2.6	7.9
15	7.9	9.6	5.6	7.2	6.9	4.8	2.5	6.4	141	26	2.2	7.4
16	8.1	8.0	5.5	6.4	6.3	4.5	2.5	4.0	107	22	1.8	6.5
17	10	7.1	5.4	5.6	5.3	4.4	2.8	4.9	144	21	1.5	5.8
18	9.9	6.9	5.0	4.9	5.1	4.0	3.2	4.9	146	21	1.4	5.1
19	9.1	11	4.6	4.7	5.0	4.0	3.4	2.0	152	22	1.4	4.7
20	8.0	14	4.5	4.5	4.2	4.3	3.2	2.0	117	79	1.3	4.3
21	7.5	12	4.3	4.0	3.6	4.9	3.4	1.3	89	115	1.3	3.9
22	7.2	8.9	4.0	4.1	3.1	4.5	3.2	.90	36	42	1.2	3.7
23	6.1	11	3.9	3.3	2.9	4.5	2.7	.99	27	35	44	3.8
24	4.4	8.4	3.9	3.1	2.8	4.1	2.5	1.5	24	22	22	4.2
25	4.1	7.0	4.0	3.2	2.6	3.9	2.6	2.6	47	15	24	4.0
26	4.5	6.9	4.1	3.8	2.7	3.7	2.7	3.0	67	11	15	3.7
27	4.5	6.4	4.0	4.3	2.8	3.7	2.7	6.8	60	8.8	14	3.7
28	4.9	6.4	3.6	4.1	2.9	3.7	2.3	9.4	54	7.7	17	5.1
29	4.9	5.9	3.3	3.6	---	3.9	2.6	7.9	50	5.8	14	5.8
30	4.9	5.8	3.1	3.2	---	4.0	3.1	13	64	5.8	12	6.7
31	4.7	---	2.9	2.9	---	3.9	---	11	---	5.4	12	---
TOTAL	202.5	253.3	145.0	208.9	105.3	121.3	96.1	115.49	3626	991.5	245.4	345.0
MEAN	6.53	8.44	4.68	6.74	3.76	3.91	3.20	3.73	121	32.0	7.92	11.5
MAX	12	14	7.0	13	6.9	5.9	4.2	13	343	115	44	49
MIN	3.7	4.2	2.9	2.9	2.6	2.6	2.3	.90	24	5.4	1.2	3.7
AC-FT	402	502	288	414	209	241	191	229	7190	1970	487	684

CAL YR 1985	TOTAL	16679.23	MEAN	45.7	MAX	490	MIN	.49	AC-FT	33080
WTR YR 1986	TOTAL	6455.79	MEAN	17.7	MAX	343	MIN	.90	AC-FT	12810

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec.21, T.24 N., R.23 E., Colfax County, Hydrologic Unit 11080003, on left bank at head of gorge, 2.0 mi south of Taylor Springs, 2.3 mi downstream from Cimarron River, 2.4 mi upstream from Chico Creek, 7.1 mi southeast of Springer, and at mile 847.9.

DRAINAGE AREA.--2,850 mi².

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.

REVISED RECORDS.--WSP 1177: Drainage area. WSP 1281: 1941-42(P), 1945-47(M), 1948-50(P).

GAGE.--Water-stage recorder. Elevation of gage is 5,635 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 10, 1964, water-stage recorder at site 1.7 mi downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

REMARKS.--Estimated daily discharges: Dec. 19, 25, Jan. 20, and Feb. 5-11. Records fair. Diversions for irrigation of about 30,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years (water years 1940-58, 1965-86), 77.9 ft³/s, 56,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 162,000 ft³/s, June 18, 1965, gage height, 47.4 ft, from floodmarks, from rating curve extended above 7,000 ft³/s on basis of slope-area measurement of peak flow; no flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood prior to 1965 occurred Sept. 29, 1904, discharge published as 91,100 ft³/s in WSP 842, 847.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0900	*1,980	*4.40	No other peak greater than base discharge.			

Minimum discharge, 3.1 ft³/s, May 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	18	14	34	18	12	9.6	7.1	135	70	10	48
2	20	18	16	34	18	12	10	7.0	223	60	9.1	31
3	19	17	22	25	17	12	12	8.1	103	53	9.1	39
4	16	18	20	22	16	12	14	6.7	179	46	9.2	109
5	14	18	27	24	16	13	14	5.9	175	32	8.1	61
6	14	19	20	19	15	12	12	5.5	234	37	7.9	39
7	13	20	18	21	13	12	12	5.1	351	52	5.9	362
8	12	20	18	22	14	12	12	5.7	313	103	5.4	444
9	12	20	18	21	14	12	13	6.7	1500	90	41	158
10	12	20	18	21	15	12	13	6.8	1040	69	134	62
11	14	20	16	22	17	12	12	5.7	593	49	45	38
12	23	19	16	27	19	12	13	5.2	481	37	19	30
13	66	20	18	33	21	13	12	4.5	341	29	26	26
14	41	19	21	38	29	15	9.8	4.7	262	27	25	133
15	30	21	20	37	33	14	9.5	6.1	232	30	21	78
16	27	21	21	23	26	14	9.0	6.4	172	23	11	36
17	28	21	21	22	21	13	8.8	10	187	21	9.2	26
18	33	18	27	24	20	13	9.1	11	214	21	7.0	20
19	32	15	30	21	19	13	9.7	9.6	226	23	6.4	18
20	30	20	33	21	16	14	11	6.4	177	103	4.7	15
21	26	20	26	21	13	13	9.8	4.5	126	142	4.2	13
22	23	19	25	18	14	13	9.6	3.6	70	76	6.5	12
23	21	22	27	22	14	12	9.6	3.2	66	52	60	13
24	19	20	23	25	13	12	9.2	3.1	72	41	85	14
25	18	18	25	20	13	11	7.5	3.5	77	25	50	13
26	17	18	27	18	13	10	7.6	5.8	93	19	29	14
27	17	18	26	20	12	11	7.5	12	269	15	27	14
28	18	17	28	19	12	11	7.4	11	179	14	25	16
29	18	18	30	20	---	9.9	6.9	15	94	12	20	17
30	18	18	26	20	---	9.7	7.0	30	88	12	41	18
31	19	---	35	19	---	10	---	26	---	11	35	---
TOTAL	692	570	712	733	481	376.6	307.6	251.9	8272	1394	796.7	1917
MEAN	22.3	19.0	23.0	23.6	17.2	12.1	10.3	8.13	276	45.0	25.7	63.9
MAX	66	22	35	38	33	15	14	30	1500	142	134	444
MIN	12	15	14	18	12	9.7	6.9	3.1	66	11	4.2	12
AC-FT	1370	1130	1410	1450	954	747	610	500	16410	2760	1580	3800

CAL YR 1985	TOTAL	26469.9	MEAN	72.5	MAX	1530	MIN	2.6	AC-FT	52500
WTR YR 1986	TOTAL	16503.8	MEAN	45.2	MAX	1500	MIN	3.1	AC-FT	32740

07215500 MORA RIVER AT LA CUEVA, NM

LOCATION.--Lat 35°56'27", long 105°14'59", Mora County, Hydrologic Unit 11080004, in Mora Grant, on left bank 45 ft upstream from bridge on State Highway 3 at La Cueva, 0.3 mi downstream from La Cueva damsite, and at mile 86.8.

DRAINAGE AREA.--173 mi².

WATER-DISCHARGE RECORDS

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.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 10, 1915 to June 4, 1921 water-stage recorder at site 2.8 mi upstream at different datum. July 6, 1921 to Jan. 5, 1929, nonrecording gage or water-stage recorder at site 0.7 mi downstream at datum about 14 ft lower and Jan. 6, 1929 to Apr. 1, 1972, water-stage recorder at site 0.7 mi downstream at datum about 15 ft lower.

REMARKS.--Estimated daily discharges: Nov. 20, Dec. 11, 12, 17, and Feb. 6-12. Water-discharge records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 7,000 acres, part of which are downstream from station. See tabulation below for monthly and yearly diversion of La Cueva Canal, which bypasses gage on left bank. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--59 years (water years 1907-10, 1932-86), 27.9 ft³/s, 20,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1930).--Maximum discharge, 1,530 ft³/s, Sept. 23, 1941, gage height, 7.58 ft, site and datum then in use, from rating curve extended above 400 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, may have exceeded 20,000 ft³/s; another major flood occurred June 11, 1913, but is believed less than that of 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0300	365	3.81	Sept. 6	1645	*467	*4.22

Minimum discharge, 1.5 ft³/s, Mar. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	13	9.7	18	12	11	6.4	12	160	105	38	27
2	27	14	8.6	17	12	11	7.6	17	213	94	38	26
3	27	14	5.3	18	11	11	6.9	21	246	90	38	22
4	19	14	4.8	18	11	11	6.3	25	242	97	30	20
5	16	14	5.3	17	11	11	4.5	34	236	87	23	22
6	16	14	5.5	17	10	11	3.6	34	218	95	17	56
7	21	11	6.7	17	9.0	8.3	6.2	25	207	84	14	38
8	28	11	5.8	31	9.0	5.1	6.9	20	221	113	14	42
9	26	11	5.6	42	9.5	5.2	6.9	19	295	126	14	32
10	29	11	6.2	29	11	5.2	5.0	14	213	88	19	27
11	62	10	6.0	19	12	4.7	3.6	14	191	78	30	24
12	33	12	8.0	18	15	4.4	4.0	15	169	70	30	22
13	32	13	10	17	19	3.2	4.8	14	150	68	23	21
14	32	14	14	14	21	1.6	1.6	15	133	66	23	26
15	28	13	13	14	13	4.0	4.2	15	119	61	23	21
16	30	13	12	13	11	7.4	5.7	12	99	61	24	18
17	42	14	10	13	10	7.7	5.7	19	92	69	24	17
18	35	13	9.6	13	11	7.8	6.0	19	82	57	24	17
19	37	13	7.8	13	11	8.2	8.6	18	75	52	21	20
20	33	12	7.8	13	11	8.1	11	18	75	97	17	17
21	31	12	7.4	13	10	8.1	9.9	17	71	98	18	19
22	31	12	7.6	13	10	6.2	8.3	19	64	100	17	22
23	27	13	6.9	13	10	2.5	8.4	18	82	98	17	22
24	20	12	6.9	13	10	4.0	9.1	19	86	84	22	30
25	18	12	8.3	12	10	5.9	7.4	21	111	76	20	32
26	17	11	10	14	11	6.2	6.7	24	126	70	27	32
27	18	11	16	13	11	7.4	9.6	27	148	64	25	32
28	18	11	19	12	11	7.0	10	39	118	59	26	31
29	18	11	17	13	---	5.6	9.1	72	113	55	26	31
30	18	11	17	12	---	5.8	9.0	73	108	51	21	31
31	16	---	18	12	---	6.3	---	85	---	42	23	---
TOTAL	833	370	295.8	511	322.5	211.9	203.0	794	4463	2455	726	797
MEAN	26.9	12.3	9.54	16.5	11.5	6.84	6.77	25.6	149	79.2	23.4	26.6
MAX	62	14	19	42	21	11	11	85	295	126	38	56
MIN	16	10	4.8	12	9.0	1.6	1.6	12	64	42	14	17
AC-FT	1650	734	587	1010	640	420	403	1570	8850	4870	1440	1580
(†)	328	742	581	92	139	183	99	310	887	544	270	172

CAL YR 1985 TOTAL 22677.8 MEAN 62.1 MAX 385 MIN 4.8 AC-FT 44980 (†) 4318
WTR YR 1986 TOTAL 11982.2 MEAN 32.8 MAX 295 MIN 1.6 AC-FT 23770 (†) 4347

(†) DIVERSION, IN ACRE-FEET, BY LA CUEVA CANAL

07215500 MORA RIVER AT LA CUEVA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
DEC									
03...	1630	8.2	450	491	--	8.10	7.5	7.0	9.2
JAN									
23...	1300	13	400	--	8.20	--	10.5	7.5	--
MAR									
03...	1615	10	--	486	8.50	8.30	14.5	10.0	--
MAY									
27...	1145	71	510	459	8.20	7.70	15.0	7.0	10.0
JUL									
01...	1530	100	460	417	8.20	8.30	22.0	18.0	4.8
AUG									
12...	1200	31	--	--	--	--	--	25.0	--

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
DEC									
03...	250	68	72	16	12	0.3	2.4	178	67
JAN									
23...	--	--	--	--	--	--	--	--	--
MAR									
03...	230	45	69	14	14	0.4	1.1	185	70
MAY									
27...	220	47	65	14	9.4	0.3	1.7	173	60
JUL									
01...	210	39	63	13	7.7	0.2	1.2	172	52
AUG									
12...	--	--	--	--	--	--	--	--	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
DEC								
03...	8.0	0.40	8.2	290	40	14	44	0.97
JAN								
23...	--	--	--	--	--	--	59	2.1
MAR								
03...	5.9	0.60	9.5	300	30	30	27	0.73
MAY								
27...	3.4	0.30	8.9	270	30	26	--	--
JUL								
01...	3.0	0.20	8.7	250	50	15	--	--
AUG								
12...	--	--	--	--	--	--	79	6.6

07216500 MORA RIVER NEAR GOLONDRINAS, NM

LOCATION.--Lat 35°53'27", long 105°09'47", Mora County, Hydrologic Unit 11080004, in Mora Grant, on right bank 0.7 mi upstream from bridge on State Highway 160, 1.2 mi east of Golondrinas, 1.9 mi upstream from Coyote Creek, 4.7 mi downstream from Rito Cebolla, and at mile 75.8.

DRAINAGE AREA.--267 mi².

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 Sept. 30, 1986 discontinued. Monthly discharge only 1915-30, published in WSP 1311.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,750 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 10, 1915 to June 4, 1921, water-stage recorder at site 2.8 mi upstream at different datum. July 6, 1921 to Jan. 5, 1929, nonrecording gage or water-stage recorder at site 0.7 mi downstream at datum about 14 ft lower and Jan. 6, 1929 to Apr. 1, 1972, water-stage recorder at site 0.7 mi downstream at datum about 15 ft lower.

REMARKS.--Estimated daily discharges: Nov. 19-22, Dec. 10, Jan. 8, 9, Feb. 6-12, Mar. 1-5, and Aug. 4-13. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Off-channel lakes make it possible to divert and store water during non-irrigation season. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--69 years (water years 1916-20, 1922, 1924-86), 34.0 ft³/s, 24,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s, Aug. 22, 1952, gage height, 14.4 ft, site and datum then in use, from rating curve extended above 660 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 25,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	1530	427	2.87	June 26	1545	*745	*3.49
June 9	0800	570	3.16				

Miminum discharge, 1.7 ft³/s, Dec. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	19	15	19	14	14	2.6	38	238	149	53	26
2	30	20	14	23	14	14	3.8	11	298	130	51	25
3	29	19	10	18	13	13	4.6	19	350	122	52	22
4	26	19	8.0	21	13	13	4.5	15	366	132	40	21
5	21	19	8.6	27	16	13	3.9	28	350	120	36	22
6	22	19	9.3	23	13	13	2.8	32	313	129	32	53
7	25	17	8.7	20	12	14	2.1	26	287	116	20	49
8	31	16	7.2	22	11	11	2.3	19	286	153	23	42
9	32	16	5.8	25	11	8.5	2.2	20	468	229	26	30
10	34	15	6.0	32	12	9.3	2.4	17	320	155	31	26
11	104	15	6.0	30	15	8.3	2.2	16	272	136	34	21
12	46	16	6.6	35	19	7.7	2.1	16	231	117	31	19
13	39	17	6.9	41	20	7.8	2.1	14	203	112	27	20
14	40	17	8.2	17	30	6.2	2.5	12	181	111	24	24
15	34	18	9.2	16	26	5.7	2.5	12	160	104	27	21
16	34	17	9.0	16	18	10	3.6	12	136	102	28	17
17	57	17	8.7	16	16	13	3.3	16	121	126	29	17
18	44	18	10	16	15	13	2.8	19	108	111	28	17
19	47	18	8.8	15	15	12	2.9	16	97	103	24	18
20	40	17	11	15	15	13	4.5	16	96	185	19	17
21	38	17	15	15	15	12	5.1	16	85	243	21	19
22	37	17	15	14	14	11	3.6	16	75	225	22	22
23	35	17	11	14	14	7.3	4.9	16	98	192	20	24
24	25	16	11	14	14	5.3	4.9	16	100	152	26	27
25	24	16	11	14	14	7.9	6.2	15	155	127	24	28
26	22	15	14	18	14	7.4	4.4	20	262	112	25	29
27	23	16	23	15	14	6.1	5.1	25	218	99	26	31
28	24	14	24	14	15	6.1	6.2	38	167	89	23	30
29	23	14	26	14	---	3.8	7.0	87	164	81	24	31
30	23	14	19	14	---	2.8	6.7	108	164	75	21	31
31	22	---	19	14	---	3.3	---	122	---	57	21	---
TOTAL	1062	505	365.0	607	432	292.5	113.8	853	6369	4094	888	779
MEAN	34.3	16.8	11.8	19.6	15.4	9.44	3.79	27.5	212	132	28.6	26.0
MAX	104	20	26	41	30	14	7.0	122	468	243	53	53
MIN	21	14	5.8	14	11	2.8	2.1	11	75	57	19	17
AC-FT	2110	1000	724	1200	857	580	226	1690	12630	8120	1760	1550

CAL YR 1985	TOTAL	28902.0	MEAN	79.2	MAX	514	MIN	5.8	AC-FT	57330
WTR YR 1986	TOTAL	16360.3	MEAN	44.8	MAX	468	MIN	2.1	AC-FT	32450

07218000 COYOTE CREEK NEAR GOLONDRINAS, NM

LOCATION.--Lat 35°55'00", long 105°09'49", Mora County, Hydrologic Unit 11080004, in Mora Grant, on left bank 0.5 mi downstream from Coyote Creek damsite, 2.3 mi northeast of Golondrinas, and at mile 2.7.

DRAINAGE AREA.--215 mi².

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

REVISED RECORDS.--WSP 1281: 1939-40(M), 1941-42, 1945-47. WSP 1511: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,785 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 26, 1938, at site 0.4 mi 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.

REMARKS.--Estimated daily discharges: Dec. 10-13, Feb. 6-12, and July 31 to Aug. 13. Records fair except those for winter period, which are poor. Diversions (including off-channel storage) for irrigation of about 4,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--58 years, 11.8 ft³/s, 8,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft³/s, Aug. 17, 1961, gage height, 9.60 ft, from rating curve extended above 250 ft³/s on basis of slope-area measurements at gage heights 5.54 ft, 7.74 ft, 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, Feb. 20, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1130	*457	*4.36	July 21	1900	212	3.50
June 17	2115	408	4.22				

Minimum discharge, 2.5 ft³/s, Apr. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	14	8.7	5.7	8.8	2.9	5.7	82	34	10	8.1
2	13	16	13	8.4	5.7	8.1	3.2	5.4	125	30	10	8.1
3	13	16	16	9.0	5.4	7.5	3.1	7.2	144	25	9.0	7.2
4	12	15	14	8.1	5.2	7.4	3.1	4.7	145	23	9.0	7.0
5	12	15	12	12	5.8	6.8	2.8	4.2	145	21	8.5	8.0
6	12	15	12	8.9	5.7	5.3	2.8	3.8	109	42	8.2	8.4
7	12	15	12	8.7	5.4	4.4	2.7	3.6	79	41	8.0	8.3
8	12	14	11	17	5.2	4.3	3.3	4.2	97	45	7.5	12
9	13	13	11	21	5.2	4.1	4.6	4.1	346	49	7.2	7.7
10	17	12	9.5	17	5.0	4.4	5.1	3.1	185	49	7.0	7.3
11	21	13	9.0	17	5.2	4.7	4.3	3.4	143	60	6.8	6.8
12	20	13	9.0	10	8.0	4.3	3.6	3.4	100	68	6.6	6.9
13	18	13	14	10	12	4.5	2.8	3.1	77	47	6.4	8.0
14	19	13	26	10	16	4.3	2.7	3.0	48	38	6.4	11
15	18	14	17	9.5	17	4.3	2.6	3.0	38	29	5.8	12
16	18	13	14	9.3	14	4.0	2.6	3.2	32	25	5.9	8.5
17	21	11	18	8.4	12	3.5	2.5	4.8	71	33	5.2	8.4
18	21	11	10	8.5	12	3.5	2.5	3.7	46	30	5.1	8.3
19	19	11	8.6	7.6	11	3.5	3.0	3.2	27	32	4.5	8.2
20	18	12	9.2	5.9	13	3.5	3.0	3.0	27	36	4.1	8.0
21	18	10	9.5	5.1	16	3.5	3.0	2.8	27	84	4.6	7.8
22	17	11	9.9	4.7	14	3.3	3.0	2.8	25	43	6.6	6.5
23	15	12	9.6	5.4	13	3.2	3.6	2.9	24	34	5.6	6.1
24	14	11	9.4	5.7	11	3.1	3.7	3.1	26	27	12	6.0
25	12	14	11	5.1	10	3.2	3.4	3.6	28	23	12	6.3
26	12	16	9.6	6.1	9.3	3.2	3.7	3.7	33	20	8.1	5.9
27	11	15	11	6.3	8.7	3.6	3.1	3.4	36	17	12	6.0
28	13	13	9.6	5.2	8.5	4.6	4.8	3.7	37	15	8.0	6.1
29	17	14	9.6	5.2	---	3.8	7.0	5.5	40	12	7.9	6.7
30	17	15	10	5.2	---	2.9	6.8	6.4	38	12	7.7	7.2
31	17	---	10	5.3	---	2.9	---	9.7	---	11	7.7	---
TOTAL	485	403	368.5	274.3	265.0	138.5	105.3	127.4	2380	1055	233.4	232.8
MEAN	15.6	13.4	11.9	8.85	9.46	4.47	3.51	4.11	79.3	34.0	7.53	7.76
MAX	21	17	26	21	17	8.8	7.0	9.7	346	84	12	12
MIN	11	10	8.6	4.7	5.0	2.9	2.5	2.8	24	11	4.1	5.9
AC-FT	962	799	731	544	526	275	209	253	4720	2090	463	462

CAL YR 1985	TOTAL	12777.4	MEAN	35.0	MAX	255	MIN	4.3	AC-FT	25340
WTR YR 1986	TOTAL	6068.2	MEAN	16.6	MAX	346	MIN	2.5	AC-FT	12040

07221000 MORA RIVER NEAR SHOEMAKER, NM

LOCATION.--Lat 35°48'01", long 104°46'58", Mora County, Hydrologic Unit 11080004, in Mora Grant, on left bank 5.5 mi east of Shoemaker, 12.3 mi upstream from Pedroso Creek, and at mile 39.4.

DRAINAGE AREA.--1,104 mi², of which 71 mi² 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.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1281: 1931(M), 1933-1934(M), 1937(M), 1938(P), 1939-40(M), 1941-42(P). WSP 1731: 1921, 1928, 1951(M). WRD NM-75-1: 1974. WRD NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 6,145 above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 10, 1934, at site 2,000 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 4 to Feb. 17 and Aug. 14 to Sept. 30. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 26,000 acres upstream from station. Off-channel lakes make it possible to divert and store water during non-irrigation season. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--68 years (water years 1915-18, 1920-24, 1928-86), 56.2 ft³/s, 40,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, June 3, 1948, gage height, 12.79 ft, from rating curve extended above 2,800 ft³/s on basis of slope-area measurements at gage heights 10.09 ft and 12.79 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 30,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 27	0245	*870	*3.88	No other peak greater than base discharge.			

Minimum discharge, 3.0 ft³/s, Apr. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	53	43	40	23	10	4.3	4.0	89	184	38	20
2	58	53	42	37	23	9.3	4.7	32	274	140	34	19
3	55	50	41	37	23	8.5	4.7	9.1	360	120	39	18
4	53	50	45	35	23	7.7	4.4	6.2	427	109	32	18
5	49	50	50	34	23	7.0	4.3	5.2	415	110	30	18
6	44	47	48	34	19	6.9	4.2	5.0	366	118	13	75
7	37	45	44	34	19	6.5	4.1	5.1	297	156	9.3	60
8	30	44	42	33	19	6.5	4.3	5.8	291	171	8.5	45
9	32	42	40	34	19	6.8	4.5	6.2	577	314	8.1	30
10	36	41	30	38	21	7.3	4.2	6.1	544	392	20	22
11	64	40	25	45	25	6.7	3.9	5.4	416	242	20	19
12	111	40	23	54	35	6.5	3.7	5.1	335	186	16	19
13	69	40	22	62	45	6.3	3.6	5.3	269	143	16	19
14	67	41	29	48	50	5.7	3.5	5.1	216	129	16	21
15	60	47	34	32	38	5.5	3.5	5.1	191	113	17	18
16	53	45	40	31	28	5.1	3.6	5.2	158	94	17	17
17	68	43	43	30	24	5.1	3.4	6.5	127	88	16	17
18	82	41	41	30	20	5.1	3.2	5.8	153	93	15	17
19	75	41	38	30	19	4.9	3.7	5.5	116	73	15	17
20	74	41	36	29	19	4.9	3.8	5.5	96	90	14	17
21	69	43	42	29	18	4.8	3.6	5.4	91	211	15	18
22	64	44	50	28	17	4.7	3.5	5.9	80	219	15	20
23	65	45	35	28	17	4.7	3.4	5.6	67	171	17	22
24	61	45	32	27	17	4.4	3.2	6.0	83	134	19	25
25	53	44	33	27	16	4.4	3.5	6.5	102	107	20	26
26	51	45	38	32	14	4.4	3.5	7.2	248	88	20	26
27	50	45	49	28	13	4.4	3.2	7.3	539	76	19	27
28	45	45	60	25	11	4.5	3.2	7.8	212	67	19	27
29	44	44	67	24	---	4.4	3.6	8.4	162	60	19	27
30	48	44	57	23	---	4.4	3.7	19	322	51	18	28
31	50	---	44	23	---	4.3	---	43	---	49	19	---
TOTAL	1770	1338	1263	1041	638	181.7	114.0	261.3	7623	4298	593.9	752
MEAN	57.1	44.6	40.7	33.6	22.8	5.86	3.80	8.43	254	139	19.2	25.1
MAX	111	53	67	62	50	10	4.7	43	577	392	39	75
MIN	30	40	22	23	11	4.3	3.2	4.0	67	49	8.1	17
AC-FT	3510	2650	2510	2060	1270	360	226	518	15120	8530	1180	1490

CAL YR 1985	TOTAL	50793	MEAN	139	MAX	1220	MIN	15	AC-FT	100700
WTR YR 1986	TOTAL	19873.9	MEAN	54.4	MAX	577	MIN	3.2	AC-FT	39420

07221500 CANADIAN RIVER NEAR SANCHEZ, NM
(Surveillance network station)

LOCATION.--Lat 35°39'08", long 104°22'39", in SW¼ sec.34, T.17 N., R.24 E., San Miguel County, Hydrologic Unit 11080003, on right bank 1,000 ft downstream from bridge on State Highway 65, 0.9 mi upstream from Lagartija Creek, 3.2 mi northeast of Sanchez, 10 mi downstream from Mora River, 25 mi southwest of Mosquero, and at mile 777.0.

DRAINAGE AREA.--6,015 mi², of which 303 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1177: Drainage area. WSP 1281: 1939, 1940(P), 1942, 1946. WSP 1731: 1956-57(M). WDR NM-82: 1965(M), 1979(M). The revised figures of discharge for September 1942, as published in WSP 1281, supersede those published in WSP 1311.

GAGE.--Water-stage recorder. Elevation of gage is 4,495 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to November 1966. Supplemental water-stage recorder at site 0.6 mi upstream used at various times since 1966.

REMARKS.--Estimated daily discharges: Feb. 1 to Apr. 22. Water-discharge records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 56,000 acres upstream from station.

AVERAGE DISCHARGE.--53 years (water years 1913-14, 1936-86), 183 ft³/s, 132,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 145,000 ft³/s, June 18, 1965, gage height, about 36.6 ft, from floodmarks, present site and datum, from rating curve extended above 91,000 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 29, or 30, 1904, probably exceeded 100,000 ft³/s, but is believed to have been less than the peak of June 18, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 30	0415	*2,540	*7.01				

Minimum discharge, 1.1 ft³/s, May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	73	65	72	50	32	17	5.4	57	383	64	186
2	82	73	63	77	50	31	18	5.2	130	562	58	167
3	88	74	62	73	50	28	19	5.2	356	259	49	193
4	93	76	62	69	50	27	20	3.5	450	192	41	482
5	84	73	65	60	50	26	18	4.5	398	173	70	237
6	79	72	60	62	45	25	16	6.8	429	199	122	160
7	73	71	55	70	40	25	15	12	477	158	45	270
8	64	69	56	64	45	25	14	8.4	506	176	35	403
9	60	67	61	54	45	24	14	5.9	1030	188	23	637
10	53	64	60	70	45	24	14	4.7	1720	330	18	344
11	129	63	49	57	50	20	12	3.4	1240	353	11	224
12	98	63	47	58	55	20	12	2.4	792	266	8.7	166
13	119	61	53	70	75	21	11	1.8	625	224	327	140
14	143	60	43	72	90	21	9.0	1.7	489	296	108	132
15	133	62	46	76	80	20	9.0	1.8	403	183	450	110
16	120	65	45	78	65	19	8.0	1.4	352	154	134	135
17	444	69	43	77	55	19	8.0	4.1	314	134	74	149
18	274	69	48	75	50	19	9.0	6.6	261	119	50	116
19	198	66	50	78	50	19	10	6.4	286	118	40	95
20	164	63	53	73	45	20	11	4.3	340	108	31	82
21	141	60	55	72	40	20	10	2.7	259	94	28	74
22	123	59	56	68	40	20	10	2.5	225	203	48	68
23	111	61	55	65	40	20	8.9	2.0	196	295	48	64
24	102	63	55	61	40	20	7.1	2.5	157	228	207	58
25	99	61	56	59	35	19	7.1	3.1	149	191	140	58
26	93	66	54	58	35	18	7.0	4.5	250	164	228	58
27	82	68	58	57	35	18	6.5	13	361	138	123	56
28	78	67	50	55	33	19	7.3	56	454	114	96	57
29	75	67	58	53	---	18	7.1	36	368	99	70	57
30	72	67	60	54	---	18	5.5	23	697	86	61	55
31	67	---	73	54	---	17	---	27	---	75	79	---
TOTAL	3622	1992	1716	2041	1383	672	340.5	267.8	13771	6262	2886.7	5033
MEAN	117	66.4	55.4	65.8	49.4	21.7	11.3	8.64	459	202	93.1	168
MAX	444	76	73	78	90	32	20	56	1720	562	450	637
MIN	53	59	43	53	33	17	5.5	1.4	57	75	8.7	55
AC-FT	7180	3950	3400	4050	2740	1330	675	531	27310	12420	5730	9980

CAL YR 1985	TOTAL	78915	MEAN	216	MAX	1950	MIN	19	AC-FT	156500
WTR YR 1986	TOTAL	39987.0	MEAN	110	MAX	1720	MIN	1.4	AC-FT	79310

07221500 CANADIAN RIVER NEAR SANCHEZ, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT												
31...	1145	72	--	--	--	--	--	13.0	--	--	--	--
JAN												
21...	1230	66	--	--	--	--	--	11.0	--	--	--	--
MAR												
11...	1330	16	1480	1630	--	8.30	18.0	12.0	--	27	630	460
APR												
22...	1340	10	--	--	--	--	--	11.0	--	--	--	--
JUN												
03...	1500	409	--	727	8.10	7.80	24.5	10.0	--	62	270	170
JUL												
15...	1330	181	--	--	--	--	--	24.0	--	--	--	--
SEP												
16...	1300	108	600	648	8.40	8.06	--	21.0	8.4	--	260	110

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
11...	120	80	140	2	3.6	--	--	--	--	172	730	32
APR												
22...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
03...	59	31	54	1	3.1	128	0	101	105	98	260	11
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	64	25	40	1	3.7	161	10	149	148	148	180	17

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
JAN											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR											
11...	0.50	6.1	1200	<0.100	<0.100	0.020	0.38	0.010	<0.010	2.8	--
APR											
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	0.30	6.6	490	<0.100	0.310	0.160	2.2	0.790	0.020	--	4
JUL											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	0.30	12	440	--	--	--	--	--	--	--	--

07221500 CANADIAN RIVER NEAR SANCHEZ, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
JAN											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR											
11...	--	110	--	--	--	--	--	--	15	--	--
APR											
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	1	60	1	<1	20	<10	24	5	19	16	<5
JUL											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	--	60	--	--	--	--	--	--	11	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT											
31...	--	--	--	--	--	--	22	4.3	98	--	--
JAN											
21...	--	--	--	--	--	--	17	3.0	68	--	--
MAR											
11...	--	--	--	--	--	--	16	0.69	66	--	--
APR											
22...	--	--	--	--	--	--	11	0.30	86	--	--
JUN											
03...	0.10	<0.1	<1	<1	170	19	1360	1500	99	--	--
JUL											
15...	--	--	--	--	--	--	165	81	99	--	--
SEP											
16...	--	--	--	--	--	--	119	35	98	120	130

07222500 CONCHAS RIVER AT VARIADERO, NM

LOCATION.--Lat 35°24'10", long 104°26'35", in NE¼NE¼ sec.36, T.14 N., R.23 E., San Miguel County, Hydrologic Unit 11080005, on left bank 1.5 mi northeast of Variadero, 14 mi west of Conchas Dam, and at mile 15.0.

DRAINAGE AREA.--523 mi², of which 130 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1281: 1937-39, 1941-47.

GAGE.--Water-stage recorder. Elevation of gage is 4,390 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 30, 1942, at site 1.5 mi upstream at different datum. Mar. 30, 1942 to May 18, 1950, at present site at datum 0.5 ft higher.

REMARKS.--Estimated daily discharges: Nov. 4 to Dec. 19 and July 10-18. Records poor. Diversions for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year. Satellite telemetry available at station.

AVERAGE DISCHARGE.--50 years, 14.0 ft³/s, 10,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,000 ft³/s, Sept. 1, 1942, gage height, 19.96 ft, present datum, from rating curve extended above 760 ft³/s on basis of slope-area measurements at gage heights 10.5 ft and 19.96 ft, present datum; no flow many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 30	0430	*2,900	*6.10	No other peak greater than base discharge.			

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	1.2	.04	.03	.02	.00	.02	.00	31	55	.00	28
2	.23	.90	.04	.03	.00	.00	.02	35	19	30	.00	85
3	.20	.73	.04	.03	.00	.00	.02	8.3	5.2	13	.00	19
4	.14	.60	.04	.03	.00	.00	.02	2.5	4.4	13	.00	8.5
5	.11	.60	.04	.03	.00	.00	.02	1.1	3.2	5.9	.39	118
6	.09	.55	.04	.03	.00	.00	.02	.48	24	40	2.0	38
7	.09	.55	.04	.03	.00	.00	.00	.20	11	9.4	.79	241
8	.09	.50	.04	.03	.00	.00	.00	.11	9.2	4.4	.33	33
9	.09	.50	.04	.03	.02	.00	.00	.06	51	2.9	.08	21
10	.11	.45	.04	.03	.02	.00	.00	.03	69	1.5	.00	11
11	10	.45	.04	.03	.02	.00	.00	.01	24	1.0	.00	7.1
12	7.0	.40	.04	.03	.02	.00	.00	.00	7.0	.50	.00	5.5
13	5.4	.40	.04	.03	.02	.00	.00	.00	4.7	.30	.00	12
14	2.5	.35	.04	.03	.03	.00	.00	.00	3.0	.20	.00	43
15	1.5	.35	.04	.03	.03	.00	.00	.00	2.0	.15	49	15
16	1.4	.30	.04	.03	.31	.00	.00	.00	1.4	.15	17	7.6
17	113	.30	.04	.03	.45	.00	.00	.03	1.0	2.0	4.1	5.0
18	79	.25	.04	.03	.27	.00	.00	.09	24	.50	1.5	3.3
19	25	.25	.04	.03	.22	.00	.00	.17	72	.07	.62	1.5
20	16	.20	.04	.03	.16	.00	.00	.09	4.8	.00	.19	.61
21	3.9	.20	.03	.04	.11	.00	.00	.03	2.0	.03	.39	.47
22	3.6	.15	.03	.06	.09	.00	.00	.00	1.4	149	176	.28
23	2.3	.15	.03	.06	.06	.00	.00	.00	19	25	217	.22
24	1.9	.10	.03	.04	.03	.00	.00	.00	5.2	6.1	35	.16
25	1.6	.10	.03	.03	.03	.02	.00	18	4.9	2.1	79	.09
26	1.4	.10	.03	.03	.03	.02	.00	20	192	.97	213	.02
27	1.2	.10	.03	.03	.02	.02	.00	2.8	65	.44	25	.00
28	.96	.05	.03	.03	.02	.02	.00	1.4	52	.16	10	.00
29	.90	.05	.03	.03	---	.02	.00	2.5	21	.04	5.7	.00
30	.78	.05	.03	.03	---	.02	.00	4.5	487	.00	3.5	.00
31	.78	---	.02	.03	---	.02	---	21	---	.00	2.4	---
TOTAL	281.50	10.88	1.12	1.01	1.98	.14	.12	118.40	1220.4	363.81	842.99	704.35
MEAN	9.08	.36	.04	.03	.07	.00	.00	3.82	40.7	11.7	27.2	23.5
MAX	113	1.2	.04	.06	.45	.02	.02	35	487	149	217	241
MIN	.09	.05	.02	.03	.00	.00	.00	.00	1.0	.00	.00	.00
AC-FT	558	22	2.2	2.0	3.9	.3	.2	235	2420	722	1670	1400

CAL YR 1985	TOTAL	1383.75	MEAN	3.79	MAX	221	MIN	.00	AC-FT	2740
WTR YR 1986	TOTAL	3546.70	MEAN	9.72	MAX	487	MIN	.00	AC-FT	7030

07223300 CONCHAS CANAL BELOW CONCHAS DAM, NM

LOCATION.--Lat 35°22'51", long 104°10'58", San Miguel County, Hydrologic Unit 11080006, in Pablo Montoya Grant, in Conchas Canal Operations building downstream from Conchas Dam, and 21.5 mi north of Newkirk.

PERIOD OR RECORD.--September 1945 to June 1949, April 1954 to June 1955, September 1961 to October 1982, October 1984 to current year.

REMARKS.--Water is diverted from Conchas Lake for irrigation of about 35,000 acres on Tucumcari Project (1966 conditions).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 751 ft^3/s, Aug. 31, 1961; no flow many days each year.

MONTHLY DIVERSION, IN ACRE-FEET, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Month	Mean	Diversion in acre-feet
October	37.8	2,320
November	-	0
December	-	0
January	-	0
February	-	0
March	10.2	627
April	251	14,930
May	137	8,430
June	32.2	1,910
July	234	14,400
August	219	13,460
September	113	6,720
WTR YR 1986	86.8	60,887

07223500 CONCHAS LAKE AT CONCHAS DAM, NM

LOCATION.--Lat 35°24'10", long 104°11'25", San Miguel County, Hydrologic Unit 11080003, in Pablo Montoya Grant, stilling well within concrete portion of Conchas Dam on Canadian River, 24 mi north of Newkirk, and at mile 746.0.

DRAINAGE AREA.--7,409 mi², of which 433 mi², is probably noncontributing.

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

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

REMARKS.--Lake is formed by dam consisting of concrete main section and earthfill wings, completed Sept. 15, 1939; storage began Dec. 29, 1938. Capacity, 330,100 acre-ft between elevations 4,060.0 ft and 4,201.0 ft, crest of 300 ft ungated service spillway. Inactive storage, 70,490 acre-ft, at elevation 4,155.0 ft. Lake usually not drawn below elevation, 4,157.35 ft, sill of irrigation outlet, capacity, 77,790 acre-ft, except for minor sluicing; at times irrigation water is pumped into Conchas Canal. Capacity of 198,800 acre-ft between elevations 4,201.0 ft, 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. Lake is used for irrigation, flood control, and recreation. Diversions upstream from station for irrigation of about 57,000 acres. Direct diversions through Conchas Dam to Bell Ranch Canal and Conchas Canal (stations 07223000, 07223300) irrigate about 36,000 acres near Tucumcari, and on Bell Ranch.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 479,600 acre-ft, Apr. 24, 1942, elevation, 4,208.41 ft; minimum after initial filling, 78,080 acre-ft, Sept. 18, 1976, elevation, 4,157.44 ft; minimum elevation, 4,155.80 ft, Sept. 24, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 298,144 acre-ft, July 8, elevation, 4,197.56 ft; minimum, 256,059 acre-ft, May. 23, elevation, 4,192.51 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on Survey by U.S. Army Corps of Engineers in 1970)

4,180	173,900
4,190	237,100
4,200	320,500

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271414	282414	281735	282583	284200	286598	283688	265487	258960	296103	291011	285739
2	271332	282498	281735	282668	284285	286598	283433	266535	259117	296723	290140	286941
3	270923	282583	281820	282753	284285	286512	282838	265971	259985	296989	289706	287458
4	270759	282668	281820	282753	284370	286512	282329	265407	260460	297078	289013	288407
5	270432	282668	281904	282838	284712	286426	281820	264684	261412	297078	288494	289706
6	270187	282583	281904	282838	285139	286426	281313	264043	262605	297078	288148	290140
7	269861	282583	281904	282838	285396	286254	280722	263323	263723	298055	287889	291185
8	269535	282498	281989	283008	285568	286254	280132	262605	265648	298144	287372	291796
9	269779	282498	281989	283008	285653	285997	279627	261889	268234	297966	286941	292846
10	269779	282329	281989	283093	285739	285911	279039	261412	270759	297966	286254	293635
11	270677	282329	281989	283178	285739	285911	278453	260777	273551	298055	285825	293635
12	270841	282244	281989	283263	285739	285825	277950	260223	275287	298055	285310	293547
13	270759	282159	281989	283433	285739	285911	276949	259590	277032	297966	284968	293547
14	270841	282074	281989	283518	285825	285825	276200	258960	277783	297877	284797	293635
15	270923	282074	281989	283603	285825	285825	275536	258409	278704	297521	285054	293635
16	272563	282074	282074	283603	285997	285825	274873	257780	279375	296812	285225	293547
17	279207	282074	282074	283688	286082	285739	274046	257859	279879	296192	284968	293284
18	280459	281989	282074	283688	286168	285653	273139	257545	280722	295661	284370	293021
19	280806	281989	282159	283859	286254	285568	272398	257232	281313	295043	283859	292583
20	281313	281989	282159	283859	286254	285482	271742	256919	281735	294514	283348	292320
21	281566	281904	282244	283859	286254	285396	271086	256684	282244	294162	284200	291971
22	281651	281820	282244	283944	286340	285396	270432	256371	282498	295397	284541	291622
23	281651	281735	282329	283944	286340	285310	269861	256059	282498	295661	285310	291273
24	281820	281735	282329	283944	286340	285139	269128	256137	282753	295573	285139	290575
25	281904	281735	282329	283944	286426	285054	268640	256293	283433	295220	284968	290054
26	281989	281735	282329	284029	286512	285054	267910	256684	285310	294867	284968	289533
27	282074	281820	282414	284114	286598	285054	267100	256762	286082	294426	285310	288927
28	282074	281904	282414	284114	286598	285054	266777	256840	287113	293898	285139	288407
29	282159	281904	282498	284114	---	284883	266051	257232	288840	293372	284968	287975
30	282244	281820	282498	284114	---	284541	265407	257780	294514	292583	284541	287458
31	282414	---	282498	284114	---	284029	---	258409	---	291709	284370	---
MAX	282414	282668	282498	284114	286598	286598	283688	266535	294514	298144	291011	293635
MIN	269535	281735	281735	282583	284200	284029	265407	256059	258960	291709	283348	285739
(†)	4195.75	4195.68	4195.76	4195.95	4196.24	4195.94	4193.69	4192.81	4197.15	4196.83	4195.98	4196.34
(††)	+10914	-594	+678	+1616	+2484	-2569	-18622	-6998	+36105	-2805	-7339	+3088

CAL YR 1985 MAX 302532 MIN 205238 (††) +77598
WTR YR 1986 MAX 298144 MIN 256059 (††) +15958

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

07226500 UTE CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°26'18", long 103°31'31", in NW¼SE¼ sec.15, T.14 N., R.32 E., Harding County, Hydrologic Unit 11090007, on right bank 1.9 mi downstream from Alamosa Creek, 4.5 mi upstream from State Road 155, 4.7 mi upstream from high-water line of Ute Reservoir, 8.2 mi northwest of Logan, and at mile 10.0.

DRAINAGE AREA.--2,060 mi², of which 617 mi² 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.

REVISED RECORDS.--WSP 1281: 1942-48, 1950, 1951(P), WDR NM-81: 1965(P), 1967-68(M), 1969(P), 1971(M), 1972, 1975(M), 1977, 1979. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Elevation of gage is 3,815 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to Oct. 1, 1964.

REMARKS.--Estimated daily discharges: Oct. 1-23, June 7, 12-19, June 22 to July 16, July 26 to Aug. 22, Aug. 28 to Sept. 1, and Sept. 7-12, 16-18. Records poor. Diversions for irrigation of a few hundred acres upstream from station. One observation of water temperature was made during the year.

AVERAGE DISCHARGE.--44 years, 23.2 ft³/s, 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s, May 28, 1946, July 12, 1951, gage height, 8.4 ft, site and datum then in use, from rating curve extended above 7,700 ft³/s on basis of slope-area measurements at gage heights 5.2 ft and 7.2 ft; maximum gage height, 9.94 ft, Aug. 11, 1981; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--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 U.S. Bureau of Reclamation; discharge, about 70,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1245	*4,540	*5.30	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.00	.00	.00	.00	.00	.00	167	.00	.00	50
2	.00	.01	.00	.00	.00	.00	.00	.00	297	.00	.00	66
3	.00	.00	.00	.00	.00	.00	.00	.00	208	.00	.00	19
4	.00	.00	.00	.00	.00	.00	.00	.00	126	.00	.00	125
5	.00	.00	.00	.00	.00	.00	.00	.00	248	.00	.00	126
6	.00	.00	.00	.00	.00	.00	.00	.00	229	.00	.00	67
7	.00	.00	.00	.00	.00	.00	.00	.00	138	.00	.00	10
8	.00	.00	.00	.00	.00	.00	.00	.00	235	50	.00	5.0
9	20	.00	.00	.00	.00	.00	.00	.00	1390	.00	.00	1.0
10	4.0	.00	.00	.00	.00	.00	.00	.00	492	.00	.00	.00
11	370	.00	.00	.00	.00	.00	.00	.00	187	.00	.00	.00
12	25	.00	.00	.00	.00	.00	.00	.00	110	.00	.00	.00
13	5.0	.00	.00	.00	.00	.00	.00	.00	50	.00	.00	52
14	.00	.00	.00	.00	.00	.00	.00	.00	10	.00	.00	215
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	84
16	3.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
17	870	.00	.00	.00	5.5	.00	.00	.00	.00	.00	.00	.10
18	296	.00	.00	.00	2.8	.00	.00	.00	.00	.00	.00	.00
19	62	.00	.00	.00	.10	.00	.00	.00	50	.00	.00	.00
20	12	.00	.00	.00	.00	.00	.00	.00	136	.00	.00	.00
21	6.0	.00	.00	.00	.00	.00	.00	.00	192	.00	.00	.00
22	4.0	.00	.00	.00	.00	.00	.00	.00	50	.00	13	.00
23	2.4	.00	.00	.00	.00	.00	.00	.00	5.0	50	20	.00
24	1.3	.00	.00	.00	.00	.00	.00	.00	.00	18	76	.00
25	.27	.00	.00	.00	.00	.00	.00	.00	100	11	48	.00
26	.05	.00	.00	.00	.00	.00	.00	21	1.0	1.0	27	.00
27	.00	.00	.00	.00	.00	.00	.00	4.4	.00	.00	20	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	15	---	.00	.00	---
TOTAL	1681.02	.02	.00	.00	8.40	.00	.00	40.40	4421.00	130.00	205.00	830.10
MEAN	54.2	.00	.00	.00	.30	.00	.00	1.30	147	4.19	6.61	27.7
MAX	870	.01	.00	.00	5.5	.00	.00	21	1390	50	76	215
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3330	.04	.00	.00	17	.00	.00	80	8770	258	407	1650

CAL YR 1985	TOTAL	2542.78	MEAN	6.97	MAX	870	MIN	.00	AC-FT	5040
WTR YR 1986	TOTAL	7315.94	MEAN	20.0	MAX	1390	MIN	.00	AC-FT	14510

07226800 UTE RESERVOIR NEAR LOGAN, NM

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ sec.21, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080006, on face of Ute Dam on Canadian River, 2.5 mi southwest of Logan, 3.5 mi downstream from Ute Creek, and at mile 673.1.

DRAINAGE AREA.--11,140 mi², of which 1,110 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1963 to September 1965 (monthend contents only), October 1965 to current year.

REVISED RECORDS.--WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Interstate Stream Commission). Prior to Feb. 25, 1974, nonrecording gage at same site and datum.

REMARKS.--Estimated daily capacity: Oct. 1-22. Reservoir is formed by an earthfill dam 132 ft high above streambed, 2,050 ft long; an earthen dike section on north bank of Canadian River 3,640 ft long with a maximum height of 38 ft; a concrete labyrinth spillway section with an equivalent weir length of 3,360 ft is located upstream of an 840 ft long ogee section between the main embankment and dike. Original construction completed in May 1963, storage began Dec. 13, 1962; modification project to construct labyrinth spillway and increase height of dam and dike completed April 1984. Capacity, 246,620 acre-ft at elevation 3,787.0 ft, crest of labyrinth spillway. Top of dam is at elevation 3,812.0 ft. Maximum design capacity of 440,250 acre-ft at elevation 3,806.0 ft, 19.0 ft above crest of spillway, allows 193,600 acre-ft of capacity for protection of the structure. Dead storage, 10,900 acre-ft at elevation 3,725.0 ft, sill of outlet intake tower; inactive pool of 25,140 acre-ft between elevations 3,725.0 and 3,741.6 ft, maintained for sediment control and fish and wildlife. Figures given herein represent total contents. Reservoir storage is for municipal and industrial uses, recreational purposes, sediment control and some incidental flood control. Diversions upstream from station for irrigation about 90,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 119,900 acre-ft, June 17, 1969, elevation, 3,762.4 ft; minimum since reservoir first filled in September 1965, 31,320 acre-ft, June 6, 1984, elevation, 3,739.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 95,900 acre-ft, Sept. 24, elevation, 3,761.62 ft; minimum, 52,400 acre-ft, Oct. 7, elevation, 3,748.6 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Geological Surveys and New Mexico Interstate Stream Commission 1983)

3,738	29,370	3,744	41,110
3,740	32,960	3,746	45,770

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52600	75500	75300	75600	75900	77200	77000	76000	76200	87900	86100	87800
2	52600	75700	75400	75500	75800	77200	77000	76100	76900	87900	85800	89500
3	52600	75800	75400	75500	75800	77200	76900	76100	77300	87900	85900	90900
4	52500	76000	75300	75500	75800	77200	76900	76100	77700	87900	85800	92600
5	52500	76000	75400	75500	75800	77100	76900	76000	78100	87800	85800	93300
6	52500	75800	75400	75400	76000	77200	77000	76000	78300	87700	85600	93700
7	52400	76000	75300	75400	76200	77100	77000	75800	78400	87700	85700	93700
8	53200	75800	75400	75500	76200	77300	76900	75500	78500	87500	85800	94200
9	55900	75600	75300	75500	76200	77100	76900	75500	81600	87600	85700	94300
10	57500	75500	75300	75600	76300	77100	77000	75500	81400	87500	85700	94400
11	57600	75600	75300	75600	76200	77100	76900	75400	82900	87500	85700	94500
12	57700	75800	75200	75600	76300	77000	77000	75400	84400	87400	85500	94600
13	57800	75700	75200	75600	76500	77000	76900	75300	84600	87200	85400	94600
14	57900	75500	75300	75600	76700	77000	76700	75200	84600	87200	85300	95200
15	57900	75600	75300	75700	76900	77200	76700	75200	84600	87000	85400	95500
16	58900	75700	75300	75700	76900	77200	76700	74900	84600	86700	85500	95600
17	59200	75700	75300	75700	77000	77200	76800	75000	84500	86800	85500	95600
18	65700	75600	75400	75700	77000	77000	76600	75100	84700	86700	85400	95600
19	70100	75400	75300	75800	77100	77000	76500	75200	84800	86600	85400	95500
20	73200	75500	75400	75800	76900	77000	76600	75200	85100	86400	85100	95500
21	74500	75400	75400	75700	77100	77100	76600	75200	85400	86500	85200	95500
22	74700	75700	75400	75700	77100	77100	76600	75000	85500	86400	87000	95400
23	75200	75400	75500	75800	77200	77200	76600	74900	85400	86600	86900	95400
24	75300	75400	75400	75700	77200	77200	76500	74900	85500	86700	87100	95300
25	75400	75600	75400	75700	77200	77200	76500	74800	85900	86700	87300	95200
26	75400	75400	75500	75700	77200	77000	76400	75000	86900	86700	87700	95000
27	75400	75300	75400	75700	77100	77100	76200	75200	87700	86700	87700	95100
28	75500	75400	75400	75800	77200	77100	76200	75400	87900	86600	87700	94900
29	75500	75400	75500	75800	---	77100	76200	75400	88000	86500	87700	94800
30	75500	75300	75500	75900	---	77200	76100	75500	88000	86400	87500	94800
31	75500	---	75500	75800	---	77000	---	75600	---	86300	87500	---
MAX	75500	76000	75500	75900	77200	77300	77000	76100	88000	87900	87700	95600
MIN	52400	75300	75200	75400	75800	77000	76100	74800	76200	86300	85100	87800
(†)	3756.13	3756.06	3756.12	3756.21	3756.60	3756.54	3756.28	3756.15	3759.59	3759.12	3759.46	3761.34
(††)	+22800	-200	+300	+300	+1400	-200	-900	-500	+12400	-1700	+1200	+7300

CAL YR 1985 MAX 76000 MIN 43600 (††) +31900
WTR YR 1986 MAX 95600 MIN 52400 (††) +42100

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

07226800 UTE RESERVOIR NEAR LOGAN, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected in Ute Reservoir impounded by Ute Dam on the Canadian River.

PERIOD OF RECORD.--Water years 1963 to current year.

REMARKS.--Samples for chemical analyses are collected semiannually at surface and/or bottom levels of selected sites. Site locations are as follows: Site A, 0.4 mi upstream from Ute Dam; Site B, 0.6 mi upstream from Ute Dam; Site C, 1.9 mi upstream from Ute Dam; Site D, on the Ute Creek arm, 5.7 mi upstream from Ute Dam; Site E, 3.8 mi upstream from Ute Dam at confluence of Ute Creek and Canadian River arms; Site F, on the Canadian River arm, 9.1 mi upstream from Ute Dam; Site G, on the Ute Creek arm, 6.9 mi upstream from Ute Dam; Site H, on the Canadian River arm, 12.8 mi upstream from Ute Dam; Site I, on the Canadian River arm, 5.0 mi upstream from Ute Dam.

07226510 - UTE RE AT SITE F, 9.1 MILES AB UTE DAM, NM (LAT 35°20'21" LONG 103°33'07")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
07...	1000	25.0	30.0	710	8.20	28.0	23.5	0.6
07...	1001	20.0	30.0	--	--	--	24.0	3.8
07...	1002	15.0	30.0	--	--	--	24.0	5.0
07...	1003	10.0	30.0	--	--	--	24.5	5.2
07...	1004	5.00	30.0	--	--	--	24.5	5.6
07...	1005	1.00	30.0	--	--	--	24.5	6.1

07226515 - UTE RE AT SITE I, 5.0 MILES AB UTE DAM, NM (LAT 35°21'03" LONG 103°31'00")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
07...	1025	35.0	40.0	720	8.00	31.0	22.0	0.6
07...	1026	30.0	40.0	--	--	--	23.0	1.2
07...	1027	25.0	40.0	--	--	--	24.0	3.9
07...	1028	20.0	40.0	--	--	--	24.5	6.2
07...	1029	15.0	40.0	--	--	--	25.0	6.7
07...	1030	10.0	40.0	--	--	--	25.0	6.8
07...	1031	5.00	40.0	--	--	--	25.0	7.0
07...	1032	1.00	40.0	--	--	--	25.0	7.1

07226520 - UTE RE AT SITE G, 6.9 MILES AB UTE DAM, NM (LAT 35°23'G35" LONG 103°30'00")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
07...	1050	5.00	7.0	770	8.50	32.5	25.5	4.4
07...	1051	1.00	7.0	--	--	--	26.5	6.2

07226800 UTE RESERVOIR NEAR LOGAN, NM -- Continued

WATER-QUALITY RECORDS

07226560 - UTE RE AT SITE B, 0.6 MILES AB UTE DAM, NM (LAT 35°20'32" LONG 103°27'16")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS (MG/L AS CACO3) (00900)
AUG												
07...	0845	49.0	54.0	970	962	7.90	7.90	25.5	18.0	0	39	190
07...	0846	45.0	54.0	--	--	--	--	--	19.0	0.6	--	--
07...	0847	40.0	54.0	--	--	--	--	--	20.0	0.4	--	--
07...	0848	35.0	54.0	--	--	--	--	--	21.0	0.4	--	--
07...	0849	30.0	54.0	--	--	--	--	--	23.5	2.0	--	--
07...	0850	25.0	54.0	970	--	8.43	--	--	24.5	4.6	--	--
07...	0851	20.0	54.0	--	--	--	--	--	24.5	5.6	--	--
07...	0852	15.0	54.0	--	--	--	--	--	24.5	5.8	--	--
07...	0853	10.0	54.0	--	--	--	--	--	24.5	5.9	--	--
07...	0854	5.00	54.0	970	--	8.49	--	--	24.5	6.0	--	--
07...	0855	1.00	54.0	--	--	--	--	--	25.0	6.1	--	--

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
AUG												
07...	0	41	22	130	4	5.5	266	0	214	218	195	210

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
AUG												
07...	60	0.70	4.1	600	<0.100	<0.100	0.110	0.39	0.030	<0.010	4.4	4

DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
AUG											
07...	4	210	<1	<1	<10	<10	4	1	7	<5	<5

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)
AUG											
07...	0.20	<0.1	<1	<1	<10	4	9.0	28	630	8	2

DATE	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
AUG											
07...	10	50	20	14000	20	580	0.04	50	43	K4	K140

07227000 CANADIAN RIVER AT LOGAN, NM

LOCATION.--Lat 35°21'25", long 103°25'03", in NE¼NE¼ sec.15, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080006, on left bank 1,100 ft upstream from bridge on U.S. Highway 54, 0.7 mi south of Logan, 1.4 mi upstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 2.0 mi downstream from Ute Dam, 4.3 mi upstream from Revuelto Creek, and at mile 672.0.

DRAINAGE AREA.--11,141 mi², of which 1,100 mi² 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.

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 3,668.1 ft above National Geodetic Vertical Datum of 1929. See WSP 1311 or 1731 for history of changes prior to Oct. 1, 1934.

REMARKS.--No estimated daily discharge. Records poor. Flow regulated by Conchas Lake, 45 mi upstream (station 07223500) and Ute Reservoir, 2 mi upstream (station 07226800). Diversions for irrigation of about 90,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years (water years 1909, 1912-13, 1927-38), 392 ft³/s, 284,000 acre-ft/yr, prior to completion of Conchas dam.
24 years (water years 1939-62), 257 ft³/s, 186,200 acre-ft/yr, prior to completion of Ute Dam.
24 years (water years 1963-86), 35.0 ft³/s, 25,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1925).--Maximum discharge, 219,000 ft³/s, Sept. 22, 1941, gage height, 29.3 ft, from floodmarks, from rating curve extended above 75,000 ft³/s; no flow at times prior to completion of Ute Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 278,000 ft³/s, Sept. 30, 1904, gage height, about 36.5 ft, site and datum used in 1909, from rating curve extended above 14,000 ft³/s, from Ninth Biennial Report of State Engineer.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 254 ft³/s, Aug. 22, gage height, 3.15 ft; minimum daily, 1.4 ft³/s, Dec. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.0	1.8	2.2	2.5	3.4	2.1	2.0	2.0	1.9	2.0	2.2
2	2.7	2.0	1.7	1.9	1.7	3.5	2.2	1.9	2.1	1.9	1.9	3.2
3	2.7	2.0	1.8	2.1	1.6	3.4	2.1	2.1	2.1	1.9	1.8	1.8
4	2.6	2.0	1.8	1.9	1.9	3.4	2.3	2.3	2.1	1.8	1.8	1.8
5	2.6	2.0	1.9	1.8	1.8	3.3	2.3	2.7	2.0	1.8	1.9	1.8
6	2.7	2.0	2.5	1.8	1.8	3.3	2.4	2.9	1.9	1.9	1.9	1.8
7	2.6	16	1.9	1.8	2.0	3.3	2.5	2.7	1.8	2.0	1.9	1.8
8	2.4	2.4	2.0	1.8	1.8	3.4	2.5	2.9	1.8	2.0	2.6	1.8
9	2.7	2.1	2.3	1.8	1.8	2.7	2.7	2.7	3.3	2.0	2.3	3.9
10	1.7	2.1	1.9	1.8	1.8	2.1	2.7	2.7	2.3	2.0	1.7	5.5
11	2.4	2.1	2.0	1.8	1.8	2.2	2.6	2.6	2.2	2.0	1.7	3.1
12	2.1	2.1	1.9	1.8	1.9	2.2	2.3	2.4	2.3	2.0	1.8	2.1
13	2.1	2.1	2.0	1.8	2.0	2.4	2.3	2.3	2.3	2.0	1.8	1.9
14	2.1	2.1	1.9	1.9	2.0	2.2	2.1	2.2	2.3	1.9	1.9	2.0
15	2.1	2.1	1.9	1.9	2.6	2.3	2.0	2.0	2.2	2.0	2.2	1.9
16	1.9	2.1	2.4	1.8	1.9	2.4	2.1	1.9	2.2	1.9	1.8	1.9
17	2.2	2.1	1.7	1.8	1.7	2.4	2.2	1.9	2.1	1.9	1.8	1.9
18	2.4	2.1	1.4	1.9	1.6	2.3	2.1	2.0	1.8	2.0	2.0	1.8
19	2.3	2.2	1.7	2.0	2.1	2.4	2.1	2.0	1.9	1.9	1.9	1.9
20	2.3	2.2	1.8	1.9	2.6	2.6	2.1	2.1	1.9	1.9	1.8	2.0
21	2.4	2.2	2.0	2.0	2.8	2.7	2.2	2.0	1.9	2.1	2.2	2.1
22	2.7	1.9	2.0	2.0	2.8	2.8	2.2	1.8	1.8	1.9	30	2.1
23	2.3	2.2	2.0	2.0	3.0	2.8	2.6	1.8	1.8	1.9	5.1	2.1
24	2.0	2.0	2.1	2.1	3.1	2.9	2.6	1.8	1.8	2.0	2.2	2.1
25	2.1	2.1	2.0	2.0	2.8	2.8	2.4	1.8	2.3	2.0	1.8	2.0
26	2.1	2.4	2.1	1.9	3.1	2.8	2.4	1.8	2.1	1.9	1.7	2.0
27	2.1	2.7	2.1	2.1	3.3	2.8	2.2	1.9	1.8	1.9	1.6	2.0
28	2.1	1.9	2.0	2.2	3.4	2.7	2.2	1.9	1.8	1.9	6.4	2.0
29	2.1	2.1	2.0	2.3	---	2.6	2.2	2.1	1.8	2.0	3.2	2.1
30	2.1	2.5	2.2	2.4	---	2.6	2.0	1.9	1.8	1.9	1.9	2.1
31	2.0	---	2.2	2.3	---	2.3	---	1.8	---	2.0	2.1	---
TOTAL	71.3	77.8	61.0	60.8	63.2	85.0	68.7	66.9	61.5	60.2	96.7	66.7
MEAN	2.30	2.59	1.97	1.96	2.26	2.74	2.29	2.16	2.05	1.94	3.12	2.22
MAX	2.7	16	2.5	2.4	3.4	3.5	2.7	2.9	3.3	2.1	30	5.5
MIN	1.7	1.9	1.4	1.8	1.6	2.1	2.0	1.8	1.8	1.8	1.6	1.8
AC-FT	141	154	121	121	125	169	136	133	122	119	192	132

CAL YR 1985 TOTAL 1049.1 MEAN 2.87 MAX 16 MIN 1.4 AC-FT 2080
WTR YR 1986 TOTAL 839.8 MEAN 2.30 MAX 30 MIN 1.4 AC-FT 1670

07227100 REVUELTO CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°20'29", long 103°23'37", in SW¼NW¼ sec.24, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080008, on right bank 0.3 mi upstream from bridge on State Highway 39, 1.9 mi southeast of Logan, and at mile 2.3.

DRAINAGE AREA.--786 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 3,665 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 16, 1981, at site 320 ft upstream at datum 0.56 ft higher.

REMARKS.--Estimated daily discharges: Dec. 8-20, Mar. 14 to Apr. 22, May 14 to June 4, and July 22 to Sept. 16. Water-discharge records poor. Low flows supplemented by surface and ground-water return from irrigation in vicinity of Tucumcari. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 43.6 ft³/s, 31,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s, July 9, 1960, gage height, 14.3 ft, site and datum then in use; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD (1941-47).--Maximum discharge determined, about 13,400 ft³/s, Sept. 18, 1946, gage height, 9.04 ft, at site 180 ft downstream at different datum, from unpublished records collected by U.S. Bureau of Reclamation.

A peak of 26,100 ft³/s, date unknown, gage height, 12.9 ft at former site and datum, was measured by slope-area method in May 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 26	Unknown	*3,680	*6.10	No other peak greater than base discharge.			

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	44	2.3	2.5	1.0	2.8	1.0	4.4	1.0	3.8	.00	100
2	13	64	2.4	2.6	1.0	2.8	1.0	4.8	1.0	2.4	.00	150
3	10	46	2.4	2.6	1.1	2.8	1.0	6.5	150	1.2	15	50
4	7.0	28	5.3	2.3	1.0	2.8	1.0	12	60	.56	2.0	500
5	5.4	20	3.4	2.1	1.7	2.5	1.0	10	36	.20	20	100
6	5.6	13	3.5	2.4	2.8	2.1	1.1	9.2	28	2.4	2.0	30
7	4.6	10	3.3	1.9	5.9	2.0	1.2	5.3	47	2.3	1.5	10
8	122	8.5	2.0	2.0	6.3	2.0	1.3	4.6	797	2.3	5.0	5.0
9	472	6.2	1.0	2.5	14	2.0	1.4	4.8	804	2.4	100	7.0
10	125	4.8	.50	2.8	26	1.8	1.5	3.2	129	.51	50	6.0
11	768	4.8	.10	2.8	30	1.8	1.5	2.2	23	.30	10	6.0
12	629	5.3	.30	2.6	58	1.5	1.5	2.0	6.4	.33	2.0	5.0
13	103	5.1	.50	2.4	187	.71	1.5	1.9	1.9	.15	1.0	5.0
14	48	6.8	.50	2.3	172	1.0	1.5	.50	.67	.16	1.0	5.0
15	30	12	.50	2.2	76	1.0	1.5	.50	.27	.00	1.0	5.0
16	26	8.2	1.0	2.1	96	1.0	1.5	.50	.10	.00	1.0	5.0
17	25	6.5	1.0	2.0	69	1.0	1.5	50	.02	.00	1.0	5.0
18	25	5.7	1.5	2.1	33	1.0	1.5	100	.00	.16	1.0	3.7
19	25	4.6	2.0	2.2	21	1.0	1.5	30	.00	1.8	1.0	6.7
20	25	3.7	3.0	2.2	16	1.0	1.5	10	53	.61	1.0	6.1
21	25	3.8	4.6	1.9	9.4	1.0	20	3.0	38	12	1.0	7.4
22	20	4.2	4.0	1.5	7.7	1.0	15	1.0	105	1.0	1.0	8.3
23	16	3.5	3.3	1.5	6.5	1.0	9.8	1.0	40	.50	100	9.8
24	14	3.0	3.1	1.4	5.7	1.0	36	1.0	9.5	.10	150	8.4
25	11	3.5	3.2	1.2	11	1.0	17	100	106	.00	60	5.8
26	12	3.8	3.5	1.2	6.3	1.0	8.6	900	694	.00	100	4.6
27	9.2	3.8	3.0	1.6	4.3	1.0	5.7	250	347	.00	100	5.0
28	8.3	4.1	3.1	1.6	2.8	1.0	5.7	30	96	.00	40	5.5
29	6.4	4.1	3.0	1.5	---	1.0	5.5	200	26	.00	10	4.8
30	5.7	3.6	3.4	1.4	---	1.0	4.8	50	7.6	.00	20	5.0
31	5.3	---	2.6	1.2	---	1.0	---	5.0	---	.00	5.0	---
TOTAL	2614.5	344.6	73.30	62.6	872.5	45.61	154.6	1803.40	3607.46	35.18	802.50	1075.1
MEAN	84.3	11.5	2.36	2.02	31.2	1.47	5.15	58.2	120	1.13	25.9	35.8
MAX	768	64	5.3	2.8	187	2.8	36	900	804	12	150	500
MIN	4.6	3.0	.10	1.2	1.0	.71	1.0	.50	.00	.00	.00	3.7
AC-FT	5190	684	145	124	1730	90	307	3580	7160	70	1590	2130

CAL YR 1985	TOTAL	13008.58	MEAN	35.6	MAX	1110	MIN	.01	AC-FT	25800
WTR YR 1986	TOTAL	11491.35	MEAN	31.5	MAX	900	MIN	.00	AC-FT	22790

07227100 REVUELTO CREEK NEAR LOGAN, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
JAN 22...	1400	1.6	--	--	--	--	--	11.0	--
MAR 12...	1530	0.80	3500	3050	--	8.20	18.0	15.0	--
APR 23...	0845	11	--	--	--	--	--	16.5	--
JUN 05...	1500	37	--	531	--	8.00	26.0	16.0	--
SEP 17...	1300	5.3	1050	1070	8.60	8.40	31.0	29.0	7.7

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JAN 22...	--	--	--	--	--	--	--	--	--
MAR 12...	400	130	80	48	500	11	4.4	264	700
APR 23...	--	--	--	--	--	--	--	--	--
JUN 05...	65	0	18	4.9	92	5	3.1	163	88
SEP 17...	180	0	44	16	160	5	4.9	178	280

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 22...	--	--	--	--	--	--	22	0.09	55
MAR 12...	400	0.70	9.3	1900	420	30	31	0.07	30
APR 23...	--	--	--	--	--	--	139	4.1	96
JUN 05...	11	0.40	21	340	200	1100	11900	1190	99
SEP 17...	70	0.40	8.8	690	240	5	40	0.57	94

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, NM
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 35°23'35", long 103°02'30", in SW¼ sec.32, T.14 N., R.37 E., Quay County, Hydrologic Unit 11080006, 0.1 mi upstream from New Mexico-Texas State line, 5.5 mi downstream from Rana Canyon, and 14.7 mi north of Glenrio.

DRAINAGE AREA.--12,616 mi².

PERIOD OF RECORD.--Water years 1969-73, 1975 to March 1986 (discontinued).

REMARKS.--Water-discharge measurements were made at the time water-quality samples were collected.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
DEC											
12...	1130	1.5	10900	8630	8.20	7.70	-12.0	2.0	20	12.0	700
MAR											
12...	0900	8.6	8000	9140	--	7.80	12.0	9.0	21	--	670

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
DEC											
12...	420	150	79	1700	29	7.7	286	400	2600	0.60	13
MAR											
12...	420	130	83	1800	31	8.5	248	530	2700	0.60	13

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
DEC											
12...	5090	5100	0.380	0.010	0.390	0.120	0.120	0.28	0.010	0.010	10
MAR											
12...	5370	5400	0.440	0.010	0.450	0.030	0.080	0.27	0.020	<0.010	--

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
DEC											
12...	1	200	<10	1	<1	2	3	20	<1	210	260
MAR											
12...	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC											
12...	0.9	2	2	<1	<1	3000	36	20	--	--	--
MAR											
12...	--	--	--	--	--	--	--	--	310	7.2	20

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO

LOCATION.--Lat 37°04'42", long 105°45'22", in sec.22, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 6 mi north of Colorado-New Mexico State line, 7 mi downstream from Culebra Creek, 10 mi east of Lobatos, 14 mi east of Antonito and at mile 1,722.1.

DRAINAGE AREA.--7,700 mi², approximately, including 2,940 mi² in closed basin in northern part of San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1899 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-04.

REVISED RECORDS.--WSP 210: Drainage area. WSP 1312: 1919 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 7,427.63 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1910, nonrecording gages at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 12 to Feb. 17. Water-discharge records good except for estimated daily discharges, 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.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--31 years (water years 1900-30), 846 ft³/s, 612,900 acre-ft/yr, includes period of extensive development for irrigation.
56 years (water years 1931-1986), 444 ft³/s, 321,700 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 13,200 ft³/s, June 8, 1905, gage height, 9.1 ft, from rating curve extended above 8,000 ft³/s; no flow at times in 1950-51, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of June 8, 1905.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,180 ft³/s, at 1600 June 11, gage height, 6.30 ft; minimum daily, 88 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	355	760	575	610	744	997	1190	3160	3960	375	142
2	310	375	752	565	625	720	1100	1380	3140	3960	310	139
3	270	450	706	540	615	728	1170	1810	3060	3820	270	128
4	234	496	728	530	585	736	1220	2330	2940	3200	242	125
5	209	526	692	515	600	744	1200	2840	3020	2750	226	120
6	195	544	657	525	575	744	1100	3370	3550	2700	206	112
7	188	538	622	495	310	744	988	3180	4010	2820	188	112
8	170	520	650	495	490	760	925	2800	4350	2900	181	154
9	160	484	650	495	410	792	1020	2280	4900	2810	192	160
10	258	435	636	505	465	824	961	1580	5570	2700	181	167
11	290	466	365	515	460	808	916	1160	6080	2770	164	216
12	355	514	415	520	515	768	898	943	6010	3060	157	460
13	360	544	285	525	530	752	988	824	5300	3020	154	550
14	385	580	345	495	555	728	1030	800	4500	2700	148	466
15	375	706	475	505	560	692	934	832	4080	2420	145	410
16	360	848	520	505	590	664	856	832	3900	2150	148	385
17	345	1020	535	505	580	657	808	760	3960	1880	136	340
18	325	1110	535	505	587	657	776	824	4080	1580	128	310
19	340	1310	535	515	692	650	736	760	4190	1240	122	274
20	345	1340	545	525	720	622	643	678	4420	1160	112	258
21	350	1230	555	525	720	601	587	692	4520	1250	108	223
22	375	1080	555	525	678	594	608	840	4550	1640	105	202
23	350	824	570	530	664	594	728	1150	4380	1670	88	181
24	330	744	585	530	657	601	997	1360	4130	1530	100	184
25	315	808	585	515	685	615	1200	1590	3970	1460	95	195
26	302	880	580	500	713	622	1350	1610	3890	1400	102	209
27	290	880	575	505	720	643	1480	1530	3720	1240	112	242
28	266	872	575	515	760	678	1360	1680	3690	1040	122	282
29	258	752	570	525	---	736	1220	2010	3720	848	130	306
30	258	736	530	560	---	832	1130	2520	3870	650	133	325
31	298	---	580	580	---	916	---	3040	---	496	139	---
TOTAL	9132	21967	17668	16165	16671	21966	29926	49195	124660	66824	5019	7377
MEAN	295	732	570	521	595	709	998	1587	4155	2156	162	246
MAX	385	1340	760	580	760	916	1480	3370	6080	3960	375	550
MIN	160	355	285	495	310	594	587	678	2940	496	88	112
AC-FT	18110	43570	35040	32060	33070	43570	59360	97580	247300	132500	9960	14630

CAL YR 1985 TOTAL 442193 MEAN 1211 MAX 6080 MIN 40 AC-FT 877100
WTR YR 1986 TOTAL 386570 MEAN 1059 MAX 6080 MIN 88 AC-FT 766800

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to 1981.
WATER TEMPERATURES: October 1975 to 1981.

INSTRUMENTATION.--Water-quality monitor October 1975 to 1981.

REMARKS.--Replaces station 08249200 Rio Grande above Culebra Creek, near Lobatos, Colo., which was discontinued July 1969. This station operated by the Colorado District.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
29...	1200	176	390	9.00	11.0	7.0	7.4	<2	<2	130	40
DEC											
23...	1400	675	229	8.10	0.0	7.8	11.2	27	--	81	24
FEB											
25...	1100	671	272	8.17	5.0	14	9.2	K2	44	86	26
APR											
29...	1200	1170	175	7.90	11.5	20	7.6	K36	52	67	20
JUN											
30...	1200	3890	170	7.56	19.0	5.2	7.1	110	65	60	18
AUG											
29...	1100	125	457	8.70	20.0	--	7.4	K18	K6	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
29...	8.1	31	1	5.5	117	64	8.8	0.40	21	254	250
DEC											
23...	5.0	13	0.7	3.1	78	19	3.8	0.30	30	150	150
FEB											
25...	5.1	21	1	3.7	84	36	6.1	0.40	28	210	180
APR											
29...	4.2	11	0.6	2.4	59	23	3.3	0.20	22	168	120
JUN											
30...	3.7	12	0.7	2.9	59	24	2.9	0.10	19	125	120
AUG											

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
OCT											
29...	0.35	121	0.100	--	0.050	--	0.60	0.121	0.080	3	33
DEC											
23...	0.20	273	0.280	--	0.090	--	0.50	0.130	0.090	--	--
FEB											
25...	0.29	380	0.210	0.060	0.070	0.64	0.70	0.170	0.170	3	32
APR											
29...	0.23	531	0.150	0.070	0.040	0.63	0.70	0.170	0.120	--	--
JUN											
30...	0.17	1310	<0.100	0.030	0.040	0.37	0.40	0.120	0.070	2	34
AUG											
29...	--	--	<0.100	0.010	<0.010	0.79	0.80	0.160	0.110	--	--

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)
OCT										
29...	<0.5	<1	<1	<3	4	300	2	49	0.3	<10
FEB										
25...	<0.5	<1	<1	<3	4	610	6	86	0.2	<10
JUN										
30...	1	<1	<1	<3	14	600	27	69	--	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	URANIUM DISSOLVED, EXTRACTION (UG/L)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
OCT										
29...	5	3	<1	<6	7	4.1	4.2	<0.6	4.0	1.1
FEB										
25...	<1	<1	<1	<6	23	--	--	--	--	--
JUN										
30...	1	<1	<1	<6	29	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
29...	1200	176	54	26	79
APR					
29...	1200	1170	82	259	--
JUN					
30...	1200	3890	62	651	53
AUG					
29...	1100	125	23	7.8	81

08252500 COSTILLA CREEK ABOVE COSTILLA DAM, NM

LOCATION.--Lat 36°53'52", long 105°15'16", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 1,900 ft upstream from normal high-water line of Costilla Reservoir, 2.1 mi northeast of Costilla Dam, 16 mi southeast of Costilla, and at mile 36.9.

DRAINAGE AREA.--25.1 mi².

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."

REVISED RECORDS.--WSP 878: 1937. WSP 1923: 1937-50, drainage area.

GAGE.--Water-stage recorder. Concrete control since Sept. 17, 1965. Elevation of gage is 9,429 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1923 for history of changes prior to Sept. 17, 1965.

REMARKS.--No estimated daily discharges. Records good. Natural flow may be augmented by transbasin diversions or irrigation returns from about 1,300 acres irrigated from Casias Creek (station 08253000). Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,870 ft³/s, July 22, 1954, gage height, about 4.8 ft, from floodmarks, site and datum then in use on basis of slope-area measurement of peak flow; minimum not determined. The flood in 1954 destroyed the gaging station and is highest since about 1909, from information by local range rider.
A portion of this flow may have originated in Casias Creek basin (see REMARKS).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2130	44	2.63	July 8	2145	*172	*3.48
July 5	2345	61	2.80				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8							17	23	9.9	6.5	4.8
2	4.7							20	29	14	6.9	4.8
3	4.6							24	25	12	6.7	4.4
4	4.5							28	26	11	6.0	4.5
5	4.5							27	24	18	5.6	4.4
6	4.5							22	25	25	5.7	4.3
7	8.2							21	26	17	6.0	4.6
8	6.0							20	28	45	6.6	7.0
9	5.6							17	32	65	5.4	6.1
10	6.7							15	25	39	8.4	8.8
11	12							15	25	27	6.7	8.8
12	6.9							16	20	21	5.3	6.8
13	6.2							16	18	18	5.0	5.8
14	5.8							16	17	16	4.9	7.3
15	4.7							15	16	17	4.6	5.4
16	---							14	15	16	4.3	5.2
17	---							15	19	14	4.2	5.0
18	---							15	22	13	4.5	4.7
19	---							14	21	12	4.3	4.5
20	---							14	18	14	4.4	4.4
21	---							16	15	13	4.5	4.4
22	---							15	13	14	4.4	4.4
23	---							14	15	12	5.1	4.4
24	---							14	16	9.9	13	4.9
25	---							13	15	9.3	8.3	4.7
26	---							14	18	8.9	5.9	4.7
27	---							14	15	8.0	5.9	4.5
28	---							14	12	7.4	5.5	4.4
29	---							18	12	6.9	4.9	4.8
30	---							20	11	6.7	5.9	5.1
31	---							22	---	6.6	4.7	---
TOTAL	---							535	596	526.6	180.1	157.9
MEAN	---							17.3	19.9	17.0	5.81	5.26
MAX	---							28	32	65	13	8.8
MIN	---							13	11	6.6	4.2	4.3
AC-FT	---							1060	1180	1040	357	313

08253000 CASIAS CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'48", long 105°15'35", Taos County, Hydrologic Unit 13020101, 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 mi northeast of Costilla Dam, and 16 mi southeast of Costilla.

DRAINAGE AREA.--16.6 mi².

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Records for Nov. 1-7, 1947 and Nov. 1-16, 1948, published in WSP 1118 and 1148, are unreliable and should not be used.

REVISED RECORDS.--WSP 1282: 1948-51. WSP 1923: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,404 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 18, 1940, water-stage recorder and wooden control 100 ft downstream at datum 1.56 ft lower.

REMARKS.--Estimated daily discharges: May 1-6, 18-24, and June 6. Records fair except for estimated daily discharges, which are poor. Diversion 3.5 mi upstream for irrigation of about 1,300 acres, part of which is in Costilla Creek basin. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft³/s, July 20, 1971, gage height, 2.07 ft, from rating curve extended above 85 ft³/s; minimum, not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 10	2145	*61	*1.29	July 8	1915	*61	*1.29

Minimum discharge, not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9							16	23	36	16	9.0
2	7.8							17	27	35	16	8.6
3	7.7							17	23	33	14	8.7
4	7.3							18	26	32	14	9.1
5	7.4							18	34	36	13	8.7
6	7.3							18	40	38	13	8.4
7	12							19	44	35	13	8.7
8	8.9							19	48	42	13	11
9	9.0							18	54	40	11	9.6
10	10							17	54	38	15	15
11	14							16	52	35	12	13
12	9.7							16	46	33	12	11
13	9.3							16	45	32	11	11
14	9.0							17	46	31	9.9	13
15	7.7							17	45	32	9.5	11
16	---							16	44	31	8.9	11
17	---							17	46	29	8.7	10
18	---							17	48	27	8.7	9.7
19	---							16	50	26	8.3	9.4
20	---							16	49	28	9.2	9.1
21	---							18	44	27	9.1	8.9
22	---							18	42	28	9.7	8.5
23	---							18	43	26	13	8.6
24	---							20	43	24	17	9.4
25	---							20	41	23	12	9.8
26	---							23	43	22	11	10
27	---							23	41	20	11	10
28	---							23	39	19	9.5	9.7
29	---							26	39	18	9.2	10
30	---							26	38	17	10	9.5
31	---							24	---	17	8.8	---
TOTAL	---							580	1257	910	356.5	299.4
MEAN	---							18.7	41.9	29.4	11.5	9.98
MAX	---							26	54	42	17	15
MIN	---							16	23	17	8.3	8.4
AC-FT	---							1150	2490	1800	707	594

08253500 SANTISTEVAN CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'03", long 105°16'50", Taos County, Hydrologic Unit 13020101, 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 mi north of Costilla Dam, and 16 mi southeast of Costilla.

DRAINAGE AREA.--2.15 mi².

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732.

REVISED RECORDS.--WSP 1923: Drainage area.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 9,487 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 27, 1940, water-stage recorder and wooden control at datum 0.99 ft lower.

REMARKS.--Estimated daily discharges: July 16. Records fair. No diversions upstream from station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18 ft³/s, Aug. 11, 1941, July 12, 1957; maximum gage height, 1.73 ft, Aug. 11, 1941; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6.0 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 17	1730	*10	*1.04	July 5	2015	7.6	0.89

Minimum discharge, not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2							1.7	3.8	5.4	2.7	1.9
2	1.2							1.8	4.1	5.4	2.7	1.9
3	1.2							2.0	4.1	5.3	2.6	1.8
4	1.1							2.3	4.6	5.2	2.5	1.8
5	1.1							2.2	4.9	5.4	2.4	1.8
6	1.1							2.3	5.3	5.3	2.4	1.8
7	1.4							2.3	5.7	5.1	2.4	1.8
8	1.2							2.3	6.3	5.3	2.3	1.9
9	1.3							2.2	6.7	5.2	2.2	1.8
10	1.4							2.3	6.9	4.6	2.7	2.1
11	1.5							2.4	6.9	4.4	2.3	2.0
12	1.3							2.4	6.7	4.1	2.2	1.8
13	1.2							2.5	6.7	3.7	2.1	1.9
14	1.2							2.6	6.6	3.7	2.2	1.9
15	---							2.6	6.5	4.8	2.1	1.7
16	---							2.8	6.6	4.5	2.0	1.7
17	---							2.8	7.1	4.4	2.0	1.6
18	---							2.7	6.9	4.3	2.0	1.6
19	---							3.0	7.1	4.2	1.9	1.5
20	---							3.1	6.7	4.2	2.1	1.5
21	---							3.3	6.4	4.0	2.0	1.5
22	---							3.4	6.2	3.9	1.9	1.5
23	---							3.4	6.5	3.8	2.3	1.5
24	---							3.5	6.3	3.6	2.8	1.5
25	---							3.5	6.1	3.4	2.5	1.5
26	---							3.6	6.2	3.2	2.2	1.5
27	---							3.7	6.1	3.2	2.1	1.5
28	---							3.7	5.9	3.1	1.9	1.5
29	---							3.4	5.8	3.0	1.9	1.5
30	---							3.5	5.7	2.9	1.9	1.5
31	---							3.8	---	2.8	1.9	---
TOTAL	---							87.1	181.4	131.4	69.2	50.8
MEAN	---							2.81	6.05	4.24	2.23	1.69
MAX	---							3.8	7.1	5.4	2.8	2.1
MIN	---							1.7	3.8	2.8	1.9	1.5
AC-FT	---							173	360	261	137	101

08254000 COSTILLA CREEK BELOW COSTILLA DAM, NM

LOCATION.--Lat 36°52'26", long 105°16'47", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 125 ft downstream from Costilla Dam, 16 mi southeast of Costilla, and at mile 34.7.

DRAINAGE AREA.--54.6 mi².

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."

REVISED RECORDS.--WSP 1923: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,290 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 15 to May 6. Records good except for estimated daily discharges, which are poor. Flow regulated by Costilla Reservoir (station 08253900). Diversions for irrigation of about 1,300 acres upstream from Reservoir. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years (water years 1945-47, 1950-86), 18.1 ft³/s, 13,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 301 ft³/s, June 19, 1979, gage height, 3.04 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 152 ft³/s, Aug. 5, 6, gage height, 2.20 ft; minimum, not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.04	.04	.04	.04	.05	.05	.05	46	52	60	90
2	.03	.04	.04	.04	.04	.05	.05	.05	39	51	32	105
3	.03	.04	.04	.04	.04	.05	.05	.05	27	51	55	102
4	.03	.04	.04	.04	.04	.05	.05	.05	21	51	145	104
5	.03	.04	.04	.04	.04	.05	.05	.05	9.2	51	152	48
6	.03	.04	.04	.04	.04	.05	.05	.05	.56	51	152	16
7	.03	.04	.04	.04	.04	.05	.05	.05	.54	51	150	28
8	.03	.04	.04	.04	.04	.05	.05	.05	.56	58	150	59
9	.03	.04	.04	.04	.04	.05	.05	.05	.55	69	150	59
10	.03	.04	.04	.04	.04	.05	.05	.05	5.3	74	150	45
11	.04	.04	.04	.04	.04	.05	.05	.05	40	78	150	18
12	.04	.04	.04	.04	.04	.05	.05	.05	69	81	149	18
13	.04	.04	.04	.04	.04	.05	.05	.05	70	81	148	18
14	.04	.04	.04	.04	.04	.05	.05	.05	69	71	148	18
15	.04	.04	.04	.04	.04	.05	.05	.05	69	55	65	18
16	.04	.04	.04	.04	.04	.05	.05	17	69	55	19	18
17	.04	.04	.04	.04	.04	.05	.05	37	69	55	33	18
18	.04	.04	.04	.04	.04	.05	.05	40	69	55	100	18
19	.04	.04	.04	.04	.04	.05	.05	91	69	55	107	18
20	.04	.04	.04	.04	.04	.05	.05	92	69	59	106	18
21	.04	.04	.04	.04	.04	.05	.05	92	69	58	106	18
22	.04	.04	.04	.04	.04	.05	.05	92	71	53	50	18
23	.04	.04	.04	.04	.04	.05	.05	52	79	53	17	18
24	.04	.04	.04	.04	.04	.05	.05	27	73	53	39	18
25	.04	.04	.04	.04	.04	.05	.05	41	68	53	100	18
26	.04	.04	.04	.04	.04	.05	.05	87	68	53	91	18
27	.04	.04	.04	.04	.04	.05	.05	92	69	64	91	18
28	.04	.04	.04	.04	.04	.05	.05	94	71	98	91	18
29	.04	.04	.04	.04	---	.05	.05	95	73	105	44	18
30	.04	.04	.04	.04	---	.05	.05	64	62	104	17	6.7
31	.04	---	.04	.04	---	.05	---	46	---	104	35	---
TOTAL	1.14	1.20	1.24	1.24	1.12	1.55	1.50	1059.75	1514.71	2002	2902	1004.7
MEAN	.04	.04	.04	.04	.04	.05	.05	34.2	50.5	64.6	93.6	33.5
MAX	.04	.04	.04	.04	.04	.05	.05	95	79	105	152	105
MIN	.03	.04	.04	.04	.04	.05	.05	.05	.54	51	17	6.7
AC-FT	2.3	2.4	2.5	2.5	2.2	3.1	3.0	2100	3000	3970	5760	1990

CAL YR 1985	TOTAL	11096.99	MEAN	30.4	MAX	158	MIN	.03	AC-FT	22010
WTR YR 1986	TOTAL	8492.15	MEAN	23.3	MAX	152	MIN	.03	AC-FT	16840

08255500 COSTILLA CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on right bank 70 ft downstream from bridge on State Highway 196, 0.5 mi upstream from diversion dam, 1.6 mi southeast of Costilla, and at mile 15.9.

DRAINAGE AREA.--195 mi².

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.

REVISED RECORDS.--WSP 1312: 1937-39(M).

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1952. Elevation of gage is 7,900 ft above National Geodetic Vertical Datum of 1929, 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 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 13-24, 28, Dec. 2 to Mar. 3 and Apr. 18-23. Records good except for estimated daily discharges, which are poor. Flow regulated by Costilla Reservoir (station 08253900) 19 mi upstream. Diversions for irrigation of about 2,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years (water years 1942-86), 43.9 ft³/s, 31,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft³/s, May 11, 1942, gage height, 5.37 ft, site and datum then in use; minimum, 0.34 ft³/s, Mar. 15, 1969, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1886, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 190 ft³/s, May 29, gage height, 3.20 ft; minimum discharge, 2.9 ft³/s, Feb. 5, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	16	8.0	9.5	12	34	82	127	111	109	93
2	20	19	15	8.0	9.5	14	35	94	152	105	63	117
3	19	20	15	8.5	10	16	33	100	131	102	60	115
4	18	19	11	9.0	9.5	18	32	121	125	101	149	117
5	18	21	10	8.5	9.5	18	31	119	128	106	177	96
6	18	20	12	9.0	10	19	36	106	113	119	176	35
7	28	16	12	10	10	20	36	98	110	108	179	35
8	30	19	10	9.0	9.0	20	40	91	112	125	180	87
9	23	19	9.0	8.5	9.0	22	37	83	140	157	175	83
10	29	16	8.2	9.0	7.0	15	34	74	123	157	179	96
11	46	19	9.0	9.5	7.5	18	35	69	141	147	177	61
12	39	19	5.0	9.5	8.0	19	35	65	174	149	173	47
13	32	18	5.0	9.5	9.0	17	35	60	170	143	172	43
14	29	13	5.0	9.5	11	16	27	59	163	138	171	46
15	27	10	7.0	10	12	17	28	59	158	113	136	42
16	26	10	7.0	11	13	15	25	58	150	109	46	40
17	28	11	7.0	10	13	18	24	92	149	107	42	39
18	28	11	7.0	10	13	15	21	78	146	102	97	37
19	31	13	7.0	10	13	15	21	130	138	105	122	36
20	30	10	7.0	9.5	13	15	29	135	133	110	123	35
21	27	15	8.0	11	10	15	38	142	127	111	124	34
22	26	12	8.0	11	9.5	16	42	142	120	105	101	34
23	24	14	8.0	11	10	19	51	121	134	101	41	34
24	24	15	8.0	11	11	24	54	79	141	95	40	37
25	23	20	8.0	9.0	11	25	58	76	133	91	106	37
26	22	21	8.0	9.0	11	24	68	125	137	89	110	37
27	22	20	8.5	9.5	12	26	70	134	126	86	109	36
28	22	14	8.5	9.5	10	27	64	144	127	118	109	35
29	22	20	8.0	10	---	29	68	166	137	130	93	36
30	22	19	8.5	10	---	30	72	158	129	127	43	37
31	22	---	9.0	11	---	29	---	122	---	127	38	---
TOTAL	797	494	274.7	298.0	290.0	603	1213	3182	4094	3594	3620	1657
MEAN	25.7	16.5	8.86	9.61	10.4	19.5	40.4	103	136	116	117	55.2
MAX	46	21	16	11	13	30	72	166	174	157	180	117
MIN	18	10	5.0	8.0	7.0	12	21	58	110	86	38	34
AC-FT	1580	980	545	591	575	1200	2410	6310	8120	7130	7180	3290

CAL YR 1985	TOTAL	28721.2	MEAN	78.7	MAX	311	MIN	5.0	AC-FT	56970
WTR YR 1986	TOTAL	20116.7	MEAN	55.1	MAX	180	MIN	5.0	AC-FT	39900

08260500 COSTILLA CREEK BELOW DIVERSION DAM, AT COSTILLA, NM

LOCATION.--Lat 36°58'03", long 105°31'00", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on right bank 600 ft downstream from diversion dam, 1.1 mi southeast of Costilla, and at mile 15.3.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--April 1952 to current year (no winter records).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,861 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 7 to Sept. 30. Records poor. Flow partly regulated by Costilla Reservoir (station 08253900) 20 mi upstream, and by canal headgates or sluice gates at diversion dam. Diversions upstream from station for irrigation of about 5,000 acres, 3,000 acres of which are downstream from station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 540 ft³/s, June 9, 1979, gage height, 4.66 ft, from rating curve extended above 220 ft³/s; maximum gage height, 6.77 ft, May 30, 1983 (backwater from debris); no flow Oct. 14, 1963, Aug. 6, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably exceeded 1,000 ft³/s, based on records for upstream station (station 08255500).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 472 ft³/s, July 11, gage height, 5.23 ft from sluicing at diversion dam; minimum not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6							6.0	36	10	20	9.6
2	1.6							13	47	11	31	6.1
3	2.0							14	28	15	22	4.0
4	1.7							25	25	20	22	5.0
5	1.5							18	30	20	15	3.0
6	2.0							10	13	26	12	6.2
7	3.0							4.3	10	19	13	5.5
8	3.4							8.3	11	48	13	9.7
9	2.0							6.7	26	66	11	5.4
10	3.5							3.7	11	66	10	12
11	20							3.2	24	65	10	15
12	14							8.8	40	63	10	7.6
13	7.0							12	37	53	9.0	4.1
14	4.0							22	32	40	8.0	4.3
15	3.0							17	30	20	13	4.3
16	2.3							16	22	20	20	4.3
17	---							26	15	20	11	4.0
18	---							8.2	11	23	10	4.0
19	---							5.7	9.8	20	4.0	3.9
20	---							5.0	14	21	7.0	3.7
21	---							11	15	19	11	3.7
22	---							10	15	18	11	3.7
23	---							18	17	17	11	3.7
24	---							15	17	16	7.3	3.7
25	---							14	16	16	12	3.7
26	---							14	16	16	8.6	5.1
27	---							8.6	14	15	8.1	4.2
28	---							11	12	16	7.9	4.3
29	---							32	15	16	12	5.1
30	---							48	15	14	9.9	4.0
31	---							51	---	12	8.8	---
TOTAL	---							465.5	623.8	821	378.6	162.9
MEAN	---							15.0	20.8	26.5	12.2	5.43
MAX	---							51	47	66	31	15
MIN	---							3.2	9.8	10	4.0	3.0
AC-FT	---							923	1240	1630	751	323

08261000 COSTILLA CREEK AT GARCIA, CO

LOCATION.--Lat 36°59'21", long 105°31'54", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 0.4 mi downstream from old State Highway 3, 0.5 mi upstream from New Mexico-Colorado State line, 0.9 mi south of Garcia, and at mile 13.3.

DRAINAGE AREA.--200 mi², approximately.

PERIOD OF RECORD.--June 1944 to current year (no winter records).

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1956. Elevation of gage is 7,758 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 20, 1950, at site 0.4 mi downstream at different datum.

REMARKS.--Estimated daily discharges: May 1-6 and Sept. 11, 12, 18-25. Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Costilla Reservoir (station 08253900) 22 mi upstream. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 500 ft³/s, June 1, 1983, gage height, 4.91 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 168 ft³/s, July 11, gage height, 3.81 ft; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3							.50	24	1.6	14	6.0
2	1.3							1.0	36	1.4	25	3.6
3	1.3							1.0	22	2.5	15	3.5
4	1.3							1.0	14	3.5	10	3.2
5	1.3							.50	16	8.4	4.9	3.1
6	1.3							.50	5.9	23	4.4	2.4
7	1.6							.28	2.9	11	3.5	2.3
8	2.0							.72	2.0	50	2.6	7.0
9	1.4							.46	15	57	3.8	2.4
10	1.4							.31	7.2	56	3.6	8.0
11	18							.31	14	59	3.5	10
12	12							.83	39	50	1.9	4.0
13	4.4							1.7	36	43	1.6	2.6
14	1.7							9.5	33	31	1.6	2.8
15	1.4							7.1	31	13	11	2.5
16	1.4							5.1	20	9.1	5.7	2.3
17	1.3							15	12	9.7	2.6	2.0
18	---							3.7	7.3	11	3.5	1.5
19	---							4.2	1.6	8.5	3.4	1.5
20	---							2.5	6.1	9.9	3.3	1.0
21	---							3.0	6.3	11	3.0	1.0
22	---							1.3	5.5	8.8	5.6	1.0
23	---							9.3	8.2	7.6	2.0	1.0
24	---							4.6	11	7.0	1.9	1.0
25	---							2.8	9.7	6.2	4.9	.50
26	---							3.7	8.1	5.8	2.2	.00
27	---							.44	6.9	2.9	2.7	.00
28	---							2.0	2.9	1.4	2.4	.00
29	---							19	6.8	3.3	6.7	.00
30	---							39	7.3	4.9	4.2	.00
31	---							38	---	3.1	3.3	---
TOTAL	---							179.35	417.7	520.6	163.8	76.20
MEAN	---							5.79	13.9	16.8	5.28	2.54
MAX	---							39	39	59	25	10
MIN	---							.28	1.6	1.4	1.6	.00
AC-FT	---							356	829	1030	325	151

PRINCIPAL DIVERSIONS FROM COSTILLA CREEK, NEW MEXICO-COLORADO

Records of discharge are collected at 5 gaging stations on 3 diversions from Costilla Creek. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado downstream from the gaging station on Costilla Creek near Costilla, NM (station 08255500). Records collected during irrigation season only. Several observations of water temperature were made at each site during the year.

08256000 ACEQUIA MADRE AT COSTILLA, NM.--Lat 36°58'03", long 105°30'57", Taos County, Hydrologic Unit 13020101, on right bank 135 ft downstream from new diversion dam, and 1.2 mi southeast of the intersection of State Highways 3 and 196 at Costilla. PERIOD OF RECORD, May 1944 to current year. GAGE, water-stage recorder and Parshall flume. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Acequia diverts from right bank of Costilla Creek.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50 ft^3/s, June 25, 1944, July 31, 1945; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 28 ft^3/s, May 27 and Aug. 12-14; minimum daily, 3.0 ft^3/s, Oct. 9, 11-13.

08258000 CERRO CANAL AT COSTILLA, NM.--Lat 36°57'56", long 105°31'07", Taos County, Hydrologic Unit 13020101, on right bank 1,350 ft downstream from new diversion dam, and 1.2 mi southeast of the intersection of State Highways 3 and 196 at Costilla. PERIOD OF RECORD, April 1944 to current year. GAGE, water-stage recorder and Parshall flume. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Canal diverts from left bank of Costilla Creek.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 164 ft^3/s, June 9, 1985; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 147 ft^3/s, Aug. 6; minimum daily, 12 ft^3/s, Oct. 4, 6.

08258600 CERRO CANAL BELOW ASSOCIATION DITCH AT COSTILLA, NM.--Lat 36°57'41", long 105°32'05", Taos County, Hydrologic Unit 13020101, on left bank 220 ft downstream from Association ditch, and 1.2 mi south of the intersection of State Highway 3 and 196 at Costilla. PERIOD OF RECORD, May 1972 to current year. GAGE, water-stage recorder and Parshall flume. Elevation of gage is 7,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 83 ft^3/s, June 9, 1985; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 78 ft^3/s, Aug. 11; minimum daily, 5.6 ft^3/s, Oct. 6.

08259600 CERRO CANAL AT STATE LINE NEAR JAROSO, CO.--Lat 36°59'41", long 105°34'36", Taos County, Hydrologic Unit 13020101, on right bank 780 ft downstream from head of N. Mex. branch Cerro Canal, and 2.7 mi east of Jaroso. PERIOD OF RECORD, April 1973 to current year. GAGE, water-stage recorder and Parshall flume. Elevation of gage is 7,680 ft above National Geodetic Vertical Datum of 1929, from topographic map. Flow measured is delivered to Colorado.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 72 ft^3/s, July 10, 1986; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 72 ft^3/s, July 10; minimum daily, 3.0 ft^3/s, May 14.

08262000 EASTDALE NO. 1 INTAKE CANAL NEAR JAROSO, CO.--Lat 37°02'25", long 105°36'18", Costilla County, Hydrologic Unit 13020101, on left bank 750 ft downstream from headgate, and 2.8 mi north of Jaroso. PERIOD OF RECORD, June 1944 to Sept. 30, 1986 discontinued. GAGE, water-stage recorder and Parshall flume. Elevation of gage is 7,585 ft above National Geodetic Verical Datum of 1929, from topographic map. Canal diverts from right bank of Costilla Creek to Eastdale Reservoir No. 1 for irrigation in Colorado.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 112 ft^3/s, May 16, 1958; no flow for long periods.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 26 ft^3/s, June 2; no flow many days.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

	08256000 Acequia Madre	08258000 Cerro Canal at Costilla	08258600 Cerro Canal below Association ditch	08259600 Cerro Canal at State line nr Jaroso	08262000 Eastdale No. 1 intake canal
October	-	-	-	-	15
November	-	-	-	-	4
December	-	-	-	-	0
January	-	-	-	-	0
February	-	-	-	-	0
March	-	-	-	-	-
April	-	-	-	-	365
May	970	4510	-	1620	177
June	998	5890	3000	2550	285
July	1050	4450	3320	3020	419
August	1060	5370	2580	2180	115
September	664	2290	1400	1120	170

08263500 RIO GRANDE NEAR CERRO, NM

LOCATION.--Lat 36°44'24", long 105°40'59", in NW¼NE¼ sec.20, T.29 N., R.12 E., Taos County, Hydrologic Unit 13020101, on left bank 4 mi southwest of Cerro, 5.5 mi northwest of Questa, 7.4 mi upstream from Red River, and at mile 1,693.1.

DRAINAGE AREA.--8,440 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1948 to current year.

REVISED RECORDS.--WDR NM-80-1: 1978(M).

GAGE.--Water-stage recorder. Elevation of gage is 7,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.-Estimated daily discharges: Dec. 11, Dec. 13 to Jan. 14 and Aug. 3-21. Water-discharge records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 7,000 acres in New Mexico.

AVERAGE DISCHARGE.--38 years, 445 ft³/s, 322,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s, June 22, 1949, gage height, 15.78 ft; minimum, about 40 ft³/s, Sept. 10, 11, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 21	0315	1,310	7.05	June 12	0915	*5,890	*12.94
May 7	0230	3,010	10.06				

Minimum daily discharge, 128 ft³/s, Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	334	850	608	616	790	1020	1140	3000	3730	525	180
2	305	387	862	604	655	762	1100	1250	2970	3720	419	183
3	339	423	818	595	671	753	1200	1540	2930	3680	320	176
4	283	521	812	572	660	755	1250	1950	2810	3270	270	164
5	248	546	811	562	625	765	1260	2340	2790	2850	250	161
6	225	580	752	544	636	776	1190	2850	3080	2710	240	153
7	202	581	752	553	611	774	1090	2880	3570	2780	230	146
8	182	577	727	525	339	782	1000	2590	3860	2870	220	150
9	172	539	744	524	519	799	1020	2210	4320	2860	210	182
10	180	483	753	524	438	839	1060	1700	5020	2710	200	189
11	304	472	620	533	496	857	1010	1250	5660	2690	190	198
12	329	542	321	544	490	823	976	1040	5800	2870	180	268
13	387	571	445	550	546	797	984	905	5240	2910	170	607
14	391	629	316	553	568	782	1070	824	4490	2720	160	606
15	426	645	377	525	598	751	1050	832	4050	2420	160	500
16	401	788	503	533	604	715	971	861	3870	2210	160	454
17	381	913	551	536	641	696	892	832	3880	2000	150	405
18	359	1060	565	535	640	683	869	807	3960	1760	150	359
19	351	1150	564	533	714	686	847	848	4040	1480	150	323
20	369	1130	567	547	724	671	767	746	4170	1280	150	283
21	378	1170	573	553	766	648	664	719	4320	1310	145	266
22	381	1020	583	557	754	627	636	778	4310	1490	143	238
23	387	956	585	557	715	627	681	1000	4210	1700	141	211
24	363	842	600	561	696	627	867	1270	4000	1570	128	193
25	349	858	616	559	708	636	1100	1440	3840	1470	134	187
26	331	935	615	546	737	648	1250	1540	3770	1440	132	201
27	317	982	610	529	759	664	1390	1510	3640	1350	137	215
28	302	965	606	533	776	702	1360	1560	3560	1170	149	258
29	273	915	607	543	---	756	1260	1830	3580	1030	160	302
30	265	833	602	558	---	844	1140	2240	3650	865	178	334
31	266	---	560	594	---	943	---	2750	---	687	176	---
TOTAL	9714	22347	19267	17090	17702	22978	30974	46032	118390	67602	6127	8092
MEAN	313	745	622	551	632	741	1032	1485	3946	2181	198	270
MAX	426	1170	862	608	776	943	1390	2880	5800	3730	525	607
MIN	172	334	316	524	339	627	636	719	2790	687	128	146
AC-FT	19270	44330	38220	33900	35110	45580	61440	91300	234800	134100	12150	16050

CAL YR 1985	TOTAL	451689	MEAN	1238	MAX	6160	MIN	130	AC-FT	895900
WTR YR 1986	TOTAL	386315	MEAN	1058	MAX	5800	MIN	128	AC-FT	766300

08263500 RIO GRANDE NEAR CERRO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977, 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC									
19...	1230	411	250	--	--	--	0.0	--	1.7
MAY									
23...	1430	1130	270	298	--	8.00	15.0	19	7.8
AUG									
27...	1430	141	420	439	8.80	8.20	19.0	--	4.9

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC								
19...	0	6	33	12	<1	1	30	9
MAY								
23...	0	5	140	13	<1	1	20	5
AUG								
27...	0	6	6	3	<1	3	20	7

08265000 RED RIVER NEAR QUESTA, NM

LOCATION.--Lat 36°42'12", long 105°34'04", in NE¼SE¼ sec.32, T.29 N., R.13 E. (projected), Taos County, Hydrologic Unit 13020101, in Carson National Forest, on left bank 1.3 mi upstream from Cabresto Creek, 1.5 mi east of Questa, and at mile 9.0.

DRAINAGE AREA.--113 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 808: 1935. WSP 1392: 1913, 1932, 1941, 1947-48. WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Wood or concrete control since Mar. 20, 1936. Datum of gage is 7,451.92 ft above National Geodetic Vertical Datum of 1929. See WSP 1923 for history of changes prior to Oct. 4, 1938.

REMARKS.--Estimated daily discharges: Nov. 15-21, Dec. 13-15, Jan. 5, 6, 8, and Feb. 7-11. Water-discharge records good except for estimated daily discharges, which are fair. Diversions for irrigation of a few hundred acres upstream from 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 downstream.
Since January 1966 surface and ground-water diversions by Molybdenum Corp. of America (Molycorp) refinery 5.5 mi upstream bypass gage in tailings pipelines on left bank and discharge into settling pond 3 mi downstream. Effluent from this pond enters Red River as surface water and is included in discharge at Red River below Fish Hatchery, near Questa (station 08266820). See tabulation below for bypass flow of water. No tabulation; data not provided.

AVERAGE DISCHARGE.--52 years (water years 1913-25, 1927-65), 55.9 ft³/s, 40,500 acre-ft/yr, prior to extensive upstream diversions by Molycorp.
21 years (water years 1966-86), 39.2 ft³/s, 28,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1929).--Maximum discharge, 886 ft³/s, May 25, 1942, from rating curve extended above 450 ft³/s; maximum gage height, 5.80 ft, June 8, 1979; minimum discharge, 0.60 ft³/s, Jan. 21, 1981, result of freezeup.
The maximum discharge of May 25, 1942, may have been equalled or exceeded by the peak of June 15, 1921.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	0245	217	3.66	June 9	0215	*375	*4.36

Minimum discharge, 3.7 ft³/s, Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	28	26	17	15	19	39	115	157	154	56	41
2	34	27	26	18	15	20	43	134	189	148	57	40
3	31	25	27	20	16	20	38	148	215	142	53	39
4	30	24	25	19	16	21	39	200	223	142	50	38
5	28	25	22	18	14	21	40	188	253	146	49	37
6	27	25	23	19	15	21	41	168	269	159	49	35
7	49	23	24	18	10	22	46	155	289	140	50	39
8	46	23	23	16	9.5	22	52	148	301	141	49	71
9	39	25	22	15	9.1	24	52	137	325	137	47	57
10	47	24	20	17	8.8	22	53	124	288	124	48	90
11	66	26	10	17	10	22	54	114	269	116	50	83
12	52	26	7.7	17	14	22	53	110	252	108	47	66
13	49	24	7.0	17	16	22	53	114	241	101	46	59
14	47	22	6.4	17	15	21	49	119	231	100	45	71
15	45	20	5.8	17	16	21	49	121	221	94	44	62
16	42	20	5.6	16	16	20	49	120	210	93	43	59
17	42	20	6.4	16	17	21	51	126	202	96	43	55
18	41	23	7.7	16	17	20	48	121	199	89	42	51
19	40	22	9.5	18	18	21	48	115	197	89	40	48
20	38	19	10	18	18	20	47	114	190	89	38	46
21	35	22	11	17	15	20	47	126	180	83	40	45
22	35	24	12	15	14	21	52	135	174	78	41	44
23	33	29	14	16	15	22	59	130	179	79	44	43
24	32	28	16	14	15	23	67	126	178	73	43	46
25	30	29	17	16	16	25	73	128	172	66	48	45
26	31	30	18	18	15	26	80	134	174	61	48	45
27	33	29	19	17	17	28	74	141	165	59	45	43
28	33	27	21	16	17	30	76	138	167	57	43	42
29	32	28	20	15	---	31	84	142	179	56	42	42
30	31	27	21	15	---	33	98	141	164	54	44	41
31	28	---	21	16	---	34	---	140	---	52	43	---
TOTAL	1180	744	504.1	521	409.4	715	1654	4172	6453	3126	1427	1523
MEAN	38.1	24.8	16.3	16.8	14.6	23.1	55.1	135	215	101	46.0	50.8
MAX	66	30	27	20	18	34	98	200	325	159	57	90
MIN	27	19	5.6	14	8.8	19	38	110	157	52	38	35
AC-FT	2340	1480	1000	1030	812	1420	3280	8280	12800	6200	2830	3020

CAL YR 1985 TOTAL 26992.1 MEAN 74.0 MAX 322 MIN 5.6 AC-FT 53540
WTR YR 1986 TOTAL 22428.5 MEAN 61.4 MAX 325 MIN 5.6 AC-FT 44490

08265000 RED RIVER NEAR QUESTA, NM -- Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	ACIDITY (MG/L AS H) (71825)
OCT 29...	1400	33	--	--	--	--	10.0	--	--	--
DEC 20...	1600	12	345	--	--	--	1.0	--	--	--
MAY 22...	1430	114	170	189	--	8.00	9.0	--	8.7	--
JUN 12...	1630	240	160	170	7.80	8.10	12.0	24	7.7	--
AUG 26...	1530	44	280	--	7.40	--	14.0	--	7.2	--
SEP 07...	2200	1100	1100	1160	3.78	3.88	--	--	--	3.1

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
OCT 29...	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--
MAY 22...	--	3.1	--	--	--	--	--	--	0	--
JUN 12...	--	4.5	--	--	--	--	--	--	0	--
AUG 26...	--	2.4	<0.010	--	--	--	--	--	1	--
SEP 07...	<1.0	--	--	220000	23000	<1	700	24	<1	6

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 29...	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	52	--	--	120	--	--	--	1600
MAY 22...	--	--	6	--	--	22	--	--	--	250
JUN 12...	--	--	21	--	--	290	--	--	--	240
AUG 26...	--	--	56	--	--	20	--	--	--	1400
SEP 07...	450	<10	2100	510	940000	130	3300	<10	18000	12000

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 29...	--	--	--	--	--	--	3	0.27	89
DEC 20...	4	4	--	--	340	290	--	--	--
MAY 22...	<1	2	--	--	60	37	--	--	--
JUN 12...	3	6	--	--	80	70	--	--	--
AUG 26...	4	5	--	--	290	180	--	--	--
SEP 07...	36	1	34	200	4400	2600	--	--	--

08266000 CABRESTO CREEK NEAR QUESTA, NM

LOCATION.--Lat 36°43'50", long 105°33'12", in SE¼SE¼ sec.21, T.29 N., R.13 E., Taos County, Hydrologic Unit 13020101, in Carson National Forest, on right bank 900 ft downstream from Llano ditch heading, 2.6 mi downstream from Lake Fork, 3 mi northeast of Questa, and at mile 3.5.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--September 1943 to current year.

REVISED RECORDS.--WSP 1712: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,845 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Estimated daily discharges: Oct. 8-21 and July 6-8. Records good. Llano ditch (station 08265500), the only diversion upstream from station, diverts from right bank 900 ft upstream from gage for irrigation of about 800 acres downstream. 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 mi upstream from mouth. Present capacity of Cabresto Reservoir is 1,100 acre-feet after further rehabilitation between 1959 and 1961.

AVERAGE DISCHARGE.--43 years, 10.4 ft³/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204 ft³/s, June 2, 1983, gage height, 4.82 ft; minimum, 0.44 ft³/s, Dec. 2, 1950, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 25, 1942, may have exceeded the maximum of record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft³/s, June 9, gage height, 3.15 ft; minimum, 0.86 ft³/s, Nov. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	6.0	6.7	6.2	6.7	12	24	12	15	10	12
2	11	10	6.1	6.6	6.2	6.9	12	27	17	14	10	10
3	11	9.9	6.2	6.7	6.2	6.9	10	26	25	14	10	9.9
4	12	9.8	5.9	6.6	6.0	6.8	12	31	26	14	10	9.8
5	15	9.8	5.7	6.2	5.9	6.9	12	31	27	15	10	9.8
6	14	9.6	6.2	6.5	6.3	7.0	12	32	25	16	10	9.6
7	18	5.6	6.5	6.4	6.2	7.1	13	29	26	15	10	10
8	16	9.4	6.5	6.4	6.2	7.1	15	28	36	15	10	14
9	15	9.1	6.4	6.6	5.3	7.2	15	23	56	15	10	12
10	16	9.0	6.3	6.6	5.7	7.0	17	20	61	14	10	15
11	20	9.2	4.6	6.6	5.1	7.1	17	17	54	14	10	16
12	16	9.1	4.1	6.6	6.0	7.2	17	16	47	14	10	14
13	15	8.9	4.0	6.6	6.3	6.9	17	14	43	13	9.9	13
14	14	9.1	3.8	6.7	6.1	7.0	16	14	42	14	9.9	14
15	13	7.7	4.4	6.6	6.1	6.8	16	14	45	12	9.9	13
16	13	7.3	5.5	6.5	6.1	6.5	17	13	42	11	9.9	15
17	13	6.5	6.7	5.3	5.9	6.9	17	13	32	11	9.8	15
18	13	6.1	7.6	4.6	6.0	6.6	16	14	21	11	9.7	15
19	12	4.3	7.2	6.3	5.3	6.5	16	11	20	11	9.6	14
20	12	3.4	6.9	6.4	3.7	6.6	16	10	31	11	9.8	14
21	12	5.5	7.1	6.4	6.0	5.5	15	11	32	10	10	14
22	12	6.1	7.1	6.3	5.8	3.8	20	10	29	10	9.9	14
23	12	6.0	7.1	6.3	6.1	5.4	22	11	22	10	9.3	15
24	12	5.8	7.0	6.3	6.1	5.2	25	10	21	10	8.6	16
25	12	5.9	6.9	6.1	6.3	7.5	23	10	21	11	10	16
26	11	6.0	6.9	6.2	6.5	7.8	18	10	22	10	14	16
27	11	6.0	6.8	6.3	6.7	8.4	17	10	20	10	14	15
28	11	5.7	6.8	6.3	6.7	9.4	16	10	19	10	14	15
29	11	6.1	6.6	6.3	---	9.9	17	11	19	10	13	16
30	11	6.2	6.6	6.3	---	10	17	11	16	10	13	16
31	11	---	6.7	6.2	---	11	---	11	---	10	13	---
TOTAL	406	223.1	192.2	196.5	167.0	221.6	485	522	909	380	327.3	408.1
MEAN	13.1	7.44	6.20	6.34	5.96	7.15	16.2	16.8	30.3	12.3	10.6	13.6
MAX	20	10	7.6	6.7	6.7	11	25	32	61	16	14	16
MIN	11	3.4	3.8	4.6	3.7	3.8	10	10	12	10	8.6	9.6
AC-FT	805	443	381	390	331	440	962	1040	1800	754	649	809
(†)	0	0	0	0	0	0	110	1270	662	687	391	0

CAL YR 1985	TOTAL	7782.0	MEAN	21.3	MAX	134	MIN	3.4	AC-FT	15440
WTR YR 1986	TOTAL	4437.8	MEAN	12.2	MAX	61	MIN	3.4	AC-FT	8800

(†) DIVERSION, IN ACRE-FEET, BY LLANO DITCH

08266500 RED RIVER BELOW QUESTA, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°41'34", long 105°36'42", in SW¼NE¼ sec.1, T.28 N., R.12 E., Taos County, Hydrologic Unit 13020101, at bridge on State Highway 3, 1.3 mi southwest of Questa.

DRAINAGE AREA.--160 mi².

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT											
29...	1400	45	310	307	7.60	7.90	9.0	10.0	10	10.0	11
DEC											
20...	1630	20	285	--	--	--	--	1.0	--	--	--
JAN											
14...	1330	29	312	--	8.80	--	7.0	2.5	--	14.4	61
MAR											
27...	0940	24	280	316	7.80	8.20	15.0	7.0	5.6	11.4	29
MAY											
20...	1500	101	205	224	7.40	8.10	18.0	14.0	4.6	8.2	22
22...	1530	118	175	--	--	--	--	9.0	6.8	8.5	--
JUL											
09...	1500	150	212	--	8.10	--	18.0	13.0	22	8.2	--
AUG											
19...	0910	36	310	330	8.05	7.70	24.0	12.0	--	8.5	<10
26...	1730	E60	285	--	7.60	--	--	14.0	--	7.2	--

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
OCT											
29...	130	85	39	8.2	4.3	0.2	1.2	--	--	--	--
DEC											
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
27...	140	87	41	8.4	5.5	0.2	1.1	--	--	50	--
MAY											
20...	95	44	29	5.4	3.4	0.2	0.90	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	150	110	45	9.5	5.8	0.2	1.3	51	0	43	42
26...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
29...	46	83	2.3	0.70	7.5	170	0.100	0.130	0.020	0.18
DEC										
20...	--	--	--	--	--	--	--	--	--	--
JAN										
14...	--	--	--	--	--	--	0.200	0.230	0.020	--
MAR										
27...	44	95	3.0	0.80	10	190	0.300	0.320	0.030	0.27
MAY										
20...	51	51	1.6	0.40	9.3	130	0.100	0.130	0.010	0.19
22...	--	--	--	--	--	--	--	--	--	--
JUL										
09...	--	--	--	--	--	--	0.200	0.190	0.010	0.29
AUG										
19...	47	110	3.2	0.80	12	210	0.300	0.310	<0.010	--
26...	--	--	--	--	--	--	--	--	--	--

08266500 RED RIVER BELOW QUESTA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
OCT										
29...	0.30	0.020	0.020	1.4	<0.010	<1	<1	<10	1	1
DEC										
20...	--	--	--	1.4	--	--	--	--	1	--
JAN										
14...	--	0.020	<0.010	8.5	--	--	--	--	--	--
MAR										
27...	0.60	0.030	<0.010	1.3	<0.010	--	--	10	--	--
MAY										
20...	0.30	0.020	<0.010	1.8	<0.010	--	--	<10	--	--
22...	--	--	--	--	--	--	--	--	0	--
JUL										
09...	0.50	0.070	<0.010	1.8	<0.010	--	--	--	--	--
AUG										
19...	--	0.050	<0.010	1.7	--	2	<1	<10	1	<1
26...	--	--	--	2.1	--	--	--	--	1	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)
OCT										
29...	<10	<10	30	1	6	2	<1	--	<0.10	--
DEC										
20...	--	--	35	--	4	--	--	760	--	--
JAN										
14...	--	--	--	--	--	--	--	--	--	--
MAR										
27...	--	--	--	--	<3	--	--	--	--	--
MAY										
20...	--	--	--	--	10	--	--	--	--	--
22...	--	--	10	--	440	--	--	250	--	--
JUL										
09...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	<10	<10	27	4	5	<5	<5	--	<0.10	<0.1
26...	--	--	41	--	14	--	--	1000	--	--

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NITRATE TOT IN BOT MAT (MG/KG AS N) (00621)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
29...	--	2	<1	<1	140	15	0.3	--	--	--
DEC										
20...	7	4	--	--	190	110	--	--	--	--
JAN										
14...	--	--	--	--	--	--	--	19	1.5	--
MAR										
27...	--	3	--	--	--	--	0.6	10	0.65	82
MAY										
20...	--	4	--	--	--	--	0.3	7	1.9	60
22...	4	4	--	--	70	60	--	--	--	--
JUL										
09...	--	2	--	--	--	--	0.5	24	9.7	77
AUG										
19...	--	--	<1	<1	180	89	--	--	--	--
26...	5	4	--	--	240	94	--	--	--	--

08266790 RED RIVER ABOVE STATE FISH HATCHERY, NEAR QUESTA, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°41'12", long 105°38'40", in SE¼SE¼ sec.3, T.28 N., R.12 E., Taos County, Hydrologic Unit 13002010l, 0.5 mi upstream from Red River State Fish Hatchery and 3.0 mi southwest of Questa.

DRAINAGE AREA.--175 mi².

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)
DEC							
20...	1430	E28	345	10.0	9.1	1.6	0
MAY							
21...	1530	121	230	12.0	--	2.5	0

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC							
20...	60	<3	290	45	58	100	16
MAY							
21...	4	12	170	18	20	50	17

08266820 RED RIVER BELOW FISH HATCHERY, NEAR QUESTA, NM

LOCATION.--Lat 36°40'54", long 105°39'21", in NW¼NW¼ sec.10, T.28 N., R.12 E., Taos County, Hydrologic Unit 13020101, on right bank 0.3 mi downstream from State Fish Hatchery, 3.5 mi upstream from mouth, and 3.7 mi southwest of Questa.

DRAINAGE AREA.--185 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1969 to July 1978 (discharge measurements only), August 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 16, 1979, at site about 250 ft upstream at datum 5.55 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Diversions for irrigation of about 3,000 acres upstream from station.

AVERAGE DISCHARGE.--8 years, 90.9 ft³/s, 65,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s, June 8, 1979, gage height, 5.30 ft, site and datum then in use; minimum, 21 ft³/s, Dec. 14, 1986, from construction work on hatchery ponds.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 165 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	0400	217	3.05	Sept. 10	1915	184	2.95
June 9	0645	*422	*3.85				

Minimum discharge, 21 ft³/s, Dec. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	65	54	52	47	46	54	137	184	193	83	74
2	64	64	56	51	47	47	61	154	206	183	90	72
3	62	61	57	55	48	47	59	165	231	177	82	69
4	62	57	56	53	48	48	62	206	242	169	80	67
5	60	57	53	49	43	48	67	204	270	170	79	67
6	59	57	56	52	46	48	68	193	282	188	78	64
7	75	56	56	51	46	48	74	180	300	178	81	64
8	76	56	56	44	47	47	85	177	319	178	80	100
9	70	58	57	45	47	48	84	171	407	175	76	92
10	73	57	55	49	40	48	87	158	386	164	76	123
11	98	58	40	48	41	47	95	148	361	153	79	128
12	88	59	37	51	45	46	97	141	325	146	75	108
13	83	59	37	50	50	46	91	133	309	138	73	99
14	83	60	36	49	49	46	87	135	300	135	74	111
15	82	55	37	51	51	46	87	140	290	131	75	102
16	79	53	36	49	51	44	85	139	279	128	71	100
17	79	60	39	47	50	45	87	145	270	133	70	98
18	79	60	42	50	52	44	82	141	257	127	67	92
19	74	53	44	57	52	44	82	136	249	126	64	87
20	69	43	45	54	49	44	85	134	242	123	63	85
21	67	52	48	52	49	43	81	142	221	116	65	84
22	66	52	48	48	46	43	86	153	209	111	67	79
23	67	58	49	48	48	44	94	149	211	113	72	77
24	67	58	50	48	48	45	101	146	208	108	71	84
25	65	59	51	46	49	44	114	149	205	101	77	86
26	65	60	51	46	48	43	121	155	216	94	81	84
27	67	59	52	48	46	44	115	164	208	92	76	83
28	67	58	53	48	44	45	111	162	204	88	73	80
29	64	58	52	48	---	47	115	166	226	84	71	74
30	64	55	55	48	---	48	126	170	204	82	74	75
31	64	---	54	48	---	50	---	170	---	80	73	---
TOTAL	2202	1717	1512	1535	1327	1423	2643	4863	7821	4184	2316	2608
MEAN	71.0	57.2	48.8	49.5	47.4	45.9	88.1	157	261	135	74.7	86.9
MAX	98	65	57	57	52	50	126	206	407	193	90	128
MIN	59	43	36	44	40	43	54	133	184	80	63	64
AC-FT	4370	3410	3000	3040	2630	2820	5240	9650	15510	8300	4590	5170

CAL YR 1985	TOTAL	43550	MEAN	119	MAX	489	MIN	32	AC-FT	86380
WTR YR 1986	TOTAL	34151	MEAN	93.6	MAX	407	MIN	36	AC-FT	67740

08266820 RED RIVER BELOW FISH HATCHERY, NEAR QUESTA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Replaces station 08266800 Red River at Fish Hatchery near Questa, NM. Samples collected at this location (08266820) since July 1974, but published under 08266800 until 1978 calendar year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC										
20...	1515	46	350	--	--	--	10.0	--	--	1.4
MAY										
21...	1600	139	225	--	--	--	13.0	--	--	7.5
JUN										
12...	1445	317	172	198	8.20	7.70	13.0	21	7.6	4.6
AUG										
26...	1815	80	320	354	7.60	7.50	15.0	--	6.7	2.0

DATE	CYANIDE TOTAL (MG/L AS CN) (00720)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC									
20...	--	0	26	6	340	56	59	110	19
MAY									
21...	<0.010	0	5	6	190	18	20	80	21
JUN									
12...	<0.010	1	20	50	150	12	14	120	51
AUG									
26...	<0.010	1	25	23	570	35	35	130	26

08267400 RIO GRANDE ABOVE RIO HONDO AT DUNN BRIDGE, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°32'06", long 105°42'30", in NW¼ sec.31, T.27 N., R.12 E., Taos County, Hydrologic Unit 13020101, at Dunn Bridge on county road, 50 ft upstream from mouth of Arroyo Hondo, 2.2 mi west of Arroyo Hondo, 11.6 mi northwest of Taos, and at mile 1,677.4.

DRAINAGE AREA.--8,690 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC										
20...	1300	585	280	--	--	--	6.0	--	9.6	1.5
MAY										
21...	1430	885	320	--	--	--	17.0	--	8.9	8.0
JUN										
12...	1330	6170	220	235	8.10	8.10	18.0	8.0	7.4	11
AUG										
27...	0830	257	340	--	8.15	--	16.0	--	6.8	3.8

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC									
20...	0	--	3	23	26	5	5	20	13
MAY									
21...	0	--	2	86	23	<1	2	10	12
JUN									
12...	0	0	7	160	14	2	6	100	79
AUG									
27...	--	--	8	14	90	11	14	60	7

08267500 RIO HONDO NEAR VALDEZ, NM

LOCATION.--Lat 36°32'30", long 105°33'21", Taos County, Hydrologic Unit 13020101, in Carson National Forest, on right bank 500 ft upstream from first diversion, 1.6 mi east of Valdez, 3.8 mi downstream from South Fork, and at mile 9.2.

DRAINAGE AREA.--36.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1934 to current year.

REVISED RECORDS.--WSP 1342: 1935. WSP 1712: Drainage area. WSP 1732: 1942(M).

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1938. Elevation of gage is 7,650 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 28, 1938, at datum 1.92 ft lower.

REMARKS.--Estimated daily discharges: Nov. 19, 20, Dec. 11-17, Jan. 2, 5, 8, 9, Feb. 5, 7-12, and June 11 to July 7. Water-discharge records good. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years, 35.0 ft³/s, 25,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 541 ft³/s, May 13, 1941; maximum gage height, 4.81 ft, Jan. 5, 1970 (ice jam); minimum discharge, about 1 ft³/s, Jan. 27, 1942, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than peak discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	2045	128	2.58	June 9	0130	*210	*3.00

Minimum daily discharge, 10 ft³/s, Dec. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	23	17	15	14	16	32	75	107	92	45	23
2	24	21	17	12	14	16	34	78	113	88	44	23
3	23	21	17	14	14	17	31	85	119	84	43	22
4	23	21	17	14	14	18	32	120	123	82	42	23
5	22	21	16	12	13	18	30	116	137	84	41	23
6	22	21	17	15	14	19	31	101	147	90	40	22
7	40	20	17	14	13	19	38	93	159	86	39	23
8	34	20	17	13	13	19	49	87	162	84	39	39
9	31	20	17	14	12	19	51	77	184	82	37	29
10	35	20	17	14	11	19	53	68	172	78	38	37
11	49	20	11	14	12	19	52	61	150	74	37	38
12	44	19	10	14	13	19	50	60	140	70	36	33
13	41	18	10	14	14	17	47	65	130	67	36	32
14	38	19	10	14	13	17	43	71	130	69	35	38
15	36	18	11	14	13	16	40	73	120	68	34	35
16	34	17	12	14	13	16	37	74	120	71	33	36
17	34	19	13	14	12	16	36	76	120	68	33	37
18	33	19	15	14	13	16	34	73	110	67	33	37
19	32	15	15	14	13	16	32	72	110	66	28	37
20	32	13	15	14	14	15	31	78	100	65	25	36
21	31	19	14	14	13	15	32	86	98	63	25	36
22	30	18	14	14	13	16	38	98	96	62	26	34
23	29	18	14	14	13	16	45	97	96	60	25	33
24	29	17	14	14	13	18	50	97	96	56	27	34
25	29	18	14	14	14	20	52	98	98	53	27	32
26	27	19	15	15	15	21	56	100	100	52	26	32
27	24	18	15	14	16	23	51	109	100	51	25	32
28	24	17	15	14	16	25	51	110	100	50	24	31
29	23	17	15	14	---	27	55	109	110	49	24	30
30	23	18	14	14	---	29	63	104	98	47	25	29
31	23	---	14	14	---	30	---	101	---	46	23	---
TOTAL	943	564	449	432	375	587	1276	2712	3645	2124	1015	946
MEAN	30.4	18.8	14.5	13.9	13.4	18.9	42.5	87.5	122	68.5	32.7	31.5
MAX	49	23	17	15	16	30	63	120	184	92	45	39
MIN	22	13	10	12	11	15	30	60	96	46	23	22
AC-FT	1870	1120	891	857	744	1160	2530	5380	7230	4210	2010	1880

CAL YR 1985	TOTAL	20042.8	MEAN	54.9	MAX	308	MIN	6.0	AC-FT	39750
WTR YR 1986	TOTAL	15068	MEAN	41.3	MAX	184	MIN	10	AC-FT	29890

08267500 RIO HONDO NEAR VALDEZ, NM -- Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT										
30...	1540	23	150	145	7.80	8.40	14.0	7.0	10.0	<10
JAN										
13...	1515	15	140	--	8.00	--	4.0	1.5	15.4	12
MAR										
27...	1140	22	130	149	8.30	8.30	17.5	5.0	12.6	34
MAY										
19...	1500	78	105	118	8.20	8.10	22.0	11.0	10.2	16
JUL										
08...	1430	78	100	112	7.60	8.00	22.0	12.0	8.2	<10
AUG										
19...	1200	28	128	--	7.94	--	26.5	11.0	--	<10

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
30...	62	11	21	2.2	2.4	0.1	1.0	--	51	13
JAN										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
27...	62	7	21	2.3	3.3	0.2	0.80	55	55	13
MAY										
19...	50	5	17	1.8	2.0	0.1	0.80	--	45	9.7
JUL										
08...	49	5	17	1.6	1.7	0.1	0.70	--	44	11
AUG										
19...	--	--	--	--	--	--	--	--	--	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT									
30...	1.2	0.20	7.1	79	0.100	0.120	0.020	--	--
JAN									
13...	--	--	--	--	0.400	0.360	0.030	0.17	0.60
MAR									
27...	3.5	0.20	7.0	84	0.200	0.210	0.040	0.16	0.40
MAY									
19...	1.2	0.20	7.3	67	0.100	0.120	0.040	0.16	0.30
JUL									
08...	0.80	<0.10	6.0	65	0.100	0.130	0.030	0.27	0.40
AUG									
19...	--	--	--	--	0.100	0.150	<0.010	--	--

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	NITRO-GEN, NITRATE TOT IN BOT MAT (MG/KG AS N) (00621)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
30...	<0.010	0.010	1.9	<10	7	--	1	0.06	75
JAN									
13...	<0.010	0.010	0.4	--	--	0.6	8	0.32	70
MAR									
27...	0.010	<0.010	2.3	<10	20	0.4	6	0.36	73
MAY									
19...	0.010	<0.010	1.6	<10	18	0.3	2	0.42	67
JUL									
08...	0.010	0.010	1.1	<10	7	0.4	1	0.21	86
AUG									
19...	<0.010	<0.010	0.9	--	--	--	--	--	--

08268700 RIO GRANDE NEAR ARROYO HONDO, NM

LOCATION.--Lat 36°32'04", long 105°42'34", in NW¼ sec.31, T.27 N., R.12 E., Taos County, Hydrologic Unit 13020101, on right bank 350 ft downstream from Arroyo Hondo, 400 ft downstream from bridge on county road, 2.2 mi west of Arroyo Hondo, 11.6 mi northwest of Taos, and at mile 1,677.4.

DRAINAGE AREA.--8,760 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Aug. 14-21. Records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 15,000 acres in New Mexico. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--23 years, 669 ft³/s, 484,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,940 ft³/s, June 14, 1985, gage height, 8.08 ft; minimum, 136 ft³/s, Aug. 2, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 21	0730	1,400	3.41	June 11	2245	*6,540	*7.77
May 7	0530	3,570	5.45				

Minimum discharge, 257 ft³/s, Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	444	928	685	708	893	1160	1430	3530	4240	727	313
2	391	509	939	680	744	882	1260	1560	3530	4240	630	322
3	451	539	914	675	762	870	1380	1870	3550	4200	552	314
4	398	615	888	650	769	870	1420	2350	3410	3690	505	296
5	357	653	899	634	720	876	1450	2790	3440	3120	466	292
6	331	681	851	624	739	897	1400	3350	3770	2920	442	280
7	328	691	831	630	739	908	1290	3450	4370	2970	428	279
8	311	685	812	597	519	902	1220	3070	4610	3100	408	312
9	297	666	833	597	583	917	1210	2640	4960	3140	392	326
10	294	604	825	601	572	945	1290	2070	5440	2930	402	377
11	439	588	686	608	580	966	1240	1570	6370	2870	398	400
12	448	638	403	621	585	955	1220	1310	6460	3030	378	409
13	532	673	515	626	656	925	1200	1140	5950	3130	350	666
14	530	728	389	628	671	906	1280	1050	5170	2920	340	756
15	568	738	449	628	706	879	1300	1050	4610	2560	330	662
16	560	839	568	631	720	845	1190	1080	4410	2310	310	609
17	539	923	614	629	726	824	1110	1090	4400	2110	330	577
18	533	1130	630	636	746	812	1070	1030	4480	1880	320	534
19	506	1200	631	637	791	816	1050	1070	4550	1640	300	496
20	514	1250	635	646	842	804	977	985	4690	1440	290	450
21	521	1260	643	655	867	784	820	946	4870	1420	290	431
22	523	1130	653	653	868	763	773	990	4860	1520	284	401
23	534	1060	656	653	827	763	818	1190	4780	1780	282	368
24	512	930	673	660	812	764	1080	1480	4550	1710	277	354
25	494	932	692	656	814	771	1340	1660	4350	1580	274	345
26	475	1000	691	643	837	785	1520	1810	4300	1540	287	351
27	457	1060	688	635	859	799	1640	1790	4160	1480	278	364
28	442	1050	684	633	869	840	1660	1810	4020	1340	282	393
29	411	1010	684	644	---	883	1560	2090	4080	1180	297	438
30	393	927	682	656	---	963	1440	2530	4160	1030	309	474
31	393	---	690	686	---	1090	---	3140	---	868	320	---
TOTAL	13858	25153	21676	19837	20631	26897	37368	55391	135830	73888	11478	12589
MEAN	447	838	699	640	737	868	1246	1787	4528	2383	370	420
MAX	568	1260	939	686	869	1090	1660	3450	6460	4240	727	756
MIN	294	444	389	597	519	763	773	946	3410	868	274	279
AC-FT	27490	49890	42990	39350	40920	53350	74120	109900	269400	146600	22770	24970

CAL YR 1985 TOTAL 537922 MEAN 1474 MAX 6840 MIN 201 AC-FT 1067000
WTR YR 1986 TOTAL 454596 MEAN 1245 MAX 6460 MIN 274 AC-FT 901700

08269000 RIO PUEBLO DE TAOS NEAR TAOS, NM

LOCATION.--Lat 36°26'22", long 105°30'11", in SW¼SE¼ sec.36, T.26 N., R.13 E., Taos County, Hydrologic Unit 13020101, in Taos Pueblo Grant, on right bank 2.3 mi east of Taos Pueblo, 4.5 mi northeast of Taos, 5.8 mi upstream from Rio Lucero, and at mile 15.1.

DRAINAGE AREA.--66.6 mi².

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.

REVISED RECORDS.--WSP 1312: 1911-12, 1914. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 20, 1962. Elevation of gage is 7,380 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1923 for history of changes prior to Nov. 20, 1962.

REMARKS.--Estimated daily discharges: Dec. 10-12, Jan. 8-11, 25-28, and Feb. 5, 7-12. Records good. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years (water years 1911-16, 1941-51, 1963-86), 30.0 ft³/s, 21,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s, May 26, 1979, gage height, 3.42 ft, from rating curve extended above 370 ft³/s; maximum gage height, 3.90 ft, from floodmark, May 14, 1941, site and datum then in use; minimum discharge, about 0.9 ft³/s, Jan. 9, 1964, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	2130	207	1.94	June 9	0400	*246	*2.06

Minimum daily discharge, 5.0 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	12	9.3	8.7	15	46	152	93	62	19	14
2	11	12	11	8.6	8.9	15	47	170	110	57	19	13
3	11	12	11	9.3	8.9	15	39	179	137	53	19	13
4	11	12	11	8.8	8.3	14	42	198	150	51	18	13
5	11	12	9.0	6.0	7.8	15	35	188	157	50	18	14
6	11	12	11	8.0	8.7	15	37	158	157	54	17	14
7	23	11	12	9.3	8.4	15	51	135	159	48	18	13
8	20	12	9.5	7.5	6.6	16	76	121	172	47	18	29
9	16	12	10	7.5	8.8	16	73	105	236	44	17	20
10	22	11	10	8.6	8.0	15	79	90	207	41	19	24
11	30	11	7.6	8.2	5.0	15	80	80	175	38	22	27
12	24	11	9.2	9.0	6.2	13	75	77	154	36	19	21
13	21	12	11	8.8	9.0	13	76	79	139	34	18	19
14	20	12	13	9.0	8.6	12	69	82	128	33	17	25
15	18	11	14	8.8	8.8	12	62	82	117	32	16	22
16	17	10	16	8.9	8.9	11	59	80	107	34	16	21
17	18	12	15	8.6	9.0	12	59	82	98	34	15	20
18	17	12	12	8.6	9.4	11	55	74	93	30	15	19
19	16	10	11	8.6	10	11	53	69	90	30	15	18
20	16	9.8	11	8.8	11	11	49	70	84	30	14	17
21	15	12	9.9	9.0	9.8	11	50	79	77	29	15	16
22	15	12	9.8	8.7	9.4	12	61	86	72	28	15	16
23	14	12	9.7	8.7	9.8	14	80	81	71	26	15	16
24	13	11	9.7	8.8	9.8	18	86	76	74	25	16	18
25	13	11	9.6	7.4	11	21	89	76	72	24	17	17
26	13	13	9.5	8.0	14	23	102	78	74	23	18	17
27	13	12	9.4	6.6	16	26	105	85	84	22	16	16
28	13	11	9.4	7.6	15	31	104	82	76	21	15	16
29	13	12	9.3	8.8	---	34	123	80	72	20	15	15
30	13	12	9.5	8.7	---	36	140	78	66	20	16	16
31	13	---	9.8	8.8	---	39	---	76	---	19	14	---
TOTAL	493	347.8	331.9	261.3	263.8	537	2102	3148	3501	1095	521	539
MEAN	15.9	11.6	10.7	8.43	9.42	17.3	70.1	102	117	35.3	16.8	18.0
MAX	30	13	16	9.3	16	39	140	198	236	62	22	29
MIN	11	9.8	7.6	6.0	5.0	11	35	69	66	19	14	13
AC-FT	978	690	658	518	523	1070	4170	6240	6940	2170	1030	1070

CAL YR 1985	TOTAL	19364.7	MEAN	53.1	MAX	415	MIN	6.6	AC-FT	38410
WTR YR 1986	TOTAL	13140.8	MEAN	36.0	MAX	236	MIN	5.0	AC-FT	26060

08271000 RIO LUCERO NEAR ARROYO SECO, NM

LOCATION.--Lat 36°30'30", long 105°31'49", Taos County, Hydrologic Unit 13020101, in Tract C Taos Pueblo Grant, on right bank 200 ft upstream from diversion dam for Tenorio and Indian ditches, 2.2 mi east of Arroyo Seco, 7.4 mi northeast of Taos, and at mile 8.1.

DRAINAGE AREA.--16.6 mi².

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.

REVISED RECORDS.--WSP 1512: 1912, 1916, 1949. WSP 1732: Drainage area. WDR NM-75-1: 1973. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Concrete control since Nov. 21, 1962. Datum of gage is 8,051.44 ft above National Geodetic Vertical Datum of 1929. See WSP 1923 for history of changes prior to Nov. 21, 1962.

REMARKS.--Estimated daily discharges: Dec. 12-21, Feb. 5-7, and June 23 to July 10. Records good. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years (water years 1911-15, 1934-51, 1963-86), 22.1 ft³/s, 16,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 310 ft³/s, June 8, 1979, gage height, 2.33 ft; maximum gage height, 3.12 ft, May 13, 1941, datum then in use; minimum discharge, about 1.4 ft³/s, Nov. 2, 1951, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 6	0615	71	1.45	June 8	2145	*161	*1.81

Minimum daily, 5.6 ft³/s, Dec. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	9.1	7.3	7.6	12	24	42	55	64	25	13
2	11	13	9.2	6.7	7.6	12	24	47	60	60	24	13
3	11	13	9.3	7.1	7.6	12	22	52	65	58	23	13
4	11	13	8.5	7.1	7.1	12	20	59	64	56	22	13
5	10	12	8.4	6.3	6.0	12	19	64	70	56	21	13
6	10	12	8.9	6.6	6.4	12	20	67	76	52	21	12
7	16	12	8.8	7.2	6.6	13	25	56	95	52	20	13
8	15	12	8.8	7.0	7.3	13	30	51	113	54	20	21
9	15	12	8.8	7.0	7.2	13	30	45	138	56	19	17
10	17	11	8.6	7.0	7.1	12	32	40	136	56	21	24
11	24	11	8.1	6.9	6.9	12	32	37	111	53	20	27
12	22	11	8.0	7.0	6.9	12	31	38	103	52	19	25
13	22	10	7.8	7.0	7.1	11	30	41	102	49	19	24
14	20	11	7.0	7.1	7.2	10	27	45	91	46	18	29
15	19	10	6.6	7.2	7.2	10	24	46	90	43	17	27
16	18	10	5.6	7.2	7.1	9.5	23	46	85	45	16	26
17	18	11	5.6	7.1	7.1	9.5	22	47	77	43	16	25
18	18	11	6.0	7.1	7.3	9.3	21	43	79	40	16	23
19	17	8.7	6.6	7.2	7.4	8.9	19	42	83	39	16	22
20	16	10	7.2	7.4	7.6	8.9	18	44	83	38	15	21
21	16	11	7.6	7.5	7.3	8.9	19	54	83	37	16	19
22	16	10	7.7	7.4	7.5	9.6	24	59	83	36	15	18
23	16	11	7.7	7.4	7.3	11	31	56	74	35	14	18
24	15	9.8	7.7	7.5	7.5	13	33	58	70	33	14	19
25	15	10	7.6	7.3	8.8	16	34	58	74	33	15	18
26	15	10	7.6	7.3	11	18	34	59	78	31	15	18
27	14	9.7	7.5	7.3	12	20	31	60	72	30	14	17
28	14	9.5	7.4	7.2	12	23	29	64	68	28	14	17
29	14	9.6	7.3	7.2	---	24	32	60	68	27	14	16
30	14	9.2	7.8	7.3	---	24	39	56	66	26	15	16
31	14	---	7.8	7.5	---	24	---	53	---	26	14	---
TOTAL	484	326.5	240.6	221.4	215.7	415.6	799	1589	2512	1354	548	577
MEAN	15.6	10.9	7.76	7.14	7.70	13.4	26.6	51.3	83.7	43.7	17.7	19.2
MAX	24	13	9.3	7.5	12	24	39	67	138	64	25	29
MIN	10	8.7	5.6	6.3	6.0	8.9	18	37	55	26	14	12
AC-FT	960	648	477	439	428	824	1580	3150	4980	2690	1090	1140

CAL YR 1985	TOTAL	11221.5	MEAN	30.7	MAX	162	MIN	5.2	AC-FT	22260
WTR YR 1986	TOTAL	9282.8	MEAN	25.4	MAX	138	MIN	5.6	AC-FT	18410

08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM

LOCATION.--Lat 36°22'39", long 105°40'05", Taos County, Hydrologic Unit 13020101, in Gijosa Grant, on left bank 1.9 mi southwest of Los Cordovas, 2.5 mi downstream from Rio Grande del Rancho, and at mile 5.1.

DRAINAGE AREA.--380 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1732: 1957(M). WSP 1923: 1957(P), 1958. WDR NM-81-1: 1979(P).

GAGE.--Water-stage recorder. Elevation of gage is 6,652 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 4, 1984 at site 700 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records fair. Diversions for irrigation of about 12,000 acres upstream from station, of which about 1,700 acres are irrigated by water from Rio Hondo. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 61.3 ft³/s, 44,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s, Aug. 24, 1957, gage height, 5.80 ft; maximum gage height, 6.00 ft (site then in use), July 30, 1982, from rating curve extended above 900 ft³/s; minimum, 1.9 ft³/s, July 31, and Aug. 1, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0215	247	5.76	July 8	1815	570	6.21
May 4	0815	477	6.07	July 19	1715	613	6.27
June 9	0830	*722	*6.33	Sept. 10	1800	260	5.68

Minimum daily discharge, 25 ft³/s, Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	49	56	47	44	51	72	344	295	162	42	28
2	31	47	52	46	44	50	86	379	434	143	51	29
3	30	47	52	46	43	50	92	427	543	131	43	32
4	29	45	50	46	42	48	91	437	574	124	38	31
5	29	47	47	43	41	48	82	457	551	119	32	30
6	30	47	51	47	41	48	77	428	512	126	30	30
7	43	46	57	47	42	48	89	372	485	116	29	29
8	44	46	54	43	40	50	136	330	470	143	29	40
9	44	46	50	44	42	51	141	277	673	113	32	37
10	59	43	51	48	44	50	145	216	629	116	32	65
11	132	43	41	46	41	52	146	170	565	107	39	52
12	65	44	39	47	45	51	136	142	507	91	35	43
13	58	48	43	46	46	49	135	130	443	81	44	41
14	56	52	50	44	55	48	131	134	397	73	36	57
15	52	49	48	44	61	48	123	130	363	74	34	45
16	52	49	52	45	63	43	115	129	317	92	30	49
17	58	53	50	44	52	44	121	172	269	103	28	48
18	59	53	50	44	51	44	111	141	244	73	33	44
19	53	47	47	44	52	44	102	127	231	202	37	42
20	52	40	48	44	54	40	97	119	209	106	31	39
21	50	48	48	44	51	41	86	127	178	112	29	38
22	48	48	48	45	48	42	90	147	163	106	29	39
23	46	53	49	45	49	44	111	150	165	104	29	41
24	44	51	48	45	49	45	130	142	186	91	29	55
25	44	53	48	42	49	45	147	138	216	81	30	50
26	45	55	48	41	53	48	223	140	245	74	30	47
27	45	55	48	43	56	51	269	144	224	68	29	46
28	45	51	48	43	53	54	240	156	189	58	25	45
29	48	55	47	44	---	60	271	184	183	47	26	46
30	53	60	48	43	---	65	324	206	168	46	29	50
31	48	---	51	44	---	66	---	211	---	43	29	---
TOTAL	1524	1470	1519	1384	1351	1518	4119	6806	10628	3125	1019	1268
MEAN	49.2	49.0	49.0	44.6	48.3	49.0	137	220	354	101	32.9	42.3
MAX	132	60	57	48	63	66	324	457	673	202	51	65
MIN	29	40	39	41	40	40	72	119	163	43	25	28
AC-FT	3020	2920	3010	2750	2680	3010	8170	13500	21080	6200	2020	2520

CAL YR 1985	TOTAL	51255	MEAN	140	MAX	1040	MIN	22	AC-FT	101700
WTR YR 1986	TOTAL	35731	MEAN	97.9	MAX	673	MIN	25	AC-FT	70870

08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM -- Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)
OCT											
31...	1015	51	520	508	8.40	8.40	13.0	7.0	13.3	10	230
JAN											
13...	1230	44	460	--	8.50	--	9.5	3.5	12.0	20	--
MAR											
27...	1540	49	378	400	8.60	8.50	19.0	15.0	9.3	34	170
MAY											
19...	1145	137	290	317	8.10	8.40	20.0	14.0	9.2	21	140
JUL											
08...	1000	134	345	383	8.30	8.40	22.0	16.0	9.5	12	170
AUG											
19...	1515	34	460	--	8.30	--	31.0	23.0	7.7	19	--

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER WHOLE IT-FLD (MG/L) (00450)	CAR-BONATE WATER WHOLE IT-FLD (MG/L) (00447)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L CACO3) (00419)
OCT										
31...	40	69	14	19	0.6	1.8	--	--	--	--
JAN										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
27...	18	53	10	14	0.5	1.1	--	--	--	--
MAY										
19...	12	43	8.4	8.7	0.3	1.1	--	--	--	--
JUL										
08...	16	49	11	14	0.5	1.8	188	0	152	154
AUG										
19...	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
31...	190	58	8.1	0.50	14	300	0.200	0.200	0.080	0.32
JAN										
13...	--	--	--	--	--	--	0.300	0.330	0.210	0.19
MAR										
27...	156	46	6.7	0.40	10	240	0.300	0.270	0.050	0.35
MAY										
19...	130	29	3.3	0.20	10	180	<0.100	0.100	0.040	0.36
JUL										
08...	163	40	5.4	0.20	13	230	<0.100	<0.100	0.040	0.46
AUG										
19...	--	--	--	--	--	--	--	0.290	--	--

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
31...	0.60	0.060	0.050	3.5	40	38	5	0.69	89
JAN									
13...	0.70	0.160	0.100	2.1	--	--	27	3.2	52
MAR									
27...	0.70	0.120	0.090	3.3	40	8	22	2.9	87
MAY									
19...	--	0.060	0.030	3.3	30	26	21	7.8	68
JUL									
08...	--	0.060	0.070	5.1	40	31	15	5.4	93
AUG									
19...	--	0.250	0.160	5.3	--	--	--	--	--

08275500 RIO GRANDE DEL RANCHO NEAR TALPA, NM

LOCATION.--Lat 36°17'52", long 105°34'55", Taos County, Hydrologic Unit 13020101, in Carson National Forest, Rancho del Rio Grande Grant, on right bank 1.4 mi downstream from Rito de la Olla (locally known at Pot Creek), 3.2 mi south of Talpa, 4.3 mi upstream from Rio Chiquito, and at mile 6.9.

DRAINAGE AREA.--83 mi², approximately.

PERIOD OF RECORD.--October 1952 to September 1982, October 1983 to September 1985 (annual maximum only), October 1985 to current year. Prior to October 1955, published as Rio Grande del Rancho nr Taos and October 1955 to September 1960 as Rio Grande de Ranchos nr Talpa.

GAGE.--Water-stage recorder. Elevation of gage is 7,238 ft above National Geodetic Vertical Datum of 1929, 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. Nov. 6, 1968 to Aug. 28, 1980, water-stage recorder at present site on left bank at same datum.

REMARKS.--Estimated daily discharges: Dec. 13-15 and Feb. 9-12. Records good except those for December, January April and May, which are fair. Minor diversions for irrigation above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years (water years 1953-1982, 1986) 20.1 ft³/s, 14,560 acre-feet/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 497 ft³/s, May 21, 1973, gage height, 3.87 ft; maximum gage height, 4.01, ft Sept. 10, 1964, site and datum then in use; minimum discharge, 0.2 ft³/s, Jan. 5, 1955, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 5	0700	203	2.52	June 3	1500	*208	*2.69

Minimum daily discharge 5.1 ft³/s, Dec. 11, 12, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	11	10	7.6	7.1	8.7	21	102	135	39	36	15
2	8.8	10	9.6	7.7	7.2	8.8	24	117	187	37	35	15
3	8.6	9.9	9.9	8.2	7.3	9.0	21	149	201	35	38	14
4	8.4	10	9.5	7.8	6.5	9.1	21	178	193	37	32	14
5	8.3	10	8.3	8.3	6.4	9.2	24	197	176	36	30	14
6	8.3	10	9.7	8.7	7.4	9.2	24	181	161	34	28	13
7	14	9.6	9.9	7.7	7.5	9.4	34	161	153	31	27	13
8	17	9.7	9.1	7.2	6.4	9.4	39	147	146	31	26	15
9	13	9.7	8.8	8.4	6.0	9.8	38	130	145	31	28	14
10	17	9.4	9.5	9.8	5.4	9.6	39	114	131	28	26	17
11	28	9.4	5.1	10	6.6	9.8	39	102	122	25	27	20
12	21	9.9	5.1	8.8	7.4	9.5	38	96	110	24	26	16
13	18	10	5.8	7.7	8.1	8.9	39	95	100	23	26	14
14	16	11	6.8	8.3	7.4	8.9	35	97	92	25	24	25
15	15	8.4	8.0	7.4	7.6	8.6	33	97	86	33	22	19
16	14	8.5	10	7.3	7.8	7.3	33	95	81	42	20	17
17	15	9.5	10	7.1	7.7	8.5	33	98	78	42	20	17
18	16	9.8	9.4	7.3	7.8	8.2	31	91	74	38	19	15
19	15	7.7	9.0	7.4	8.4	8.0	33	83	70	45	19	14
20	14	6.8	8.8	7.4	8.8	6.5	30	79	65	54	18	13
21	14	11	8.5	7.4	8.0	7.5	30	84	59	71	17	13
22	13	10	8.3	7.3	6.8	8.6	35	89	55	72	17	12
23	13	10	8.4	7.3	7.7	9.3	41	87	53	72	21	13
24	13	9.9	8.3	7.4	7.8	10	43	85	53	65	21	15
25	12	10	8.3	6.6	8.1	11	45	82	52	59	21	14
26	12	11	8.4	7.1	8.4	12	72	83	49	54	20	14
27	11	11	8.5	7.9	8.7	14	74	86	47	50	19	14
28	12	9.9	8.5	7.7	8.7	15	70	86	47	46	17	13
29	11	11	8.3	7.4	---	17	81	90	45	42	17	13
30	11	11	8.2	7.2	---	19	96	91	41	39	18	14
31	11	---	7.9	7.1	---	20	---	93	---	39	16	---
TOTAL	417.5	295.1	263.9	240.5	209.0	319.8	1216	3365	3007	1299	731	449
MEAN	13.5	9.84	8.51	7.76	7.46	10.3	40.5	109	100	41.9	23.6	15.0
MAX	28	11	10	10	8.8	20	96	197	201	72	38	25
MIN	8.3	6.8	5.1	6.6	5.4	6.5	21	79	41	23	16	12
AC-FT	828	585	523	477	415	634	2410	6670	5960	2580	1450	891

WTR YR 1986 TOTAL 11812.8 MEAN 32.4 MAX 201 MIN 5.1 AC-FT 23430

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM
(Surveillance network station)

LOCATION.--Lat 36°19'12", long 105°45'14", in NW¼NE¼ sec.15, T.24 N., R.11 E., Taos County, Hydrologic Unit 13020101, on left bank 1.7 mi downstream from bridge on State Highway 96, 2.0 mi downstream from Rio Pueblo de Taos, 11.8 mi southwest of Taos, and at mile 1,657.7.

DRAINAGE AREA.--9,730 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 788: 1934(M). WSP 828: Drainage area. WSP 1392: 1931-1932, 1935, 1937, 1945, 1950.

GAGE.--Water-stage recorder. Datum of gage is 6,050.3 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 14, 1934, at bridge 1.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Feb. 10. Water-discharge records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 30,000 acres in New Mexico.

AVERAGE DISCHARGE.--61 years, 753 ft³/s, 545,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, June 7, 1948, gage height, 9.18 ft and June 22, 1949, gage height, 9.23 ft; minimum, 155 ft³/s, Sept. 21, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1888, about 14,000 ft³/s June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 ft³/s occurred June 9, 1905, May 28, 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 4	2300	1,700	5.29	June 12	1200	*7,390	*8.61
May 7	0715	3,890	6.87				

Minimum discharge, 344 ft³/s, Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	462	547	1080	814	833	1040	1280	1830	3720	4170	814	378
2	457	633	1080	799	857	1010	1420	1980	3870	4160	724	394
3	531	664	1070	807	877	1000	1580	2260	3950	4140	646	389
4	497	716	1030	780	893	997	1640	2780	3860	3810	591	372
5	440	776	1040	753	853	1010	1670	3240	3830	3300	545	365
6	413	796	1000	751	849	1010	1610	3640	4000	3110	515	355
7	415	818	978	754	867	1020	1490	3780	4480	3130	498	348
8	413	807	958	721	689	1020	1460	3440	4820	3250	480	393
9	383	798	975	714	643	1030	1410	3080	5660	3250	473	400
10	407	733	961	725	620	1060	1520	2530	6410	3110	466	475
11	634	712	888	730	673	1110	1470	1980	7020	3010	489	520
12	592	742	478	743	698	1090	1430	1640	7140	3120	447	490
13	647	787	613	748	783	1040	1390	1420	6540	3210	462	685
14	650	843	464	751	809	1020	1460	1300	5670	3070	434	881
15	673	869	514	751	857	994	1500	1290	4880	2760	423	786
16	677	940	680	760	871	955	1370	1320	4520	2570	408	725
17	666	1070	735	752	855	927	1290	1400	4380	2400	394	696
18	663	1250	763	761	891	911	1220	1270	4390	2150	414	639
19	633	1340	758	761	896	912	1190	1330	4430	1980	389	598
20	626	1410	763	767	988	900	1120	1230	4550	1710	372	550
21	633	1440	780	779	1000	877	1000	1170	4730	1660	359	521
22	633	1320	788	780	1010	856	936	1220	4740	1760	358	496
23	642	1240	798	777	964	848	977	1400	4710	2040	353	462
24	626	1080	795	787	947	848	1150	1770	4540	1960	353	462
25	611	1080	829	781	940	852	1480	1950	4360	1830	344	454
26	592	1150	824	754	970	871	1780	2120	4310	1750	368	444
27	578	1210	826	761	1000	889	1990	2120	4170	1680	352	460
28	571	1210	820	759	1010	924	2050	2130	4010	1490	348	474
29	551	1190	821	771	---	976	1940	2400	4050	1300	360	524
30	536	1090	816	780	---	1050	1840	2800	4080	1130	375	568
31	516	---	808	807	---	1180	---	3300	---	955	392	---
TOTAL	17368	29261	25733	23678	24143	30227	43663	65120	141820	78965	13946	15304
MEAN	560	975	830	764	862	975	1455	2101	4727	2547	450	510
MAX	677	1440	1080	814	1010	1180	2050	3780	7140	4170	814	881
MIN	383	547	464	714	620	848	936	1170	3720	955	344	348
AC-FT	34450	58040	51040	46970	47890	59960	86610	129200	281300	156600	27660	30360

CAL YR 1985 TOTAL 604077 MEAN 1655 MAX 7510 MIN 252 AC-FT 1198000
WTR YR 1986 TOTAL 509228 MEAN 1395 MAX 7140 MIN 344 AC-FT 1010000

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
NOV											
27...	1015	1330	--	265	8.60	8.20	10.0	5.0	6.0	--	<10
JAN											
28...	1200	850	235	--	8.10	--	11.0	5.5	3.0	10.0	14
MAR											
26...	1145	894	260	295	8.20	8.20	16.0	11.0	8.0	10.4	37
MAY											
29...	0930	2380	260	285	8.40	8.20	16.0	14.5	22	8.6	37
JUN											
24...	1045	4940	170	--	8.00	--	22.0	18.0	--	6.8	42

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
NOV											
27...	98	12	30	5.7	16	0.7	2.9	66	19	91	86
JAN											
28...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	100	0	31	6.2	18	0.8	3.0	139	0	114	114
MAY											
29...	87	13	26	5.4	19	0.9	3.6	--	--	74	--
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
NOV											
27...	83	37	4.0	0.40	25	190	0.500	0.330	0.090	0.21	0.80
JAN											
28...	--	--	--	--	--	--	0.300	0.290	<0.010	--	0.70
MAR											
26...	93	42	6.2	0.50	25	200	0.300	0.330	0.030	0.47	0.80
MAY											
29...	77	55	5.4	0.30	20	180	0.100	0.110	0.010	0.59	0.70
JUN											
24...	--	--	--	--	--	--	<0.100	<0.100	0.130	0.67	--

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
NOV										
27...	0.130	0.040	3.0	<0.010	1	1	40	<1	<1	<10
JAN										
28...	0.060	0.040	1.9	<0.010	--	--	--	--	--	--
MAR										
26...	0.130	0.070	6.1	<0.010	--	--	40	--	--	--
MAY										
29...	0.160	0.050	6.9	<0.010	--	--	30	--	--	--
JUN										
24...	0.180	0.050	5.5	<0.010	--	--	--	--	--	--

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, TOTAL (UG/L AS SE) (01147)
NOV 27...	<10	5	2	41	3	<1	0.10	0.1	2	<1
JAN 28...	--	--	--	--	--	--	--	--	5	--
MAR 26...	--	--	--	19	--	--	--	--	5	--
MAY 29...	--	--	--	100	--	--	--	--	2	--
JUN 24...	--	--	--	--	--	--	--	--	--	--

DATE	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NITRATE TOT IN BOT MAT (MG/KG AS N) (00621)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 27...	<1	<1	40	30	0.8	33	119	79	--	--
JAN 28...	--	--	--	--	0.7	7	16	97	--	--
MAR 26...	--	--	--	--	0.8	35	84	88	<10	<10
MAY 29...	--	--	--	--	0.7	76	488	86	--	--
JUN 24...	--	--	--	--	--	49	654	97	21	190

08279000 EMBUDO CREEK AT DIXON, NM

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼SE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, Hydrologic Unit 13020101, on right bank 750 ft upstream from U.S. Highway 64, 0.5 mi upstream from mouth, 0.5 mi east of Embudo Post Office, and 1.7 mi northwest of Dixon.

DRAINAGE AREA.--305 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1512: 1931-32, 1941, 1947(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 5,858.60 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1938, at site about 1 mi upstream at different datum. Nov. 30, 1938 to Aug. 1, 1941, at site about 0.9 mi 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.

REMARKS.--Estimated daily discharges: Nov. 17, 18, Dec. 13-18, Dec. 31 to Jan. 12, Jan. 21-24, Jan. 27 to Feb. 12, and July 19 to Sept 30. Water-discharge records good except for period of estimated record, July 19 to Sept. 30, which are fair. Diversions upstream from station for irrigation of about 6,500 acres, a small part of which are downstream from gage.

AVERAGE DISCHARGE.--55 years (water years 1924-25, 1927-55, 1963-86), 81.0 ft³/s, 58,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1941).--Maximum discharge, 4,200 ft³/s, Aug. 29, 1977, gage height, 7.10 ft, from rating curve extended above 1,600 ft³/s; maximum gage height, 7.6 ft, Aug. 4, 1967; minimum discharge, 0.06 ft³/s, June 26, 27, 1950.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	0445	*925	*4.30	No other peak greater than base discharge.			

Minimum discharge, 9.0 ft³/s, Dec. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	75	44	36	29	38	100	316	627	150	76	45
2	47	74	43	34	28	37	121	396	835	145	59	40
3	48	60	49	33	28	38	128	452	864	133	55	42
4	48	61	46	32	27	39	124	503	808	129	51	45
5	47	61	40	32	27	39	125	524	794	131	47	42
6	47	61	48	31	27	38	125	456	762	129	38	34
7	70	61	51	30	27	37	140	390	749	118	37	34
8	78	63	45	29	27	36	173	361	704	125	38	40
9	69	65	43	33	27	40	172	298	771	138	35	44
10	97	64	47	35	24	40	145	245	644	126	36	57
11	212	61	30	35	26	42	108	197	560	111	41	91
12	119	56	25	35	31	43	96	186	490	97	40	57
13	99	53	22	36	39	39	96	180	427	88	46	62
14	93	56	21	36	37	39	86	183	382	82	44	72
15	87	47	20	38	37	40	80	182	330	76	39	84
16	81	47	22	39	38	33	75	177	295	107	35	102
17	97	45	23	36	36	39	72	234	269	134	31	70
18	93	43	24	36	37	37	66	215	246	124	33	61
19	86	44	34	35	40	39	65	204	222	120	38	56
20	84	37	37	34	42	34	64	186	221	170	35	54
21	82	53	40	33	38	38	61	198	194	325	32	54
22	80	45	41	31	34	41	64	220	172	420	32	55
23	78	55	41	30	36	44	77	207	157	285	31	58
24	75	55	40	29	37	47	85	201	173	175	32	66
25	71	55	40	29	38	54	101	206	205	135	32	74
26	70	56	40	30	39	57	201	214	203	110	48	60
27	70	52	40	31	41	61	214	225	232	86	55	55
28	69	45	39	31	41	67	204	228	210	80	55	53
29	72	47	39	31	---	76	261	313	182	73	44	52
30	79	48	44	30	---	87	277	366	165	86	46	50
31	75	---	40	30	---	93	---	396	---	118	40	---
TOTAL	2472	1645	1158	1020	938	1432	3706	8659	12893	4326	1301	1709
MEAN	79.7	54.8	37.4	32.9	33.5	46.2	124	279	430	140	42.0	57.0
MAX	212	75	51	39	42	93	277	524	864	420	76	102
MIN	47	37	20	29	24	33	61	177	157	73	31	34
AC-FT	4900	3260	2300	2020	1860	2840	7350	17180	25570	8580	2580	3390

CAL YR 1985 TOTAL 66885 MEAN 183 MAX 1050 MIN 20 AC-FT 132700
WTR YR 1986 TOTAL 41259 MEAN 113 MAX 864 MIN 20 AC-FT 81840

08279000 EMBUDO CREEK AT DIXON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV												
25...	1115	55	--	336	--	8.20	--	--	--	160	10	52
JAN												
29...	1345	32	334	--	--	--	--	--	--	--	--	--
MAR												
27...	1030	61	350	291	7.90	8.10	20.0	9.5	10.0	120	0	41
MAY												
29...	1330	292	190	210	7.10	8.20	18.0	14.0	14.5	96	5	32
JUN												
06...	1315	762	220	--	--	--	26.0	18.0	12.2	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
25...	6.6	7.0	0.3	1.6	147	18	1.4	0.20	12	190	50	8
JAN												
29...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
27...	5.2	5.4	0.2	1.0	127	16	3.4	0.20	9.4	160	20	58
MAY												
29...	4.0	3.6	0.2	1.3	91	11	1.9	0.10	9.0	120	10	67
JUN												
06...	--	--	--	--	--	--	--	--	--	--	--	--

08279500 RIO GRANDE AT EMBUDO, NM

LOCATION.--Lat 36°12'20", long 105°57'49", in SW¼SW¼ sec.23, T.23 N., R.9 E., Rio Arriba County, Hydrologic Unit 13020101, on right bank 0.2 mi downstream from bridge at Embudo, 2.8 mi downstream from Embudo Creek, and at mile 1,643.1.

DRAINAGE AREA.--10,400 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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.

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 5,789.14 ft above National Geodetic Vertical Datum of 1929. Jan. 1 to Feb. 28, 1889, nonrecording gage 1.2 mi 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.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 40,000 acres in New Mexico. Several observations of water temperature were made during the year. National Weather Service gage-height telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1890-1930), 1,238 ft³/s, 896,900 acre-ft/yr.
56 years (water years 1931-86), 819 ft³/s, 593,400 acre-ft/yr, subsequent to upstream development.

EXTREMES FOR PERIOD OF RECORD (1889-1903 AND SINCE 1911).--Maximum discharge, 16,200 ft³/s, June 19, 1903, gage height, about 15.9 ft; minimum daily, 130 ft³/s, June 30, 1902. A flood of about 14,000 ft³/s 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 7	0715	4,170	7.74	July 22	1130	2,640	6.19
June 12	0615	*7,500	*10.83				

Minimum discharge, 365 ft³/s, Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	607	1080	838	847	1050	1340	2230	4190	4370	900	423
2	537	677	1090	820	870	1040	1490	2360	4490	4360	782	434
3	581	709	1090	832	889	1020	1670	2660	4600	4290	712	431
4	586	743	1050	808	906	1020	1730	3160	4510	3880	642	418
5	533	811	1050	776	877	1030	1780	3600	4460	3450	592	407
6	505	827	1030	782	854	1040	1730	3940	4580	3300	553	389
7	527	849	1000	782	882	1040	1640	4100	5050	3340	535	381
8	538	836	975	743	763	1040	1630	3780	5350	3470	518	416
9	505	836	979	738	648	1060	1560	3410	6100	3460	509	438
10	546	779	984	757	640	1080	1660	2850	6620	3260	491	518
11	852	748	928	756	681	1120	1610	2240	7190	3180	525	612
12	733	761	568	767	738	1110	1560	1840	7410	3320	486	551
13	732	821	540	773	797	1070	1510	1590	6870	3330	501	673
14	744	871	551	774	820	1050	1530	1470	6000	3110	473	972
15	751	897	568	778	873	1030	1600	1440	5260	2830	457	893
16	767	938	668	785	908	987	1480	1460	4920	2720	441	860
17	769	1080	752	775	881	961	1390	1610	4770	2510	420	785
18	761	1220	802	782	918	946	1310	1460	4770	2250	435	716
19	728	1310	789	783	916	945	1270	1490	4790	2100	417	667
20	711	1380	792	787	1000	932	1210	1400	4880	1880	397	614
21	718	1430	805	801	1010	914	1100	1340	5010	1990	382	579
22	717	1330	819	800	1030	897	1030	1390	4970	2340	378	556
23	719	1240	828	796	991	884	1070	1530	4940	2490	376	526
24	708	1110	818	808	973	891	1210	1870	4800	2250	385	542
25	687	1080	850	798	956	900	1550	2090	4670	2050	376	537
26	669	1140	847	768	986	920	2020	2310	4590	1930	417	514
27	656	1220	851	783	1020	885	2280	2330	4490	1770	407	524
28	643	1200	843	781	1030	974	2360	2320	4300	1530	396	532
29	637	1190	842	795	---	1030	2320	2630	4300	1330	404	575
30	627	1120	846	802	---	1100	2260	3040	4310	1140	422	618
31	600	---	832	824	---	1230	---	3530	---	1030	432	---
TOTAL	20339	29760	26467	24392	24704	31196	47900	72470	153190	84260	15161	17101
MEAN	656	992	854	787	882	1006	1597	2338	5106	2718	489	570
MAX	852	1430	1090	838	1030	1230	2360	4100	7410	4370	900	972
MIN	505	607	540	738	640	884	1030	1340	4190	1030	376	381
AC-FT	40340	59030	52500	48380	49000	61880	95010	143700	303900	167100	30070	33920

CAL YR 1985 TOTAL 674041 MEAN 1847 MAX 8320 MIN 295 AC-FT 1337000
WTR YR 1986 TOTAL 546940 MEAN 1498 MAX 7410 MIN 376 AC-FT 1085000

08281100 RIO GRANDE ABOVE SAN JUAN PUEBLO, NM

LOCATION.--Lat 36°03'58", long 106°04'34", in NE¼SE¼ sec.10, T.21 N., R.8 E., Rio Arriba County, Hydrologic Unit 13020101, in San Juan Pueblo Grant, on left bank 0.8 mi upstream from bridge on State Highway 74, 1.0 mi northwest of San Juan Pueblo, 1.8 mi upstream from Rio Chama, 5.1 mi north of Espanola, and at mile 1,630.1.

DRAINAGE AREA.--10,550 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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

GAGE.--Water-stage recorder. Elevation of gage is 5,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 42,000 acres in New Mexico. Several observations of water temperature were made during the year. San Juan lateral (station 08280100 - discontinued, Sept. 1984) and San Juan Pueblo ditch (station 08280200), both on left bank, and Guique ditch (station 08280700), on right bank, bypass gage for irrigation of several hundred acres downstream from station. See tabulation below for monthly diversion, as provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--23 years, 808 ft³/s, 585,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,220 ft³/s, June 9, 1979, gage height, 6.94 ft; minimum, 92 ft³/s, Aug. 10-11, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--For years of outstanding floods see records for Rio Grande at Embudo (station (08279500).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 7	1415	3,660	4.37	June 12	0530	*6,830	*6.03

Minimum discharge, 307 ft³/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	554	580	1040	835	836	1030	1280	1920	3750	3660	871	383
2	536	639	1050	819	859	1030	1400	2010	4120	3650	759	394
3	568	663	1060	825	876	1010	1540	2260	4300	3610	717	394
4	588	684	1010	808	893	1000	1600	2650	4270	3420	638	389
5	531	755	1010	777	867	1020	1620	3030	4220	2970	568	358
6	487	781	1010	778	843	1030	1600	3350	4300	2750	528	338
7	493	804	988	778	869	1030	1530	3590	4740	2690	507	324
8	521	796	964	749	795	1030	1510	3340	5070	2780	499	333
9	485	797	959	738	633	1040	1460	3030	5780	2860	480	402
10	546	760	968	750	763	1070	1530	2560	6230	2760	459	455
11	854	719	932	752	672	1110	1510	2060	6660	2630	492	565
12	764	730	612	761	736	1120	1460	1720	6760	2630	484	513
13	732	795	586	774	775	1070	1410	1540	6260	2750	486	559
14	746	830	593	774	807	1050	1420	1430	5360	2670	434	872
15	740	865	537	776	848	1040	1470	1390	4570	2420	418	844
16	755	887	655	780	884	1000	1390	1420	4140	2280	401	827
17	762	1010	731	771	866	969	1330	1550	3960	2230	372	789
18	762	1100	771	779	898	962	1260	1480	4030	2000	391	697
19	737	1190	774	781	895	954	1210	1480	4080	1830	388	641
20	715	1250	777	784	951	936	1170	1400	4160	1750	355	593
21	717	1290	789	798	961	908	1080	1320	4330	1640	334	557
22	707	1240	805	796	989	894	995	1360	4300	1760	330	541
23	701	1150	812	794	960	884	1030	1460	4270	2140	331	498
24	694	1080	802	803	949	888	1130	1710	4140	2040	367	501
25	674	1030	832	793	934	887	1380	1880	3970	1830	354	528
26	665	1070	834	774	961	902	1690	2070	3910	1720	376	488
27	652	1180	836	779	995	921	1970	2100	3870	1630	393	488
28	641	1160	831	777	1010	955	2030	2080	3640	1480	355	497
29	632	1140	829	787	---	1000	2000	2400	3580	1310	363	522
30	630	1090	832	795	---	1080	1950	2660	3580	1160	387	563
31	591	---	826	814	---	1190	---	3100	---	1010	379	---
TOTAL	20180	28065	26055	24299	24325	31010	43955	65350	136350	72060	14216	15853
MEAN	651	936	840	784	869	1000	1465	2108	4545	2325	459	528
MAX	854	1290	1060	835	1010	1190	2030	3590	6760	3660	871	872
MIN	485	580	537	738	633	884	995	1320	3580	1010	330	324
AC-FT	40030	55670	51680	48200	48250	61510	87180	129600	270500	142900	28200	31440
(†)	225	30	0	0	0	0	114	187	114	216	155	327
(††)	277	308	0	0	0	0	279	327	164	227	82	236

CAL YR 1985 TOTAL 618763 MEAN 1695 MAX 7470 MIN 201 AC-FT 1227000
WTR YR 1986 TOTAL 501718 MEAN 1375 MAX 6760 MIN 324 AC-FT 995200

(†) ESTIMATED DIVERSION, IN ACRE-FEET, BY SAN JUAN PUEBLO DITCH
(††) ESTIMATED DIVERSION, IN ACRE-FEET, BY GUIQUE DITCH

08284100 RIO CHAMA NEAR LA PUENTE, NM

LOCATION.--Lat 36°39'45", long 106°37'57", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 0.7 mi downstream from Rito de Tierra Amarilla, 3.1 southwest of La Puente, 6.7 mi upstream from flow line of El Vado Reservoir, and at mile 91.4.

DRAINAGE AREA.--480 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Concrete control since Nov. 9, 1965. Elevation of gage is 7,083 ft above National Geodetic Vertical Datum of 1929, from river profile map.

REMARKS.--Estimated daily discharges: Nov. 17-23, Dec. 3 to Jan. 24, and Feb. 7-13. Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,300 acres upstream from station (1962 determination). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 352 ft³/s, 255,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft³/s, May 28, 1979, gage height, 6.35 ft, from rating curve extended above 5,400 ft³/s; maximum gage height, 6.49 ft, May 9, 1985; minimum, 4.0 ft³/s, Sept. 19, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 9,000 ft³/s occurred Apr. 16, 1937, based on flow of Rio Chama at Los Ojos (Park View) with allowance for tributary inflow. A peak on May 21 or 22, 1926, may have exceeded 10,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 23	2345	2,120	4.68	May 13	2330	3,430	5.17
May 5	0045	*5,750	*5.72	May 21	0015	3,740	5.26

Minimum discharge, 60 ft³/s, Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	227	153	96	125	257	1260	2820	1620	444	110	133
2	134	211	151	97	120	261	1720	3500	1540	392	105	115
3	127	208	141	98	120	256	1170	3620	1750	365	107	105
4	122	195	136	98	105	291	906	4480	1770	357	101	95
5	118	193	126	98	104	331	818	3910	1740	478	94	92
6	115	179	121	98	99	347	959	2930	1780	396	90	93
7	440	161	114	99	99	364	1240	2390	1700	319	92	87
8	423	159	110	100	98	393	1180	1980	1540	280	85	141
9	296	169	108	101	97	422	1150	1510	1530	287	80	151
10	264	150	105	101	97	340	1100	1270	1280	288	78	572
11	502	160	102	100	96	315	1120	1370	1250	240	103	579
12	444	159	99	100	95	291	1050	1800	1060	215	102	403
13	442	146	97	98	94	266	1070	2400	1030	199	120	256
14	393	137	95	97	96	262	872	2820	985	186	97	237
15	322	150	93	95	109	252	886	2690	931	185	89	198
16	301	144	91	94	108	228	982	2550	851	219	81	195
17	302	140	90	94	94	238	940	2480	763	235	75	224
18	372	136	90	93	123	229	808	1910	771	194	76	173
19	381	132	89	93	160	227	736	2130	771	195	82	146
20	340	132	89	93	192	211	757	2720	677	194	77	133
21	317	130	88	94	155	227	1010	3080	624	310	77	123
22	305	130	88	95	139	263	1460	2920	577	239	74	120
23	274	130	90	98	142	313	1770	2790	555	245	83	116
24	258	135	91	100	160	388	1860	2600	562	248	161	150
25	244	154	92	103	184	427	1760	2330	638	192	155	181
26	238	193	94	102	218	480	1640	2360	704	166	136	272
27	232	186	95	105	256	577	1280	2150	820	149	124	282
28	226	164	96	105	260	722	1210	1930	621	137	121	386
29	222	171	96	112	---	860	1500	1980	575	130	164	512
30	244	162	95	115	---	987	2070	1870	515	123	197	405
31	246	---	95	119	---	1040	---	1740	---	116	190	---
TOTAL	8787	4843	3220	3091	3745	12065	36284	77030	31530	7723	3326	6675
MEAN	283	161	104	99.7	134	389	1209	2485	1051	249	107	223
MAX	502	227	153	119	260	1040	2070	4480	1780	478	197	579
MIN	115	130	88	93	94	211	736	1270	515	116	74	87
AC-FT	17430	9610	6390	6130	7430	23930	71970	152800	62540	15320	6600	13240

CAL YR 1985 TOTAL 269829 MEAN 739 MAX 7720 MIN 43 AC-FT 535200
WTR YR 1986 TOTAL 198319 MEAN 543 MAX 4480 MIN 74 AC-FT 393400

08284100 RIO CHAMA NEAR LA PUENTE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT										
17...	1030	301	130	148	8.40	7.30	8.0	8.5	8.5	21
JAN										
09...	1330	102	210	--	8.20	--	5.0	0.5	11.0	14
FEB										
14...	1420	94	280	255	8.00	8.20	8.0	2.5	8.5	26
APR										
02...	1130	1600	230	211	8.00	7.70	7.0	5.0	9.0	52
JUN										
18...	0915	825	100	100	8.20	7.90	22.0	12.0	6.1	15
SEP										
04...	1015	100	--	--	--	--	--	15.0	--	--

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
OCT										
17...	56	5	17	3.4	5.0	0.3	1.4	--	--	--
JAN										
09...	--	--	--	--	--	--	--	--	--	--
FEB										
14...	97	19	29	5.9	8.5	0.4	1.5	--	--	--
APR										
02...	88	22	25	6.1	8.0	0.4	1.9	--	--	--
JUN										
18...	42	0	13	2.4	3.5	0.2	1.1	55	0	39
SEP										
04...	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT										
17...	--	51	13	1.5	<0.10	17	89	<0.100	<0.100	0.040
JAN										
09...	--	--	--	--	--	--	--	<0.100	0.110	0.040
FEB										
14...	--	78	20	2.6	<0.10	18	130	<0.100	<0.100	0.050
APR										
02...	--	66	26	1.6	<0.10	13	120	<0.100	<0.100	0.090
JUN										
18...	45	42	8.7	0.60	<0.10	18	75	<0.100	<0.100	0.030
SEP										
04...	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
17...	0.26	0.020	0.010	3.0	10	120	10	8.1	70
JAN									
09...	0.36	0.040	0.030	4.6	--	--	10	2.8	96
FEB									
14...	0.55	0.040	0.020	3.8	30	24	25	6.3	--
APR									
02...	0.81	0.200	0.030	13	20	140	271	1170	93
JUN									
18...	0.27	0.060	0.030	11	<10	100	19	42	94
SEP									
04...	--	--	--	--	--	--	17	4.6	94

08284160 AZOTEA TUNNEL AT OUTLET, NEAR CHAMA, NM

LOCATION.--Lat 36°51'12", long 106°40'18", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on left bank at south portal, 0.2 mi upstream from Azotea Creek, and 6.2 mi 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 National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records represent regulated diversions from Rio Blanco, Little Navajo River, and Navajo River in San Juan River Basin.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--16 years, 137 ft³/s, 99,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, May 17, 1978, gage height, 7.85 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,031 ft³/s, June 7, 8, gage height, 7.25 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				.00	.00	.00	244	574	560	22	59	1.5
2				.00	.00	.00	341	347	570	40	47	1.5
3				.00	.00	.00	184	358	736	70	34	1.5
4				.00	.00	.00	117	360	746	83	36	1.5
5				.00	.00	.00	112	352	956	55	47	.00
6				.00	.00	.00	151	336	1010	16	57	.00
7				.00	.00	.00	209	315	1010	27	56	.00
8				.00	.00	.00	193	288	1010	46	41	.00
9				.00	.00	.00	174	284	962	25	32	.00
10				.00	.00	.00	170	242	784	10	29	.00
11				.00	.00	.00	213	230	734	19	36	.00
12				.00	.00	.00	256	284	786	58	39	.00
13				.00	.00	.00	267	405	892	55	36	.00
14				.00	.00	.00	196	542	930	64	30	.00
15				.00	.00	.00	195	502	934	73	23	.00
16				.00	.00	.00	245	500	858	2.1	19	.00
17				.00	.00	.00	245	529	830	1.9	16	.00
18				.00	.00	.00	190	444	816	1.9	16	.00
19				.00	.00	.00	160	516	708	1.9	13	.00
20				.00	.00	.00	193	698	354	1.9	13	.00
21				.00	.00	.00	348	870	207	1.5	19	.00
22				.00	.00	.00	513	876	198	.23	16	.00
23				.00	.00	.00	579	892	144	.23	29	.00
24				.00	.00	.00	572	858	43	.23	98	.00
25				.00	.00	.00	512	776	21	.23	5.1	.00
26				.00	.00	.00	507	888	20	.23	1.4	.00
27				.00	.00	28	388	880	19	.08	1.5	.00
28				.00	.00	111	367	756	19	.08	1.5	.00
29				.00	---	179	487	718	19	.08	1.5	.00
30				.00	---	209	630	656	18	.08	1.5	.00
31				.00	---	210	---	547	---	11	1.5	---
TOTAL				.00	.00	737.00	8958	16823	16894	686.67	855.0	6.00
MEAN				.00	.00	23.8	299	543	563	22.2	27.6	.20
MAX				.00	.00	210	630	892	1010	83	98	1.5
MIN				.00	.00	.00	112	230	18	.08	1.4	.00
AC-FT				.00	.00	1460	17770	33370	33510	1360	1700	12

08284200 WILLOW CREEK ABOVE HERON RESERVOIR, NEAR LOS OJOS, NM

LOCATION.--Lat 36°44'33", long 106°37'34", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 200 ft downstream from bridge, 0.2 mi downstream from Iron Spring Creek, 3.3 mi west of Los Ojos, and at mile 9.7.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Concrete control since June 6, 1963. Datum of gage is 7,196.29 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Apr. 1, 1971, at site 900 ft downstream at lower datum.

REMARKS.--Records represent inflow to Heron Reservoir and since Nov. 17, 1970, include San Juan River water imported through Azotea tunnel (station 08284160).

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--8 years (water years 1963-70), 10.5 ft³/s, 7,610 acre-ft/yr, prior to completion of Azotea tunnel.
16 years (water years 1971-86), 151 ft³/s, 109,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s, Mar. 12, 1985, gage height, 6.65 ft: no flow at times most years prior to 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s, June 6, 7, gage height, 4.65 ft; minimum daily, 0.24 ft³/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.59	5.8	.59	25	82	426	655	573	19	59	2.9
2	.42	.52	4.4	.76	22	75	480	375	591	32	49	1.6
3	.32	.42	5.0	.76	18	85	653	384	753	75	36	1.1
4	.27	.40	4.3	.76	11	123	366	389	873	93	33	.76
5	.27	.38	2.8	.72	9.0	130	249	380	981	86	49	.67
6	.24	.36	2.6	.63	4.5	113	311	362	1030	21	51	.56
7	4.6	.34	2.9	.63	3.6	108	402	345	1030	17	62	.56
8	3.1	.32	2.2	.67	3.7	111	311	349	1030	55	43	2.4
9	1.5	.30	2.8	.63	3.4	116	302	323	992	51	32	3.9
10	.80	.30	1.8	.59	3.4	66	269	290	818	6.6	29	20
11	55	.29	1.5	.63	3.9	77	302	269	769	27	29	59
12	14	.29	1.8	.67	4.6	73	345	306	824	53	42	9.5
13	3.9	.34	1.4	.67	4.8	55	366	393	929	68	34	3.6
14	2.0	.56	1.0	.67	4.6	49	269	568	958	62	29	2.1
15	1.4	.59	.80	.80	4.8	42	253	524	946	113	20	1.3
16	.80	.56	.76	.88	6.2	33	315	509	879	13	18	1.3
17	.76	.67	.72	.96	6.6	37	332	553	879	10	18	1.8
18	5.0	.88	.76	1.1	7.8	37	261	462	851	4.8	13	1.1
19	9.0	.72	.72	1.4	7.8	53	210	504	764	4.8	11	.88
20	3.1	.63	.63	1.6	7.8	37	229	679	384	6.2	10	.45
21	1.8	.76	.67	2.4	7.8	30	362	868	233	13	13	.34
22	1.3	.67	.67	2.3	7.8	45	530	873	222	9.0	15	.29
23	.96	.96	.67	2.4	7.8	62	503	884	169	5.4	20	.26
24	.67	1.2	.72	2.5	78	77	579	873	60	18	120	.67
25	.59	1.8	.72	2.5	98	77	522	775	25	5.8	9.0	3.6
26	.52	11	.67	2.3	108	77	514	884	25	2.3	5.8	20
27	.45	18	.67	2.5	131	88	398	896	37	1.4	1.9	43
28	1.1	7.4	.63	3.1	100	203	379	775	28	.88	2.0	11
29	.67	7.0	.59	4.5	---	273	514	732	22	.56	2.4	8.6
30	.56	6.2	.56	16	---	315	638	669	19	.38	2.8	10
31	.59	---	.56	32	---	315	---	573	---	.29	3.9	---
TOTAL	116.28	64.45	51.82	88.62	700.9	3064	11590	17421	17694	874.41	862.8	213.24
MEAN	3.75	2.15	1.67	2.86	25.0	98.8	386	562	590	28.2	27.8	7.11
MAX	55	18	5.8	32	131	315	653	896	1030	113	120	59
MIN	.24	.29	.56	.59	3.4	30	210	269	19	.29	1.9	.26
AC-FT	231	128	103	176	1390	6080	22990	34550	35100	1730	1710	423

CAL YR 1985 TOTAL 57946.94 MEAN 159 MAX 1170 MIN .05 AC-FT 114900
WTR YR 1986 TOTAL 52741.52 MEAN 144 MAX 1030 MIN .24 AC-FT 104600

08284300 HORSE LAKE CREEK ABOVE HERON RESERVOIR, NEAR LOS OJOS, NM

LOCATION.--Lat 36°42'24", long 106°44'42", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 3.7 mi northwest of Heron Dam, 7.8 mi downstream from Horse Lake, and 9.9 mi west of Los Ojos.

DRAINAGE AREA.--45 mi², approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year. No winter records 1973 to 1985. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Concrete control since June 10, 1963. Datum of gage is 7,188.85 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to July 1, 1971, at site 1,100 ft upstream at higher datums.

REMARKS.--Diversions upstream from station for irrigation of meadows and for off-channel stock tanks.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--11 years (water years 1963-73), 1.10 ft³/s, 797 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s, July 30, 1968, gage height, 4.9 ft, site and datum then in use, from rating curve extended above 37 ft³/s on basis of slope-area measurements at gage heights 3.20 ft and 4.9 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78 ft³/s, Apr. 2, gage height, 2.30 ft; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.1	5.4	3.8	1.4	1.4	2.0	1.2	.80	.22	.01	.30
2	3.7	4.0	4.9	3.8	1.4	1.4	55	1.3	1.0	.11	.02	.15
3	3.6	4.0	5.2	3.8	1.4	1.3	34	1.4	.76	.07	.02	.06
4	3.6	4.1	5.0	3.8	1.4	2.8	12	1.3	.61	.05	.02	.03
5	3.5	4.1	4.2	3.8	1.4	1.6	7.5	1.1	.48	.20	.01	.03
6	3.5	4.0	4.7	3.8	1.4	1.0	7.6	1.0	.36	.16	.01	.02
7	13	3.9	4.8	3.8	1.4	.61	6.9	1.0	.24	.09	.01	.02
8	6.1	4.0	4.3	3.8	1.4	.42	4.0	1.3	.24	.05	.02	.20
9	4.5	3.9	4.5	3.8	1.4	.96	2.6	1.4	.24	.08	.02	1.4
10	6.5	3.9	3.4	3.8	1.4	1.0	1.8	1.2	.28	.11	.01	18
11	31	3.9	4.5	3.8	1.4	1.8	1.4	.96	.28	.05	.01	7.5
12	6.9	4.0	4.2	3.8	1.4	2.2	1.2	.76	.24	.02	.02	1.6
13	5.1	4.2	3.9	3.8	1.4	1.3	1.2	.61	.18	.01	.01	.76
14	4.7	4.2	3.4	3.8	1.4	1.0	.72	.68	.12	.02	.00	.51
15	4.3	3.9	3.5	3.8	1.4	1.1	.64	.76	.09	.02	.00	.33
16	3.7	3.8	3.5	3.8	1.4	.92	.61	.72	.06	.03	.00	1.7
17	4.9	4.5	3.7	3.8	1.4	.76	.76	1.0	.03	.03	.00	1.6
18	8.5	4.0	3.7	3.8	1.4	.96	.64	1.2	.02	.02	.00	.48
19	5.7	3.4	3.8	3.8	1.4	.92	.45	.88	.02	.07	.00	.28
20	4.7	4.9	4.0	3.8	1.4	.92	.28	.61	.01	.51	.00	.12
21	4.3	4.2	4.1	3.8	1.4	.42	.20	.48	.01	.33	.00	.09
22	4.3	4.3	4.9	3.8	1.4	.33	.14	.42	.01	.68	.01	.08
23	4.1	4.5	3.8	3.8	1.4	.36	.14	.36	.01	.84	.08	.08
24	4.0	5.0	3.8	3.8	1.4	.33	.20	.33	.02	1.8	.80	2.0
25	4.0	6.0	3.8	1.4	1.4	.28	.20	.30	.02	.30	1.3	2.0
26	3.9	15	3.8	1.4	1.4	.28	1.4	.28	1.0	.18	1.3	14
27	4.1	10	3.8	1.4	1.4	.42	.96	.24	4.2	.07	.36	7.3
28	4.8	6.4	3.8	1.4	1.4	.51	.68	.26	.84	.04	1.6	1.8
29	4.1	6.2	3.8	1.4	---	.57	.88	.26	.39	.02	2.5	2.0
30	4.0	6.2	3.8	1.4	---	.57	1.1	.36	.33	.01	2.4	1.6
31	4.0	---	3.8	1.4	---	.57	---	.45	---	.01	.61	---
TOTAL	176.7	148.6	127.8	101.0	39.2	29.01	147.20	24.12	12.89	6.20	11.15	66.04
MEAN	5.70	4.95	4.12	3.26	1.40	.94	4.91	.78	.43	.20	.36	2.20
MAX	31	15	5.4	3.8	1.4	2.8	55	1.4	4.2	1.8	2.5	18
MIN	3.5	3.4	3.4	1.4	1.4	.28	.14	.24	.01	.01	.00	.02
AC-FT	350	295	253	200	78	58	292	48	26	12	22	131

WTR YR 1986 TOTAL 889.91 MEAN 2.44 MAX 55 MIN .00 AC-FT 1770

08284510 HERON RESERVOIR NEAR LOS OJOS, NM

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, at Heron Dam on Willow Creek, 0.2 mi upstream from Rio Chama, 5.1 mi northeast of El Vado Dam, and 8.7 mi southwest of Los Ojos.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--October 1970 to current year. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Mar. 24, 1971, nonrecording gage.

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 provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 401,800 acre-ft, July 28, 1982, elevation, 7,186.19 ft; no storage prior to Oct. 21, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 401,600 acre-ft, June 26, elevation, 7,186.14 ft: minimum, 323,600 acre-ft, Apr. 14, elevation, 7,172.12 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Bureau of Reclamation in 1971)

7,170	312,600
7,180	366,200
7,190	424,700

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397600	397200	396200	394800	390500	370300	353100	337500	400000	400400	400600	399600
2	397400	397100	396200	394800	390100	369200	355100	338100	370600	400300	400000	400900
3	397100	397200	396200	394800	389800	368400	356100	338800	372000	400300	400000	400900
4	397100	397000	396100	394700	389300	367800	355500	339500	373700	400700	399900	400700
5	396900	397000	396200	394700	388300	367300	354000	340100	375600	401000	400000	400600
6	396800	396900	396200	394800	387800	366800	352700	340700	377500	400700	400000	400600
7	397200	396800	396200	394800	387100	366200	350100	341200	379500	400600	400100	400600
8	397100	396800	396100	394700	386400	365600	345900	341700	381500	400600	400100	400400
9	397000	396700	396100	394800	385700	365000	341800	342300	383300	400600	400000	400800
10	397400	396600	396200	394700	385000	364400	337600	342800	384900	400600	400200	401300
11	397700	396600	396100	394700	384200	363700	333500	343200	386300	400400	400200	401100
12	397700	396600	396100	394700	383400	362900	329400	343600	387800	400400	400500	400900
13	397700	396400	396100	394700	382800	362200	325400	344400	389500	400500	400400	400500
14	397600	396300	396000	394700	382200	361500	323600	345400	391200	400500	400400	400200
15	397600	396000	396000	394700	381600	360800	323800	346400	393000	400900	400400	400000
16	397600	395900	396000	394600	380900	360200	324300	347200	394700	401000	400400	400000
17	397600	395800	396000	394600	380200	359500	324700	348300	396200	400700	400300	399900
18	397700	395800	395900	394600	379500	358900	325200	349100	397700	400400	400400	399900
19	397700	395800	395900	394600	379500	358200	325500	350100	399100	400400	400300	399800
20	397700	395800	395900	394600	378800	357800	326000	351700	399700	400500	400300	399700
21	397600	395700	395900	394500	378300	357700	326600	353100	400000	400500	400300	399700
22	397500	395700	395900	394300	377600	357300	327700	354800	400400	400600	400200	399600
23	397400	395700	395800	393900	377100	356700	328800	356400	400600	400700	400800	399600
24	397400	395700	395600	393500	376300	356100	330000	358100	400800	400600	401100	399700
25	397400	395800	395400	393100	375000	355500	331200	359600	400900	400600	401100	399700
26	397400	396000	395100	392800	373700	354500	332400	361300	401600	400400	401000	399900
27	397400	396000	394800	392300	372400	353300	333200	363200	401400	400300	401000	400000
28	397400	396100	394800	391900	371200	352700	334000	364700	401200	400300	401100	399900
29	397400	396100	394800	391500	---	352600	334900	366100	400900	400200	401200	400200
30	397300	396200	394800	391100	---	352500	336100	367400	400600	400000	401200	400200
31	397300	---	394800	390900	---	352400	---	368400	---	400000	401200	---
MAX	397700	397200	396200	394800	390500	370300	356100	368400	401600	401000	401200	401300
MIN	396800	395700	394800	390900	371200	352400	323600	337500	370600	400000	399900	399600
(†)	7185.41	7185.23	7185.00	7184.32	7180.89	7177.51	7174.49	7180.39	7185.98	7185.87	7186.07	7185.91
(††)	-300	-900	-1400	-3900	-19700	-18800	-16300	32300	32200	-600	1200	-700

CAL YR 1985 MAX 401600 MIN 317100 (††) 32200
WTR YR 1986 MAX 401600 MIN 323600 (††) 2600

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08284520 WILLOW CREEK BELOW HERON DAM, NM

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, in outlet conduits of Heron Dam, 0.2 mi upstream from Rio Chama, 5.1 mi northeast of El Vado Dam, and 8.7 mi southwest of Los Ojos.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--January 1971 to current year.

GAGE.--Totalizing flowmeters in each of two outlet conduits in Heron Dam.

REMARKS.--Flow regulated by Heron Reservoir (station 08284510) since Oct. 21, 1970. Outlet conduits are 14-in. and 120-in. in diameter.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--15 years, 120 ft³/s, 86,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,780 ft³/s, Dec. 18, 19, 1982; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,454 ft³/s, Apr. 8; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	.00	.00	.00	204	631	348	.00	.00	38	.00	.00
2	35	.00	.00	.00	204	631	349	.00	.00	.00	.00	.00
3	35	.00	.00	.00	204	631	348	.00	.00	.00	.00	.00
4	35	.00	.00	.00	329	504	775	.00	.00	.00	.00	.00
5	35	.00	.00	.00	407	400	1040	.00	.00	110	.00	.00
6	34	.00	.00	.00	406	400	1040	.00	.00	62	.00	.00
7	34	.00	.00	.00	406	461	1860	.00	.00	.00	.00	.00
8	34	.00	.00	.00	406	512	2450	.00	.00	.00	.00	.00
9	34	.00	.00	.00	406	512	2450	.00	.00	.00	.00	.00
10	14	.00	.00	.00	405	514	2450	.00	.00	.00	.00	92
11	.00	.00	.00	.00	404	514	2440	.00	.00	.00	.00	178
12	.00	.00	.00	.00	404	514	2430	.00	.00	.00	.00	145
13	.00	18	.00	.00	405	514	2430	.00	.00	.00	.00	145
14	.00	68	.00	.00	404	514	1140	.00	.00	.00	.00	145
15	.00	100	.00	.00	404	444	132	.00	.00	.00	.00	62
16	.00	100	.00	.00	404	402	88	.00	.00	85	.00	.00
17	.00	100	.00	.00	404	402	23	.00	.00	152	.00	.00
18	.00	47	.00	.00	403	401	.00	.00	.00	61	.00	.00
19	.00	3.6	.00	.00	403	400	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	403	222	.00	.00	.00	.00	.00	.00
21	.00	.81	.00	.00	403	99	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	126	403	284	.00	.00	.00	.00	.00	.00
23	.00	.00	48	204	403	395	.00	.00	.00	.00	.00	.00
24	.00	.00	84	204	567	395	.00	.00	.00	.50	.00	.00
25	.00	4.8	84	204	831	396	.00	.00	.00	.00	.00	.00
26	.00	3.6	100	204	828	599	.00	.00	42	.00	.00	.00
27	.00	.00	118	204	827	721	.00	.00	198	.00	.00	.00
28	.00	.00	.00	204	708	518	.00	.00	176	.00	.00	.00
29	.00	.00	.00	204	---	349	.00	.00	93	.00	.00	.00
30	.00	.00	.00	204	---	349	.00	.00	93	.00	.00	.00
31	.00	---	.00	204	---	348	---	.00	---	.00	.00	---
TOTAL	312.00	445.81	434.00	1962.00	12385	13976	21793.00	.00	602.00	508.50	.00	767.00
MEAN	10.1	14.9	14.0	63.3	442	451	726	.00	20.1	16.4	.00	25.6
MAX	35	100	118	204	831	721	2450	.00	198	152	.00	178
MIN	.00	.00	.00	.00	204	99	.00	.00	.00	.00	.00	.00
AC-FT	619	884	861	3890	24570	27720	43230	.00	1190	1010	.00	1520

CAL YR 1985	TOTAL	44984.81	MEAN	123	MAX	2160	MIN	.00	AC-FT	89230
WTR YR 1986	TOTAL	53185.31	MEAN	146	MAX	2450	MIN	.00	AC-FT	105500

08285000 EL VADO RESERVOIR NEAR TIERRA AMARILLA, NM

LOCATION.--Lat 36°35'39", long 106°44'00", Rio Arriba County, Hydrologic Unit 13020102, Tierra Amarilla Grant, at outlet tower of dam on Rio Chama, at village of El Vado, 12.4 mi southwest of Tierra Amarilla, and at mile 77.7.

DRAINAGE AREA.--873 mi², of which about 100 mi² 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 hours.

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 National Geodetic Vertical Datum of 1929.

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 ft and 6,902.0 ft, top of spillway gate. 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 and, since December 1972, for storage of contract water from San Juan-Chama Project. Rehabilitation of outlet works, completed in December 1966, increased valve-controlled release from about 1,750 ft³/s to about 6,000 ft³/s.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 204,900 acre-ft, of which 7,400 acre-ft was uncontrolled storage, June 4, 5, 1948, gage height, 6,904.2 ft; no storage at times prior to December 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 190,200 acre-ft, June 26, elevation, 6,900.13 ft; minimum, 167,900 acre-ft, Apr. 9, elevation, 6,893.14 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by U.S. Bureau of Reclamation in 1966)

6,865	96,490	6,880	130,800
6,870	107,000	6,900	158,500

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177400	177400	176700	172800	172900	175500	188700	189400	187000	189600	187800	186300
2	177200	177300	176600	172600	173200	176000	188800	188900	187000	189600	187700	186400
3	177200	177300	176600	172500	173500	176500	186700	188300	187700	189700	187700	186400
4	177200	177300	176500	172400	173700	176800	181900	189600	188400	189500	187700	186300
5	177200	177300	176400	172300	173400	177100	177000	189100	189100	189600	187700	186300
6	177300	177200	176300	172100	173300	177200	175500	186700	189500	189600	187700	186200
7	177600	177000	176200	172000	173200	177200	170100	186500	189800	189800	187600	186000
8	177300	176800	176000	171800	173000	177300	168800	186100	189400	189800	187600	186100
9	177000	176700	175900	171700	172800	177400	167900	185700	189300	189900	187500	186200
10	177400	176500	175800	171600	172600	177300	170100	185600	189400	189600	187500	187700
11	177500	176400	175600	171400	172400	177200	173800	185800	189700	189400	187500	189000
12	177100	176300	175400	171400	172100	177000	177400	186600	189600	188800	187700	189600
13	177100	176300	175200	171200	172000	177000	180800	186900	189500	188100	187700	189800
14	177100	176300	174900	171000	171800	177300	182300	186500	189600	188300	187700	189700
15	177100	176300	174700	171000	171600	177800	182700	186200	189600	188500	187600	189600
16	177300	176300	174600	170800	171600	178500	183300	186200	189500	188900	187500	189500
17	177400	176500	174400	170700	171400	179200	183900	186400	189400	189400	187500	189400
18	177600	176600	174200	170600	171300	180000	184800	185900	189600	189800	187500	189300
19	177800	176400	174100	170500	171500	180700	185800	186500	189800	189800	187500	189200
20	177800	176300	173900	170300	171700	181000	186800	187200	189600	189800	187400	189200
21	177800	176300	173700	170200	171700	181100	188400	187200	189400	189900	187400	189100
22	177700	176300	173600	170200	171600	181600	189600	186500	189300	189900	187400	189100
23	177600	176300	173500	170600	171400	182100	189800	186100	189400	189700	187400	189100
24	177500	176300	173500	170800	171700	182800	189700	185800	189600	189600	187600	189400
25	177500	176300	173500	171000	172400	183600	189600	185500	189800	189700	187700	189500
26	177400	176500	173500	171300	173200	184700	189600	185900	190200	188600	187900	189800
27	177400	176600	173700	171600	174300	186200	189300	186400	189900	187700	188000	189800
28	177400	176600	173500	171800	174900	187400	189300	186800	189200	187700	188100	189900
29	177400	176700	173300	172100	---	187900	189400	186900	189200	187700	187900	190000
30	177300	176700	173200	172400	---	188300	189500	186900	189400	187800	187300	189500
31	177400	---	173000	172600	---	188500	---	187100	---	187800	186700	---
MAX	177800	177400	176700	172800	174900	188500	189800	189600	190200	189900	188100	190000
MIN	177000	176300	173000	170200	171300	175500	167900	185500	187000	187700	186700	186000
(†)	6896.15	6895.94	6894.77	6894.66	6895.37	6899.59	6899.90	6899.17	6899.87	6899.39	6899.06	6899.89
(††)	-100	-700	-3700	-400	2300	13600	1000	-2400	2300	-1600	-1100	2800

CAL YR 1985 MAX 850801 MIN 124900 (††) 47600
WTR YR 1986 MAX 190200 MIN 167900 (††) 12000

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08285500 RIO CHAMA BELOW EL VADO DAM, NM

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on left bank 1.5 mi downstream from El Vado Dam, 2.8 mi upstream from Rio Nutrias, 13 mi southwest of Tierra Amarilla, and at mile 76.2.

DRAINAGE AREA.--877 mi², of which about 100 mi² 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.

REVISED RECORDS.--WSP 1312: 1914, 1949. WSP 1392: 1949.

GAGE.--Water-stage recorder. Datum of gage is 6,696.12 ft above National Geodetic Vertical Datum of 1929. Prior to October 1935, at site 1.5 mi upstream at different datum. October 1935 to September 1938 at site 1.1 mi upstream at datum 30.34 ft higher.

REMARKS.--Estimated daily discharges: Apr. 14-20. Records good. Flow regulated by El Vado Reservoir (station 08285000) since 1935. Flow affected by release of transmountain water from Heron Reservoir (station 08284510) since May 1971. Diversions for irrigation of about 10,600 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years (water years 1914-15, 1921-23), 448 ft³/s, 324,600 acre-ft/yr, prior to completion of El Vado Dam.
35 years (water years 1936-70), 373 ft³/s, 270,200 acre-ft/yr, prior to release of transmountain water.
16 years (water years 1971-86), 474 ft³/s, 334,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s, May 22, 1920, gage height, 12 ft, site and datum then in use, from rating curve extended above 3,500 ft³/s; no flow Mar. 25, 26, 31, 1955.
Maximum discharge since construction of El Vado Dam in 1935, 6,610 ft³/s, May 7, 1985, gage height, 7.08 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4 or 5, 1911, was greater than floods in September 1904 and May 1920, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,550 ft³/s, Apr. 9, gage height, 6.28 ft; minimum daily, 49 ft³/s, Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	210	171	166	184	541	1560	2640	1690	392	71	305
2	209	189	156	166	184	541	2060	3560	1540	369	76	88
3	176	163	166	154	190	540	2610	4010	1420	332	76	99
4	149	186	191	142	399	561	3980	4010	1410	491	76	104
5	125	204	226	143	571	541	4170	4570	1420	573	78	118
6	128	214	201	140	571	598	4130	4640	1530	476	81	143
7	364	202	205	140	571	730	4180	2840	1630	248	94	140
8	675	203	213	169	578	752	4110	2590	1740	252	81	143
9	476	200	210	186	584	808	4120	1950	1600	376	83	146
10	241	199	216	184	584	822	2440	1610	1280	335	78	163
11	512	199	206	184	584	807	1630	1470	1170	372	78	143
12	589	165	200	177	572	793	1630	1690	1180	556	81	192
13	415	157	171	176	584	703	1630	2360	1060	541	86	317
14	346	175	167	171	578	658	1250	2800	970	121	95	377
15	268	185	171	167	578	418	800	2680	970	88	93	302
16	194	180	163	171	578	266	800	2240	930	88	88	230
17	210	172	161	175	578	271	650	2310	812	86	79	230
18	231	174	172	177	578	254	340	2100	690	99	76	202
19	272	162	182	180	578	251	210	1720	669	159	67	143
20	312	163	191	186	556	255	210	2130	791	188	72	113
21	322	155	187	205	614	273	220	2850	736	298	64	117
22	309	158	188	219	556	356	800	3030	621	271	63	101
23	319	149	180	227	561	449	1640	2830	471	299	64	83
24	279	147	185	214	540	422	1850	2600	447	258	63	88
25	242	152	195	207	519	409	1850	2370	616	153	60	86
26	244	172	173	176	521	496	1650	2110	798	674	60	152
27	239	178	169	182	556	495	1490	1800	1230	500	55	240
28	220	164	168	178	582	562	1250	1680	1170	101	49	268
29	208	161	166	186	---	907	1430	1910	677	81	342	464
30	209	150	171	188	---	1140	1910	1810	482	71	501	668
31	209	---	167	189	---	1220	---	1700	---	65	525	---
TOTAL	8901	5288	5688	5525	14629	17839	56600	78610	31750	8913	3455	5965
MEAN	287	176	183	178	522	575	1887	2536	1058	288	111	199
MAX	675	214	226	227	614	1220	4180	4640	1740	674	525	668
MIN	125	147	156	140	184	251	210	1470	447	65	49	83
AC-FT	17660	10490	11280	10960	29020	35380	112300	155900	62980	17680	6850	11830

CAL YR 1985 TOTAL 270795 MEAN 742 MAX 5650 MIN 41 AC-FT 537100
WTR YR 1986 TOTAL 243163 MEAN 666 MAX 4640 MIN 49 AC-FT 482300

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM

LOCATION.--Lat 36°19'06", long 106°35'50", Rio Arriba County, Hydrologic Unit 13020102, on left bank 40 ft downstream from site of former bridge, 7.7 mi downstream from Rio Gallina, 9 mi northwest of Youngsville, 15.6 mi upstream from Abiquiu Dam, 30.3 mi downstream from El Vado Dam, and at mile 47.4.

DRAINAGE AREA.--1,600 mi², of which about 100 mi² is probably noncontributing.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,275 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-2. Records good. Flow regulated by El Vado Reservoir (station 08285000). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions for irrigation of about 15,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 358 ft³/s, 259,400 acre-ft/yr, prior to release of transmountain water.
16 years (water years 1971-86), 504 ft³/s, 365,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,680 ft³/s, May 8, 1985, gage height, 7.67 ft; maximum gage height, 8.70 ft, May 20, 1973; minimum, 7.5 ft³/s, Oct. 17, 18, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred on Sept. 29, 1904, Oct. 4 or 5, 1911, and May 22, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,400 ft³/s, May 6, gage height, 7.26 ft; minimum daily, 72 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	200	163	178	166	523	1420	2440	1650	381	77	396
2	210	197	157	180	169	523	2080	3370	1550	371	86	107
3	190	170	158	179	167	524	2420	4210	1360	328	90	86
4	152	157	188	155	179	523	4190	4190	1360	396	87	91
5	124	195	191	153	497	523	4590	4510	1340	497	96	94
6	120	195	192	151	507	545	4600	5110	1400	472	119	113
7	261	195	194	153	510	648	4580	3280	1520	241	99	118
8	563	196	189	150	511	723	4590	2720	1660	232	98	117
9	597	195	189	150	517	747	4570	2170	1580	244	98	136
10	292	194	188	154	515	823	2990	1590	1280	399	104	343
11	634	196	183	155	519	773	1650	1490	1040	225	130	387
12	693	196	184	155	520	751	1640	1500	1090	442	99	154
13	450	147	189	156	529	672	1630	2120	1000	445	122	316
14	370	173	179	157	533	586	1500	2880	848	259	121	379
15	326	171	182	157	543	497	753	2780	842	112	108	379
16	220	169	184	158	569	277	746	2460	821	129	104	255
17	211	173	181	158	593	261	711	2240	737	101	84	255
18	264	173	181	159	592	264	477	2240	611	114	78	250
19	253	152	182	159	621	272	257	1740	549	135	140	198
20	298	148	183	161	587	253	243	1810	639	190	86	128
21	296	151	182	163	561	249	239	2770	635	443	74	121
22	294	152	181	162	526	261	367	3060	558	382	73	121
23	293	154	182	162	520	386	1440	3000	479	294	72	99
24	290	159	180	164	520	397	1800	2620	350	365	84	121
25	238	162	180	160	525	404	1800	2460	498	210	80	128
26	237	174	180	160	528	413	1740	2130	588	345	99	108
27	238	170	179	163	530	464	1510	1860	886	783	101	235
28	240	161	179	163	526	483	1170	1630	1230	177	76	287
29	202	169	179	164	---	683	1310	1820	665	108	183	385
30	200	173	177	165	---	1080	1660	1890	506	94	496	709
31	200	---	178	171	---	1150	---	1650	---	83	461	---
TOTAL	9166	5217	5614	4975	13580	16678	58673	79740	29272	8997	3825	6616
MEAN	296	174	181	160	485	538	1956	2572	976	290	123	221
MAX	693	200	194	180	621	1150	4600	5110	1660	783	496	709
MIN	120	147	157	150	166	249	239	1490	350	83	72	86
AC-FT	18180	10350	11140	9870	26940	33080	116400	158200	58060	17850	7590	13120

CAL YR 1985 TOTAL 277523 MEAN 760 MAX 6170 MIN 43 AC-FT 550500
WTR YR 1986 TOTAL 242353 MEAN 664 MAX 5110 MIN 72 AC-FT 480700

08286900 ABIQUIU RESERVOIR NEAR ABIQUIU, NM

LOCATION.--Lat 36°14'24", long 106°25'44", Rio Arriba County, Hydrologic Unit 13020102, in Piedra Lumbre Grant, in operations building at Abiquiu Dam on Rio Chama, 6.6 mi northwest of Abiquiu, and at mile 32.1.

DRAINAGE AREA.--2,146 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--February 1963 to September 1965 (monthend contents only), October 1965 to current year. October 1969 to December 1975, contents at 0800 hours.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam, completed Feb. 5, 1963. Capacity, 1,212,000 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, 1980. No dead storage. Reservoir is used for flood control and, since March 1976, for recreation. A desilting pool of about 2,000 acre-ft was maintained from May 1968 to 1974, when it was increased to 4,000 acre-ft and continued until December 1975.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 382,720 acre-ft, June 11, 1985, elevation, 6,256.22 ft; no storage at times prior to May 1968 and Jan. 11 to Mar. 25, 1976.

EXTREMES FOR CURRENT YEAR.-Maximum contents, 325,250 acre-ft, Dec. 17, elevation, 6,246.17 ft; minimum, 186,804 acre-ft, Mar. 26, 27, elevation, 6,218.90 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Army Corps of Engineers in 1978)

6,200	125,400	6,240	292,600
6,220	199,900	6,250	346,600
6,230	243,700	6,260	405,500

RESERVOIR STORAGE (AC-FT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317980	317980	321200	307549	263737	213290	190078	214029	269890	314706	317691	312760
2	317980	317860	321500	306748	260933	211903	191518	217576	269790	315356	317364	312060
3	317920	317750	321660	306267	258147	210737	193544	222551	270090	315410	317256	311467
4	317920	317700	321960	305627	255379	209660	198380	227733	271790	315681	317093	311036
5	317920	317860	322250	304882	253301	208372	204280	232984	274502	316387	316930	310982
6	317980	317750	322650	304349	251425	207047	209617	239371	277076	316930	316658	311036
7	318160	317700	322940	303605	249747	205640	215382	242596	280018	316984	316333	311144
8	318160	317650	323300	302969	247697	204492	221299	245090	283129	316767	315952	310821
9	317980	317550	323500	302280	245847	203348	226737	246510	286001	316550	315735	310929
10	318680	317500	323750	301591	243959	202123	229917	246747	288268	316767	316115	311144
11	319200	317450	323850	300957	241987	201063	230602	246984	290234	316658	315952	311359
12	318850	317400	324200	300429	240164	199722	231150	247031	292415	316984	315681	311144
13	318600	317400	324360	299743	238301	198380	231608	249939	294395	317528	315410	311036
14	318400	317500	324660	299058	236306	196915	231562	252868	295962	317745	315410	310929
15	318160	317500	324900	298112	233536	195039	230556	255040	297482	317310	314977	310713
16	318100	317750	325150	297220	231837	192757	229552	256494	299006	316550	314814	310660
17	318340	318160	325250	295753	230967	190818	228096	257369	300904	316007	314598	310929
18	318340	318400	324900	293873	229233	189749	225742	258488	301750	316115	314598	311144
19	318340	318400	324200	292155	227506	189298	222774	258732	302651	316767	314382	311036
20	318280	318500	323750	290338	225833	189257	219832	259074	303446	316658	314111	310821
21	318340	318750	323240	288423	223986	189011	216872	261129	304243	316984	313624	310391
22	318040	318960	322600	286619	222282	188438	214247	263589	304828	317636	313192	310283
23	318040	319140	321900	284871	220364	188029	213899	265912	305307	317691	312976	310444
24	317920	319440	321250	283078	218901	187784	214160	267648	305520	317854	312599	310122
25	317920	319650	320680	281087	217796	187334	214378	268943	306320	317854	312545	309907
26	317920	320000	320100	279306	216740	186804	214596	269690	307924	318017	312060	309907
27	317920	320200	319600	277329	215688	186804	214378	269840	309853	319161	311736	310068
28	317920	320450	318900	274804	214596	187008	213508	269491	312221	318997	311467	310176
29	318040	320800	318280	271990	---	187294	212813	269790	313624	319052	311575	310660
30	317980	321100	317700	269092	---	188561	212726	270040	314382	318670	312167	311790
31	317980	---	317300	266458	---	189462	---	269940	---	318072	312437	---
MAX	319200	321100	325250	307549	263737	213290	231608	270040	314382	319161	317691	312760
MIN	317920	317400	317300	266458	214596	186804	190078	214029	269790	314706	311467	309907
(†)	6244.83	6245.40	6244.70	6236.61	6225.50	6219.55	6225 7	6237.31	6245.86	6246.54	6245.50	6245.38
(††)	+80	+3120	-3800	-49158	-51862	-25134	+23264	+57214	+44442	+3690	-5635	-647

CAL YR 1985 MAX 382720 MIN 159560 (††) +158000
WTR YR 1986 MAX 325250 MIN 186804 (††) -6110

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08287000 RIO CHAMA BELOW ABIQUIU DAM, NM

LOCATION.--Lat 36°14'12", long 106°24'59", in SE¼SE¼ sec.8, T.23 N., R.5 E., Rio Arriba County, Hydrologic Unit 13020102, on right bank 0.8 mi downstream from Abiquiu Dam, 5.9 mi northwest of Abiquiu, and at mile 31.3.

DRAINAGE AREA.--2,147 mi², of which about 100 mi² 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. Elevation of gage is 6,040 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 25, 1966, at datum 1.60 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow controlled by El Vado Reservoir (station 08285000) 46.4 mi upstream and Abiquiu Reservoir (station 08286900) 0.8 mi upstream. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 54.5 mi upstream. Diversions for irrigation of about 17,600 acres upstream from station. U.S. Army Corps of Engineers gage-height telemeter at station.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 384 ft³/s, 278,200 acre-ft/yr, prior to release of transmountain water.
16 years (water years 1971-86), 512 ft³/s, 370,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft³/s, July 1, 1965, gage height, 6.69 ft, datum then in use; maximum gage height, 7.29 ft, Jan. 14, 1967 (backwater from ice); minimum discharge, about 0.5 ft³/s, Mar. 17, 1966, Jan. 28, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft³/s, Apr. 18, gage height, 4.98 ft; minimum daily, 49 ft³/s, multiple days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	225	49	498	1650	1350	1600	1950	1870	155	241	360
2	168	234	49	498	1640	1350	1660	1780	1860	155	211	355
3	190	234	49	498	1640	1350	1660	1600	1650	155	213	365
4	136	176	49	498	1650	1350	1680	1600	738	162	215	201
5	127	157	49	498	1660	1340	1670	1610	237	162	215	82
6	127	232	49	498	1660	1420	1680	1620	169	162	211	94
7	217	211	49	498	1680	1550	1680	1620	169	215	208	94
8	504	202	49	496	1680	1610	1690	1630	170	275	208	120
9	733	230	49	493	1690	1640	1690	1630	171	271	208	146
10	450	230	49	387	1690	1650	1680	1640	170	270	208	194
11	594	230	49	498	1690	1660	1690	1640	172	270	208	293
12	864	201	49	519	1700	1670	1690	1640	172	270	208	387
13	596	152	49	525	1690	1660	1670	671	173	270	208	482
14	473	152	49	572	1640	1650	1650	1490	175	269	208	596
15	402	129	49	673	1630	1660	1640	1850	175	305	208	481
16	274	52	63	668	1620	1660	1660	1850	175	376	208	257
17	216	52	147	897	1610	1420	1650	1860	176	333	208	96
18	284	50	361	1080	1610	1020	1840	1870	175	270	208	93
19	314	49	494	1070	1610	631	1980	1870	127	272	208	197
20	322	50	493	1080	1620	367	1980	1870	245	270	208	341
21	329	50	493	1090	1640	476	1970	1870	309	267	208	208
22	366	49	493	1090	1630	720	1960	1880	309	270	208	99
23	356	49	493	1090	1630	723	1960	1880	259	277	208	99
24	321	49	493	1090	1480	726	1950	1880	188	288	208	162
25	270	49	493	1090	1240	796	1950	1890	175	288	208	143
26	254	49	493	1090	1240	863	1960	1890	176	288	208	99
27	254	49	493	1210	1240	636	1950	1890	150	288	206	142
28	241	49	493	1470	1290	596	1950	1890	155	288	204	275
29	219	49	496	1660	---	767	1950	1880	155	288	204	272
30	219	49	498	1670	---	768	1950	1880	155	288	204	163
31	219	---	498	1660	---	1130	---	1870	---	288	306	---
TOTAL	10141	3739	7729	26654	44450	36209	53690	53991	11000	8005	6590	6896
MEAN	327	125	249	860	1588	1168	1790	1742	367	258	213	230
MAX	864	234	498	1670	1700	1670	1980	1950	1870	376	306	596
MIN	102	49	49	387	1240	367	1600	671	127	155	204	82
AC-FT	20110	7420	15330	52870	88170	71820	106500	107100	21820	15880	13070	13680

CAL YR 1985 TOTAL 225801 MEAN 619 MAX 2660 MIN 18 AC-FT 447900
WTR YR 1986 TOTAL 269094 MEAN 737 MAX 1980 MIN 49 AC-FT 533700

08289000 RIO OJO CALIENTE AT LA MADERA, NM

LOCATION.--Lat 36°20'59", long 106°02'37", in NW¼NE¼ sec.1, T.24 N., R.8 E., Rio Arriba County, Hydrologic Unit 13020102, on left bank 400 ft upstream from bridge on State Highway 96, 2.4 mi south of La Madera, 2.6 mi downstream from confluence of Rio Vallecitos and Rio Tusas, 3.1 mi north of Ojo Caliente, and at mile 19.9.

DRAINAGE AREA.--419 mi².

PERIOD OF RECORD.--April 1932 to current year.

REVISED RECORDS.--WSP 1712: 1959.

GAGE.--Water-stage recorder. Datum of gage is 6,358.84 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 23, 1934, at site about 2.6 mi 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.

REMARKS.--No estimated daily discharges. Records good. Diversion upstream from station for irrigation of about 3,500 acres (1962 determination). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years, 69.5 ft³/s, 50,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,140 ft³/s, Apr. 21, 1958, gage height, 6.42 ft, from rating curve extended above 1,300 ft³/s; maximum gage height, 7.25 ft, from floodmarks, June 19, 1966; minimum discharge, 0.2 ft³/s, Aug. 17, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Apr. 21, 1958, may have been exceeded by a flood in May 1920, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	0130	*986	*5.62	No other peak greater than base discharge.			

Minimum discharge, 9.1 ft³/s, Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	42	31	26	27	62	395	598	142	35	11	17
2	21	38	29	26	29	62	385	687	162	29	20	16
3	19	35	33	28	27	61	378	727	180	28	17	13
4	17	34	31	26	25	62	289	840	208	29	9.7	13
5	17	33	28	25	23	67	240	682	149	29	9.3	13
6	18	32	33	26	23	70	284	501	135	27	9.1	12
7	30	31	32	27	22	73	341	407	110	24	9.2	12
8	56	29	29	23	27	78	362	340	98	26	34	15
9	37	29	31	24	27	86	366	280	137	23	18	15
10	34	29	30	24	25	71	371	252	111	20	14	15
11	68	28	22	24	25	73	372	244	150	18	16	38
12	70	28	22	24	27	72	395	259	107	17	20	28
13	62	28	25	24	29	66	288	285	82	16	39	50
14	51	28	25	24	30	64	299	276	69	14	27	46
15	46	25	27	25	30	63	311	252	58	17	19	40
16	43	25	28	25	31	57	343	226	50	13	15	37
17	46	29	28	24	31	61	277	275	42	13	12	36
18	55	30	29	25	34	57	259	248	38	11	13	36
19	61	24	29	24	38	59	225	200	32	11	12	34
20	51	21	28	24	47	53	255	224	32	14	11	33
21	46	29	29	25	49	57	370	233	25	17	12	30
22	42	28	28	25	44	60	463	213	21	22	12	28
23	39	30	28	24	44	67	497	192	22	30	12	28
24	36	29	27	25	46	78	500	173	33	26	15	29
25	35	30	27	22	55	93	467	150	43	21	16	30
26	34	32	27	23	62	108	427	149	49	19	21	33
27	33	33	26	24	69	137	341	135	53	18	19	36
28	34	31	26	24	63	174	328	133	42	15	20	41
29	32	34	26	26	---	217	395	149	36	12	18	45
30	41	33	27	26	---	245	488	165	36	12	18	46
31	46	---	29	28	---	314	---	148	---	11	18	---
TOTAL	1241	907	870	770	1009	2867	10711	9643	2452	617	516.3	865
MEAN	40.0	30.2	28.1	24.8	36.0	92.5	357	311	81.7	19.9	16.7	28.8
MAX	70	42	33	28	69	314	500	840	208	35	39	50
MIN	17	21	22	22	22	53	225	133	21	11	9.1	12
AC-FT	2460	1800	1730	1530	2000	5690	21250	19130	4860	1220	1020	1720

CAL YR 1985	TOTAL	54788.7	MEAN	150	MAX	1450	MIN	6.1	AC-FT	108700
WTR YR 1986	TOTAL	32468.3	MEAN	89.0	MAX	840	MIN	9.1	AC-FT	64400

08290000 RIO CHAMA NEAR CHAMITA, NM

LOCATION.--Lat 36°04'26", long 106°06'40", in NE¼NE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, Hydrologic Unit 13020102, in San Juan Pueblo Grant, at downstream end of pier nearest left bank of bridge on U.S. Highway 285, 0.5 mi west of Chamita, 2.5 mi northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 mi², of which about 100 mi² 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.

REVISED RECORDS.--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Jan. 1, 1964. Datum of gage is 5.653.61 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1933, at railroad bridge 2.3 mi 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.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 27,600 acres. Chamita ditch (station 08289500), on left bank, and Hernandez ditch (station 08289800), on right bank, bypass gage for irrigation of several hundred acres downstream from station. Flow regulated by El Vado Reservoir (station 08285000) and Abiquiu Reservoir (station 08286900), 74.9 mi and 29.3 mi upstream respectively. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 83.0 mi upstream. National Weather Service gage-height telemeter at station.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 541 ft³/s, 392,000 acre-ft/yr, prior to release of transmountain water.
16 years (water years 1971-86), 568 ft³/s, 411,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, May 22, 1920, from rating curve extended above 2,300 ft³/s; maximum gage height, 10.45 ft, Aug. 22, 1961; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 ft³/s. Another major flood occurred in 1884, from newspaper accounts.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,460 ft³/s, May 2, gage height, 6.43 ft; minimum daily, 65 ft³/s, Dec. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	328	105	539	1720	1290	1830	2410	1940	168	230	448
2	104	329	110	539	1730	1280	1950	2610	1980	164	175	466
3	200	325	109	538	1730	1280	1830	2360	1920	159	181	409
4	156	319	111	529	1740	1270	1690	2620	1140	155	223	326
5	115	224	107	523	1730	1280	1640	2440	690	152	170	194
6	134	281	102	527	1740	1300	1680	2030	660	155	162	180
7	155	319	97	529	1760	1480	1780	1880	649	160	165	168
8	372	277	104	521	1770	1580	1910	1820	635	273	170	163
9	760	315	102	521	1790	1590	1950	1750	336	322	193	163
10	774	316	88	524	1720	1560	1950	1690	293	268	172	168
11	698	311	65	527	1670	1560	1950	1680	293	248	177	264
12	1010	319	71	526	1680	1540	1910	1670	279	238	171	345
13	772	253	91	527	1700	1520	1960	1220	241	233	194	553
14	631	231	92	529	1700	1500	1810	1180	186	231	201	693
15	567	222	92	680	1690	1510	1810	1900	158	227	178	694
16	455	192	93	682	1690	1490	1830	1860	154	362	167	543
17	298	127	96	742	1680	1390	1860	1920	149	358	165	200
18	358	133	273	1120	1680	819	1860	1910	151	250	165	137
19	445	127	498	1110	1670	537	2080	1830	140	264	181	126
20	395	118	539	1100	1680	302	2080	1850	112	290	166	270
21	428	119	551	1110	1640	257	2080	1900	221	270	172	331
22	452	119	548	1120	1650	495	2170	1900	218	435	171	122
23	502	100	546	1120	1620	492	2220	1870	227	353	144	100
24	436	101	552	1120	1550	498	2280	1860	210	329	154	112
25	376	112	550	1120	1180	539	2290	1850	187	306	264	180
26	359	125	547	1110	1180	764	2340	1840	208	299	237	103
27	351	130	549	1120	1180	633	2230	1850	330	287	228	99
28	351	100	545	1450	1200	483	2220	1870	184	277	211	211
29	329	115	537	1670	---	758	2230	2030	177	269	195	271
30	329	127	540	1690	---	798	2260	2000	177	250	203	265
31	324	---	541	1700	---	1040	---	1950	---	237	225	---
TOTAL	12764	6214	8951	27163	45470	32835	59680	59550	14245	7989	5810	8304
MEAN	412	207	289	876	1624	1059	1989	1921	475	258	187	277
MAX	1010	329	552	1700	1790	1590	2340	2620	1980	435	264	694
MIN	104	100	65	521	1180	257	1640	1180	112	152	144	99
AC-FT	25320	12330	17750	53880	90190	65130	118400	118100	28250	15850	11520	16470

CAL YR 1985 TOTAL 275376 MEAN 754 MAX 3570 MIN 50 AC-FT 546200
WTR YR 1986 TOTAL 288975 MEAN 792 MAX 2620 MIN 65 AC-FT 573200

08291000 SANTA CRUZ RIVER AT CUNDIYO, NM

LOCATION.--Lat 35°57'53", long 105°54'14", in SE¼NW¼ sec.17, T.20 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, 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 mi northwest of Cundiyo, 1.8 mi upstream from Santa Cruz Dam, and at mile 11.9.

DRAINAGE AREA.--86 mi², approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only from some periods, published in WSP 1312. Prior to October 1953, published as Rio Santa Cruz at Cundiyo.

REVISED RECORDS.--WSP 1392: 1931(M), 1932-33, 1934-39(M), 1942, 1943(M).

GAGE.--Water-stage recorder. Concrete control since Jan. 3, 1954. Elevation of gage is 6,460 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 1, 1930 to Aug. 12, 1932, water-stage recorder at site about 1 mi 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.

REMARKS.--Estimated daily discharges: Nov. 16-18, Dec. 6-23, and Feb. 6-12. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 1,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--56 years, 30.6 ft³/s, 22,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s, Sept. 24, 1931, gage height, 7.80 ft, site and datum then in use, from rating curve extended above 170 ft³/s; minimum, 0.19 ft³/s, Mar. 13, 1954, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0415	295	3.10	Aug. 25	2145	173	2.72
May 3	2345	244	2.94	Sept. 14	0445	130	2.54
June 9	0145	234	2.91	Sept. 24	0930	128	2.53
July 23	1530	*430	*3.40				

Minimum discharge, 6.8 ft³/s, Feb. 10, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	33	20	18	13	18	62	107	131	84	108	40
2	21	31	21	16	13	18	62	123	137	80	96	40
3	21	29	21	15	12	17	55	170	145	76	87	35
4	19	28	20	20	11	17	54	200	152	71	82	33
5	18	27	18	24	12	17	55	180	187	72	78	32
6	18	27	17	16	11	17	58	159	182	77	74	31
7	27	25	17	15	11	17	64	145	187	68	72	29
8	24	26	15	23	11	18	76	130	188	76	69	32
9	23	26	15	22	11	18	78	112	202	82	65	39
10	41	25	14	17	11	17	74	105	185	74	62	59
11	150	24	13	17	11	18	68	99	173	70	63	60
12	79	24	12	16	12	17	63	93	160	65	58	48
13	59	23	11	15	12	15	61	92	151	61	57	44
14	54	22	11	17	12	15	53	92	142	65	55	85
15	47	18	12	14	12	15	52	93	129	63	51	64
16	45	17	12	14	12	13	52	97	121	99	48	63
17	59	17	13	15	11	15	50	105	122	106	46	59
18	56	16	13	14	11	14	48	97	115	102	45	55
19	54	16	14	14	12	13	48	97	108	114	43	52
20	51	15	14	15	13	15	44	96	101	126	41	49
21	47	27	15	14	11	15	45	101	96	150	45	47
22	45	24	15	13	11	21	51	104	90	153	40	46
23	42	24	16	14	12	28	55	106	91	271	41	44
24	40	22	19	13	12	38	57	107	94	246	42	56
25	38	22	25	13	14	44	62	107	93	220	49	48
26	36	22	24	14	16	48	78	109	93	202	70	47
27	35	22	29	18	18	53	87	112	94	174	58	44
28	36	20	19	16	18	58	92	112	92	151	51	41
29	36	21	29	14	---	60	100	126	89	135	45	39
30	36	20	19	13	---	61	103	119	82	122	42	38
31	34	---	16	13	---	60	---	118	---	116	42	---
TOTAL	1313	693	529	492	346	810	1907	3613	3932	3571	1825	1399
MEAN	42.4	23.1	17.1	15.9	12.4	26.1	63.6	117	131	115	58.9	46.6
MAX	150	33	29	24	18	61	103	200	202	271	108	85
MIN	18	15	11	13	11	13	44	92	82	61	40	29
AC-FT	2600	1370	1050	976	686	1610	3780	7170	7800	7080	3620	2770

CAL YR 1985	TOTAL	25419	MEAN	69.6	MAX	310	MIN	10	AC-FT	50420
WTR YR 1986	TOTAL	20430	MEAN	56.0	MAX	271	MIN	11	AC-FT	40520

08292000 SANTA CLARA CREEK NR ESPANOLA, NM

LOCATION.--Lat 35°58'40", long 106°10'20", in SW¼SW¼ sec.11, T.20 N., R.7 E., Rio Arriba County, Santa Clara Indian Reservation, on right bank 5.5 mi upstream from mouth, and 5.5 mi southwest of Espanola.

DRAINAGE AREA.--34.5 mi².

PERIOD OF RECORD.--February 1936 to September 1941, August 1949 to October 1950, April 26, 1984 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 28 to Jan. 16 and Feb. 8-12. Records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during year. Two small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--8 years (water years 1937-1941, 1950, 1985-1986), 4.66 ft³/s, 3,480 ac-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 970 ft³/s, Sept. 22, 1941, from rating curve extended above 35 ft³/s on basis of slope-area determination, gage height, 5.65 ft; no flow Aug. 8-13, 1984 possibly from extreme diversion.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 10	2345	23	2.20	July 16	1515	25	2.23
July 4	1915	26	*2.26	July 23	1345	15	2.02
July 8	1515	*27	*2.26				

Minimum discharge, 1.8 ft³/s, Nov. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.9	4.2	3.9	3.6	2.9	2.6	5.3	4.2	5.5	5.5	4.5
2	4.1	3.9	4.2	3.9	3.6	2.8	4.0	5.5	4.0	5.1	5.0	4.4
3	4.0	3.9	4.3	3.8	3.6	2.6	4.1	5.6	4.1	4.7	5.1	4.3
4	3.9	3.9	4.4	3.8	3.5	2.6	3.7	5.5	4.5	6.7	5.4	4.2
5	3.9	3.9	4.2	3.8	3.4	2.6	3.7	5.3	3.7	5.7	4.9	4.1
6	3.9	3.8	4.2	3.8	3.8	2.5	3.4	5.1	3.6	4.6	5.0	4.1
7	4.4	3.8	4.2	3.8	3.4	2.5	3.3	5.0	3.3	4.0	4.6	4.0
8	4.4	3.8	4.2	3.9	3.3	2.5	3.2	5.3	3.5	6.2	5.0	4.2
9	4.2	3.7	4.2	3.7	3.4	2.7	3.0	5.4	4.5	5.8	5.2	4.5
10	5.5	3.7	4.2	3.6	3.5	2.7	2.9	5.3	3.6	6.4	4.9	4.8
11	11	3.7	4.3	3.5	3.1	2.7	2.9	5.0	3.4	4.9	6.5	4.9
12	5.6	3.7	4.4	3.4	3.3	2.6	3.2	4.7	3.1	4.6	5.3	4.3
13	4.6	3.9	4.2	3.4	4.9	2.6	3.6	4.6	3.0	4.7	6.0	4.7
14	4.4	4.1	4.2	3.3	6.1	2.6	4.2	4.6	3.0	4.8	4.1	7.5
15	4.2	3.9	4.2	3.3	5.5	2.6	4.9	4.5	2.8	4.7	4.5	5.2
16	4.3	4.8	4.1	3.3	5.3	2.6	4.9	4.4	2.8	6.0	4.3	4.9
17	5.5	4.3	4.0	3.3	5.0	2.6	4.9	5.3	2.7	5.6	4.2	4.7
18	4.8	4.3	4.0	3.2	5.1	2.7	4.6	5.0	3.6	6.6	4.0	4.2
19	5.4	3.1	4.0	3.2	5.5	2.9	5.0	4.5	3.7	6.9	3.7	4.0
20	5.6	1.8	4.0	3.3	6.0	2.7	4.8	4.2	3.2	7.1	3.8	3.9
21	4.7	2.8	4.0	3.3	4.9	2.8	4.7	4.0	2.9	6.5	4.5	3.8
22	4.5	4.7	4.0	3.2	3.2	2.7	4.3	3.8	2.7	8.0	4.5	3.8
23	4.4	4.4	4.0	3.2	3.0	2.6	4.3	3.8	2.7	6.8	4.4	3.8
24	4.3	4.6	4.0	3.3	3.1	2.7	5.0	3.7	3.4	4.7	4.1	4.8
25	4.2	4.5	3.9	3.2	3.2	2.7	5.0	3.8	6.3	5.3	6.3	4.7
26	4.1	4.7	3.9	3.2	3.2	2.6	6.8	3.8	7.1	5.1	5.8	4.2
27	3.9	4.5	4.1	3.5	3.2	2.4	6.6	3.8	5.4	5.2	5.8	4.1
28	3.9	4.4	4.1	3.5	3.1	2.3	5.5	5.0	4.6	4.9	4.7	3.9
29	4.0	4.3	4.2	3.6	---	2.3	5.3	5.8	5.9	4.7	4.7	3.8
30	4.0	4.3	4.1	3.5	---	2.3	5.1	4.7	6.4	4.6	5.1	3.8
31	3.9	---	4.0	3.5	---	2.4	---	4.5	---	4.6	4.6	---
TOTAL	143.7	119.1	128.0	108.2	111.8	80.8	129.5	146.8	117.7	171.0	151.5	132.1
MEAN	4.64	3.97	4.13	3.49	3.99	2.61	4.32	4.74	3.92	5.52	4.89	4.40
MAX	11	4.8	4.4	3.9	6.1	2.9	6.8	5.8	7.1	8.0	6.5	7.5
MIN	3.9	1.8	3.9	3.2	3.0	2.3	2.6	3.7	2.7	4.0	3.7	3.8
AC-FT	285	236	254	215	222	160	257	291	233	339	301	262

CAL YR 1985	TOTAL	2118.3	MEAN	5.80	MAX	29	MIN	1.6	AC-FT	4200
WTR YR 1986	TOTAL	1540.2	MEAN	4.22	MAX	11	MIN	1.8	AC-FT	3050

08294200 NAMBE FALLS RESERVOIR NEAR NAMBE, NM

LOCATION.--Lat 35°50'46", long 105°54'17", in NE¼SW¼, sec.29, T.19 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, in Nambe Indian Reservation, 300 ft upstream from Nambe Falls, 2.6 mi upstream from Rio En Medio, 4.4 mi southeast of Nambe Pueblo, and 5.4 mi southeast of Nambe.

DRAINAGE AREA.--34.1 mi².

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

REVISED RECORDS.--WDR NM-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to July 22, 1976, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by a concrete arch and earthfill dam, storage began Feb. 23, 1976. Total capacity, 2,020 acre-ft at elevation 6,826.6 ft, crest of ogee weir spillway, including 237 acre-ft of storage in a permanent pool between elevation 6,760.9 ft, invert of outlet conduits, and 6,780.0 ft. Dead storage 121 acre-ft below elevation 6,760.9 ft. Outlet conduits are one 6-in and two 12-in diameter pipes. Reservoir is used for storage of irrigation water and for recreation. Figures given herein represent total storage.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,060 acre-ft June 9, 1979, elevation, 6,827.24 ft; no storage prior to Feb. 23, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,030 acre-ft, many days, elevation, 6,826.72 ft; minimum, 1,680 acre-ft, Oct. 1, elevation, 6,820.18 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Bureau of Reclamation in 1976)

6,815	1,420	6,825	1,930
6,820	1,660	6,830	2,230

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANTOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	1980	1960	1940	1970	1960	2020	2020	2030	2030	2030	1900
2	1690	1970	1950	1940	1980	1970	2020	2020	2030	2030	2030	1890
3	1700	1970	1960	1950	1970	1970	2020	2020	2030	2020	2030	1880
4	1710	1970	1960	1950	1970	1960	2020	2020	2030	2020	2030	1880
5	1710	1970	1960	1950	1970	1960	2020	2020	2030	2020	2030	1860
6	1710	1970	1960	1950	1960	1950	2020	2020	2030	2020	2030	1850
7	1710	1970	1960	1950	1960	1950	2020	2020	2030	2020	2030	1840
8	1720	1970	1960	1940	1950	1950	2020	2020	2030	2020	2030	1830
9	1730	1970	1950	1940	1950	1960	2020	2020	2030	2020	2020	1820
10	1750	1970	1950	1940	1940	1970	2020	2020	2030	2020	2020	1830
11	1800	1970	1940	1940	1930	1980	2020	2020	2030	2020	2020	1830
12	1830	1970	1940	1950	1930	1990	2020	2020	2030	2020	2020	1830
13	1860	1970	1940	1960	1930	2000	2020	2020	2030	2020	2020	1830
14	1890	1970	1940	1960	1930	2010	2020	2020	2030	2020	2020	1860
15	1920	1970	1930	1950	1930	2020	2020	2020	2030	2030	2020	1890
16	1940	1970	1940	1950	1930	2020	2020	2020	2030	2030	2020	1930
17	1980	1980	1940	1940	1930	2020	2020	2020	2030	2030	2020	1960
18	1990	1980	1950	1940	1940	2020	2020	2020	2030	2030	2020	1990
19	1980	1970	1960	1930	1940	2020	2020	2020	2030	2030	2000	2020
20	1970	1970	1970	1930	1940	2020	2020	2020	2030	2030	1970	2020
21	1970	1970	1970	1930	1940	2020	2020	2020	2030	2030	1940	2020
22	1970	1970	1980	1930	1940	2020	2020	2020	2030	2030	1910	2020
23	1960	1960	1980	1940	1950	2020	2020	2020	2030	2030	1880	2020
24	1970	1960	1970	1950	1950	2020	2020	2020	2030	2030	1860	2020
25	1970	1960	1970	1950	1950	2020	2020	2020	2030	2030	1870	2020
26	1980	1960	1960	1950	1950	2020	2020	2020	2030	2030	1890	2020
27	1980	1960	1950	1960	1960	2020	2020	2020	2030	2030	1900	2020
28	1980	1960	1940	1960	1960	2020	2020	2030	2030	2030	1900	2020
29	1980	1960	1940	1960	---	2020	2020	2020	2030	2030	1900	2020
30	1980	1960	1930	1970	---	2020	2020	2020	2030	2030	1900	2020
31	1980	---	1940	1970	---	2020	---	2020	---	2030	1900	---
MAX	1990	1980	1980	1970	1980	2020	2020	2030	2030	2030	2030	2020
MIN	1680	1960	1930	1930	1930	1950	2020	2020	2030	2020	1860	1820
(†)	6825.85	6825.50	6825.09	6825.70	6825.54	6826.52	6826.60	6826.64	6826.66	6826.72	6824.46	6826.49
(††)	+310	-20	-20	+30	-10	+60	0	0	0	0	-130	+120

CAL YR 1985 MAX 2040 MIN 1420 (††) +240
WTR YR 1986 MAX 2030 MIN 1680 (††) +350

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08294210 RIO NAMBE BELOW NAMBE FALLS DAM, NEAR NAMBE, NM

LOCATION.--Lat 35°50'46", long 105°54'17", in NE¼SW¼ sec.29, T.19 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, in Nambe Indian Reservation, in outlet conduits of Nambe Falls Dam, 300 ft upstream from Nambe Falls, 2.6 mi upstream from Rio En Medio, 4.4 mi southeast of Nambe Pueblo and 5.4 mi southeast of Nambe.

DRAINAGE AREA.--34.1 mi².

PERIOD OF RECORD.--January 1979 to current year.

GAGE.--Totalizing flowmeters in each of three outlet conduits in Nambe Falls Dam.

REMARKS.--Flow regulated by Nambe Falls Reservoir (station 08294200). Outlet conduits are one 6-in and two 12-in diameter pipes. During periods of spill at Nambe Falls Dam, record computed at site 1,100 ft downstream, site of discontinued station 08294300, Rio Nambe at Nambe Falls.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 312 ft³/s June 9, 1979, gage height, 1.96 ft, at site 1,100 ft downstream (maximum release and spill computed at Nambe Falls Dam, 250 ft³/s, June 9, 1979); minimum daily discharge, 0.13 ft³/s May 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 77 ft³/s, July 23; minimum daily, 0.55 ft³/s, Mar. 9, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	13	8.4	3.6	3.5	4.1	18	38	47	34	41	19
2	2.2	13	7.0	3.9	3.5	4.1	19	33	51	34	45	19
3	2.2	12	5.7	4.1	5.4	5.3	16	41	50	34	39	19
4	3.7	11	5.7	4.1	6.3	6.1	16	45	58	34	32	19
5	6.0	10	5.7	4.1	6.3	6.1	16	47	58	34	29	19
6	6.0	11	5.7	5.2	6.3	6.1	15	44	61	34	27	20
7	5.6	11	5.7	5.9	6.3	6.1	16	48	61	34	26	20
8	4.5	9.5	5.7	5.9	6.3	3.4	18	48	61	34	25	20
9	4.1	8.8	5.7	5.9	6.3	.55	22	37	70	40	26	20
10	4.1	8.8	5.7	4.1	6.3	.56	22	34	60	47	22	20
11	2.0	8.8	5.7	1.3	6.4	.56	21	32	56	47	26	19
12	.58	8.8	5.7	1.3	6.4	.56	18	33	51	47	21	20
13	.58	8.8	5.7	3.0	6.4	.56	17	34	54	33	21	20
14	.58	8.8	5.7	5.1	4.9	.55	16	35	48	33	18	20
15	.57	7.0	5.7	5.7	3.5	.55	17	34	44	34	17	14
16	.57	6.0	4.3	5.7	3.5	4.2	17	37	44	50	16	9.4
17	.58	8.0	3.3	5.7	3.5	6.1	16	38	44	51	16	9.4
18	11	7.0	3.3	5.7	3.5	6.0	15	35	41	51	18	9.4
19	20	8.0	3.3	5.7	3.6	6.1	17	34	41	54	16	9.5
20	20	8.0	3.3	5.7	3.6	5.8	16	34	38	61	20	22
21	17	8.4	3.3	3.5	3.6	4.9	14	35	39	63	30	22
22	15	8.4	3.3	1.0	3.5	6.0	16	38	38	63	30	21
23	15	8.4	6.5	1.0	3.5	6.4	17	38	34	77	30	21
24	12	8.4	8.5	2.0	3.6	7.0	19	39	34	72	30	24
25	10	8.4	8.5	3.0	3.6	8.4	20	41	33	65	30	22
26	10	8.4	8.5	3.0	3.6	10	22	45	33	60	25	9.4
27	10	8.4	8.5	3.0	3.6	14	22	46	33	53	20	9.4
28	11	8.4	8.5	3.0	3.9	15	22	51	32	48	20	9.4
29	13	8.4	9.0	3.0	---	16	22	50	32	47	19	9.4
30	13	8.4	6.4	3.3	---	17	23	47	33	45	20	9.4
31	13	---	4.2	3.5	---	16	---	47	---	46	20	---
TOTAL	236.76	271.3	182.2	121.0	130.7	194.09	545	1238	1379	1459	775	504.7
MEAN	7.64	9.04	5.88	3.90	4.67	6.26	18.2	39.9	46.0	47.1	25.0	16.8
MAX	20	13	9.0	5.9	6.4	17	23	51	70	77	45	24
MIN	.57	6.0	3.3	1.0	3.5	.55	14	32	32	33	16	9.4
AC-FT	470	538	361	240	259	385	1080	2460	2740	2890	1540	1000

CAL YR 1985 TOTAL 9843.11 MEAN 27.0 MAX 112 MIN .50 AC-FT 19520
WTR YR 1986 TOTAL 7036.75 MEAN 19.3 MAX 77 MIN .55 AC-FT 13960

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM

(National stream-quality accounting network, surveillance network, and radiochemcial network station)

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, Hydrologic Unit 13020101, 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 mi southwest of San Ildefonso Pueblo, 2.5 mi downstream from Pojoaque River, 6.8 mi west of Pojoaque, and at mile 1,614.2.

DRAINAGE AREA.--14,300 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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."

REVISED RECORDS.--WSP 828: Drainage area. WSP 1512: 1895-99, 1904-6, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M).

GAGE.--Water-stage recorder. Datum of gage is 5,488.48 ft above National Geodetic Vertical Datum of 1929. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

REMARKS.--Estimated daily discharges: Dec. 12-16. Records good. Considerable regulation by Heron Reservoir (station 08284510), El Vado Reservoir (station 08285000) and Abiquiu Reservoir (station 08286900) on Rio Chama, which can contribute a major portion of the total flow. Flow affected by release of transmountain water from Heron Reservoir since May 1971. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s, May 23, 1920; maximum gage height, 14.5 ft, Sept. 29, 1904, present site and datum; minimum daily discharge, 60 ft³/s, July 4, 5, 1902.

EXTREMES OUTSIDE PERIOD OF RECORD.--The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeo's file on floods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 5	1000	6,560	7.35	June 12	1500	*7,980	*8.07
June 3	1345	7,030	7.60				

Minimum discharge, 408 ft³/s, Sept. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	739	966	1380	1480	2540	2510	3290	4690	6300	4730	1290	763
2	705	1030	1360	1460	2570	2510	3610	4970	6770	4760	1070	801
3	829	1070	1310	1470	2590	2490	3780	5160	6910	4690	1040	807
4	867	1080	1280	1450	2610	2490	3780	5800	6320	4490	973	784
5	778	1080	1250	1420	2570	2500	3730	6190	5530	4030	848	553
6	697	1130	1250	1420	2560	2520	3720	6210	5300	3700	776	453
7	700	1190	1220	1430	2590	2670	3710	6250	5570	3560	715	428
8	900	1150	1200	1390	2540	2770	3800	5930	5930	3850	713	429
9	1350	1170	1170	1380	2350	2790	3770	5540	6660	4070	738	531
10	1600	1150	1200	1400	2460	2810	3850	4930	7120	3840	684	649
11	2280	1120	1170	1410	2370	2840	3850	4240	7560	3600	728	846
12	1960	1120	858	1420	2430	2860	3750	3780	7850	3540	712	913
13	1640	1130	800	1430	2460	2800	3680	3200	7560	3640	725	1050
14	1500	1150	789	1430	2460	2760	3570	2630	6660	3550	677	1710
15	1460	1160	754	1580	2490	2750	3590	3460	5740	3230	640	1670
16	1440	1160	874	1600	2510	2710	3520	3450	5260	3230	602	1420
17	1410	1240	964	1620	2490	2660	3490	3700	4960	3270	559	1250
18	1410	1350	1080	2020	2520	2200	3330	3690	4930	2820	566	975
19	1410	1490	1390	2030	2530	1960	3530	3600	4940	2560	594	898
20	1410	1550	1410	2000	2610	1530	3460	3520	4990	2580	533	969
21	1370	1590	1430	2000	2640	1380	3370	3440	5220	2410	515	1060
22	1310	1540	1460	1990	2710	1640	3380	3460	5220	2630	525	817
23	1280	1410	1450	1990	2690	1710	3490	3540	5230	3290	517	710
24	1210	1360	1450	2000	2640	1730	3650	3780	5220	3140	536	771
25	1150	1310	1460	2000	2310	1780	3910	3970	5080	2760	626	862
26	1170	1440	1470	1990	2290	2050	4350	4200	5050	2560	662	776
27	1140	1520	1480	1970	2360	1980	4600	4250	5290	2400	712	730
28	1040	1540	1470	2260	2390	1850	4670	4310	4770	2150	645	776
29	1020	1500	1470	2470	---	2150	4610	4850	4690	1900	614	887
30	1020	1470	1480	2490	---	2290	4620	5280	4660	1650	670	977
31	977	---	1470	2480	---	2490	---	5650	---	1490	610	---
TOTAL	37772	38166	38799	54480	70280	72180	113460	137670	173290	100120	21815	26265
MEAN	1218	1272	1252	1757	2510	2328	3782	4441	5776	3230	704	876
MAX	2280	1590	1480	2490	2710	2860	4670	6250	7850	4760	1290	1710
MIN	697	966	754	1380	2290	1380	3290	2630	4660	1490	515	428
AC-FT	74920	75700	76960	108100	139400	143200	225000	273100	343700	198600	43270	52100

CAL YR 1985 TOTAL 1004929 MEAN 2753 MAX 12000 MIN 536 AC-FT 1993000
WTR YR 1986 TOTAL 884297 MEAN 2423 MAX 7850 MIN 428 AC-FT 1754000

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1946 to current year.
WATER TEMPERATURES: October 1948 to current year.
SUSPENDED-SEDIMENT DISCHARGES: October 1947 to current year.

INSTRUMENTATION.-- Water-temperature recorder since April 1954 to September 1986 (discontinued). Specific-conductance recorder since October 1978 to September 1986 (discontinued).

REMARKS.--Unable to produce continuous record for part of the year because of difficulties with sensors in the channel and malfunctioning instruments. Data from the recorder approximates the daily extremes.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,310 microsiemens, Aug. 5, 1963; minimum daily, 88 microsiemens, May 12, 1984.
WATER TEMPERATURES: Maximum, 31.0°C, Aug. 4, 5, 1954; minimum, 0.0°C on many days during winter periods each year.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 43,500 mg/L, Aug. 21, 1955; minimum daily mean, 11 mg/L, July 27, 1963 and Feb. 7, 1974.
SEDIMENT LOADS: Maximum daily, 366,000 tons, Aug. 23, 1961; minimum daily, 3 tons, July 27, 1963.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 419 microsiemens, Sept. 14; minimum daily, 191 microsiemens, July 3.
WATER TEMPERATURES: Maximum, 26.0°C, Aug. 4; minimum, 0.0°C, Dec. 15.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 10,300 mg/L, Sept. 14; minimum daily mean, 72 mg/L, Sept. 7.
SEDIMENT LOADS: Maximum daily, 53,700 tons, Oct. 11; minimum daily, 83 tons, Sept. 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
NOV											
01...	1400	1000	350	382	8.50	8.70	16.0	12.0	29	10.2	140
JAN											
14...	1100	1400	250	303	8.70	8.30	8.0	3.0	6.0	10.8	110
MAR											
13...	1115	2810	280	313	8.10	8.30	10.0	6.0	15	12.8	120
MAY											
14...	1140	2760	265	--	7.70	--	22.0	14.0	--	8.3	--
AUG											
04...	1300	975	310	348	8.40	7.90	26.0	26.0	340	6.9	130
SEP											
24...	0945	723	360	346	--	8.20	13.0	12.0	40	9.2	130

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
NOV											
01...	15	42	7.7	22	0.9	3.9	144	2.0	121	122	121
JAN											
14...	17	35	6.4	16	0.7	2.2	--	--	--	--	97
MAR											
13...	29	35	7.0	16	0.7	2.1	106	0	86	87	0
MAY											
14...	--	--	--	--	--	--	106	0	85	87	--
AUG											
04...	23	39	7.4	22	0.9	3.1	128	0	104	105	118
SEP											
24...	0	41	7.5	21	0.8	2.6	164	0	132	134	119

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV										
01...	48	7.6	0.40	17	220	220	--	<0.010	<0.100	0.050
JAN										
14...	44	5.0	0.30	20	174	190	0.190	0.010	0.200	0.040
MAR										
13...	57	4.3	0.20	17	198	190	--	<0.010	0.140	0.030
MAY										
14...	--	--	--	--	--	--	--	<0.010	0.150	0.040
AUG										
04...	53	5.8	0.40	20	220	210	--	<0.010	0.340	0.050
SEP										
24...	51	7.0	0.50	20	244	230	--	<0.010	<0.100	<0.010

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV										
01...	0.030	0.35	0.120	0.010	<0.010	14	--	60	14	7
JAN										
14...	0.030	0.26	0.100	0.030	--	--	--	40	11	--
MAR										
13...	0.010	0.47	0.070	0.030	--	--	--	30	24	--
MAY										
14...	0.050	0.36	0.130	0.040	<0.010	64	170	20	--	--
AUG										
04...	0.040	0.85	0.330	0.050	<0.010	--	--	40	140	12
SEP										
24...	<0.010	--	0.140	<0.010	<0.010	440	2600	40	14	12

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV										
01...	1400	20	2	66	<0.5	<1	<1	<3	5	<1
AUG										
04...	1300	150	2	81	<0.5	1	<1	<3	23	<5
SEP										
24...	0945	20	2	71	<0.5	<1	1	<3	3	<5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)
NOV										
01...	20	0.2	<5	13	<1	<1	310	<6	20	6.0
AUG										
04...	17	0.1	<10	4	<1	<1	340	<6	23	--
SEP										
24...	17	<0.1	<10	1	<1	<1	310	<6	9	--

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)
NOV 01...	6.7	130	2	<1	10	<10	30	780	10	59

DATE	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
NOV 01...	<0.01	10	5.4	1.1	4.2	3.1	3.5	2.9	0.06	3.8

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)
OCT 11...	1650	1560	--	15.0	8260	34800	--	--
NOV 01...	1400	1000	350	12.0	453	1220	16	--
JAN 14...	1100	1400	250	3.0	330	1250	8	--
MAR 13...	1115	2810	280	6.0	301	2280	18	--
MAY 14...	1140	2760	265	14.0	430	3200	25	--
JUN 27...	0635	5520	--	18.0	3690	55000	--	--
JUL 01...	1000	4880	--	20.0	250	3290	30	--
23...	0630	3420	--	17.5	2430	22400	--	--
AUG 04...	1300	975	310	26.0	1040	2740	100	--
05...	0630	866	--	18.0	3500	8180	99	100
SEP 24...	0945	723	360	12.0	166	324	87	--
24...	1640	910	--	15.0	4200	10300	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
OCT 11...	24	32	44	62	90	97	100	--
NOV 01...	--	--	--	--	--	--	--	--
JAN 14...	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--
MAY 14...	--	--	--	--	--	--	--	--
JUN 27...	39	48	74	92	97	100	--	--
JUL 01...	--	--	--	--	--	--	--	--
23...	47	57	77	92	95	100	--	--
AUG 04...	61	73	94	--	--	--	--	--
05...	67	73	95	--	--	--	--	--
SEP 24...	--	--	--	--	--	--	--	--
24...	37	47	68	82	84	87	96	100

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	354	239	307	299	410	303	254	269	201	303	400
2	380	353	223	303	299	340	285	251	270	196	314	379
3	386	353	257	302	297	319	278	241	256	191	332	375
4	342	353	224	294	297	316	272	234	254	194	345	365
5	352	340	228	294	294	319	272	223	254	203	405	371
6	354	343	257	302	295	319	278	213	258	218	373	409
7	349	325	222	307	297	316	276	213	252	218	389	406
8	349	326	248	302	302	319	280	208	238	221	401	404
9	306	317	228	307	312	314	287	214	233	216	398	407
10	307	318	310	303	315	310	282	229	211	216	404	403
11	346	316	297	294	315	310	283	239	217	215	405	386
12	312	320	266	295	314	305	277	252	225	223	408	384
13	321	329	334	299	321	305	281	265	250	212	413	379
14	327	344	295	296	312	309	279	265	256	195	413	419
15	312	331	362	297	313	309	283	274	262	208	413	359
16	323	323	285	297	313	311	280	276	258	216	408	302
17	331	304	303	294	316	317	277	275	250	238	412	351
18	326	288	305	295	310	318	286	272	234	250	408	315
19	316	263	300	297	307	318	295	278	223	243	411	326
20	316	251	302	299	307	319	299	278	216	249	416	329
21	311	218	292	302	303	317	304	280	218	259	409	322
22	321	230	307	300	304	326	299	284	210	266	413	325
23	342	235	278	297	307	323	289	287	207	298	412	342
24	342	261	307	296	312	327	289	291	209	248	406	349
25	349	248	299	297	312	326	287	286	207	244	407	347
26	330	265	299	294	312	323	267	261	212	250	394	352
27	330	279	294	296	314	320	266	261	270	261	396	367
28	349	265	265	302	317	312	252	257	225	269	394	370
29	349	284	290	302	---	307	258	272	225	261	393	360
30	352	279	289	302	---	299	258	281	215	271	391	358
31	360	---	292	302	---	287	---	258	---	280	399	---
MEAN	337	301	281	299	308	318	281	257	236	233	393	365

WTR YR 1986 MEAN 301 MAX 419 MIN 191

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	9.0	4.5	3.5	5.0	6.0	11.0	11.5	12.0	20.0	18.5	20.0
2	10.5	7.5	3.5	5.0	5.5	6.0	9.0	12.5	12.5	19.0	18.0	17.0
3	10.0	7.5	4.0	4.5	7.0	10.0	7.0	12.0	13.0	24.0	18.0	17.0
4	11.0	12.0	4.0	2.0	6.0	10.5	7.0	12.5	13.5	21.0	18.0	18.0
5	10.5	8.0	3.0	2.0	5.5	10.0	7.0	11.0	16.0	20.5	18.0	18.0
6	10.0	8.0	2.5	4.0	4.0	10.5	8.0	11.0	16.5	20.0	18.0	18.0
7	16.5	10.0	3.0	4.5	4.5	10.0	10.0	11.0	16.0	20.0	19.0	17.5
8	15.0	9.0	3.0	4.0	3.0	6.5	10.0	10.0	17.5	20.0	20.0	18.0
9	14.0	7.5	4.0	4.0	3.0	7.0	9.5	9.0	16.0	20.0	20.0	18.5
10	15.0	6.0	3.0	4.5	4.0	7.0	9.0	9.5	14.0	19.0	20.5	18.0
11	15.0	8.0	2.0	2.0	4.5	9.0	10.0	10.5	14.5	18.5	18.5	13.0
12	10.0	8.0	.5	2.0	5.0	9.0	9.0	11.0	15.5	19.0	20.5	14.0
13	12.0	7.0	1.0	5.0	5.5	8.0	9.5	11.5	17.5	20.0	20.0	15.0
14	11.5	7.5	1.0	4.5	6.5	7.5	7.5	13.0	21.0	20.0	21.5	15.5
15	14.0	6.5	.0	4.5	4.5	7.0	9.0	12.0	18.5	20.0	20.0	16.0
16	11.5	3.0	2.0	6.0	5.0	6.0	9.5	12.0	17.0	20.5	20.5	16.5
17	14.0	3.5	2.0	5.5	4.5	8.0	9.0	11.0	17.5	19.0	21.5	14.0
18	15.0	2.5	2.0	6.0	8.0	9.0	7.5	10.0	18.5	19.5	21.0	14.5
19	12.0	2.0	3.5	5.0	8.0	8.5	9.0	11.0	18.5	19.0	21.5	14.5
20	10.0	3.0	4.0	4.0	8.5	10.0	9.0	12.0	18.5	19.0	21.0	14.5
21	14.0	1.0	3.0	6.0	7.0	12.0	10.0	13.0	19.0	18.0	22.0	15.0
22	14.5	1.5	5.0	6.0	4.5	8.0	11.0	13.0	18.5	19.0	21.0	15.0
23	14.5	2.0	4.0	6.0	5.0	9.0	10.0	12.0	19.0	17.5	21.0	14.0
24	14.5	2.0	4.0	6.0	9.0	12.5	10.0	13.0	19.0	17.0	24.0	15.0
25	15.0	3.5	3.0	3.5	10.0	9.0	11.0	14.0	18.0	18.0	19.5	11.0
26	9.5	6.0	4.0	2.5	10.0	12.0	10.5	14.0	17.5	17.5	20.0	11.5
27	10.0	5.0	4.0	5.5	9.5	13.0	8.5	14.0	18.0	18.0	19.0	11.0
28	9.5	5.5	3.0	6.5	9.5	10.0	9.0	12.5	20.0	18.0	19.0	11.5
29	10.0	5.0	2.5	7.0	---	10.5	10.5	14.0	21.0	17.5	18.0	15.5
30	9.5	4.5	5.0	7.0	---	11.0	11.0	12.0	20.0	18.5	18.0	15.0
31	9.5	---	6.0	7.5	---	11.0	---	11.0	---	19.5	19.0	---
MEAN	12.0	5.5	3.0	4.5	6.0	9.0	9.5	12.0	17.0	19.0	20.0	15.5

WTR YR 1986 MEAN 11.0 MAX 24.0 MIN .0

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	290	275	282	306	290	295	---	---	---	220	212	220
2	306	275	287	298	282	291	251	243	247	227	204	215
3	298	275	286	298	282	286	243	235	240	220	196	203
4	290	275	282	290	282	283	251	235	241	204	180	191
5	282	275	281	290	275	284	243	235	240	188	173	181
6	290	275	283	290	282	284	251	235	242	180	173	175
7	306	275	287	290	275	282	251	235	244	180	173	174
8	314	282	297	290	275	282	251	235	246	180	173	176
9	345	290	309	282	275	282	251	243	248	188	180	183
10	322	290	304	282	275	281	251	243	251	204	188	196
11	306	290	296	282	275	278	251	235	246	220	196	207
12	306	290	293	282	275	276	251	235	243	227	212	220
13	322	290	299	282	267	277	251	235	244	235	227	231
14	322	290	306	282	275	279	251	243	248	251	227	232
15	322	290	309	282	275	282	251	243	247	251	235	244
16	322	290	306	290	275	282	251	243	245	251	243	248
17	329	290	305	290	282	287	251	235	243	251	243	245
18	329	290	302	290	282	287	259	251	251	251	235	242
19	306	282	292	290	282	286	259	251	257	251	243	247
20	290	282	286	306	282	294	267	259	260	251	243	248
21	298	275	286	314	298	305	275	259	265	251	243	249
22	306	282	289	322	298	306	267	251	259	259	243	251
23	306	282	295	329	306	319	259	243	252	259	251	255
24	306	282	296	337	322	327	259	243	251	259	251	254
25	314	282	300	337	306	322	251	235	246	259	227	247
26	306	282	299	329	298	311	243	227	232	235	227	229
27	314	290	303	322	298	309	227	220	222	235	220	227
28	314	290	298	306	282	296	227	212	218	235	220	229
29	---	---	---	298	282	286	227	220	223	243	227	235
30	---	---	---	290	267	282	227	220	221	243	227	234
31	---	---	---	282	259	272	---	---	---	235	212	225
MONTH	345	275	295	337	259	291	275	212	244	259	173	223
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	243	220	230	---	---	---	220	212	219	314	267	275
2	---	---	---	---	---	---	243	220	226	275	259	267
3	---	---	---	---	---	---	243	227	233	267	251	262
4	---	196	---	---	---	---	251	235	242	---	---	---
5	227	141	214	---	---	---	251	243	248	---	---	---
6	267	212	224	---	---	---	259	243	253	---	---	---
7	220	204	217	---	---	---	314	243	259	---	---	---
8	212	196	201	---	---	---	275	259	265	---	---	---
9	220	180	192	---	---	---	282	267	271	---	---	---
10	376	196	342	---	---	---	282	267	276	---	---	---
11	---	---	---	---	---	---	282	267	278	---	---	---
12	---	---	---	---	---	---	282	275	282	275	259	269
13	345	753	258	---	---	---	298	282	285	282	235	264
14	267	227	231	---	---	---	298	282	290	267	227	249
15	251	227	230	---	---	---	290	282	289	251	212	235
16	337	227	254	---	---	---	290	282	287	227	204	214
17	353	227	269	---	---	---	290	282	288	227	212	223
18	369	220	304	---	---	---	290	282	288	235	212	221
19	---	---	---	---	---	---	298	282	290	227	212	224
20	---	---	---	---	---	---	314	290	293	227	220	224
21	---	---	---	---	---	---	298	290	291	227	212	220
22	---	---	---	---	---	---	298	282	289	235	220	225
23	---	---	---	---	---	---	290	282	288	235	227	232
24	---	---	---	180	173	177	290	275	283	243	227	233
25	---	---	---	180	173	177	290	275	282	306	227	282
26	---	---	---	196	180	185	290	267	279	314	298	304
27	---	---	---	196	180	190	282	275	281	314	298	307
28	---	---	---	196	188	190	314	267	278	322	306	311
29	---	---	---	196	188	193	275	267	271	322	306	315
30	---	---	---	204	196	201	275	267	268	---	306	310
31	---	---	---	220	204	212	282	267	273	---	---	---
MONTH	376	141	244	220	173	191	314	212	272	322	204	258

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	9.5	11.5	---	---	---	---	---	---	3.5	1.5	2.5
2	12.5	9.5	10.5	---	---	---	---	---	---	3.0	1.0	2.0
3	---	---	---	---	---	---	---	---	---	3.0	1.5	2.0
4	---	---	---	10.0	8.5	9.5	---	---	---	2.0	.0	1.0
5	---	---	---	10.0	7.0	8.5	---	---	---	2.5	---	---
6	---	---	---	10.0	7.0	8.5	---	---	---	3.0	.5	2.0
7	---	---	---	8.5	5.0	7.0	---	---	---	3.0	1.5	2.0
8	---	---	---	8.0	5.0	6.5	---	---	---	2.5	.0	1.5
9	---	---	---	8.5	5.5	7.0	3.0	1.5	2.5	2.5	---	---
10	---	---	---	8.0	5.0	7.0	2.0	.5	1.5	3.0	---	---
11	---	---	---	9.5	6.5	8.0	1.0	---	---	3.0	.0	2.0
12	---	---	---	9.0	6.5	8.0	---	---	---	3.5	1.0	2.5
13	---	---	---	7.5	5.5	6.5	---	---	---	3.5	1.0	2.5
14	---	---	---	6.5	4.0	5.0	---	---	---	3.0	1.0	2.0
15	---	---	---	5.0	2.0	4.0	---	---	---	3.0	1.0	2.0
16	---	---	---	4.5	1.5	3.0	.5	---	---	4.5	2.0	3.5
17	---	---	---	2.5	1.5	2.0	.5	---	---	4.0	2.0	3.0
18	---	---	---	3.0	1.0	2.0	1.0	---	---	4.0	2.0	3.5
19	---	---	---	1.5	---	---	2.0	---	---	4.5	2.0	3.0
20	---	---	---	---	---	---	2.5	---	---	4.0	1.5	3.0
21	---	---	---	---	---	---	2.5	.0	1.5	4.5	2.0	3.5
22	---	---	---	---	---	---	3.0	.5	2.0	4.0	2.0	3.5
23	---	---	---	---	---	---	3.0	.5	1.5	4.5	2.0	3.5
24	---	---	---	---	---	---	3.0	.5	2.0	4.0	2.0	3.0
25	---	---	---	---	---	---	2.5	.0	1.5	4.0	1.0	2.5
26	---	---	---	---	---	---	2.5	.0	1.5	3.5	1.0	2.5
27	---	---	---	---	---	---	2.5	.0	1.5	3.5	1.0	2.5
28	---	---	---	---	---	---	3.0	.0	2.0	4.5	1.5	3.0
29	---	---	---	---	---	---	2.5	.0	1.5	3.5	2.0	2.5
30	---	---	---	---	---	---	3.0	.5	2.0	---	---	---
31	---	---	---	---	---	---	4.0	2.5	3.0	7.5	4.5	---
MONTH	14.0	9.5	11.0	10.0	1.0	6.0	4.0	.0	2.0	7.5	.0	2.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	4.0	5.5	9.5	6.0	8.0	---	---	---	15.0	11.5	13.5
2	7.5	5.0	6.0	8.5	6.0	7.5	10.5	8.5	9.5	15.0	12.5	13.5
3	7.0	4.0	5.5	9.5	6.5	8.0	9.5	7.0	8.5	15.0	11.5	13.0
4	6.0	3.5	5.0	10.5	7.0	8.5	11.0	7.0	9.0	15.5	12.0	14.0
5	6.0	3.0	4.5	10.0	7.0	8.5	11.5	7.5	9.5	14.5	11.0	13.0
6	5.0	3.5	4.0	10.0	7.0	8.5	11.0	8.0	9.5	14.0	11.0	12.5
7	5.0	3.0	4.0	10.0	7.0	8.5	12.5	9.5	11.0	14.0	11.0	12.5
8	4.5	2.5	3.5	9.5	6.5	8.5	13.0	9.5	11.0	12.5	10.5	11.5
9	4.5	3.0	4.0	9.5	7.5	8.0	13.0	9.0	11.0	12.0	9.5	11.0
10	4.5	1.5	3.0	7.5	6.0	7.0	13.0	9.0	11.5	14.0	9.5	12.0
11	5.0	1.5	3.5	9.5	7.0	7.5	12.0	9.5	11.0	15.0	10.5	13.0
12	5.5	2.5	4.0	9.5	6.5	8.0	12.5	9.0	11.0	16.0	11.5	13.5
13	6.0	4.0	5.0	8.5	5.5	7.0	12.5	9.5	11.0	16.0	11.5	14.0
14	7.0	4.0	5.5	8.5	6.0	7.0	12.5	7.5	10.0	16.0	13.0	14.5
15	6.5	5.0	5.5	9.5	6.5	8.0	12.0	9.0	11.0	14.5	11.5	13.5
16	7.0	5.0	6.0	9.5	6.0	8.0	11.5	9.5	10.5	15.0	11.5	13.5
17	7.5	4.5	6.0	8.5	6.5	7.5	12.0	8.5	10.5	14.0	11.5	13.0
18	8.5	5.5	7.0	9.5	6.0	7.5	12.0	8.0	10.0	15.5	10.5	13.0
19	8.0	6.0	7.0	9.0	6.5	7.5	12.5	8.5	11.0	16.5	12.0	14.5
20	8.5	6.5	7.5	10.0	6.0	8.0	13.5	8.5	11.0	17.0	12.5	15.0
21	7.5	5.0	6.5	11.5	7.0	9.0	14.5	10.0	12.5	16.5	13.0	15.0
22	7.5	4.5	6.0	11.5	8.0	10.0	13.5	11.0	12.5	16.0	12.5	14.5
23	8.0	5.0	6.5	12.5	8.5	10.5	13.0	10.0	12.0	16.0	12.0	14.0
24	8.5	5.5	7.5	12.0	9.0	11.0	13.0	10.0	12.0	16.0	13.0	14.5
25	9.5	6.0	8.0	12.5	9.0	11.0	12.5	10.5	11.5	17.0	13.5	15.5
26	9.5	7.0	8.0	12.0	9.0	11.0	12.5	10.5	11.5	18.0	13.5	16.0
27	9.5	7.5	8.5	13.0	9.5	11.5	12.5	8.5	10.5	16.0	13.0	15.0
28	9.5	7.0	8.0	14.0	10.0	12.0	14.0	9.0	11.5	17.0	12.5	15.0
29	---	---	---	13.5	10.5	12.0	15.0	10.5	13.0	15.5	12.0	14.0
30	---	---	---	14.0	10.5	12.5	15.0	11.0	13.0	14.0	12.5	13.0
31	---	---	---	14.0	10.5	12.5	---	---	---	14.5	12.0	13.0
MONTH	9.5	1.5	6.0	14.0	5.5	9.0	15.0	7.0	11.0	18.0	9.5	13.5

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued
WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	12.5	13.0	---	---	---	22.5	18.5	20.5	22.5	20.0	21.0
2	---	---	---	---	---	---	22.0	18.0	20.0	21.5	17.5	19.5
3	---	---	---	---	---	---	22.0	18.0	20.0	21.5	17.0	19.5
4	17.0	14.0	15.0	---	---	---	22.5	18.0	20.5	---	---	---
5	17.0	15.5	16.5	---	---	---	22.5	18.5	20.5	---	---	---
6	18.5	16.0	17.5	---	---	---	24.0	18.5	21.0	---	---	---
7	18.5	16.5	17.5	---	---	---	24.0	19.0	21.5	---	---	---
8	18.5	17.0	17.5	---	---	---	22.5	19.5	21.5	---	---	---
9	17.5	16.0	16.5	---	---	---	24.0	20.5	22.5	---	---	---
10	17.0	15.0	16.0	---	---	---	24.5	20.5	22.0	---	---	---
11	---	---	---	---	---	---	23.5	18.5	21.0	---	---	---
12	---	---	---	---	---	---	23.0	20.5	22.0	19.5	14.5	17.0
13	19.0	17.0	18.0	---	---	---	25.5	20.0	22.5	18.5	15.0	17.0
14	19.5	17.5	18.5	---	---	---	26.0	21.0	23.5	19.5	15.5	17.5
15	19.5	17.5	18.5	---	---	---	25.5	20.5	23.0	18.5	16.0	17.5
16	20.0	17.5	18.5	---	---	---	25.5	20.5	23.0	19.5	16.0	17.5
17	20.0	18.0	19.0	---	---	---	24.5	21.5	23.0	19.0	14.0	16.5
18	19.0	18.0	18.5	---	---	---	26.0	21.0	23.5	18.5	15.0	17.0
19	---	---	---	---	---	---	25.5	21.5	23.5	19.0	15.0	17.0
20	---	---	---	---	---	---	25.5	21.0	23.0	18.5	15.0	17.0
21	---	---	---	---	---	---	25.0	21.5	23.0	18.0	14.5	16.5
22	---	---	---	---	---	---	25.0	21.0	23.0	18.0	15.0	16.5
23	---	---	---	---	---	---	23.0	21.0	22.0	17.0	15.0	16.0
24	---	---	---	21.5	17.5	19.5	24.0	20.0	21.5	15.5	13.0	14.5
25	---	---	---	21.5	18.0	19.5	23.5	19.5	21.5	14.0	11.5	13.0
26	---	---	---	22.0	18.0	20.0	23.0	20.0	21.5	14.5	11.5	13.0
27	---	---	---	23.0	18.0	20.5	23.0	18.5	21.0	16.0	11.5	14.0
28	---	---	---	23.0	18.0	20.5	22.5	19.5	21.0	16.0	12.0	14.0
29	---	---	---	23.0	18.0	20.5	20.5	18.0	19.5	16.0	12.5	14.5
30	---	---	---	23.5	18.5	21.5	23.0	18.0	20.5	15.5	11.0	13.5
31	---	---	---	22.5	19.5	21.0	23.0	19.0	21.5	---	---	---
MONTH	20.0	12.5	17.0	23.5	17.5	20.5	26.0	18.0	21.5	22.5	11.0	16.5
YEAR	26.0	.0	11.5									

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1400	2790	669	1740	802	2990	601	2400	1110	7610	589	3990
2	1410	2680	1050	2920	1050	3860	630	2480	994	6900	463	3140
3	1410	3160	793	2290	544	1920	687	2730	955	6680	351	2360
4	842	1970	1100	3210	564	1950	971	3800	851	6000	371	2490
5	604	1270	1080	3150	293	989	470	1800	913	6340	307	2070
6	515	969	1090	3330	302	1020	414	1590	982	6790	211	1440
7	828	1560	760	2440	378	1250	571	2200	800	5590	504	3630
8	1460	3550	965	3000	428	1390	416	1560	717	4920	513	3840
9	1600	5830	1080	3410	407	1290	427	1590	753	4780	765	5760
10	2870	12400	957	2970	386	1250	782	2960	940	6240	923	7000
11	8730	53700	763	2310	339	1070	481	1830	199	1270	598	4590
12	6110	32300	803	2430	561	1300	329	1260	782	5130	561	4330
13	2320	10300	664	2030	334	721	322	1240	867	5760	432	3270
14	2050	8300	654	2030	240	511	325	1250	483	3210	320	2380
15	1600	6310	696	2180	208	423	1030	4390	406	2730	312	2320
16	747	2900	725	2270	300	708	504	2180	460	3120	321	2350
17	1910	7270	1160	3880	335	872	453	1980	538	3620	276	1980
18	858	3270	1390	5070	441	1290	1410	7690	527	3590	211	1250
19	1810	6890	1760	7080	481	1810	1190	6520	702	4800	171	905
20	1280	4870	1690	7070	583	2220	929	5020	814	5740	266	1100
21	1090	4030	2280	9790	565	2180	981	5300	621	4430	418	1560
22	1170	4140	1290	5360	555	2190	1330	7150	887	6490	246	1090
23	940	3250	1080	4110	555	2170	598	3210	874	6350	192	886
24	999	3260	880	3230	620	2430	681	3680	737	5250	188	878
25	1030	3200	1180	4170	514	2030	947	5110	501	3120	177	851
26	1210	3820	1440	5600	380	1510	846	4550	492	3040	312	1730
27	863	2660	1470	6030	666	2660	1210	6440	642	4090	258	1380
28	815	2290	843	3510	801	3180	1070	6530	667	4300	223	1110
29	947	2610	715	2900	466	1850	1320	8800	---	---	332	1930
30	1060	2920	840	3330	685	2740	1260	8470	---	---	331	2050
31	807	2130	---	---	887	3520	1200	8040	---	---	461	3100
TOTAL	---	206599	---	112840	---	55294	---	123750	---	137890	---	76760

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1050	9330	335	4240	473	8050	226	2890	393	1370	253	521
2	906	8830	916	12300	458	8370	211	2710	244	705	208	450
3	1020	10400	1100	15300	372	6940	172	2180	343	963	147	320
4	731	7460	1180	18500	320	5460	250	3030	918	2410	119	252
5	586	5900	1080	18100	383	5720	271	2950	2050	4690	93	139
6	590	5930	795	13300	307	4390	304	3040	156	327	94	115
7	521	5220	647	10900	290	4360	227	2180	149	288	72	83
8	584	5990	517	8280	310	4960	479	4980	406	782	119	138
9	453	4610	415	6210	725	13000	708	7780	592	1180	418	599
10	519	5400	453	6030	479	9210	588	6100	185	342	406	711
11	430	4470	566	6480	509	10400	243	2360	131	257	806	1840
12	423	4280	581	5930	494	10500	215	2050	137	263	704	1740
13	385	3830	337	2910	391	7980	167	1640	175	343	1560	4420
14	391	3770	475	3370	323	5810	204	1960	186	340	10300	47600
15	464	4500	458	4280	312	4840	197	1720	129	223	1280	5770
16	601	5710	360	3350	396	5620	833	7260	101	164	3060	11700
17	430	4050	230	2300	437	5850	712	6290	110	166	3610	12200
18	903	8120	218	2170	279	3710	222	1690	114	174	309	813
19	341	3250	504	4900	222	2960	326	2250	289	463	238	577
20	277	2590	750	7130	257	3460	461	3210	221	318	248	649
21	299	2720	226	2100	228	3210	354	2300	121	168	262	750
22	309	2820	193	1800	215	3030	920	6530	128	181	152	335
23	343	3230	230	2200	190	2680	1870	16600	182	254	114	219
24	352	3470	227	2320	306	4310	495	4200	89	129	426	887
25	370	3910	245	2630	257	3530	375	2790	1280	2160	543	1260
26	710	8340	249	2820	405	5520	615	4250	1150	2060	228	478
27	609	7560	261	2990	2550	36400	249	1610	632	1210	107	211
28	534	6730	384	4470	379	4880	181	1050	176	307	208	436
29	434	5400	929	12200	278	3520	129	662	118	196	230	551
30	372	4640	952	13600	242	3040	118	526	93	168	220	580
31	---	---	488	7440	---	---	372	1500	151	249	---	---
TOTAL	---	162460	---	210550	---	201710	---	110288	---	22850	---	96344

TOTAL LOAD FOR YEAR: 1517335 TONS.

08315500 MCCLURE RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'18", long 105°50'06", in NE¼SW¼, sec.24, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, at McClure Dam on Santa Fe River, 2.1 mi upstream from Nichols Reservoir, 5.8 mi east of Santa Fe, and at mile 37.1.

DRAINAGE AREA.--17.4 mi².

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. Prior to January 1980 at site on outlet tower.

GAGE.--Water-stage recorder. Elevation of gage is 7,788 ft above National Geodetic Vertical Datum of 1929, 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.

REMARKS.--No estimated daily contents. Reservoir is formed by earthfill dam, completed in 1926, capacity, 561 acre-ft, raised 3 ft in 1935, capacity, 650 acre-ft, and raised 36.5 ft more in 1947, capacity, 2,615 acre-ft at gage height 96.6 ft, crest of concrete spillway. Between October 1947 and May 1953 varying amounts of sandbag bulkheads were placed on crest of spillway to increase capacity. Between May 1953 and December 1971 spillway was equipped with radial gates that opened automatically thereby increasing capacity to over 3,000 acre-ft. Radial gates were removed during 1972, capacity, 2,615 acre-ft. No dead storage. Water is for municipal use of city of Santa Fe.

COOPERATION.--Capacity table provided by Public Service Co. of New Mexico.

EXTREMES FOR 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.

EXTREMES FOR CURRENT YEARS.--Maximum contents, 2,660 acre-ft many days; maximum gage height, 97.11 ft, June 11; minimum, 1,530 acre-ft, Oct. 7, 8, gage height, 79.54 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Public Service Co. of New Mexico in 1947)

75	1,280	90	2,160
80	1,550	95	2,500
85	1,840	100	2,860

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	2200	2430	2520	2480	2470	2280	2510	2640	2660	2650	2640
2	1580	2220	2440	2520	2480	2480	2280	2520	2640	2660	2650	2630
3	1570	2230	2440	2520	2480	2480	2290	2540	2640	2650	2650	2630
4	1560	2240	2450	2520	2480	2470	2300	2560	2640	2650	2650	2600
5	1550	2260	2450	2350	2470	2460	2320	2590	2650	2650	2650	2580
6	1540	2260	2460	2360	2470	2460	2330	2610	2650	2650	2640	2560
7	1530	2270	2460	2380	2470	2440	2330	2630	2650	2650	2650	2540
8	1530	2290	2460	2390	2470	2430	2370	2640	2650	2650	2640	2530
9	1540	2300	2470	2400	2470	2420	2380	2640	2650	2650	2650	2520
10	1550	2300	2470	2400	2470	2410	2400	2640	2650	2650	2640	2500
11	1620	2310	2470	2410	2470	2400	2420	2640	2650	2650	2640	2490
12	1670	2320	2470	2420	2470	2390	2430	2640	2650	2650	2640	2480
13	1700	2330	2470	2420	2470	2380	2440	2640	2650	2650	2640	2470
14	1720	2330	2480	2430	2470	2370	2450	2640	2650	2650	2640	2470
15	1750	2340	2480	2440	2470	2350	2450	2640	2650	2650	2640	2460
16	1780	2350	2490	2440	2460	2340	2460	2640	2640	2650	2640	2450
17	1820	2350	2490	2510	2460	2330	2460	2640	2650	2650	2640	2440
18	1870	2360	2490	2500	2460	2320	2460	2640	2650	2650	2640	2430
19	1910	2360	2500	2500	2470	2310	2460	2640	2650	2660	2640	2420
20	1950	2370	2500	2500	2460	2300	2460	2640	2650	2660	2640	2410
21	1980	2370	2500	2500	2460	2290	2460	2640	2650	2660	2640	2390
22	2010	2380	2510	2500	2470	2280	2460	2640	2650	2660	2640	2380
23	2030	2390	2510	2500	2470	2270	2460	2640	2640	2660	2640	2370
24	2060	2390	2510	2490	2470	2270	2470	2640	2640	2660	2640	2370
25	2080	2400	2510	2490	2470	2260	2480	2640	2650	2660	2640	2360
26	2100	2410	2520	2490	2470	2260	2480	2640	2660	2660	2640	2360
27	2120	2410	2520	2490	2470	2260	2490	2640	2660	2660	2640	2360
28	2140	2420	2520	2490	2470	2260	2490	2640	2660	2650	2640	2370
29	2150	2420	2520	2490	---	2260	2500	2640	2660	2650	2640	2370
30	2170	2430	2520	2490	---	2260	2500	2640	2660	2650	2640	2370
31	2190	---	2520	2490	---	2270	---	2640	---	2650	2640	---
MAX	2190	2430	2520	2520	2480	2480	2500	2640	2660	2660	2650	2640
MIN	1530	2200	2430	2350	2460	2260	2280	2510	2640	2650	2640	2360
(†)	90.24	93.71	95.08	94.53	94.32	91.42	94.78	96.77	96.99	96.92	96.77	92.83
(††)	+590	+240	+90	-30	-20	-200	+230	+140	+20	-10	-10	-270

CAL YR 1985 MAX 2690 MIN 1530 (††) +400
WTR YR 1986 MAX 2660 MIN 1530 (††) +770

(†) GAGE HEIGHT, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08316000 SANTA FE RIVER NEAR SANTA FE, NM

LOCATION.--Lat 35°41'12", long 105°50'35", in NE¼SE¼ sec.23, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, on left bank 0.4 mi downstream from McClure Dam, 5.3 mi east of Santa Fe, and at mile 36.6.

DRAINAGE AREA.--18.2 mi².

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.

REVISED RECORDS.--WSP 1512: 1933, 1936-37(M), 1942, drainage area. WSP 1732: 1923, 1925. WDR NM-75-1: 1927.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,718 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1312 for history of changes prior to Oct. 1, 1947.

REMARKS.--Estimated daily discharges: Jan. 1 to Mar. 3. Records good except for estimated daily discharge, which are fair. Flow regulated by McClure Reservoir (station 08315500), completed in 1926, raised in 1935 and again in 1947. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--73 years, 8.07 ft³/s, 5,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,500 ft³/s, Aug. 14, 1921, gage height, 5.17 ft, site and datum then in use, from rating curve extended above 150 ft³/s; minimum, 0.05 ft³/s, Apr. 7, 8, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks which probably exceeded 1,000 ft³/s occurred Aug. 19, 1872, and Sept. 29 or 30, 1904. Without regulation the flood of Sept. 23, 1929, might have exceeded 1,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 39 ft³/s, July 23, gage height, 2.35 ft; minimum daily, 1.1 ft³/s many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	1.2	1.1	2.6	2.4	2.4	8.4	9.0	16	23	16	4.9
2	9.6	1.2	1.1	2.6	2.4	2.4	8.5	9.0	15	22	15	7.2
3	9.6	1.2	1.1	2.6	2.4	2.4	8.6	9.0	16	19	14	11
4	9.6	1.2	1.1	2.6	2.4	4.8	8.6	9.1	15	18	12	14
5	9.4	1.2	1.1	2.6	2.4	6.5	8.6	9.1	16	19	11	14
6	9.4	1.2	1.1	2.4	2.6	6.7	8.6	9.1	18	16	10	14
7	6.9	1.2	1.1	2.4	2.6	7.1	8.8	9.1	19	15	9.6	14
8	4.0	1.2	1.1	2.4	2.6	7.2	9.1	15	21	22	9.0	14
9	4.1	1.2	1.1	2.4	2.6	8.5	9.1	17	27	18	9.1	14
10	4.2	1.2	1.1	2.4	2.6	8.5	9.1	16	23	16	8.2	14
11	5.0	1.2	1.1	2.2	2.5	8.4	9.1	15	20	15	8.7	14
12	4.5	1.2	1.1	2.2	2.3	8.4	9.2	15	18	13	7.9	14
13	4.2	1.2	1.1	2.2	2.4	8.6	9.2	14	17	13	7.6	14
14	4.2	1.2	1.1	2.2	2.4	8.6	9.2	15	16	12	6.8	14
15	2.6	1.1	1.1	2.2	2.4	8.6	9.3	15	15	13	6.4	14
16	1.4	1.1	1.1	2.2	2.4	8.5	9.3	15	14	22	5.9	14
17	1.6	1.1	1.1	2.2	2.4	8.5	9.3	18	12	23	6.3	14
18	1.6	1.1	1.1	2.2	2.4	8.5	9.3	15	12	22	6.0	14
19	1.6	1.1	1.1	2.2	2.4	8.4	9.2	14	12	25	5.3	13
20	1.6	1.1	1.1	2.2	2.4	8.4	9.0	14	11	26	5.3	14
21	1.5	1.1	1.1	2.2	2.4	8.4	9.0	14	10	25	4.5	14
22	1.5	1.1	1.1	2.2	2.4	8.3	9.0	14	9.7	24	4.8	14
23	1.4	1.1	1.1	2.2	2.4	8.3	9.0	14	8.9	36	5.6	12
24	1.4	1.1	1.1	2.4	2.4	8.3	9.0	14	11	34	5.8	9.0
25	1.4	1.1	1.1	2.4	2.4	8.3	9.0	15	13	32	5.7	9.0
26	1.3	1.1	1.1	2.4	2.4	8.3	9.0	16	22	30	7.7	6.7
27	1.3	1.1	1.3	2.4	2.4	8.3	9.0	16	28	27	9.0	4.9
28	1.3	1.1	1.6	2.4	2.4	8.3	9.0	16	29	23	7.0	4.9
29	1.3	1.1	1.6	2.4	---	8.3	9.0	17	28	21	6.1	4.9
30	1.2	1.1	2.1	2.4	---	8.3	9.0	16	25	19	5.6	4.9
31	1.2	---	2.6	2.4	---	8.3	---	16	---	17	5.1	---
TOTAL	119.5	34.4	37.8	72.8	68.2	232.8	269.5	429.4	517.6	660	247.0	344.4
MEAN	3.85	1.15	1.22	2.35	2.44	7.51	8.98	13.9	17.3	21.3	7.97	11.5
MAX	9.6	1.2	2.6	2.6	2.6	8.6	9.3	18	29	36	16	14
MIN	1.2	1.1	1.1	2.2	2.3	2.4	8.4	9.0	8.9	12	4.5	4.9
AC-FT	237	68	75	144	135	462	535	852	1030	1310	490	683

CAL YR 1985	TOTAL	6086.2	MEAN	16.7	MAX	99	MIN	1.1	AC-FT	12070
WTR YR 1986	TOTAL	3033.4	MEAN	8.31	MAX	36	MIN	1.1	AC-FT	6020

08316500 NICHOLS RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'24", long 105°52'46", in SE¼NE¼ sec.21, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, at Nichols Dam on Santa Fe River, 0.6 mi east of Twomile Reservoir, 3.3 mi east of Santa Fe, and at mile 34.4.

DRAINAGE AREA.--22.8 mi².

PERIOD OF RECORD.--March 1943 to September 1965 (monthend contents only), October 1965 to current year. Prior to January 1980 at site on outlet tower.

GAGE.--Water-stage recorder. Datum of gage is 7,313.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily contents. Reservoir is formed by earthfill dam. No centents 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.--Survey to compute capacity table provided by Public Service Co. of New Mexico.

EXTREMES FOR 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.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 706 acre-ft, July 23, gage height, 167.69 ft; minimum, 263 acre-ft, Mar. 3, 4, gage height, 148.96.

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

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	643	510	380	327	269	477	410	577	701	695	401
2	600	639	506	375	326	266	483	406	590	700	695	392
3	597	634	502	370	325	263	486	401	598	695	695	391
4	602	629	498	365	324	263	489	398	604	696	694	396
5	610	625	495	360	324	268	493	392	611	698	692	402
6	620	620	491	357	323	274	496	383	620	695	684	407
7	625	615	487	355	323	282	494	375	628	694	676	411
8	622	609	484	353	322	290	490	380	643	698	655	423
9	620	604	481	351	322	298	486	393	676	698	643	439
10	621	600	476	349	321	307	483	403	691	698	628	455
11	641	596	472	347	320	315	478	409	693	696	618	470
12	654	591	468	345	324	322	474	409	691	694	607	484
13	662	585	464	343	324	330	469	410	684	692	600	501
14	668	578	460	340	323	336	467	415	678	691	589	521
15	669	573	456	339	320	344	465	421	677	694	573	535
16	669	568	449	338	311	351	461	429	671	701	557	554
17	674	563	445	337	308	359	454	443	665	702	544	573
18	681	559	441	336	308	367	449	451	658	701	533	589
19	684	553	435	335	308	374	451	457	658	701	520	606
20	685	549	428	335	303	382	451	464	649	700	501	622
21	682	544	422	334	296	390	447	470	637	702	477	638
22	678	541	416	333	295	398	443	475	625	702	462	653
23	675	537	410	333	295	407	438	478	616	706	455	658
24	673	533	404	332	293	415	435	483	614	705	452	658
25	670	530	398	331	289	423	431	490	621	704	445	663
26	667	527	392	331	281	431	427	499	650	702	440	664
27	664	523	387	330	275	439	423	511	694	700	437	662
28	660	520	383	329	272	446	422	524	704	700	427	660
29	656	516	378	329	---	454	419	538	703	697	420	656
30	651	513	376	328	---	461	415	551	702	695	412	653
31	648	---	382	327	---	469	---	563	---	694	409	---
MAX	685	643	510	380	327	469	496	563	704	706	695	664
MIN	597	513	376	327	272	263	415	375	577	691	409	391
(†)	165.75	160.83	155.29	152.52	149.55	159.05	156.73	162.70	167.53	167.29	156.46	165.93
(††)	+45	-135	-131	-55	-55	+197	-54	+148	+139	-8	-285	+244

CAL YR 1985 MAX 728 MIN 328 (††) -147
WTR YR 1986 MAX 706 MIN 263 (††) +50

(†) GAGE HEIGHT, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08317200 SANTA FE RIVER ABOVE COCHITI LAKE, NM

LOCATION.--Lat 35°32'49", long 106°13'41", in NW¼ sec.8, T.15 N., R.7 E., Santa Fe County, Hydrologic Unit 13020201 in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 mi upstream from Cochiti Dam, 6.3 mi east of Pena Blanca, and at mile 7.9.

DRAINAGE AREA.--231 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 5,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-30, Feb. 6-11, Mar. 21 to Apr. 8 and July 3-5. Water-discharge records good. 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 upstream from station. See tabulation below for the results of discharge measurements made during year at point adjacent to gage of an unnamed ditch on right bank which diverts water 0.4 mi upstream and bypasses gage; ditch flow not included in record.

AVERAGE DISCHARGE.--16 years, 9.64 ft³/s, 6,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, July 26, 1971, gage height, 9.58 ft, from rating curve extended above 160 ft³/s on basis of slope-area measurements at gage heights 5.69 ft and 9.58 ft; no flow July 16-18, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	1700	*750	*3.56	Sept. 8	0145	342	2.81
July 12	2100	450	2.98	Sept. 14	0200	485	3.14
July 13	2330	440	2.96				

Minimum daily, 1.9 ft³/s, May 26.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Dec. 9	0	Feb. 10	0	Apr. 8	1.6	July 3	0
Jan. 13	0	Mar. 12	0	May 13	2.6		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	11	11	18	10	7.0	3.6	5.9	12	5.0	3.4
2	9.8	9.3	11	11	18	10	7.0	4.1	4.0	11	5.2	3.8
3	9.8	11	11	10	19	10	9.1	4.8	4.6	10	6.0	3.4
4	9.7	10	11	11	19	9.9	8.0	4.6	4.5	9.5	5.0	3.6
5	9.7	10	10	11	19	10	7.2	3.5	5.0	9.5	4.5	3.6
6	9.7	10	11	11	18	9.2	6.9	3.5	3.5	13	4.8	3.1
7	9.8	10	11	11	18	8.0	6.8	3.5	2.7	17	6.2	29
8	9.8	10	11	11	18	8.7	7.5	3.6	77	12	4.7	49
9	10	9.6	11	12	19	11	6.9	3.7	13	11	5.0	6.4
10	10	9.5	11	14	19	11	7.3	3.5	7.8	7.0	5.9	10
11	60	11	12	14	18	12	8.9	3.7	7.8	5.1	4.5	6.3
12	34	11	20	14	15	12	7.9	3.5	7.8	38	4.4	6.0
13	21	10	25	13	13	11	7.1	3.1	7.9	62	5.3	8.1
14	11	11	40	13	13	11	6.1	2.0	7.2	59	4.8	72
15	14	10	16	13	13	9.4	4.1	3.8	4.2	20	4.1	9.0
16	30	10	12	14	15	10	6.0	3.4	5.6	16	4.2	8.7
17	60	10	12	14	14	9.8	8.2	4.1	7.6	16	4.3	8.2
18	30	9.6	11	14	12	8.5	6.9	2.8	8.1	16	3.7	7.0
19	21	10	11	14	11	9.6	12	4.4	5.7	24	3.9	6.4
20	15	11	11	15	11	9.2	9.7	3.6	6.0	17	3.9	5.9
21	10	12	11	17	10	9.1	9.8	3.4	5.3	17	3.6	5.8
22	10	11	11	16	10	8.3	8.3	3.3	4.9	16	3.7	5.9
23	11	10	11	17	11	9.1	6.1	2.4	4.7	22	4.2	6.2
24	11	9.7	11	17	11	8.0	5.0	3.1	6.4	24	6.3	8.7
25	11	10	11	17	11	7.8	6.5	2.7	7.3	22	4.5	7.3
26	11	10	10	18	11	7.9	7.6	1.9	10	19	5.2	6.8
27	10	10	10	18	11	7.8	8.2	3.6	8.1	15	4.8	5.5
28	11	10	11	19	10	7.6	8.8	4.0	7.0	11	3.8	5.3
29	10	11	10	19	---	7.2	7.7	5.9	11	8.6	4.4	5.2
30	9.8	11	10	18	---	7.1	5.2	5.6	12	6.0	4.5	5.1
31	10	---	10	18	---	7.1	---	6.1	---	5.9	3.9	---
TOTAL	509.1	307.7	395	445	405	287.3	223.8	114.8	272.6	551.6	144.3	314.7
MEAN	16.4	10.3	12.7	14.4	14.5	9.27	7.46	3.70	9.09	17.8	4.65	10.5
MAX	60	12	40	19	19	12	12	6.1	77	62	6.3	72
MIN	9.7	9.3	10	10	10	7.1	4.1	1.9	2.7	5.1	3.6	3.1
AC-FT	1010	610	783	883	803	570	444	228	541	1090	286	624

CAL YR 1985	TOTAL	7318.9	MEAN	20.1	MAX	205	MIN	2.5	AC-FT	14520
WTR YR 1986	TOTAL	3970.9	MEAN	10.9	MAX	77	MIN	1.9	AC-FT	7880

08317200 SANTA FE RIVER ABOVE COCHITI LAKE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-75, 1979, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
06...	1415	9.9	570	612	8.40	8.50	16.0	12.0	9.2	34	140	0
MAR												
12...	1430	12	550	629	8.50	8.40	8.0	11.0	--	--	140	0
MAY												
30...	0930	5.5	--	607	8.30	8.10	16.0	12.0	8.4	--	120	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
NOV												
06...	44	7.1	65	2	6.2	197	52	37	0.90	24	360	1.30
MAR												
12...	43	7.2	81	3	7.0	219	48	37	0.80	23	380	--
MAY												
30...	37	6.8	68	3	6.8	187	50	40	0.90	20	340	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV												
06...	1.30	0.060	0.94	2.3	3.50	1.30	7.1	160	9	38	1.0	--
MAR												
12...	--	--	--	--	--	--	--	150	19	49	1.6	--
MAY												
30...	--	--	--	--	--	--	--	150	26	275	4.1	5

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM

LOCATION.--Lat 35°37'01", long 106°18'58", in NW¼SW¼ sec.16, T.16 N., R.6 E., Sandoval County, Hydrologic Unit 13020201, in Pueblo de Cochiti Grant, in control tower at Cochiti Dam, 1.7 mi northeast of Cochiti Pueblo, and at mile 1,588.1.

DRAINAGE AREA.--14,900 mi², approximately, including 2,940 mi², in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S.-Army Corps of Engineers). Prior to Apr. 15, 1975, at site 1.3 mi upstream at same datum.

REMARKS.--Lake is formed by an earthfill dam on Rio Grande and Santa Fe River. Storage began on Nov. 12, 1973. Capacity, based on capacity table effective Jan. 1, 1982, 505,700 acre-ft between elevations 5,247.0 ft and 5,450.0 ft, crest of service spillway. Dead storage 732 acre-ft below elevation 5,255.0 ft, invert of outlet structure. Lake was created primarily for flood and sediment control. A 50,000 acre-ft permanent pool is authorized for recreational purposes.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 300,997 acre-ft, July 3, 1986, elevation, 5,417.32 ft; no storage prior to Nov. 12, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 300,997 acre-ft, July 3, elevation, 5,417.32 ft; minimum, 50,852 acre-ft, Sept. 23, elevation, 5,330.43 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Corps of Engineers in 1981)

5,325	44,346	5,385	170,704
5,345	72,203	5,395	205,437
5,355	90,664	5,405	245,062
5,365	113,640	5,415	289,888
5,375	140,203	5,425	340,423

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178541	182096	213227	222188	183872	128960	96898	142626	222620	300318	263663	88027
2	178541	183154	215171	221561	181824	126100	98170	146008	227900	300706	256475	84218
3	178574	184318	217015	220856	180093	126047	100168	149655	233608	300997	249585	80550
4	178339	185520	218677	220115	178776	120559	102066	154494	237890	300755	242107	78103
5	177969	186659	220310	219337	176996	117826	104063	159794	240305	299882	234632	75481
6	177935	187420	221992	217671	175593	115258	106374	165136	242234	298240	226342	72587
7	178070	187074	223566	216322	174064	112897	108277	170508	244638	296364	218909	70130
8	178473	186037	225030	214904	172610	110808	110319	175493	247658	295789	211409	67425
9	179046	185073	226541	213455	170704	108762	112256	179755	251911	296460	204037	64720
10	178877	184078	227900	212089	169072	106807	114261	182812	256956	296316	196715	62334
11	180500	182983	229266	210618	167290	105012	116286	184592	262375	295741	190346	60273
12	180534	181858	230153	209191	165777	103073	118130	185383	268405	295166	184455	58445
13	108398	180771	230720	207847	163892	101252	119558	185417	273836	294306	178675	57064
14	179856	179789	231531	206288	162022	99802	120971	186244	277403	294162	173006	56938
15	178978	179721	232181	204479	160263	98959	122344	190031	279475	293876	167774	56673
16	179012	181518	232996	202864	158612	98959	123570	192313	280630	293685	162338	55638
17	178776	183427	233567	201114	156943	99050	124673	193902	281185	293781	157158	54848
18	178170	185314	233200	199845	155317	98688	125015	195679	281927	292210	152165	53069
19	178103	187524	232222	198690	153402	98733	125517	197324	282809	289699	147265	51286
20	178002	189822	231247	197647	151295	98665	125756	198798	283973	287296	142339	50954
21	178305	192313	230275	196465	149329	97945	125835	200026	285983	285374	137471	51197
22	178406	194754	229387	195145	147412	97231	125862	201150	287954	284113	132406	50979
23	178137	196822	228502	194115	145484	96566	126100	202243	289652	284766	127886	50852
24	178204	198834	227700	192877	143516	95951	126499	203450	291972	285374	123021	50967
25	178036	200642	226700	191609	140657	95558	127405	204847	294115	285047	118435	51133
26	177935	202681	226063	190486	137891	95754	129203	206769	296988	284300	113219	51107
27	177935	204736	225307	189333	134882	95842	131397	208631	298771	283414	109709	50928
28	178372	207103	224633	188810	131833	95742	134137	210242	299399	282020	105274	51043
29	179248	209191	224317	188323	---	96478	137024	211900	299834	278967	100720	51197
30	180296	211220	223763	187490	---	96105	139778	214751	300125	275936	96522	51158
31	181144	---	222975	186072	---	95798	---	218096	---	269891	92046	---
MAX	181144	211220	233567	222188	183872	128960	139778	218096	300125	300997	263663	88027
MIN	108398	179721	213227	186072	131833	95558	96898	142626	222620	269891	92046	50852
(†)	5388.13	5396.55	5399.60	5389.98	5371.99	5357.43	5374.85	5398.35	5417.14	5410.67	5355.67	5330.67
(††)	+2644	+30076	+11755	-36903	-54239	-36035	+43980	+78318	+82029	-30234	-177845	-40888

CAL YR 1985 MAX 282716 MIN 47168 (††) +175675
WTR YR 1986 MAX 300997 MIN 50852 (††) -127342

(†) ELEVATION, IN FEET, AT END OF MONTH
(††) CHANGE IN CONTENTS, IN ACRE-FEET

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected in Cochiti Lake impounded by Cochiti Dam on the Rio Grande.

PERIOD OF RECORD.--Water years 1981 to current year.

REMARKS.--Samples for chemical analyses are collected annually at surface and/or bottom levels of selected sites, located as follows: Site A, 500 ft upstream from Outlet Tower (Riser); Site B, 0.4 mi east of Outlet Towers (Riser); Site C, approximately 2.5 mi upstream from Outlet Tower (Riser) and 0.3 mi north of boat ramp on east side of lake; Site D, approximately 5.0 mi upstream from Outlet Tower (Riser) at mouth of Bland Canyon.

08313408 - COCHITI LAKE AT SITE D (LAT 35°40'41" LONG 106°18'53")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
19...	1330	48.0	53.0	270	7.60	35.5	22.0	2.8
19...	1331	45.0	53.0	--	--	--	22.0	2.8
19...	1332	40.0	53.0	--	--	--	22.5	2.6
19...	1333	35.0	53.0	--	--	--	22.5	2.5
19...	1334	30.0	53.0	--	--	--	22.5	2.5
19...	1335	25.0	53.0	--	--	--	22.5	2.5
19...	1336	20.0	53.0	--	--	--	22.5	2.8
19...	1337	15.0	53.0	--	--	--	23.0	5.1
19...	1338	10.0	53.0	--	--	--	23.5	7.2
19...	1339	5.00	53.0	--	--	--	24.0	8.7
19...	1340	1.00	53.0	--	--	--	25.5	9.2

08313412 - COCHITI LAKE AT SITE C (LAT 35°38'57" LONG 106°18'39")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
19...	1415	109	114	320	7.20	35.0	20.5	0.7
19...	1416	105	114	--	--	--	21.0	0.5
19...	1417	100	114	--	--	--	21.0	0.5
19...	1418	95.0	114	--	--	--	21.5	0.4
19...	1419	90.0	114	--	--	--	21.5	0.4
19...	1420	85.0	114	--	--	--	21.5	0.4
19...	1421	80.0	114	--	--	--	22.0	0.4
19...	1422	75.0	114	--	--	--	22.0	0.6
19...	1423	70.0	114	--	--	--	22.0	0.8
19...	1424	65.0	114	--	--	--	22.0	0.8
19...	1425	60.0	114	--	--	--	22.0	0.9
19...	1426	55.0	114	--	--	--	22.0	1.3
19...	1427	50.0	114	--	--	--	22.0	1.8
19...	1428	45.0	114	--	--	--	22.5	2.5
19...	1429	40.0	114	--	--	--	22.5	3.1
19...	1430	35.0	114	--	--	--	22.5	3.6
19...	1431	30.0	114	--	--	--	22.5	4.1
19...	1432	25.0	114	--	--	--	22.5	4.3
19...	1433	20.0	114	--	--	--	23.0	4.8
19...	1434	15.0	114	--	--	--	23.0	6.0
19...	1435	10.0	114	--	--	--	23.0	6.9
19...	1436	5.00	114	--	--	--	24.5	12.6
19...	1437	1.00	114	--	--	--	27.0	14.2

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM -- Continued

WATER-QUALITY RECORDS

08317298 - COCHITI LAKE AT SITE B (LAT 35°37'06" LONG 106°18'39")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG								
19...	1505	85.0	90.0	262	7.20	32.0	21.0	1.8
19...	1506	80.0	90.0	--	--	--	21.0	1.4
19...	1507	75.0	90.0	--	--	--	21.5	1.5
19...	1508	70.0	90.0	--	--	--	21.5	1.6
19...	1509	65.0	90.0	--	--	--	22.0	1.4
19...	1510	60.0	90.0	--	--	--	22.0	1.4
19...	1511	55.0	90.0	--	--	--	22.0	1.4
19...	1512	50.0	90.0	--	--	--	22.0	1.4
19...	1513	45.0	90.0	--	--	--	22.5	2.0
19...	1514	40.0	90.0	--	--	--	22.5	2.3
19...	1515	35.0	90.0	--	--	--	22.5	3.0
19...	1516	30.0	90.0	--	--	--	23.0	5.0
19...	1517	25.0	90.0	--	--	--	23.0	6.7
19...	1518	20.0	90.0	--	--	--	23.0	7.1
19...	1519	15.0	90.0	--	--	--	23.0	7.3
19...	1520	10.0	90.0	--	--	--	23.0	7.4
19...	1521	5.00	90.0	--	--	--	23.5	11.3
19...	1522	1.00	90.0	--	--	--	26.0	13.2

08317300 - COCHITI LAKE AT SITE A (LAT 35°38'11" LONG 106°19'05")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS (MG/L AS CACO3) (00900)
AUG												
19...	1100	127	132	245	256	7.50	8.00	27.0	16.5	1.2	<10	94
19...	1101	125	132	--	--	--	--	--	16.5	1.2	--	--
19...	1102	120	132	--	--	--	--	--	18.5	0.9	--	--
19...	1103	115	132	--	--	--	--	--	20.0	1.1	--	--
19...	1104	110	132	--	--	--	--	--	20.0	1.2	--	--
19...	1105	105	132	--	--	--	--	--	20.5	1.4	--	--
19...	1106	100	132	--	--	--	--	--	21.0	1.6	--	--
19...	1107	95.0	132	--	--	--	--	--	21.0	1.8	--	--
19...	1108	90.0	132	--	--	--	--	--	21.0	0.7	--	--
19...	1109	85.0	132	--	--	--	--	--	21.5	0.4	--	--
19...	1110	80.0	132	--	--	--	--	--	21.5	0.7	--	--
19...	1111	75.0	132	--	--	--	--	--	21.5	0.9	--	--
19...	1112	70.0	132	--	--	--	--	--	22.0	1.1	--	--
19...	1113	65.0	132	245	--	7.50	--	--	22.0	1.1	--	--
19...	1114	60.0	132	--	--	--	--	--	22.0	1.1	--	--
19...	1115	55.0	132	--	--	--	--	--	22.0	1.2	--	--
19...	1116	50.0	132	--	--	--	--	--	22.0	1.2	--	--
19...	1117	45.0	132	--	--	--	--	--	22.5	1.2	--	--
19...	1118	40.0	132	--	--	--	--	--	22.5	1.6	--	--
19...	1119	35.0	132	--	--	--	--	--	22.5	2.1	--	--
19...	1120	30.0	132	--	--	--	--	--	23.0	5.3	--	--
19...	1121	25.0	132	--	--	--	--	--	23.0	5.6	--	--
19...	1122	20.0	132	--	--	--	--	--	23.0	6.0	--	--
19...	1123	15.0	132	--	--	--	--	--	23.0	6.4	--	--
19...	1124	10.0	132	--	--	--	--	--	23.5	6.8	--	--
19...	1125	5.00	132	--	--	--	--	--	23.5	7.8	--	--
19...	1126	1.00	132	230	--	9.00	--	--	24.0	10.8	--	--

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM -- Continued

WATER-QUALITY RECORDS

08317300 - COCHITI LAKE AT SITE A (LAT 35°38'11" LONG 106°19'05")

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
AUG 19...	2	29	5.2	15	0.7	2.9	112	0	90	92	88	34

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
AUG 19...	3.9	0.30	18	160	<0.100	<0.100	0.390	0.41	0.020	0.160	5.7	3

DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
AUG 19...	3	30	<1	<1	10	<10	4	3	7	<5	<5

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)
AUG 19...	0.50	0.1	<1	<1	20	20	3.0	220	940	9	1

DATE	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
AUG 19...	10	<50	30	17000	30	1000	0.05	80	12	0	4

08317400 RIO GRANDE BELOW COCHITI DAM, NM

LOCATION.--Lat 35°37'05", long 106°19'24", in SW¼NE¼ sec.17, T.16 N., R.6 E., Sandoval County, Hydrologic Unit 13020201, in Pueblo de Cochiti Grant, on right bank 320 ft upstream from bridge on State Highway 22, 700 ft downstream from Cochiti Dam, 1.4 mi northeast of Cochiti Pueblo, and at mile 1,587.6.

DRAINAGE AREA.--14,900 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 5,226.08 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 14, 1973, at site 2.4 mi downstream at elevation 5,210 ft, from topographic map. Nov. 14, 1973 to Jan. 8, 1976, at site 320 ft downstream at datum 1.79 ft lower.

REMARKS.--Estimated daily discharges: Dec. 12, Feb. 19 to Mar. 11, Apr. 30, May 1, and Sept. 21-30. Water-discharge records good. Discharges include flow of Santa Fe River which is intercepted by Cochiti Dam and released through the combined outlet works. Flow regulated by Cochiti Dam since Nov. 12, 1973. Diversions upstream from 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, head at Cochiti Dam and bypass gage for irrigation of about 6,000 acres downstream from station; see tabulation below for monthly and yearly diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,300 ft³/s, July 26, 1971, gage height, 7.90 ft, site and datum then in use, from rating curve extended above 2,600 ft³/s; minimum, 0.51 ft³/s, Aug. 3-5, 1977, Aug. 27-28, 1978, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 15, 1941, reached a discharge of 23,400 ft³/s at a nearby site upstream from mouth of Santa Fe River. The flood of May 23, 1920, probably exceeded 23,400 ft³/s, and is likely the highest since 1905.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,990 ft³/s, Aug. 5, gage height, 5.03 ft; minimum daily, 84 ft³/s, Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	290	90	1630	3360	3990	2570	2610	3330	3980	4470	2940
2	380	284	89	1630	3360	3990	2870	2680	3350	3950	4430	2900
3	432	290	90	1640	3430	3970	2530	2710	3370	3880	4400	2730
4	575	285	87	1640	3400	3970	2440	2700	3600	3880	4570	2260
5	626	285	90	1640	3380	3970	2460	2690	3720	3930	4810	2110
6	435	460	90	1840	3410	3910	2480	2710	3730	3930	4900	2070
7	272	1140	87	1960	3440	3910	2490	2740	3720	3910	4680	2100
8	329	1450	89	1960	3440	3850	2420	2760	3720	3550	4540	2260
9	892	1450	90	1950	3440	3850	2420	2760	3730	3410	4500	2250
10	1440	1440	84	2000	3440	3850	2430	2760	3860	3450	4450	2190
11	1530	1440	86	2030	3420	3850	2450	2760	3960	3400	4080	2110
12	1510	1440	89	2050	3390	3880	2470	2760	3970	3380	3780	1930
13	1510	1430	90	2070	3590	3860	2480	2760	4010	3390	3630	1860
14	1450	1420	90	2180	3640	3570	2490	1480	4050	3120	3630	1860
15	1320	970	90	2300	3620	3160	2500	801	4060	2860	3450	1860
16	1210	103	90	2340	3590	2640	2500	1620	4060	2860	3250	1860
17	1210	103	470	2410	3580	2480	2500	2140	4070	2860	3230	1840
18	1210	103	954	2540	3570	2300	2800	2150	4010	3040	3220	1810
19	1210	103	1490	2530	3760	1880	3010	2150	3930	3350	3210	1780
20	1040	103	1560	2500	3930	1490	3000	2160	3840	3320	3190	840
21	916	103	1590	2500	3910	1660	3000	2170	3540	3040	3190	890
22	1030	103	1600	2480	3910	1890	3000	2230	3540	2660	3150	860
23	1030	103	1610	2490	3890	1880	2990	2400	3550	2320	3150	718
24	961	103	1600	2480	3870	1880	2980	2560	3560	2380	3090	700
25	930	99	1610	2490	3930	1780	2980	2560	3550	2360	3090	718
26	920	92	1610	2490	4040	1710	2990	2560	3080	2380	3050	736
27	829	90	1610	2490	4100	1810	2990	2640	3630	2390	3030	718
28	509	90	1620	2490	4060	1640	2750	2950	3890	2400	3010	619
29	310	90	1620	2670	---	1600	2620	3310	3900	3090	3010	691
30	197	90	1630	3010	---	2320	2580	3320	3930	2900	3010	840
31	192	---	1630	3160	---	2380	---	3320	---	4320	2980	---
TOTAL	26746	15552	23625	69590	101900	88920	80190	77921	112260	99690	114180	49050
MEAN	863	518	762	2245	3639	2868	2673	2514	3742	3216	3683	1635
MAX	1530	1450	1630	3160	4100	3990	3010	3320	4070	4320	4900	2940
MIN	192	90	84	1630	3360	1490	2420	801	3080	2320	2980	619
AC-FT	53050	30850	46860	138000	202100	176400	159100	154600	222700	197700	226500	97290
(†)	5620	0	0	0	121	6460	7440	7790	7510	7140	7510	5700
(††)	2010	0	0	0	266	3950	4040	4110	3570	3890	3760	2520

CAL YR 1985 TOTAL 844269 MEAN 2313 MAX 8290 MIN 84 AC-FT 1675000 (†) 49534 (††) 30710
WTR YR 1986 TOTAL 859624 MEAN 2355 MAX 4900 MIN 84 AC-FT 1705000 (†) 55290 (††) 28120

(†) DIVERSION, IN ACRE-FEET, BY COCHITI EASTSIDE MAIN CANAL AT HEAD.
(††) DIVERSION, IN ACRE-FEET, BY SILI MAIN CANAL AT HEAD.

08317400 RIO GRANDE BELOW COCHITI DAM, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1984.
WATER TEMPERATURES: July 1971 to September 1982.
SUSPENDED-SEDIMENT DISCHARGES: July 1974 to September 1984, October 1985 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 698 microsiemens, July 19, 1978; minimum daily, 130 microsiemens, July 30, 1978.
WATER TEMPERATURES: Maximum daily, 35.5°C, Aug. 4, 1977; minimum daily, 0.0°C on several days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 343 mg/L, June 16, 1975; minimum daily mean, 1 mg/L on several days in 1977 and 1981.
SEDIMENT LOADS: Maximum daily, 5,050 tons, May 18, 1984; minimum daily, 0.02 ton, Aug. 4, 1977.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 37 mg/L, Nov. 9, May 10; minimum daily mean, 3 mg/L, July 15.
SEDIMENT LOADS: Maximum daily, 299 tons, June 11; minimum daily, 5.5 tons, Dec. 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR					
15...	1200	3160	19	162	96
APR					
10...	1200	2430	18	118	98
22...	1200	3000	13	105	99
MAY					
12...	1200	2800	21	159	99
JUL					
12...	1200	3400	10	92	65
SEP					
09...	1200	2250	26	158	94
29...	1026	691	37	69	96

08317400 RIO GRANDE BELOW COCHITI DAM, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	29	27	24	19	27	6.6	20	88	21	191	16	172
2	29	30	23	18	23	5.5	20	88	21	191	16	172
3	31	36	22	17	23	5.6	20	89	21	194	16	172
4	29	45	23	18	24	5.6	21	93	20	184	16	172
5	28	47	25	19	26	6.3	19	84	19	173	16	172
6	28	33	25	31	26	6.3	24	119	19	175	16	169
7	29	21	32	98	25	5.9	25	132	19	176	15	158
8	29	26	37	145	26	6.2	23	122	19	176	15	156
9	30	72	34	133	25	6.1	23	121	19	176	15	156
10	34	132	34	132	25	5.7	23	124	19	176	16	166
11	30	124	33	128	24	5.6	24	132	20	185	15	156
12	27	110	32	124	25	6.0	23	127	18	165	23	241
13	25	102	32	124	26	6.3	23	129	19	184	14	146
14	25	98	32	123	26	6.3	22	129	19	187	26	251
15	25	89	31	81	26	6.3	21	130	19	186	20	171
16	26	85	29	8.1	27	6.6	20	126	18	174	15	107
17	27	88	28	7.8	26	33	20	130	17	164	25	167
18	25	82	29	8.1	28	72	23	158	16	154	20	124
19	26	85	28	7.8	34	137	22	150	17	173	29	147
20	27	76	28	7.8	28	118	21	142	19	202	23	93
21	27	67	28	7.8	24	103	21	142	18	190	27	121
22	28	78	28	7.8	23	99	21	141	17	179	35	179
23	31	86	29	8.1	23	100	21	141	18	189	16	81
24	30	78	30	8.3	22	95	21	141	17	178	25	127
25	28	70	29	7.8	23	100	20	134	16	170	14	67
26	30	75	30	7.5	22	96	21	141	15	164	17	78
27	28	63	29	7.0	23	100	20	134	16	177	27	132
28	25	34	30	7.3	22	96	20	134	16	175	13	58
29	24	20	29	7.0	22	96	22	159	---	---	15	65
30	26	14	27	6.6	21	92	26	211	---	---	17	106
31	27	14	---	---	21	92	23	196	---	---	13	84
TOTAL	---	2007	---	1324.8	---	1525.9	---	4087	---	5008	---	4366

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13	90	28	197	27	243	19	204	22	266	18	143
2	22	170	27	195	26	235	18	192	22	263	17	133
3	19	130	28	205	26	237	21	220	23	273	16	118
4	17	112	29	211	26	253	17	178	22	271	16	98
5	21	139	25	182	26	261	12	127	22	286	15	85
6	21	141	24	176	27	272	13	138	22	291	11	61
7	29	195	28	207	27	271	16	169	21	265	15	85
8	29	189	30	224	28	281	9	86	21	257	17	104
9	29	189	35	261	28	282	7	64	21	255	22	134
10	19	125	37	276	28	292	7	65	20	240	16	95
11	20	132	35	261	28	299	7	64	22	242	15	85
12	17	113	22	164	27	289	9	82	21	214	23	120
13	24	161	30	224	27	292	6	55	20	196	19	95
14	25	168	19	76	27	295	9	76	20	196	15	75
15	23	155	14	30	27	296	3	23	20	186	17	85
16	23	155	23	101	26	285	5	39	20	175	18	90
17	25	169	28	162	25	275	5	39	20	174	22	109
18	29	219	28	163	24	260	6	49	20	174	23	112
19	30	244	28	163	23	244	5	45	19	165	25	120
20	31	251	28	163	23	238	6	54	20	172	25	57
21	34	275	24	141	22	210	8	66	21	181	26	62
22	15	121	25	151	21	201	9	65	19	162	25	58
23	25	202	24	156	20	192	12	75	18	153	23	45
24	31	249	23	159	20	192	17	109	18	150	24	45
25	33	266	22	152	18	173	15	96	19	159	24	47
26	29	234	22	152	16	133	13	84	20	165	24	48
27	29	234	23	164	18	176	16	103	20	164	25	48
28	35	260	18	143	17	179	21	136	21	171	28	47
29	30	212	17	152	21	221	15	125	20	163	32	60
30	28	195	21	188	20	212	15	117	19	154	31	70
31	---	---	26	233	---	---	24	280	18	145	---	---
TOTAL	---	5495	---	5432	---	7289	---	3225	---	6328	---	2534

TOTAL LOAD FOR YEAR: 48621.7 TONS.

08317900 GALISTEO RESERVOIR NEAR CERRILLOS, NM

LOCATION.--Lat 35°27'44", long 106°12'30", in NW¼ sec.9 T.14 N., R.7 E., Sante Fe County, Hydrologic Unit 13020201, in Mesita de Juana Lopez Grant, at Galisteo Dam on Galisteo Creek, 5.0 mi northwest of Cerrillos, and at mile 11.8.

DRAINAGE AREA.--596 mi².

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

GAGE.--Water-stage recorder above elevation 5,500.3 ft, nonrecording below. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by an earthfill dam, completed Oct. 11, 1970. Capacity, 88,990 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 provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,510 acre-ft, July 26, 1971, elevation, 5,517.00 no storage most of time.

EXTREMES FOR CURRENT YEAR.--No storage all year.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Army Corps of Engineers in 1972)

5,500	0	5,504	41
5,501	2	5,505	69
5,502	9	5,506	109
5,503	21	5,508	244

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

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

CAL YR 1985 MEAN .0 MAX .0 MIN .0

08317950 GALISTEO CREEK BELOW GALISTEO DAM, NM

LOCATION.--Lat 35°27'53", long 106°12'49", in NE¼NE¼ sec.8, T.14 N., R.7 E., Santa Fe County, Hydrologic Unit 13020201, in Mesita de Juana Lopez Grant, on right bank 0.4 mi downstream from Galisteo Dam, 5.3 mi northwest of Cerrillos, and at mile 11.4.

DRAINAGE AREA.--597 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,450 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 21, 1981, at site 1,200 ft downstream at different datum.

REMARKS.--Estimated daily discharges: May 5-13, June 7, 8, 13-16, 21-24, July 12-15, July 28 to Aug. 1, Aug. 4-10, 12-20, 28, Aug. 30 to Sept. 4, and Sept. 11-13, 19-23. Records poor. Flow regulated by Galisteo Reservoir 0.4 mi upstream. Diversions for irrigation of about 50 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 6.35 ft³/s, 4,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s July 27, 1971, gage height, 7.00 ft; maximum gage height, 7.33 ft, July 20, 1971; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 973 ft³/s, Sept. 8, gage height, 5.60 ft, from floodmark; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.2	1.5	2.3	.82	2.3	2.8	1.0	.42	3.1	.00	.00
2	2.6	2.2	1.3	2.3	.88	2.4	4.3	3.2	1.8	12	8.6	.00
3	2.6	2.3	1.3	2.3	1.0	2.2	4.3	2.7	.00	4.8	2.5	.00
4	2.6	2.3	1.3	2.2	1.1	2.3	2.1	2.1	20	2.0	1.0	.00
5	2.6	2.3	1.3	2.1	1.1	2.4	1.9	.00	16	2.5	.00	2.6
6	2.4	2.1	1.4	2.1	1.1	2.5	1.7	.00	1.0	1.3	.00	.96
7	2.4	2.2	1.3	2.0	1.0	2.7	1.7	.00	.00	1.8	.00	3.8
8	2.4	2.3	1.3	1.8	.85	3.0	1.4	.00	.00	307	.00	130
9	23	2.3	1.4	1.6	1.2	3.6	1.3	.00	54	41	.00	10
10	79	2.2	1.1	2.1	1.2	3.7	1.2	.00	13	18	.00	5.0
11	460	2.3	1.9	2.0	1.7	5.1	1.2	.00	6.7	3.0	20	2.0
12	27	2.4	2.2	2.0	2.5	4.3	1.4	.00	1.6	.00	4.0	1.0
13	15	2.1	4.5	1.9	2.4	3.3	1.3	.00	.82	.00	1.0	6.6
14	15	2.3	7.1	1.7	2.1	3.6	.66	.00	.00	.00	.00	8.2
15	15	2.2	8.3	1.8	1.9	3.9	1.1	.00	.00	.00	.00	2.8
16	15	2.2	6.2	1.8	3.2	3.3	1.2	.00	.00	36	.00	4.4
17	69	2.3	6.8	1.7	3.0	4.2	1.3	.00	9.6	13	.00	5.6
18	31	2.2	6.1	1.5	2.9	4.0	.46	.00	10	2.8	.00	2.6
19	24	1.7	7.2	1.4	2.8	4.6	5.1	.00	12	19	.00	.00
20	22	1.9	8.3	1.2	2.7	3.3	2.7	.00	13	16	.00	.00
21	21	2.7	11	1.2	2.9	3.1	1.8	.00	2.0	20	.00	.00
22	15	2.6	12	1.2	2.5	2.8	1.5	.00	.55	12	.00	.00
23	3.1	2.4	11	1.2	2.3	2.9	1.6	.00	.00	42	.00	.00
24	2.1	2.1	3.0	1.2	2.1	3.1	1.9	.00	.00	9.2	.64	17
25	1.9	2.1	2.3	1.2	2.1	3.1	2.3	.00	3.0	4.1	5.4	12
26	2.4	1.8	2.3	1.3	2.1	2.9	2.0	.00	2.0	1.7	31	7.7
27	2.5	1.7	2.5	2.1	2.0	2.8	1.1	.00	1.8	.80	9.1	5.3
28	2.4	1.9	3.1	2.0	2.3	3.0	.50	.00	1.5	.00	2.4	4.3
29	2.1	1.8	1.9	1.7	---	2.8	.59	.00	3.5	.00	.73	5.7
30	1.9	2.1	2.3	1.2	---	2.9	.12	.00	12	.00	.00	6.2
31	2.3	---	2.3	.84	---	2.6	---	.00	---	.00	.00	---
TOTAL	871.9	65.2	125.5	52.94	53.75	98.7	52.53	9.00	186.29	573.10	86.37	243.76
MEAN	28.1	2.17	4.05	1.71	1.92	3.18	1.75	.29	6.21	18.5	2.79	8.13
MAX	460	2.7	12	2.3	3.2	5.1	5.1	3.2	54	307	31	130
MIN	1.9	1.7	1.1	.84	.82	2.2	.12	.00	.00	.00	.00	.00
AC-FT	1730	129	249	105	107	196	104	18	370	1140	171	483

CAL YR 1985	TOTAL	3822.47	MEAN	10.5	MAX	460	MIN	.00	AC-FT	7580
WTR YR 1986	TOTAL	2419.04	MEAN	6.63	MAX	460	MIN	.00	AC-FT	4800

08319000 RIO GRANDE AT SAN FELIPE, NM
(Surveillance network station)

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼NW¼ sec.17, T.14 N., R.5 E., Sandoval County, Hydrologic Unit 13020201, in San Felipe Grant, on right bank 200 ft downstream from Tonque Arroyo, 1,700 ft upstream from steel highway bridge, 0.8 mi upstream from San Felipe Pueblo, 11 mi northeast of Bernalillo, and at mile 1,572.7.

DRAINAGE AREA.--16,100 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1926-30, WSP 1392: 1937(M), WSP 1512: 1931-32, 1933(M), 1934-36, 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 5,115.73 ft above National Geodetic Vertical Datum of 1929. 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.

REMARKS.--Estimated daily discharges: Oct. 2-10. Water-discharge records good. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300) 17 mi upstream. Prior to November 1973 some regulation of flow by El Vado Reservoir (station 08285000) and Abiquiu Reservoir (station 08286900). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions for irrigation of about 705,000 acres upstream from station, some of which is irrigated downstream by Cochiti eastside main canal and San Felipe eastside acequia, which bypass station.

AVERAGE DISCHARGE.--48 years (water years 1926-73), 1,374 ft³/s, 995,500 acre-ft/yr, prior to closure of Cochiti Dam.
13 years (water years 1974-86), 1,600 ft³/s, 1,159,000 acre-ft/yr, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,300 ft³/s, June 26, 1937, gage height, 11.13 ft, site and datum then in use, from rating curve extended above 15,000 ft³/s; minimum, 32 ft³/s, July 7, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in 1874, 1884, and 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,060 ft³/s, at 0830 hours Aug. 6, gage height, 6.02 ft; minimum daily, 172 ft³/s Dec. 11, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	406	175	1620	3580	4280	2560	2800	3660	3920	4420	2720
2	400	405	175	1620	3640	4260	3100	2810	3660	3920	4450	2710
3	380	403	175	1620	3590	4250	2780	2840	3690	3900	4470	2620
4	400	379	174	1620	3400	4180	2640	2840	3840	3920	4560	2320
5	500	364	173	1620	3400	4130	2620	2840	4010	3930	4810	2030
6	540	422	175	1730	3420	4110	2640	2870	4000	3920	4950	2010
7	500	1050	174	1900	3430	4100	2660	2910	4000	3860	4800	2030
8	450	1490	173	1890	3420	4100	2670	2960	4030	3880	4610	2400
9	900	1510	173	1890	3420	4090	2650	2980	4060	3570	4580	2130
10	1300	1510	174	1910	3420	4050	2660	2990	4110	3510	4540	2100
11	1930	1510	172	1940	3400	4060	2670	3030	4200	3480	4330	2110
12	1600	1510	173	1930	3400	4050	2670	3040	4220	3450	3940	2050
13	1590	1510	174	1940	3580	4000	2680	3050	4240	3450	3750	2040
14	1560	1520	173	2010	3660	3830	2670	2210	4240	3300	3710	2080
15	1480	1380	172	2170	3640	3410	2670	1090	4250	3000	3600	2050
16	1340	276	172	2230	3660	2950	2680	1650	4250	3050	3320	2070
17	1380	215	236	2260	3650	2550	2700	2490	4320	3050	3280	1860
18	1350	198	793	2400	3640	2630	2840	2490	4230	3090	3240	1910
19	1340	190	1510	2400	3730	2080	3180	2500	4170	3580	3200	1910
20	1240	185	1600	2410	3970	1740	3180	2500	4130	3510	3160	1520
21	1070	184	1610	2430	3970	1680	3170	2500	3830	3300	3140	1120
22	1120	181	1610	2420	3960	2030	3160	2540	3840	2980	3130	1280
23	1190	180	1620	2440	3960	2030	3160	2620	3850	2660	2990	1080
24	1100	178	1620	2450	3940	2020	3150	2830	3910	2620	2850	1040
25	1090	177	1620	2450	4000	1960	3170	2860	3980	2600	2900	1020
26	1100	179	1620	2440	4170	1800	3170	2860	3660	2600	2890	1060
27	1050	177	1620	2440	4180	1910	3170	2930	3690	2610	2870	1050
28	807	176	1620	2440	4220	1830	3000	3160	3760	2590	2830	969
29	477	176	1620	2530	---	1660	2780	3590	3820	3010	2800	954
30	444	177	1620	2880	---	2230	2780	3620	3880	2880	2790	1180
31	408	---	1620	3030	---	2660	---	3640	---	4140	2760	---
TOTAL	30503	18218	24716	67060	103450	94660	85630	86040	119530	103280	113670	53423
MEAN	984	607	797	2163	3695	3054	2854	2775	3984	3332	3667	1781
MAX	1930	1520	1620	3030	4220	4280	3180	3640	4320	4140	4950	2720
MIN	380	176	172	1620	3400	1660	2560	1090	3660	2590	2760	954
AC-FT	60500	36140	49020	133000	205200	187800	169800	170700	237100	204900	225500	106000
(†)	3330	0	0	0	0	3520	3630	4020	4120	3680	3820	3340

CAL YR 1985 TOTAL 875215 MEAN 2398 MAX 8100 MIN 172 AC-FT 1736000
WTR YR 1986 TOTAL 900180 MEAN 2466 MAX 4950 MIN 172 AC-FT 1786000

(†) MONTHLY DIVERSION, IN ACRE-FT, OF COCHITI EASTSIDE CANAL; RECORD OF THIS FLOW FURNISHED BY MIDDLE RIO GRANDE CONSERVANCY DISTRICT.

08319000 RIO GRANDE AT SAN FELIPE, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
19...	1120	187	425	446	7.50	8.30	7.5	5.0	9.8	1800	160	18
JAN												
06...	1130	1680	285	--	7.80	--	4.0	5.0	11.2	14	--	--
MAR												
06...	1130	3870	300	331	7.30	8.20	19.0	7.5	12.4	18	120	18
APR												
15...	1000	2710	271	--	7.80	--	--	11.5	11.2	--	--	--
MAY												
19...	1100	2370	220	252	7.90	8.00	13.5	19.5	7.6	16	95	22
JUL												
14...	1100	3450	245	247	8.40	8.00	16.5	10.0	9.3	26	88	12
SEP												
02...	1245	2850	250	--	8.00	--	28.0	22.0	8.0	23	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV												
19...	49	8.6	28	1	3.5	170	0	130	140	133	68	9.7
JAN												
06...	--	--	--	--	--	133	0	108	109	--	--	--
MAR												
06...	37	7.1	18	0.7	2.6	127	0	103	104	98	57	5.2
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
19...	29	5.5	12	0.6	2.1	93	0	73	--	76	42	3.0
JUL												
14...	27	5.1	16	0.8	2.9	93	0	76	--	77	42	4.5
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV												
19...	0.40	22	270	<0.100	<0.100	0.060	0.24	--	0.030	0.030	2.5	2
JAN												
06...	--	--	--	--	0.160	0.030	0.87	--	0.040	0.060	3.5	--
MAR												
06...	0.40	17	210	0.200	0.150	0.020	0.38	0.60	0.050	0.020	3.7	--
APR												
15...	--	--	--	0.200	0.230	0.050	0.35	0.60	0.060	0.040	--	--
MAY												
19...	0.20	17	160	0.100	0.110	0.040	0.56	0.70	0.060	0.030	5.0	--
JUL												
14...	0.20	18	160	0.100	0.100	0.030	0.47	0.60	0.060	0.050	4.6	2
SEP												
02...	--	--	--	0.100	0.130	0.080	0.32	0.50	0.080	0.020	4.8	--

08319000 RIO GRANDE AT SAN FELIPE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV 19...	2	50	<1	1	<10	<10	11	3	8	7	<1	0.20
JAN 06...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	30	--	--	--	--	--	--	23	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 19...	--	30	--	--	--	--	--	--	45	--	--	--
JUL 14...	1	30	1	<1	<10	<10	11	9	18	6	<5	0.10
SEP 02...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)
NOV 19...	0.2	<1	<1	70	15	<2.0	3.9	120	3	3	20	<10
JAN 06...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 19...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	0.1	<1	<1	120	10	--	--	--	--	--	--	--
SEP 02...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 19...	30	3000	<10	150	<0.01	30	10	5.0	97	K150	28
JAN 06...	--	--	--	--	--	--	5	23	97	30	19
MAR 06...	--	--	--	--	--	--	24	251	72	K33	K0
APR 15...	--	--	--	--	--	--	28	205	53	7	33
MAY 19...	--	--	--	--	--	--	13	83	88	20	66
JUL 14...	--	--	--	--	--	--	24	224	71	50	200
SEP 02...	--	--	--	--	--	--	26	200	93	3	280

08321500 JEMEZ RIVER BELOW EAST FORK, NEAR JEMEZ SPRINGS, NM

LOCATION.--Lat 35°49'39", long 106°38'52", in NW¼ sec.5, T.18 N., R.3 E., Sandoval County, Hydrologic Unit 13020202, on left bank 0.4 mi downstream from East Fork and boundary of Santa Fe National Forest, 5.3 mi northeast of Jemez Springs, and at mile 43.0.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--July 1949 to October 1950 (gaged separately upstream from East Fork), May 1951 to September 1957 (irrigation seasons only), March 1958 to September 1976, July 1981 to current year.

REVISED RECORDS.--WSP 1512: 1951-54(M), 1955, 1956(M). WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,703 ft above National Geodetic Vertical Datum of 1929 (plane-table survey by Topographic Division, U.S. Geological Survey, 1952). Prior to May 1951, at sites 3,000 ft upstream, at different datums and on separate channels.

REMARKS.--Estimated daily discharges: Dec. 10 to Feb. 20. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--24 years (water years 1950, 1959-76, 1982-86), 32.1 ft³/s, 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,500 ft³/s, Apr. 21, 1958, gage height, 7.35 ft, from rating curve extended above 1,100 ft³/s on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.91 ft³/s, Jan. 24, 1969, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	1115	113	2.06	June 27	1230	123	2.09
Feb. 21	1530	215	2.47	July 21	0915	102	1.99
Apr. 3	0015	215	2.51	Aug. 12	1145	153	2.25
Apr. 27	0230	*342	*2.89				

Minimum daily discharge, 10 ft³/s, Dec. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	23	20	14	15	62	61	55	43	54	28	26
2	18	22	22	15	16	55	120	53	35	44	25	23
3	18	21	25	14	16	50	162	56	41	38	24	22
4	18	21	20	15	16	48	114	60	48	35	26	22
5	18	21	17	15	15	51	107	53	38	43	30	21
6	18	21	21	14	16	48	78	47	32	41	33	21
7	20	19	20	14	14	47	74	44	28	32	26	20
8	22	19	17	13	14	45	75	42	27	37	23	21
9	20	19	17	14	12	49	79	43	35	40	22	23
10	28	19	15	14	11	37	71	41	37	49	33	30
11	99	19	10	13	13	38	67	37	28	44	77	35
12	63	19	17	13	16	37	65	34	24	31	104	24
13	33	19	23	13	25	34	74	31	23	26	83	24
14	28	20	15	13	22	34	64	29	21	30	57	48
15	25	15	15	13	20	33	59	28	19	27	37	42
16	26	17	16	13	21	34	58	27	18	28	29	28
17	45	20	16	14	23	38	63	33	18	39	27	28
18	50	17	17	15	18	34	54	43	24	53	26	23
19	42	14	16	14	18	37	53	34	25	56	23	21
20	47	19	15	14	22	34	50	28	24	69	22	19
21	34	18	14	13	161	40	46	26	20	77	25	19
22	30	18	15	13	87	62	45	24	18	58	25	19
23	27	20	15	13	67	70	47	23	18	75	24	19
24	26	21	14	14	93	67	48	23	26	67	24	26
25	25	25	15	14	112	60	50	22	41	48	36	35
26	25	38	15	15	119	54	115	23	74	39	42	29
27	23	39	14	16	101	56	211	23	109	35	46	26
28	25	29	15	15	73	56	93	27	86	31	36	22
29	25	27	15	15	---	54	68	28	64	28	33	21
30	26	25	15	16	---	52	58	26	72	26	45	22
31	25	---	15	16	---	59	---	41	---	25	34	---
TOTAL	947	644	516	437	1156	1475	2329	1104	1116	1325	1125	759
MEAN	30.5	21.5	16.6	14.1	41.3	47.6	77.6	35.6	37.2	42.7	36.3	25.3
MAX	99	39	25	16	161	70	211	60	109	77	104	48
MIN	18	14	10	13	11	33	45	22	18	25	22	19
AC-FT	1880	1280	1020	867	2290	2930	4620	2190	2210	2630	2230	1510

CAL YR 1985	TOTAL	27011.0	MEAN	74.0	MAX	825	MIN	8.0	AC-FT	53580
WTR YR 1986	TOTAL	12933	MEAN	35.4	MAX	211	MIN	10	AC-FT	25650

08323000 RIO GUADALUPE AT BOX CANYON, NEAR JEMEZ, NM

LOCATION.--Lat 35°43'52", long 106°45'44", Sandoval County, Hydrologic Unit 13020202, in Canon de San Diego Grant, on left bank at downstream end of Guadalupe Box Canyon, 4.8 mi upstream from mouth, 5 mi southwest of Jemez Springs, and 7 mi north of Jemez.

DRAINAGE AREA.--235 mi².

PERIOD OF RECORD.--November 1938 to September 1942, August 1949 to September 1950, (monthly discharge only for November, December 1938 and August 1949 published in WSP 1312), May 1951 to September 1957 (irrigation seasons only), May 1958 to September 1976, July 1981 to current year. Prior to 1951 published as "08323500 Rio Guadalupe near Jemez Springs".

REVISED RECORDS.--WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,015 ft above National Geodetic Vertical Datum of 1929 (plane-table survey by Topographic Division, U.S. Geological Survey, 1952). Prior to 1951 at site 2.4 mi downstream at lower datums.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 13, and Dec. 11-16. Records good except for estimated daily discharges, which are poor. Flow regulated to some extent since October 1958 by San Gregorio Reservoir on Clear Creek, 24 mi upstream (capacity, 345 acre-ft), and by transmountain diversion into Rio Puerco Basin for irrigation of about 300 acres in vicinity of Cuba. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years (water years 1939-42, 1950, 1959-76, 1982-1986), 47.2 ft³/s, 34,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,190 ft³/s, May 13 or 14, 1941, gage height, 8.4 ft, from floodmarks, site and datum in use June 1941 to September 1942, from rating curve extended above 1,000 ft³/s; minimum, 2.8 ft³/s, Dec. 9, 1967.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0915	109	4.37	May 5	0115	*586	*5.84
Apr. 9	2400	185	4.78	July 21	0145	110	4.43
Apr. 26	1145	229	4.93	Aug. 13	0415	141	4.58

Minimum daily discharge, 10 ft³/s, Dec. 11, Jan. 5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	17	13	14	32	68	211	98	30	18	18
2	16	13	15	12	15	33	79	247	94	25	18	16
3	18	14	19	12	13	34	87	265	108	25	17	15
4	17	15	15	11	12	32	100	394	121	25	16	13
5	17	16	14	10	13	31	113	366	93	35	16	13
6	17	14	17	11	12	30	121	255	93	32	19	13
7	19	13	16	11	14	31	146	208	73	25	18	12
8	36	14	14	10	16	29	167	177	64	29	16	13
9	23	14	15	12	16	32	173	142	68	35	18	15
10	26	13	15	12	16	24	172	121	55	33	18	32
11	84	16	10	11	21	27	165	125	46	24	25	57
12	56	18	11	12	17	26	154	138	40	21	31	29
13	40	17	13	12	17	22	152	148	35	19	79	21
14	34	17	14	12	16	22	134	147	31	18	32	26
15	28	14	13	13	16	21	126	129	28	19	22	24
16	26	14	13	12	17	18	132	122	26	23	18	19
17	35	16	14	12	17	20	127	144	24	30	16	42
18	43	17	14	13	20	17	113	147	39	36	16	24
19	30	13	14	13	27	20	107	133	42	30	16	20
20	27	19	13	13	38	16	105	112	31	30	14	17
21	24	21	13	14	37	19	119	118	26	73	14	16
22	22	15	13	14	26	24	156	118	22	38	15	15
23	21	16	13	14	24	30	168	107	23	71	15	15
24	19	17	13	14	28	38	171	104	31	59	16	17
25	19	18	12	12	37	40	168	103	43	39	36	23
26	17	21	12	13	39	39	199	102	71	31	32	26
27	17	21	12	13	39	41	178	101	56	28	27	38
28	17	18	11	13	34	46	159	115	42	24	22	44
29	17	19	11	13	---	55	165	102	32	22	20	48
30	16	19	12	13	---	53	185	99	33	20	26	41
31	17	---	13	15	---	60	---	106	---	19	23	---
TOTAL	813	488	421	385	611	962	4209	4906	1588	968	689	722
MEAN	26.2	16.3	13.6	12.4	21.8	31.0	140	158	52.9	31.2	22.2	24.1
MAX	84	21	19	15	39	60	199	394	121	73	79	57
MIN	15	13	10	10	12	16	68	99	22	18	14	12
AC-FT	1610	968	835	764	1210	1910	8350	9730	3150	1920	1370	1430

CAL YR 1985	TOTAL	36504	MEAN	100	MAX	829	MIN	10	AC-FT	72410
WTR YR 1986	TOTAL	16762	MEAN	45.9	MAX	394	MIN	10	AC-FT	33250

08324000 JEMEZ RIVER NEAR JEMEZ, NM

LOCATION.--Lat 35°39'42", long 106°44'34", Sandoval County, Hydrologic Unit 13020202, in Canon de San Diego Grant, on left bank 0.7 mi downstream from Rio Guadalupe, 3.5 mi north of Jemez, and at mile 29.5.

DRAINAGE AREA.--470 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1712: Drainage area. WSP 1923, 1957-58.

GAGE.--Water-stage recorder. Concrete control since Dec. 6, 1965. Datum of gage is 5,622 ft above National Geodetic Vertical Datum of 1929 (plane-table survey by Topographic Division, U.S. Geological Survey 1952). 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.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years (water years 1937-40, 1950, 1954-86), 75.2 ft³/s, 54,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s, Apr. 21, 1958, from rating curve extended above 2,200 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 10.10 ft, July 15, 1985, present datum; minimum, 1.2 ft³/s, July 25, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1890 occurred between May 6 and 15, 1941, after gage was destroyed (discharge probably exceeded 6,000 ft³/s), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 9	1545	1,680	7.52	Sept. 9	1915	*1,900	*7.77

Minimum discharge, 12 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	51	54	39	54	110	185	267	130	113	42	46
2	37	53	53	36	58	102	238	295	117	85	40	40
3	36	49	63	35	48	95	301	309	138	72	41	37
4	35	48	47	34	43	91	247	369	160	69	45	34
5	34	46	45	29	36	96	238	357	120	88	48	35
6	34	43	52	34	35	96	224	282	116	88	51	34
7	36	41	50	34	29	95	231	242	95	75	46	34
8	54	38	44	29	35	98	254	211	97	76	40	36
9	45	39	46	34	39	104	264	187	99	144	42	160
10	80	41	44	35	33	85	257	169	86	96	71	80
11	199	40	25	33	32	89	246	164	75	85	88	107
12	132	40	31	37	40	84	234	168	64	67	123	78
13	85	40	39	35	42	74	235	170	58	57	149	92
14	69	43	33	36	41	77	215	166	52	58	94	82
15	60	39	42	38	38	77	203	150	49	57	61	89
16	56	44	47	36	44	75	201	145	43	51	47	62
17	89	54	40	37	41	80	205	160	41	66	45	79
18	110	52	41	38	45	71	186	178	55	92	40	62
19	79	43	42	37	58	79	173	169	69	85	36	52
20	83	39	41	37	95	72	169	137	59	106	34	47
21	66	62	41	39	164	80	179	139	43	130	36	45
22	59	48	40	38	132	102	204	139	37	81	43	43
23	54	51	38	40	104	120	219	124	36	111	35	41
24	50	54	38	36	125	130	222	118	53	105	37	51
25	47	61	38	34	155	129	221	116	85	77	57	66
26	47	78	37	35	170	127	293	112	147	62	75	65
27	46	72	36	41	163	133	387	109	175	58	72	73
28	56	63	36	38	126	145	270	129	144	52	60	71
29	53	62	34	43	---	153	243	118	110	46	47	77
30	53	59	36	47	---	150	245	112	117	42	67	73
31	52	---	37	55	---	166	---	137	---	41	63	---
TOTAL	1974	1493	1290	1149	2025	3185	6989	5648	2670	2435	1775	1891
MEAN	63.7	49.8	41.6	37.1	72.3	103	233	182	89.0	78.5	57.3	63.0
MAX	199	78	63	55	170	166	387	369	175	144	149	160
MIN	34	38	25	29	29	71	169	109	36	41	34	34
AC-FT	3920	2960	2560	2280	4020	6320	13860	11200	5300	4830	3520	3750

CAL YR 1985	TOTAL	64760	MEAN	177	MAX	1480	MIN	15	AC-FT	128500
WTR YR 1986	TOTAL	32524	MEAN	89.1	MAX	387	MIN	25	AC-FT	64510

08324000 JEMEZ RIVER NEAR JEMEZ, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT												
02...	1210	37	--	--	--	--	--	--	--	--	--	--
29...	1040	49	420	442	7.40	8.40	21.5	11.5	8.5	14	120	0
JAN												
08...	1045	22	--	--	7.60	--	3.0	1.5	10.6	--	--	--
MAR												
03...	1100	99	--	319	7.80	8.10	12.0	6.0	--	--	96	0
MAY												
07...	1130	223	170	192	7.80	8.10	22.0	10.0	9.1	--	64	0
JUL												
10...	0930	99	315	345	7.80	8.10	21.5	18.0	7.6	19	99	0
AUG												
28...	1030	6.3	285	--	8.20	--	24.0	18.0	8.1	--	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT												
02...	--	--	--	--	--	--	--	--	--	--	--	--
29...	40	4.6	41	2	6.6	150	134	16	45	0.70	35	280
JAN												
08...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
03...	32	3.8	24	1	5.0	--	106	17	23	0.60	27	200
MAY												
07...	22	2.2	11	0.6	2.3	--	73	9.0	11	0.20	18	120
JUL												
10...	33	4.1	29	1	5.7	--	119	12	31	0.50	32	220
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
OCT												
02...	--	--	--	--	--	--	--	--	--	--	--	--
29...	<0.100	<0.100	0.020	0.58	0.020	0.020	3.3	36	36	370	<1	<1
JAN												
08...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
03...	--	--	--	--	--	--	--	--	--	190	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	90	--	--
JUL												
10...	<0.100	<0.100	0.020	0.98	0.070	0.040	8.7	--	--	250	--	--
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--

08324000 JEMEZ RIVER NEAR JEMEZ, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
OCT												
02...	--	--	--	--	--	--	--	--	--	--	--	--
29...	<10	<10	2	2	51	<1	<1	<0.10	<1	<1	10	11
JAN												
08...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
03...	--	--	--	--	55	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	200	--	--	--	--	--	--	--
JUL												
10...	--	--	--	--	140	--	--	--	--	--	--	--
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
02...	--	--	--	--	--	--	--	--	25	2.5	66
29...	5.2	2.0	1.1	1.4	0.8	1.3	0.89	1.3	52	6.9	31
JAN											
08...	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
MAY											
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	--	--	--	--	--	--	--	--	196	52	83
AUG											
28...	--	--	--	--	--	--	--	--	--	--	--

08328500 JEMEZ CANYON RESERVOIR NEAR BERNALILLO, NM

LOCATION.--Lat 35°23'40", long 106°32'50", in SW¼SW¼ sec.32, T.14 N., R.4 E., Sandoval County, Hydrologic Unit 13020202, at corner of outlet works control tower of Jemez Canyon Dam on Jemez River, 2.8 mi upstream from mouth, and 6 mi north of Bernalillo.

DRAINAGE AREA.--1,034 mi².

PERIOD OF RECORD.--October 1953 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam, completed October 19, 1953. Capacity, 172,800 acre-ft, from capacity table adapted January 1, 1985, between elevations 5,125.0 ft sill of outlet gates and 5,252.3 ft operating deck of spillway. Maximum controlled capacity, 102,700 acre-ft at elevation 5,232.0 ft (floor of spillway which is located about 0.8 mi south of dam). Capacity by original survey was 189,100 acre-ft. Original plan for reservoir operation was to desilt all flow above 30 ft³/s by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 71,220 acre-ft, June 8, 1958, elevation, 5,213.36 ft; no storage most of time prior to March 1979.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,328 acre-ft, May 13, elevation, 5,203.43 ft; minimum contents, 26,071 acre-ft, Feb. 20, 21 elevation, 5,194.25 ft.

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

5,160	1,180	5,185	15,400
5,165	2,370	5,190	20,840
5,170	4,200	5,195	27,060
5,175	6,980	5,200	34,100
5,180	10,730	5,205	41,860

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26608	27006	27500	27824	26319	27286	29694	36586	29097	29946	33425	32944
2	26595	26979	27568	27730	26280	27460	29960	36891	28821	30044	33308	32929
3	26516	26953	27635	27541	26267	27595	30282	37335	28436	30086	33191	32856
4	26437	26953	27689	27366	26267	27716	30663	37797	28450	30100	33147	32740
5	26398	26939	27730	27165	26267	27838	30919	38247	28629	30114	33089	32697
6	26372	26873	27797	27019	26267	27947	31160	38575	28739	30114	33017	32668
7	26319	26820	27851	26886	26280	28055	31445	38763	28849	30114	32973	32639
8	26306	26780	27906	26740	26306	28178	31745	38936	28959	30621	32973	32668
9	26346	26767	27960	26595	26346	28300	32033	39061	29028	31274	32987	33293
10	27219	26753	27987	26516	26346	28395	32321	39140	29028	31702	33002	33733
11	27838	26740	28015	26490	26319	28491	32523	39218	29028	31760	33017	33821
12	28096	26701	28042	26463	26319	28656	32900	39297	29028	31717	33133	34381
13	28382	26661	28069	26411	26332	28780	33104	39328	29000	31674	33264	35200
14	28656	26621	28069	26372	26332	28862	33278	38983	28959	31660	33337	36026
15	28519	26595	28069	26319	26306	28780	33395	37921	28904	31947	33366	36328
16	28042	26595	28123	26319	26280	28656	33528	37028	28890	32292	33337	36632
17	27689	26595	28178	26346	26254	28656	33630	36071	28862	32436	33293	36799
18	27299	26595	28232	26346	26188	28753	33747	35125	28821	32610	33235	36891
19	27086	26595	28273	26346	26136	28807	33865	34174	28821	32784	33176	36921
20	26767	26582	28314	26346	26071	28835	33982	33249	28794	32900	33046	36921
21	26714	26635	28259	26346	26071	28904	34100	32192	28753	33147	32973	36921
22	26820	26687	28205	26346	26123	28973	34218	31232	28711	33264	32929	36921
23	26873	26740	28137	26319	26175	29125	34396	30184	28656	33395	32856	36906
24	26926	26793	28083	26306	26254	29166	34633	29736	28629	33513	32784	36465
25	26953	26873	28042	26319	26385	29097	34975	29291	28684	33571	32697	35559
26	26953	26953	28028	26332	26687	28987	35289	28959	29097	33601	32871	34663
27	26953	27059	27987	26332	26926	28945	35604	28656	29485	33615	32987	33777
28	26939	27192	27906	26332	27112	29028	35905	28615	29638	33601	33002	32900
29	26953	27313	27824	26332	---	29166	36162	28753	29778	33571	33002	31976
30	26979	27406	27784	26332	---	29318	36419	28890	29848	33542	32973	31089
31	27006	---	27797	26332	---	29485	---	29000	---	33498	32958	---
MAX	28656	27406	28314	27824	27112	29485	36419	39328	29848	33615	33425	36921
MIN	26306	26582	27500	26306	26071	27286	29694	28615	28436	29946	32697	31089
(†)	+385	+400	+391	-1465	+780	+2373	+6934	-7419	+848	+3650	-540	-1869
(††)	5194.96	5195.26	5195.55	5194.45	5195.04	5196.78	5201.55	5196.43	5197.04	5199.59	5199.22	5197.92

CAL YR 1985 MAX 29862.0 MIN 4135.0 (††) +23728
WTR YR 1986 MAX 39328.0 MIN 26071.0 (††) + 4468

(†) CHANGE IN CONTENTS, IN ACRE-FEET.
(††) ELEVATION, IN FEET, AT END OF MONTH.

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec.5, T.13 N., R.4 E., Sandoval County, Hydrologic Unit 13020202, on right bank 0.8 mi downstream from Jemez Canyon Dam, 2.0 mi upstream from mouth, and 6 mi north of Bernalillo.

DRAINAGE AREA.--1,038 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,095.60 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 24, 1951, at site 0.8 mi 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 gages on Jemez Canyon Dam at datum 5,125.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark) used at times since January 1953.

REMARKS.--Estimated daily discharges: Oct. 1-7. Water-discharge records good except for those below 5.0 ft³/s , which are fair and estimated daily discharges, which are poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (station 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres upstream from station.

AVERAGE DISCHARGE.--44 years (water years 1937, 1944-86), 60.1 ft³/s, 43,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,300 ft³/s, Aug. 29, 1943, gage height, 5.62 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; no flow for many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1900 was probably less than 16,000 ft³/s, but highest observed outside period of record.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 742 ft³/s, May 15; minimum daily, 0.10 ft³/s, Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	24	1.3	58	28	12	26	65	78	19	20	23
2	28	36	1.3	79	28	12	47	65	233	19	20	23
3	28	35	1.1	113	29	11	65	65	315	19	20	23
4	28	34	.60	113	30	11	65	65	136	19	20	24
5	28	34	.60	113	30	11	65	65	34	19	20	25
6	28	49	.60	111	30	11	65	65	25	19	20	25
7	28	60	.52	109	29	11	65	66	24	19	20	25
8	15	52	.45	109	29	11	65	68	23	19	20	25
9	2.5	41	.45	109	29	11	65	69	22	19	20	26
10	4.7	40	.48	81	39	9.7	66	69	20	19	20	22
11	5.7	40	.39	58	52	9.7	66	69	20	19	20	17
12	.32	40	.30	58	51	9.5	66	69	20	19	20	17
13	.20	31	.41	57	49	8.6	66	68	20	19	20	17
14	.10	21	.45	44	57	49	66	310	20	19	21	18
15	151	12	.30	30	69	125	66	742	20	19	21	16
16	319	3.0	.38	30	69	123	66	739	20	19	21	14
17	316	3.0	.45	30	69	65	66	733	20	37	21	14
18	269	2.8	.45	30	69	14	65	732	20	19	20	14
19	217	2.7	15	30	69	14	65	733	20	19	20	14
20	215	2.5	51	30	69	14	65	731	20	20	20	14
21	97	2.4	61	30	62	14	65	727	20	20	20	14
22	.73	2.1	59	30	63	13	65	726	20	20	20	14
23	2.0	2.1	59	30	64	13	65	589	20	20	21	15
24	4.8	2.1	59	30	62	60	65	362	20	20	22	278
25	12	2.1	59	30	61	136	64	365	20	20	22	527
26	16	2.1	59	30	35	164	64	365	20	20	22	529
27	16	2.1	59	30	13	138	64	200	27	20	22	533
28	16	2.0	59	29	12	78	65	77	19	20	22	538
29	14	1.9	58	29	---	28	65	77	19	20	22	540
30	14	1.7	58	29	---	28	65	78	19	20	22	552
31	12	---	58	29	---	26	---	78	---	20	23	---
TOTAL	1916.05	583.6	724.53	1718	1296	1240.5	1898	9232	1314	619	642	3936
MEAN	61.8	19.5	23.4	55.4	46.3	40.0	63.3	298	43.8	20.0	20.7	131
MAX	319	60	61	113	69	164	66	742	315	37	23	552
MIN	.10	1.7	.30	29	12	8.6	26	65	19	19	20	14
AC-FT	3800	1160	1440	3410	2570	2460	3760	18310	2610	1230	1270	7810

CAL YR 1985	TOTAL	52099.63	MEAN	143	MAX	1180	MIN	.00	AC-FT	103300
WTR YR 1986	TOTAL	25119.68	MEAN	68.8	MAX	742	MIN	.10	AC-FT	49820

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JAN												
06...	1430	106	--	--	7.50	--	8.0	5.0	10.0	--	--	--
MAR												
03...	1345	11	--	962	8.40	8.30	12.0	4.0	--	190	25	63
MAY												
07...	1630	68	--	762	8.00	8.30	--	14.0	9.0	160	8	54
JUL												
02...	1320	19	710	702	8.30	8.40	32.0	21.5	7.8	150	4	51

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN												
06...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
03...	8.0	120	4	8.0	165	160	100	0.90	24	580	550	5
MAY												
07...	6.4	88	3	6.8	153	110	82	0.60	24	460	450	32
JUL												
02...	6.1	84	3	6.8	148	97	69	0.70	23	430	430	12

08329700 CAMPUS WASH AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'40", long 106°37'22", in SE¼ sec.16, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 100 ft west of southwest corner of University of New Mexico North Golf Course, 200 ft downstream from Barelas Stormwater Pumping Station outfall, 600 ft downstream from Tucker Road bridge, and 1,500 ft northeast of intersection of Lomas and University Blvds. in Albuquerque.

PERIOD OF RECORD.--April 1982 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Elevation of gage is 5,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Recording rain gage at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft³/s, Aug. 25, 1986, gage height, 4.00 ft, from floodmarks; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s, at 2055 hours Aug. 25, gage height, 4.00 ft; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00			---	7.5	.00	.00	.72	.22	.00
2	.00	.00	.00			---	.05	.00	.00	.00	.00	.00
3	.00	.00	.00			---	.10	3.4	.56	.00	.96	.00
4	.00	.00	---			.00	.00	.00	.00	5.3	1.5	.58
5	.00	.00	---			.00	.00	.00	.00	.69	.33	.00
6	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
7	1.2	.00	---			.00	.00	.00	.00	11	2.3	.00
8	.00	.00	---			.00	.00	.00	.00	5.5	.53	.00
9	9.1	.00	---			.00	.00	.00	.00	2.9	.01	.00
10	27	.00	---			.06	.00	.00	.04	.00	25	.62
11	9.3	.00	---			.69	.00	.00	.00	.00	.01	.00
12	2.6	.00	---			.00	.00	.00	.00	.00	.42	.00
13	.00	.00	---			.00	.00	.00	.00	.00	.00	3.9
14	.00	.00	---			.02	.11	.00	.00	.00	.62	.00
15	.00	.00	---			.18	.46	.00	.00	.00	.37	.00
16	13	.00	---			.00	.22	8.0	.00	6.4	.00	.26
17	7.5	.00	---			.00	.19	14	14	.00	.00	.00
18	.00	.00	---			.00	.00	.00	.29	1.4	.00	.00
19	.00	.00	---			.00	.00	.00	.00	1.1	.00	.00
20	.00	.00	---			.00	.00	.00	.00	2.5	.00	.00
21	.00	.00	---			.00	.00	.25	.00	.00	.00	.00
22	.00	.00	---			.00	.00	.00	.00	1.6	.00	.00
23	.00	.00	---			.00	.00	.00	.00	.00	12	.42
24	.00	.00	---			.00	.05	.00	9.6	.00	2.4	8.8
25	.00	.00	---			.00	2.7	.00	3.7	.00	27	.00
26	.00	.00	---			.00	.00	.01	.00	.43	4.8	.00
27	.00	.00	---			.00	.00	.00	21	.01	.00	.00
28	.00	.00	---			.00	.00	.02	.00	.01	.00	.00
29	.00	.00	---			.00	.00	3.5	.77	.05	.00	.00
30	.00	.00	---			.30	.00	1.6	2.1	.00	.00	.00
31	.01	---	---			.00	---	.00	---	.35	.00	---
TOTAL	69.71	.00	---			---	11.38	30.78	52.06	39.96	78.47	14.58
MEAN	2.25	.00	---			---	.38	.99	1.74	1.29	2.53	.49
MAX	27	.00	---			---	7.5	14	21	11	27	8.8
MIN	.00	.00	---			---	.00	.00	.00	.00	.00	.00
AC-FT	138	.00	---			---	23	61	103	79	156	29

08329835 NORTH FLOODWAY CHANNEL AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'03", long 106°36'42", in SE¼ sec.3, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank of concrete lined drainage channel, 300 ft downstream (north) of bridge on Candelaria Blvd. NE and 3,000 ft downstream from confluence of Campus Wash and Embudo Arroyo in Albuquerque.

PERIOD OF RECORD.--May 1982 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Elevation of gage is 5,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,230 ft³/s, July 31, 1982, gage height, 11.20 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,280 ft³/s, at 1930 hours Aug. 10, gage height, 6.60 ft; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.0	.00			---	64	.00	.00	7.1	.00	.00
2	.00	.34	.00			---	2.4	3.4	.00	.00	.00	1.6
3	.00	.00	.00			---	.00	38	.68	.00	1.6	.00
4	.00	.00	---			.00	.00	1.2	.00	43	.11	11
5	.00	.00	---			.00	.00	.00	.00	3.4	1.7	.00
6	.00	.00	---			.00	.08	.00	.00	.00	.00	.00
7	13	.00	---			.00	.00	.00	.00	54	2.9	.00
8	.00	.88	---			.00	.00	.00	.00	109	3.9	.00
9	110	.00	---			.00	.00	.00	.00	38	.00	3.7
10	135	.00	---			2.3	.00	.00	.00	.00	113	3.9
11	127	.00	---			12	.00	.00	.00	.00	4.3	.00
12	.00	.00	---			.00	.00	.00	.00	.00	1.9	.00
13	3.1	.00	---			.00	.00	.00	.00	.73	2.3	49
14	.46	2.6	---			.00	.44	.00	.00	.00	5.6	5.4
15	.00	.00	---			1.1	.80	.00	.00	.00	.70	7.7
16	119	.00	---			.00	2.2	58	.00	49	.00	12
17	61	.00	---			4.2	1.1	93	95	.00	.00	.00
18	.00	.00	---			1.2	.92	.00	4.0	30	.00	.00
19	.00	.00	---			.00	.00	.00	1.3	20	.00	.00
20	.00	.00	---			.00	.00	.00	1.6	59	.00	1.0
21	.00	.00	---			.00	.00	.00	.00	.89	1.1	.00
22	.94	.00	---			.00	.00	.00	.00	29	3.2	.00
23	2.7	.00	---			.00	1.7	.00	.00	2.8	70	7.3
24	.00	.00	---			.00	1.2	.00	72	.00	16	79
25	.00	.00	---			.00	11	.00	79	.00	145	.00
26	.00	.00	---			.00	.00	.00	23	2.7	19	.00
27	.00	.00	---			.00	.00	.00	146	.00	.00	.00
28	.00	.00	---			.00	.00	.00	.10	.00	.00	.00
29	.00	.00	---			.00	.00	21	7.8	.00	.00	.00
30	.00	3.2	---			1.6	.00	27	13	.00	.00	.00
31	4.2	---	---			.00	---	2.6	---	.46	.00	---
TOTAL	576.40	9.02	---			---	85.84	244.20	443.48	449.08	392.31	181.60
MEAN	18.6	.30	---			---	2.86	7.88	14.8	14.5	12.7	6.05
MAX	135	3.2	---			---	64	93	146	109	145	79
MIN	.00	.00	---			---	.00	.00	.00	.00	.00	.00
AC-FT	1140	18	---			---	170	484	880	891	778	360

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM

LOCATION.--Lat 35°11'58", long 106°35'53", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on left bank 0.5 mi upstream from Edith Blvd., 1.1 mi upstream from mouth, and 1.2 mi northeast of Alameda.

PERIOD OF RECORD.--July 1968 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Elevation of gage is 5,015 ft above National Geodetic Vertical Datum of 1929, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 3. Records good except those below 25 ft³/s, which are fair, and estimated daily discharges, which are poor. Floodway channel interœepts flow of numerous arroyos in northeast Albuquerque and discharges into the Rio Grande at a point 1.6 mi north of Alameda.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Aug. 14, 1980, gage height, 10.4 ft, from rating curve extended above 2,900 ft³/s; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 17	1945	1,730	3.15	Aug. 10	2000	*2,800	*4.30
June 27	1845	1,670	3.08	Aug. 25	2200	2,500	4.00

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	5.0	.00			---	86	.00	.00	26	.27	.00
2	.00	.50	.00			---	16	2.6	.00	3.8	.00	1.6
3	.00	1.0	.00			---	.00	55	1.4	.00	.49	.00
4	.00	.50	---			---	.00	18	.00	50	.00	16
5	.00	.00	---			---	.00	.00	.00	11	2.1	.00
6	.00	.00	---			---	.00	.00	.00	.00	.00	.00
7	30	.00	---			.00	.00	.00	.00	23	.00	.00
8	.00	1.0	---			.00	.00	.00	.00	168	12	.00
9	210	.00	---			.00	.00	.00	.00	60	.00	5.0
10	150	.00	---			.00	.00	.00	.00	.00	145	2.6
11	180	.00	---			35	.00	.00	.00	.00	18	3.6
12	.00	.00	---			.00	.00	.00	.00	.00	1.1	.00
13	5.0	.00	---			.00	.00	.00	.00	2.6	12	60
14	1.0	2.6	---			.00	.00	.00	.00	.00	15	19
15	.00	.00	---			3.9	.00	.00	.00	.00	.52	4.7
16	150	.00	---			.00	.00	35	.00	106	.00	31
17	80	.00	---			17	.00	174	120	4.9	.69	.00
18	3.0	.00	---			13	.00	.00	24	35	.00	.00
19	1.0	.00	---			.00	.00	.00	.00	24	.00	.00
20	.00	.00	---			.00	.00	.00	8.3	78	.00	1.0
21	.00	.00	---			.00	.00	.00	.00	11	.00	.00
22	.00	.00	---			.00	.00	.00	.00	58	12	.00
23	.00	.00	---			.00	.00	.00	.00	20	96	11
24	.00	.00	---			.00	5.4	.00	98	.00	23	107
25	.00	.00	---			.00	19	.00	102	.00	160	.00
26	.00	.00	---			.00	.00	.00	27	6.7	65	.00
27	.00	.00	---			.00	.00	.00	192	2.6	.00	.00
28	.00	.00	---			.00	.00	.00	3.4	.00	.00	.00
29	.00	.00	---			.00	.00	25	.26	.00	.00	.00
30	.00	3.5	---			.00	.00	36	43	.00	.00	.00
31	1.0	---	---			3.4	---	5.4	---	.00	.00	---
TOTAL	811.00	14.10	---			---	126.40	351.00	619.36	690.60	563.17	262.50
MEAN	26.2	.47	---			---	4.21	11.3	20.6	22.3	18.2	8.75
MAX	210	5.0	---			---	86	174	192	168	160	107
MIN	.00	.00	---			---	.00	.00	.00	.00	.00	.00
AC-FT	1610	28	---			---	251	696	1230	1370	1120	521

08330000 RIO GRANDE AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'21", lon leftg 106°40'48", Bernalillo County, Hydrologic Unit 13020203, in Atrisco Grant, on left downstream bridge abutment of Central Ave. bridge in Albuquerque, and at mile 1,540.0.

DRAINAGE AREA.--17,440 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1946(M).

GAGE.--Water-stage recorder. Datum of gage is 4,946.16 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1947, at various sites at datum about 2.00 ft higher; Sept. 15, 1982 to Sept. 20, 1983 at site 1.0 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Water-discharge records fair. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300) 50 mi upstream. Possible regulation by operation of reservoirs on Rio Chama and by flood-and-silt-detention reservoirs on Galisteo Creek and Jemez River (stations 08285000, 08286900, 08317900, 08328500). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions upstream from station for irrigation of about 718,000 acres, several hundred of which are downstream from station. National Weather Service gage height telemeter at station.

COOPERATION.--Records for Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals provided by Middle Rio Grande Conservancy District.

AVERAGE DISCHARGE.--32 years (water years 1942-73), 1,068 ft³/s, 773,800 acre-ft/yr, prior to closure of Cochiti Dam.
13 years (water years 1974-86), 1,420 ft³/s, 1,029,000 acre-ft/yr, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Apr. 24, 1942, from rating curve extended above 13,900 ft³/s; maximum gage height, 7.82 ft, Aug. 10, 1967; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,190 ft³/s, at 0115 hours Aug. 11, gage height, 5.71 ft; minimum daily, 181 ft³/s, Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	399	195	1600	3280	3790	1960	2510	3170	3500	3890	2530
2	378	446	195	1610	3560	3820	2490	2540	3170	3460	3980	2550
3	358	425	196	1640	3500	3870	2620	2550	3370	3410	4020	2500
4	373	408	192	1640	3360	3860	2290	2760	3360	3450	4110	2320
5	432	408	184	1630	3400	3800	2110	2720	3470	3560	4430	1790
6	494	404	184	1670	3390	3760	2110	2470	3530	3490	4660	1670
7	452	466	183	1910	3430	3780	2160	2400	3540	3420	4670	1640
8	327	1100	184	1970	3330	3780	2170	2350	3560	3800	4460	1960
9	312	1400	184	1940	3390	3750	2160	2340	3580	3410	4440	1950
10	924	1420	181	1920	3330	3820	2190	2330	3600	3180	4400	1790
11	1900	1450	183	1910	3340	3790	2230	2360	3670	3070	4490	1740
12	1750	1470	182	1900	3300	3680	2310	2380	3680	2990	3850	1680
13	1460	1470	183	1900	3300	3620	2340	2420	3650	3020	3610	1580
14	1450	1430	183	1950	3610	3600	2370	2370	3660	3070	3520	1720
15	1380	1380	191	2130	3590	3440	2310	1310	3670	2650	3470	1630
16	1560	982	192	2210	3580	3180	2300	1160	3640	2630	3230	1620
17	1730	380	190	2240	3520	2560	2260	2380	3670	2740	3080	1750
18	1590	305	214	2340	3570	2590	2190	2440	3750	2710	2960	1510
19	1460	264	619	2410	3570	2200	2550	2330	3550	3090	2840	1560
20	1420	240	1090	2480	3780	1810	2720	2310	3400	3360	2800	1560
21	1260	230	1230	2470	3780	1370	2770	2340	3250	3380	2750	945
22	1020	217	1320	2490	3780	1570	2740	2360	3030	2830	2730	839
23	1020	210	1380	2510	3810	1730	2760	2420	3000	2520	2820	816
24	1030	204	1450	2500	3840	1760	2760	2400	3130	2310	2940	785
25	980	205	1490	2450	3740	1670	2840	2510	3220	2160	2740	1020
26	962	203	1470	2400	3980	1670	2940	2540	3070	2110	2910	1030
27	968	200	1500	2380	3870	1690	2920	2500	3610	2050	2790	1070
28	886	193	1520	2450	3810	1660	2860	2410	3330	2000	2600	1050
29	677	194	1540	2510	---	1400	2520	2840	3340	1930	2620	965
30	447	194	1540	2830	---	1400	2510	3120	3350	2680	2620	1050
31	390	---	1600	2930	---	2080	---	3120	---	2640	2580	---
TOTAL	29787	18297	21145	66920	99740	86500	73460	74990	103020	90620	107010	46620
MEAN	961	610	682	2159	3562	2790	2449	2419	3434	2923	3452	1554
MAX	1900	1470	1600	2930	3980	3870	2940	3120	3750	3800	4670	2550
MIN	312	193	181	1600	3280	1370	1960	1160	3000	1930	2580	785
AC-FT	59080	36290	41940	132700	197800	171600	145700	148700	204300	179700	212300	92470
(†)	9430	1150	897	1080	1240	12500	15800	16140	14230	16000	16040	14760

CAL YR 1985 TOTAL 828258 MEAN 2269 MAX 8650 MIN 181 AC-FT 1643000 (†) 103600
WTR YR 1986 TOTAL 818109 MEAN 2241 MAX 4670 MIN 181 AC-FT 1623000 (†) 119300

(†) COMBINED FLOW, IN ACRE-FEET, OF ALBUQUERQUE RIVERSIDE DRAIN, AND ARENAL, ARMIJO AND ATRISCO CANALS. THIS FLOW, WHICH BYPASSES RIVER GAGE, CAN BE ADDED TO RIVER RECORDS TO GET THE ENTIRE FLOW IN VALLEY CROSS SECTION.

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURES: October 1969 to current year.
SUSPENDED-SEDIMENT DISCHARGES: May 1969 to September 1969 (partial-record station), October 1969 to current year.

REMARKS.--Additional sediment total-discharge determinations were made monthly when needed.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,840 microsiemens, Oct. 12, 1974; minimum daily, 115 microsiemens, Aug. 14, 1980.
WATER TEMPERATURES: Maximum daily, 34.0°C, July 12, 1970; minimum daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 45,500 mg/L, July 21, 1971; minimum daily mean, no flow on many days in 1971, 1972, and 1977.
SEDIMENT LOADS: Maximum daily, 275,000 tons, July 27, 1971; minimum daily, 0 ton on many days in 1971, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 505 microsiemens, Sept. 27; minimum daily, 260 microsiemens, July 15.
WATER TEMPERATURES: Maximum daily, 23.5°C, June 30; minimum daily, 2.5°C, Feb. 4.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,780 mg/L, Oct. 12; minimum daily mean, 10 mg/L, Nov. 19.
SEDIMENT LOADS: Maximum daily, 22,600 tons, Oct. 12; minimum daily, 7.1 tons, Nov. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN												
07...	0930	2030	330	377	6.80	8.20	5.5	6.0	10.8	23	130	19
MAR												
07...	1200	3750	320	343	7.70	8.20	15.0	10.5	9.6	--	120	19
MAY												
20...	1100	2300	365	356	8.00	8.20	22.5	16.5	8.6	--	110	13
JUL												
15...	0930	2750	260	268	7.80	7.90	16.5	10.5	7.6	21	90	9
SEP												
03...	0945	2630	265	--	8.10	--	25.0	20.0	--	--	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
JAN											
07...	41	6.9	25	1	3.4	112	55	8.5	0.40	17	220
MAR											
07...	37	7.0	19	0.8	2.6	102	59	6.2	0.40	16	210
MAY											
20...	33	5.5	26	1	2.8	92	56	16	0.30	18	210
JUL											
15...	28	4.9	17	0.8	3.1	81	45	4.5	0.20	17	170
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN											
07...	0.100	0.150	0.040	0.46	0.60	0.110	0.070	4.0	--	70	14
MAR											
07...	--	--	--	--	--	--	--	--	--	30	16
MAY											
20...	--	--	--	--	--	--	--	--	--	100	49
JUL											
15...	<0.100	<0.100	0.030	0.37	--	0.380	0.040	4.3	--	30	20
SEP											
03...	--	--	--	--	--	--	--	--	8	--	--

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
JAN 07...	0930	4	3	<1	<1	<10	<10	14	4

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 07...	5	<1	<0.10	<0.1	<1	<1	30	20

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
JAN 07...	5.3	7.2	4.0	5.6	3.1	5.0	0.06	3.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, DISCH, SUSP. + BED MA-TERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
OCT										
11...	1000	967	--	10.0	1290	3370	--	98	99	100
FEB										
04...	1100	3250	--	2.5	387	3400	6490	--	--	--
MAR										
07...	1200	3750	320	10.5	247	2500	3970	--	--	--
31...	1000	2140	--	8.5	143	826	1380	79	97	99
MAY										
06...	1120	2430	--	15.0	241	1580	3660	--	--	--
20...	1100	2300	365	16.5	223	1380	3600	--	--	--
JUN										
03...	1030	3440	--	12.0	387	3590	7800	--	--	--
27...	1200	3130	--	13.0	2430	20500	--	100	--	--
30...	1045	3320	--	23.5	343	3070	6370	--	--	--
JUL										
09...	1000	3610	--	12.0	--	--	1500	100	--	--
15...	0930	2750	260	10.5	133	988	1500	59	--	--
AUG										
05...	1200	4580	--	--	203	2510	3700	83	--	--
SEP										
03...	0945	2630	265	20.0	209	1480	2220	38	--	--
09...	0900	1950	--	10.0	4650	24500	--	100	--	--
17...	1300	2020	--	--	1670	9110	--	--	--	--
25...	1100	1330	--	13.0	499	1790	--	99	100	--

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)
OCT										
11...	--	48	58	87	--	--	--	--	--	--
FEB										
04...	--	--	--	--	39	49	71	100	--	0
MAR										
07...	--	--	--	--	42	66	99	100	--	0
31...	100	--	--	--	--	--	--	--	--	0
MAY										
06...	--	--	--	--	20	31	77	100	--	0
20...	--	--	--	--	21	33	74	98	100	0
JUN										
03...	--	--	--	--	16	27	85	100	--	0
27...	--	52	63	92	--	--	--	--	--	--
30...	--	18	23	39	64	74	96	100	--	0
JUL										
09...	--	53	67	92	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	0
AUG										
05...	--	--	--	--	--	--	--	--	--	32
SEP										
03...	--	--	--	--	--	--	--	--	--	--
09...	--	55	71	96	--	--	--	--	--	--
17...	--	40	52	76	84	85	89	96	100	--
25...	--	57	70	91	--	--	--	--	--	--

DATE	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT									
11...	--	--	--	--	--	--	--	--	--
FEB									
04...	0	9	82	95	98	98	99	100	--
MAR									
07...	0	70	100	--	--	--	--	--	--
31...	0	24	84	92	98	99	100	--	--
MAY									
06...	0	32	82	85	87	89	91	94	100
20...	1	14	60	73	83	90	97	100	--
JUN									
03...	0	36	95	97	98	99	100	--	--
27...	--	--	--	--	--	--	--	--	--
30...	0	11	86	96	99	99	100	--	--
JUL									
09...	--	--	--	--	--	--	--	--	--
15...	0	17	60	81	88	91	94	100	--
AUG									
05...	49	58	66	66	68	69	71	82	100
SEP									
03...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)
MAR										
07...	1200	--	--	--	--	--	--	--	--	--
JUL										
15...	0930	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010

DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALATHION, TOTAL (UG/L) (39530)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHYL PARATHION, TOTAL (UG/L) (39600)	METHYL TRITHION, TOTAL (UG/L) (39790)
MAR									
07...	--	--	--	--	--	--	--	--	--
JUL									
15...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01

DATE	PARATHION, TOTAL (UG/L) (39540)	TOXAPHENE, TOTAL (UG/L) (39400)	TOTAL TRITHION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PERTHANE TOTAL (UG/L) (39034)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)
MAR									
07...	--	--	--	<0.01	<0.01	<0.01	--	--	--
JUL									
15...	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	463	---	397	351	362	358	321	295	289	276	328
2	431	474	488	408	354	354	361	315	307	291	270	326
3	436	485	492	423	356	348	365	316	317	295	271	328
4	422	484	488	425	356	358	365	301	317	290	271	327
5	429	488	492	426	361	357	363	316	304	283	285	334
6	411	482	485	426	320	357	357	310	300	283	266	342
7	431	487	478	423	---	358	349	310	302	283	265	345
8	421	474	474	413	336	359	338	308	295	261	269	345
9	440	445	476	412	325	362	339	306	296	321	271	384
10	381	403	459	411	353	361	332	294	295	291	275	355
11	305	434	479	406	358	362	337	278	297	294	274	353
12	406	443	478	401	358	360	330	274	293	291	286	351
13	407	447	480	404	363	360	331	271	296	287	292	358
14	393	437	479	400	358	356	322	266	292	286	291	366
15	400	437	482	398	369	372	330	288	292	290	296	368
16	429	432	484	395	365	374	323	440	289	281	292	368
17	405	476	488	394	367	380	327	347	292	280	---	371
18	478	479	485	387	358	366	320	340	288	305	295	379
19	472	488	469	384	---	367	326	344	288	---	293	378
20	453	490	424	381	348	369	313	345	284	---	296	378
21	452	495	429	384	353	372	323	354	286	---	298	382
22	421	438	428	380	345	361	310	352	283	---	298	392
23	421	460	428	383	353	355	321	353	286	---	297	385
24	412	460	423	380	349	350	317	317	---	---	303	329
25	425	467	426	386	360	372	324	314	285	---	298	472
26	424	480	424	384	353	390	322	314	289	---	285	497
27	430	485	423	385	357	405	320	315	319	---	305	505
28	424	---	421	384	349	389	319	293	300	294	314	499
29	427	---	423	384	---	370	---	289	296	295	321	499
30	443	---	424	380	---	370	318	288	293	285	321	497
31	451	---	422	345	---	366	---	293	---	290	323	---
MEAN	423	464	458	396	353	366	333	315	296	289	290	385

WTR YR 1986 MEAN 365 MAX 505 MIN 261

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.0	9.0	---	9.0	10.0	11.0	7.0	11.0	11.0	16.0	14.0	9.0
2	11.0	9.0	9.0	8.0	11.0	8.0	8.0	11.0	10.0	9.0	11.0	11.0
3	12.0	9.0	9.0	9.0	9.0	9.0	11.0	11.0	11.0	10.0	10.0	11.0
4	11.0	8.0	10.0	9.0	9.0	10.0	9.0	9.0	14.0	12.0	9.0	11.0
5	11.0	9.0	10.0	8.0	9.0	9.0	10.0	10.0	12.0	15.0	9.0	12.0
6	12.0	10.0	8.0	10.0	9.0	11.0	8.0	11.0	12.0	10.0	12.0	15.0
7	12.0	9.0	9.0	9.0	4.0	10.0	7.0	11.0	10.0	10.0	15.0	14.0
8	11.0	9.0	10.0	8.0	3.0	9.0	8.0	10.0	16.0	12.0	13.0	12.0
9	10.0	9.0	9.0	9.0	4.0	11.0	10.0	10.0	9.0	12.0	13.0	10.0
10	10.0	9.0	8.0	9.0	3.0	9.0	11.0	12.0	11.0	10.0	11.0	10.0
11	10.0	8.0	8.0	9.0	5.0	10.0	11.0	12.0	13.0	12.0	10.0	11.0
12	11.0	8.0	7.0	10.0	6.0	9.0	10.0	10.0	11.0	10.0	12.0	10.0
13	11.0	9.0	9.0	8.0	7.0	9.0	7.0	9.0	11.0	16.0	13.0	12.0
14	10.0	11.0	9.0	9.0	8.0	10.0	12.0	10.0	13.0	12.0	9.0	13.0
15	10.0	10.0	8.0	10.0	8.0	10.0	11.0	10.0	12.0	13.0	11.0	10.0
16	10.0	9.0	8.0	9.0	9.0	9.0	10.0	12.0	11.0	14.0	12.0	11.0
17	9.0	9.0	9.0	9.0	12.0	9.0	10.0	11.0	10.0	16.0	---	10.0
18	10.0	8.0	9.0	9.0	9.0	11.0	11.0	12.0	9.0	11.0	15.0	9.0
19	9.0	8.0	8.0	11.0	---	11.0	7.0	11.0	14.0	---	12.0	13.0
20	11.0	8.0	8.0	10.0	10.0	10.0	10.0	11.0	10.0	---	11.0	14.0
21	10.0	7.0	10.0	8.0	8.0	10.0	11.0	12.0	12.0	---	12.0	11.0
22	9.0	7.0	9.0	9.0	8.0	11.0	10.0	10.0	11.0	---	14.0	11.0
23	9.0	9.0	7.0	10.0	10.0	10.0	7.0	11.0	9.0	---	13.0	10.0
24	9.0	8.0	8.0	9.0	10.0	10.0	8.0	14.0	---	---	13.0	10.0
25	9.0	9.0	7.0	9.0	9.0	9.0	10.0	11.0	9.0	---	13.0	13.0
26	10.0	9.0	8.0	10.0	9.0	9.0	10.0	10.0	10.0	---	14.0	14.0
27	12.0	8.0	8.0	9.0	10.0	11.0	10.0	11.0	13.0	---	12.0	11.0
28	10.0	---	9.0	9.0	9.0	10.0	9.0	9.0	12.0	12.0	11.0	12.0
29	9.0	---	10.0	10.0	---	12.0	---	9.0	11.0	17.0	11.0	10.0
30	10.0	---	9.0	9.0	---	12.0	11.0	12.0	10.0	9.0	12.0	12.0
31	10.0	---	9.0	9.0	---	9.0	---	12.0	---	12.0	14.0	---
MEAN	10.5	8.5	8.5	9.0	8.0	10.0	9.5	11.0	11.5	12.5	12.0	11.5

WTR YR 1986 MEAN 10.0 MAX 17.0 MIN 3.0

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	44	47	30	32	25	13	58	251	269	2380	147	1500
2	40	41	31	37	29	15	60	261	272	2610	121	1250
3	41	40	18	21	23	12	71	314	207	1960	142	1480
4	42	42	21	23	22	11	78	345	233	2110	119	1240
5	60	70	21	23	20	9.9	80	352	122	1120	123	1260
6	58	77	20	22	19	9.4	71	320	140	1280	129	1310
7	37	45	33	42	20	9.9	122	629	112	1040	159	1620
8	35	31	99	294	19	9.4	91	484	101	908	109	1110
9	38	31	111	420	25	12	75	393	92	842	87	881
10	886	2900	97	372	23	11	57	295	83	746	84	889
11	2350	11900	98	384	19	9.4	60	309	81	730	94	975
12	4780	22600	90	357	17	8.4	53	272	84	748	74	763
13	730	2880	53	210	16	7.9	48	246	72	642	70	697
14	213	834	38	147	16	7.9	57	306	136	1330	70	720
15	151	563	40	149	18	9.3	84	488	100	969	65	625
16	378	1590	35	93	19	9.8	104	621	93	899	57	502
17	245	1140	14	14	14	7.2	121	732	82	779	54	373
18	503	2160	11	9.1	15	8.7	114	720	70	675	56	392
19	219	863	10	7.1	124	207	124	807	76	733	48	285
20	111	426	14	9.1	183	539	126	844	92	939	46	225
21	86	293	16	9.9	140	465	114	769	100	1020	56	207
22	48	132	20	12	153	545	110	740	88	898	52	220
23	48	132	21	12	113	421	85	576	102	1050	39	185
24	51	142	15	8.3	89	348	75	506	103	1070	33	157
25	46	122	17	9.4	83	334	68	450	91	919	35	167
26	43	112	20	11	80	318	65	421	215	2310	33	154
27	46	120	19	10	80	324	71	456	182	1900	30	139
28	45	108	21	11	69	283	65	439	179	1840	36	167
29	40	73	21	11	66	274	61	413	---	---	29	110
30	32	39	23	12	59	245	111	848	---	---	26	98
31	45	47	---	---	63	272	184	1460	---	---	94	528
TOTAL	---	49600	---	2771.9	---	4756.2	---	16067	---	34447	---	20229

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	54	286	49	332	64	548	154	1460	304	3190	79	540
2	99	666	49	336	66	565	118	1100	200	2150	83	571
3	94	665	52	358	309	2800	103	948	185	2010	109	736
4	57	352	59	440	333	3020	109	1020	191	2120	62	388
5	46	262	52	382	126	1180	93	894	140	1670	62	300
6	51	291	122	814	143	1360	101	952	111	1400	51	230
7	67	391	75	486	79	755	99	914	93	1170	43	190
8	64	375	53	336	73	702	480	5050	83	999	179	1030
9	61	356	57	360	86	831	489	4500	91	1090	2900	15300
10	50	296	55	346	149	1450	335	2880	79	939	283	1370
11	53	319	61	389	147	1460	158	1310	138	1670	161	756
12	53	331	65	418	92	914	95	767	237	2460	150	680
13	52	329	58	379	87	857	84	685	86	838	113	482
14	51	326	54	346	87	860	87	721	96	912	301	1320
15	51	318	50	192	103	1020	95	680	69	646	352	1550
16	47	292	96	301	102	1000	66	469	51	445	297	1300
17	50	305	125	803	570	5630	95	703	47	391	525	2480
18	52	307	117	771	601	6170	255	1870	45	360	265	1080
19	77	530	82	516	182	1740	291	2430	45	345	146	615
20	61	448	120	748	79	725	305	2770	46	348	109	459
21	59	441	66	417	77	676	279	2550	53	394	73	186
22	53	392	67	427	59	483	204	1560	57	420	69	156
23	52	388	77	503	54	437	169	1150	59	449	68	150
24	47	350	50	324	55	465	123	767	130	1030	87	184
25	48	368	45	305	54	469	110	642	171	1270	107	295
26	49	389	50	343	57	472	98	558	521	4090	89	248
27	49	386	50	337	1530	16200	97	537	820	6180	85	246
28	42	324	39	254	1090	9800	97	524	247	1730	78	221
29	43	293	73	560	174	1570	83	433	125	884	67	175
30	47	319	73	615	209	1890	216	1560	128	905	72	204
31	---	---	66	556	---	---	78	556	133	926	---	---
TOTAL	---	11095	---	13694	---	66049	---	42960	---	43431	---	33442

TOTAL LOAD FOR YEAR: 338542.1 TONS.

08330600 TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'04", long 106°39'18", in SW¼SW¼ sec.17, T.9 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 875 ft downstream from highway bridge on Broadway Boulevard SE, 1,760 ft upstream from South Diversion Channel, 0.5 mi downstream from highway bridge on Interstate Highway 25, and 3 mi south of Albuquerque.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--October 1951 to September 1968, (annual maximum only), August 1974 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Elevation of gage is 4,960 ft above National Geodetic Vertical Datum of 1929, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft³/s, June 24, 1967, gage height not determined; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 550 ft³/s, at 2250 hours Aug. 25, gage height, 2.20 ft; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00			---	.06	.00	.00	2.5	.00	.00
2	.00	.00	.00			---	.07	.08	.00	1.5	.00	.00
3	.00	.00	---			---	.00	.08	.00	.00	.00	.00
4	.00	.00	---			---	.00	.00	.00	1.7	.00	.00
5	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
6	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
7	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
8	.00	.00	---			.00	.00	.00	.00	14	.00	.00
9	7.4	.00	---			.50	.00	.00	.00	8.0	.00	.00
10	14	.00	---			.00	.00	.00	.00	.00	7.8	.00
11	70	.00	---			.00	.00	.00	.00	.00	2.4	.00
12	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---			.00	.56	.00	.00	.00	.00	.47
14	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
16	2.1	.00	---			.50	.00	.16	.00	.64	.00	.32
17	7.0	.00	---			.15	.50	.00	.47	.00	.00	.00
18	.00	.00	---			.00	.00	.00	.19	3.1	.00	.00
19	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---			.00	.00	.00	.00	17	.00	.00
21	.00	.00	---			.00	.00	.00	.00	1.3	.00	.00
22	.00	.00	---			.00	.38	.00	.00	.28	.00	.00
23	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---			.00	.00	.00	.00	.00	.00	.81
25	.00	.00	---			.00	.00	.00	.00	.00	31	.00
26	.00	1.5	---			.00	.00	.00	.00	.00	13	.00
27	.00	.00	---			.00	.00	.00	5.1	.00	.00	.00
28	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
30	.00	.34	---			.00	.00	2.0	.00	.00	.00	.00
31	.00	---	---			.00	---	1.2	---	.00	.00	---
TOTAL	100.50	1.84	---			---	1.57	3.52	5.76	50.02	54.20	1.60
MEAN	3.24	.06	---			---	.05	.11	.19	1.61	1.75	.05
MAX	70	1.5	---			---	.56	2.0	5.1	17	31	.81
MIN	.00	.00	---			---	.00	.00	.00	.00	.00	.00
AC-FT	199	3.6	---			---	3.1	7.0	11	99	108	3.2

08330800 TIJERAS ARROYO BELOW SOUTH DIVERSION CHANNEL INLET NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'09", long 106°39'41", in SW¼SE¼ sec.18, T.9 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 260 ft upstream from highway bridge on State Highway 47, 500 ft downstream from South Diversion Channel inlet, 1.0 mi downstream from highway bridge on Interstate Highway 25 and 2.5 mi south of Albuquerque.

PERIOD OF RECORD.--July 1974 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Elevation of gage is 4,930 ft above National Geodetic Vertical Datum of 1929, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--Estimated daily discharges: Nov. 12 to Dec. 2 and Mar. 5 to Apr. 28. Records fair except estimated daily discharges, which are poor. South Diversion Channel intercepts flow of numerous arroyos in northeast and southeast Albuquerque and discharges into Tijeras Arroyo at a point 0.8 mi upstream from the Rio Grande.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s, Aug. 19, 1976, gage height not determined; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 550 ft³/s, at 2300 hours Aug. 25, gage height, 2.20 ft; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.77	.00			---	.06	.00	.00	2.5	.00	.00
2	.00	.00	.00			---	.07	.08	.00	4.3	.00	.00
3	.00	.00	---			---	.00	.08	.00	.00	.00	.00
4	.00	.00	---			---	.00	.00	.00	1.7	.00	.00
5	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
6	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
7	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
8	.00	.00	---			.00	.00	.00	.00	14	.00	.00
9	7.4	.00	---			.50	.00	.00	.00	8.0	.00	.00
10	14	.00	---			.00	.00	.00	.00	.00	7.8	.00
11	70	.00	---			.00	.00	.00	.00	.00	2.5	.00
12	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---			.00	.00	.00	.00	.00	.00	.47
14	.00	.00	---			.00	.56	.00	.00	.00	.00	.00
15	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
16	2.1	.00	---			.50	.00	2.5	2.0	3.0	.00	.32
17	7.0	.00	---			.15	.00	5.8	.19	.00	.00	.00
18	.00	.00	---			.00	.50	.00	.00	3.1	.00	.00
19	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---			.00	.00	.00	.00	17	.00	.00
21	.00	.00	---			.00	.00	.00	.00	1.3	.00	.00
22	.00	.00	---			.00	.38	.00	.00	.28	.00	.00
23	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---			.00	.00	.00	.00	.00	.00	.81
25	.00	.00	---			.00	.00	.00	.00	.00	31	.00
26	.00	1.5	---			.00	.00	.00	.00	.00	13	.00
27	.00	.00	---			.00	.00	.00	7.9	.00	.00	.00
28	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---			.00	.00	.00	.00	.00	.00	.00
30	.00	.34	---			.00	.00	2.0	.00	.00	.00	.00
31	.00	---	---			.00	---	1.2	---	.00	.00	---
TOTAL	100.50	2.61	---			---	1.57	11.66	10.09	55.18	54.30	1.60
MEAN	3.24	.09	---			---	.05	.38	.34	1.78	1.75	.05
MAX	70	1.5	---			---	.56	5.8	7.9	17	31	.81
MIN	.00	.00	---			---	.00	.00	.00	.00	.00	.00
AC-FT	199	5.2	---			---	3.1	23	20	109	108	3.2

08331000 RIO GRANDE AT ISLETA, NM
(Surveillance network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 34°54'21", long 106°41'04", in NE¼NE¼SW¼ sec.24, T.08 N., R.02 E., Valencia County, Hydrologic Unit 13020203, 50 feet upstream from diversion dam, 50 feet downstream from bridge on State Highway 147, at Isleta.

DRAINAGE AREA.--18,100 mi² (estimated).

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--Samples are collected on the Peralta main canal or the Belen Highline canal when the river is completely diverted. Water-discharge measurements were made at the time water-quality samples were collected.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
22...	1000	228	630	535	7.70	7.40	0.0	7.0	9.6	40	170	26
JAN												
07...	1250	2030	375	--	6.60	--	5.0	5.5	10.5	18	--	--
MAR												
10...	1000	3780	320	352	7.80	8.10	9.5	8.0	10.0	14	130	15
MAY												
20...	1330	2300	375	367	8.00	7.80	29.0	17.0	7.6	23	110	21
JUL												
15...	1345	2750	275	283	7.80	8.00	29.0	25.0	6.8	22	97	11
SEP												
03...	1230	2630	290	--	7.91	--	25.0	22.0	6.8	<10	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV												
22...	53	8.2	43	2	6.2	180	0	140	--	126	73	27
JAN												
07...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	39	7.0	20	0.8	2.8	135	0	111	--	102	58	7.0
MAY												
20...	35	5.9	28	1	3.2	113	0	91	--	96	60	15
JUL												
15...	30	5.3	20	0.9	3.1	105	0	82	86	85	49	6.9
SEP												
03...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV												
22...	0.60	28	330	0.400	0.410	3.50	0.30	4.2	2.30	2.00	7.4	4
JAN												
07...	--	--	--	0.400	0.300	0.370	0.43	1.2	0.280	0.220	3.9	--
MAR												
10...	0.40	18	220	0.300	0.310	0.160	0.44	0.90	0.170	0.100	4.8	--
MAY												
20...	0.30	20	220	0.300	0.340	0.160	0.64	1.1	0.270	0.160	5.0	--
JUL												
15...	0.30	19	190	0.300	0.260	0.080	0.52	0.90	0.190	0.150	5.4	3
SEP												
03...	--	--	--	0.400	0.410	0.120	0.58	1.1	0.270	0.180	4.3	--

08331000 RIO GRANDE AT ISLETA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV 22...	4	110	<1	<1	<10	<10	6	2	15	4	<1	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	40	--	--	--	--	--	--	33	--	--	--
MAY 20...	--	90	--	--	--	--	--	--	27	--	--	--
JUL 15...	2	40	1	<1	<10	<10	15	5	12	<5	<5	0.10
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)
NOV 22...	--	<1	<1	30	16	<2.0	5.8	360	2	<1	20	<10
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	0.1	<1	<1	30	18	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)
NOV 22...	10	2200	<10	100	<0.01	20	4.8	0.7	7.6	0.7	5.9	0.7
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--

08331000 RIO GRANDE AT ISLETA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)	CARBON 14 PERCENT MODERN (82172)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)
NOV												
22...	0.06	3.1	0.0	45	28	28	36	K5	--	--	--	--
JAN												
07...	--	--	--	398	2180	44	13	91	--	--	--	--
MAR												
10...	--	--	--	101	1030	69	53	K48	--	--	--	--
MAY												
20...	--	--	--	22	137	100	53	36	--	--	--	--
JUL												
15...	--	--	--	350	2600	25	42	170	--	--	--	--
SEP												
03...	--	--	--	--	--	--	180	200	<0.1	<0.010	<0.1	<0.010

DATE	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALA-THION, TOTAL (UG/L) (39530)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)
NOV												
22...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
07...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
03...	<0.010	<0.010	0.01	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01

DATE	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL TRI-THION, TOTAL (UG/L) (39790)	PARA-THION, TOTAL (UG/L) (39540)	TOX-APHENE, TOTAL (UG/L) (39400)	TOTAL TRI-THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PER-THANE TOTAL (UG/L) (39034)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)
NOV											
22...	--	--	--	--	--	--	--	--	--	--	--
JAN											
07...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	--	--	--	--	--	<0.01	<0.01	<0.01	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	<0.01	<0.01	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, NM

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, Hydrologic Unit 13020203, in Sevilleta or Belen Grant, 0.2 mi south of U.S. Highway 60, 1.8 mi east of Bernardo, about 3 mi upstream from floodway, and 4 mi 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", are not equivalent.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,720.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1964, 0.2 mi upstream at various datums.

REMARKS.--No estimated daily discharges. Records good. Conveyance channel is 1 of 4 channels (stations 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 ft³/s. 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 station 08332010. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,220 ft³/s, Apr. 22, 1958; no flow many days most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	6.6	4.4	5.3	5.7	4.9	6.6	7.8	11	11	4.1	7.7
2	3.3	6.4	4.4	5.3	5.9	4.9	7.1	9.7	11	11	4.4	9.6
3	3.1	5.9	4.2	5.3	5.9	4.9	7.1	8.7	10	10	5.0	22
4	3.0	5.7	4.0	5.3	5.9	13	7.3	8.3	12	9.1	5.4	6.2
5	3.6	6.4	3.8	5.3	5.9	11	7.7	9.1	9.5	8.9	5.9	5.5
6	3.0	6.1	3.9	5.4	5.9	9.5	7.7	8.4	11	8.5	7.5	5.1
7	3.0	5.6	4.0	5.3	6.2	7.7	7.9	8.7	10	8.7	7.4	4.8
8	3.2	5.3	4.1	5.5	5.8	7.3	9.7	8.2	10	11	7.5	4.9
9	4.1	5.5	4.1	5.7	5.3	7.2	10	8.6	10	11	13	5.1
10	4.6	6.0	4.1	5.2	4.8	7.3	9.2	8.4	9.7	11	9.0	5.1
11	5.5	6.4	4.1	5.1	4.5	7.7	8.4	7.9	10	9.1	9.6	6.2
12	7.0	6.5	4.1	5.3	4.5	7.3	8.3	7.8	9.5	7.9	9.1	5.3
13	7.9	6.5	4.1	5.3	4.5	6.7	7.8	7.9	8.7	7.4	9.4	5.4
14	7.8	6.5	4.0	5.3	4.5	6.5	7.0	9.8	8.1	6.9	7.7	5.5
15	7.5	6.7	4.1	5.3	4.6	6.5	6.4	8.0	8.0	6.8	7.0	5.2
16	8.0	6.8	4.1	5.3	4.6	6.3	6.2	7.3	7.9	11	6.5	5.8
17	9.4	6.4	4.0	5.3	4.6	6.5	5.9	7.4	10	8.4	6.2	5.8
18	9.8	5.7	3.8	5.3	4.6	6.1	5.8	8.2	9.6	6.5	8.1	7.6
19	9.2	5.1	3.8	5.3	4.5	5.9	5.9	9.7	9.1	6.6	8.8	6.9
20	9.2	4.9	3.8	5.5	4.6	7.4	6.0	11	7.8	6.7	6.8	7.0
21	9.2	5.0	4.1	5.4	4.6	17	8.9	9.3	7.1	7.7	5.8	7.3
22	8.5	4.9	4.7	5.3	4.5	5.5	8.4	8.8	6.9	7.2	6.1	5.7
23	7.9	4.9	4.5	5.4	4.6	5.3	6.8	9.0	7.4	6.5	6.5	5.5
24	7.2	4.7	4.8	5.3	4.7	5.5	5.9	9.2	11	6.0	6.9	5.8
25	6.8	4.6	4.9	5.3	4.7	5.9	6.0	8.9	12	5.5	6.2	5.6
26	6.9	4.7	5.1	5.3	4.8	7.4	6.1	9.5	19	7.1	8.8	5.3
27	7.1	4.6	5.1	5.3	4.8	5.7	6.0	11	15	7.7	8.6	5.2
28	7.5	4.5	5.2	5.2	4.9	5.5	6.3	11	11	5.3	8.0	5.4
29	8.3	4.5	5.3	5.1	---	6.1	7.4	11	11	4.8	7.3	5.6
30	7.3	4.5	5.3	5.1	---	8.2	7.0	11	12	4.7	7.5	5.5
31	6.7	---	5.3	5.6	---	6.5	---	11	---	4.5	8.2	---
TOTAL	199.1	167.9	135.2	164.9	140.4	223.2	216.8	280.6	305.3	244.5	228.3	193.6
MEAN	6.42	5.60	4.36	5.32	5.01	7.20	7.23	9.05	10.2	7.89	7.36	6.45
MAX	9.8	6.8	5.3	5.7	6.2	17	10	11	19	11	13	22
MIN	3.0	4.5	3.8	5.1	4.5	4.9	5.8	7.3	6.9	4.5	4.1	4.8
AC-FT	395	333	268	327	278	443	430	557	606	485	453	384

CAL YR 1985	TOTAL	2377.1	MEAN	6.51	MAX	30	MIN	1.4	AC-FT	4710
WTR YR 1986	TOTAL	2499.8	MEAN	6.85	MAX	22	MIN	3.0	AC-FT	4960

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, Hydrologic Unit 13020203, in Belen or Sevilleta Grant, on downstream side of bridge on U.S. Highway 60, 5 mi downstream from heading of conveyance channel, 2 mi east of Bernardo, and at mile 1,487.2.

DRAINAGE AREA.--19,230 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 12, Nov. 14-20, Nov. 22 to Dec. 5, Dec. 30 to Jan. 8, Jan. 10-14, 17-19, Feb. 2-21, Feb. 27 to Mar. 7, Mar. 28 to 30, Apr. 8-25, 27-30, May 2-9, June 28 to July 24, Aug. 11, 12, 25-29, and Sept. 9-13, 15-22. Water-discharge records poor. Since November 1973 flow completely regulated by Cochiti Dam (station 08317300) 100 mi upstream. Floodway is 1 of 4 channels (stations 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. Diversions for irrigation of about 740,000 acres upstream from station.

AVERAGE DISCHARGE.--19 years (water years 1937-38, 1942-58), 1,125 ft³/s, 815,100 acre-ft/yr. Includes flow of floodway, conveyance channel, and Bernardo interior drain.
15 years (water years 1959-73), 898 ft³/s, 605,600 acre-ft/yr, includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain, prior to closure of Cochiti Dam.
13 years (water years 1974-86), 1,396 ft³/s, 1,011,000 acre-ft/yr, includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain since, closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD (1936-39 AND SINCE 1941).--Maximum discharge, 21,000 ft³/s, Apr. 25, 1942, gage height, 6.90 ft; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,090 ft³/s, Feb. 22; minimum daily, 150 ft³/s, Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	645	225	1800	3560	3900	1940	2160	2990	3300	1950	2270
2	200	510	210	1800	3550	3900	1930	2300	2940	3300	3280	2240
3	150	530	210	1800	3550	3900	2610	2300	2850	3350	3400	2330
4	200	520	210	1800	3550	3900	2570	2300	3360	3360	3360	2290
5	230	530	205	1800	3600	3900	2020	2300	3320	3300	3390	2100
6	270	530	205	1800	3600	3800	1950	2300	3430	3300	3640	1660
7	300	530	193	1950	3600	3800	2000	2200	3280	3300	3910	1290
8	230	600	189	2100	3600	3560	2000	2150	3250	3200	3960	1300
9	180	900	183	2100	3600	3520	2000	2200	3150	3150	3800	1300
10	190	1300	185	2100	3600	3740	2000	2280	2870	3000	3760	1400
11	800	1550	181	2100	3600	3810	2000	2270	2720	2900	3700	1500
12	2300	1550	175	2100	3600	3710	2000	2480	3040	2800	3500	1500
13	2000	1550	174	2100	3600	3780	2000	2230	3260	2900	3260	1400
14	1800	1550	171	2100	3800	3810	2000	2270	3360	2700	3040	1460
15	2000	1550	165	2100	3800	3310	2000	2020	3240	2600	2870	1400
16	1650	1400	163	2120	3800	2930	2000	984	3540	2600	2730	1400
17	1780	1120	160	2200	3800	2840	2000	524	3390	2500	2670	1500
18	2000	820	155	2300	3800	2540	2000	1780	3450	2500	2520	1400
19	1700	580	151	2500	3800	2490	2100	2030	3370	2600	2450	1400
20	1570	410	218	2660	3950	2290	2350	2240	3150	3000	2360	1000
21	1470	250	930	2600	4030	1950	2400	2180	3090	3000	2380	800
22	1350	240	1330	2600	4090	1480	2400	1970	2880	2500	2450	800
23	1100	235	1650	2600	3420	1530	2400	2020	2640	2300	2240	745
24	1080	235	1800	2600	3640	1560	2400	2080	2700	2100	2400	1020
25	1090	235	1800	2600	3580	1460	2400	2000	3220	2090	2600	1060
26	1040	235	1800	2600	3880	1450	2190	2140	3480	1700	2600	1110
27	1040	230	1800	2550	3900	1430	2200	2250	3300	1620	2500	1250
28	960	230	1800	2550	3900	1410	2200	2140	3200	1530	2500	1190
29	950	230	1800	2580	---	1270	2200	2090	3300	1350	2500	1190
30	890	230	1800	2440	---	1250	2200	2610	3300	1230	2440	972
31	800	---	1800	3190	---	1380	---	2980	---	1850	2320	---
TOTAL	31570	21025	22038	70240	103800	85600	64460	65778	95070	80930	90480	42277
MEAN	1018	701	711	2266	3707	2761	2149	2122	3169	2611	2919	1409
MAX	2300	1550	1800	3190	4090	3900	2610	2980	3540	3360	3960	2330
MIN	150	230	151	1800	3420	1250	1930	524	2640	1230	1950	745
AC-FT	62620	41700	43710	139300	205900	169800	127900	130500	188600	160500	179500	83860
(†)	76120	46590	48160	144300	211600	181800	143000	145700	203200	174200	197300	101000

CAL YR 1985 TOTAL 718133.2 MEAN 1967 MAX 8950 MIN 1.6 AC-FT 1424000 (†) MEAN 2150 AC-FT 1556000
WTR YR 1986 TOTAL 773268 MEAN 2119 MAX 4090 MIN 150 AC-FT 1534000 (†) MEAN 2311 AC-FT 1673000

(†) COMBINED FLOW, IN ACRE-FT, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL BERNARDO INTERIOR DRAIN AND LOWER SAN JUAN RIVERSIDE DRAIN.

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1956 to current year.
WATER TEMPERATURES: October 1964 to current year.
SUSPENDED-SEDIMENT DISCHARGES: October 1964 to current year.

REMARKS.--Additional sediment total-discharge determinations were made monthly when needed. Records prior to 1965 water year were published as 08332000 Rio Grande near Bernardo, N. Mex., a composite of 08331990 Rio Grande Conveyance Channel near Bernardo, 08332010 Rio Grande Floodway near Bernardo, and 08332050 Bernardo Interior Drain at Bernardo.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1964-86): Maximum daily, 1,410 microsiemens, July 23, 1976; minimum daily, 224 microsiemens, June 5, 1980.
WATER TEMPERATURES: Maximum daily, 34.5°C, Aug. 9, 1975; minimum daily, 0.0°C on several days during 1971-72, 1976-77, 1979, and 1983-85.
SEDIMENT CONCENTRATIONS (water years 1975-86): Maximum daily mean, 21,400 mg/L, Aug. 11, 1979; minimum daily mean, no flow on many days of most years.
SEDIMENT LOADS: Maximum daily, 356,000 tons, Aug. 11, 1967; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 690 microsiemens, Nov. 21; minimum daily, 273 microsiemens, Aug. 4.
WATER TEMPERATURES: Maximum daily, 32.0°C, June 26; minimum daily, 3.0°C, Dec. 21.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,400 mg/L, July 10; minimum daily mean, 24 mg/L, Dec. 7
SEDIMENT LOADS: Maximum daily, 19,400 tons, July 10; minimum daily, 12 tons, Dec. 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
21...	1245	250	690	621	8.10	8.10	11.5	7.5	9.8	27	210	41
JAN												
09...	1145	2.1	410	--	7.50	--	10.0	5.0	11.2	--	--	--
MAY												
23...	0930	2050	405	389	8.40	8.10	21.5	18.0	8.0	--	120	17
JUL												
16...	1215	2630	305	306	7.70	8.00	17.0	12.0	9.0	32	100	11
SEP												
03...	1030	2300	300	--	7.54	--	27.0	23.5	--	--	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV												
21...	68	10	51	2	5.1	210	0	170	155	110	27	0.50
JAN												
09...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
23...	37	6.2	30	1	3.3	--	--	--	101	65	17	0.30
JUL												
16...	31	5.4	21	1	3.3	--	--	--	89	52	8.5	0.30
SEP												
03...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
21...	28	400	0.600	0.640	0.460	0.84	1.9	0.610	0.520	6.0	110	10
JAN												
09...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
23...	20	240	--	--	--	--	--	--	--	--	100	14
JUL												
16...	18	190	0.400	0.420	0.030	0.97	1.4	0.210	0.170	5.4	50	13
SEP												
03...	--	--	--	--	--	--	--	--	--	--	--	--

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 21...	1245	4	4	<1	1	<10	<10	3

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 21...	3	2	<1	<1	<1	50	23

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, DISCH, SUSP. + BED MA-TERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
OCT										
15...	1000	1940	--	14.0	648	3390	--	99	100	--
NOV										
06...	1130	530	--	12.0	196	280	687	--	--	--
DEC										
05...	1200	206	--	7.0	32	18	51	70	79	99
JAN										
21...	1230	2600	--	13.0	251	1760	2750	72	80	99
FEB										
06...	1300	3500	--	6.5	381	3600	6970	--	--	--
MAR										
07...	1015	3770	--	10.5	185	1880	4370	74	96	96
APR										
10...	1030	2060	--	17.0	92	512	1150	78	93	99
MAY										
09...	1000	2420	--	12.0	60	392	804	93	97	99
23...	0930	2050	405	18.0	102	565	--	78	80	99
JUN										
05...	1030	3390	--	21.0	105	961	1480	96	98	100
19...	0930	3090	--	21.0	930	7760	9430	98	99	100
29...	1730	3300	--	26.0	1350	12000	--	99	100	--
JUL										
03...	0930	3340	--	24.0	395	3560	5200	99	100	--
22...	1800	2500	--	27.0	659	4450	--	98	100	--
AUG										
06...	0945	3720	--	24.0	194	1950	2900	96	--	--
06...	0945	3720	--	24.0	--	--	--	--	--	--
21...	1015	2400	--	25.0	90	583	897	88	--	--
21...	1015	2400	--	25.0	--	--	--	--	--	--
SEP										
03...	1030	2300	300	23.5	149	925	1400	98	--	--
03...	1030	2300	--	23.5	--	--	--	--	--	--
11...	0940	1600	--	22.5	1620	7000	10000	100	--	--
11...	0940	1600	--	22.5	--	--	--	--	--	--
19...	0955	1560	--	18.5	--	--	--	--	--	--

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued
WATER-QUALITY RECORDS
WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
OCT										
15...	--	--	45	62	--	88	--	--	--	--
NOV										
06...	--	--	--	--	--	--	27	38	99	100
DEC										
05...	100	--	--	--	--	--	--	--	--	--
JAN										
21...	100	--	--	--	--	--	--	--	--	--
FEB										
06...	--	--	--	--	--	--	49	63	99	100
MAR										
07...	100	--	--	--	--	--	--	--	--	--
APR										
10...	99	100	--	--	--	--	--	--	--	--
MAY										
09...	100	--	--	--	--	--	--	--	--	--
23...	100	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
19...	--	--	43	64	--	89	--	--	--	--
29...	--	--	42	57	--	86	--	--	--	--
JUL										
03...	--	--	47	62	--	84	--	--	--	--
22...	--	--	47	60	74	84	--	--	--	--
AUG										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
SEP										
03...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--
11...	--	--	61	77	90	95	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--

DATE	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
OCT										
15...	--	--	--	--	--	--	--	--	--	--
NOV										
06...	0	0	59	98	--	--	--	--	--	100
DEC										
05...	2	12	96	100	--	--	--	--	--	--
JAN										
21...	14	33	99	100	--	--	--	--	--	--
FEB										
06...	31	71	98	100	--	--	--	--	--	--
MAR										
07...	0	2	65	100	--	--	--	--	--	--
APR										
10...	11	68	99	100	--	--	--	--	--	--
MAY										
09...	20	64	97	100	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	19	56	95	99	100	--	--	--	--	--
19...	42	86	99	100	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	35	57	96	--	--	--	--	--	100	--
22...	--	--	--	--	--	--	--	--	--	--
AUG										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	43	64	92	99	100
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	31	74	98	100	--
SEP										
03...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	22	45	96	100	--
11...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	3	10	77	100	--
19...	--	--	--	--	--	2	6	57	99	100

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	605	562	665	456	395	390	412	379	337	324	329	352
2	604	578	674	451	388	388	405	374	344	317	309	351
3	632	611	618	455	384	392	405	377	345	323	---	359
4	625	607	660	466	383	377	412	355	365	320	273	357
5	533	616	671	466	385	374	415	350	378	322	291	355
6	621	614	654	458	386	372	432	364	352	328	296	379
7	565	627	664	460	381	375	425	372	348	314	298	385
8	564	638	681	454	384	375	392	364	332	316	298	387
9	564	598	680	452	390	381	400	358	335	331	298	387
10	588	509	677	452	386	379	399	354	329	363	302	380
11	548	487	681	448	391	382	390	351	352	350	305	414
12	439	481	677	444	394	381	387	340	334	351	307	415
13	476	482	680	437	400	386	389	328	337	341	319	425
14	472	472	677	437	395	380	388	324	329	335	314	425
15	454	472	683	441	397	387	382	321	334	330	317	430
16	464	471	672	430	396	405	383	345	327	326	317	429
17	541	553	677	431	402	411	386	453	342	339	318	432
18	439	559	678	422	400	413	384	402	325	336	317	434
19	---	624	514	419	399	405	382	385	328	357	325	449
20	505	624	500	416	393	409	378	391	321	334	319	440
21	491	641	501	416	394	435	372	388	323	339	332	443
22	474	652	466	416	391	435	368	390	324	340	358	458
23	500	648	461	420	398	438	363	396	320	346	330	504
24	480	650	454	418	390	417	368	403	320	342	324	488
25	470	661	474	401	392	417	369	400	321	362	334	497
26	459	655	455	400	393	417	368	366	318	355	345	479
27	472	665	455	403	397	454	372	366	334	342	342	619
28	470	664	453	401	387	458	372	365	346	339	341	642
29	480	676	454	402	---	462	370	352	350	341	363	631
30	503	661	452	400	---	463	374	340	330	342	351	622
31	564	---	455	400	---	452	---	337	---	329	351	---
MEAN	520	592	586	431	392	407	388	367	336	337	321	446

WTR YR 1986 MEAN 427 MAX 683 MIN 273

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	14.0	8.0	7.0	11.0	15.0	15.0	23.0	19.0	25.0	29.0	25.0
2	22.0	14.0	8.0	6.0	12.0	13.0	13.0	15.0	25.0	26.0	27.0	29.0
3	20.0	16.0	9.0	5.0	12.0	14.0	11.0	17.0	20.0	29.0	---	24.0
4	20.0	15.0	9.0	6.0	11.0	14.0	13.0	21.0	25.0	25.0	30.0	26.0
5	19.0	15.0	10.0	4.0	9.0	17.0	11.0	28.0	25.0	27.0	26.0	28.0
6	19.0	15.0	10.0	5.0	7.0	16.0	18.0	20.0	26.0	26.0	27.0	27.0
7	19.0	15.0	11.0	4.0	7.0	16.0	18.0	20.0	27.0	25.0	28.0	19.0
8	19.0	14.0	12.0	4.5	6.0	17.0	20.0	14.0	24.0	27.0	26.0	21.0
9	19.0	13.0	8.0	5.0	7.0	16.0	20.0	18.0	24.0	23.0	22.0	21.0
10	19.0	14.0	8.0	6.0	6.0	14.0	19.0	23.0	21.0	26.0	23.0	23.0
11	19.0	14.0	5.0	9.0	7.0	11.0	18.0	23.0	24.0	29.0	25.0	19.0
12	17.0	13.0	4.0	8.0	7.0	9.0	17.0	23.0	23.0	30.0	25.0	24.0
13	18.0	12.0	4.0	6.0	8.0	10.0	19.0	21.0	24.0	29.0	24.0	20.0
14	17.0	10.0	5.0	5.0	8.0	11.0	18.0	22.0	25.0	30.0	25.0	21.0
15	18.0	10.0	4.0	7.0	10.0	12.0	18.0	21.0	25.0	28.0	26.0	24.0
16	14.0	12.0	6.0	6.0	11.0	13.0	19.0	20.0	25.0	21.0	26.0	24.0
17	15.0	10.0	6.5	8.0	12.0	11.0	16.0	17.0	24.0	25.0	29.0	22.0
18	16.0	8.0	7.0	6.0	11.5	11.0	16.0	20.0	24.0	28.0	25.0	20.0
19	---	8.0	6.0	8.0	12.0	14.0	17.0	24.0	25.0	27.0	26.0	23.0
20	15.0	9.0	5.0	8.0	11.0	15.0	17.0	24.0	28.0	25.0	29.0	15.0
21	14.0	8.0	3.0	8.0	11.0	16.0	21.0	23.0	28.0	24.0	29.0	20.0
22	19.0	9.0	8.0	8.0	10.0	18.0	19.0	25.0	25.0	27.0	29.0	22.0
23	20.0	9.0	8.0	9.0	12.0	14.0	19.0	21.0	27.0	29.0	28.0	19.0
24	20.0	12.0	9.0	10.0	16.0	16.0	17.0	19.0	26.0	24.0	27.0	16.0
25	19.0	11.0	9.0	9.0	16.0	18.0	13.0	24.0	21.0	26.0	28.0	16.0
26	19.0	11.0	7.0	11.0	12.0	18.0	12.0	25.0	32.0	24.0	24.0	18.0
27	20.0	11.0	8.0	10.0	12.5	19.0	14.0	26.0	28.0	26.0	23.0	17.0
28	19.0	12.0	7.0	10.0	12.0	20.0	18.0	28.0	26.0	26.0	24.0	18.0
29	17.0	12.0	6.0	11.0	---	19.0	21.0	20.0	26.0	28.0	21.0	19.0
30	18.0	9.0	7.0	10.0	---	20.0	24.0	19.0	28.0	29.0	28.0	19.0
31	15.0	---	8.0	10.0	---	19.0	---	19.0	---	27.0	25.0	---
MEAN	18.0	12.0	7.5	7.5	10.5	15.0	17.0	21.5	25.0	26.5	26.0	21.5

WTR YR 1986 MEAN 17.5 MAX 32.0 MIN 3.0

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	90	61	119	207	115	70	262	1270	323	3100	235	2470
2	81	44	93	128	64	36	157	763	240	2300	196	2060
3	94	38	75	107	56	32	119	578	452	4330	218	2300
4	59	32	74	104	49	28	66	321	748	7170	211	2220
5	87	54	60	86	37	20	210	1020	697	6770	247	2600
6	118	86	70	100	31	17	242	1180	478	4650	240	2460
7	56	45	46	66	24	13	235	1240	446	4340	231	2370
8	63	39	39	63	72	37	313	1770	480	4670	319	3070
9	74	36	104	253	99	49	726	4120	429	4170	284	2700
10	791	406	240	842	67	33	597	3380	806	7830	244	2460
11	1160	2510	208	870	55	27	370	2100	843	8190	252	2590
12	2370	14700	165	691	72	34	464	2630	391	3800	252	2520
13	1940	10500	160	670	84	39	440	2490	229	2230	163	1660
14	1920	9330	172	720	27	12	264	1500	217	2230	150	1540
15	587	3170	171	716	32	14	197	1120	255	2620	164	1470
16	569	2530	278	1050	90	40	197	1130	409	4200	190	1500
17	276	1330	84	254	97	42	204	1210	126	1290	156	1200
18	484	2610	74	164	147	62	181	1120	96	985	112	768
19	496	2280	52	81	218	89	174	1170	165	1690	130	874
20	508	2150	44	49	220	129	175	1260	213	2270	126	779
21	257	1020	37	25	176	442	210	1470	293	3190	109	574
22	198	722	30	19	169	607	208	1460	360	3980	118	472
23	336	998	36	23	194	864	191	1340	225	2080	116	479
24	231	674	35	22	151	734	194	1360	200	1970	92	388
25	159	468	31	20	239	1160	231	1620	212	2050	76	300
26	124	348	30	19	539	2620	227	1590	247	2590	85	333
27	118	331	28	17	349	1700	241	1660	269	2830	73	282
28	100	259	28	17	252	1220	231	1590	246	2590	75	286
29	103	264	31	19	302	1470	271	1890	---	---	112	384
30	88	211	125	78	283	1380	274	1810	---	---	67	226
31	99	214	---	---	244	1190	249	2140	---	---	60	224
TOTAL	---	57460	---	7480	---	14210	---	49302	---	100115	---	43559

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	139	728	78	455	131	1060	351	3130	306	1610	218	1340
2	196	1020	73	453	249	1980	564	5030	344	3050	209	1260
3	259	1830	75	466	235	1810	749	6770	282	2590	183	1150
4	119	826	79	491	362	3280	469	4250	245	2220	184	1140
5	94	513	112	696	365	3270	523	4660	246	2250	151	856
6	275	1450	87	540	446	4130	1320	11800	237	2330	117	524
7	260	1400	109	647	410	3630	823	7330	218	2300	118	411
8	461	2490	291	1690	169	1480	869	7510	195	2080	131	460
9	203	1100	255	1510	118	1000	1470	12500	186	1910	240	842
10	192	1040	307	1890	119	922	2400	19400	148	1500	759	2870
11	125	675	276	1690	570	4190	1530	12000	143	1430	1200	4860
12	102	551	256	1710	283	2320	828	6260	150	1420	633	2560
13	100	540	146	879	153	1350	443	3470	245	2160	397	1500
14	101	545	111	680	130	1180	321	2340	165	1350	322	1270
15	99	535	93	507	118	1030	231	1620	133	1030	1260	4760
16	100	540	81	215	107	1020	982	6890	116	855	1090	4120
17	90	486	91	129	110	1010	607	4100	93	670	473	1920
18	83	448	177	851	125	1160	341	2300	95	646	425	1610
19	85	482	117	641	623	5670	568	3990	104	688	681	2570
20	100	634	88	532	248	2110	465	3770	91	580	414	1120
21	88	570	97	571	152	1270	751	6080	84	540	260	562
22	90	583	94	500	114	886	713	4810	146	966	209	451
23	101	654	91	496	102	727	650	4040	181	1090	147	296
24	88	570	93	522	104	758	400	2270	155	1000	203	559
25	37	240	87	470	126	1100	856	4830	230	1610	157	449
26	29	171	85	491	145	1360	737	3380	1120	7860	189	566
27	78	463	77	468	718	6400	501	2190	780	5260	339	1140
28	129	766	76	439	1650	14300	285	1180	676	4560	229	736
29	85	505	81	457	1480	13200	184	671	630	4250	171	549
30	76	451	127	895	567	5050	199	661	354	2330	136	357
31	---	---	134	1080	---	---	258	1290	261	1630	---	---
TOTAL	---	22806	---	23061	---	88653	---	160522	---	63765	---	42808

TOTAL LOAD FOR YEAR: 673741 TONS.

08332050 BERNARDO INTERIOR DRAIN NEAR BERNARDO, NM

LOCATION.--Lat 34°24'56", long 106°49'15", Socorro County, Hydrologic Unit 13020203, on right bank 110 ft upstream from culvert on U.S. Highway 60, and 1.0 mi east of Bernardo. P10

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-ft published in WSP 1923. Daily records available in district files beginning October 1943.

GAGE.--Water-stage recorder. Elevation of gage is 4,710 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 4, 1936 to May 17, 1937, nonrecording gage 300 ft downstream and Oct. 1, 1943 to Jan. 12, 1978, water-stage recorder at site 150 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 4-20. Records good except for estimated daily discharges, which are fair. This drain is 1 of 4 channels (stations 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 station 08332010. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 208 ft³/s, May 5, 1983; no flow at times. Prior to 1952, drain was subject to overflow from floodway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	42	22	25	28	64	109	102	111	107	83	137
2	123	38	20	24	28	63	104	91	99	100	76	134
3	127	37	20	25	28	63	89	104	92	92	82	132
4	105	36	19	25	28	69	103	113	102	103	82	133
5	109	35	20	25	28	94	115	104	110	105	80	130
6	102	30	20	24	28	110	112	97	104	94	83	132
7	97	27	20	24	28	106	111	100	103	84	79	129
8	102	26	20	25	28	97	106	104	98	99	85	133
9	106	26	20	25	29	100	108	94	93	96	94	124
10	124	28	20	25	29	81	112	92	86	94	104	136
11	136	28	20	25	29	80	111	100	90	89	111	141
12	131	28	20	26	29	80	104	98	88	89	108	144
13	124	28	20	26	29	76	111	99	87	88	109	140
14	120	28	20	26	29	76	105	99	87	85	133	137
15	117	28	19	26	29	86	97	99	86	79	166	147
16	133	27	18	26	29	98	104	104	81	84	158	168
17	134	27	18	27	29	95	108	103	89	85	156	144
18	126	27	18	27	29	88	106	108	85	84	138	133
19	110	26	19	27	38	85	103	108	87	77	120	129
20	104	25	21	27	60	96	112	106	83	86	107	115
21	103	24	23	27	62	102	106	95	87	91	139	120
22	105	24	24	27	63	96	101	107	89	97	146	117
23	103	23	24	27	63	95	91	101	95	92	170	114
24	108	23	25	27	63	94	94	103	97	92	180	130
25	107	23	25	28	63	98	105	105	98	93	164	122
26	106	22	24	27	63	99	121	99	93	87	141	129
27	97	21	25	27	63	107	122	103	97	95	134	129
28	117	22	26	27	64	105	110	97	110	93	139	132
29	132	22	25	27	---	107	102	99	107	83	116	120
30	115	22	24	27	---	107	108	100	104	82	128	110
31	67	---	25	27	---	106	---	107	---	82	136	---
TOTAL	3510	823	664	808	1116	2823	3190	3141	2838	2807	3747	3941
MEAN	113	27.4	21.4	26.1	39.9	91.1	106	101	94.6	90.5	121	131
MAX	136	42	26	28	64	110	122	113	111	107	180	168
MIN	67	21	18	24	28	63	89	91	81	77	76	110
AC-FT	6960	1630	1320	1600	2210	5600	6330	6230	5630	5570	7430	7820

CAL YR 1985	TOTAL	28571	MEAN	78.3	MAX	151	MIN	18	AC-FT	56670
WTR YR 1986	TOTAL	29408	MEAN	80.6	MAX	180	MIN	18	AC-FT	58330

08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, NM

LOCATION.--Lat 35°38'08", long 107°09'56", in SW¼ sec.21, T.16 N., R.3 W., Sandoval County, Hydrologic Unit 13020204, on right bank 1.6 mi upstream from Arroyo Chico, 5.5 mi northeast of village of Guadalupe, and at mile 106.8.

DRAINAGE AREA.--420 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,950 ft above National Geodetic Vertical Datum of 1929. Prior to July 14, 1966 at datum 1.01 ft higher.

REMARKS.--Estimated daily discharges: Nov. 14-17, 19-22, Dec. 8-16, 28-31, Jan. 1-17, 23-28, June 15-18, Aug. 4-6, 12, and Sept. 14-16. Records poor. Diversions for irrigation of about 3,700 acres upstream from station in past years, but present diversions are negligible. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years, 13.6 ft³/s, 9,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,940 ft³/s July 29, 1967, gage height, 13.53 ft, from rating curve extended above 1,300 ft³/s on basis of slope-area measurements at gage heights 7.75 ft and 10.60 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1943, probably exceeded 5,000 ft³/s based on records for stations upstream and downstream.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 2	0130	*807	*4.74				

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.50	4.5	1.2	3.5	1.7	13	30	42	27	1.4	.00
2	.30	1.0	4.2	1.2	2.3	1.4	18	37	50	122	.87	.00
3	.00	1.1	3.5	1.2	1.8	1.5	34	50	57	12	3.0	.00
4	.00	1.1	4.8	1.0	3.1	1.8	28	61	62	48	10	.00
5	.00	1.1	4.0	1.0	2.6	2.1	22	68	48	54	8.0	.00
6	.00	1.0	3.3	1.5	2.4	2.3	18	64	46	30	5.0	.00
7	.00	.44	3.0	1.2	1.6	2.1	17	54	37	42	2.5	4.0
8	.00	.38	2.8	1.2	1.4	2.0	19	49	37	36	.73	1.8
9	.02	.22	3.2	1.2	1.3	2.2	20	37	31	60	1.7	7.7
10	11	.16	2.5	1.0	2.4	1.8	22	30	37	19	5.8	26
11	167	.38	2.3	1.2	2.5	4.8	21	24	34	13	20	31
12	11	.55	2.4	1.1	1.7	5.3	20	26	28	9.4	60	8.8
13	2.5	.50	2.6	1.2	3.3	7.2	20	31	20	7.5	30	88
14	2.2	.50	2.6	1.0	5.3	9.1	20	31	15	3.3	6.7	125
15	1.4	.50	2.0	1.0	6.5	7.6	19	31	12	2.5	2.3	80
16	1.4	.60	1.9	1.5	8.6	5.5	19	28	10	21	.64	65
17	3.3	1.5	1.8	1.5	12	6.2	20	33	10	35	.00	40
18	2.5	1.9	1.3	1.6	11	6.2	20	40	14	37	.00	6.9
19	1.9	1.9	1.2	1.5	11	10	20	38	16	39	.00	2.3
20	1.9	1.9	.55	1.3	8.5	12	20	33	19	42	.00	1.1
21	1.3	1.8	.28	1.3	5.9	6.8	19	33	9.1	46	.00	.18
22	1.3	1.8	.16	1.2	4.5	4.5	19	36	4.0	34	.00	.00
23	1.2	1.8	.16	1.0	2.2	3.8	20	38	4.0	29	.00	.00
24	1.0	2.7	.22	1.2	1.9	4.4	26	37	7.5	30	.00	20
25	.50	4.0	.22	.70	1.6	6.3	26	35	23	16	.20	24
26	.50	4.2	.28	1.1	1.3	7.3	31	37	39	14	2.9	5.6
27	.44	3.8	.33	1.2	1.4	7.2	28	37	50	11	14	23
28	.44	3.7	.50	1.1	1.5	7.1	30	41	38	2.6	2.6	5.5
29	.44	3.7	.50	1.2	---	8.3	27	45	19	2.0	2.0	5.2
30	.38	3.8	.80	1.4	---	9.1	27	41	9.3	1.5	.29	16
31	.44	---	1.0	2.0	---	10	---	47	---	1.5	.00	---
TOTAL	214.86	48.53	58.90	38.00	113.1	167.6	663	1222	827.9	847.3	180.63	587.08
MEAN	6.93	1.62	1.90	1.23	4.04	5.41	22.1	39.4	27.6	27.3	5.83	19.6
MAX	167	4.2	4.8	2.0	12	12	34	68	62	122	60	125
MIN	.00	.16	.16	.70	1.3	1.4	13	24	4.0	1.5	.00	.00
AC-FT	426	96	117	75	224	332	1320	2420	1640	1680	358	1160

CAL YR 1985	TOTAL	10088.57	MEAN	27.6	MAX	420	MIN	.00	AC-FT 20010
WTR YR 1986	TOTAL	4968.90	MEAN	13.6	MAX	167	MIN	.00	AC-FT 9860

08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-56 (published as "below Cabezon"), 1981 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGES: July 1948 to June 1956, October 1981 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since August 1981.

REMARKS.-- Under the heading SAMPLE SOURCE numerical values are used to indicate sampling method; 26 indicates automatic pump sample and 29 indicates dip or grab sample.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 190,000 mg/L, Aug. 2, 1983; minimum daily mean, no flow on many days each year.
SEDIMENT LOADS: Maximum daily, 730,000 tons, July 27, 1955; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 123,000 mg/L, Oct. 11; minimum daily mean, no flow on many days.
SEDIMENT LOADS: Maximum daily, 55,500 tons, Oct. 11; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)
MAR									
19...	1253	14	3030	9.0	18600	703	98	100	67
MAY									
01...	1340	30	1420	21.5	19500	1580	--	--	40
01...	1352	30	1210	21.5	17800	1440	--	--	46
01...	1400	30	--	21.5	18400	1490	--	--	46
05...	1000	68	--	--	45000	8260	--	--	39
05...	2200	68	--	--	41800	7670	--	--	42
29...	1120	45	--	18.0	24000	2920	--	--	37
29...	1141	45	--	18.0	19700	2390	--	--	44
JUL									
01...	1106	27	--	26.5	3280	239	--	--	77
01...	1135	27	--	26.5	2530	184	100	--	78
01...	1940	81	--	--	67900	14800	--	--	49
06...	1800	18	--	--	68700	3340	--	--	38
11...	1105	15	--	22.5	9190	372	--	--	62
11...	1118	15	--	22.5	13000	527	--	--	46
18...	1520	60	--	--	120000	19400	--	--	38
18...	1850	44	--	--	111000	13200	--	--	45
SEP									
26...	1100	3.8	--	--	138000	1420	--	--	39
26...	1442	4.5	--	16.5	37000	450	--	--	53

DATE	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SAMPLE SOURCE (72005)	
MAR									
19...	73	91	--	--	--	--	--	26	
MAY									
01...	49	64	89	97	100	--	--		--
01...	54	71	94	99	100	--	--	26	
01...	55	72	94	99	100	--	--		--
05...	47	67	93	99	100	--	--		--
05...	51	67	92	99	100	--	100		--
29...	45	60	83	96	100	--	--		--
29...	53	69	94	99	100	--	--		--
JUL									
01...	88	93	97	100	--	--	--		--
01...	94	99	--	--	--	--	--		--
01...	60	81	94	99	100	--	--		--
06...	45	64	90	98	99	100	--		--
11...	73	90	97	100	--	--	--		--
11...	55	70	83	88	92	100	--		--
18...	45	64	87	98	100	--	--		--
18...	53	72	90	98	100	--	--		--
SEP									
26...	46	64	87	96	100	--	--		--
26...	63	78	92	97	100	--	--		--

08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20000	27	6780	9.2	765	9.3	9850	32	4210	40	6860	31
2	31600	26	6130	17	755	8.6	8880	29	4870	30	5420	20
3	0	.00	4400	13	716	6.8	8540	28	2950	14	4990	20
4	0	.00	2940	8.7	949	12	10100	27	3510	29	4870	24
5	0	.00	1530	4.5	1000	11	9600	26	3420	24	4730	27
6	0	.00	682	1.8	4410	39	9590	39	3770	24	4190	26
7	0	.00	644	.77	5840	47	9830	32	3590	16	3070	17
8	0	.00	645	.66	5220	39	9620	31	4070	15	2680	14
9	4500	.24	640	.38	12500	108	9700	31	4360	15	2730	16
10	46000	1370	646	.28	10300	70	9940	27	4690	30	12300	60
11	123000	55500	861	.88	6240	39	14400	47	5370	36	11600	150
12	81100	2410	968	1.4	3600	23	12500	37	5120	24	12700	182
13	54600	369	886	1.2	3080	22	11000	36	6050	54	17800	346
14	42600	253	1140	1.5	4710	33	11400	31	10700	153	12400	305
15	38600	146	1170	1.6	6210	34	10500	28	13200	232	12300	252
16	38900	147	1230	2.0	4370	22	10600	43	13900	323	12600	187
17	42100	375	1200	4.9	6100	30	10800	44	14500	470	15200	254
18	40500	273	1020	5.2	6300	22	9990	43	14300	425	17600	295
19	41300	212	1040	5.3	6440	21	9940	40	14300	425	21400	578
20	37400	192	1020	5.2	4440	6.6	11700	41	15200	349	20000	648
21	33300	117	1010	4.9	3680	2.8	11600	41	14600	233	16900	310
22	27300	96	954	4.6	3240	1.4	10700	35	13900	169	14000	170
23	23400	76	912	4.4	3440	1.5	10000	27	12400	74	13300	136
24	20100	54	1010	7.4	3890	2.3	10200	33	12000	62	13500	160
25	16700	23	986	11	4570	2.7	8880	17	11300	49	15300	260
26	16000	22	1000	11	4880	3.7	10400	31	10700	38	15600	307
27	14000	17	1120	11	7190	6.4	7630	25	9460	36	15400	299
28	11700	14	938	9.4	9420	13	8540	25	7970	32	15600	299
29	10300	12	704	7.0	11000	15	7980	26	---	---	15600	350
30	8910	9.1	644	6.6	10300	22	8130	31	---	---	15900	391
31	7870	9.3	---	---	10200	28	6080	33	---	---	16200	437
TOTAL	---	61749.64	---	162.77	---	702.1	---	1016	---	3421	---	6571

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16600	583	18900	1530	28500	3230	36700	2680	189	.71	0	.0
2	17600	855	25900	2590	27500	3710	92900	30600	206	.48	0	.0
3	22600	2070	28500	3850	26700	4110	47200	1530	9540	77	0	.0
4	20400	1540	37600	6190	40000	6700	66200	8580	54900	1480	0	.0
5	18000	1070	43200	7930	36100	4680	62900	9170	43400	937	0	.0
6	17200	836	41500	7170	35500	4410	43700	3540	32900	444	0	.0
7	17100	785	40500	5900	33000	3300	50400	5720	42900	290	8030	87
8	17300	887	39000	5160	33500	3350	57700	5610	14200	28	59900	291
9	17600	950	37000	3700	33300	2790	58800	9530	27900	128	39800	827
10	17700	1050	35600	2880	33700	3370	26500	1360	67500	1060	77700	5450
11	17500	992	34600	2240	34100	3130	12300	432	51200	2760	82000	6860
12	18100	977	34300	2410	32900	2490	9520	242	65700	10600	67100	1590
13	18900	1020	32000	2680	30600	1650	9390	190	67000	5430	55400	13200
14	18600	1000	29300	2450	26100	1060	7990	71	63600	1150	80700	27200
15	18600	954	29100	2440	23100	748	6150	42	40400	251	60800	13100
16	18700	959	26300	1990	20900	564	28600	1620	18800	32	54900	9630
17	19100	1030	27500	2450	18700	505	62000	5860	0	.00	65600	7080
18	19300	1040	30800	3330	15800	597	85900	8580	0	.00	64500	1200
19	19800	1070	28900	2970	19100	825	90400	9520	0	.00	48700	302
20	19700	1060	29200	2600	31600	1620	77200	8750	0	.00	34500	102
21	19300	990	22800	2030	21400	526	75900	9430	0	.00	14300	6.9
22	18400	944	22900	2230	13900	150	67500	6200	0	.00	0	.0
23	17700	956	22800	2340	13600	147	84500	6620	0	.00	0	.0
24	17300	1210	22600	2260	20500	415	72400	5860	0	.00	46700	2520
25	17500	1230	21500	2030	29800	1850	44100	1910	0	.00	81900	5310
26	17800	1490	21000	2100	35100	3700	11900	450	51100	400	72300	1090
27	19700	1490	21000	2100	39100	5280	1510	45	51600	1950	78200	4860
28	19400	1570	21100	2340	41100	4220	752	5.3	28900	203	68600	1020
29	19200	1400	22800	2770	34400	1760	382	2.1	12500	67	64200	901
30	19700	1440	21200	2350	30700	771	280	1.1	24200	19	64700	2800
31	---	---	24600	3120	---	---	212	.9	0	.00	---	---
TOTAL	---	33448	---	98130	---	71658	---	144151.4	---	27307.19	---	105426.9

TOTAL LOAD FOR YEAR: 553744.00 TONS.

08340500 ARROYO CHICO NEAR GUADALUPE, NM

LOCATION.--Lat 35°35'33", long 107°11'19", in NE¼ sec.30, T.16 N., R.3 W., Sandoval County, Hydrologic Unit 13020205, on left bank 0.2 mi upstream from mouth, 4.1 mi northwest of Guadalupe, and 5.5 mi southwest of Cabezon.

DRAINAGE AREA.--1,390 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to September 1986 (discontinued).

REVISED RECORDS.--WSP 1282: 1944-50.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,920 ft above National Geodetic Vertical Datum of 1929. Prior to June 21, 1968 at site 500 ft upstream at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Dec. 13-17, 23-31, Feb. 11 to Mar. 13, May 17-28, and June 5-24. Water-discharge records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 100 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--43 years, 21.1 ft³/s, 15,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s, Sept. 12, 1972, gage height, 17.5 ft from floodmarks, from rating curve extended above 2,900 ft³/s on basis of slope-area measurements at gage heights 11.6 ft and 14.8 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 25	2315	*1,700	*6.15				

Minimum daily discharge, 0.17 ft³/s, May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	18	12	3.3	7.0	11	8.0	3.7	8.7	26	.73	2.4
2	2.8	9.7	9.0	3.0	7.5	12	12	4.2	14	78	.92	.93
3	2.0	11	11	5.7	4.3	9.3	11	7.4	17	3.3	17	.86
4	1.5	11	9.0	6.1	3.2	10	12	61	9.2	111	19	.92
5	1.7	11	9.1	5.0	3.3	12	10	6.5	16	410	21	.82
6	2.2	5.8	7.2	4.7	3.4	10	5.8	11	15	65	160	.45
7	6.9	5.4	6.1	1.2	7.3	8.9	5.2	14	14	24	13	65
8	2.7	7.5	6.1	.65	3.4	7.8	3.9	13	10	46	1.4	366
9	5.0	7.5	5.7	4.4	2.3	7.4	4.0	22	10	133	1.0	112
10	73	7.5	3.1	1.9	3.8	7.2	4.7	12	14	95	1.3	158
11	350	7.9	1.3	1.1	4.4	8.0	4.2	9.8	15	13	1.6	72
12	67	6.9	1.4	7.2	4.1	7.6	5.2	11	17	8.3	20	13
13	14	7.8	1.4	5.7	11	8.5	6.5	23	8.0	11	7.8	72
14	12	10	.37	4.4	13	11	4.7	14	1.5	6.4	1.1	59
15	9.4	8.9	.65	3.1	8.2	14	6.3	16	2.4	96	.54	10
16	9.4	8.3	.27	2.6	9.8	10	7.7	11	10	109	.49	10
17	39	12	.30	4.4	14	12	5.2	8.2	13	24	.30	43
18	106	10	.33	3.1	11	9.9	4.8	4.0	16	88	.28	8.6
19	38	5.0	.53	5.7	9.0	11	5.7	2.5	19	64	.41	3.8
20	16	3.4	.57	6.1	12	9.7	4.9	4.0	10	81	.25	2.5
21	12	10	1.2	3.8	10	7.0	4.9	2.3	12	49	25	2.4
22	11	15	1.3	5.0	9.2	7.2	4.7	1.8	14	33	38	2.9
23	8.1	14	1.9	7.2	8.5	6.4	4.8	1.7	15	80	15	2.6
24	11	12	3.6	6.8	8.6	6.4	5.1	2.5	16	171	18	23
25	14	11	3.6	1.9	8.4	7.0	5.6	2.0	19	18	45	53
26	16	13	1.4	3.3	9.0	6.6	11	1.6	63	6.5	262	5.3
27	20	10	3.6	1.9	9.4	5.5	9.9	1.0	15	2.2	50	19
28	19	10	4.4	3.1	10	6.8	7.3	.80	17	1.7	6.9	3.9
29	18	12	3.3	4.4	---	6.9	5.1	.17	19	1.5	47	2.5
30	14	13	1.9	6.8	---	7.8	3.5	.49	20	.81	27	4.9
31	23	---	4.4	7.7	---	9.0	---	23	---	.69	11	---
TOTAL	927.8	294.6	116.02	131.25	215.1	273.9	193.7	295.66	449.8	1856.40	813.02	1120.78
MEAN	29.9	9.82	3.74	4.23	7.68	8.84	6.46	9.54	15.0	59.9	26.2	37.4
MAX	350	18	12	7.7	14	14	12	61	63	410	262	366
MIN	1.5	3.4	.27	.65	2.3	5.5	3.5	.17	1.5	.69	.25	.45
AC-FT	1840	584	230	260	427	543	384	586	892	3680	1610	2220

CAL YR 1985	TOTAL	8564.48	MEAN	23.5	MAX	458	MIN	.00	AC-FT 16990
WTR YR 1986	TOTAL	6688.03	MEAN	18.3	MAX	410	MIN	.17	AC-FT 13270

08340500 ARROYO CHICO NEAR GUADALUPE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-56, 1978 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGES: July 1948 to June 1956, October 1978 to September 1986 (discontinued).

INSTRUMENTATION.--Automatic pumping sediment sampler since July 1979.

REMARKS.--Under the heading SAMPLE SOURCE numerical values are used to indicate sampling method; 26 indicates automatic pump sample and 29 indicates dip or grab sample.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 201,000 mg/L, Sept. 18, 1981; minimum daily mean, no flow on many days of most years.
SEDIMENT LOADS: Maximum daily, 1,220,000 tons, July 17, 1953; minimum daily, 0 ton on many days of most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 141,000 mg/L, Sept. 8; minimum daily mean, 46 mg/L, May 29.
SEDIMENT LOADS: Maximum daily, 139,000 tons, Sept. 8; minimum daily, .02 ton, May 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)
MAR										
19...	1015	8.2	2830	4.5	2030	45	--	--	--	--
MAY										
01...	1225	4.4	2500	24.0	1510	18	--	--	--	--
01...	1251	4.1	2650	24.0	1400	15	86	94	99	99
01...	1255	3.8	--	24.0	1420	15	--	--	--	--
29...	0935	0.17	4630	16.0	41	0.02	97	--	--	--
JUL										
01...	0930	8.7	--	21.5	6990	164	--	--	--	--
01...	0947	8.7	--	21.5	7270	171	--	--	--	--
11...	1000	15	--	19.0	8780	356	--	--	--	--
11...	1020	15	--	19.0	12600	510	--	--	--	--
12...	1200	17	--	--	137000	6290	--	--	--	--
13...	1200	8.0	--	--	98100	2120	--	--	--	--
29...	1102	19	--	23.0	1800	92	--	--	--	--
SEP										
26...	1348	4.7	--	14.5	17000	216	--	--	--	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SAMPLE SOURCE (72005)
MAR										
19...	--	--	54	64	79	85	92	100	--	26
MAY										
01...	--	--	--	--	--	77	97	100	--	--
01...	99	100	74	74	74	--	--	--	--	26
01...	--	--	61	74	84	91	96	100	--	--
29...	--	--	--	--	--	--	--	--	--	29
JUL										
01...	--	--	83	92	94	96	97	100	--	--
01...	--	--	83	93	95	99	100	--	--	--
11...	--	--	76	87	93	97	99	100	--	--
11...	--	--	59	70	79	89	95	99	100	--
12...	--	--	20	24	39	67	86	98	100	--
13...	--	--	31	37	55	79	92	99	100	--
29...	--	--	78	90	96	98	99	100	--	--
SEP										
26...	--	--	76	87	94	97	98	100	--	--

08340500 ARROYO CHICO NEAR GUADALUPE, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5100	43	1930	94	1850	60	3570	32	2230	42	1390	41
2	3990	30	1800	47	1830	44	2650	21	2260	46	1390	45
3	3910	21	1690	50	2040	61	2440	38	2090	24	1390	35
4	3790	15	1640	49	1960	48	2090	34	2270	20	1390	38
5	3490	16	1600	48	1950	48	1820	25	2120	19	1370	44
6	3140	19	1280	20	1630	32	1890	24	2270	21	1340	36
7	3230	60	2830	41	2090	34	2010	6.5	2780	55	1340	32
8	3530	26	3490	71	2230	37	1500	2.6	2850	26	1350	28
9	3610	49	3480	70	2290	35	1300	15	2690	17	1310	26
10	3440	678	3350	68	2330	20	1240	6.4	2880	30	1260	24
11	32400	30600	3150	67	1930	6.8	2000	5.9	3120	37	1210	26
12	22500	4070	2940	55	1830	6.9	2240	44	4140	46	1190	24
13	15400	582	2710	57	1700	6.4	1930	30	5710	170	1200	28
14	14900	483	3140	85	1690	1.7	1820	22	4990	175	1680	50
15	14200	360	3540	85	1920	3.4	1900	16	4390	97	2580	98
16	13600	345	3850	86	1800	1.3	1910	13	3990	106	2390	65
17	12900	1360	3540	115	1750	1.4	1870	22	3470	131	2190	71
18	12300	3520	3340	90	1540	1.4	1870	16	2930	87	2100	56
19	11600	1190	3430	46	1310	1.9	1880	29	2680	65	2050	61
20	11300	488	3460	32	1350	2.1	1970	32	2340	76	2150	56
21	11100	360	4860	131	1590	5.2	2000	21	2020	55	2130	40
22	8780	261	5000	202	1810	6.4	1870	25	1770	44	2320	45
23	6690	146	5100	193	2400	12	1720	33	1670	38	2270	39
24	5360	159	5370	174	2950	29	1640	30	1660	39	2300	40
25	4910	186	4850	144	3060	30	1420	7.3	1630	37	2290	43
26	4120	178	4470	157	2870	11	1370	12	1560	38	2400	43
27	3560	192	2750	74	2680	26	1350	6.9	1510	38	2280	34
28	2990	153	1920	52	2760	33	1280	11	1430	39	2370	44
29	2650	129	1570	51	2620	23	1600	19	---	---	2410	45
30	2350	89	1750	61	3290	17	2300	42	---	---	2410	51
31	2090	130	---	---	4580	54	2520	52	---	---	2520	61
TOTAL	---	45938	---	2515	---	698.9	---	693.6	---	1618	---	1369

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2500	54	1450	14	83800	1970	6960	489	5590	11	47400	307
2	3110	101	1610	18	64000	2420	80700	17000	5560	14	42200	106
3	3250	97	1790	36	66800	3070	44300	395	5600	257	37100	86
4	3160	102	75100	12400	51600	1280	59800	17900	5500	282	30400	76
5	2990	81	36700	644	45000	1940	105000	116000	5500	312	26600	59
6	2630	41	15500	460	32900	1330	49100	8620	5300	2290	23200	28
7	2430	34	8400	318	21300	805	35000	2270	10800	379	39500	6930
8	2270	24	5650	198	15600	421	26800	3330	10800	41	141000	139000
9	2150	23	3970	236	17000	459	84700	30400	9240	25	107000	32400
10	2070	26	2850	92	8250	312	72200	18500	6790	24	90500	38600
11	2040	23	1950	52	3420	139	17600	618	5770	25	75400	14700
12	1960	28	1060	31	2640	121	11400	255	41600	2250	62500	2190
13	1870	33	611	38	2160	47	11300	336	54300	1140	53900	10500
14	1760	22	375	14	2090	8.5	7990	138	24700	73	46100	7340
15	1650	28	263	11	1960	13	23700	6140	9380	14	38000	1030
16	1560	32	222	6.6	1750	47	94400	27800	5120	6.8	34700	937
17	1510	21	201	4.5	1510	53	59100	3830	3930	3.2	30900	3590
18	1500	19	198	2.1	1120	48	61000	14500	3420	2.6	39300	913
19	1490	23	177	1.2	48800	2500	86500	14900	2890	3.2	41000	421
20	1490	20	153	1.7	35600	961	78600	17200	2330	1.6	34000	229
21	1490	20	172	1.1	23200	752	59300	7850	20000	1350	29700	192
22	1530	19	135	.66	14900	563	45100	4020	84400	8660	26100	204
23	1530	20	112	.51	9490	384	76600	16500	71000	2880	23900	168
24	1580	22	94	.63	22500	972	101000	46600	60800	2950	22100	1370
25	1610	24	78	.42	50100	2570	59900	2910	50400	6120	20800	2980
26	1980	59	63	.27	70900	12100	38000	667	119000	84200	17800	255
27	2150	57	54	.15	52600	2130	22100	131	82200	11100	14700	754
28	2180	43	47	.10	33300	1530	11200	51	55500	1030	12900	136
29	2180	30	46	.02	20800	1070	6390	26	62100	7880	11400	77
30	1610	15	215	.28	11900	643	5480	12	70400	5130	10400	138
31	---	---	13700	851	---	---	5920	11	61100	1810	---	---
TOTAL	---	1141	---	15433.24	---	40658.5	---	379399	---	140264.4	---	265716

TOTAL LOAD FOR YEAR: 895444.64 TONS.

08341400 BLUEWATER LAKE NEAR BLUEWATER, NM

LOCATION.--Lat 35°17'31", long 108°06'40", in SE¼ sec.9, T.12 N., R.12 W., Cibola County, Hydrologic Unit 13020207, at left end of Bluewater Dam on Bluewater Creek, and 9.5 mi west of Bluewater.

DRAINAGE AREA.--201 mi².

PERIOD OF RECORD.--June 1927 to December 1950 (monthend contents only, published in WSP 1732), April 1958 to current year (month end contents only).

GAGE.--Water-stage recorder. Datum of gage is 7,345.57 ft above National Geodetic Vertical Datum of 1929. July 1958 to January 1961, nonrecording gage at nearby site, same datum. Gage heights have been converted to sea-level elevations.

REMARKS.--Reservoir is formed by concrete arch dam. Storage began in 1927. Capacity, 38,500 acre-ft survey of 1945 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. Capacity table used through 1944 showed a capacity of 50,300 acre-ft at crest of ungated spillway over dam, and that used from 1945-50, 43,500 acre-ft . Tables used prior to 1958 are not available and no adjustments are made for changes in tables. 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.

EXTREMES FOR 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 ft³/s occurred at station 8 mi downstream; no storage at times prior to 1947.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 29,260 acre-ft, Oct. 1-3, elevation, 7,396.8 ft; minimum, 15,000 acre-ft, Sept. 26-30, elevation, 7,384.9 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,396.8	29,260	-------
Oct. 31	7,396.2	28,420	- 840
Nov. 30	7,395.9	28,000	- 420
Dec. 31	7,395.7	27,730	- 270
CAL YR 1985			+ 8,120
Jan. 31	7,395.5	27,460	- 270
Feb. 28	7,395.4	27,320	- 140
Mar. 31	7,395.4	27,320	0
Apr. 30	7,394.9	26,650	- 670
May 31	7,392.8	23,920	- 2,730
June 30	7,390.4	20,940	- 2,980
July 31	7,388.4	18,570	- 2,370
Aug. 31	7,385.4	15,470	- 3,100
Sept. 30	7,384.9	15,000	- 470
WTR YR 1986			-14,260

08343000 RIO SAN JOSE AT GRANTS, NM

LOCATION.--Lat 35°09'16", long 107°52'11", in SW¼NW¼ sec.26, T.11 N., R.10 W., Cibola County, Hydrologic Unit 13020207, on right bank at bridge on El Morro St., 0.2 mi south of Santa Fe Ave. in Grants, and at mile 67.8

DRAINAGE AREA.--1,020 mi², 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".

REVISED RECORDS.--WSP 1512: 1913-14. WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,468.34 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers). See WSP 1732 or 1923 for history of changes prior to Jan. 1, 1926.

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Bluewater Lake (station 08341400) 24 mi upstream. Diversions and groundwater withdrawals for irrigation of about 4,500 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years (water years 1913, 1915-20, 1922, 1924-25, 1950-66, 1968-86), 3.11 ft³/s, 2,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1950-66 AND SINCE 1968).--Maximum discharge recorded, 1,760 ft³/s, Aug. 28, 1952, gage height, 5.35 ft, from rating curve extended above 300 ft³/s on basis of velocity-area studies; no flow for long periods.

EXTREMES OUTSIDE PERIOD OF RECORD.--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.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 27	2400	*11	*1.84				

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1.34	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
MEAN	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAX	1.1	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	2.7	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00

CAL YR 1985	TOTAL	1303.86	MEAN	3.57	MAX	100	MIN	.00	AC-FT	2590
WTR YR 1986	TOTAL	1.36	MEAN	.00	MAX	1.1	MIN	.00	AC-FT	2.7

08343100 GRANTS CANYON AT GRANTS, NM

LOCATION.--Lat 35°09'39", long 107°50'15", in NE¼NE¼ sec.25, T.11 N., R.10 W., Cibola County, Hydrologic Unit 13020207, on upstream side of culvert under Roosevelt Avenue, in Grants, 0.2 mi east of intersection of Roosevelt and First Avenue, and 1.1 mi upstream from confluence with Rio San Jose (formerly Bluewater Creek).

DRAINAGE AREA.--13.0 mi².

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

GAGE.--Water-stage recorder and culvert control. Elevation of gage is 6,450 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--25 years, 0.129 ft³/s, 93 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s, Aug. 26, 1963, gage height, 5.10 ft, from rating curve extended above 220 ft³/s on basis of slope-area measurements at gage heights 3.17 ft, 5.10 ft, and 5.38 ft; maximum gage height, 5.38 ft, Sept. 8, 1967; no flow for most of time.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 175 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 10	1900	*126	*1.38				

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.46	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.1	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	3.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	4.98	.00	.00	.00	.00	.00	.00	.00	.04	.56	4.10	.00
MEAN	.16	.00	.00	.00	.00	.00	.00	.00	.00	.02	.13	.00
MAX	3.9	.00	.00	.00	.00	.00	.00	.00	.04	.31	4.1	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	9.9	.00	.00	.00	.00	.00	.00	.00	.08	1.1	8.1	.00

CAL YR 1985	TOTAL	20.58	MEAN	.06	MAX	14	MIN	.00	AC-FT	41
WTR YR 1986	TOTAL	9.68	MEAN	.03	MAX	4.1	MIN	.00	AC-FT	19

08343500 RIO SAN JOSE NEAR GRANTS, NM

LOCATION.--Lat 35°04'27", long 107°45'01", in SE¼SE¼ sec.23, T.10 N., R.9 W., Cibola County, Hydrologic Unit 13020207, on right bank at west boundary of Acoma Pueblo Grant, 8.5 mi southeast of Grants, and at mile 57.4.

DRAINAGE AREA.--2,300 mi², approximately, of which 1,130 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as "San Jose River near Grants".

REVISED RECORDS.--WSP 898: 1936-39(M). WSP 1512: 1943. WSP 1712: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,269.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow slightly regulated by Bluewater Lake (station 08341400), 34 mi upstream. Diversions and ground-water withdrawal for irrigation of about 5,100 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 6.77 ft³/s, 4,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft³/s, Sept. 20, 1963, gage height, 4.87 ft, from rating curve extended above 450 ft³/s on basis of slope-area measurements at gage heights 3.19 ft and 4.87 ft; minimum, 1.9 ft³/s, Feb. 21, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--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.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 10	1830	*149	*2.87	No other peak above base discharge.			

Minimum daily discharge, 2.8 ft³/s, July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.3	6.1	5.6	4.9	4.6	4.2	5.2	6.1	5.0	3.9	4.9
2	3.9	5.1	5.9	5.3	5.1	4.4	4.7	4.3	5.8	4.9	4.1	5.0
3	4.0	5.0	5.2	5.4	5.5	4.2	4.9	3.6	5.8	6.3	4.2	4.9
4	4.0	5.1	4.9	5.4	5.3	4.3	4.5	3.5	6.3	4.6	4.2	5.1
5	4.0	4.9	4.8	5.3	4.9	4.3	4.3	4.1	6.4	4.6	4.3	5.1
6	4.1	4.4	4.8	5.3	5.1	4.2	4.0	4.8	6.0	4.9	4.5	5.2
7	4.3	4.5	4.6	5.0	5.2	4.3	3.9	4.8	5.1	5.3	4.5	5.3
8	4.5	4.6	4.6	4.9	5.0	4.3	4.0	5.6	5.2	5.3	4.8	5.4
9	4.6	4.6	4.6	4.9	4.8	4.2	4.0	5.8	5.0	5.3	4.9	5.3
10	4.9	4.5	4.7	5.1	5.4	4.4	4.1	5.8	4.6	3.7	15	5.3
11	5.7	4.9	4.3	5.2	6.4	4.6	4.5	5.3	4.5	3.5	4.8	5.5
12	8.1	5.0	4.2	5.2	5.9	4.4	4.4	5.3	3.7	3.5	5.0	5.5
13	5.1	5.0	4.2	5.1	5.8	4.2	4.5	5.3	4.0	3.2	4.8	5.5
14	5.1	5.0	4.3	5.0	5.6	4.3	4.9	5.3	4.3	3.1	5.0	5.5
15	5.4	5.2	4.6	5.1	5.2	4.3	4.7	5.2	4.5	2.9	5.0	5.4
16	5.6	5.4	4.7	5.0	5.2	4.4	4.4	5.1	4.8	3.1	5.3	5.3
17	6.9	5.5	4.8	4.9	5.1	4.4	4.4	5.4	5.2	3.0	5.0	5.2
18	10	5.3	5.0	4.7	5.0	4.4	4.3	5.4	5.8	2.8	5.2	5.2
19	9.9	4.9	5.1	4.8	4.7	4.4	4.5	4.3	5.7	3.0	5.3	5.1
20	6.3	5.0	5.2	4.8	4.3	4.2	4.7	3.9	5.4	3.4	5.3	5.0
21	5.0	5.3	5.3	5.1	4.1	4.2	5.0	4.1	5.3	3.6	5.4	4.9
22	5.0	5.6	5.3	5.0	4.2	4.3	5.0	4.1	5.3	4.8	5.5	5.1
23	5.0	5.8	5.3	5.1	4.2	4.3	4.9	4.4	5.3	5.0	5.4	5.0
24	4.7	5.7	5.3	4.9	4.8	4.3	5.0	4.8	5.3	4.0	5.1	5.1
25	4.7	5.7	5.2	4.7	4.7	4.4	5.1	5.0	5.2	3.4	4.8	5.1
26	4.7	5.6	5.0	4.6	4.5	4.3	5.2	5.0	5.0	3.3	4.8	5.6
27	5.9	5.6	5.1	4.8	4.6	4.1	5.1	4.8	5.0	3.5	4.9	5.4
28	13	5.4	5.2	4.9	4.7	4.2	5.2	5.0	5.0	3.6	4.9	5.5
29	18	5.3	5.2	4.8	---	4.1	5.3	5.4	5.0	3.8	5.2	5.6
30	8.0	5.3	5.2	4.9	---	4.2	5.2	6.7	5.0	3.9	5.0	5.6
31	5.7	---	5.5	5.0	---	4.1	---	6.0	---	3.9	4.8	---
TOTAL	190.0	154.5	154.2	155.8	140.2	133.3	138.9	153.3	155.6	124.2	160.9	157.6
MEAN	6.13	5.15	4.97	5.03	5.01	4.30	4.63	4.95	5.19	4.01	5.19	5.25
MAX	18	5.8	6.1	5.6	6.4	4.6	5.3	6.7	6.4	6.3	15	5.6
MIN	3.9	4.4	4.2	4.6	4.1	4.1	3.9	3.5	3.7	2.8	3.9	4.9
AC-FT	377	306	306	309	278	264	276	304	309	246	319	313

CAL YR 1985	TOTAL	3563.3	MEAN	9.76	MAX	110	MIN	3.8	AC-FT	7070
WTR YR 1986	TOTAL	1818.5	MEAN	4.98	MAX	18	MIN	2.8	AC-FT	3610

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980-82, current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 25...	1100	7.8	1500	1470	8.00	7.80	16.0	12.5	7.1	13
JAN 30...	1100	5.4	1400	--	7.90	--	14.0	10.0	8.2	26
MAR 11...	1145	4.3	1100	1500	8.00	7.80	7.0	10.5	9.4	20
MAY 02...	1000	5.4	1320	1410	8.38	8.10	21.0	14.5	9.8	11
JUL 18...	1115	2.6	1380	1290	8.10	8.20	25.0	7.0	12.0	25
AUG 26...	1345	4.8	1050	--	8.40	--	27.0	19.5	7.7	20

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
OCT 25...	390	100	87	43	160	4	6.9	--	--	290
JAN 30...	--	--	--	--	--	--	--	--	--	--
MAR 11...	400	160	88	43	160	4	6.6	292	0	237
MAY 02...	370	130	80	41	140	3	6.8	266	14	240
JUL 18...	390	160	88	41	150	3	6.6	273	0	221
AUG 26...	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 25...	--	228	320	130	0.80	27	950	1.90	2.00	0.060
JAN 30...	--	--	--	--	--	--	--	1.60	1.60	2.10
MAR 11...	239	236	360	140	0.90	27	970	1.80	1.80	0.340
MAY 02...	240	236	340	130	0.70	27	930	0.900	0.920	0.030
JUL 18...	224	230	310	130	0.80	30	890	1.60	1.50	0.080
AUG 26...	--	--	--	110	--	--	--	0.600	0.570	0.090

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT 25...	0.54	2.5	0.850	0.830	3.3	56	29	360	5	--
JAN 30...	0.70	4.4	1.30	1.20	3.1	--	--	--	--	--
MAR 11...	0.66	2.8	1.40	1.20	9.6	K11	38	360	<3	17
MAY 02...	0.27	1.2	1.10	1.00	2.7	16	110	340	6	--
JUL 18...	0.72	2.4	0.810	0.740	2.9	110	170	350	9	--
AUG 26...	0.31	1.0	1.20	1.10	9.5	--	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
OCT 25...	1100	5	5	<1	<1	<10	<10	1	1	<5
JUL 18...	1115	5	5	1	<1	<10	<10	6	2	<5

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)
OCT 25...	<5	<0.10	0.1	4	4	30	12	7.0	20	410
JUL 18...	<5	0.10	0.1	4	4	20	7	--	--	--

DATE	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)
OCT 25...	3	<1	60	<10	8	5200	10	80	0.07
JUL 18...	--	--	--	--	--	--	--	--	--

DATE	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)
OCT 25...	20	<12	<0.6	8.6	4.1	6.0	4.0	0.06	3.9
JUL 18...	--	--	--	--	--	--	--	--	--

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
25...	1100	7.8	1500	12.5	11	0.23	98
JAN							
30...	1100	5.4	1400	10.0	24	0.35	86
MAR							
11...	1145	4.3	1100	10.5	21	0.24	86
MAY							
21...	1000	4.3	--	--	13	0.15	87
JUL							
18...	1115	2.6	1380	7.0	23	0.16	98
AUG							
26...	1345	4.8	1050	19.5	34	0.44	89

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, TOTAL (UG/L) (39388)
MAR										
11...	1145	--	--	--	--	--	--	--	--	--
AUG										
26...	1345	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	0.02	<0.010	<0.010

DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALA-THION, TOTAL (UG/L) (39530)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL TRI-THION, TOTAL (UG/L) (39790)
MAR									
11...	--	--	--	--	--	--	--	--	--
AUG									
26...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01

DATE	PARA-THION, TOTAL (UG/L) (39540)	TOX-APHENE, TOTAL (UG/L) (39400)	TOTAL TRI-THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PER-THANE TOTAL (UG/L) (39034)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)
MAR									
11...	--	--	--	0.01	<0.01	<0.01	--	--	--
AUG									
26...	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

08349800 RIO PAGUATE BELOW JACKPILE MINE NEAR LAGUNA, NM

LOCATION.--Lat 35°07'09", long 107°19'58", in SW¼SE¼ sec.2, T.10 N., R.5 W., Cibola County, Hydrologic Unit 13020207, in Paguate Purchase Grant, near right bank on downstream end of bridge piling of the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.4 mi downstream from Rio Moquino, 4.2 mi upstream from Paguate Reservoir, 5.0 mi southeast of Paguate and 26 mi east of Grants.

DRAINAGE AREA.--107 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 14, Dec. 12-22, Jan. 8-13, 16-30, Feb. 6-15, 25-27, and Aug. 17 to Sept. 30. Records poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 1.59 ft³/s, 1,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,520 ft³/s, Aug. 16, 1982, gage height, 11.8 ft, from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurement at gage height 8.60 ft and contracted-opening measurement at gage height 10.19 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 9	1515	*528	*6.45	No other peak greater than base discharge.			

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.20	1.1	.13	.34	.40	1.7	1.5	.78	1.9	.07	.10
2	.10	.18	1.2	.22	.42	.43	1.8	1.7	.59	1.8	.01	.10
3	.10	.18	1.2	.11	.41	.53	1.7	1.7	.80	1.8	.02	.10
4	.13	.16	1.2	.26	.38	.59	1.5	1.5	.77	1.8	.01	.10
5	.14	.14	1.3	.22	.55	.59	1.5	1.3	.66	1.6	.01	.10
6	.15	.12	1.3	.22	.21	.61	1.4	1.3	.48	1.6	.01	.10
7	.17	.10	1.2	.25	.22	.69	1.4	1.3	.35	1.6	.00	.10
8	.20	.15	1.3	.17	.22	.78	1.4	1.3	.58	1.9	.00	.10
9	.24	.10	1.2	.16	.24	.86	1.4	1.3	.56	14	.01	.10
10	4.7	.10	1.1	.15	.25	.96	1.5	1.2	.21	.69	.00	.10
11	1.7	.10	.98	.15	.25	1.1	1.5	1.1	.24	.00	.01	.10
12	.85	.11	1.3	.14	.24	1.2	1.5	1.0	.05	.00	.41	.12
13	.66	.24	.78	.14	.24	1.2	1.6	1.0	.08	.00	1.2	.10
14	.57	.30	.35	.13	.24	1.3	1.7	.92	.06	.00	.60	.14
15	.43	.25	.30	.08	.25	1.2	1.7	.95	.08	.03	.50	.10
16	.59	.31	.36	.10	.31	1.2	1.7	.89	.08	.08	.50	.10
17	.62	.46	.34	.14	.24	1.2	1.6	.98	.08	.00	.40	.10
18	.45	.81	.31	.18	.22	1.3	1.8	.93	.07	.00	.40	.10
19	.35	1.1	.26	.14	.26	1.2	1.7	.75	.08	.00	.40	.10
20	.30	1.3	.24	.14	.14	1.2	1.8	.70	.09	.01	.30	.12
21	.30	1.3	.20	.16	.17	1.1	1.8	.54	.09	.00	.20	.10
22	.32	1.2	.16	.18	.25	1.1	1.8	.31	.08	.09	.16	.12
23	.30	.83	.08	.20	.23	1.2	1.7	.31	.09	.03	.10	.10
24	.28	.87	.12	.30	.22	1.2	1.7	.15	.13	.00	.09	.78
25	.28	.93	.25	.40	.26	1.2	1.7	.39	8.1	.04	2.2	.10
26	.27	.98	.47	.50	.18	1.2	1.6	.41	3.6	.33	.75	.12
27	.26	1.0	.91	.60	.23	1.3	1.7	.26	2.0	.26	.13	.12
28	.26	1.1	.66	.60	.29	1.3	1.7	.02	1.9	.17	.10	.10
29	.25	1.2	.76	.80	---	1.4	1.6	.50	1.9	.13	.12	.10
30	.25	1.2	.60	.80	---	1.5	1.5	1.1	2.0	.10	.14	.00
31	.23	---	.22	.90	---	1.5	---	1.0	---	.16	.12	---
TOTAL	15.55	17.02	21.75	8.67	7.46	32.54	48.7	28.31	26.58	30.12	8.97	3.72
MEAN	.50	.57	.70	.28	.27	1.05	1.62	.91	.89	.97	.29	.12
MAX	4.7	1.3	1.3	.90	.55	1.5	1.8	1.7	8.1	14	2.2	.78
MIN	.10	.10	.08	.08	.14	.40	1.4	.02	.05	.00	.00	.00
AC-FT	31	34	43	17	15	65	97	56	53	60	18	7.4

CAL YR 1985	TOTAL	708.97	MEAN	1.94	MAX	65	MIN	.00	AC-FT	1410
WTR YR 1986	TOTAL	249.39	MEAN	.68	MAX	14	MIN	.00	AC-FT	495

08351500 RIO SAN JOSE AT CORREO, NM

LOCATION.--Lat 34°58'03", long 107°10'10", in NE¼ sec.32, T.9 N., R.3 W., Cibola County, Hydrologic Unit 13020207, on left bank 0.3 mi downstream from State Highway 6, 1.2 mi northeast of Correo, and 13 mi upstream from mouth.

DRAINAGE AREA.--3,660 mi², approximately, of which about 1,130 mi² 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 and concrete control. Datum of gage is 5,474.88 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1958 to Sept. 30, 1975, water-stage recorder at site 1 mi upstream at datum 17.55 ft higher.

REMARKS.--Estimated daily discharges: Dec. 11, 12, 14, 15, 18-31 and Jan. 1-16. Records fair except for estimated daily discharges, which are poor. Flow regulated to some extent since 1927 by Bluewater Lake (station 08341400) 79 mi upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--43 years, 11.0 ft³/s, 7,970 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,150 ft³/s, Aug. 11, 1955; maximum gage height, 20.7 ft, Aug. 22, 1958, backwater from dam (present datum); no flow for many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood which probably occurred Aug. 21, 1935, reached a stage of 15.4 ft, from floodmarks, (discharge, about 11,000 ft³/s), 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.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0400	*397	*3.40				

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	9.6	7.7	7.6	7.4	5.1	.94	.00	3.1	.01	.00	.00
2	.22	6.7	7.8	7.3	7.1	5.1	2.1	.00	.00	.00	.00	.00
3	.11	5.2	7.4	7.2	7.2	5.2	2.4	.00	.00	.00	.00	.00
4	.04	4.5	7.2	7.1	7.1	5.0	2.2	.00	2.6	.00	.00	.00
5	.01	4.1	6.9	7.1	7.0	4.9	1.9	.00	.00	.00	.00	.00
6	.00	3.7	6.9	7.4	7.1	4.7	2.0	.00	.00	.00	.00	.00
7	.00	3.4	6.7	7.6	7.5	4.6	2.1	.00	.00	.00	.00	.00
8	.00	3.2	6.6	7.3	6.2	4.4	1.3	.00	.00	2.4	.00	.00
9	.00	3.0	6.9	7.4	8.7	4.2	1.4	.00	.00	.08	.00	.00
10	5.8	2.8	6.6	7.1	9.3	4.3	1.2	.00	.00	49	.00	.00
11	106	2.4	6.6	8.6	16	4.7	1.1	.00	.00	6.9	.00	.00
12	170	2.6	6.3	9.0	12	4.9	.85	.00	.00	29	.00	.00
13	106	3.5	6.0	9.5	12	5.1	.67	.00	.00	5.1	.00	.00
14	20	3.7	6.8	9.3	11	5.2	.62	.00	.00	1.4	.00	11
15	8.4	3.9	7.2	9.0	9.5	5.0	.45	.00	.00	.63	.00	.69
16	6.2	4.1	8.6	8.8	9.3	4.8	.44	.00	.00	1.5	.00	.24
17	14	4.1	8.3	9.4	8.7	5.0	.72	.00	.00	10	.00	.16
18	29	5.3	8.2	8.9	7.6	4.8	.61	.00	.00	.88	.00	.11
19	61	6.4	8.0	8.5	6.9	4.9	.61	.00	.00	.64	.00	.08
20	33	7.5	7.9	8.8	6.9	4.3	.66	.00	.00	1.2	.00	.07
21	17	6.7	8.1	8.4	6.5	3.9	.72	.00	.00	7.0	.00	.00
22	11	5.8	8.3	8.2	6.1	2.6	.64	.00	.00	30	.00	.00
23	7.8	7.0	8.6	7.8	5.9	1.4	.50	.00	.00	68	.00	.00
24	6.1	7.9	8.2	7.7	5.7	1.6	.26	.00	.00	10	.00	.00
25	5.3	7.1	7.6	7.4	5.5	1.4	.10	.00	2.5	8.5	.00	.00
26	4.8	7.0	8.3	7.3	5.4	1.1	.06	.00	39	1.6	.00	.00
27	4.6	6.9	8.0	7.4	5.3	1.2	.00	.00	3.1	.26	13	.00
28	5.2	6.7	7.6	8.8	5.1	1.3	.00	.00	.02	.07	.02	.00
29	4.6	6.7	8.2	8.0	---	1.1	.00	.00	.00	.00	.04	.00
30	5.7	7.3	8.3	7.8	---	.98	.00	.33	.00	.00	.16	.00
31	12	---	8.4	7.5	---	.86	---	.00	---	.00	.01	---
TOTAL	644.23	158.8	234.2	249.2	220.0	113.64	26.55	.33	50.32	234.17	13.23	12.35
MEAN	20.8	5.29	7.55	8.04	7.86	3.67	.88	.01	1.68	7.55	.43	.41
MAX	170	9.6	8.6	9.5	16	5.2	2.4	.33	39	68	13	11
MIN	.00	2.4	6.0	7.1	5.1	.86	.00	.00	.00	.00	.00	.00
AC-FT	1280	315	465	494	436	225	53	.6	100	464	26	24

CAL YR 1985	TOTAL	5225.79	MEAN	14.3	MAX	183	MIN	.00	AC-FT	10370
WTR YR 1986	TOTAL	1957.02	MEAN	5.36	MAX	170	MIN	.00	AC-FT	3880

08353000 RIO PUERCO NEAR BERNARDO, NM

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, Hydrologic Unit 13020204, on bridge on former U.S. Highway 85 and 0.2 mi upstream from Interstate Highway 25, 1.2 mi southwest of Bernardo, 3 mi upstream from mouth, and 18 mi south of Belen.

DRAINAGE AREA.--7,350 mi², approximately, of which at least 1,130 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

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, are in error and should not be used.

REVISED RECORDS.--WSP 1512: 1941-42, 1944-45, 1946(P), 1947-49. WSP 1632: 1957. WSP 1732: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 4,722.34 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 24, 1969, at datum 3.10 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1-6, Oct. 11 to Nov. 6, Jan. 16-20, Feb. 21-27, Apr. 5, Apr. 13 to May May 7, 11, 13-22, 25-29, 31, June 1, 8-18, 20-25, 30, July 1, 15, 22, July 27 to Aug. 5, Aug. 30 to Sept. 8, and Sept. 21-30. Water-discharge records poor. Diversions for irrigation of about 11,500 acres upstream from station (includes 3,700 acres irrigated wholly or partly from wells).

AVERAGE DISCHARGE.--46 years (water years 1941-86), 44.7 ft³/s, 32,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft³/s, Sept. 23, 1941, from rating curve extended above 7,800 ft³/s; maximum gage height, 16.9 ft, present datum, Aug. 12, 1955; no flow for extended periods.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 ft³/s, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge, 30,600 ft³/s, by slope-area method, from reports of State Engineer).

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 6	2045	*1,170	*9.67				

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	5.0	10	.50	5.0
2	.00	.00	.00	.00	.00	.00	.00	.00	10	147	.00	1.0
3	.00	.00	.00	.00	.00	.00	.00	.00	20	127	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	86	42	.00	.00
5	.00	.00	.00	.00	.00	.00	5.0	.00	52	115	.00	.00
6	.00	.00	.00	.00	.00	.00	28	.00	27	1060	.00	.00
7	.00	.00	.00	.00	.00	.00	28	.00	11	180	.00	.00
8	.00	.00	.00	.00	.00	.00	15	38	5.0	38	.00	.00
9	.00	.00	.00	.00	.00	.00	12	36	2.0	584	.00	266
10	.00	.00	.00	.00	.00	.00	15	28	1.0	172	.00	682
11	300	.00	.00	.00	.00	.00	50	20	.50	299	.00	125
12	150	.00	.00	.00	.00	.00	99	17	.30	66	.00	122
13	70	.00	.00	.00	.00	.00	10	15	.00	47	.00	74
14	50	.00	.00	.00	.00	.00	5.0	10	.00	147	.00	19
15	35	.00	.00	.00	.00	.00	3.0	5.0	.00	250	.00	166
16	10	.00	.00	.00	.00	.00	1.0	3.0	.00	492	.00	82
17	25	.00	.00	.00	.00	.00	.50	2.0	.00	238	.00	21
18	70	.00	.00	.00	.00	.00	.00	1.0	.00	172	.00	31
19	30	.00	.00	.00	.00	.00	.00	.50	.00	58	.00	21
20	10	.00	.00	.00	.00	.00	.00	.30	.00	161	.00	15
21	5.0	.00	.00	.00	5.0	.00	.00	1.0	.00	45	.00	9.0
22	2.0	.00	.00	.00	4.0	.00	.00	10	.00	70	.00	6.0
23	2.0	.00	.00	.00	3.0	.00	.00	5.7	.00	89	.00	3.0
24	1.0	.00	.00	.00	2.0	.00	.00	1.0	.00	58	.00	1.0
25	1.0	.00	.00	.00	1.0	.00	.00	.00	.00	98	.00	.00
26	.00	.00	.00	.00	.50	.00	.00	.00	6.3	382	.00	.00
27	.00	.00	.00	.00	.06	.00	.00	.00	85	50	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	27	10	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	7.3	5.0	44	.00
30	.00	.00	.00	.00	---	.00	.00	.08	2.0	.60	10	.00
31	.00	---	.00	.00	---	.00	---	1.0	---	1.0	5.0	---
TOTAL	761.00	.00	.00	.00	15.56	.00	271.50	194.58	347.40	5213.60	59.50	1649.00
MEAN	24.5	.00	.00	.00	.56	.00	9.05	6.28	11.6	168	1.92	55.0
MAX	300	.00	.00	.00	5.0	.00	99	38	86	1060	44	682
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60	.00	.00
AC-FT	1510	.00	.00	.00	31	.00	539	386	689	10340	118	3270

CAL YR 1985	TOTAL	15646.00	MEAN	42.9	MAX	947	MIN	.00	AC-FT	31030
WTR YR 1986	TOTAL	8512.14	MEAN	23.3	MAX	1060	MIN	.00	AC-FT	16880

08353000 RIO PUERCO NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1956 to current year.
WATER TEMPERATURES: October 1964 to current year.
SUSPENDED-SEDIMENT DISCHARGES: October 1947 to current year.

REMARKS.--Samples are collected when flow is observed on this ephemeral stream.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 11,400 microsiemens, June 10, 1968; minimum daily, 238 microsiemens, July 30, 1969.
WATER TEMPERATURES: Maximum daily, 32.0°C, July 29, 1977; minimum daily, 0.0°C, Dec. 30, 1971, Mar. 3, 1985.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 267,000 mg/L, July 26, 1957; minimum daily mean, no flow on many days of each year.
SEDIMENT LOADS: Maximum daily, 2,240,000 tons, Aug. 7, 1957; minimum daily, 0 ton on many days of each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,160 microsiemens, Apr. 6; minimum daily, 715 microsiemens, July 16.
WATER TEMPERATURES: Maximum daily, 32.0°C, July 30; minimum daily, 5.5° C, Feb 22.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 165,000 mg/L, June 30; minimum daily mean, no flow on many days.
SEDIMENT LOADS: Maximum daily, 378,000 tons, July 6; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
FEB												
28...	1200	0.06	3400	3360	8.60	7.90	17.0	16.0	--	590	390	120
MAY												
23...	1230	5.7	2150	2380	8.10	8.00	29.5	19.5	7.0	540	370	150
JUL												
18...	1400	170	1950	2030	8.00	7.60	27.5	24.0	--	490	340	130

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
FEB												
28...	70	500	9	8.9	195	1300	270	1.1	9.6	2400	490	120
MAY												
23...	40	310	6	7.8	170	990	110	1.1	8.9	1700	240	70
JUL												
18...	40	260	5	7.6	146	810	71	1.2	9.0	1400	240	<10

08353000 RIO PUERCO NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
12...	1500	150	--	16.0	95100	38500	--
FEB							
22...	1030	4.0	--	5.5	34800	376	100
28...	1200	0.06	3400	16.0	1430	0.23	100
APR							
09...	1320	12	--	19.5	73900	2390	100
MAY							
09...	1445	36	--	17.0	66800	6490	100
20...	1330	0.31	--	26.0	49100	41	100
JUN							
04...	1900	86	--	24.0	64900	15100	--
JUL							
02...	1130	147	--	--	146000	57900	--
03...	1330	127	--	25.0	114000	39100	--
06...	1710	1060	--	25.0	139000	398000	--
09...	1840	584	--	22.0	54300	85600	--
16...	1725	492	--	20.0	34700	46100	--
20...	1800	161	--	24.0	83000	36100	95
30...	1330	0.61	--	32.0	69800	115	100
AUG							
29...	1315	44	--	23.5	95100	11300	--
SEP							
11...	1400	122	--	19.0	63100	20800	--
15...	1400	478	--	19.0	96200	124000	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)
OCT						
12...	46	56	73	99	100	--
FEB						
22...	77	93	--	--	--	--
28...	96	--	--	--	--	--
APR						
09...	80	91	99	--	--	--
MAY						
09...	63	77	97	--	--	--
20...	80	96	98	--	--	--
JUN						
04...	74	87	100	--	--	--
JUL						
02...	67	70	82	88	94	100
03...	52	72	86	98	100	--
06...	45	54	75	97	100	--
09...	52	59	78	100	--	--
16...	48	57	75	99	100	--
20...	--	--	--	--	--	--
30...	--	--	--	--	--	--
AUG						
29...	64	77	97	100	--	--
SEP						
11...	60	70	91	99	100	--
15...	46	54	74	96	100	--

08353000 RIO PUERCO NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---				---	---	---	---	---	---	---	---
2	---				---	---	---	---	1880	1030	---	---
3	---				---	---	---	---	2610	2310	---	---
4	---				---	---	---	---	2050	2880	---	---
5	---				---	---	---	---	2880	3010	---	---
6	---				---	---	4160	---	1890	2770	---	---
7	---				---	---	2920	---	1870	2010	---	---
8	---				---	---	2800	1960	---	1960	---	---
9	---				---	---	2880	2140	1880	1360	---	---
10	---				---	---	2690	1900	---	1430	---	1920
11	1590				---	---	---	1860	---	1960	---	2130
12	1590				---	---	3040	1840	---	2140	---	1790
13	---				---	---	---	---	---	2410	---	1510
14	1220				---	---	---	---	---	2420	---	1710
15	1350				---	---	---	---	---	---	---	1850
16	---				---	---	---	---	---	715	---	2000
17	---				---	---	---	---	---	2710	---	1350
18	---				---	---	---	---	---	2140	---	2030
19	---				---	---	---	---	---	2250	---	2010
20	---				---	---	---	2640	---	2180	---	1640
21	---				---	---	---	---	---	2590	---	---
22	---				3020	---	---	---	---	---	---	2060
23	---				3310	2220	---	---	---	2370	---	---
24	---				3070	---	---	---	---	1390	---	---
25	---				---	---	---	---	---	2050	---	---
26	---				---	---	---	---	722	2310	---	---
27	---				---	---	---	---	2480	2160	---	2010
28	---				3540	---	---	---	1930	---	---	---
29	---				---	---	---	---	1840	---	2220	---
30	---				---	---	---	---	---	2800	---	---
31	---				---	---	---	---	---	---	---	---
MEAN	1440				3240	2220	3080	2060	2000	2130	2220	1850

WTR YR 1986 MEAN 2160 MAX 4160 MIN 715

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---				---	---	---	---	---	---	---	---
2	---				---	---	---	---	24.0	25.0	---	---
3	---				---	---	---	---	21.0	28.0	---	---
4	---				---	---	---	---	24.0	24.0	---	---
5	---				---	---	---	---	24.0	26.0	---	---
6	---				---	---	17.0	---	25.0	25.0	---	---
7	---				---	---	13.0	---	26.0	24.0	---	---
8	---				---	---	19.0	13.0	---	26.0	---	---
9	---				---	---	19.5	17.0	26.0	22.0	---	---
10	---				---	---	18.0	22.0	---	25.0	---	22.0
11	18.0				---	---	---	22.0	---	28.0	---	18.0
12	16.0				---	---	16.0	22.0	22.0	29.0	---	23.0
13	---				---	---	---	---	---	28.0	---	19.0
14	16.0				---	---	---	---	---	29.0	---	20.0
15	17.0				---	---	---	---	---	---	---	23.0
16	---				---	---	---	---	---	20.0	---	23.0
17	---				---	---	---	---	---	24.0	---	21.0
18	---				---	---	---	---	---	27.0	---	19.0
19	---				---	---	---	---	---	26.0	---	24.0
20	---				---	---	---	26.0	---	24.0	---	14.0
21	---				---	---	---	---	---	23.0	---	---
22	---				5.5	---	---	---	---	---	---	21.0
23	---				11.0	28.0	---	---	---	28.0	---	---
24	---				15.0	---	---	---	---	23.0	---	---
25	---				---	---	---	---	---	---	---	---
26	---				---	---	---	---	29.0	23.0	---	---
27	---				---	---	---	---	27.0	25.0	---	25.0
28	---				16.0	---	---	---	25.0	---	---	---
29	---				---	---	---	---	25.0	---	23.5	---
30	---				---	---	---	---	---	32.0	---	---
31	---				---	---	---	---	---	---	---	---
MEAN	17.0				12.0	28.0	17.0	20.5	25.0	25.5	23.5	21.0

WTR YR 1986 MEAN 22.0 MAX 32.0 MIN 5.5

08353000 RIO PUERCO NEAR BERNARDO, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
2	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
3	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
4	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
5	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
6	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
7	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
8	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
9	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
10	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
11	64300	52100	0	.00	0	.00	0	.00	0	.00	0	.00
12	95100	38500	0	.00	0	.00	0	.00	0	.00	0	.00
13	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
14	44800	6050	0	.00	0	.00	0	.00	0	.00	0	.00
15	40500	3830	0	.00	0	.00	0	.00	0	.00	0	.00
16	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
17	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
18	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
19	0	.0	0	.00	0	.00	0	.00	0	.00	0	.00
20	31700	856	0	.00	0	.00	0	.00	0	.00	0	.00
21	31600	427	0	.00	0	.00	0	.00	0	.00	0	.00
22	29300	158	0	.00	0	.00	0	.00	34800	376	0	.00
23	0	.0	0	.00	0	.00	0	.00	40100	325	0	.00
24	0	.0	0	.00	0	.00	0	.00	43800	237	0	.00
25	0	.0	0	.00	0	.00	0	.00	36600	99	0	.00
26	0	.0	0	.00	0	.00	0	.00	22200	30	0	.00
27	0	.0	0	.00	0	.00	0	.00	7910	1.3	0	.00
28	0	.0	0	.00	0	.00	0	.00	1370	.00	0	.00
29	0	.0	0	.00	0	.00	0	.00	---	---	0	.00
30	0	.0	0	.00	0	.00	0	.00	---	---	0	.00
31	0	.0	---	---	0	.00	0	.00	---	---	0	.00
TOTAL	---	101921.0	---	0.00	---	0.00	---	0.00	---	1068.30	---	0.00

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0	.00	0	.00	0	.00	152000	4100	0	.00	0	.0
2	0	.00	0	.00	42900	1160	145000	57600	0	.00	0	.0
3	0	.00	0	.00	68700	3710	121000	41500	0	.00	0	.0
4	0	.00	0	.00	66200	15400	122000	13800	0	.00	0	.0
5	0	.00	0	.00	96400	13500	129000	40100	0	.00	0	.0
6	72000	5440	0	.00	87000	6340	132000	378000	0	.00	0	.0
7	78200	5910	0	.00	60400	1790	113000	54900	0	.00	0	.0
8	74000	3000	59900	6150	0	.00	78400	8040	0	.00	0	.0
9	74200	2400	66200	6430	0	.00	57300	90400	0	.00	44900	32200
10	81500	3300	60100	4540	0	.00	59100	27400	0	.00	97800	180000
11	80700	10900	55200	2980	0	.00	85100	68700	0	.00	64700	21800
12	0	.00	56100	2570	0	.00	81700	14600	0	.00	72200	23800
13	0	.00	0	.00	0	.00	79400	10100	0	.00	77900	15600
14	0	.00	0	.00	0	.00	52500	20800	0	.00	69700	3580
15	0	.00	0	.00	0	.00	38500	26000	0	.00	86500	38800
16	0	.00	0	.00	0	.00	85500	114000	0	.00	76100	16800
17	0	.00	0	.00	0	.00	65200	41900	0	.00	57200	3240
18	0	.00	0	.00	0	.00	72700	33800	0	.00	64700	5420
19	0	.00	0	.00	0	.00	69100	10800	0	.00	62100	3520
20	0	.00	42500	34	0	.00	71300	31000	0	.00	50900	2060
21	0	.00	0	.00	0	.00	94300	11500	0	.00	46400	1130
22	0	.00	0	.00	0	.00	95100	18000	0	.00	42900	695
23	0	.00	0	.00	0	.00	65900	15800	0	.00	0	.0
24	0	.00	0	.00	0	.00	38600	6040	0	.00	0	.0
25	0	.00	0	.00	22100	.00	63300	16700	0	.00	0	.0
26	0	.00	0	.00	132000	2250	92400	95300	0	.00	0	.0
27	0	.00	0	.00	112000	25700	80200	10800	0	.00	0	.0
28	0	.00	0	.00	75300	5490	69000	1860	0	.00	0	.0
29	0	.00	0	.00	82300	1620	73400	991	0	.00	0	.0
30	0	.00	0	.00	165000	891	77400	125	0	.00	0	.0
31	---	---	0	.00	---	---	0	0	0	.00	---	---
TOTAL	---	30950.00	---	22704.00	---	77851.00	---	1264656	---	0.00	---	348645.0

TOTAL LOAD FOR YEAR: 1847795.30 TONS.

08354500 SOCORRO MAIN CANAL NORTH AT SAN ACACIA, NM

LOCATION.--Lat 34°15'17", long 106°53'43", in SE¼NW¼ sec.1, T.1 S., R.1 W., Socorro County, Hydrologic Unit 13020203, on right bank at San Acacia, and 0.5 mi downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to current year.

REVISED RECORDS.--WSP 1242: 1951.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 8, 1958, at site 300 ft upstream (in old channel) at datum 0.42 ft lower.

REMARKS:--Estimated daily discharges: June 25-30 and Sept. 16-18. Records fair. This canal is 1 of 3 channels (stations 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 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 upstream from station for irrigation of about 400 acres. Discharge records collected at the canal heading from October 1964 to September 1965 indicate that 7,770 acre-ft or 9% of the initial canal flow was diverted before reaching the regular gaging station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 274 ft³/s, June 22, 1980; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	41	.00	.00	.00	52	207	193	168	109	208	135
2	105	38	.00	.00	.00	49	185	187	173	28	218	141
3	116	36	.00	.00	.00	50	161	89	164	29	216	155
4	117	21	.00	.00	.00	56	120	106	164	28	173	139
5	99	.03	.00	.00	.00	67	117	118	157	27	171	140
6	91	.00	.00	.00	.00	84	126	144	167	48	218	146
7	104	.00	.00	.00	.00	94	142	152	164	91	229	152
8	134	.00	.00	.00	.00	105	163	175	156	45	227	156
9	91	.00	.00	.00	.00	110	201	174	166	73	224	165
10	2.1	.00	.00	.00	.00	112	194	164	157	60	207	152
11	5.1	.00	.00	.00	.00	102	217	178	161	62	222	138
12	13	.00	.00	.00	.00	104	212	186	177	109	206	126
13	10	.00	.00	.00	.00	138	215	166	171	153	194	116
14	25	.00	.00	.00	.00	143	227	181	178	176	196	135
15	45	.00	.00	.00	.00	144	204	174	180	172	174	147
16	46	.00	.00	.00	.00	136	213	173	190	123	131	90
17	27	.00	.00	.00	.00	138	204	161	183	120	129	60
18	32	.00	.00	.00	.00	118	195	170	177	159	119	40
19	38	.00	.00	.00	.00	143	187	170	174	124	121	28
20	35	.00	.00	.00	.00	124	191	177	178	133	156	35
21	33	.00	.00	.00	.00	161	191	175	180	120	164	111
22	32	.00	.00	.00	.00	191	176	177	172	114	172	79
23	29	.00	.00	.00	.00	196	167	174	159	110	169	114
24	38	.00	.00	.00	.00	203	170	178	102	111	195	122
25	47	.00	.00	.00	.00	194	186	165	80	125	167	100
26	48	.00	.00	.00	.00	196	186	173	80	141	136	130
27	48	.00	.00	.00	.00	197	188	189	75	170	140	128
28	62	.00	.00	.00	28	196	185	190	75	154	163	118
29	86	.00	.00	.00	---	200	170	134	70	181	141	121
30	88	.00	.00	.00	---	165	174	121	70	193	113	126
31	72	---	.00	.00	---	170	---	159	---	210	132	---
TOTAL	1807.2	136.03	.00	.00	28.00	4138	5474	5073	4468	3498	5431	3545
MEAN	58.3	4.53	.00	.00	1.00	133	182	164	149	113	175	118
MAX	134	41	.00	.00	28	203	227	193	190	210	229	165
MIN	2.1	.00	.00	.00	.00	49	117	89	70	27	113	28
AC-FT	3580	270	.00	.00	56	8210	10860	10060	8860	6940	10770	7030

CAL YR 1985	TOTAL	34223.79	MEAN	93.8	MAX	257	MIN	.00	AC-FT	67880
WTR YR 1986	TOTAL	33598.23	MEAN	92.0	MAX	229	MIN	.00	AC-FT	66640

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM

LOCATION.--Lat 34°14'54", long 106°54'04", in SW¼ sec.1, T.1 S., R.1 W., Socorro County, Hydrologic Unit 13020203, on right bank 75 ft upstream from railway crossing, 0.5 mi south of San Acacia, and 1.2 mi 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 4,652.50 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Jan. 9-20 and Feb. 6 to Mar. 20. Records poor. Conveyance channel, constructed in 1958, is 1 of 3 channels (stations 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 ft³/s. For combined monthly flow in acre-ft of this channel, floodway, and Socorro main canal north see tabulation below daily table for station 08354900.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,950 ft³/s, May 12, 13, 1966; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	1.2	.00	.00	.08	.08	.07	.04	.00	.00	.03	.16
2	.20	.60	.00	.00	.10	.08	.07	.04	.00	.00	.03	.16
3	.22	.09	.00	.00	.12	.08	.08	.04	.00	.00	.04	.17
4	.19	.07	.00	.00	.14	.08	.08	.04	.00	.00	.04	.17
5	.19	.04	.00	.00	.12	.08	.08	.04	.00	.00	.04	.17
6	.07	.02	.00	.00	.12	.08	.08	.04	.00	.00	.05	.17
7	.08	.02	.00	.00	.12	.08	.08	.04	.00	.00	.05	.17
8	.23	.02	.00	.02	.11	.08	.08	.04	.00	.00	.06	.20
9	.29	.02	.00	.02	.11	.08	.08	.05	.00	.02	.09	.27
10	.11	.02	.00	.02	.11	.07	.08	.05	.00	.04	.08	.26
11	.14	.01	.00	.02	.10	.07	.08	.05	.00	.03	.08	.25
12	.07	.00	.00	.02	.10	.07	.07	.04	.00	.02	.08	.23
13	.05	.00	.00	.02	.10	.07	.07	.04	.00	.01	.08	.23
14	.05	.00	.00	.02	.09	.07	.07	7.9	.00	.00	.08	.24
15	.03	.00	.00	.02	.09	.07	.07	22	.00	.00	.08	.20
16	.08	.00	.00	.02	.09	.06	.07	.00	.00	.03	.07	.20
17	.14	.00	.00	.02	.08	.06	.06	.00	.00	.04	.06	.20
18	.10	.00	.00	.02	.08	.06	.06	.00	.00	.03	.04	.17
19	.10	.00	.00	.02	.08	.06	.06	.00	.00	.03	.04	.14
20	.09	.00	.00	.02	.08	.06	.06	.00	.00	.03	.04	.10
21	.10	.00	.00	.02	.08	.06	.05	.00	.00	.03	.04	.09
22	.12	.00	.00	.04	.08	.06	.05	.00	.00	.03	.05	.09
23	.09	.00	.00	.05	.08	.06	.05	.00	.00	.03	.06	.12
24	.10	.00	.00	.06	.08	.06	.05	.00	.00	.03	.07	.18
25	.08	.00	.00	.06	.08	.06	.05	.00	.00	.03	.07	.16
26	.09	.00	.00	.06	.08	.06	.05	.00	.00	.03	.09	.15
27	.16	.00	.00	.08	.08	.07	.05	.00	.00	.02	.09	.13
28	.18	.00	.00	.06	.08	.07	.05	.00	.00	.01	.09	.13
29	.84	.00	.00	.07	---	.07	.05	.00	.00	.00	.09	.13
30	2.3	.00	.00	.06	---	.07	.04	.00	.00	.01	.10	.13
31	2.8	---	.00	.08	---	.07	---	.00	---	.02	.15	---
TOTAL	9.36	2.11	.00	.90	2.66	2.15	1.94	30.45	.00	.52	2.06	5.17
MEAN	.30	.07	.00	.03	.09	.07	.06	.98	.00	.02	.07	.17
MAX	2.8	1.2	.00	.08	.14	.08	.08	22	.00	.04	.15	.27
MIN	.03	.00	.00	.00	.08	.06	.04	.00	.00	.00	.03	.09
AC-FT	19	4.2	.00	1.8	5.3	4.3	3.8	60	.00	1.0	4.1	10

CAL YR 1985	TOTAL	81370.78	MEAN	223	MAX	1490	MIN	.00	AC-FT	161400
WTR YR 1986	TOTAL	57.32	MEAN	.16	MAX	22	MIN	.00	AC-FT	114

RIO GRANDE BASIN
08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM
(Surveillance network)

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, Hydrologic Unit 13020203, in Sevilleta Grant, on right bank 0.2 mi downstream from San Acacia diversion dam, 0.3 mi east of San Acacia, 2 mi downstream from Rio Salado, and at mile 1,472.6.

DRAINAGE AREA.--26,770 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, Co.

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1242: 1951. WSP 1732: 1958(M). WDR NM-69-1: 1967.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft above National Geodetic Vertical Datum of 1929. 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 mi upstream at different datums. Mar. 19, 1953 to Aug. 19, 1965, at site 0.4 mi downstream at datum 3.60 ft higher. Floodway is bypassed by Socorro main canal north and since Oct. 1958, by conveyance channel.

REMARKS.--Estimated daily discharges: Oct. 20-30, Nov. 25 to Dec. 2, Feb. 1-10, May 31 to June 3, July 3-9, Aug. 3-12, and Sept. 18-21. Water-discharge records poor. Floodway is 1 of 3 channels (stations 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 ft³/s) and Socorro main canal north (about 200 ft³/s) is exceeded, during periods of silt sluicing, and when river silt load is excessive. Diversions upstream from station for irrigation of about 760,000 acres; this includes Socorro main canal north which bypasses station and irrigates about 8,000 acres.

AVERAGE DISCHARGE.--22 years (water years 1937-58), 1,192 ft³/s, 863,000 acre-ft/yr, prior to construction of conveyance channel; does not include Socorro main canal north.
15 years (water years 1959-73), 911 ft³/s, 660,000 acre-ft/yr, combined flow of floodway, conveyance channel and Socorro main canal north, prior to closure of Cochiti Dam.
13 years (water years 1974-86), 1,434 ft³/s, 1,039,000 acre-ft/yr, combined flow of floodway, conveyance channel, and Socorro main canal north, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s, Aug. 5, 1936, gage height, 10.75 ft, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,250 ft³/s, July 2; minimum daily, 270 ft³/s, Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	1120	430	2000	4000	3890	1990	2390	3400	4830	2280	2900
2	348	645	415	1990	3950	4100	2250	2610	3300	5250	3810	2840
3	373	585	406	2000	3900	4100	3040	2600	3350	4920	3900	2810
4	349	732	412	2000	3950	4130	3020	2700	3560	4920	4000	2550
5	331	694	406	2100	3800	3780	2240	2740	3540	5180	4100	2420
6	294	744	418	2050	3850	3960	1880	2700	3400	5180	4200	2420
7	270	757	433	2100	3830	3920	2130	2770	3340	5050	4300	1990
8	364	823	434	2200	3820	3890	2230	2940	3210	5180	4400	1760
9	445	947	467	2300	3800	3610	2220	3130	3240	5050	4350	2210
10	700	1510	486	2400	3820	3920	2040	2930	3250	4970	4300	2770
11	1300	1520	531	2480	3850	3960	2120	2790	3230	4570	4200	2170
12	2500	1500	549	2460	3870	3650	1970	3010	3280	4210	3800	2210
13	2900	1500	597	2380	3710	3760	1920	2720	3190	3850	3500	2010
14	2600	1610	615	2400	4120	3890	2160	2770	3270	3720	3190	1830
15	2200	1580	608	2600	4130	3890	2160	2550	3280	3420	3120	2200
16	1900	1600	609	2700	4200	3560	2100	1710	3410	3360	3180	2160
17	2090	1590	655	2750	4060	3560	2230	1070	3280	3570	3090	1950
18	2270	1400	653	2800	3770	2840	2080	2330	3120	3510	2900	1850
19	2020	1280	682	2900	3640	3080	2150	2930	3030	3180	2780	1800
20	1900	570	676	3000	3660	2560	2470	2590	2720	3120	2680	1750
21	1800	536	1380	2900	4070	2400	2870	2420	3200	3620	2780	1500
22	1700	531	1450	2850	3840	2300	2850	2440	3200	3610	3130	1270
23	1550	524	1600	2900	3700	2100	2690	2440	3300	2760	2920	992
24	1350	496	1700	3000	3750	1900	2650	2510	3350	2660	3140	1520
25	1320	490	1800	3270	3670	2000	2710	2400	3500	2390	3580	1540
26	1300	480	1850	2970	3440	1950	2870	2500	3700	2310	3520	1280
27	1300	470	1900	2910	3830	1900	2860	2380	4000	2280	3600	1690
28	1280	460	1950	2960	3740	1950	2830	2510	4450	2400	3480	1420
29	1250	445	2000	3070	---	1900	2580	2500	4760	2150	3160	1420
30	1110	435	1980	3140	---	1920	2400	3260	4900	1970	3030	1100
31	874	---	2000	3840	---	1910	---	3500	---	2490	2890	---
TOTAL	40317	27574	30092	81420	107770	96280	71710	80840	103760	115680	107310	58332
MEAN	1301	919	971	2626	3849	3106	2390	2608	3459	3732	3462	1944
MAX	2900	1610	2000	3840	4200	4130	3040	3500	4900	5250	4400	2900
MIN	270	435	406	1990	3440	1900	1880	1070	2720	1970	2280	992
AC-FT	79970	54690	59690	161500	213800	191000	142200	160300	205800	229500	212800	115700
(†)	83570	54960	59690	161500	213800	199200	153100	170400	214700	236400	223600	127700

CAL YR 1985 TOTAL 761369.35 MEAN 2086 MAX 9420 MIN .75 AC-FT 1510000 (†) MEAN 2403 AC-FT 1739000
WTR YR 1986 TOTAL 921085 MEAN 2524 MAX 5250 MIN 270 AC-FT 1827000 (†) MEAN 2616 AC-FT 1894000

(†) COMBINED FLOW, IN ACRE-FT, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL, AND SOCORRO MAIN CANAL NORTH.

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-56, 1959 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July to December 1937, March 1939 to September 1956, October 1964 to current year.
WATER TEMPERATURES: October 1947 to August 1956, January 1959 to current year.
SUSPENDED-SEDIMENT DISCHARGES: July 1946 to June 1956, January 1959 to current year.

REMARKS.--Additional sediment total-discharge determinations were made monthly when needed. When there is insufficient flow to sample 08354800 Rio Grande Conveyance Channel at San Acacia or 08354900 Rio Grande Floodway at San Acacia , samples are taken from 08354500 Socorro Main Canal North at San Acacia.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,700 microsiemens, July 14, 1940; minimum daily, 236 microsiemens, May 17, 1942.
WATER TEMPERATURES (1947-56, 1959-62, 1964-86): Maximum daily, 34.5°C, July 13, 1971; minimum daily, 0.0°C on many days during winter months of most years.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 223,000 mg/L, Aug. 11, 1946; minimum daily mean, no flow on many days of most years.
SEDIMENT LOADS: Maximum daily, 1,760,000 tons, Aug. 12, 1955; minimum daily, 0 ton on many days of most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,190 microsiemens, Nov. 5; minimum daily, 305 microsiemens, Sept. 5.
WATER TEMPERATURES: Maximum daily, 25.5°C, July 9, 31; minimum daily, 3.0°C on many days during December and January.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 19,700 mg/L, Sept. 10; minimum daily mean, 34 mg/L, Dec. 5.
SEDIMENT LOADS: Maximum daily, 187,000 tons, July 10; minimum daily, 37 tons, on Dec. 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
NOV										
20...	1145	569	800	702	8.10	8.20	-2.0	5.0	11.2	27
JAN										
23...	1100	3000	380	--	7.60	--	10.0	7.0	10.4	29
MAR										
21...	1030	1730	410	411	8.20	8.10	18.0	9.5	9.4	30
MAY										
22...	1000	2460	460	423	8.00	8.60	28.5	20.0	7.6	--
JUL										
17...	1030	3150	370	376	8.30	8.00	21.0	21.0	7.0	81
SEP										
05...	0945	3800	305	--	8.19	--	24.5	23.0	7.6	27

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV										
20...	200	28	61	11	70	2	5.0	200	0	170
JAN										
23...	--	--	--	--	--	--	--	--	--	--
MAR										
21...	140	22	44	7.8	28	1	3.4	146	0	120
MAY										
22...	140	23	43	7.1	35	1	3.7	143	0	114
JUL										
17...	110	27	35	6.6	33	1	3.3	107	0	88
SEP										
05...	--	--	--	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV										
20...	--	157	120	48	0.50	27	440	0.600	0.580	0.180
JAN										
23...	--	--	--	--	--	--	--	0.600	0.570	0.060
MAR										
21...	120	117	67	11	0.40	21	260	0.600	0.600	0.030
MAY										
22...	--	112	73	20	0.30	21	270	0.400	0.440	0.040
JUL										
17...	--	101	70	12	0.40	19	230	0.500	0.440	0.040
SEP										
05...	--	--	--	--	--	--	--	0.500	0.490	0.030

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV									
20...	0.32	1.1	0.540	0.400	5.7	K250	680	140	6
JAN									
23...	0.64	1.3	0.570	0.200	7.3	200	530	--	--
MAR									
21...	0.47	1.1	0.240	0.190	11	21	70	60	48
MAY									
22...	0.76	1.2	0.360	0.170	--	160	290	100	9
JUL									
17...	2.2	2.7	0.180	0.130	19	2200	2600	70	13
SEP									
05...	0.37	0.90	0.270	0.150	4.9	200	360	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
NOV										
20...	1145	7	6	<1	<1	<10	<10	12	5	2
JUL										
17...	1030	5	3	<1	<1	40	<10	61	4	19

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)
NOV										
20...	<1	--	--	<1	<1	30	4	<2.0	3.0	450
JUL										
17...	<5	0.70	0.4	--	<1	230	4	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)
NOV 20...	4	<1	40	<10	10	5000	<10	180	<0.01	20
JUL 17...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SEDIMENT, DISCH, SUSP. + BED MATERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
OCT												
03...	1115	380	--	16.0	290	298	601	96	98	99	100	--
18...	1300	2300	--	15.0	1750	10900	14200	--	--	--	--	--
DEC												
04...	1030	379	--	7.0	349	357	1020	24	43	69	95	100
23...	1237	1600	--	9.0	592	2560	--	38	--	--	--	--
23...	1240	1600	--	9.0	294	1270	--	58	--	--	--	--
23...	1300	1600	--	9.0	914	3950	--	27	--	--	--	--
JAN												
08...	1615	2380	--	7.0	335	2150	19700	69	82	98	100	--
23...	1100	3000	380	7.0	1870	15100	--	--	--	--	--	--
23...	1450	3000	--	6.5	712	5770	--	37	--	--	--	--
23...	1506	3000	--	6.5	735	5950	--	38	--	--	--	--
FEB												
19...	1000	3810	--	9.0	714	7340	11200	--	--	--	--	--
MAR												
04...	0945	4350	--	9.0	441	5180	7430	77	93	100	--	--
21...	1030	1730	410	9.5	116	542	752	97	100	--	--	--
APR												
08...	1030	2240	--	14.5	737	4460	5450	98	100	--	--	--
24...	1405	2700	--	17.0	240	1750	--	58	--	--	--	--
24...	1415	2710	--	17.0	248	1810	--	61	--	--	--	--
24...	1430	2720	--	17.0	166	1220	--	89	--	--	--	--
MAY												
06...	0945	2610	--	16.5	836	5890	8470	--	--	--	--	--
08...	1335	2960	--	15.0	2020	16100	--	--	--	--	--	--
22...	1000	2460	460	20.0	434	2880	--	--	--	--	--	--
JUN												
04...	1015	3570	--	20.0	525	5060	7310	--	--	--	--	--
17...	1030	3250	--	22.0	207	1820	2710	--	--	--	--	--
JUL												
09...	1305	5050	--	25.5	12200	166000	--	--	--	--	--	--
09...	1310	5060	--	25.5	12700	174000	--	--	--	--	--	--
17...	1030	3150	370	21.0	3730	31700	43400	--	--	--	--	--
18...	1051	3510	--	--	9360	88700	--	--	--	--	--	--
AUG												
05...	1015	4100	--	24.0	541	5990	--	--	--	--	--	--
20...	1015	2610	--	24.0	96	677	1040	97	--	--	--	--
20...	1015	2610	--	24.0	--	--	--	--	--	--	--	--
SEP												
05...	0930	2410	--	23.0	2090	13600	19100	--	--	--	--	--
05...	0930	2410	--	23.0	--	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)
OCT												
03...	--	--	--	--	--	--	--	--	--	62	95	99
18...	30	37	--	54	90	100	--	--	--	40	91	91
DEC												
04...	--	--	--	--	--	--	--	--	--	10	62	97
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
08...	--	--	--	--	--	--	--	--	--	0	0	37
23...	5	6	--	12	22	50	95	100	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
19...	17	18	--	26	49	83	100	--	--	29	76	100
MAR												
04...	18	23	--	34	--	--	--	--	--	4	11	54
21...	--	--	--	--	--	--	--	--	--	0	2	52
APR												
08...	59	75	--	88	--	--	--	--	--	43	92	99
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
06...	62	76	86	89	96	100	--	--	--	4	29	78
08...	67	78	--	93	97	99	100	--	--	--	--	--
22...	56	66	--	78	85	94	100	--	--	--	--	--
JUN												
04...	59	68	--	83	97	100	--	--	--	11	49	85
17...	--	--	--	--	83	99	100	--	--	1	9	55
JUL												
09...	50	58	--	78	97	100	--	--	--	--	--	--
09...	47	55	--	76	96	99	100	--	--	--	--	--
17...	44	54	--	69	89	95	99	100	--	10	20	48
18...	50	61	--	80	96	100	--	--	--	--	--	--
AUG												
05...	33	44	--	64	95	100	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
05...	--	--	--	--	17	41	85	98	100	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT												
03...	100	--	--	--	--	--	--	--	--	--	--	--
18...	91	--	--	--	--	--	100	--	--	--	--	--
DEC												
04...	100	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
08...	95	--	--	--	--	--	98	99	99	100	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
04...	93	100	--	--	--	--	--	--	--	--	--	--
21...	97	100	--	--	--	--	--	--	--	--	--	--
APR												
08...	100	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
06...	85	--	--	--	--	--	85	85	86	89	92	100
08...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	98	--	--	--	--	--	100	--	--	--	--	--
17...	96	--	--	--	--	--	98	99	100	--	--	--
JUL												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
17...	82	--	--	--	--	--	84	87	91	95	97	100
18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	19	67	98	100	--	--	--	--	--	--
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	0	2	28	91	98	99	99	100	--	--

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)
MAR										
21...	1030	<0.1	--	--	--	--	--	--	--	--
SEP										
05...	0945	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010

DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALATHION, TOTAL (UG/L) (39530)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHYL PARATHION, TOTAL (UG/L) (39600)	METHYL TRITHION, TOTAL (UG/L) (39790)
MAR									
21...	--	--	--	--	--	--	--	--	--
SEP									
05...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01

DATE	PARATHION, TOTAL (UG/L) (39540)	TOXAPHENE, TOTAL (UG/L) (39400)	TOTAL TRITHION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PERTHANE TOTAL (UG/L) (39034)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)
MAR									
21...	--	--	--	0.01	<0.01	<0.01	--	--	--
SEP									
05...	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	541	1150	824	516	397	459	526	---	---	---	411	---
2	586	1160	822	510	398	400	487	---	---	396	370	---
3	598	1170	831	515	400	397	463	---	---	---	347	---
4	598	1180	830	508	399	394	451	---	400	---	339	---
5	603	1190	834	397	402	396	464	---	---	---	329	414
6	601	829	830	415	402	393	453	442	---	---	415	---
7	621	800	835	419	404	397	484	---	---	---	403	---
8	780	786	831	421	402	394	472	467	---	---	399	---
9	799	787	838	423	404	398	450	---	---	500	396	510
10	794	768	830	422	404	395	442	---	---	613	396	874
11	964	764	837	451	406	398	524	---	---	---	386	709
12	972	775	834	452	404	451	611	---	---	---	387	683
13	899	767	842	460	417	460	596	---	---	---	388	544
14	982	767	834	456	407	357	560	---	---	382	398	595
15	996	763	844	455	407	392	549	---	---	392	389	645
16	988	754	839	455	403	391	540	---	---	386	390	615
17	1000	760	847	430	404	457	536	---	359	421	379	470
18	995	912	847	427	404	457	520	---	---	549	376	534
19	1010	938	860	427	404	461	525	---	---	460	368	504
20	997	906	851	425	402	458	512	---	406	406	358	505
21	1010	951	868	426	403	458	482	---	389	440	354	480
22	994	945	536	425	404	455	462	457	378	---	447	476
23	1000	959	532	429	405	459	446	---	379	577	476	489
24	995	1040	521	427	405	456	433	---	364	640	461	494
25	622	1050	524	428	406	461	---	---	367	579	477	---
26	567	1050	518	427	407	458	---	---	394	667	910	---
27	557	1040	520	427	407	468	---	---	409	549	605	---
28	544	1060	518	425	389	559	---	---	406	492	---	---
29	555	1040	517	337	---	572	---	---	---	471	---	---
30	551	760	515	386	---	558	---	---	360	456	---	---
31	1040	---	515	395	---	550	---	---	---	430	---	---
MEAN	799	927	736	436	403	444	500	455	384	490	421	561

WTR YR 1986 MEAN 571 MAX 1190 MIN 329

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	12.0	7.0	3.0	5.0	10.0	---	---	---	---	---	---
2	20.0	12.0	7.0	3.0	5.0	10.0	---	---	---	24.0	---	---
3	20.0	12.0	7.0	3.0	5.0	10.0	---	---	21.0	---	---	---
4	20.0	12.0	5.0	3.0	5.0	10.0	---	---	20.0	---	---	---
5	20.0	12.0	5.0	3.0	5.0	10.0	---	---	---	---	25.0	23.0
6	20.0	12.0	5.0	3.0	5.0	10.0	---	16.5	---	---	---	---
7	20.0	12.0	5.0	3.0	7.0	10.0	---	---	---	---	---	---
8	20.0	12.0	5.0	3.0	7.0	10.0	14.5	15.0	---	---	---	---
9	20.0	12.0	5.0	3.0	7.0	10.0	---	---	---	25.5	---	21.5
10	20.0	12.0	5.0	3.0	7.0	10.0	17.5	---	---	---	---	21.5
11	20.0	12.0	5.0	3.0	7.0	10.0	---	---	---	---	---	---
12	20.0	12.0	5.0	3.0	7.0	12.0	---	---	22.0	---	---	---
13	18.0	12.0	5.0	3.0	7.0	12.0	---	---	---	---	---	---
14	18.0	12.0	5.0	3.0	7.0	12.0	---	---	---	24.5	---	---
15	17.0	12.0	5.0	3.0	7.0	11.0	---	---	---	---	---	---
16	17.0	12.0	5.0	3.0	7.0	11.0	---	---	---	---	---	---
17	17.0	12.0	5.0	3.0	8.0	11.0	---	---	20.0	21.0	---	19.0
18	17.0	12.0	3.0	3.0	9.0	11.0	---	---	---	---	---	---
19	15.0	12.0	3.0	3.0	9.0	11.0	---	---	---	---	---	---
20	15.0	12.0	3.0	3.0	9.0	11.0	---	---	20.5	---	24.0	---
21	15.0	12.0	3.0	3.0	10.0	11.0	---	---	---	---	25.0	---
22	15.0	12.0	3.0	3.0	10.0	13.0	---	20.0	---	---	---	---
23	15.0	12.0	3.0	3.0	10.0	13.0	---	---	---	21.5	---	21.5
24	15.0	12.0	3.0	3.0	10.0	13.0	17.0	---	---	---	---	21.5
25	15.0	12.0	3.0	3.0	10.0	13.0	---	---	---	---	---	---
26	15.0	12.0	3.0	3.0	10.0	13.0	---	---	---	---	---	---
27	15.0	12.0	3.0	3.0	10.0	16.0	---	---	21.0	---	---	---
28	15.0	12.0	3.0	3.0	10.0	---	---	---	---	---	---	---
29	15.0	12.0	3.0	3.0	---	---	---	---	---	---	---	---
30	15.0	12.0	3.0	3.0	---	---	---	---	24.0	---	---	---
31	15.0	---	3.0	3.0	---	---	---	---	---	25.5	---	---
MEAN	17.5	12.0	4.5	3.0	7.5	11.5	16.5	17.0	21.0	23.5	24.5	21.5

WTR YR 1986 MEAN 11.0 MAX 25.5 MIN 3.0

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	335	298	65	197	48	56	597	3220	303	3270	297	3120
2	409	384	57	99	47	53	687	3690	299	3190	281	3110
3	278	280	66	104	45	49	675	3650	331	3490	270	2990
4	326	307	85	168	113	126	568	3070	305	3250	265	2960
5	461	412	199	373	34	37	522	2960	283	2900	270	2760
6	433	344	248	498	35	40	524	2900	278	2890	268	2870
7	419	305	229	468	38	44	524	2970	321	3320	275	2910
8	5870	5770	236	524	43	50	439	2610	339	3500	275	2890
9	10600	12700	266	680	49	62	460	2860	309	3170	279	2720
10	11300	21400	247	1010	49	64	506	3280	351	3620	288	3050
11	8440	29600	197	808	47	67	498	3330	302	3140	272	2910
12	772	5210	218	883	43	64	506	3360	294	3070	137	1350
13	323	2530	252	1020	46	74	456	2930	316	3170	230	2330
14	156	1100	272	1180	47	78	518	3360	323	3590	329	3460
15	165	980	299	1280	49	80	540	3790	336	3750	348	3660
16	169	867	297	1280	51	84	501	3650	345	3910	470	4520
17	165	931	278	1190	46	81	535	3970	387	4240	235	2260
18	175	1070	163	616	47	83	546	4130	502	5110	103	790
19	161	878	73	252	48	88	525	4110	518	5090	87	723
20	151	775	437	673	46	84	567	4590	392	3870	155	1070
21	168	816	216	313	223	831	575	4500	361	3970	171	1110
22	176	808	75	108	460	1800	536	4120	326	3380	149	925
23	164	686	75	106	498	2150	636	4980	292	2920	161	913
24	164	598	103	138	564	2590	574	4650	294	2980	160	821
25	236	841	119	157	627	3050	521	4600	340	3370	158	853
26	354	1240	175	227	717	3580	557	4470	318	2950	154	811
27	348	1220	120	152	614	3150	566	4450	259	2680	172	882
28	271	937	105	130	600	3160	538	4300	270	2730	107	563
29	299	1010	108	130	636	3430	357	2960	---	---	184	944
30	292	875	70	82	602	3220	276	2340	---	---	213	1100
31	163	385	---	---	549	2960	304	3150	---	---	247	1270
TOTAL	---	95557	---	14846	---	31285	---	112950	---	96520	---	62645

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	265	1420	570	3680	1900	17400	3510	45800	531	3270	5770	45200
2	307	1870	526	3710	1400	12500	7520	107000	1240	12800	5880	45100
3	487	4000	538	3780	869	7860	6880	91400	976	10300	10100	76600
4	360	2940	374	2730	549	5280	4480	59500	908	9810	6710	46200
5	365	2210	756	5590	660	6310	3550	49700	750	8300	4690	30600
6	490	2490	833	6070	737	6770	3310	46300	837	9490	9360	61200
7	739	4250	1680	12600	710	6400	3170	43200	817	9490	6760	36300
8	765	4610	1810	14400	602	5220	10000	140000	834	9910	6320	30000
9	730	4380	1520	12800	658	5760	12700	173000	1320	15500	12300	73400
10	569	3130	1120	8860	581	5100	13900	187000	918	10700	19700	147000
11	506	2900	776	5850	551	4810	7610	93900	741	8400	9670	56700
12	484	2570	965	7840	626	5540	4560	51800	1120	11500	7950	47400
13	552	2860	1010	7420	470	4050	2960	30800	813	7680	8360	45400
14	548	3200	1090	8150	347	3060	1910	19200	821	7070	11000	54400
15	463	2700	954	6570	384	3400	991	9150	985	8300	12400	73700
16	408	2310	1210	5590	437	4020	3280	29800	794	6820	8790	51300
17	391	2350	1450	4190	507	4490	5350	51600	457	3810	2840	15000
18	351	1970	1320	8300	917	7720	7830	74200	423	3310	3340	16700
19	330	1920	1010	7990	1200	9820	3960	34000	392	2940	2850	13900
20	304	2030	785	5490	566	4160	2440	20600	241	1740	2270	10700
21	313	2430	595	3890	444	3840	6360	62200	290	2180	1060	4290
22	345	2650	501	3300	412	3560	6190	60300	604	5100	492	1690
23	340	2470	559	3680	450	4010	5410	40300	540	4260	447	1200
24	242	1730	448	3040	609	5510	3880	27900	408	3460	608	2500
25	230	1680	837	5420	570	5390	3100	20000	1120	10800	522	2170
26	272	2110	727	4910	1910	19100	6800	42400	10700	102000	446	1540
27	277	2140	649	4170	2140	23100	2680	16500	7290	70900	892	4070
28	428	3270	605	4100	2750	33000	1510	9780	7580	71200	600	2300
29	398	2770	658	4440	3100	39800	996	5780	4880	41600	494	1890
30	501	3250	860	7570	3390	44800	606	3220	7080	57900	374	1110
31	---	---	1550	14600	---	---	746	5020	5050	39400	---	---
TOTAL	---	80610	---	200730	---	311780	---	1651350	---	569940	---	999560

TOTAL LOAD FOR YEAR: 4227773 TONS.

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM
(National stream-quality accounting network, surveillance network, and radiochemical network station)

LOCATION.--Lat 33°41'15", long 106°59'40", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 34, on right bank 0.4 mi northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mi southwest of former site of San Marcial, 3.5 mi downstream from railroad bridge near Tiffany siding, and 51 mi downstream from heading at San Acacia.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to September 1959, October 1969 to current year. Prior to October 1964 monthly discharge only published with record for Rio Grande at San Marcial (station 08358500).

GAGE.--Water-stage recorder. Datum of gage is 4,454.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft higher.

REMARKS.--Estimated daily discharges: Sept. 3, 4. Water-discharge records good except for estimated daily discharges, which are fair. Original design and plan was for conveyance channel to carry all flows up to about 2,000 ft³/s. Conveyance channel is 1 of 2 channels (station 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 station 08358400.

EXTREMES FOR PERIOD OF RECORD (SINCE 1954).--Maximum daily discharge, 2,200 ft³/s, May 14, 1966; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	308	186	208	237	409	270	296	385	418	186	325
2	228	216	183	208	224	415	256	327	409	447	217	278
3	194	199	176	214	218	404	238	351	330	487	264	320
4	184	196	176	226	217	393	231	371	335	443	339	385
5	166	224	184	218	212	368	320	362	324	438	285	377
6	165	224	190	217	202	317	363	350	342	429	300	366
7	147	222	187	210	209	312	355	310	337	432	335	327
8	146	218	185	191	184	365	272	303	352	437	323	332
9	191	206	176	189	195	366	276	301	352	476	393	319
10	228	204	165	179	237	402	275	305	325	492	423	325
11	202	200	162	181	230	372	279	328	329	512	443	341
12	196	199	166	183	216	336	255	341	293	489	358	339
13	200	180	157	201	207	343	310	322	285	464	383	361
14	216	180	168	225	202	373	314	293	296	447	370	363
15	202	182	180	220	201	387	274	340	360	393	359	368
16	216	183	174	219	203	377	329	305	360	395	357	352
17	256	184	173	221	198	371	327	325	298	383	323	317
18	206	193	177	223	201	372	297	331	262	410	373	294
19	231	192	181	222	223	362	308	307	274	431	331	295
20	219	203	180	223	209	352	324	270	326	441	288	300
21	266	203	166	223	208	343	380	279	326	454	302	288
22	301	179	174	214	211	280	310	296	331	470	313	284
23	300	177	181	212	227	252	328	283	315	454	397	284
24	310	203	182	202	252	255	288	303	345	428	408	321
25	281	204	180	205	334	285	312	319	465	397	375	375
26	275	185	185	215	344	257	338	360	501	333	326	353
27	266	181	212	216	381	260	329	281	503	356	322	330
28	271	181	213	215	400	232	273	301	476	341	319	338
29	305	186	213	191	---	190	230	306	450	304	355	342
30	251	168	215	210	---	220	279	324	432	258	362	325
31	308	---	214	247	---	284	---	291	---	241	354	---
TOTAL	7162	5980	5661	6528	6582	10254	8940	9781	10718	12900	10483	9924
MEAN	231	199	183	211	235	331	298	316	357	416	338	331
MAX	310	308	215	247	400	415	380	371	503	512	443	385
MIN	146	168	157	179	184	190	230	270	262	241	186	278
AC-FT	14210	11860	11230	12950	13060	20340	17730	19400	21260	25590	20790	19680

CAL YR 1985	TOTAL	164369	MEAN	450	MAX	1470	MIN	85	AC-FT	326000
WTR YR 1986	TOTAL	104913	MEAN	287	MAX	512	MIN	146	AC-FT	208100

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1954 to current year.
WATER TEMPERATURES: March 1954 to September 1985.
SUSPENDED-SEDIMENT DISCHARGES: March 1954 to current year.

REMARKS.--Water samples for chemical and biological analyses collected at this station when all flow is diverted from the station 08358400 Rio Grande Floodway at San Marcial, NM.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 2,860 microsiemens, Oct. 25, 1956; minimum daily, 298 microsiemens, May 25, 1984.
WATER TEMPERATURES: Maximum daily, 37.0°C, July 17, 24, Sept. 2; minimum daily, 0.0°C on many days during December and January of most years.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 144,000 mg/L, Sept. 19, 1971; minimum daily mean, no flow on many days during most years.
SEDIMENT LOADS: Maximum daily, 638,000 tons, Aug. 28, 1972; minimum daily, 0 ton on many days during most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1080 microsiemens on several days during January; minimum daily, 400 microsiemens, Mar. 18.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,290 mg/L, Oct. 1; minimum daily mean, 32 mg/L, Nov. 5.
SEDIMENT LOADS: Maximum daily, 1,150 tons, July 3; minimum daily, 19 tons, Nov. 5, Jan. 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
NOV											
26...	1330	179	980	939	8.20	8.20	12.5	13.5	4.7	9.3	240
MAR											
18...	1100	2540	400	419	8.50	8.20	12.0	9.0	72	9.5	140

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
NOV										
26...	48	72	14	110	3	5.9	200	10	180	190
MAR										
18...	6	43	7.9	31	1	3.1	144	10	131	134

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV										
26...	170	160	83	0.60	26	582	590	--	0.010	<0.100
MAR										
18...	112	72	17	0.40	19	273	290	0.460	0.010	0.470

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
NOV 26...	0.050	0.050	0.25	0.170	0.050	<0.010	30	75	7	4
MAR 18...	0.040	0.030	0.96	0.430	0.130	<0.010	160	240	28	7

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, DISSOLVED (UG/L AS PB) (01049)
NOV 26...	1330	20	7	79	<0.5	<1	<1	<3	2	<1
MAR 18...	1100	40	<1	46	<0.5	1	<1	<3	14	1

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)
NOV 26...	100	0.1	<10	2	<1	<1	830	<6	14	<2.0
MAR 18...	35	<0.1	<10	3	<1	2	400	<6	12	--

DATE	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)
NOV 26...	4.3	320	4	<1	40	<10	4	4200	<10	310
MAR 18...	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)
NOV 26...	<0.01	20	<6.2	<0.6	6.6	<0.6	4.8	<0.6	0.04	1.3
MAR 18...	--	--	--	--	--	--	--	--	--	--

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, DISCH, SUSP. + BED MA-TERIAL (T/DAY) (80156)
NOV							
26...	1330	179	980	13.5	126	61	142
APR							
22...	1425	327	--	22.0	317	280	--
JUN							
24...	1428	364	--	30.0	692	680	--
AUG							
11...	1200	459	--	36.0	384	476	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
NOV							
26...	27	45	97	100	--	--	--
APR							
22...	100	--	--	--	69	90	96
JUN							
24...	97	100	--	--	58	71	87
AUG							
11...	100	--	--	--	67	81	98

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	1020	1020	941	909	900	854	838	813	790	707	
2	861	1010	1010	994	972	884	881	851	810	500	688	
3	898	1040	---	1010	988	898	893	857	864	765	690	
4	903	1040	---	1010	992	896	909	860	731	780	681	
5	915	1040	---	1010	991	902	899	852	860	669	697	
6	908	1040	---	1010	988	899	901	851	875	746	687	
7	922	966	---	1020	1020	904	504	849	890	750	693	
8	915	1030	---	1070	988	904	811	852	887	790	683	
9	925	1040	---	1080	929	908	838	833	895	804	688	
10	916	965	---	1080	918	684	846	833	913	761	682	
11	953	959	---	1080	921	933	848	832	899	802	539	
12	950	955	---	1080	918	962	850	832	845	800	732	
13	961	960	---	1080	921	968	853	567	845	810	755	
14	955	960	---	1080	917	969	852	552	838	801	746	
15	963	998	---	1030	922	972	848	547	842	815	760	
16	954	1000	---	1030	921	970	849	546	837	806	551	
17	967	1010	---	1020	962	965	847	551	841	819	745	
18	957	1020	---	501	963	954	522	550	---	810	751	
19	919	1020	---	950	967	972	484	546	804	818	758	
20	950	1020	---	1000	962	958	475	819	800	580	736	
21	966	1030	---	1020	974	963	471	843	800	767	552	
22	970	1020	---	1020	923	959	475	853	794	775	530	
23	985	1030	---	1020	905	963	470	837	805	782	734	
24	976	1010	---	1020	900	963	470	851	794	780	741	
25	881	1010	---	1020	903	967	469	852	808	786	757	
26	982	1010	---	1020	898	965	470	498	803	785	552	
27	1000	1020	---	1030	705	---	---	787	808	780	734	
28	1000	1010	---	1020	882	---	775	808	786	774	744	
29	1010	1020	---	---	---	---	---	812	790	779	759	
30	1010	1010	---	---	---	---	---	814	781	781	811	
31	1010	---	---	---	---	---	---	813	---	797	---	
MEAN	938	1010	1020	1010	934	930	717	761	830	768	696	

WTR YR 1986 MEAN 859 MAX 1080 MIN 469

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1290	819	45	37	41	21	43	24	61	39	137	151
2	135	83	41	24	47	23	40	22	58	35	158	177
3	100	52	40	21	49	23	52	30	62	36	116	127
4	123	61	37	20	46	22	42	26	60	35	130	138
5	110	49	32	19	46	23	43	25	56	32	157	156
6	129	57	39	24	46	24	49	29	52	28	129	110
7	118	47	55	33	47	24	52	29	57	32	137	115
8	108	43	47	28	47	23	46	24	53	26	133	131
9	114	59	43	24	48	23	43	22	172	91	140	138
10	115	71	56	31	46	20	40	19	157	100	345	374
11	105	57	54	29	46	20	40	20	163	101	217	218
12	114	60	67	36	46	21	47	23	168	98	285	259
13	116	63	76	37	47	20	54	29	170	95	209	194
14	142	83	63	31	48	22	68	41	165	90	257	259
15	108	59	44	22	48	23	66	39	169	92	285	298
16	114	66	41	20	48	23	74	44	177	97	281	286
17	124	86	43	21	48	22	66	39	231	123	203	203
18	147	82	42	22	50	24	42	25	305	166	234	235
19	217	135	42	22	51	25	50	30	334	201	303	296
20	144	85	39	21	51	25	50	30	309	174	142	135
21	82	59	45	25	53	24	52	31	135	76	130	120
22	61	50	61	29	51	24	71	41	150	85	160	121
23	74	60	54	26	50	24	59	34	163	100	185	126
24	58	49	68	37	48	24	50	27	166	113	219	151
25	51	39	70	39	46	22	66	37	167	151	200	154
26	40	30	82	41	43	21	61	35	165	153	188	130
27	50	36	65	32	50	29	50	29	146	150	174	122
28	47	34	48	23	49	28	53	31	166	179	172	108
29	43	35	49	25	46	26	60	31	---	---	156	80
30	43	29	46	21	45	26	63	36	---	---	153	91
31	48	40	---	---	44	25	63	42	---	---	186	143
TOTAL	---	2578	---	820	---	724	---	944	---	2698	---	5346

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	172	125	83	66	187	194	547	617	172	86	134	118
2	150	104	97	86	148	163	718	867	135	79	121	91
3	150	96	99	94	160	143	876	1150	193	138	128	111
4	162	101	93	93	118	107	495	592	172	157	117	122
5	155	134	111	108	117	102	192	227	209	161	135	137
6	150	147	94	89	147	136	150	174	215	174	143	141
7	88	84	108	90	150	136	109	127	248	224	136	120
8	128	94	89	73	118	112	134	158	224	195	146	131
9	190	142	263	214	111	105	142	182	196	208	146	126
10	207	154	363	299	97	85	229	304	253	289	148	130
11	215	162	322	285	210	187	174	241	367	439	139	128
12	224	154	241	222	362	286	143	189	264	255	129	118
13	292	244	165	143	442	340	170	213	157	162	129	126
14	239	203	138	109	422	337	183	221	176	176	128	125
15	217	161	158	145	423	411	173	184	193	187	137	136
16	223	198	150	124	404	393	137	146	314	303	125	119
17	203	179	118	104	387	311	193	200	229	200	123	105
18	286	229	110	98	413	292	159	176	162	163	112	89
19	373	310	132	109	565	418	205	239	211	189	105	84
20	333	291	189	138	608	535	140	167	194	151	107	87
21	370	380	249	188	617	543	200	245	310	253	100	78
22	334	280	241	193	699	625	221	280	437	369	98	75
23	376	333	256	196	490	417	235	288	377	404	93	71
24	389	302	200	164	583	543	212	245	305	336	110	95
25	370	312	239	206	475	596	255	273	339	343	144	146
26	326	298	325	316	565	764	226	203	264	232	132	126
27	206	183	219	166	579	786	158	152	263	229	121	108
28	83	61	183	149	553	711	169	156	216	186	119	109
29	68	42	177	146	565	686	168	138	133	127	119	110
30	72	54	190	166	544	635	150	104	133	130	109	96
31	---	---	179	141	---	---	196	128	150	143	---	---
TOTAL	---	5557	---	4720	---	11099	---	8586	---	6688	---	3358

TOTAL LOAD FOR YEAR: 53118 TONS.

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM

(National stream-quality accounting network, surveillance network, and radiochemical network station)

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 33, on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 mi downstream from former site of San Marcial, 18.5 mi southwest of San Antonio, and at mile 1,425.2.

DRAINAGE AREA.--27,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

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 Rio Grande at San Marcial (station 08358500). 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 National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records poor. Floodway is 1 of 2 channels (station 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 ft³/s) is exceeded. Combined monthly discharge in acre-ft is given at end of each year table. Diversion for irrigation of about 775,000 acres upstream from station (includes about 13,800 acre-ft diverted from conveyance channel, as based on weekly measurements, data provided by U.S. Bureau of Reclamation).

AVERAGE DISCHARGE.--22 years (water years 1965-86), 675 ft³/s, 489,000 acre-ft/yr.
Total flow of river.--91 years (water years 1895-1986), 1,259 ft³/s, 912,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, since January 1895 about 50,000 ft³/s Oct. 11, 1904; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,670 ft³/s, July 10; minimum daily, 41 ft³/s, Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	565	156	1580	2510	3350	1200	2070	2410	3340	1510	1970
2	140	776	151	1660	2700	3320	1810	1970	2530	3390	1560	1930
3	116	538	148	1670	3250	3400	1730	2020	2650	3490	2410	1840
4	103	446	148	1710	3300	3350	2150	2030	2740	3350	2560	1840
5	77	428	143	1710	3250	3350	2000	2070	2780	3290	2580	1760
6	73	392	135	1750	3120	3300	1750	2050	2760	3320	2610	1570
7	47	362	133	1710	3190	3300	1750	2000	2780	3460	2810	1270
8	41	345	130	1800	3200	3260	1810	1950	2740	3410	3040	1010
9	85	340	118	2060	3140	3180	1810	1930	2700	3500	3130	1020
10	435	772	112	2010	3130	3160	1810	1970	2700	3670	3180	1370
11	976	1250	107	1940	3100	3180	1760	1960	2610	3530	3190	1640
12	1530	1280	112	1930	3030	3230	1760	1900	2550	3160	3340	1220
13	2580	1280	140	1890	2950	3200	1710	1930	2500	2890	3380	1230
14	2100	1400	153	1990	2940	3100	1780	1820	2450	2770	2990	1180
15	1560	1310	177	1990	3100	3090	1830	1840	2450	2690	2750	1060
16	1520	1360	186	1970	3030	2970	1750	1760	2460	2540	2560	1280
17	1970	1350	180	2150	3060	2670	1770	1430	2540	2940	2380	1300
18	2010	909	146	2230	3010	2500	1800	1190	2550	2900	2220	1130
19	1900	416	140	2180	2980	2220	1780	1670	2660	2770	2060	1190
20	1690	356	130	2420	3030	2160	1790	1870	2690	2440	1920	1100
21	1600	310	241	2350	3110	1820	1960	1890	2620	2740	1810	1000
22	1470	271	1140	2340	3190	1720	2040	1880	2670	3090	1850	911
23	1260	283	1280	2320	3220	1390	2090	1950	2690	3040	1980	831
24	1020	266	1400	2330	3220	1430	2040	1970	2690	2510	1870	482
25	951	224	1430	2320	3270	1590	2080	2040	2910	2220	1970	647
26	932	206	1400	2320	3310	1580	2130	2080	3100	1900	2230	692
27	829	174	1450	2300	3330	1580	2170	2120	3300	1680	2480	554
28	829	174	1480	2280	3400	1460	2200	2130	3190	1550	2390	777
29	722	165	1540	2200	---	1390	2160	2200	3260	1490	2360	722
30	741	156	1580	2210	---	1470	2130	2310	3260	1320	2320	728
31	592	---	1620	2230	---	1340	---	2330	---	1190	2150	---
TOTAL	30119	18104	17406	63550	87070	78060	56550	60330	81940	85580	75590	35254
MEAN	972	603	561	2050	3110	2518	1885	1946	2731	2761	2438	1175
MAX	2580	1400	1620	2420	3400	3400	2200	2330	3300	3670	3380	1970
MIN	41	156	107	1580	2510	1340	1200	1190	2410	1190	1510	482
AC-FT	59740	35910	34520	126100	172700	154800	112200	119700	162500	169700	149900	69930
(†)	73950	47770	45750	139000	185800	175100	129900	139100	183800	195300	170700	89610

CAL YR 1985 TOTAL 600811.20 MEAN 1646 MAX 8110 MIN .00 AC-FT 1192000 (†) MEAN 2096 AC-FT 1518000
WTR YR 1986 TOTAL 689553 MEAN 1889 MAX 3670 MIN 41 AC-FT 1368000 (†) MEAN 2177 AC-FT 1576000

(†) COMBINED FLOW, IN ACRE-FT, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY AND CONVEYANCE CHANNEL.

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1905-07, 1946 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1905 to April 1907, July 1946 to current year.
WATER TEMPERATURES: January 1949 to September 1985.
SUSPENDED-SEDIMENT DISCHARGES: July 1946 to current year.

REMARKS.--Records of chemical analyses and sediment discharge for years prior to 1946 have been published in Water Bulletins of International Boundary and Water Commission. Additional sediment total-discharge determinations were made monthly when needed.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 2,730 microsiemens, Apr. 8, 1953; minimum daily, 277 microsiemens, June 12, 1983.
WATER TEMPERATURES: Maximum daily, 37.0°C, July 22, 27, Aug. 7; minimum daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 135,000 mg/L, July 23, 1977; minimum daily mean, no flow on many days each year.
SEDIMENT LOADS: Maximum daily, 1,200,000 tons, Sept. 21, 1982; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 887 microsiemens, Feb. 23; minimum daily, 335 microsiemens, Sept. 4.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 25,100 mg/L, Oct. 1; minimum daily mean, 164 mg/L, Apr. 27.
SEDIMENT LOADS: Maximum daily, 120,000 tons, June 12; minimum daily, 197 tons, Oct. 8.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
JAN 24...	1100	2340	415	--	7.50	--	7.5	7.0	--	10.7
MAY 20...	1100	1920	455	432	8.00	8.20	27.0	20.5	180	7.4
JUL 21...	1200	2730	365	--	8.00	--	32.0	21.5	--	7.6
SEP 04...	1145	1870	335	398	7.90	8.20	29.0	23.0	700	6.6

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
JAN 24...	--	--	--	--	--	--	--	--	--	--
MAY 20...	130	7	40	7.3	35	1	3.7	150	0	121
JUL 21...	--	--	--	--	--	--	--	--	--	--
SEP 04...	130	21	39	7.0	31	1	4.1	129	0	106

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
JAN 24...	--	--	--	--	--	--	--	--	--	--
MAY 20...	123	111	72	20	0.30	21	271	270	<0.010	0.450
JUL 21...	--	--	--	--	--	--	--	--	--	--
SEP 04...	--	114	71	12	0.40	20	288	250	<0.010	0.460

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
JAN										
24...	--	--	--	--	--	--	440	1000	--	--
MAY										
20...	0.050	0.080	0.75	0.540	0.180	<0.010	140	170	--	--
JUL										
21...	--	--	--	--	--	--	1600	1700	--	--
SEP										
04...	0.020	0.030	0.98	0.310	0.120	<0.010	K270	K630	10	1

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, DISSOLVED (UG/L AS PB) (01049)
SEP										
04...	1145	<10	4	59	<0.5	<1	<1	<3	6	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
SEP									
04...	32	<0.1	<10	4	4	<1	400	<6	<3

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SEDIMENT, DISCH, SUSP. + BED MATERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
OCT										
17...	1100	1970	--	13.0	4600	24500	26000	99	100	--
NOV										
10...	1425	287	--	29.0	2380	1840	--	93	99	100
DEC										
01...	1400	103	--	26.0	2860	795	--	96	100	--
JAN										
04...	1000	1710	--	7.0	1020	4710	--	98	100	--
08...	0915	1770	--	1.0	786	3760	4830	99	100	--
FEB										
18...	0930	2940	--	9.0	1440	11400	15300	--	--	--
MAR										
18...	1100	2540	--	9.0	941	6450	8440	88	99	100
APR										
07...	1230	1800	--	16.0	282	1370	--	96	100	--
23...	1030	2120	--	18.0	298	1710	2520	96	100	--
MAY										
05...	1030	2070	--	18.5	187	1050	1700	99	100	--
21...	1100	1920	--	20.5	391	2030	2900	90	99	100
JUN										
03...	1030	2760	--	19.0	495	3690	--	99	99	100
16...	1045	2480	--	23.0	442	2960	4410	100	--	--
JUL										
01...	1000	3240	--	24.0	863	7550	--	100	--	--
21...	1200	2730	365	21.5	--	--	--	--	--	--
AUG										
04...	1045	2580	--	24.0	431	3000	4340	100	--	--
04...	1045	2580	--	24.0	--	--	--	--	--	--
SEP										
04...	1145	1870	335	23.0	1100	5550	931	99	100	--
04...	1145	1870	--	23.0	--	--	--	--	--	--

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)
OCT										
17...	42	54	76	--	--	--	16	18	91	100
NOV										
10...	18	23	45	--	--	--	--	--	--	--
DEC										
01...	13	15	32	--	--	--	--	--	--	--
JAN										
04...	26	32	58	--	--	--	67	92	97	99
08...	34	37	65	--	--	--	1	15	92	100
FEB										
18...	16	16	30	75	96	100	13	62	100	--
MAR										
18...	21	23	40	--	--	--	1	15	98	100
APR										
07...	--	--	--	--	--	--	48	90	100	--
23...	--	--	--	--	--	--	9	26	84	99
MAY										
05...	67	81	91	--	--	--	19	40	84	98
21...	40	48	62	--	--	--	1	19	94	99
JUN										
03...	65	82	94	--	--	--	--	--	--	--
16...	57	70	96	--	--	--	15	51	96	99
JUL										
01...	62	78	95	--	--	--	82	96	99	100
21...	60	72	88	91	94	100	0	1	79	100
AUG										
04...	63	77	98	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
SEP										
04...	70	83	96	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--

DATE	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)
OCT									
17...	--	--	--	--	--	--	--	--	--
NOV									
10...	--	--	--	--	--	--	--	--	--
DEC									
01...	--	--	--	--	--	--	--	--	--
JAN									
04...	100	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
FEB									
18...	--	--	--	--	--	--	--	--	--
MAR									
18...	--	--	--	--	--	--	--	--	--
APR									
07...	--	--	--	--	--	--	--	--	--
23...	100	--	--	--	--	--	--	--	--
MAY									
05...	--	--	--	--	--	99	100	--	--
21...	100	--	--	--	--	--	--	--	--
JUN									
03...	--	--	--	--	--	--	--	--	--
16...	100	--	--	--	--	--	--	--	--
JUL									
01...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
AUG									
04...	--	--	--	--	--	--	--	--	--
04...	--	21	33	78	94	97	98	99	100
SEP									
04...	--	--	--	--	--	--	--	--	--
04...	--	0	2	45	98	100	--	--	--

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued
WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	764	514	466	384	436	433	381	383	472	411	
2	762	757	511	468	416	441	433	380	429	470	419	
3	780	817	---	473	420	446	437	383	439	748	418	
4	604	821	---	470	419	443	436	381	438	495	407	
5	576	827	---	474	424	446	439	391	444	364	423	
6	569	824	---	474	422	444	438	385	438	367	418	
7	569	829	---	477	424	446	442	386	448	368	418	
8	566	824	---	469	423	458	439	417	512	373	415	
9	570	607	---	467	414	449	443	392	472	371	417	
10	567	567	---	464	412	444	463	417	445	375	416	
11	569	557	---	463	412	447	469	422	447	471	716	
12	619	553	---	468	412	442	466	419	502	479	437	
13	632	556	---	467	414	448	470	783	498	483	418	
14	632	791	---	508	416	443	469	819	789	494	415	
15	635	539	---	524	415	448	471	830	832	485	511	
16	633	583	---	487	415	445	470	825	832	492	725	
17	633	590	---	459	414	445	472	828	844	491	561	
18	632	593	---	453	405	453	802	823	499	486	543	
19	754	597	---	520	407	445	841	829	496	393	539	
20	648	590	---	461	404	451	844	483	489	382	537	
21	880	622	---	453	420	458	851	429	484	386	537	
22	724	591	---	449	409	440	850	425	478	379	538	
23	711	596	---	451	887	448	792	424	480	382	535	
24	705	520	---	453	526	441	835	423	476	378	535	
25	689	567	---	452	483	449	848	424	484	379	536	
26	750	515	---	449	510	442	861	422	477	371	535	
27	752	514	---	450	476	---	852	388	482	746	536	
28	752	507	---	447	468	---	379	381	469	441	536	
29	758	512	---	---	---	---	---	385	471	386	535	
30	759	509	---	---	---	---	---	384	467	379	534	
31	769	---	---	---	---	---	---	384	---	371	---	
MEAN	674	635	513	468	445	446	587	498	515	441	497	

WTR YR 1986 MEAN 522 MAX 887 MIN 364

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25100	14900	4030	6150	2490	1050	1770	7550	825	5590	216	1950
2	21800	8240	8490	17800	1890	771	1460	6540	994	7250	192	1720
3	18300	5730	4060	5900	1420	567	1420	6400	590	5180	174	1600
4	2030	565	313	377	1370	547	1230	5680	859	7650	177	1600
5	2370	493	252	291	1270	490	1450	6690	1100	9650	177	1600
6	2400	473	364	385	1210	441	1310	6190	921	7760	173	1540
7	1910	242	365	357	1240	445	2650	12200	689	5930	927	8260
8	1780	197	408	380	1210	425	5730	27800	858	7410	789	6940
9	1710	383	1890	1740	1150	366	7980	44400	372	3150	303	2610
10	1770	2140	2430	5070	1140	345	4920	26700	285	2410	431	3680
11	2610	8090	2260	7630	1150	332	2660	13900	282	2360	601	5160
12	4240	18500	2250	7780	1150	348	3630	18900	348	2850	586	5100
13	8310	57900	2680	9260	1250	472	2500	12800	373	2970	630	5450
14	5930	33600	2640	9980	1210	500	1240	6660	386	3070	770	6450
15	3760	15800	2380	8420	1230	588	1850	9940	293	2450	692	5770
16	4290	17600	2350	8630	1230	618	2240	11900	294	2410	665	5330
17	4900	26100	2690	9810	1210	588	722	4190	268	2220	560	4040
18	7480	40600	2100	5290	1360	536	677	4080	266	2170	791	5340
19	4050	20800	2030	2280	1400	529	1250	7360	226	1820	646	3870
20	5740	26200	3680	3540	1290	453	1660	10800	248	2030	511	2980
21	4390	19000	3770	3160	1400	1200	862	5470	284	2380	592	2910
22	1740	6910	2780	2030	2270	6990	689	4350	255	2200	520	2410
23	924	3140	2840	2170	1820	6290	665	4170	298	2590	572	2150
24	1150	3170	2510	1800	1790	6770	1780	11200	249	2170	493	1910
25	4170	10700	1980	1200	1800	6950	1440	9020	251	2220	415	1790
26	2180	5490	1860	1030	1870	7070	848	5310	232	2070	366	1560
27	6490	14500	2430	1140	1850	7240	657	4080	253	2270	320	1370
28	12000	26900	2280	1070	1830	7310	578	3560	279	2560	290	1150
29	7510	14600	1770	789	1810	7530	582	3460	---	---	283	1060
30	7560	15100	1560	657	1830	7810	627	3740	---	---	287	1140
31	5290	8460	---	---	1830	8000	699	4210	---	---	335	1220
TOTAL	---	426523	---	126116	---	83571	---	309250	---	104790	---	99660

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	354	1150	242	1350	360	2340	1260	11400	336	1370	502	2680
2	400	1950	265	1410	613	4180	1460	13400	453	1900	484	2530
3	324	1520	415	2260	622	4450	786	7400	445	2900	494	2450
4	300	1740	293	1610	607	4490	1750	15800	640	4420	742	3690
5	307	1660	244	1360	654	4910	475	4220	673	4680	462	2190
6	326	1540	254	1410	839	6250	384	3440	562	3960	402	1710
7	311	1470	200	1080	655	4920	423	3950	402	3050	358	1220
8	466	2280	387	2040	843	6240	440	4050	329	2700	327	892
9	506	2480	314	1640	735	5360	431	4070	330	2790	510	1410
10	377	1840	692	3670	643	4690	490	4850	393	3370	4750	17600
11	328	1560	776	4100	486	3420	2830	27000	437	3760	9560	42400
12	333	1580	638	3280	17500	120000	4620	39400	360	3240	4990	16400
13	324	1500	452	2350	10000	67500	4070	31800	333	3040	3220	10700
14	257	1230	425	2090	3330	22000	4560	34200	307	2480	2330	7440
15	376	1860	407	2020	687	4540	5310	38600	488	3630	2060	5920
16	351	1660	380	1810	1980	13200	5650	38800	286	1980	2120	7340
17	338	1610	408	1580	9150	62800	5850	46400	427	2740	1950	6850
18	238	1160	395	1270	15400	106000	3110	24300	529	3170	1670	5090
19	206	990	522	2360	6490	46600	419	3130	522	2910	1770	5700
20	221	1070	771	3890	1720	12500	219	1440	521	2690	1640	4880
21	228	1200	572	2920	2540	18000	314	2320	493	2400	1440	3900
22	241	1320	707	3590	3380	24400	376	3130	369	1840	1370	3370
23	254	1430	716	3760	2850	20700	353	2900	391	2090	1220	2740
24	240	1320	709	3780	2620	19000	339	2300	534	2700	628	817
25	236	1320	746	4100	2490	19600	340	2040	621	3300	724	1270
26	244	1400	705	3970	2860	23900	623	3190	498	3000	706	1320
27	164	959	487	2790	2250	20000	272	1240	514	3450	394	589
28	179	1060	436	2510	1680	14500	364	1520	406	2620	956	2010
29	233	1360	431	2560	1560	13700	418	1680	537	3420	1040	2030
30	238	1370	561	3500	1670	14700	405	1440	545	3410	1020	2000
31	---	---	382	2400	---	---	465	1490	502	2910	---	---
TOTAL	---	44589	---	78460	---	694890	---	380900	---	91920	---	169138

TOTAL LOAD FOR YEAR: 2609807 TONS.

08360500 ELEPHANT BUTTE RESERVOIR AT ELEPHANT BUTTE, NM

LOCATION.--Lat 33°09'15", long 107°11'28", in NW¼ sec.30, T.13 S., R.3 W., Sierra County, Hydrologic Unit 13020211, at dam on Rio Grande, 1 mi west of Elephant Butte, 4 mi northeast of Truth or Consequences (Hot Springs) and at mile 1,383.2.

DRAINAGE AREA.--29,445 mi², approximately including 2,940 mi² in closed basin in San Luis Valley, CO.

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.

REVISED RECORDS.--WSP 1442: 1954(m). WSP 1632: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above National Geodetic Vertical Datum of 1929. Oct. 16, 1939, to May 2, 1940, and prior to September 1930, nonrecording gages.

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,110,300 acre-ft survey of 1980 at gage height 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. No storage allocated to flood control. Water is used for power development and irrigation on Rio Grande Project of U.S. Bureau of Reclamation. A 50,000 acre-ft permanent pool is authorized for recreational purposes.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 2,303,000 acre-ft, June 16-18, 1942, gage height, 4,409.19 ft; minimum daily contents after initial filling, 9,900 acre-ft, Aug. 6, 1954, gage height, 4,258.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 2,093,000 acre-feet, May 2, 4, 5, gage height, 4,406.53 ft; minimum daily contents, 1,847,200 acre-ft, Oct. 1, gage height, 4,399.60 ft.

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

4,350	655.0	4,390	1,540.7
4,360	826.2	4,400	1,860.9
4,370	1,027.6	4,410	2,222.6
4,380	1,264.3		

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1847200	1909400	1930300	1959900	2067000	2061900	2072900	2092300	2057900	2063400	2057900	2075800
2	1848600	1908300	1930300	1962400	2070700	2062300	2072900	2093000	2058600	2066300	2057900	2076500
3	1847900	1908300	1931100	1965300	2073600	2064100	2074700	2092300	2059700	2068100	2053900	2076500
4	1847500	1909700	1931100	1967700	2073600	2064800	2077200	2093000	2060500	2071000	2052800	2077600
5	1847500	1910800	1931100	1970600	2072500	2067000	2078700	2093000	2062300	2073600	2052800	2076500
6	1848200	1911800	1931400	1973400	2072100	2067700	2078300	2091900	2065200	2076100	2054300	2078000
7	1848900	1911500	1931400	1977000	2072100	2070300	2079100	2091900	2066600	2078000	2055400	2074700
8	1849600	1912500	1930300	1978800	2071000	2071400	2078700	2087500	2067400	2078700	2058300	2072900
9	1850300	1912200	1930300	1982000	2072500	2074300	2078700	2088200	2067400	2080200	2060100	2071000
10	1853400	1912900	1931800	1985500	2071400	2075000	2078700	2085700	2066300	2079400	2061900	2071800
11	1854700	1912900	1930000	1989400	2070700	2076900	2078700	2086800	2066600	2081600	2062300	2071800
12	1856100	1913600	1928600	1993000	2069900	2079400	2078700	2085700	2067400	2083500	2063700	2072100
13	1859900	1918100	1928600	1996200	2067400	2081300	2079100	2084600	2067400	2083500	2066300	2074700
14	1864700	1919500	1928900	2000200	2065600	2082000	2078700	2082700	2063700	2077600	2070700	2073600
15	1865700	1920200	1928900	2003400	2065900	2082700	2078700	2080900	2059700	2076100	2072500	2073200
16	1876400	1921900	1928900	2007000	2064800	2084200	2078700	2082000	2057900	2073900	2074300	2073200
17	1878800	1924400	1929300	2011300	2065600	2086000	2078700	2077200	2055000	2072500	2075000	2072500
18	1882600	1926800	1929300	2015600	2066600	2087500	2079100	2073900	2052100	2073900	2076500	2071800
19	1886100	1927500	1929300	2019200	2066600	2088200	2077600	2072900	2049200	2075400	2077200	2071000
20	1889200	1926500	1929300	2023500	2065900	2087500	2078700	2072500	2047400	2076100	2078700	2070300
21	1892300	1927500	1929600	2028600	2064100	2086400	2078700	2072500	2047700	2076100	2079100	2069200
22	1895400	1928600	1931400	2032200	2062600	2085300	2078700	2070300	2045600	2076500	2077200	2068800
23	1897500	1928200	1934200	2035800	2063700	2084200	2079100	2068500	2044500	2080200	2075800	2067700
24	1899600	1928900	1936700	2040800	2064500	2083100	2079100	2067400	2044100	2083100	2074700	2064800
25	1901000	1930000	1939100	2045200	2065600	2080200	2079100	2068800	2050300	2084600	2072900	2062300
26	1902700	1931100	1941900	2048800	2065600	2076500	2080200	2067700	2052500	2083100	2073200	2061200
27	1904100	1930700	1944400	2052500	2062300	2072900	2080200	2062300	2056100	2081600	2073900	2059000
28	1905500	1930300	1947600	2057200	2061200	2069900	2080900	2061900	2058300	2079800	2073200	2057500
29	1906900	1930300	1950100	2061500	---	2067000	2082700	2061200	2060800	2072900	2075400	2056500
30	1907300	1930300	1952900	2062600	---	2069200	2089700	2058600	2063400	2067400	2075400	2054300
31	1909400	---	1955700	2066300	---	2071800	---	2058600	---	2064800	2076100	---
MAX	1909400	1931100	1955700	2066300	2073600	2088200	2089700	2093000	2067400	2084600	2079100	2078000
MIN	1847200	1908300	1928600	1959900	2061200	2061900	2072900	2058600	2044100	2063400	2052800	2054300
(†)	4401.40	4402.00	4402.72	4405.80	4405.66	4405.95	4406.44	4405.59	4405.72	4405.76	4406.07	4405.47
(††)	+62500	+20900	+25400	+11600	-5100	+10600	+17900	-31100	+4800	+1400	+11300	-21800

CAL YR 1985 MAX 2013800 MIN 1601300 (††) +345200
WTR YR 1986 MAX 2093000 MIN 1847200 (††) +207400

(†) ELEVATION, IN FEET, AT END OF MONTH.
(††) CHANGE IN CONTENTS, IN ACRE-FEET.

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, Hydrologic Unit 13030101, in Pedro Armendaris Grant, on left bank 1.0 mi downstream from dam, 1.5 mi upstream from Cuchillo Negro River, and at mile 1,382.2.

DRAINAGE AREA.--29,450 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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.

REVISED RECORDS.--WSP 1562: 1920. WSP 1632: Drainage area. WSP 1732: 1917, 1920. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 4,241.09 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 24, 1980 at datum 1.0 ft higher. See WSP 1732 for history of changes prior to Apr. 24, 1942.

REMARKS.--Estimated daily discharges: Oct. 16 to Jan. 6. Records good except for estimated daily discharges, which are fair. Flow regulated by Elephant Butte Reservoir (station 08360500). Diversion for irrigation of about 800,000 acres upstream from station.

AVERAGE DISCHARGE.--71 years, 978 ft³/s, 708,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,220 ft³/s, May 22, 1942; no flow at times prior to 1929, Mar. 2-4, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,220 ft³/s, Feb. 13; minimum daily, 1.4 ft³/s, Nov. 1-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1.4	2.5	2.1	1050	2980	159	852	2260	2320	2540	2020
2	2.5	1.4	2.5	2.1	1060	2980	164	1430	2250	2330	2550	2080
3	2.6	1.4	2.5	2.1	1710	2580	167	1450	2250	2340	2590	2130
4	2.7	1.4	2.5	2.1	2720	2540	714	1460	2250	2350	2600	1540
5	2.7	1.4	2.5	2.1	3020	2560	1540	2050	2250	2370	2560	1700
6	2.6	1.4	2.5	2.1	2990	2570	1540	2080	2240	2380	2560	2080
7	2.7	1.4	2.5	2.2	3070	2400	1540	2090	2250	2980	2540	2030
8	3.8	1.4	2.3	2.8	3090	2300	1530	2090	2240	3490	2560	2020
9	2.7	1.4	2.2	3.5	3080	2300	1530	2350	2240	3590	2510	1490
10	2.8	1.4	2.2	4.3	3100	2230	1530	2450	2240	3700	2500	1470
11	2.8	1.4	2.2	5.5	3250	2140	1540	2470	2270	3740	2680	1470
12	2.7	1.4	2.2	8.2	3840	2140	1540	2470	2540	3720	2450	1460
13	2.7	1.4	2.2	12	4220	2140	1540	2470	2980	3690	2160	1260
14	2.5	1.4	2.2	16	4150	2140	1540	2470	3400	3670	2280	1470
15	2.6	1.4	2.2	22	3150	2140	1530	2490	3380	3650	2290	1490
16	2.6	1.4	2.2	29	3160	2140	1530	2490	3370	3530	2310	1460
17	2.6	1.4	2.2	37	3130	2140	1530	2480	3430	3460	2330	1450
18	2.5	1.4	2.2	44	3160	2140	1540	2480	3500	2830	1860	1450
19	2.5	1.4	2.2	56	3170	2140	1530	2480	3490	2260	1620	1460
20	2.5	1.4	2.2	62	3150	2140	1530	2480	3370	2260	1620	1460
21	2.2	1.4	2.2	65	3150	2140	1540	2480	3260	2250	1860	1460
22	2.2	1.4	2.2	70	3150	2060	1550	2480	3260	2250	2340	1460
23	2.1	1.4	2.1	72	3140	2250	1570	2480	3040	2240	2380	1460
24	2.1	1.4	2.1	78	3150	2370	1570	2470	2450	2360	2380	1450
25	2.1	1.4	2.1	85	3150	2420	1590	2460	2270	2560	2310	1440
26	2.0	1.4	2.1	86	3090	2800	1600	2460	2260	2710	2250	1420
27	1.8	1.4	2.1	87	3400	2840	1600	2520	2270	2700	2300	1420
28	1.7	1.4	2.1	88	3230	2460	1600	2560	2280	2700	2030	1420
29	1.6	1.4	2.1	92	---	2120	873	2540	2290	3440	1990	1430
30	1.6	1.8	2.1	488	---	200	854	2400	2310	3640	1990	1430
31	1.5	---	2.1	980	---	155	---	2260	---	2850	1980	---
TOTAL	74.6	42.4	69.5	2508.1	84730	68655	40111	70192	79890	90360	70920	47380
MEAN	2.41	1.41	2.24	80.9	3026	2215	1337	2264	2663	2915	2288	1579
MAX	3.8	1.8	2.5	980	4220	2980	1600	2560	3500	3740	2680	2130
MIN	1.5	1.4	2.1	2.1	1050	155	159	852	2240	2240	1620	1260
AC-FT	148	84	138	4970	168100	136200	79560	139200	158500	179200	140700	93980

CAL YR 1985 TOTAL 448894.3 MEAN 1230 MAX 3130 MIN 1.4 AC-FT 890400
WTR YR 1986 TOTAL 554932.6 MEAN 1520 MAX 4220 MIN 1.4 AC-FT 1101000

08362000 CABALLO RESERVOIR NEAR ARREY, NM

LOCATION.--Lat 32°53'47", long 107°17'30", in SE¼SW¼ sec.19, T.16 S., R.4 W., Sierra County, Hydrologic Unit 13030101, in control tower of Caballo Dam on Rio Grande, 0.5 mi downstream from mouth of Apache Canyon, 0.9 mi upstream from Bojarquez Bridge, 2 mi upstream from Percha diversion dam, 3.5 mi northeast of Arrey, 5.2 mi south of Caballo, and at mile 1,356.6.

DRAINAGE AREA.--30,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--February 1938 to September 1965 (monthend contents only), October 1965 to current year.

REVISED RECORDS.--WSP 978: 1942. WSP 1632: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam, completed Sept. 19, 1938. Storage began Feb. 8, 1938. Capacity by 1981 survey, 331,500 acre-ft between gage heights 4,104 ft bottom of tunnel entrance of gates and 4,182 ft gage height above which spillway gates operate automatically. Capacity by original survey was 345,900 acre-ft. No dead storage. Storage held for flood control, 100,000 acre-ft. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande Project of U.S. Bureau of Reclamation.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 347,000 acre-ft, Mar. 4, 1942, gage height, 4,182.06 ft; minimum daily contents, 118 acre-ft, Oct. 14, 1938, gage height, 4,108.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 277,900 acre-ft, Mar. 29, gage height, 4,177.13 ft; minimum daily contents, 177,500 acre-ft, Jan. 31, gage height, 4,166.20 ft.

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

4,125	4,810	4,160	131,200
4,130	11,680	4,170	209,400
4,140	33,770	4,180	308,900
4,150	71,800		

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222600	212200	208600	207600	177700	262500	270600	237800	234000	236900	233000	233700
2	220900	211700	208600	207400	178100	264000	268800	236700	235900	235900	232400	233100
3	218900	211500	208700	207400	179400	265300	266200	235000	237200	234800	231900	233300
4	216100	211300	208700	207400	182900	265700	263400	233800	238100	233900	231900	232700
5	212600	211300	208700	207300	186500	266900	263600	232900	238200	233000	231700	231800
6	209400	211400	208700	207600	190200	268200	263900	232100	237800	231800	230900	231800
7	207500	211100	208600	207500	193300	269200	264000	232100	237700	231300	230900	232100
8	207900	210500	208400	207200	196200	269900	264000	231600	237500	234700	230400	232400
9	208000	210500	208200	207200	199500	270700	263700	231700	236900	236400	230300	231900
10	208200	210400	208600	207200	202800	271500	263300	231700	236000	237100	230300	231600
11	208400	210200	208200	207200	205900	272100	262800	231700	234000	238700	230600	230900
12	208200	210000	208000	207200	210800	272800	262500	231600	232700	240000	231700	230300
13	208200	210000	208000	207200	215600	274100	262400	231600	231900	241100	231800	230700
14	208300	210500	208000	205400	221900	274400	261800	231600	231700	241800	232200	230400
15	208500	210000	207900	202900	226000	274700	261500	231600	232000	242300	232700	230200
16	211000	209700	207900	201000	230300	275000	260000	232500	233300	242500	233200	230200
17	212400	209500	207800	199400	234300	275200	258500	231600	232100	241500	233400	230100
18	212700	209500	207700	198100	238000	275300	257200	231400	232500	241300	233500	230000
19	212900	209600	207700	196900	242000	275400	255400	231500	232700	239500	232100	230100
20	212900	209200	207600	195500	246300	275500	254400	231700	233200	238000	231300	230500
21	213000	209000	207600	194300	249300	275300	253700	231900	233400	235600	230300	230900
22	212900	209000	207600	192700	251600	275200	252200	231900	233500	234100	230300	231300
23	212900	208800	207600	190900	253600	274500	250900	232000	233900	233300	231700	231700
24	212900	208700	207500	189300	255200	274800	249600	232200	234000	232800	232500	231700
25	212700	208700	207500	186900	256400	274500	247700	232100	235000	232400	233000	231600
26	212700	208900	207500	185000	258000	274900	246500	232900	235400	232500	233200	231700
27	212600	208800	207500	182900	259700	275300	245500	231600	236400	232500	233400	232400
28	212400	208600	207500	181000	261000	276800	244100	231800	236800	232400	233000	233000
29	212300	208300	207500	179100	---	277900	242200	231600	237400	232200	233200	233500
30	211900	208700	207400	177700	---	276200	240100	231800	237800	233200	233500	234000
31	212200	---	207700	177500	---	273500	---	232800	---	233800	233600	---
MAX	222600	212200	208700	207600	261000	277900	270600	237800	238200	242500	233600	234000
MIN	207500	208300	207400	177500	177700	262500	240100	231400	231700	231300	230300	230000
(†)	4170.32	4169.93	4169.81	4166.20	4175.48	4176.70	4173.35	4172.58	4173.11	4172.69	4172.67	4172.71
(††)	-12400	-3500	-1000	-30200	+83500	+12500	-33400	-7300	+5000	-4000	-200	+400

CAL YR 1985 MAX 244300 MIN 41100 (††) +167300
WTR YR 1986 MAX 277900 MIN 177500 (††) +9400

(†) ELEVATION, IN FEET, AT END OF MONTH.
(††) CHANGE IN CONTENTS, IN ACRE-FEET.

08362500 RIO GRANDE BELOW CABALLO DAM, NM

LOCATION.--Lat 32°53'05", long 107°17'31", in NE¼SW¼ sec.30, T.16 S., R.4 W., Sierra County, Hydrologic Unit 13030102, on left bank 2,000 ft upstream from Interstate Highway 25, 4,200 ft downstream from Caballo Dam, 1.2 mi downstream from Apache Canyon, 1.3 mi upstream from Percha diversion dam, 3 mi northeast of Arrey, 5 mi south of Caballo, and at mile 1,355.6.

DRAINAGE AREA.--30,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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

GAGE.--Water-stage recorder. Datum of gage is 4,140.9 ft above National Geodetic Vertical Datum of 1929. 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.

REMARKS.--Flow regulated by Caballo Reservoir (station 08362000) capacity, 331,500 acre-ft, 1981 survey and Elephant Butte Reservoir (station 08360500) capacity, 2,110,000 acre-ft, 1980 survey. Diversions for irrigation of about 800,000 acres upstream from 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 provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--48 years, 865 ft³/s, 626,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft³/s, May 20, 1942; minimum daily, 0.1 ft³/s, Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955, Feb. 15-29, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily dis,charge, 3,640 ft³/s, July 16,17; minimum daily, 11 ft³/s Jan. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	34	20	11	970	2280	1490	1890	1510	2420	2690	1940
2	1010	33	20	11	970	2190	1430	1890	1510	2790	2760	2060
3	1060	33	20	11	977	2190	1440	2020	1600	2790	2790	2000
4	1380	32	20	11	977	2030	1390	2020	1900	2710	2800	1900
5	1730	31	19	11	977	1900	1350	2020	1900	2640	2780	1890
6	1730	30	19	12	1240	1900	1350	2020	1980	2630	2780	1880
7	942	30	19	12	1580	1850	1360	2050	2090	2630	2680	1880
8	55	29	19	12	1600	1800	1460	2060	2090	3040	2610	1760
9	36	28	19	12	1570	1810	1580	2210	2080	3360	2610	1680
10	36	27	19	12	1570	1820	1650	2300	2510	3370	2610	1680
11	36	27	18	12	1570	1580	1640	2300	3020	3210	2500	1680
12	35	26	18	12	1580	1360	1610	2310	3030	3080	2180	1570
13	35	25	18	13	1580	1380	1630	2290	3140	3070	2090	1470
14	34	24	18	1000	1300	1520	1640	2240	3230	3060	2110	1470
15	34	23	18	1200	1050	1980	1830	2240	3240	3370	2080	1470
16	34	23	18	1020	1050	2080	2000	2250	3240	3640	2090	1450
17	34	22	17	800	1060	2080	2280	2240	3320	3640	2090	1430
18	34	21	17	700	1050	2080	2240	2250	3350	3480	2090	1440
19	34	20	17	700	1060	2080	1960	2260	3360	3200	2060	1290
20	34	20	17	700	1070	2090	1980	2280	3250	3210	2060	1140
21	34	20	17	797	1500	2300	2000	2270	3170	3210	2060	1140
22	34	20	16	898	2060	2380	2030	2260	3160	2940	2110	1140
23	34	20	16	925	2070	2390	2100	2270	2910	2730	1910	1190
24	34	20	16	1040	2070	2390	2090	2270	2500	2720	1900	1250
25	34	20	16	1140	2340	2530	2100	2270	2150	2720	2020	1250
26	34	20	16	1140	2600	2630	2080	2280	1950	2730	2170	1160
27	34	20	16	1140	2610	2310	2060	2370	1940	2720	2160	1070
28	34	20	16	1090	2460	1790	2080	2440	1950	2710	2160	1060
29	34	20	16	1060	---	1530	1990	2440	1940	3120	2140	1050
30	34	20	16	1060	---	1530	1890	2210	1940	3280	1940	1040
31	34	---	15	1010	---	1530	---	1860	---	2880	1940	---
TOTAL	9767	738	546	17572	42511	61310	53730	68080	74960	93100	70970	44430
MEAN	315	24.6	17.6	567	1518	1978	1791	2196	2499	3003	2289	1481
MAX	1730	34	20	1200	2610	2630	2280	2440	3360	3640	2800	2060
MIN	34	20	15	11	970	1360	1350	1860	1510	2420	1900	1040
AC-FT	19370	1460	1080	34850	84320	121600	106600	135000	148700	184700	140800	88130
(†)	0	0	0	0	0	103	70	74	21	78	50	17

CAL YR 1985 TOTAL 341647.0 MEAN 936 MAX 2290 MIN 1.0 AC-FT 677700
WTR YR 1986 TOTAL 537714 MEAN 1473 MAX 3640 MIN 11 AC-FT 1067000

(†) DIVERSION, IN ACRE-FEET, BY BONITA DITCH. BONITA DITCH DIVERTS DIRECTLY FROM CABALLO DAM AND THIS DIVERSION IS NOT INCLUDED IN THE RIVER RECORDS.

08364000 RIO GRANDE AT EL PASO, TX
(National stream-quality accounting network)

WATER-QUALITY RECORDS

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, Hydrologic Unit 13030102, on downstream side of first pier from left abutment of Courchesne Bridge at El Paso, 1.7 mi upstream from American Dam, 5.6 mi upstream from Santa Fe Street-Juarez Avenue Bridge between El Paso and Cd. Juarez, Chihuahua, and at mile 1,249.

DRAINAGE AREA.--32,207 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--Water years 1930 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to 1981.
WATER TEMPERATURES: January 1978 to 1981.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
OCT											
17...	1425	578	1350	1380	7.80	8.00	--	13.5	--	--	300
NOV											
09...	1000	202	1920	2080	8.40	8.40	16.0	12.0	21	11.4	470
20...	1325	166	2080	2170	7.80	8.10	--	5.5	--	--	490
DEC											
17...	1340	167	2040	2160	7.90	7.90	--	4.0	--	--	440
JAN											
10...	0930	60	1900	2090	8.20	8.00	1.0	3.5	18	--	410
13...	1235	83	2070	2160	8.10	8.10	--	5.0	--	--	450
FEB											
21...	0910	500	1050	1050	7.80	8.10	--	6.5	--	--	250
MAR											
14...	0900	720	1000	1100	8.20	8.20	12.0	11.0	42	9.1	250
18...	0930	1300	772	792	7.80	8.00	--	3.5	--	--	200
APR											
14...	0935	700	1040	1010	7.80	8.00	--	16.5	--	--	240
MAY											
02...	1400	970	900	885	8.30	8.10	30.0	21.0	45	8.0	220
19...	0900	1100	831	837	--	7.90	--	--	--	--	220
JUN											
17...	0845	1850	733	710	7.60	7.80	--	18.5	--	--	200
JUL											
10...	0930	2560	630	638	8.20	7.70	26.0	23.0	13000	6.4	180
15...	0910	2250	779	687	7.70	8.10	--	23.0	--	--	190
AUG											
19...	1030	1380	--	--	7.80	--	--	18.0	--	--	--
SEP											
10...	1000	1000	890	864	8.20	8.20	26.5	22.0	50	6.9	230

08364000 RIO GRANDE AT EL PASO, TX -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)
OCT										
17...	120	89	19	170	4	8.2	--	--	176	--
NOV										
09...	240	140	28	270	6	11	260	14	230	230
20...	230	140	33	300	6	10	--	--	259	--
DEC										
17...	190	130	29	290	6	10	--	--	252	--
JAN										
10...	170	120	28	280	6	9.9	300	0	237	246
13...	190	130	30	300	6	10	--	--	263	--
FEB										
21...	74	74	16	120	3	6.3	--	--	177	--
MAR										
14...	77	74	15	120	3	6.2	207	0	162	170
18...	49	59	12	82	3	5.4	--	--	148	--
APR										
14...	68	73	15	110	3	6.8	--	--	176	--
MAY										
02...	58	65	13	96	3	6.5	193	0	150	158
19...	64	67	14	90	3	6.1	--	--	161	--
JUN										
17...	45	59	12	74	2	5.8	--	--	152	--
JUL										
10...	46	54	9.9	63	2	5.7	159	0	125	130
15...	53	57	12	73	2	5.4	--	--	139	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	72	67	14	100	3	6.6	188	0	147	154

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
OCT										
17...	--	280	160	--	17	--	850	--	--	--
NOV										
09...	250	450	250	0.80	24	1340	1300	0.520	0.050	0.570
20...	--	460	280	--	23	--	1400	--	--	--
DEC										
17...	--	490	260	--	22	--	1400	--	--	--
JAN										
10...	288	440	220	0.70	23	1360	1300	0.500	0.050	0.550
13...	--	510	250	--	22	--	1400	--	--	--
FEB										
21...	--	210	100	--	10	--	640	--	--	--
MAR										
14...	184	230	100	0.60	13	694	660	0.300	0.010	0.310
18...	--	150	63	--	9.9	--	470	--	--	--
APR										
14...	--	200	85	--	13	--	610	--	--	--
MAY										
02...	122	210	85	0.50	12	595	580	--	<0.010	0.130
19...	--	170	65	--	13	--	520	--	--	--
JUN										
17...	--	140	56	--	13	--	450	--	--	--
JUL										
10...	133	130	48	0.40	14	410	410	0.330	0.010	0.340
15...	--	130	47	--	15	--	420	--	--	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	159	170	71	0.60	17	640	540	0.260	0.020	0.280

08364000 RIO GRANDE AT EL PASO, TX -- CONTINUED

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
OCT										
17...	--	--	--	--	--	--	--	--	--	--
NOV										
09...	0.110	0.150	0.39	0.220	0.130	10	3	120	<0.5	<1
20...	--	--	--	--	--	--	--	--	--	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
JAN										
10...	0.200	0.260	0.50	0.240	0.160	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
FEB										
21...	--	--	--	--	--	--	--	--	--	--
MAR										
14...	0.070	0.090	0.53	0.230	0.040	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
APR										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	0.020	0.080	0.58	0.170	0.030	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
17...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	0.110	0.100	3.2	0.490	0.050	20	4	67	<0.5	<1
15...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	0.080	0.040	0.52	0.150	0.060	10	4	76	0.5	<1

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
OCT										
17...	--	--	--	--	--	--	--	--	--	--
NOV										
09...	<1	<3	2	7	1	180	21	<0.1	10	<1
20...	--	--	--	--	--	--	--	--	--	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
JAN										
10...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
FEB										
21...	--	--	--	--	--	--	--	--	--	--
MAR										
14...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
APR										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
17...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	<1	<3	5	18	<5	53	3	<0.1	<10	3
15...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	<1	<3	2	<3	<5	85	2	<0.1	<10	2

08364000 RIO GRANDE AT EL PASO, TX --Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT										
17...	--	--	--	--	--	--	--	--	--	--
NOV										
09...	<1	<1	1700	<6	24	92	50	57	560	880
20...	--	--	--	--	--	--	--	--	--	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
JAN										
10...	--	--	--	--	--	42	6.8	77	480	780
13...	--	--	--	--	--	--	--	--	--	--
FEB										
21...	--	--	--	--	--	--	--	--	--	--
MAR										
14...	--	--	--	--	--	107	208	92	540	820
18...	--	--	--	--	--	--	--	--	--	--
APR										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	97	254	94	450	1600
19...	--	--	--	--	--	--	--	--	--	--
JUN										
17...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	<1	<1	560	<6	26	6000	41500	40	4000	7000
15...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	<1	<1	810	<6	5	700	1890	18	3300	1400

08370500 RIO GRANDE BELOW OLD FORT QUITMAN, TX
(National stream-quality accounting network)

WATER-QUALITY RECORDS

LOCATION.--Lat 31°05'05", long 105°36'25", Hudspeth County, Hydrologic Unit 13040201, at gaging station on the rectified channel of the Rio Grande, 1.5 mi downstream from Old Fort Quitman, and 81.7 mi downstream from the American Dam at El Paso.

DRAINAGE AREA.--31,990 mi², approximately, United States and Mexico; from International Boundary and Water Commission Bulletin No. 46 (excluding 2,940 mi² in closed basin in San Luis Valley, CO).

PERIOD OF RECORD.--Water years 1930 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to 1981.
WATER TEMPERATURES: October 1974 to 1981.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
NOV											
10...	1000	280	3300	3460	8.40	7.80	19.5	13.5	75	12.4	600
JAN											
11...	1000	180	3200	3460	7.80	7.20	6.5	4.5	16	--	570
MAR											
15...	1000	240	3800	4100	8.20	7.90	13.0	10.0	35	9.0	600
MAY											
03...	1000	450	2350	2510	8.10	8.00	22.5	20.0	130	6.6	460
JUL											
11...	1100	2500	1130	1090	7.90	7.80	29.5	25.5	950	6.0	260
SEP											
11...	1130	620	2200	2260	8.00	7.90	29.0	23.0	120	6.8	430

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
NOV										
10...	350	170	42	490	9	13	280	10	240	250
JAN										
11...	320	160	41	520	10	11	298	0	234	244
MAR										
15...	370	160	49	560	10	9.6	286	0	228	234
MAY										
03...	240	130	34	340	7	9.1	276	0	210	226
JUL										
11...	110	76	16	140	4	6.8	181	0	147	148
SEP										
11...	230	120	30	330	7	8.6	237	0	193	194

08370500 RIO GRANDE BELOW OLD FORT QUITMAN, TX -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
NOV										
10...	252	630	640	0.90	25	2210	2200	1.61	0.190	1.80
JAN										
11...	243	610	660	0.80	27	2170	2200	--	--	--
MAR										
15...	25	690	820	0.80	23	2530	2500	0.580	0.060	0.640
MAY										
03...	213	420	460	0.60	19	1540	1600	0.830	0.120	0.950
JUL										
11...	149	210	160	0.50	16	711	720	0.400	0.090	0.490
SEP										
11...	199	400	380	0.70	22	1560	1400	0.940	0.160	1.10

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
NOV										
10...	0.850	0.820	1.8	1.20	0.650	10	9	100	<10	<1
JAN										
11...	3.70	--	1.2	1.70	--	--	--	--	--	--
MAR										
15...	0.390	0.440	0.91	0.400	0.210	--	--	--	--	--
MAY										
03...	0.240	0.260	1.5	0.620	0.350	--	--	--	--	--
JUL										
11...	0.270	0.220	1.6	0.360	0.170	20	7	82	<0.5	<1
SEP										
11...	0.280	0.210	1.2	0.910	0.290	10	7	100	<10	<1

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
NOV										
10...	<1	<1	2	30	<1	230	40	0.3	10	3
JAN										
11...	--	--	--	--	--	--	--	--	--	--
MAR										
15...	--	--	--	--	--	--	--	--	--	--
MAY										
03...	--	--	--	--	--	--	--	--	--	--
JUL										
11...	<1	<3	4	9	<5	74	3	<0.1	<10	3
SEP										
11...	<1	<1	3	10	<5	150	10	<0.1	9	4

DATE	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV										
10...	<1	<1	2800	13	30	258	195	65	490	1100
JAN										
11...	--	--	--	--	--	88	43	46	17	86
MAR										
15...	--	--	--	--	--	137	89	46	26	120
MAY										
03...	--	--	--	--	--	2120	2580	14	140	260
JUL										
11...	<1	1	960	8	12	1690	11400	82	3000	4300
SEP										
11...	<1	<1	1800	4	70	694	1160	42	1100	520

08377900 RIO MORA NEAR TERRERO, NM
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E NE¼ sec.22, T.18 N., R.12 E., San Miguel County, Hydrologic Unit 13060001, 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 mi north of Terrero.

DRAINAGE AREA.--53.2 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 20-25, Dec. 6, 9-19, 23-30, Jan. 1-10, 12-31, and Feb. 7-10. Water-discharge records good except for estimated daily discharges, 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.

AVERAGE DISCHARGE.--23 years, 31.3 ft³/s, 22,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s, June 8, 1979, gage height, 4.15 ft; minimum determined, 0.90 ft³/s, Jan. 12-14, 1964, but may have been less during periods of ice effect.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since 1886 probably occurred Sept. 29, 1904 (based on statement for Pecos River near Pecos and history of that flood period).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	2145	210	2.55	June 29	1930	164	2.37
June 5	1915	*230	*2.62	July 19	1930	110	2.09

Minimum discharge, 4.1 ft³/s, Mar. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	24	13	10	8.5	14	28	65	114	116	41	22
2	19	22	14	10	8.8	13	27	85	137	103	40	22
3	18	22	13	10	9.0	12	25	123	159	98	37	21
4	17	22	11	9.6	9.0	12	24	157	157	97	34	20
5	17	21	12	9.1	10	13	27	163	170	88	32	20
6	16	21	12	8.9	8.7	13	31	136	145	85	30	21
7	18	19	13	8.9	8.6	13	35	124	133	78	29	20
8	17	20	14	9.2	8.4	13	40	112	134	83	28	24
9	17	19	13	9.4	8.0	14	39	97	177	80	26	22
10	25	18	13	9.4	8.4	12	39	86	141	72	26	24
11	43	19	13	9.6	11	12	38	83	125	66	29	22
12	35	18	13	9.5	11	11	35	85	113	62	25	20
13	30	17	13	9.6	11	9.1	35	86	102	58	23	20
14	28	17	12	9.9	11	9.6	32	86	90	56	22	30
15	25	16	12	10	10	9.6	31	87	81	53	21	23
16	26	15	12	10	10	9.1	32	87	75	58	20	23
17	34	18	12	10	9.2	8.2	30	88	75	54	19	22
18	34	16	12	11	8.7	9.6	27	82	67	48	18	21
19	32	20	12	11	9.7	8.9	26	81	63	64	17	20
20	30	21	11	11	10	9.1	25	83	59	87	17	19
21	30	20	11	11	9.6	10	28	90	54	81	19	18
22	29	19	11	11	8.0	11	33	89	48	84	17	18
23	27	18	11	11	8.4	13	38	83	48	88	18	18
24	26	17	11	10	9.1	16	42	81	54	78	21	22
25	24	16	11	9.6	12	18	46	80	65	70	23	20
26	24	16	11	9.7	13	19	47	82	83	65	35	18
27	24	14	11	9.4	15	21	44	84	121	59	36	18
28	25	13	11	9.4	14	21	43	80	106	53	29	17
29	25	13	11	9.3	---	21	49	91	114	47	27	16
30	24	13	11	9.1	---	21	55	93	136	44	25	16
31	24	---	11	8.9	---	23	---	97	---	44	23	---
TOTAL	782	544	371	304.5	278.1	419.2	1051	2946	3146	2219	807	617
MEAN	25.2	18.1	12.0	9.82	9.93	13.5	35.0	95.0	105	71.6	26.0	20.6
MAX	43	24	14	11	15	23	55	163	177	116	41	30
MIN	16	13	11	8.9	8.0	8.2	24	65	48	44	17	16
AC-FT	1550	1080	736	604	552	831	2080	5840	6240	4400	1600	1220

CAL YR 1985	TOTAL	20763.1	MEAN	56.9	MAX	358	MIN	7.4	AC-FT	41180
WTR YR 1986	TOTAL	13484.8	MEAN	36.9	MAX	177	MIN	8.0	AC-FT	26750

08377900 RIO MORA NEAR TERRERO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
26...	1230	16	110	101	8.50	8.30	6.0	0.5	1.1	12.4	47	10
MAR												
25...	1345	18	97	119	7.90	7.80	12.0	4.5	3.8	--	56	0
MAY												
28...	1030	77	60	--	7.60	--	14.0	6.0	--	9.2	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV											
26...	16	1.7	1.2	0.1	0.80	35	5.0	41	37	38	8.0
MAR											
25...	19	2.0	1.6	0.1	0.70	68	0	55	56	49	10
MAY											
28...	--	--	--	--	--	--	--	43	--	--	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV											
26...	0.90	0.20	5.9	57	62	--	<0.010	<0.100	<0.010	0.020	--
MAR											
25...	0.80	0.20	6.4	68	75	0.090	0.020	0.110	0.030	0.040	0.27
MAY											
28...	--	--	--	--	--	--	<0.010	<0.100	0.040	0.070	0.26

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV											
26...	<0.010	<0.010	<10	<1	26	<0.5	<1	1	<3	1	15
MAR											
25...	0.010	0.020	70	<1	30	<0.5	<1	<1	<3	2	48
MAY											
28...	0.010	<0.010	--	--	--	--	--	--	--	--	--

08377900 RIO MORA NEAR TERRERO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 26...	1	<4	<1	<0.1	<10	<1	<1	<1	34	<6	35
MAR 25...	<1	<4	5	0.6	<10	<1	<1	<1	45	<6	19
MAY 28...	--	--	--	--	--	--	--	--	--	--	--

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 26...	0.5	<0.6	1.1	<0.6	0.9	<0.6	0.02	<0.13	1	0.04	90
MAR 25...	--	--	--	--	--	--	--	--	22	1.1	97
MAY 28...	--	--	--	--	--	--	--	--	1	0.21	75

08378500 PECOS RIVER NEAR PECOS, NM

LOCATION.--Lat 35°42'30", long 105°40'55", in NE¼NE¼ sec.17, T.17 N., R.12 E., San Miguel County, Hydrologic Unit 13060001, in Santa Fe National Forest, on left bank 30 ft downstream from bridge on private road, 270 ft upstream from Indian Creek, 2.4 mi downstream from Holy Ghost Creek, 9.0 mi north of Pecos, and at mile 896.6.

DRAINAGE AREA.--189 mi².

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.

REVISED RECORDS.--WSP 898: Drainage area. WSP 1312: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 7,502.94 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 27, 1977, at site 30 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 9-30, Jan. 2-30, and Feb. 5-15. Records good except those for winter period, which are poor. Diversions for irrigation of about 75 acres, 1959 determinations, upstream from station. Several observations of water temperature were made during the year. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--67 years, 99.6 ft³/s, 72,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,500 ft³/s, Sept. 21 or 22, 1929, gage height, 6.2 ft, from floodmark, from rating curve extended above 1,600 ft³/s; minimum, 2.0 ft³/s, Mar. 19, 1971, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 310 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	2245	521	3.11	June 27	0215	427	2.94
June 9	0430	*705	*3.38	July 23	0245	448	2.98

Minimum discharge, 10 ft³/s, Mar. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	74	44	39	26	39	94	199	373	290	154	63
2	50	68	46	38	26	38	92	255	399	266	142	62
3	49	68	43	35	26	37	85	346	440	235	133	58
4	46	67	40	35	27	36	79	432	441	228	117	58
5	45	67	37	34	26	38	84	439	493	219	110	61
6	45	64	46	33	26	38	91	387	475	228	105	57
7	58	58	41	32	26	39	102	357	464	235	103	58
8	56	62	40	32	26	40	122	327	479	216	99	69
9	53	59	40	31	26	44	120	278	590	206	94	69
10	97	56	41	31	26	37	124	251	488	186	94	92
11	178	61	41	31	26	38	119	243	447	170	110	88
12	124	59	42	30	26	35	111	247	399	158	92	71
13	102	55	42	30	27	32	115	253	364	153	86	67
14	92	56	42	30	27	33	103	259	336	151	80	132
15	83	34	42	29	27	33	100	262	311	142	76	86
16	83	48	42	29	28	29	100	265	286	170	72	87
17	113	52	42	29	29	30	97	281	285	163	69	82
18	111	49	43	29	30	31	89	262	258	151	69	73
19	102	37	43	29	35	28	85	260	242	200	64	69
20	95	67	43	29	37	33	81	260	232	267	61	66
21	92	63	43	29	32	34	87	282	211	263	67	63
22	89	56	43	29	30	37	102	289	192	260	62	61
23	83	53	43	28	30	43	116	269	182	332	65	61
24	79	52	43	26	30	51	127	273	199	270	71	79
25	76	50	43	24	37	55	139	278	246	242	76	70
26	74	51	43	23	41	57	143	287	298	219	102	64
27	76	47	43	24	43	63	140	297	350	195	97	60
28	81	43	43	25	40	69	133	287	304	178	79	58
29	78	46	43	26	---	74	147	322	299	163	72	56
30	76	44	43	26	---	73	164	321	313	156	68	55
31	74	---	44	27	---	77	---	325	---	163	65	---
TOTAL	2510	1666	1314	922	836	1341	3291	9093	10396	6475	2754	2095
MEAN	81.0	55.5	42.4	29.7	29.9	43.3	110	293	347	209	88.8	69.8
MAX	178	74	46	39	43	77	164	439	590	332	154	132
MIN	45	34	37	23	26	28	79	199	182	142	61	55
AC-FT	4980	3300	2610	1830	1660	2660	6530	18040	20620	12840	5460	4160

CAL YR 1985	TOTAL	62569	MEAN	171	MAX	1020	MIN	27	AC-FT	124100
WTR YR 1986	TOTAL	42693	MEAN	117	MAX	590	MIN	23	AC-FT	84680

08379500 PECOS RIVER NEAR ANTON CHICO, NM

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 2.1 mi upstream from Canon Blanco, 2.3 mi southeast of Anton Chico, 9.7 mi downstream from Tecolote Creek, and at mile 808.0.

DRAINAGE AREA.--1,050 mi², 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.

REVISED RECORDS.--WSP 1342: 1951(M), 1952-53. WSP 1512: 1912-14, 1931, 1933(M), 1935-36(M), 1938(P), 1939-40, 41-42(P), 1945(M), 1946(P). WSP 1712: 1942(P).

GAGE.--Water-stage recorder. Elevation of gage is 5,130 ft above National Geodetic Vertical Datum of 1929, from river-profile map. See WSP 1732 for history of changes prior to June 21, 1951.

REMARKS.--Estimated daily discharges: Oct. 1-21. Records good except estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 4,900 acres, 1959 determinations, upstream and downstream from station. Acequia del Bodo Juan Paiz (see table below) diverts water about 8 mi upstream from gage and bypasses this station on left bank; ditch flow not included in record measurements made at point opposite regular gage. A portion of this flow may be returned to the river about 5.0 mi downstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--73 years (1910-15, 1915-24, 1926-86), 130 ft³/s, 94,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,300 ft³/s, 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since 1879 occurred Sept. 29, 1904, discharge about 73,000 ft³/s, from information by a local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0830	*7,850	*10.37	July 13	1815	3,170	7.63
June 26	2200	5,000	8.78				

Minimum discharge, 0.10 ft³/s, Feb. 7, result of freezeup.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 4	15	Mar. 6	29	May 21	0	Sept. 11	48
Dec. 17	12						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	105	29	52	14	6.9	97	134	317	643	157	93
2	52	81	29	51	16	5.4	119	188	371	827	157	102
3	40	77	31	48	2.5	6.0	136	205	417	393	226	93
4	35	73	47	44	1.2	4.7	140	287	496	308	203	91
5	33	71	46	41	3.3	7.2	128	329	458	280	135	88
6	33	67	43	39	1.6	6.2	129	332	510	255	174	87
7	50	64	41	37	1.5	7.9	136	292	471	381	70	139
8	68	60	26	39	11	6.6	145	269	462	569	78	227
9	64	59	19	35	25	7.0	176	257	2460	399	183	164
10	83	56	16	26	22	7.6	185	222	771	252	102	88
11	200	55	18	26	21	15	182	184	648	224	97	70
12	220	54	35	37	32	12	177	167	552	217	91	69
13	180	52	43	39	39	8.6	160	157	468	424	115	175
14	140	49	28	40	41	7.0	148	163	407	195	70	303
15	100	49	25	39	40	5.3	140	159	356	181	60	117
16	86	46	33	35	38	4.4	113	217	316	175	53	110
17	190	46	48	25	38	26	90	250	371	174	51	95
18	260	42	63	19	31	48	84	271	281	173	48	91
19	230	41	53	18	10	58	72	256	260	162	47	75
20	205	37	55	16	10	56	76	255	232	196	46	58
21	175	31	63	15	10	50	54	253	213	337	48	53
22	155	28	65	15	12	49	48	245	190	290	54	49
23	137	34	67	16	8.8	49	48	255	170	390	172	59
24	122	36	65	17	6.0	54	63	213	163	334	95	49
25	111	35	62	16	6.3	63	69	218	222	278	63	47
26	103	34	59	16	5.7	71	94	268	1850	243	81	66
27	94	34	57	14	5.0	78	101	231	1090	210	232	54
28	90	34	55	15	6.9	83	104	243	554	188	152	38
29	92	33	54	16	---	84	84	244	482	172	101	35
30	87	31	53	16	---	86	82	266	442	162	64	33
31	85	---	51	17	---	96	---	275	---	158	58	---
TOTAL	3582	1514	1379	879	458.8	1068.8	3380	7305	16000	9190	3283	2818
MEAN	116	50.5	44.5	28.4	16.4	34.5	113	236	533	296	106	93.9
MAX	260	105	67	52	41	96	185	332	2460	827	232	303
MIN	33	28	16	14	1.2	4.4	48	134	163	158	46	33
AC-FT	7100	3000	2740	1740	910	2120	6700	14490	31740	18230	6510	5590

CAL YR 1985 TOTAL 81851 MEAN 224 MAX 1150 MIN 11 AC-FT 162400
WTR YR 1986 TOTAL 50857.6 MEAN 139 MAX 2460 MIN 1.2 AC-FT 100900

08380500 GALLINAS CREEK NEAR MONTEZUMA, NM

LOCATION.--Lat 35°39'07", long 105°19'06", San Miguel County, Hydrologic Unit 13060001, in Las Vegas Grant, on left bank 2.4 mi west of Montezuma, 6.9 mi northwest of Las Vegas, and at mile 74.4.

DRAINAGE AREA.--84 mi², 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.

REVISED RECORDS.--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).

GAGE.--Water-stage recorder. Elevation of gage is 6,875 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 21, 1934, at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-21, Nov. 21-23, Dec. 11 to Jan. 19, and Feb. 7-15. Records good except those for winter period, which are poor. Diversions for irrigation of about 80 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--70 years, 19.2 ft³/s, 13,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,120 ft³/s, Aug. 2, 1966, gage height, 9.7 ft, from floodmarks, from rating curve extended above 500 ft³/s on basis of slope-area measurements at gage heights 5.25 ft, 8.25 ft, and 9.7 ft; minimum, 0.20 ft³/s, Oct. 6-9, 1922, Sept. 21, Oct. 9-14, 1956, Dec. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 27	0030	*153	*2.29				

Minimum daily discharge, 3.5 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	13	6.1	5.1	4.5	9.1	11	22	52	55	11	11
2	8.7	12	6.4	5.1	4.6	8.8	14	23	82	46	11	11
3	8.2	11	7.8	5.0	4.7	8.7	14	26	85	38	10	10
4	7.4	11	7.1	4.8	4.1	8.4	13	30	78	35	10	11
5	6.5	11	6.1	4.6	4.5	7.8	14	29	72	32	10	11
6	6.0	9.9	8.1	4.4	5.1	7.8	14	25	63	30	9.9	11
7	5.3	8.3	7.1	4.3	4.1	7.8	14	23	51	27	9.3	11
8	4.8	9.1	6.4	5.0	3.6	7.5	17	22	45	33	9.1	16
9	4.3	9.4	6.4	4.8	4.0	7.8	17	21	70	31	9.5	14
10	4.9	8.1	6.4	4.5	3.8	7.7	16	18	54	28	9.8	13
11	11	9.4	6.4	4.5	3.5	7.8	16	16	49	24	13	11
12	38	9.3	6.4	4.7	4.0	7.3	15	15	41	21	15	10
13	33	9.3	6.2	5.0	4.6	6.9	15	14	35	19	11	10
14	26	8.7	5.9	5.0	5.5	6.3	14	14	30	20	10	11
15	16	8.6	5.8	4.6	6.7	7.0	13	13	25	18	9.8	11
16	20	8.6	5.5	4.6	8.8	6.1	13	13	22	17	9.3	9.7
17	90	8.3	5.4	4.6	8.1	6.6	13	16	22	19	8.0	9.5
18	97	8.4	5.4	4.5	8.7	6.0	12	15	20	16	7.9	8.7
19	66	8.1	5.5	4.5	11	5.8	12	18	18	15	7.5	7.9
20	46	7.1	5.4	4.6	12	6.4	13	15	21	19	7.3	7.4
21	35	6.8	5.4	4.8	11	6.7	17	14	19	19	7.1	7.1
22	22	6.8	5.4	4.7	8.9	7.6	20	14	16	21	8.0	7.1
23	20	7.5	5.3	4.8	9.3	8.2	21	14	15	27	12	7.1
24	18	8.4	5.2	4.9	8.4	8.7	21	13	17	22	13	7.1
25	16	8.1	5.1	4.6	9.2	9.0	24	14	32	18	12	7.9
26	15	7.8	5.0	4.8	9.2	9.1	25	14	89	16	13	7.9
27	20	7.8	5.0	5.7	9.4	9.0	24	14	135	14	27	6.3
28	20	7.1	4.9	5.5	9.4	9.3	23	18	91	13	17	6.4
29	16	7.4	4.9	4.9	---	9.8	22	21	69	11	14	6.6
30	14	7.4	5.0	4.1	---	9.6	21	26	57	11	13	6.4
31	13	---	5.1	4.3	---	10	---	27	---	11	12	---
TOTAL	717.6	263.7	182.1	147.3	190.7	244.6	498	577	1475	726	346.5	285.1
MEAN	23.1	8.79	5.87	4.75	6.81	7.89	16.6	18.6	49.2	23.4	11.2	9.50
MAX	97	13	8.1	5.7	12	10	25	30	135	55	27	16
MIN	4.3	6.8	4.9	4.1	3.5	5.8	11	13	15	11	7.1	6.3
AC-FT	1420	523	361	292	378	485	988	1140	2930	1440	687	565

CAL YR 1985	TOTAL	13464.1	MEAN	36.9	MAX	210	MIN	4.3	AC-FT	26710
WTR YR 1986	TOTAL	5653.6	MEAN	15.5	MAX	135	MIN	3.5	AC-FT	11210

08382500 GALLINAS RIVER NEAR COLONIAS, NM

LOCATION.--Lat 35°10'55", long 104°53'59", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 2.1 mi upstream from Canon Blanco, 2.3 mi southeast of Anton Chico, and Preston Beck Grants, on right bank 2.3 mi south of San Miguel-Guadalupe County line, 2.4 mi upstream from mouth, 5.8 mi northwest of Colonias, and 9.0 mi east of Dilia. Mouth at Pecos River mile 789.2.

DRAINAGE AREA.--610 mi², approximately.

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,944 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 18 to Nov. 12. Records good. Diversions for irrigation of about 7,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years, 15.6 ft³/s, 11,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft³/s, July 11, 1982, gage height, 19.67 ft, from rating curve extended above 1,900 ft³/s on basis of slope-area measurements at gage heights 8.64 ft, 12.74 ft, 16.65 ft, and 27.2 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about June 1, 1937, reached a stage of about 27.2 ft; discharge determined as 26,700 ft³/s by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29-30, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1200	2,270	8.63	July 13	2300	*3,130	*9.89
June 27	0330	2,480	8.95				

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	10	6.0	4.6	5.7	1.5	.00	147	40	.92	63
2	12	11	9.9	6.1	4.9	5.7	2.0	107	81	24	.54	102
3	10	11	10	5.8	4.0	5.7	2.2	79	76	36	.41	58
4	8.2	10	10	5.0	3.8	5.5	2.3	34	37	21	2.0	28
5	7.1	9.4	11	4.9	4.2	5.1	2.6	18	25	15	.62	37
6	6.4	8.1	11	4.6	5.0	4.7	3.0	12	21	13	.77	16
7	5.8	8.0	11	5.4	7.3	4.2	2.9	7.9	48	12	6.7	12
8	5.3	8.0	11	6.0	8.6	4.2	2.4	5.6	29	10	11	16
9	5.3	8.0	12	5.3	9.5	3.8	2.3	5.3	763	24	6.8	40
10	5.8	8.0	13	5.1	7.5	3.5	2.3	3.8	205	49	4.7	33
11	54	8.4	13	5.2	5.7	3.6	2.5	3.0	66	21	2.9	16
12	53	8.4	12	6.1	5.8	3.7	2.6	2.3	41	15	9.9	11
13	39	8.2	9.9	6.2	7.0	3.7	2.3	1.9	29	157	8.3	14
14	24	8.0	8.8	6.7	9.9	3.7	1.5	1.5	22	218	5.7	154
15	17	7.9	6.5	5.9	14	3.7	.87	1.2	18	23	45	25
16	15	7.9	6.1	6.3	18	3.7	.84	1.5	15	12	19	22
17	187	8.2	6.7	6.5	18	3.7	.78	2.0	17	9.9	8.2	13
18	60	8.6	6.8	6.2	15	3.6	.61	3.0	14	12	5.1	8.6
19	35	8.5	6.9	5.8	11	4.2	.68	2.9	12	17	3.0	6.8
20	27	8.3	7.4	5.8	8.8	3.7	.87	4.8	11	6.1	2.0	5.9
21	22	8.6	7.2	5.2	7.8	3.5	1.3	3.6	9.6	6.0	18	4.6
22	19	9.3	7.1	4.2	7.2	3.5	1.8	2.0	8.9	19	10	2.9
23	17	9.2	6.9	3.9	6.9	3.5	1.8	1.5	8.4	8.6	27	2.7
24	15	9.3	6.7	5.1	6.3	3.2	.60	1.4	8.2	13	32	2.7
25	15	9.3	6.5	4.4	5.9	2.9	.11	1.4	12	7.8	17	4.1
26	14	9.8	6.1	3.6	5.6	2.4	.01	15	133	6.1	22	6.6
27	22	9.8	5.6	3.6	5.2	2.2	.00	36	700	4.5	15	6.5
28	18	10	5.5	4.2	5.6	1.9	.00	19	112	2.9	13	5.3
29	15	10	5.5	4.4	---	1.9	.00	11	45	2.0	7.1	4.7
30	12	10	5.6	4.3	---	1.9	.00	34	27	1.4	4.1	3.4
31	12	---	6.3	4.4	---	1.8	---	23	---	1.1	3.1	---
TOTAL	771.9	271.2	262.0	162.2	223.1	114.1	42.67	444.60	2741.1	807.4	311.86	724.8
MEAN	24.9	9.04	8.45	5.23	7.97	3.68	1.42	14.3	91.4	26.0	10.1	24.2
MAX	187	12	13	6.7	18	5.7	3.0	107	763	218	45	154
MIN	5.3	7.9	5.5	3.6	3.8	1.8	.00	.00	8.2	1.1	.41	2.7
AC-FT	1530	538	520	322	443	226	85	882	5440	1600	619	1440

CAL YR 1985	TOTAL	4677.30	MEAN	12.8	MAX	199	MIN	.00	AC-FT 9280
WTR YR 1986	TOTAL	6876.93	MEAN	18.8	MAX	763	MIN	.00	AC-FT 13640

08382600 PECOS RIVER ABOVE CANON DEL UTA NEAR COLONIAS, NM

LOCATION.--Lat 35°05'29", long 104°48'00", in T.10 N., R.20 E., Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 0.4 mi upstream from Canon del Uta, 2.9 mi southeast of Colonias, and at mile 775.8.

DRAINAGE AREA.--2,330 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above National Geodetic Vertical Datum of 1929, (U.S. Army Corps of Engineers plans).

REMARKS.--Estimated daily discharges: Oct. 14-17, Apr. 13-20, May 6, 12-17, 20, 24-26, 31, June 2, 5-8, Aug. 26, 27, and Sept. 10-13. Records fair except for estimated daily discharges, which are poor. Diversions and groundwater withdrawals for irrigation for about 11,800 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--10 years, 80.3 ft³/s, 58,180 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s, June 20, 1982, gage height, 10.36 ft, from rating curve extended above 1,200 ft³/s on basis of discharges transferred from station 5 mi downstream using the relation between peak gage heights at the two stations; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1330	*5,250	*8.93	June 27	0045	4,280	8.59

Minimum discharge, 1.4 ft³/s, part of each day, Mar. 25, 26, Mar. 31 to Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	59	22	4.0	3.7	2.9	1.5	2.7	283	306	9.8	7.2
2	43	73	22	4.0	3.7	2.9	2.6	85	341	1070	9.3	140
3	27	61	22	4.0	3.6	2.9	11	187	401	372	9.0	111
4	22	55	21	4.0	3.7	2.8	15	192	467	195	119	181
5	22	49	18	4.0	3.9	2.8	32	203	386	164	39	49
6	22	45	15	4.0	4.0	2.8	8.0	256	429	183	95	109
7	22	41	13	4.0	4.0	2.7	7.4	220	436	137	32	34
8	21	36	11	4.0	4.0	2.6	8.4	179	455	580	4.0	26
9	21	31	8.7	4.0	4.0	2.4	11	171	1770	393	16	222
10	21	27	7.2	4.0	4.0	2.3	18	148	1090	242	86	89
11	257	25	5.9	4.0	4.0	2.4	18	120	516	164	7.8	33
12	430	26	4.7	4.0	4.0	2.5	15	86	340	137	3.7	31
13	212	24	4.1	4.0	3.9	2.4	14	90	296	101	20	37
14	154	24	4.0	4.0	3.7	2.3	13	73	221	549	30	433
15	112	23	4.0	3.9	3.7	2.0	12	75	166	82	12	138
16	91	23	4.0	3.7	3.7	1.9	12	79	142	47	22	91
17	1000	23	4.0	3.7	3.7	1.9	8.1	143	193	47	12	56
18	524	23	4.0	3.7	3.7	1.9	5.8	159	129	64	12	30
19	226	22	4.0	3.7	3.7	1.9	4.2	146	105	46	13	19
20	205	22	4.0	3.7	3.9	1.8	4.8	158	276	72	13	7.6
21	172	22	4.0	3.7	3.8	1.8	4.0	150	114	169	16	7.3
22	136	22	4.0	3.7	3.7	1.7	3.3	123	76	196	35	6.9
23	114	22	4.0	3.7	3.6	1.7	2.8	125	52	276	57	6.3
24	98	23	4.0	3.7	3.5	1.6	3.0	129	40	267	108	5.6
25	78	23	4.0	3.7	3.3	1.5	3.8	101	40	225	61	5.5
26	62	23	4.0	3.7	3.3	1.5	2.4	148	1150	168	26	6.1
27	51	23	4.0	3.7	3.3	1.6	2.5	200	1660	121	113	6.6
28	39	23	4.0	3.7	3.2	1.6	3.9	134	660	80	119	6.9
29	26	23	4.0	3.7	---	1.6	5.1	179	369	50	103	6.5
30	26	23	3.8	3.7	---	1.6	3.2	168	327	30	46	6.5
31	24	---	4.0	3.7	---	1.5	---	213	---	18	12	---
TOTAL	4295	939	246.4	119.1	104.3	65.8	255.8	4442.7	12930	6551	1260.6	1908.0
MEAN	139	31.3	7.95	3.84	3.72	2.12	8.53	143	431	211	40.7	63.6
MAX	1000	73	22	4.0	4.0	2.9	32	256	1770	1070	119	433
MIN	21	22	3.8	3.7	3.2	1.5	1.5	2.7	40	18	3.7	5.5
AC-FT	8520	1860	489	236	207	131	507	8810	25650	12990	2500	3780

CAL YR 1985 TOTAL 63752.5 MEAN 175 MAX 1090 MIN 1.5 AC-FT 126500
WTR YR 1986 TOTAL 33117.7 MEAN 90.7 MAX 1770 MIN 1.5 AC-FT 65690

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°03'35", long 104°45'41", in NE¼SE¼SE¼ sec.25, T.10 N., R.20 E., Guadalupe County, Hydrologic Unit 13060001, at south boundary Preston Beck Grant, on left bank, 1.6 mi upstream from River Ranch, 5.8 miles southeast of Colonias, 9.1 miles northwest of Santa Rosa, and at mile 770.8.

DRAINAGE AREA.--2,340 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder. Elevation of gage is 4,760 ft above National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: Dec. 3-18, Feb. 28, Mar. 1, 19-26, and Sept. 11, 12. Records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation of about 11,800 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--10 years, 101 ft³/s, 73,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,900 ft³/s, June 21, 1982, gage height, 14.50 ft, from manometer gage, 15.33 ft, from floodmarks, from rating curve extended above 1,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 2.9 ft³/s, Aug. 21, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1415	*7,140	*12.60	July 14	0200	3,340	9.71
June 27	0630	4,060	10.45				

Minimum discharge, 17 ft³/s, Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	73	36	43	23	21	27	23	279	330	37	33
2	52	79	33	43	23	22	30	72	355	933	35	132
3	42	60	30	40	22	22	47	187	383	359	48	172
4	35	60	29	36	23	21	77	171	436	220	119	472
5	33	58	30	35	26	20	81	207	377	165	74	133
6	33	50	31	36	24	19	73	249	389	183	87	278
7	34	47	31	35	25	20	71	224	407	125	100	315
8	37	44	32	28	24	20	74	191	395	546	51	95
9	36	44	32	26	25	21	110	180	2470	302	64	225
10	40	36	32	27	24	23	145	170	1260	233	126	105
11	300	33	33	27	24	23	142	128	549	152	66	61
12	378	33	33	26	23	24	136	97	406	119	44	54
13	227	32	34	26	24	24	122	80	341	98	49	59
14	153	32	35	26	24	25	101	71	262	710	59	438
15	122	31	36	26	24	24	88	73	215	127	43	151
16	104	31	36	26	24	25	88	72	176	102	46	124
17	808	31	36	26	23	25	70	130	212	106	34	83
18	610	31	36	25	23	27	44	169	171	84	33	83
19	234	31	36	25	23	30	34	145	127	80	35	71
20	199	32	36	25	22	28	39	139	340	98	35	63
21	172	31	36	24	22	26	30	136	139	175	37	53
22	138	31	37	22	22	25	25	131	94	210	68	42
23	115	29	37	22	22	24	23	131	73	258	76	30
24	101	35	36	22	22	23	22	129	53	255	150	31
25	91	36	36	23	21	22	22	98	52	203	98	33
26	84	35	36	23	22	21	23	140	1410	176	58	38
27	76	35	35	22	21	21	22	207	2300	145	111	35
28	68	34	35	22	21	24	28	162	591	100	138	36
29	60	34	35	23	---	26	39	172	390	74	110	33
30	60	35	36	23	---	27	27	170	349	55	70	31
31	60	---	45	22	---	26	---	218	---	42	39	---
TOTAL	4551	1203	1071	855	646	729	1860	4472	15001	6765	2140	3509
MEAN	147	40.1	34.5	27.6	23.1	23.5	62.0	144	500	218	69.0	117
MAX	808	79	45	43	26	30	145	249	2470	933	150	472
MIN	33	29	29	22	21	19	22	23	52	42	33	30
AC-FT	9030	2390	2120	1700	1280	1450	3690	8870	29750	13420	4240	6960

CAL YR 1985	TOTAL	69735	MEAN	191	MAX	1230	MIN	20	AC-FT	138300
WTR YR 1986	TOTAL	42802	MEAN	117	MAX	2470	MIN	19	AC-FT	84900

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
DEC 03...	1120	29	800	782	8.40	8.40	14.0	5.5	11.2	<10
JAN 08...	1330	32	790	--	8.30	--	5.0	9.5	9.8	--
FEB 19...	1215	24	750	803	8.40	7.90	19.0	14.0	11.1	--
APR 30...	1130	29	790	795	8.10	8.20	24.0	22.0	8.6	--
JUN 30...	1430	332	275	283	7.70	7.90	32.0	28.5	6.4	43
AUG 27...	1030	41	775	--	7.90	--	20.0	19.0	7.8	--

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
DEC 03...	420	280	140	18	9.5	0.2	1.3	139	270	4.9
JAN 08...	--	--	--	--	--	--	--	--	--	--
FEB 19...	450	330	150	18	9.3	0.2	1.3	116	320	4.6
APR 30...	420	330	140	16	8.9	0.2	1.4	90	290	4.5
JUN 30...	150	61	48	6.8	6.8	0.3	2.4	87	48	2.9
AUG 27...	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC 03...	0.30	11	540	0.300	0.260	0.060	--	0.010	<0.010	0.5
JAN 08...	--	--	--	--	--	--	--	--	--	--
FEB 19...	0.30	11	580	--	--	--	--	--	--	--
APR 30...	0.30	10	530	--	--	--	--	--	--	--
JUN 30...	0.20	18	190	<0.100	<0.100	0.060	1.0	0.160	0.040	9.4
AUG 27...	--	--	--	--	--	--	--	--	--	--

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
DEC 03...	2	1	30	1	1	<10	<10	1	<1	7
JAN 08...	--	--	--	--	--	--	--	--	--	--
FEB 19...	--	--	70	--	--	--	--	--	--	23
APR 30...	--	--	40	--	--	--	--	--	--	11
JUN 30...	--	--	20	--	--	--	--	--	--	1800
AUG 27...	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 03...	1	<1	<0.1	2	2	20	18	9	0.70	36
JAN 08...	--	--	--	--	--	--	--	45	3.9	72
FEB 19...	--	--	--	--	--	--	--	16	1.0	88
APR 30...	--	--	--	--	--	--	--	18	1.4	71
JUN 30...	--	--	--	--	--	--	--	641	575	84
AUG 27...	--	--	--	--	--	--	--	534	59	14

08382730 LOS ESTEROS CREEK ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°05'42", long 104°39'49", Guadalupe County, Hydrologic Unit 13060001 in Preston-Beck Grant, on left bank, 3.7 mi upstream from mouth, 4.9 mi north-northeast of Santa Rosa Dam, and 10.4 mi north-northeast of Santa Rosa. Mouth at Pecos River mile 763.0.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--July 1973 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,767 ft above National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated daily discharges: Feb. 5-14, June 9-12, 30, July 1, Aug. 4, and Sept. 4. Records good except for estimated daily discharges, which are poor. No known diversions or groundwater withdrawals for irrigation upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--13 years, 1.37 ft³/s, 993 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft³/s, July 24, 1976, gage height, 9.3 ft from rating curve extended above 70 ft³/s on basis of velocity-area studies and slope-area measurements at gage heights 6.5 ft and 9.3 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood of unknown date reached a discharge of about 6,800 ft³/s, gage height, 11.6 ft, from floodmarks, from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	0700	304	4.06	July 22	0600	712	5.19
June 3	1930	288	3.97	Aug. 4	0600	545	4.78
June 20	2130	*1,240	*6.17	Aug. 15	0500	398	4.45
June 26	0830	231	3.79				

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	28	.15	.18	6.1
4	.00	.00	.00	.00	.00	.00	.00	.00	4.9	.01	83	5.2
5	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	2.7	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.22	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.02	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.68	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	14	.00	.05	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00	.53	.00
11	.77	.00	.00	.00	.00	.00	.00	.00	.12	.00	.01	.00
12	2.8	.00	.00	.00	.00	.00	.00	.00	.09	.00	.04	.00
13	.63	.00	.00	.00	.02	.00	.00	.00	.08	.00	.10	.00
14	.24	.00	.00	.00	.01	.00	.00	.00	.02	.00	.05	1.6
15	.02	.00	.00	.00	4.9	.00	.00	.00	.00	.00	85	1.1
16	.55	.00	.00	.00	2.3	.00	.00	.00	.00	.00	4.2	.14
17	149	.00	.00	.00	.46	.00	.00	.00	.00	.00	.37	.07
18	6.0	.00	.00	.00	.09	.00	.00	.00	.00	.00	.15	.04
19	.68	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
20	.20	.00	.00	.00	.00	.00	.00	.00	193	.00	.00	.00
21	.09	.00	.00	.00	.00	.00	.00	.00	95	.00	.00	.00
22	.04	.00	.00	.00	.00	.00	.00	.00	2.4	147	.00	.00
23	.03	.00	.00	.00	.00	.00	.00	.00	.58	3.3	.00	.00
24	.02	.00	.00	.00	.00	.00	.00	.00	.22	.26	.00	.00
25	.02	.00	.00	.00	.00	.00	.00	.00	.14	.04	.00	.00
26	.02	.00	.00	.00	.00	.00	.00	.00	89	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	4.7	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.68	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.54	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	30	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	161.11	.00	.00	.00	7.81	.00	.00	.00	464.61	154.26	176.62	14.25
MEAN	5.20	.00	.00	.00	.28	.00	.00	.00	15.5	4.98	5.70	.47
MAX	149	.00	.00	.00	4.9	.00	.00	.00	193	147	85	6.1
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	320	.00	.00	.00	15	.00	.00	.00	922	306	350	28

CAL YR 1985	TOTAL	261.73	MEAN	.72	MAX	149	MIN	.00	AC-FT	519
WTR YR 1986	TOTAL	978.66	MEAN	2.68	MAX	193	MIN	.00	AC-FT	1940

08382760 LOS ESTEROS CREEK TRIBUTARY ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°05'35", long 104°40'20", Preston-Beck Grant, Guadalupe County, Hydrologic Unit 13060001, 0.5 mi west-southwest of Los Esteros Creek gage, 0.8 mi upstream from confluence with Los Esteros Creek, 4.6 mi north-northeast of Santa Rosa Dam, and 10.2 mi north-northeast of Santa Rosa.

DRAINAGE AREA.--13.7 mi².

PERIOD OF RECORD.--July 1973 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,758 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No known diversions or groundwater withdrawals for irrigation upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--13 years, 0.29 ft³/s, 210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,400 ft³/s, Aug. 29, 1977, gage height, 7.80 ft from rating curve extended above 0.5 ft³/s on basis of velocity-area studies and slope-area measurement at gage height 7.80 ft; no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 80 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 3	2300	*106	*2.11	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.4	.15
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.60	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	8.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	1.1	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	8.97	.00	.00	.00	.00	.00	.00	.00	1.72	.00	6.32	.15
MEAN	.29	.00	.00	.00	.00	.00	.00	.00	.06	.00	.20	.00
MAX	8.9	.00	.00	.00	.00	.00	.00	.00	1.1	.00	4.4	.15
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	18	.00	.00	.00	.00	.00	.00	.00	3.4	.00	13	.3

CAL YR 1985	TOTAL	9.68	MEAN	.03	MAX	8.9	MIN	.00	AC-FT	19
WTR YR 1986	TOTAL	17.16	MEAN	.05	MAX	8.9	MIN	.00	AC-FT	34

08382810 SANTA ROSA LAKE NEAR SANTA ROSA, NM

LOCATION.--Lat 35°01'47", long 104°41'30", Guadalupe County, Hydrologic Unit 13060001, in Jose Perea Grant, near outlet gates of Santa Rosa Dam on Pecos River, approximately 7.0 mi north of Santa Rosa, and at mile 757.2.

DRAINAGE AREA.--2,430 mi², approximately.

PERIOD OF RECORDS.--April 1980 to current year.

GAGE.--Nonrecording gage. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--All record prior to May 13, 1983 is questionable. Lake is formed by earth and rockfill dam on Pecos River. Storage began on Apr. 22, 1980. Capacity, 447,100 acre-ft, between elevations, 4,630.0 ft, invert of outlet structure, and 4,797.0 ft, crest of spillway. No dead storage. Lake was created primarily for flood, irrigation, and sediment control.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 108,010 acre-ft, July 1, 1985, elevation 4,746.59 ft; no storage for many days, July-Sept., 1980 and June-Aug., 1981.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 107,510 acre-ft, June 29, 30, elevation, 4,746.46 ft; minimum, 77,480 acre-ft, May 22, elevation, 4,737.80 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94811	104803	105713	106246	106437	106437	106552	106094	81166	107049	106246	106552
2	94882	104917	105713	106361	106437	106437	106552	106284	81936	107011	106170	106628
3	94988	105068	105751	106437	106437	106475	106552	106475	82809	106208	106246	106819
4	94988	105485	105789	106475	106208	106475	106552	106743	83720	105865	106705	107088
5	94917	105713	105789	106513	106323	106475	106552	106132	84638	105903	106705	106858
6	94846	105903	105751	106437	106437	106513	106590	104803	85198	106132	106590	106705
7	94846	105789	105751	106552	106513	106513	106705	103411	86326	106399	106475	106323
8	94953	105637	105751	106513	106552	106513	106819	101956	87228	106896	106399	106246
9	95024	105675	105713	106323	106590	106513	106819	100514	91279	106628	106361	106513
10	95236	105713	105675	106437	106590	106513	106743	99050	93717	106132	106399	106513
11	95663	105789	105675	106475	106552	106475	106590	97527	94988	105865	106361	106513
12	96056	105713	105675	106513	106590	106475	106552	95450	95806	105865	106284	106437
13	96449	105713	105713	106552	106590	106475	106513	93647	96485	106399	106284	106323
14	96843	105789	105789	106475	106475	106513	106437	91590	97023	106666	106323	106896
15	97672	105789	105865	106399	106361	106513	106323	89869	97419	106399	106475	106896
16	98650	105713	105865	106284	106323	106513	106361	87496	97780	106284	106552	106590
17	100184	105637	105865	106284	106284	106513	106284	85661	98106	106323	106552	106475
18	101289	105561	105865	106361	106170	106513	106208	83753	98468	106437	106552	106437
19	102179	105561	105865	106437	106208	106513	106246	81904	98686	106437	106399	106208
20	102775	105561	105865	106513	106208	106513	106323	80242	99488	106513	106323	106132
21	103261	105561	105865	106399	106246	106513	106399	78446	100000	106781	106246	106056
22	103673	105561	105865	106513	106246	106513	106475	77480	100184	106705	106208	105865
23	104011	105599	105903	106743	106284	106513	106513	77697	100331	106437	106437	105827
24	104237	105599	105941	106819	106284	106513	106475	77946	100441	106437	106513	105599
25	104388	105599	105941	106781	106284	106513	106399	78133	100735	106361	106666	105485
26	104652	105599	105979	106743	106361	106513	106361	78414	103411	106323	106552	105447
27	104803	105675	106056	106552	106361	106513	106284	78727	106513	106323	106705	105409
28	104841	105751	106094	106513	106399	106513	106246	79167	107088	106399	106819	105371
29	104728	105751	106132	106475	---	106513	106208	79545	107510	106399	106858	105371
30	104690	105713	106132	106475	---	106513	106132	80083	107510	106361	106819	105371
31	104728	---	106170	106437	---	106552	---	80623	---	106284	106666	---
MAX	104841	105903	106170	106819	106590	106552	106819	106743	107510	107049	106858	107088
MIN	94811	104803	105675	106246	106170	106437	106132	77480	81166	105865	106170	105371
(†)	+9918	+985	+457	+267	-38	+153	-420	-25509	+26887	-1226	+382	-1295

CAL YR 1985 MAX 108010 MIN 23150 (†) +83310
WTR YR 1986 MAX 107510 MIN 77480 (†) +10561

(†) CHANGE IN CONTENTS, IN ACRE-FEET.

08382810 SANTA ROSA LAKE NEAR SANTA ROSA, NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4743.02	4745.75	4745.99	4746.13	4746.18	4746.18	4746.21	4746.09	4738.97	4746.34	4746.13	4746.21
2	4743.04	4745.78	4745.99	4746.16	4746.18	4746.18	4746.21	4746.14	4739.21	4746.33	4746.11	4746.23
3	4743.07	4745.82	4746.00	4746.18	4746.18	4746.19	4746.21	4746.19	4739.48	4746.12	4746.13	4746.28
4	4743.07	4745.93	4746.01	4746.19	4746.12	4746.19	4746.21	4746.26	4739.76	4746.03	4746.25	4746.35
5	4743.05	4745.99	4746.01	4746.20	4746.15	4746.19	4746.21	4746.10	4740.04	4746.04	4746.25	4746.29
6	4743.03	4746.04	4746.00	4746.18	4746.18	4746.20	4746.22	4745.75	4740.21	4746.10	4746.22	4746.25
7	4743.03	4746.01	4746.00	4746.21	4746.20	4746.20	4746.25	4745.38	4740.55	4746.17	4746.19	4746.15
8	4743.06	4745.97	4746.00	4746.20	4746.21	4746.20	4746.28	4744.99	4740.82	4746.30	4746.17	4746.13
9	4743.08	4745.98	4745.99	4746.15	4746.22	4746.20	4746.28	4744.60	4742.01	4746.23	4746.16	4746.20
10	4743.14	4745.99	4745.98	4746.18	4746.22	4746.20	4746.26	4744.20	4742.71	4746.10	4746.17	4746.20
11	4743.26	4746.01	4745.98	4746.19	4746.21	4746.19	4746.22	4743.78	4743.07	4746.03	4746.16	4746.20
12	4743.37	4745.99	4745.98	4746.20	4746.22	4746.19	4746.21	4743.20	4743.30	4746.03	4746.14	4746.18
13	4743.48	4745.99	4745.99	4746.21	4746.22	4746.19	4746.20	4742.69	4743.49	4746.17	4746.14	4746.15
14	4743.59	4746.01	4746.01	4746.19	4746.19	4746.20	4746.18	4742.10	4743.64	4746.24	4746.15	4746.30
15	4743.82	4746.01	4746.03	4746.17	4746.16	4746.20	4746.15	4741.60	4743.75	4746.17	4746.19	4746.30
16	4744.09	4745.99	4746.03	4746.14	4746.15	4746.20	4746.16	4740.90	4743.85	4746.14	4746.21	4746.22
17	4744.51	4745.97	4746.03	4746.14	4746.14	4746.20	4746.14	4740.35	4743.94	4746.15	4746.21	4746.19
18	4744.81	4745.95	4746.03	4746.16	4746.11	4746.20	4746.12	4739.77	4744.04	4746.18	4746.21	4746.18
19	4745.05	4745.95	4746.03	4746.18	4746.12	4746.20	4746.13	4739.20	4744.10	4746.18	4746.17	4746.12
20	4745.21	4745.95	4746.03	4746.20	4746.12	4746.20	4746.15	4738.68	4744.32	4746.20	4746.15	4746.10
21	4745.34	4745.95	4746.03	4746.17	4746.13	4746.20	4746.17	4738.11	4744.46	4746.27	4746.13	4746.08
22	4745.45	4745.95	4746.03	4746.20	4746.13	4746.20	4746.19	4737.80	4744.51	4746.25	4746.12	4746.03
23	4745.54	4745.96	4746.04	4746.26	4746.14	4746.20	4746.20	4737.87	4744.55	4746.18	4746.18	4746.02
24	4745.60	4745.96	4746.05	4746.28	4746.14	4746.20	4746.19	4737.95	4744.58	4746.18	4746.20	4745.96
25	4745.64	4745.96	4746.05	4746.27	4746.14	4746.20	4746.17	4738.01	4744.66	4746.16	4746.24	4745.93
26	4745.71	4745.96	4746.06	4746.26	4746.16	4746.20	4746.16	4738.10	4745.38	4746.15	4746.21	4745.92
27	4745.75	4745.98	4746.08	4746.21	4746.16	4746.20	4746.14	4738.20	4746.20	4746.15	4746.25	4745.91
28	4745.76	4746.00	4746.09	4746.20	4746.17	4746.20	4746.13	4738.34	4746.35	4746.17	4746.28	4745.90
29	4745.73	4746.00	4746.10	4746.19	---	4746.20	4746.12	4738.46	4746.46	4746.17	4746.29	4745.90
30	4745.72	4745.99	4746.10	4746.19	---	4746.20	4746.10	4738.63	4746.46	4746.16	4746.28	4745.90
31	4745.73	---	4746.11	4746.18	---	4746.21	---	4738.80	---	4746.14	4746.24	---
MEAN	4744.31	4745.96	4746.03	4746.19	4746.17	4746.20	4746.19	4741.56	4743.16	4746.17	4746.19	4746.13
MAX	4745.76	4746.04	4746.11	4746.28	4746.22	4746.21	4746.28	4746.26	4746.46	4746.34	4746.29	4746.35
MIN	4743.02	4745.75	4745.98	4746.13	4746.11	4746.18	4746.10	4737.80	4738.97	4746.03	4746.11	4745.90

CAL YR 1985 MEAN 4735.53 MAX 4746.59 MIN 4712.18
WTR YR 1986 MEAN 4745.35 MAX 4746.46 MIN 4737.80

08382830 PECOS RIVER BELOW SANTA ROSA DAM, NM

LOCATION.--Lat 35°01'27", long 104°41'20", Guadalupe County, Hydrologic Unit 13060001, in Jose Perea Grant, on right bank, 0.2 mi downstream from Santa Rosa Dam, 5.7 mi north of Santa Rosa, and at mile 757.0.

DRAINAGE AREA.--2,430 mi², approximately.

PERIOD OF RECORD.--January 1980 to current year.

GAGE.--Water-stage recorder. Elevation 4,640 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 31, 1980, at datum about 1.2 ft higher. Prior to Mar. 26, 1982, 195 ft upstream at datum 2.36 ft higher.

REMARKS.--Estimated daily discharges: Nov. 21 to Dec. 18. Records good except for estimated daily discharges, which are poor. Flow completely regulated by Santa Rosa Lake (08382810) since April, 1980. Diversions and groundwater withdrawals for irrigation of about 12,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--6 years, 80.8 ft³/s, 58,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s, June 26, 1980, gage height, about 5.77 ft, present datum; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,040 ft³/s, May 14, 15; no flow, Oct. 24, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.31	.36	.96	59	.66	1.2	2.4	2.0	593	8.9	70
2	.17	.21	.36	.87	58	.66	.58	2.4	2.1	687	8.4	36
3	.29	.20	.36	.89	59	.60	1.8	2.3	2.0	636	8.3	17
4	.31	.15	.36	.89	50	.59	2.3	2.1	2.0	402	8.4	108
5	.33	.17	.36	.89	39	.50	2.0	460	2.0	153	64	205
6	.38	.17	.36	16	39	.59	1.6	860	2.0	11	115	232
7	.41	.17	.36	20	39	.66	1.4	858	2.1	12	116	230
8	.47	.22	.36	42	39	.66	33	855	2.1	109	57	127
9	.46	.31	.36	44	39	.66	66	852	2.0	395	33	32
10	.52	.31	.36	26	40	.64	127	851	.62	481	33	34
11	.85	.31	.36	24	40	.61	131	851	5.3	283	34	63
12	.46	.29	.50	24	46	.61	79	899	3.4	95	19	63
13	.46	.29	.74	25	41	.53	81	1010	2.6	15	11	63
14	.46	.29	.74	25	42	.55	83	1040	2.4	232	11	62
15	.46	.28	.74	25	42	.59	53	1040	2.6	198	11	169
16	1.1	.32	.74	20	42	.59	31	1030	2.5	47	11	226
17	1.1	.36	.74	14	42	.54	32	1010	2.2	10	11	115
18	.01	.36	.74	12	37	.53	15	1020	2.2	6.4	11	58
19	.06	.36	.74	13	25	.53	3.6	1020	1.8	6.6	11	58
20	.08	.36	.74	13	17	.45	3.0	1010	1.8	6.8	11	59
21	.08	.36	.75	26	11	.41	2.4	1010	1.7	38	10	59
22	.04	.36	.81	36	6.6	.41	3.3	455	1.6	316	11	31
23	.01	.36	.85	36	4.4	.36	4.9	2.6	1.7	361	11	9.2
24	.00	.36	.83	49	3.5	.31	4.3	2.5	1.7	275	11	5.8
25	.04	.36	.81	57	2.4	.29	4.3	2.0	1.7	218	11	5.8
26	.07	.36	.81	56	1.5	.26	3.7	1.9	2.1	158	11	3.8
27	.00	.36	.81	57	.56	2.7	3.0	1.8	71	76	11	1.8
28	.06	.36	.85	58	.65	3.0	2.8	1.7	220	45	40	1.4
29	.08	.36	.89	58	---	2.3	2.6	1.6	227	45	73	1.5
30	.08	.36	.93	57	---	1.8	2.6	1.6	369	20	72	1.6
31	.12	---	.97	58	---	1.2	---	2.0	---	14	71	---
TOTAL	9.09	9.04	19.69	895.50	865.61	24.79	782.38	16157.9	943.22	5944.8	925.0	2147.9
MEAN	.29	.30	.64	28.9	30.9	.80	26.1	521	31.4	192	29.8	71.6
MAX	1.1	.36	.97	58	59	3.0	131	1040	369	687	116	232
MIN	.00	.15	.36	.87	.56	.26	.58	1.6	.62	6.4	8.3	1.4
AC-FT	18	18	39	1780	1720	49	1550	32050	1870	11790	1830	4260

CAL YR 1985	TOTAL	21984.74	MEAN	60.2	MAX	887	MIN	.00	AC-FT	43610
WTR YR 1986	TOTAL	28724.92	MEAN	78.7	MAX	1040	MIN	.00	AC-FT	56980

08383000 PECOS RIVER AT SANTA ROSA, NM

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, Hydrologic Unit 13060001, on left bank, 0.4 mi downstream from bridge on U.S. Highway I-40, 0.6 mi upstream from bridge on U.S. Highway I-40 (Business) in Santa Rosa, 1.9 mi upstream from El Rito Creek, and at mile 748.4.

DRAINAGE AREA.--2,650 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

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 are unreliable and should not be used.

REVISED RECORDS.--WSP 1512: 1913-15. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and partial concrete control. Elevation of gage is 4,537.56 ft above National Geodetic Vertical Datum of 1929. For history of changes prior to Sept. 13, 1967, see WSP 2123.

REMARKS.--Estimated daily discharges: Nov. 22-30, and Mar. 12-17, 22-25. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April, 1980. Diversions for irrigation of about 12,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--63 years (water years 1906, 1913-14, 1928-79), 135 ft³/s, 97,810 acre-ft/yr, prior to completion of Santa Rose Dam.
7 years (water years 1980-1986), 83.2 ft³/s, 60,280 acre-ft/yr, since completion of Santa Rosa Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s, June 2, 1937, gage height, 25.7 ft, site and datum then in use, from rating curve extended above 32,000 ft³/s; minimum, 0.28 ft³/s, 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, 45,000 ft³/s, 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 ft³/s, by comparison with 1904 flood.
Since completion of Santa Rosa Dam in 1980, maximum discharge, 7,050 ft³/s, Aug. 11, 1981, gage height, 6.56 ft; minimum daily, 2.0 ft³/s, July 23-25, 31, and Aug. 1, 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft³/s, May 13, 14, gage height, 2.58 ft; minimum daily discharge, 3.4 ft³/s, Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	6.4	8.1	9.1	52	8.3	9.5	6.5	8.2	565	22	68
2	5.1	6.5	7.9	11	53	8.1	9.4	7.3	7.2	658	19	55
3	5.1	6.5	7.3	11	54	8.1	9.2	6.5	6.2	671	18	29
4	5.1	6.5	7.3	11	53	8.1	13	6.2	5.8	400	78	72
5	5.1	6.5	7.3	11	44	8.5	15	318	6.0	229	55	166
6	5.1	6.3	7.3	11	44	8.6	15	835	7.1	34	115	238
7	5.1	5.8	7.3	25	42	8.1	14	844	6.0	31	115	219
8	5.6	5.8	7.3	30	42	7.8	33	849	4.7	77	86	155
9	5.8	5.8	7.3	45	42	7.3	94	849	6.0	339	53	62
10	5.8	5.8	7.3	33	39	7.3	121	849	5.1	470	55	34
11	9.0	5.8	7.3	30	38	7.3	154	854	5.1	305	52	73
12	7.9	5.8	7.4	30	38	7.3	100	887	5.0	145	45	73
13	7.3	5.8	8.1	29	38	12	99	990	4.5	32	24	73
14	7.3	5.8	8.1	28	38	13	97	1020	4.5	167	22	73
15	7.3	5.8	8.1	29	38	15	84	1020	5.3	242	22	135
16	10	5.8	8.1	28	38	12	52	1020	5.7	77	22	209
17	39	5.8	8.1	20	38	12	50	1020	6.5	32	22	150
18	9.0	5.8	8.1	16	37	12	43	1020	6.2	17	22	80
19	7.3	5.8	8.1	15	32	11	15	1020	5.8	15	21	76
20	6.5	5.8	8.1	15	21	9.8	12	1010	5.8	13	21	72
21	6.5	5.8	8.1	16	21	9.8	8.9	1000	5.8	18	18	70
22	6.2	5.8	8.1	28	15	9.0	7.7	588	5.8	241	37	58
23	5.8	6.0	8.1	29	14	8.1	7.5	24	5.8	371	35	29
24	5.8	6.0	8.1	35	13	6.5	8.9	15	5.9	262	20	13
25	5.4	6.0	8.1	45	13	5.8	8.9	12	6.7	239	18	11
26	5.1	6.0	8.1	44	11	5.8	8.9	9.7	11	171	18	10
27	5.1	6.5	8.1	44	10	5.8	8.6	8.5	31	122	17	6.7
28	5.1	7.0	8.1	44	9.2	5.8	7.3	9.9	230	55	25	4.9
29	5.1	7.5	8.4	46	---	8.3	6.5	9.2	233	78	69	4.1
30	5.1	8.0	8.9	51	---	9.8	6.0	7.3	331	42	70	3.4
31	5.1	---	8.9	52	---	9.8	---	7.3	---	38	69	---
TOTAL	223.8	184.5	244.9	871.1	927.2	276.1	1118.3	16122.4	982.7	6156	1285	2322.1
MEAN	7.22	6.15	7.90	28.1	33.1	8.91	37.3	520	32.8	199	41.5	77.4
MAX	39	8.0	8.9	52	54	15	154	1020	331	671	115	238
MIN	5.1	5.8	7.3	9.1	9.2	5.8	6.0	6.2	4.5	13	17	3.4
AC-FT	444	366	486	1730	1840	548	2220	31980	1950	12210	2550	4610

CAL YR 1985	TOTAL	23981.8	MEAN	65.7	MAX	911	MIN	2.0	AC-FT	47570
WTR YR 1986	TOTAL	30714.1	MEAN	84.1	MAX	1020	MIN	3.4	AC-FT	60920

08383000 PECOS RIVER AT SANTA ROSA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 0.6 mi downstream from discharge station.

PERIOD OF RECORD.--Water years 1905-07, 1959 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1985.
WATER TEMPERATURES: October 1958 to September 1985.
SUSPENDED-SEDIMENT DISCHARGES: October 1958 to September 1985.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,170 microsiemens, Oct. 21, 1982; minimum daily, 173 microsiemens, May 22, 1973.
WATER TEMPERATURES: Maximum daily, 38.0°C, May 11, 1970; minimum daily, 0.0°C on several days during most winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 31,400 mg/L, Aug. 18, 1961; minimum daily mean, 0 mg/L, several days 1982-85.
SEDIMENT LOADS: Maximum daily, 344,000 tons July 30, 1971; minimum daily, 0 ton several days 1982-85.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
DEC												
04...	1245	7.5	2600	2680	8.20	8.00	16.5	5.5	11.6	1800	1700	600
JAN												
07...	1330	23	1600	--	8.10	--	5.5	5.5	11.3	--	--	--
FEB												
13...	1045	38	790	775	7.90	8.20	12.5	4.0	11.2	390	270	130
APR												
29...	1500	6.5	2120	2100	8.00	7.90	29.0	24.5	8.3	1300	1200	430
JUN												
24...	1530	6.5	2200	2080	7.82	7.80	20.5	22.0	8.4	1100	960	340
AUG												
26...	1820	17	1200	--	8.23	--	24.0	25.0	7.8	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
DEC												
04...	75	56	0.6	1.9	133	1600	77	0.70	13	2500	110	40
JAN												
07...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
13...	16	13	0.3	1.9	125	280	9.7	0.30	3.3	530	70	57
APR												
29...	50	42	0.5	2.5	78	1100	41	0.50	12	1700	90	30
JUN												
24...	55	42	0.6	2.4	111	1200	65	0.60	13	1800	90	100
AUG												
26...	--	--	--	--	--	--	--	--	--	--	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM
(Surveillance network station)

LOCATION.--Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, Hydrologic Unit 13060001, on left bank 9.0 mi southeast of Puerto de Luna, 17.5 mi upstream from Sumner Dam, and at mile 719.5.

DRAINAGE AREA.--3,970 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1512: 1939.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,311.34 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 15, 1954, at datum 1.0 ft higher.

REMARKS.--Estimated daily discharges: Dec. 11-17, Jan. 8, Feb. 8, 10, 11, June 15-19, and Aug. 25, 26. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April, 1980. Diversions for irrigation of about 12,500 acres, 1959 determination, upstream from station. Discharge represents inflow to Lake Sumner.

AVERAGE DISCHARGE.--41 years (1939-79), 209 ft³/s, 151,400 acre-ft/yr, prior to completion of Santa Rose Dam.
7 years (water years 1980-86), 170 ft³/s, 123,200 acre-ft/yr, since completion of Santa Rosa Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,600 ft³/s, Sept. 1, 1942, gage height, 17.00 ft, from rating curve extended above 7,400 ft³/s on basis of flow "at Santa Rosa"; minimum, 11 ft³/s, Jan. 31, 1951.
Since completion of Santa Rosa Dam in 1980, maximum discharge, 27,100 ft³/s, Sept. 2, 1986, gage height, 11.23 ft; minimum, 41 ft³/s, Aug. 13, 14, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 ft³/s, and peak inflow to Lake Sumner was about 75,000 ft³/s. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,100 ft³/s, Sept. 2, gage height, 11.23 ft, from rating curve extended as explained above; minimum, 52 ft³/s, July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	116	101	89	125	82	68	194	131	619	86	157
2	79	114	101	88	127	74	78	191	153	732	73	2910
3	73	108	104	95	128	76	72	104	555	847	74	143
4	69	106	102	91	129	79	66	95	168	576	106	107
5	72	105	102	88	144	81	74	91	126	518	257	441
6	72	103	103	87	132	80	76	750	123	213	165	349
7	70	102	103	85	134	80	77	859	119	108	217	678
8	92	102	100	101	128	79	69	867	114	92	216	334
9	100	100	99	124	123	76	107	861	110	181	249	204
10	95	102	98	131	120	78	160	863	106	548	208	191
11	407	102	98	114	114	78	207	877	106	487	151	116
12	124	104	98	110	115	75	198	890	104	300	149	145
13	102	104	98	109	118	74	162	996	100	160	181	147
14	98	103	98	111	128	72	158	1060	99	81	138	148
15	96	102	96	109	140	72	160	1040	91	326	119	149
16	149	103	94	108	122	68	137	1040	80	187	147	266
17	3510	102	94	104	115	68	110	1050	76	130	114	309
18	261	102	95	98	113	71	108	1040	71	84	108	189
19	121	101	96	91	112	76	107	1060	69	61	106	150
20	107	102	94	89	103	73	91	1070	69	58	104	146
21	108	102	94	88	92	71	81	1070	70	57	95	147
22	110	102	94	92	92	66	74	1040	67	67	109	149
23	108	101	93	107	85	70	71	270	68	425	190	128
24	111	101	92	108	84	70	72	118	82	329	134	101
25	111	103	93	117	83	69	74	168	98	317	117	81
26	109	105	91	126	83	69	73	108	332	242	177	80
27	106	105	91	128	82	72	71	96	200	202	184	76
28	106	103	92	129	83	74	69	100	188	132	103	73
29	107	102	91	126	---	74	69	124	359	101	119	71
30	107	102	90	127	---	70	68	92	390	126	161	72
31	107	---	89	128	---	73	---	100	---	95	160	---
TOTAL	6965	3109	2984	3300	3154	2290	3007	18284	4424	8401	4517	8257
MEAN	225	104	96.3	106	113	73.9	100	590	147	271	146	275
MAX	3510	116	104	131	144	82	207	1070	555	847	257	2910
MIN	69	100	89	85	82	66	66	91	67	57	73	71
AC-FT	13820	6170	5920	6550	6260	4540	5960	36270	8780	16660	8960	16380

CAL YR 1985	TOTAL	56418	MEAN	155	MAX	3510	MIN	46	AC-FT	111900
WTR YR 1986	TOTAL	68692	MEAN	188	MAX	3510	MIN	57	AC-FT	136300

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-66, 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
DEC											
05...	1145	101	2980	2940	8.30	7.90	16.5	5.5	--	11.4	22
JAN											
09...	1100	114	2500	--	8.30	--	3.0	1.0	--	12.4	10
FEB											
18...	1600	114	2430	2470	8.60	7.90	19.5	15.0	--	11.8	22
APR											
29...	1100	71	3080	2930	8.10	7.70	26.0	18.5	--	8.4	13
JUN											
24...	1030	81	2610	2690	7.93	7.70	20.0	20.0	1.000	8.8	14
AUG											
26...	1115	99	2630	--	8.24	--	24.0	24.0	--	7.4	18

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L AS CACO3) (99430)
DEC											
05...	1800	1700	600	77	110	1	2.1	160	0	130	--
JAN											
09...	--	--	--	--	--	--	--	--	--	--	--
FEB											
18...	1300	1100	400	63	85	1	2.5	111	32	146	144
APR											
29...	1700	1600	560	70	100	1	2.6	137	0	114	112
JUN											
24...	1600	1500	530	65	93	1	2.4	117	--	92	96
AUG											
26...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
DEC											
05...	110	1600	160	0.70	13	2600	<0.100	<0.100	0.270	0.03	--
JAN											
09...	--	--	--	--	--	--	0.100	0.110	0.150	0.15	0.40
FEB											
18...	86	1300	120	0.60	13	2100	<0.100	<0.100	0.120	0.18	--
APR											
29...	109	1500	150	0.60	14	2500	<0.100	<0.100	0.250	0.25	--
JUN											
24...	100	1500	130	0.60	12	2400	<0.100	<0.100	0.260	0.44	--
AUG											
26...	--	--	--	--	--	--	<0.100	<0.100	0.180	0.62	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
DEC										
05...	0.030	<0.010	0.9	2	2	110	1	<1	20	20
JAN										
09...	0.050	0.010	1.1	--	--	--	--	--	--	--
FEB										
18...	0.040	0.010	2.6	--	--	110	--	--	--	--
APR										
29...	0.030	<0.010	2.7	--	--	120	--	--	--	--
JUN										
24...	0.060	0.030	1.9	<1	<1	110	<5	<1	<10	<10
AUG										
26...	--	<0.010	3.0	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
DEC										
05...	<1	<1	40	2	<1	--	<0.1	<1	<1	30
JAN										
09...	--	--	--	--	--	--	--	--	--	--
FEB										
18...	--	--	190	--	--	--	--	--	--	--
APR										
29...	--	--	40	--	--	--	--	--	--	--
JUN										
24...	230	2	60	20	<5	<0.10	0.1	<1	<1	40
AUG										
26...	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
DEC										
05...	10	3.0	8.6	340	3	1	40	<10	9	3500
JAN										
09...	--	--	--	--	--	--	--	--	--	--
FEB										
18...	--	--	--	--	--	--	--	--	--	--
APR										
29...	--	--	--	--	--	--	--	--	--	--
JUN										
24...	40	--	--	--	--	--	--	--	--	--
AUG										
26...	--	--	--	--	--	--	--	--	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SAMPLING METHOD, CODES (82398)
DEC										
05...	10	280	0.01	10	115	31	88	130	16	10.0
JAN										
09...	--	--	--	--	107	33	71	23	19	10.0
FEB										
18...	--	--	--	--	61	19	88	63	48	10.0
APR										
29...	--	--	--	--	67	13	45	9	28	10.0
JUN										
24...	--	--	--	--	128	28	88	450	390	10.0
AUG										
26...	--	--	--	--	--	--	--	84	130	10.0

08384000 LAKE SUMNER NEAR FORT SUMNER, NM

LOCATION.--Lat 34°36'30", long 104°23'04", in SE¼SW¼ sec.34, T.5 N., R.24 E., DeBaca County, Hydrologic Unit 13060001, near center of dam on Pecos River, 5.0 mi northeast of Guadalupe, 12.2 mi northwest of Fort Sumner, and at mile 702.0.

DRAINAGE AREA.--4,390 mi², approximately (contributing area).

PERIOD OF RECORD.--December 1938 to September 1965 (month end elevations and contents), October 1965 to current year. Month end elevations September 1937 to November 1938 published in reports of Pecos River Commission. Elevations and contents May 27, 1937 to June 10, 1937 in WSP 842. Prior to October 1974, published as "Alamogordo Reservoir".

REVISED RECORDS.--WSP 1732: 1939-54 (contents). WSP 1923: 1939-53(M).

GAGE.--Nonrecording gage. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). April 1, 1946 to Sept. 30, 1957, water-stage recorder above elevation 4,234.25 ft, nonrecording gage below.

REMARKS.--Reservoir is formed by earthfill dam, completed and storage began in August, 1937. Capacity, 101,600 acre-ft, between elevation 4,200.0 ft, sill of outlet gate, and elevation 4,275.0 ft, normal operating level. No dead storage. Reservoir is used to store water for irrigation.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR 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, and Dec. 23, 24, 1941, elevation, 4,275.00 ft; maximum elevation, 4,276.10 ft, June 3 and Sept. 8, 1958; no storage, July 28 to Aug. 2, 1951, elevation, 4,200.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 51,702 acre-ft, Sept. 17-20, elevation, 4,261.10 ft; minimum, 9,685 acre-ft, Oct. 1-4, elevation, 4,237.00 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9685	28775	33470	38196	43853	50012	47813	45674	27075	29952	39144	42078
2	9685	29164	33686	38431	44368	50012	47813	44110	27821	30958	38905	43341
3	9685	29164	33686	38431	44627	50012	47542	42078	28010	32197	38905	43341
4	9685	29359	33902	38668	44627	50012	47542	40106	29164	33686	38905	43341
5	9849	29556	34120	38905	44888	50012	47542	38196	29359	34338	38905	46736
6	9849	29753	34120	38905	44888	50012	47542	36119	29556	35221	39144	47272
7	9849	29952	34338	39144	45149	49734	47542	35668	29556	35444	39144	48357
8	9849	30151	34557	39383	45938	49734	47272	35221	29556	35444	39383	49456
9	9849	30151	34778	39383	46203	49603	47272	34999	29556	35444	39383	50291
10	10099	30351	34778	39623	46469	49603	47272	34557	29556	35444	39864	50571
11	10793	30552	34999	39865	46469	49603	47272	34338	29359	36346	40106	50852
12	12393	30552	34999	40106	46736	49603	47542	34120	29164	37033	40106	50852
13	12998	30552	35221	40349	47003	49603	47813	33902	29164	37495	40106	51135
14	12998	30755	35444	40594	47272	49180	48048	33902	29164	37495	40106	51418
15	12998	30958	35444	40839	47542	49180	48357	33902	28969	37495	40106	51418
16	13308	31162	35668	40839	47813	49180	48357	34120	28775	37728	40106	51418
17	18758	31367	35893	41087	48084	48905	48357	34120	28582	37728	40106	51702
18	27446	31579	35893	41331	48357	48905	48357	34120	28582	37961	40106	51702
19	27633	31780	36119	41579	48357	48905	48357	34338	28582	37961	39864	51702
20	28200	31780	36346	41579	48630	48905	48357	34338	28391	37961	39864	51702
21	28391	31988	36574	41828	48630	48905	48357	34557	28391	37728	39625	51135
22	28582	32197	36803	41828	48905	48630	48357	34557	28391	37728	39864	51135
23	28775	32407	36803	42078	49180	48630	48357	34338	28010	37495	40106	51135
24	28969	32407	37033	42328	49180	48630	48048	32407	28010	37961	40349	51135
25	28969	32407	37263	42328	49456	48357	48048	30351	28010	38431	40594	51135
26	28969	32618	37263	42580	49456	48357	47813	29164	28391	38668	40595	51135
27	28969	33042	37495	42833	49734	48048	47813	27260	28969	39144	40839	50852
28	28775	33042	37728	42833	49734	48048	47542	27075	29164	39144	41331	50852
29	28775	33259	37728	43086	---	48048	47542	27075	29359	39144	41579	50571
30	28775	33470	37961	43596	---	47813	47542	27075	29556	39144	41579	50571
31	28775	---	38196	43853	---	47813	---	27260	---	39144	41828	---
MAX	28969	33470	38196	43853	49734	50012	48357	45674	29556	39144	41828	51702
MIN	9685	28775	33470	38196	43853	47813	47272	27075	27075	29952	38905	42078
(†)	+19095	+4695	+4726	+5657	+6138	-1921	-271	-20282	+2296	+9588	+2684	+8743

CAL YR 1985 MAX 46200 MIN 8680 (†) +5366
WTR YR 1986 MAX 51702 MIN 9685 (†) +41148

(†) CHANGE IN CONTENTS, IN ACRE-FEET.

08384000 LAKE SUMNER NEAR FORT SUMNER, NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4237.00	4251.50	4253.80	4255.90	4258.20	4260.50	4259.70	4258.90	4250.60	4252.10	4256.30	4257.50
2	4237.00	4251.70	4253.90	4256.00	4258.40	4260.50	4259.70	4258.30	4251.00	4252.60	4256.20	4258.00
3	4237.00	4251.70	4253.90	4256.00	4258.50	4260.50	4259.60	4257.50	4251.10	4253.20	4256.20	4259.00
4	4237.00	4251.80	4254.00	4256.10	4258.50	4260.50	4259.60	4256.70	4241.70	4253.90	4256.20	4259.00
5	4237.20	4251.90	4254.10	4256.20	4258.60	4260.50	4259.60	4255.90	4251.80	4254.20	4256.20	4259.30
6	4237.20	4252.00	4254.10	4256.20	4258.60	4260.50	4259.60	4255.00	4251.90	4254.60	4256.30	4259.50
7	4237.20	4252.10	4254.20	4256.30	4258.70	4260.40	4259.60	4254.80	4251.90	4254.70	4256.30	4259.90
8	4237.20	4252.20	4254.30	4256.40	4259.00	4260.40	4259.50	4254.60	4251.90	4254.70	4256.40	4260.30
9	4237.20	4252.20	4254.40	4256.40	4259.10	4260.30	4259.50	4254.50	4251.90	4254.70	4256.40	4260.60
10	4237.50	4252.30	4254.40	4256.50	4259.20	4260.30	4259.50	4254.30	4251.90	4254.70	4256.60	4260.70
11	4238.30	4252.40	4254.50	4256.60	4259.20	4260.30	4259.50	4254.20	4251.80	4255.10	4256.70	4260.80
12	4240.00	4252.40	4254.50	4256.70	4259.30	4260.30	4259.60	4254.10	4251.70	4255.40	4256.70	4260.80
13	4240.60	4252.40	4254.60	4256.80	4259.40	4260.30	4259.70	4254.00	4251.70	4255.60	4256.70	4260.90
14	4240.60	4252.50	4254.70	4256.90	4259.50	4260.20	4259.80	4254.00	4251.70	4255.60	4256.70	4261.00
15	4240.60	4252.60	4254.70	4257.00	4259.60	4260.20	4259.90	4254.00	4251.60	4255.60	4256.70	4261.00
16	4240.90	4252.70	4254.80	4257.00	4259.70	4260.20	4259.90	4254.10	4251.50	4255.70	4256.70	4261.00
17	4245.40	4252.80	4254.90	4257.10	4259.80	4260.10	4259.90	4254.10	4251.40	4255.70	4256.70	4261.10
18	4250.80	4252.90	4254.90	4257.20	4259.90	4260.10	4259.90	4254.10	4251.40	4255.80	4256.70	4261.10
19	4250.90	4253.00	4255.00	4257.30	4259.90	4260.10	4259.90	4254.20	4251.40	4255.80	4256.60	4261.10
20	4251.20	4253.00	4255.10	4257.30	4260.00	4260.10	4259.90	4254.20	4251.30	4255.80	4256.60	4261.10
21	4251.30	4253.10	4255.20	4257.40	4260.00	4260.10	4259.90	4254.30	4251.30	4255.70	4256.50	4260.90
22	4251.40	4253.20	4255.30	4257.40	4260.10	4260.00	4259.90	4254.30	4251.30	4255.70	4256.60	4260.90
23	4251.50	4253.30	4255.30	4257.50	4260.20	4260.00	4259.90	4254.20	4251.10	4255.60	4256.70	4260.90
24	4251.60	4253.30	4255.40	4257.60	4260.20	4260.00	4259.80	4253.30	4251.10	4255.80	4256.80	4260.90
25	4251.60	4253.30	4255.50	4257.60	4260.30	4259.90	4259.80	4252.30	4251.10	4256.00	4256.90	4260.90
26	4251.60	4253.40	4255.50	4257.70	4260.30	4259.90	4259.70	4251.70	4251.30	4256.10	4256.90	4260.90
27	4251.60	4253.60	4255.60	4257.80	4260.40	4259.80	4259.70	4250.70	4251.60	4256.30	4257.00	4260.80
28	4251.50	4253.60	4255.70	4257.80	4260.40	4259.80	4259.60	4250.60	4251.70	4256.30	4257.20	4260.80
29	4251.50	4253.70	4255.70	4257.90	---	4259.80	4259.60	4250.60	4251.80	4256.30	4257.30	4260.70
30	4251.50	4253.80	4255.80	4258.10	---	4259.70	4259.60	4250.60	4251.90	4256.30	4257.30	4260.70
31	4251.50	---	4255.90	4258.20	---	4259.70	---	4250.70	---	4256.30	4257.40	---
MEAN	4244.43	4252.68	4254.83	4257.00	4259.46	4260.16	4259.71	4254.03	4251.18	4255.22	4256.66	4260.40
MAX	4251.60	4253.80	4255.90	4258.20	4260.40	4260.50	4259.90	4258.90	4251.90	4256.30	4257.40	4261.10
MIN	4237.00	4251.50	4253.80	4255.90	4258.20	4259.70	4259.50	4250.60	4241.70	4252.10	4256.20	4257.50

CAL YR 1985 MEAN 4252.30 MAX 4259.10 MIN 4235.70
WTR YR 1986 MEAN 4255.44 MAX 4261.10 MIN 4237.00

08384500 PECOS RIVER BELOW SUMNER DAM, NM
(National stream-quality accounting network station)

LOCATION.--Lat 34°36'15", long 104°23'14", in lot 1, sec.2, T.4 N., R.24 E., DeBaca County, Hydrologic Unit 13060003, on left bank 1,200 ft downstream from Sumner Dam, 2.9 mi upstream from Salado Creek, 4.6 mi northeast of Guadalupe, 12.2 mi northwest of Fort Sumner, and at mile 701.7.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--4,390 mi², 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. October 1944 to September 1974, published as "below Alamogordo Dam." Prior to October 1944, published as "near Guadalupe."

REVISED RECORDS.--WSP 1512: 1932. WSP 1632: 1942. WSP 1712: 1944.

GAGE.--Water-stage recorder and Parshall flume, with concrete control above top of flume. Elevation of gage is 4,142.67 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to Sept. 10, 1936, at site 1.5 mi upstream at different datum. Sept. 14, 1936 to Mar. 8, 1941, and June 11 to Sept. 21, 1941, at site 0.2 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Santa Rosa Lake (station 08382810) beginning April, 1980 and Lake Sumner (station 08484000) 0.3 mi upstream beginning August, 1937. Diversion for irrigation of about 12,500 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--23 years (water years 1913-25, 1927-36), 236 ft³/s, 171,000 acre-ft/yr, prior to completion of Sumner Dam.
50 years (water years 1937-86), 199 ft³/s, 144,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,800 ft³/s, Sept. 1, 1942, by computation of flow over spillway and through outlet gates of Sumner Dam by U.S. Bureau of Reclamation; maximum gage height, 13.58 ft, Sept. 22, 1941; no flow at times.
Flood of June 2, 1937, about 75,000 ft³/s, at site 1.5 mi upstream, from peak inflow to Lake Sumner.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,110 ft³/s, May 22; minimum daily, 0.21 ft³/s, Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	4.5	.27	1.0	1.3	1.5	79	1090	62	99	103	1.5
2	70	.45	.33	1.0	1.3	1.5	78	1090	35	99	104	1.7
3	70	.45	.52	1.3	1.0	94	78	1070	29	99	104	1.9
4	70	1.1	.52	1.1	1.0	97	78	1070	29	100	102	2.1
5	71	.48	.25	1.1	1.5	97	77	1070	29	100	100	1.9
6	71	.44	.33	1.3	1.3	97	77	1080	66	100	100	1.9
7	71	.45	.21	1.3	1.5	97	76	1080	93	101	100	1.9
8	71	.44	.28	.64	1.3	97	76	1080	93	102	100	1.9
9	71	.45	.28	.76	1.5	97	75	1080	98	103	100	2.1
10	71	.45	.27	.83	1.3	98	75	1080	100	103	100	2.2
11	36	.45	.29	1.0	1.3	97	75	1080	100	103	100	2.2
12	.45	.45	.43	1.1	1.1	97	74	1080	100	104	100	2.2
13	.45	.44	.45	1.4	1.2	97	74	1090	100	104	100	2.2
14	.45	.41	.45	1.3	1.2	97	78	1090	100	103	100	63
15	.53	.41	.45	1.3	1.3	97	81	1090	99	103	100	98
16	.73	.45	.55	1.3	1.3	97	81	1090	99	103	100	98
17	2.0	.42	.57	1.3	1.4	95	80	1090	99	103	99	188
18	.64	.44	.46	1.3	1.6	94	80	1090	99	103	98	252
19	.64	.45	.45	1.3	1.5	94	79	1100	98	103	97	256
20	.63	.87	.45	1.3	1.5	94	80	1100	99	102	97	256
21	.50	.89	.45	1.5	1.5	94	79	1100	99	102	97	155
22	.46	1.4	.46	1.5	1.5	94	77	1110	99	103	97	98
23	.46	2.0	.46	1.5	1.6	94	77	1100	99	103	36	98
24	40	1.8	.50	1.5	1.7	94	79	1100	99	103	1.3	98
25	90	.28	.45	1.5	1.8	94	79	1100	99	103	1.3	97
26	90	.28	.49	1.5	2.0	94	78	1090	100	103	1.4	98
27	90	.43	.58	1.5	1.6	94	78	555	99	104	1.4	98
28	90	.28	.64	1.3	1.5	93	82	82	99	104	1.5	98
29	90	.28	.57	1.3	---	93	96	83	99	104	1.5	100
30	90	.28	.81	1.3	---	92	747	77	99	104	1.5	101
31	90	---	1.0	1.3	---	83	---	82	---	103	1.6	---
TOTAL	1419.94	21.87	14.22	38.63	39.6	2755.0	3023	29169	2618	3173	2245.5	2277.7
MEAN	45.8	.73	.46	1.25	1.41	88.9	101	941	87.3	102	72.4	75.9
MAX	90	4.5	1.0	1.5	2.0	98	747	1110	100	104	104	256
MIN	.45	.28	.21	.64	1.0	1.5	74	77	29	99	1.3	1.5
AC-FT	2820	43	28	77	79	5460	6000	57860	5190	6290	4450	4520

CAL YR 1985 TOTAL 52707.14 MEAN 144 MAX 976 MIN .13 AC-FT 104500
WTR YR 1986 TOTAL 46795.46 MEAN 128 MAX 1110 MIN .21 AC-FT 92820

08384500 PECOS RIVER BELOW SUMNER DAM, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-66, 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
DEC											
02...	1530	0.41	1700	1770	8.10	8.00	0.0	4.5	1.5	11.2	890
FEB											
10...	1630	1.2	2050	2160	8.20	7.90	2.5	4.0	10	11.2	1100
APR											
28...	1300	77	2430	--	8.50	--	26.0	15.5	--	8.7	--
MAY											
05...	1530	1030	2550	2300	8.50	7.90	23.5	18.0	17	8.8	1200
AUG											
25...	1805	1.2	1410	1490	8.20	7.80	30.0	27.0	21	8.0	780

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
DEC										
02...	780	280	45	62	0.9	2.5	130	0	100	110
FEB										
10...	1000	360	54	76	1	2.3	142	0	114	116
APR										
28...	--	--	--	--	--	--	107	7.0	101	100
MAY										
05...	1100	400	50	80	1	3.2	--	--	--	--
AUG										
25...	680	250	36	48	0.8	6.9	122	0	92	100

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
DEC									
02...	90	860	88	3.7	10	1470	1400	<0.010	<0.100
FEB									
10...	108	1000	130	0.50	11	1960	1700	<0.010	<0.100
APR									
28...		--	--	--	--	--	--	<0.010	<0.100
MAY									
05...	89	1000	110	0.50	11	2040	1700	--	--
AUG									
25...	91	710	57	0.40	8.9	1260	1200	0.010	<0.100

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SAM-PLING METHOD, CODES (82398)
DEC										
02...	0.300	0.170	0.0	0.020	<0.010	56	22	<3	6	10.0
FEB										
10...	0.150	0.120	0.45	0.050	<0.010	K46	K96	64	47	10.0
APR										
28...	0.190	0.180	0.21	0.030	0.020	<1	130	--	--	10.0
MAY										
05...	--	--	--	--	--	--	--	--	--	10.0
AUG										
25...	0.120	0.090	0.88	<0.010	<0.010	100	170	6	120	10.0

08384500 PECOS RIVER BELOW SUMNER DAM, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, DISSOLVED (UG/L AS PB) (01049)
DEC										
02...	1530	--	--	91	<0.5	<1	--	<3	--	--
FEB										
10...	1630	110	<1	76	<0.5	<1	<1	<3	2	1
AUG										
25...	1805	30	2	74	<0.5	2	<1	<3	1	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SAMPLING METHOD, CODES (82398)
DEC										
02...	34	--	<10	--	--	--	3900	<6	7	10.0
FEB										
10...	35	<0.1	<10	2	1	1	5200	<6	12	10.0
AUG										
25...	35	<0.1	<10	<1	<1	<1	3100	<6	21	10.0

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAMPLING METHOD, CODES (82398)
OCT								
01...	0730	70	2400	15.0	21	4.0	--	--
02...	0800	70	2390	14.0	35	6.6	--	--
03...	0800	70	2260	14.0	44	8.3	--	--
04...	0730	71	2250	15.0	35	6.7	--	--
05...	0815	71	2360	13.0	47	9.0	--	--
06...	0800	71	2270	13.0	37	7.1	--	--
07...	0730	71	2390	14.0	64	12	--	--
08...	0800	71	2330	15.0	55	11	--	--
09...	0800	71	2330	15.0	30	5.8	--	--
10...	0800	71	2350	15.0	32	6.1	--	--
11...	1130	71	2380	15.0	61	12	--	--
24...	1600	96	1800	17.0	184	48	--	--
25...	0830	90	1670	15.0	171	42	--	--
25...	1300	90	1670	16.0	158	38	99	--
26...	0830	90	1710	15.0	89	22	--	--
27...	0800	90	1720	15.0	78	19	--	--
28...	0730	90	1720	15.0	67	16	--	--
29...	0815	90	1810	15.0	78	19	--	--
30...	0730	90	1710	15.0	56	14	--	--
31...	0800	90	1700	15.0	61	15	--	--
DEC								
02...	1530	0.41	1700	4.5	20	0.02	95	10.0
FEB								
10...	1630	1.2	2050	4.0	14	0.05	90	10.0

08384500 PECOS RIVER BELOW SUMNER DAM, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR							
03...	0800	97	2170	9.0	60	16	98
04...	0745	97	2300	9.0	15	3.9	--
05...	0730	97	2300	9.0	16	4.2	--
06...	0845	97	2310	10.0	10	2.6	--
07...	0745	97	2330	9.0	10	2.6	--
08...	0900	97	2330	10.0	12	3.1	--
09...	0845	97	2340	10.0	12	3.1	--
10...	0800	98	2350	10.0	9	2.4	--
11...	0820	98	2350	10.0	9	2.4	--
12...	0800	97	2360	10.0	7	1.8	--
13...	0730	97	2450	10.0	12	3.1	--
14...	0745	97	2470	10.0	20	5.2	--
15...	0800	97	2460	10.0	9	2.4	--
16...	0830	97	2470	10.0	7	1.8	--
17...	0730	95	2440	10.0	6	1.5	--
18...	0730	94	2440	10.0	8	2.0	--
19...	0720	94	2460	10.0	5	1.3	--
20...	0720	94	2440	9.0	7	1.8	--
21...	0815	95	2470	10.0	7	1.8	--
22...	0830	94	2500	10.0	5	1.3	--
23...	0830	94	2490	10.0	4	1.0	--
24...	0724	94	2510	10.0	8	2.0	--
25...	0800	94	2480	10.0	6	1.5	--
26...	0800	94	2470	10.0	4	1.0	--
27...	0800	94	2470	10.0	7	1.8	--
28...	0800	94	2470	11.0	7	1.8	--
29...	0800	94	2470	10.0	10	2.5	--
30...	0800	94	2470	12.0	7	1.8	--
31...	0730	91	2470	11.0	5	1.2	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM-PLING METHOD, CODES (82398)
APR								
01...	0730	79	2480	12.0	6	1.3	--	--
02...	1030	78	2480	14.0	13	2.7	--	--
03...	0745	78	2500	12.0	14	2.9	--	--
04...	0750	78	2500	12.0	21	4.4	--	--
05...	0830	77	2510	13.0	23	4.8	--	--
06...	0900	76	2550	13.0	22	4.5	--	--
07...	0830	76	2560	13.0	18	3.7	--	--
08...	1400	77	2120	14.0	35	7.3	--	--
09...	1415	75	2320	14.0	50	10	--	--
10...	0730	76	2390	13.0	34	7.0	--	--
11...	0730	76	2370	13.0	37	7.6	--	--
12...	0730	75	2380	13.0	39	7.9	--	--
13...	0845	75	2380	14.0	34	6.9	--	--
17...	1030	80	2390	15.0	56	12	--	--
18...	0745	80	2400	14.0	101	22	--	--
19...	0700	80	2410	14.0	45	9.7	--	--
20...	0830	80	2410	15.0	35	7.6	--	--
21...	0730	80	2410	14.0	38	8.2	--	--
22...	0730	86	2440	14.0	34	7.9	--	--
23...	0750	78	2430	14.0	15	3.2	--	--
24...	0730	77	2430	14.0	17	3.5	--	--
25...	0730	78	2450	15.0	20	4.2	--	--
26...	0730	79	2430	15.0	25	5.3	--	--
27...	0930	79	2440	15.0	19	4.1	--	--
28...	0930	99	2450	15.0	59	16	--	--
28...	1300	77	2430	15.5	33	6.9	78	10.0
29...	0745	96	2450	15.0	23	6.0	--	--
30...	0745	96	2440	15.0	26	6.7	--	--

08384500 PECOS RIVER BELOW SUMNER DAM, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM-PLING METHOD, CODES (82398)
MAY								
01...	0930	1090	2460	16.0	16	47	--	--
02...	0800	1090	2450	16.0	21	62	--	--
03...	0830	1070	2450	17.0	10	29	--	--
04...	0800	1070	2460	17.0	10	29	--	--
05...	1530	1030	2550	18.0	19	53	95	10.0
06...	1130	1090	2470	17.0	12	35	--	--
07...	0730	1070	2480	18.0	17	49	--	--
08...	0730	1070	2470	18.0	19	55	--	--
09...	0745	1070	2450	18.0	22	64	--	--
10...	0815	1070	2400	18.0	19	55	--	--
11...	0900	1090	2340	17.0	14	41	--	--
12...	0730	1070	2280	18.0	17	49	--	--
13...	0740	1090	2260	18.0	17	50	--	--
14...	0700	1070	2190	18.0	16	46	--	--
15...	0710	1090	2140	18.0	19	56	--	--
16...	0730	1090	1940	18.0	70	206	--	--
17...	0830	1090	1490	18.0	36	106	--	--
21...	1030	1090	1510	17.0	45	132	--	--
22...	0730	1110	1490	17.0	47	141	--	--
23...	0800	1090	1290	18.0	51	150	--	--
24...	0745	1090	1220	18.0	32	94	--	--
25...	0800	1110	1170	18.0	29	87	--	--
26...	0800	1110	1170	19.0	43	129	--	--
27...	0745	1090	1120	19.0	30	88	--	--
28...	0810	83	1190	19.0	63	14	--	--
29...	0800	83	1270	19.0	84	19	--	--
30...	0715	82	1300	18.0	56	12	97	--
31...	0800	82	1230	18.0	88	19	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN						
01...	0730	82	1300	18.0	72	16
05...	0700	29	1340	18.0	51	4.0
06...	0740	28	1420	18.0	40	3.0
07...	0815	93	1480	19.0	51	13
08...	0800	93	1440	19.0	38	9.5
09...	0730	97	1400	19.0	60	16
10...	0700	100	1360	18.0	45	12
11...	0640	100	1350	18.0	35	9.5
12...	0645	100	1330	18.0	52	14
13...	0745	100	1480	19.0	77	21
14...	0845	100	1490	20.0	76	21
15...	0845	99	1430	20.0	69	18
16...	0645	99	1410	20.0	67	18
17...	0650	99	1420	20.0	71	19
18...	0745	100	1380	21.0	78	21
19...	0700	98	1380	21.0	78	21
20...	0745	100	1380	21.0	68	18
21...	0825	99	1380	22.0	59	16
22...	0830	99	1380	22.0	72	19
23...	1545	99	1220	22.0	79	21
24...	0645	98	1330	21.0	68	18
25...	0745	99	1370	21.0	73	20
26...	0800	100	1490	21.0	71	19
27...	0740	100	1580	22.0	78	21
28...	0730	99	1580	22.0	64	17
29...	0830	99	1820	22.0	96	26
30...	0730	99	1780	23.0	76	20

08384500 PECOS RIVER BELOW SUMNER DAM, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM-PLING METHOD, CODES (82398)
JUL								
01...	0830	99	1670	23.0	88	24	--	--
02...	0800	99	1660	22.0	63	17	--	--
03...	0800	99	1620	22.0	81	22	--	--
07...	1230	101	1580	23.0	43	12	--	--
08...	0630	103	1560	22.0	43	12	--	--
09...	0800	103	1550	22.0	65	18	--	--
10...	0800	103	1540	22.0	70	19	--	--
11...	0800	103	1520	22.0	70	19	--	--
12...	0800	104	1510	22.0	43	12	--	--
13...	0800	104	1500	22.0	54	15	--	--
14...	0745	104	1490	22.0	52	15	--	--
15...	0730	103	1480	22.0	44	12	--	--
16...	0745	103	1450	22.0	42	12	--	--
17...	0745	103	1440	22.0	44	12	--	--
18...	0745	103	1430	22.0	55	15	--	--
26...	0800	104	1420	22.0	42	12	--	--
27...	0800	103	1430	22.0	45	13	--	--
28...	0800	104	1440	23.0	38	11	--	--
29...	0800	104	1440	23.0	29	8.1	--	--
30...	0745	103	1440	23.0	37	10	--	--
31...	0800	103	1440	22.0	62	17	--	--
AUG								
01...	0800	103	1440	22.0	55	15	--	--
02...	0800	103	1440	22.0	66	18	--	--
03...	0630	103	1440	22.0	54	15	--	--
04...	0800	103	1440	22.0	29	8.1	--	--
05...	0800	100	1440	22.0	55	15	--	--
06...	0800	100	1440	23.0	69	19	--	--
07...	0745	100	1330	23.0	70	19	--	--
08...	0745	100	1400	23.0	56	15	99	--
09...	0800	100	1370	23.0	43	12	--	--
10...	0800	99	1400	23.0	56	15	--	--
11...	0800	100	1350	23.0	35	9.5	--	--
12...	0730	100	1400	23.0	41	11	--	--
18...	1330	98	1320	26.0	73	19	--	--
19...	0800	97	1470	24.0	56	15	--	--
20...	0715	97	1470	23.0	55	14	--	--
21...	0730	97	1490	23.0	62	16	--	--
22...	0745	97	1450	24.0	58	15	--	--
23...	0815	51	1490	23.0	43	5.9	--	--
25...	1805	1.2	1410	27.0	24	0.08	84	10.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
SEP						
14...	0930	71	1550	21.0	55	11
15...	0745	98	1530	20.0	42	11
16...	0900	98	1550	21.0	57	15
17...	0800	98	1510	20.0	32	8.5
18...	0800	251	1520	20.0	49	33
19...	0800	256	1540	20.0	63	44
20...	0930	256	1520	20.0	35	24
21...	0900	116	1510	21.0	27	8.5
22...	0730	98	1550	19.0	35	9.3
23...	0830	98	1520	19.0	39	10
24...	0730	98	1520	19.0	43	11
25...	0730	98	1550	19.0	41	11
26...	0800	97	1530	19.0	58	15
27...	0830	98	1530	19.0	32	8.5
28...	0900	98	1560	19.0	66	17
29...	0830	100	1540	19.0	54	15
30...	0740	101	1540	18.0	32	8.7

08385000 FORT SUMNER MAIN CANAL NEAR FORT SUMNER, NM

LOCATION.--Lat 34°30'30", long 104°16'40", in SE¼SW¼SW¼ sec.1, T.3 N., R.25 E., DeBaca County, Hydrologic Unit 13060003, on right bank of concrete canal, 200 ft downstream from diversion dam on Pecos River, 3.0 mi northwest of Fort Sumner, and at Pecos River mile 684.8.

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. Elevation of gage is 4,034.7 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to March 1954 at site 2.4 mi downstream at different datum. April 1954 to March 1965 at site 1.1 mi downstream at datum 1.7 ft lower.

REMARKS.--Estimated daily discharges: July 25 and Aug. 25. Records fair except for estimated daily discharges, which are poor. Canal diverts water from Pecos River for irrigation of about 6,600 acres, 1961 determination, by the Fort Sumner Irrigation District. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--35 years (water years 1940-42, 1955-86), 49.6 ft³/s, 35,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 174 ft³/s, July 22, 1941; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	27	.00	.00	.00	.00	84	89	35	89	94	.04
2	53	.00	.00	.00	.00	.00	84	93	3.8	90	94	.00
3	50	.00	.00	.00	.00	.00	78	91	2.2	86	94	.00
4	49	.00	.00	.00	.00	53	77	90	.84	98	93	.00
5	49	.00	.00	.00	.00	102	76	89	.11	97	92	.00
6	48	.00	.00	.00	.00	98	71	88	1.3	97	92	.00
7	47	.00	.00	.00	.00	91	70	88	67	97	92	.00
8	51	.00	.00	.00	.00	89	70	88	90	98	92	.00
9	52	.00	.00	.00	.00	94	71	87	95	98	92	.00
10	47	.00	.00	.00	.00	94	72	87	96	98	92	.00
11	27	.00	.00	.00	.00	95	72	87	95	98	92	.00
12	.00	.00	.00	.00	.00	94	71	86	95	98	92	.00
13	.00	.00	.00	.00	.00	94	70	101	92	98	92	.00
14	.00	.00	.00	.00	.00	94	70	112	93	98	92	.00
15	.00	.00	.00	.00	.00	94	74	112	94	97	92	51
16	.00	.00	.00	.00	.00	92	71	112	92	97	92	90
17	.02	.00	.00	.00	.00	92	76	112	92	98	92	97
18	.00	.00	.00	.00	.00	88	73	112	92	97	91	115
19	.00	.00	.00	.00	.00	93	79	112	97	96	91	114
20	.00	.00	.00	.00	.00	89	72	112	96	93	90	114
21	.00	.00	.00	.00	.00	93	75	112	97	95	90	108
22	.00	.00	.00	.00	.00	92	71	112	96	95	90	106
23	.00	.00	.00	.00	.00	92	69	113	95	94	50	103
24	.00	.00	.00	.00	.00	93	70	110	97	92	6.0	101
25	.00	.00	.00	.00	.00	93	71	112	97	92	.00	99
26	.00	.00	.00	.00	.00	93	69	114	97	92	.00	98
27	32	.00	.00	.00	.00	91	65	113	93	94	.00	99
28	59	.00	.00	.00	.00	91	67	101	91	94	.00	100
29	63	.00	.00	.00	---	92	75	107	89	94	.00	101
30	74	.00	.00	.00	---	92	82	103	89	94	.00	103
31	72	---	.00	.00	---	89	---	110	---	94	.02	---
TOTAL	827.02	27.00	.00	.00	.00	2557.00	2195	3155	2270.25	2948	2079.02	1599.04
MEAN	26.7	.90	.00	.00	.00	82.5	73.2	102	75.7	95.1	67.1	53.3
MAX	74	27	.00	.00	.00	102	84	114	97	98	94	115
MIN	.00	.00	.00	.00	.00	.00	65	86	.11	86	.00	.00
AC-FT	1640	54	.00	.00	.00	5070	4350	6260	4500	5850	4120	3170

CAL YR 1985	TOTAL	18213.74	MEAN	49.9	MAX	117	MIN	.00	AC-FT	36130
WTR YR 1986	TOTAL	17657.33	MEAN	48.4	MAX	115	MIN	.00	AC-FT	35020

08386000 PECOS RIVER NEAR ACME, NM
(Surveillance network station)

LOCATION.--Lat 33°32'10", long 104°22'34", in SW¼NW¼ sec.14, T.9 S., R.25 E., Chaves County, Hydrologic Unit 13060007, on right bank 3.0 mi downstream from U.S. Highway 70, 3.7 mi downstream from Salt Creek, 4.7 mi southwest of Acme, 14 mi northeast of Roswell, and at mile 585.3.

DRAINAGE AREA.--11,380 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

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. Elevation of gage is 3,507 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1938, at site on highway bridge 3 mi upstream at various datums. Since Oct. 25, 1963, supplemental water-stage recorder at site opposite base gage at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Santa Rosa Lake (station 08382810) since April 1980 and by Lake Sumner (station 08384000) since August 1937. Diversions for irrigation of about 20,000 acres, 1959 determination upstream from station.

AVERAGE DISCHARGE.--49 years (water years 1938-86), 178 ft³/s, 129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s, Sept. 23, 1941, gage height, 13.71 ft, from rating curve extended above 27,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 28, 1937, reached a discharge of 53,000 ft³/s, 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 18	1230	*1,930	*6.24				

No flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	76	18	13	9.5	5.5	14	.54	210	178	.00	347
2	87	85	18	13	10	5.1	12	59	230	498	.00	230
3	85	85	18	13	10	4.4	11	710	666	329	.00	345
4	74	79	18	13	9.5	4.0	11	763	280	206	11	177
5	70	54	17	13	10	3.7	10	818	257	138	9.2	800
6	69	41	16	12	15	3.2	10	818	149	96	33	384
7	61	34	18	14	16	2.9	16	829	105	72	61	264
8	73	31	17	13	19	3.5	24	862	83	64	61	216
9	123	29	16	10	18	31	22	862	78	65	36	432
10	325	29	16	11	13	21	18	889	98	48	32	133
11	327	29	15	9.0	10	15	12	917	57	41	65	102
12	689	29	15	11	10	12	8.6	935	41	37	35	61
13	229	28	14	14	14	10	6.6	938	30	29	22	56
14	164	28	14	14	21	14	5.8	948	25	24	20	44
15	105	25	11	13	24	15	5.5	961	20	23	18	37
16	80	25	13	12	27	18	5.5	961	19	19	164	34
17	134	23	13	12	21	17	4.0	1000	15	17	147	32
18	849	22	13	11	16	16	3.7	896	13	15	73	30
19	270	21	13	10	13	15	5.1	749	45	14	32	61
20	224	20	15	10	12	14	6.2	844	38	12	20	50
21	163	20	17	10	10	15	5.5	861	147	11	19	127
22	127	20	16	10	8.6	15	5.1	857	35	9.2	51	198
23	99	20	15	10	7.7	16	5.5	903	36	12	93	322
24	80	20	15	10	7.0	15	6.2	915	47	7.2	288	158
25	68	20	15	9.5	6.6	11	7.3	924	307	7.4	336	81
26	59	19	15	9.5	6.2	10	5.5	901	192	12	207	61
27	52	19	15	9.5	5.5	9.5	2.4	954	163	5.3	125	53
28	51	19	14	9.5	5.5	15	1.2	738	105	2.3	142	45
29	81	18	14	9.5	---	26	1.2	621	107	.43	159	41
30	73	18	14	9.0	---	21	.81	415	85	.00	79	32
31	65	---	13	9.5	---	15	---	313	---	.00	57	---
TOTAL	5044	986	471	347.0	355.1	398.8	251.71	24161.54	3683	1991.83	2395.20	4953
MEAN	163	32.9	15.2	11.2	12.7	12.9	8.39	779	123	64.3	77.3	165
MAX	849	85	18	14	27	31	24	1000	666	498	336	800
MIN	51	18	11	9.0	5.5	2.9	.81	.54	13	.00	.00	30
AC-FT	10000	1960	934	688	704	791	499	47920	7310	3950	4750	9820

CAL YR 1985	TOTAL	46811.77	MEAN	128	MAX	1450	MIN	.58	AC-FT 92850
WTR YR 1986	TOTAL	45038.18	MEAN	123	MAX	1000	MIN	.00	AC-FT 89330

08386000 PECOS RIVER NEAR ACME, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
18...	1130	23	4100	3830	8.10	7.90	19.0	11.0	9.9	28	1400	1300
JAN												
10...	1030	11	4300	--	8.50	--	8.5	2.0	12.5	15	--	--
FEB												
10...	1000	19	--	4820	8.30	7.80	-0.5	1.0	12.1	25	1700	1500
MAY												
01...	1600	0.31	8010	8100	8.10	7.60	32.0	28.0	8.0	29	2600	2500
JUL												
01...	1600	76	2190	2130	7.20	7.30	31.5	31.0	7.3	26	880	790
AUG												
25...	1015	366	1030	--	8.00	--	24.0	20.5	11.8	91	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV												
18...	420	96	340	4	4.0	140	0	110	110	94	1300	480
JAN												
10...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
10...	470	120	530	6	4.1	185	0	150	152	112	1700	750
MAY												
01...	710	210	960	8	8.9	134	0	114	110	103	2600	1500
JUL												
01...	260	55	130	2	4.6	103	0	81	84	72	880	170
AUG												
25...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV												
18...	0.50	12	2700	0.300	0.250	0.270	0.23	0.80	0.040	0.040	1.8	2
JAN												
10...	--	--	--	0.200	0.230	0.140	0.26	0.60	0.020	0.010	1.4	--
FEB												
10...	0.50	11	3700	--	0.190	--	--	--	0.020	<0.010	6.1	--
MAY												
01...	0.70	12	6100	<0.100	<0.100	0.410	0.79	--	0.030	<0.010	15	--
JUL												
01...	0.50	10	1600	<0.100	<0.100	0.150	0.65	--	0.150	<0.010	4.9	2
AUG												
25...	--	--	--	0.400	0.440	0.190	2.0	2.6	--	<0.010	25	--

08386000 PECOS RIVER NEAR ACME, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV 18...	2	260	<1	<1	10	<10	2	1	270	2	1	<0.10
JAN 10...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	320	--	--	--	--	--	--	50	--	--	--
MAY 01...	--	600	--	--	--	--	--	--	60	--	--	--
JUL 01...	1	170	1	1	<10	<10	17	12	1300	11	5	0.20
AUG 25...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NITRATE TOT IN BOT MAT (MG/KG AS N) (00621)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)
NOV 18...	<0.1	<1	<1	50	30	0.8	<2.0	2.8	52	2	<1
JAN 10...	--	--	--	--	--	0.6	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--	--	--
JUL 01...	0.1	<1	1	90	50	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	2.6	--	--	--	--	--

DATE	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 18...	20	<10	10	1000	<10	160	<0.01	<10	56	3.5	87
JAN 10...	--	--	--	--	--	--	--	--	47	1.4	60
FEB 10...	--	--	--	--	--	--	--	--	190	9.7	10
MAY 01...	--	--	--	--	--	--	--	--	32	0.03	92
JUL 01...	--	--	--	--	--	--	--	--	338	69	93
AUG 25...	--	--	--	--	--	--	--	--	5230	5170	93

08387000 RIO RUIDOSO AT HOLLYWOOD, NM

LOCATION.--Lat 33°19'43", long 105°36'34", in SW¼SE¼NE¼ sec.30, T.11 S., R.14 E., Lincoln County, Hydrologic Unit 13060008, on right upstream bridge abutment on road leading to Ruidoso Downs Race Track, 0.2 mi north of U.S. Highway 70, 1.1 mi east of the Hollywood Post Office, 1.8 mi downstream from Galvilan Canyon, 2.8 mi downstream from Carrizzo Creek, and at mile 23.4. (Due to construction work, a temporary gage was installed Mar. 28, 1986, 0.95 mi upstream at different datum and used for the remainder of the water year.)

DRAINAGE AREA.--120 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,365.42 ft above National Geodetic Vertical Datum of 1929. 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.

REMARKS.--Estimated daily discharge: Oct. 22-28. Records good except for estimated daily discharges, which are poor. Village of Ruidoso diverts from right bank 7.0 mi upstream for municipal use and return a portion of this water as effluent from sewage disposal plant downstream from the gage. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--28 years (water years 1954-1981), 14.9 ft³/s, 10,800 acre-ft/yr, for period when sewage disposal plant effluent was discharged upstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s, Aug. 11, 1984, gage height, 9.68 ft, from rating curve extended above 510 ft³/s on basis of slope-area measurement of peak flow; maximum gage-height, 10.05 ft, present datum, June 17, 1965; minimum discharge, 0.30 ft³/s, Jan. 1, 1962, May 8-9, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0615	310	3.06	July 1	1430	*361	3.31
Oct. 17	0830	250	2.85	July 8	1330	174	2.62
June 26	0445	354	*3.40	Aug. 30	1300	190	2.79

Minimum discharge, 6.4 ft³/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	29	13	11	30	60	34	18	124	21	97
2	15	19	24	13	11	28	58	32	19	100	21	106
3	14	17	24	12	13	27	55	24	17	84	21	101
4	13	16	23	11	14	25	51	25	15	68	26	98
5	13	15	21	11	15	24	45	25	23	55	33	78
6	13	13	21	12	15	23	43	23	19	55	23	62
7	33	13	20	13	17	23	44	21	18	52	25	57
8	201	12	20	11	14	23	54	20	14	69	41	51
9	221	21	18	11	17	23	62	18	13	87	31	54
10	142	21	17	12	18	22	60	17	12	72	25	55
11	231	20	15	12	30	29	54	15	11	65	23	51
12	103	21	12	12	50	37	48	14	12	57	21	43
13	47	20	13	12	40	60	44	13	13	52	21	49
14	22	18	13	12	16	60	41	13	13	47	23	45
15	10	18	15	13	16	41	39	13	11	45	25	42
16	15	18	15	13	18	19	38	12	9.9	42	34	39
17	203	21	14	12	17	20	37	16	10	44	58	37
18	122	24	14	13	18	18	34	13	10	49	42	35
19	83	25	14	12	24	18	32	13	13	44	21	33
20	55	22	14	12	27	16	30	12	16	34	20	32
21	33	25	13	13	28	17	28	10	13	33	20	31
22	33	23	13	13	27	18	28	9.8	10	32	21	34
23	33	21	15	13	26	21	28	9.5	29	31	26	32
24	32	22	14	12	26	27	28	9.1	139	30	24	37
25	32	26	14	12	28	33	31	11	205	29	34	35
26	31	39	15	11	31	39	30	13	307	27	48	35
27	31	33	13	12	33	44	27	21	240	26	43	35
28	30	28	14	12	32	45	25	15	148	25	55	34
29	30	29	13	12	---	48	24	14	106	24	59	34
30	27	35	14	12	---	53	23	20	85	24	164	32
31	23	---	13	11	---	58	---	23	---	22	134	---
TOTAL	1906	656	507	375	632	969	1201	528.4	1568.9	1548	1183	1504
MEAN	61.5	21.9	16.4	12.1	22.6	31.3	40.0	17.0	52.3	49.9	38.2	50.1
MAX	231	39	29	13	50	60	62	34	307	124	164	106
MIN	10	12	12	11	11	16	23	9.1	9.9	22	20	31
AC-FT	3780	1300	1010	744	1250	1920	2380	1050	3110	3070	2350	2980

CAL YR 1985	TOTAL	15546.8	MEAN	42.6	MAX	231	MIN	5.0	AC-FT	30840
WTR YR 1986	TOTAL	12578.3	MEAN	34.5	MAX	307	MIN	9.1	AC-FT	24950

08390500 RIO HONDO AT DIAMOND A RANCH, NEAR ROSWELL, NM

LOCATION.--33°20'57", long 104°51'05", in NE¼NE¼ sec.20, T.11 S, R.21 E., Chaves County, Hydrologic Unit 13060008, on right bank 15 ft downstream from county road bridge at Diamond A Ranch, 1.3 mi south of U.S. Highway 70-380, 13 mi upstream from Two Rivers Reservoir, 21 mi upstream from mouth of Rocky Arroyo, 18 mi west of Roswell, and at mile 44.7.

DRAINAGE AREA.--947 mi², 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, State Engineer Office, Streamflow and Reservoir Content 1888-1954.

REVISED RECORDS.--WSP 1392: Drainage area. WSP 1512: 1939-40(P), 1941, 1942-43(P), 1946(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,190 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 11, 1965 at site on left bank at same datum.

REMARKS.--Estimated daily discharges: Nov. 15-27. Records fair except for estimated daily discharges, which are poor. Diversions and groundwater withdrawals upstream from station for irrigation above and below station of about 6,500 acres, 1959 determination. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--47 years (water years 1940-86), 23.5 ft³/s, 17,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,800 ft³/s, June 18, 1965, gage height, 26.40 ft, from rating curve extended above 3,100 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 28.78 ft, Sept. 22, 1941; no flow most of the time.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on June 1, 1937, reached a discharge of 24,900 ft³/s, at Riverside about 13 mi upstream. Other major floods occurred Oct. 31, 1901, Sept. 29, 30, 1904 and July 25, 1905.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	1200	1,750	19.51	June 26	2300	*54,000	*26.39
Sept. 21	0130	1,250	16.76				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	75	30	26	16	10	29	.41	.00	370	7.6	289
2	1.8	83	31	26	16	9.6	32	.06	.11	371	2.0	333
3	1.0	80	21	26	15	9.2	41	.00	35	288	.00	254
4	.71	76	22	26	13	9.1	40	.00	40	225	.00	221
5	.36	70	22	27	16	13	31	.00	15	183	.00	201
6	.00	65	22	28	16	12	28	.00	11	140	17	158
7	.00	57	22	33	17	8.5	24	.00	6.2	129	14	143
8	.00	53	22	37	17	9.5	21	.00	3.3	108	119	129
9	343	51	20	36	22	8.6	23	.00	4.9	158	79	118
10	365	48	23	36	25	9.4	35	.00	5.5	197	95	113
11	347	38	27	35	24	6.8	41	.00	.83	169	75	107
12	650	28	29	34	24	6.6	38	.00	.00	144	59	100
13	375	28	31	33	40	9.7	32	.00	.00	123	55	94
14	251	28	32	29	46	24	25	.00	.00	103	56	187
15	165	27	31	28	33	31	20	.00	.00	86	52	103
16	128	26	26	28	25	26	19	.00	.00	68	48	92
17	636	25	24	28	22	14	19	.00	.00	49	54	84
18	692	25	23	26	18	13	16	.00	.00	56	75	62
19	430	23	21	23	17	11	15	.00	.00	63	63	50
20	326	24	22	22	19	9.9	18	.00	.00	57	30	48
21	265	27	19	22	21	6.6	14	.00	.00	42	22	220
22	202	29	24	22	13	2.5	11	.00	.00	46	25	42
23	169	28	28	21	10	1.4	8.8	.00	2.7	78	53	35
24	132	27	28	22	14	.08	5.5	.00	917	53	81	45
25	113	26	28	22	11	.88	2.8	.00	1670	37	66	40
26	99	25	27	20	10	3.4	3.0	.00	3450	28	116	36
27	84	23	27	19	12	7.2	4.0	.00	2490	23	107	35
28	74	22	30	19	11	10	4.4	.00	604	19	108	38
29	71	22	29	18	---	22	2.6	.00	396	12	120	39
30	74	23	28	16	---	33	1.6	.00	357	12	163	35
31	69	---	26	16	---	34	---	.00	---	11	380	---
TOTAL	6065.57	1182	795	804	543	371.96	604.7	.47	10008.54	3448	2141.60	3451
MEAN	196	39.4	25.6	25.9	19.4	12.0	20.2	.01	334	111	69.1	115
MAX	692	83	32	37	46	34	41	.41	3450	371	380	333
MIN	.00	22	19	16	10	.08	1.6	.00	.00	11	.00	35
AC-FT	12030	2340	1580	1590	1080	738	1200	.9	19850	6840	4250	6850

CAL YR 1985	TOTAL	25614.58	MEAN	70.2	MAX	692	MIN	.00	AC-FT	50810
WTR YR 1986	TOTAL	29415.84	MEAN	80.6	MAX	3450	MIN	.00	AC-FT	58350

08390600 TWO RIVERS RESERVOIR NEAR ROSWELL, NM

LOCATION.--08390610 Rio Hondo Reservoir: Lat 33°17'55", long 104°43'20", in SW¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, Hydrologic Unit 13060008, near center of Diamond A Dam on Rio Hondo, 13 mi southwest of Roswell at mile 33.4; 08390620 Rocky Arroyo Reservoir: Lat 33°16'20", long 104°43'20", in NW¼SE¼NE¼ sec.16, T.12 S., R.22 E., at left end of Rocky Dam on Rocky Arroyo, and 14 mi southwest of Roswell.

DRAINAGE AREA.--1,027 mi²; Rio Hondo, 963 mi²; Rocky Arroyo, 64 mi².

PERIOD OF RECORD.--July 1963 to current year (prior to October 1965 month end contents only). Prior to October 1966 contents at 0800 hours.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Two Rivers Reservoir, completed July 16, 1963, is formed by earthfill dams, on Rio Hondo, which forms Rio Hondo Reservoir, and on 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 166,200 acre-ft, at elevation 4,032.0 ft, crest of ungated spillway. Capacity of Rio Hondo Reservoir, 181 acre-ft, between elevations 3,957.0 ft, sill of outlet gate, and 3,980.0. Capacity of Rocky Arroyo Reservoir, 13,410 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 from new capacity table put into use Jan. 1, 1972.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Rio Hondo Reservoir: maximum contents at 0800 hours, 1,260 acre-ft, July 29, 1965, elevation, 3,985.7 ft; no storage most of time.
Rocky Arroyo Reservoir: maximum contents at 0800 hours, 6,090 acre-ft, June 18, 1965, elevation, 3,970.7 ft; no storage most of time.

EXTREMES FOR CURRENT YEAR.--Maximum contents at 2400 hours, Rio Hondo Res., 871 acre-ft, June 24, elevation, 3,986.40 ft; Rocky Arroyo Res. at 2400 hours, 4,881 acre-ft, June 27, elevation, 3,969.63; no contents both reservoirs most of time.

CONTENTS, IN ACRE-FEET, AND ELEVATION, IN FEET, WATER YEAR, OCTOBER 1985 TO SEPTEMBER 1986.

NO CONTENTS AT 2400 HOURS DURING YEAR EXCEPT:

RIO HONDO RESERVOIR

DATE	ELEVATION	CONTENTS	DATE	ELEVATION	CONTENTS
Oct. 9	3979.40	152	June 25	3985.90	790
10	3979.38	150	26	3985.80	774
11	3973.00	14	27	3985.13	675
12	3974.20	24	28	3985.66	754
13	3974.40	26	29	3985.40	715
14	3974.42	27	30	3985.02	685
15	3965.80	1	July 1	3985.24	691
16	3965.60	1	2	3984.98	653
17	3982.60	378	3	3984.87	639
18	3984.10	540	4	3985.86	783
19	3983.20	438	5	3984.14	545
20	3982.70	388	6	3985.62	748
21	3981.00	244	7	3983.20	438
22	3978.30	106	8	3981.00	244
June 24	3986.40	871	9	3979.41	152

ROCKY ARROYO RESERVOIR

DATE	ELEVATION	CONTENTS	DATE	ELEVATION	CONTENTS
Oct. 17	3949.40	60	June 30	3963.63	2,242
20	3949.30	1	July 1	3963.20	2,108
June 24	3967.50	3,750	2	3961.00	1,516
25	3969.00	4,532	3	3960.90	1,493
26	3967.50	3,750	4	3955.20	485
27	3969.63	4,881	5	3954.80	438
28	3969.59	4,321	6	3952.50	220
29	3967.34	3,705			

08390800 RIO HONDO BELOW DIAMOND A DAM, NEAR ROSWELL, NM

LOCATION.--Lat 33°18'05", long 104°43'12", in NE¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, Hydrologic Unit 13060008, on left bank, 500 ft downstream from outlet conduit of Diamond A Dam (Two Rivers Reservoir), 13 mi southwest of Roswell, and at mile 33.3.

DRAINAGE AREA.--963 mi², contributing area.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,949.68 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Estimated daily discharges: Oct. 24 to Nov. 1, 24, Dec. 11-20, Jan. 10-14, Feb. 9-24, June 24, 25, and Aug. 2-19. Records good except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation of about 6,500 acres, 1959 determination, upstream from station. This record represents the outflow from Two Rivers Reservoir through Diamond A Dam; flow from reservoir can also be discharged into Rocky Arroyo through Rocky Dam (see REMARKS for station 08390600). Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--23 years, 12.2 ft³/s, 8,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 659 ft³/s, July 29, 1965, gage height, 4.91 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 588 ft³/s, Oct. 18, gage height, 3.71 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	78	27	20	4.1	2.4	23	.00	.00	2.0	9.3	326
2	3.7	77	28	20	3.8	7.5	25	.00	.00	.05	6.3	336
3	2.4	74	20	20	3.3	9.8	33	.00	11	36	.29	319
4	.90	67	20	20	2.0	7.7	35	.00	29	79	.00	240
5	.87	61	20	21	5.6	3.3	33	.00	10	78	.00	197
6	.50	57	21	22	4.3	2.2	31	.00	6.0	78	3.1	174
7	.39	49	20	26	7.1	.70	25	.00	2.2	72	29	141
8	.36	45	18	26	7.7	.01	18	.00	.24	137	105	128
9	166	43	16	24	11	.00	17	.00	.00	147	47	109
10	322	41	20	22	19	.00	26	.00	.76	140	80	98
11	284	34	23	22	18	4.9	35	.00	.20	126	58	93
12	347	22	22	23	16	6.6	32	.00	.00	109	50	88
13	353	22	25	23	24	7.5	27	.00	.00	87	47	81
14	340	22	26	23	32	18	22	.00	.00	69	46	110
15	196	21	24	22	23	28	16	.00	.00	58	45	99
16	116	20	23	22	14	28	15	.00	.00	46	40	81
17	200	20	22	22	9.8	18	17	.00	.00	26	44	71
18	349	19	20	21	4.6	14	11	.00	.25	34	56	58
19	291	18	18	19	4.2	15	11	.00	.64	40	34	44
20	283	19	17	17	4.6	9.3	17	.00	.01	46	16	41
21	273	20	15	16	6.6	6.0	14	.00	.00	28	4.4	93
22	252	22	16	12	2.9	2.8	7.0	.00	.00	24	5.7	84
23	184	22	22	9.8	.45	.53	5.5	.00	.11	51	13	37
24	108	20	22	9.5	.05	.02	2.4	.00	78	41	76	41
25	93	19	22	9.2	.00	.01	.92	.00	.26	23	45	33
26	86	17	22	10	.00	.00	.01	.00	.09	15	87	32
27	85	19	22	7.9	.00	1.2	.00	.00	.05	7.6	99	29
28	83	19	23	7.2	2.6	4.1	.87	.00	.00	4.9	96	32
29	81	17	22	5.5	---	13	.77	.00	.00	1.3	113	34
30	88	18	22	4.3	---	23	.00	.34	3.8	2.4	123	31
31	80	---	19	5.0	---	30	---	.04	---	12	333	---
TOTAL	4672.42	1002	657	531.4	230.70	263.57	500.47	.38	142.61	1620.25	1711.09	3280
MEAN	151	33.4	21.2	17.1	8.24	8.50	16.7	.01	4.75	52.3	55.2	109
MAX	353	78	28	26	32	30	35	.34	78	147	333	336
MIN	.36	17	15	4.3	.00	.00	.00	.00	.00	.05	.00	29
AC-FT	9270	1990	1300	1050	458	523	993	.7	283	3210	3390	6510

CAL YR 1985	TOTAL	20613.65	MEAN	56.5	MAX	367	MIN	.00	AC-FT	40890
WTR YR 1986	TOTAL	14611.89	MEAN	40.0	MAX	353	MIN	.00	AC-FT	28980

08393500 RIO HONDO AT ROSWELL, NM

LOCATION.--Lat 33°22'19", long 104°32'42", in NE¼SE¼ sec.7, T.11 S., R.24 E., Chaves County, Hydrologic Unit 13060008, on left bank, 0.3 mi upstream from Sunset Ave. bridge in Roswell, 6.3 mi downstream from Rocky Arroyo and 11.7 mi upstream from mouth. Mouth at Pecos River mile 566.0.

DRAINAGE AREA.--1,070 mi², approximately, contributing area.

PERIOD OF RECORD.--February 1981 to current year. Records for June 1903 to February 1906, published in WSP 358, are unreliable and should not be used.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water-stage recorder. Elevation of gage is 3,615 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-8, Feb. 6-20, June 24 to July 7, and July 8, 11. Records fair except for estimated daily discharges, which are poor. Flow regulated by Two Rivers Reservoir (station 08390600). Diversions and ground-water withdrawals for irrigation upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--5 years, 20.2 ft³/s, 14,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 373 ft³/s, Dec. 23, 1984, gage height, 6.73 ft, from rating curve extended above 354 ft³/s; maximum gage height, 7.5 ft, May 3, 1981, from floodmarks; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 334 ft³/s, Sept. 2, gage height, 5.86 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	74	18	18	5.5	.00	3.4	.00	.00	150	3.2	260
2	.00	75	19	18	4.4	.00	5.5	.00	.00	142	1.0	248
3	.00	70	17	18	3.5	.75	13	.00	.00	140	.03	238
4	.00	65	16	19	2.5	1.1	20	.00	10	162	.00	203
5	.00	61	16	19	.99	.01	16	.00	2.0	130	.00	188
6	.00	58	16	19	5.8	.00	10	.00	.21	93	.00	160
7	.00	48	16	21	6.0	.00	7.2	.00	.00	66	5.5	126
8	.00	40	15	22	7.5	.00	4.0	.00	.00	97	45	106
9	80	37	14	22	14	.00	3.2	.00	.00	120	54	94
10	279	35	15	23	19	.00	5.7	.00	.00	115	77	86
11	249	39	17	23	14	.00	15	.00	.00	105	59	82
12	270	19	19	23	15	.00	19	.00	.00	89	27	78
13	281	19	20	23	17	.62	15	.00	.00	68	14	74
14	272	19	19	22	22	5.3	12	.00	.00	53	14	93
15	218	18	19	21	19	17	6.4	.00	.00	43	8.8	96
16	132	18	21	21	12	18	2.3	.00	.00	34	7.3	81
17	203	18	16	21	7.4	13	4.4	.00	.00	17	6.8	72
18	261	17	17	21	5.4	6.1	2.7	.00	.16	15	13	62
19	290	16	16	20	2.5	5.2	1.2	.00	.77	20	25	42
20	238	16	16	18	1.2	2.2	6.5	.00	.00	31	13	34
21	203	17	14	18	1.2	.04	4.6	.00	.00	17	2.2	59
22	198	18	14	15	2.9	.00	.47	.00	.00	9.9	.28	79
23	174	18	17	13	.05	.00	.08	.00	.00	28	.69	32
24	126	18	18	12	.00	.00	.00	.00	53	28	71	24
25	111	17	18	12	.00	.00	.00	.00	131	14	54	20
26	103	15	18	13	.00	.00	.00	.00	159	12	83	20
27	93	16	18	11	.00	.00	.00	.00	158	3.6	100	20
28	84	16	19	10	.00	.00	.00	.00	162	.40	106	30
29	79	16	19	8.5	---	.18	.00	.00	164	.00	127	34
30	79	15	18	6.4	---	11	.00	.43	155	.00	133	32
31	71	---	18	6.0	---	12	---	.01	---	1.7	226	---
TOTAL	4094.00	928	533	536.9	188.84	92.50	177.65	.44	995.14	1804.60	1276.80	2773
MEAN	132	30.9	17.2	17.3	6.74	2.98	5.92	.01	33.2	58.2	41.2	92.4
MAX	290	75	21	23	22	18	20	.43	164	162	226	260
MIN	.00	15	14	6.0	.00	.00	.00	.00	.00	.00	.00	20
AC-FT	8120	1840	1060	1060	375	183	352	.9	1970	3580	2530	5500

CAL YR 1985	TOTAL	17331.33	MEAN	47.5	MAX	291	MIN	.00	AC-FT	34380
WTR YR 1986	TOTAL	13400.87	MEAN	36.7	MAX	290	MIN	.00	AC-FT	26580

08394100 PECOS RIVER NEAR HAGERMAN, NM

LOCATION.--Lat 33°10'08", long 104°18'24", in SE¼SW¼SE¼ sec.23, T.13 S., R.26 E., Chaves County, Hydrologic Unit 13060007, on left bank 3.4 mi upstream from Rio Felix, 4.9 mi north of Hagerman, and at mile 544.6.

DRAINAGE AREA.--13,630 mi², approximately (contributing area).

PERIOD OF RECORD.--February 1968 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Elevation of gage is 3,390 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10-13, May 29 to June 2, June 12, and Sept. 7, 8. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April 1980, by Lake Sumner (station 08384000) since August 1937 and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrgation of about 80,000 acres upstream from station. Several observations of water temperatures were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge determined, 3,700 ft³/s, Sept. 11, 1969; no flow at times in 1971, 1974, 1976, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge greater than 1,200 ft³/s, Oct. 12, 13, 18, 19, June 24-26, July 2, 3, and Sept. 5, 6; minimum, 13 ft³/s, May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	132	46	42	48	35	38	17	204	324	15	246
2	93	136	46	40	48	35	33	20	190	---	15	717
3	93	143	47	40	48	35	29	135	629	---	15	491
4	90	140	48	40	47	35	26	586	401	436	17	311
5	82	136	46	39	47	34	29	671	212	359	18	---
6	78	119	46	40	48	33	32	704	217	275	17	---
7	77	101	47	44	49	32	29	698	157	182	19	456
8	76	90	47	60	50	31	25	729	127	145	32	268
9	80	83	47	56	53	31	25	778	120	176	67	359
10	208	79	45	52	58	29	33	774	114	183	69	238
11	300	75	44	50	64	41	35	773	113	164	64	185
12	---	71	45	50	73	45	33	757	97	116	72	156
13	---	68	44	49	71	42	32	791	76	100	63	127
14	383	65	41	49	74	42	26	779	65	86	48	129
15	291	62	40	51	84	37	23	798	59	70	31	144
16	204	61	43	51	89	41	22	786	51	61	28	139
17	181	58	42	50	79	47	20	823	46	54	87	121
18	---	56	43	46	72	41	17	1010	43	45	112	109
19	---	55	43	44	67	40	17	841	62	39	86	97
20	467	51	47	43	61	40	16	764	70	39	58	99
21	313	51	53	41	58	39	17	808	86	40	42	92
22	284	51	52	40	55	38	20	823	106	36	30	163
23	254	51	49	38	53	37	18	827	78	31	54	296
24	200	51	46	38	50	38	16	821	---	33	64	271
25	156	51	45	37	45	37	15	803	---	38	305	190
26	146	50	44	37	38	37	14	948	---	29	191	123
27	162	49	44	37	36	34	14	1000	390	24	206	99
28	148	49	43	39	34	32	15	948	300	27	159	89
29	130	48	43	49	---	31	16	755	253	21	155	86
30	137	47	43	49	---	33	16	653	288	18	192	84
31	139	---	43	48	---	41	---	326	---	16	155	---
TOTAL	---	2279	1402	1389	1599	1143	701	21946	---	---	2486	---
MEAN	---	76.0	45.2	44.8	57.1	36.9	23.4	708	---	---	80.2	---
MAX	---	143	53	60	89	47	38	1010	---	---	305	---
MIN	---	47	40	37	34	29	14	17	---	---	15	---
AC-FT	---	4520	2780	2760	3170	2270	1390	43530	---	---	4930	---

08394500 RIO FELIX AT OLD HIGHWAY BRIDGE, NEAR HAGERMAN, NM

LOCATION.--Lat 33°07'30", long 104°20'40", in SW¼SW¼SE¼ sec.4, T.14 S., R.26 E., Chaves County, Hydrologic Unit 13060009, near left bank on downstream side of abandoned bridge pier, 0.6 mi upstream from alternate U.S. Highway 285, 1.3 mi northwest of Hagerman, and 2.7 mi upstream from mouth. Mouth at Pecos River mile 541.4.

DRAINAGE AREA.--932 mi², contributing area.

PERIOD OF RECORD.--April 1939 to current year. March 1932 to April 1939 at site 1 mi downstream; records for periods of low flow not equivalent, owing to inflow between sites.

REVISED RECORDS.--WSP 928: 1940(M). WSP 1562: 1939-40, 1941(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,403.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 19 to Feb. 20, June 29 to July 1, July 3, 5-10, Aug. 31 to Sept. 2, and Sept. 4, 5, 10-30. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 350 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--47 years, 14.4 ft³/s, 10,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,000 ft³/s, Oct. 7, 1954, gage height, 27.5 ft, from floodmarks, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement at point 5.5 mi upstream from gage (adjusted for channel storage); no flow for many periods.
Flood in 1954 is the highest since 1894 (information from local residents).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 1, 1904, is probably second highest since 1894; another major flood occurred in April, 1915.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	2130	*17,900	*20.81	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	.94	.00	.00	.00	.00	.00	.00	.00	29	.00	.51
2	5.3	2.5	1.9	.00	.00	.00	.00	.00	.00	184	.00	2.4
3	5.4	6.0	.00	.00	.00	.00	.00	.00	.00	45	.00	.11
4	3.9	.95	.00	.00	.00	.00	.00	.00	.00	256	.00	.82
5	2.9	.00	.00	.00	.00	.00	.00	.00	6.1	4.0	.00	.42
6	2.4	.00	.00	.00	.00	.00	.00	.00	4.7	2.5	.00	.00
7	1.7	.00	.00	.00	.00	.00	.00	.00	1.2	1.5	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.01	.70	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	1.3	.20	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.61	.10	.00	.00
11	13	.00	.00	.00	.00	.00	.00	.00	1.5	.00	.00	8.0
12	6.4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
13	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14
14	20	.00	2.7	.00	.00	.00	.00	.00	.00	.00	.00	13
15	2.2	.00	3.4	.00	.00	.00	.00	.00	.00	.00	.00	12
16	11	.00	8.6	.00	.00	3.0	.00	.00	.00	.00	.00	12
17	15	.00	.00	.00	.00	3.9	.00	.00	.00	.00	.00	11
18	23	2.6	.00	.00	.00	4.8	.00	.00	.00	.00	.00	10
19	23	2.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
20	26	.26	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.0
21	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.0
22	.02	2.0	.00	.00	.00	.00	.00	.00	1.0	.00	.00	20
23	.00	.50	.00	.00	.00	.00	.00	.00	6.8	.00	.00	21
24	.00	.00	.00	.00	.00	.00	.00	.00	4530	.00	.00	17
25	14	.00	.00	.00	.00	.00	.00	.00	10000	.00	.00	15
26	16	.00	.00	.00	.00	.00	.00	.00	2390	.00	.00	12
27	15	.00	.00	.00	.00	.00	.00	.00	811	.00	.00	12
28	6.4	.00	.00	.00	.00	.00	.00	.00	139	.00	.00	10
29	2.5	.00	.00	.00	---	.00	.00	.00	38	.00	.00	10
30	.10	.00	.00	.00	---	.00	.00	.00	15	.00	.00	8.0
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.18	---
TOTAL	259.22	18.25	16.60	.00	.00	11.70	.00	.00	17946.22	523.00	.18	249.26
MEAN	8.36	.61	.54	.00	.00	.38	.00	.00	598	16.9	.01	8.31
MAX	26	6.0	8.6	.00	.00	4.8	.00	.00	10000	256	.18	21
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	514	36	33	.00	.00	23	.00	.00	35600	1040	.4	494

CAL YR 1985	TOTAL	1028.20	MEAN	2.82	MAX	222	MIN	.00	AC-FT 2040
WTR YR 1986	TOTAL	19024.43	MEAN	52.1	MAX	10000	MIN	.00	AC-FT 37730

08395500 PECOS RIVER NEAR LAKE ARTHUR, NM

LOCATION.--Lat 32°59'18", long 104°19'20", in SW¼NE¼ sec.27, T.15 S., R.26 E., Chaves County, Hydrologic Unit 1306007, on left bank 400 ft upstream from county bridge, 2.5 mi east of Lake Arthur, 7 mi upstream from Cottonwood Creek, 11 mi northeast of Artesia, and at mile 522.0.

DRAINAGE AREA.--14,760 mi², approximately (contributing area).

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

GAGE.--Water-stage recorder and rock control. Elevation of gage is 3,327.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 2, 3, Nov. 11-13, Mar. 5, 6, 8, 11, 12, May 9, June 27-30, July 2-11, 15-22, July 28 to Aug. 9, and Sept. 8, 10, 11. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April 1980, by Lake Sumner (station 08384000) since August 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 124,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--48 years, 225 ft³/s, 163,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft³/s, Sept. 24, 1941, gage height, 21.90 ft, from rating curve extended above 16,100 ft³/s on basis of slope-area measurement at gage height 21.77 ft; no flow at times in 1947, 1953-4, 1962, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1937, reached a stage of 21.77 ft, discharge, 51,500 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft³/s, June 26, gage height, 18.14 ft; minimum, 3.2 ft³/s, Apr. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	149	67	63	53	44	20	12	292	369	18	363
2	102	149	66	63	53	42	15	17	244	1210	18	434
3	97	148	66	63	54	42	15	26	424	1330	19	467
4	94	151	67	62	53	41	9.0	556	609	1260	20	441
5	90	153	68	62	54	42	6.0	621	340	948	20	468
6	87	147	68	62	54	44	8.6	678	252	541	19	680
7	86	135	66	63	55	41	17	682	229	365	19	620
8	87	126	66	64	56	40	9.3	677	161	302	19	350
9	85	109	66	68	57	41	4.9	730	155	262	22	286
10	139	100	66	71	58	41	4.9	741	131	244	59	479
11	337	95	65	72	60	42	14	762	115	238	63	269
12	493	95	64	72	65	48	17	764	120	217	54	246
13	730	90	64	71	68	53	16	777	92	208	61	202
14	436	83	62	70	72	51	21	767	77	196	49	183
15	385	78	61	69	73	50	14	742	66	153	42	167
16	321	79	62	67	78	42	10	752	58	134	36	160
17	260	77	66	63	86	50	9.9	766	43	102	32	147
18	282	74	62	62	87	59	7.7	866	38	99	109	122
19	911	75	62	57	84	49	6.8	846	31	97	105	112
20	565	73	62	55	79	43	11	752	61	89	66	101
21	416	70	63	54	74	41	14	774	61	78	37	109
22	352	70	66	51	71	41	12	770	99	68	30	102
23	331	71	67	50	68	41	13	775	89	57	29	210
24	311	70	67	49	65	36	8.5	793	1170	50	35	333
25	274	70	67	48	62	37	6.9	783	8230	46	203	219
26	199	68	66	47	57	32	6.0	854	11500	47	296	141
27	180	69	65	47	51	31	7.9	895	3850	35	184	101
28	167	66	64	47	46	31	19	953	1130	30	154	98
29	154	66	63	48	---	28	17	788	397	22	123	92
30	141	67	63	52	---	25	13	650	353	18	112	87
31	149	---	63	54	---	30	---	488	---	18	120	---
TOTAL	8348	2873	2010	1846	1793	1278	354.4	21057	30417	8833	2173	7789
MEAN	269	95.8	64.8	59.5	64.0	41.2	11.8	679	1014	285	70.1	260
MAX	911	153	68	72	87	59	21	953	11500	1330	296	680
MIN	85	66	61	47	46	25	4.9	12	31	18	18	87
AC-FT	16560	5700	3990	3660	3560	2530	703	41770	60330	17520	4310	15450

CAL YR 1985	TOTAL	60939.2	MEAN	167	MAX	1240	MIN	9.3	AC-FT	120900
WTR YR 1986	TOTAL	88771.4	MEAN	243	MAX	11500	MIN	4.9	AC-FT	176100

08396500 PECOS RIVER NEAR ARTESIA, NM
(Surveillance program station)

LOCATION.--Lat 32°50'27", long 104°19'23", in NW¼NW¼ sec.18, T.17 S., R.27 E., Eddy County, Hydrologic Unit 13060007, on left bank 250 ft upstream from bridge on State Highway 83, 4.3 mi east of Artesia, 7.0 mi upstream from Rio Penasco, 17 mi upstream from McMillan Dam, and at mile 503.9.

DRAINAGE AREA.--15,300 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

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."

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Elevation of gage is 3,291.92 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). See WSP 1923 or 2123 for history of changes prior to Apr. 5, 1941. Apr. 5, 1941 to Apr. 2, 1981, water-stage recorder at site 250 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Mar. 24 to Apr. 1 and June 28 to July 9. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April 1980, by Lake Sumner (station 08384000) since August 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 154,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--50 years (water years 1937-86), 239 ft³/s, 173,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge probably occurred May 30, 1937, when a discharge of 51,500 ft³/s was measured by slope-area method at a point 15 mi 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1893 occurred Oct. 2, 1904, discharge not determined; the peak inflow to Lake McMillan, which includes Rio Penasco and Fourmile Draw, was estimated at 82,000 ft³/s. The second highest flood occurred July 25, 1905, discharge below Rio Penasco, 50,300 ft³/s, 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 27	0330	*12,300	*12.61	No other peak greater than base discharge.			

Minimum discharge, 5.9 ft³/s, April 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	157	67	60	60	44	25	12	426	491	30	317
2	97	149	67	58	62	42	22	12	258	724	28	742
3	113	154	66	57	63	42	17	15	247	997	26	698
4	101	161	70	56	61	42	17	240	606	836	27	586
5	100	161	71	56	61	43	13	525	367	827	28	631
6	96	153	70	56	62	44	10	569	221	482	26	887
7	94	138	66	59	63	41	11	600	212	373	25	575
8	92	122	68	62	63	41	17	616	170	302	25	476
9	93	112	69	66	65	41	11	623	240	257	27	314
10	95	104	65	77	72	39	8.4	650	146	262	40	438
11	348	98	63	69	75	39	8.0	667	121	269	72	313
12	467	96	64	66	76	39	13	677	113	238	66	234
13	859	91	64	65	82	49	16	710	110	203	63	196
14	542	89	64	65	86	52	14	711	88	177	68	166
15	393	82	62	65	80	51	18	699	75	146	55	148
16	311	78	62	66	94	48	14	725	65	126	51	147
17	252	81	65	66	99	44	11	718	56	114	46	158
18	293	80	66	66	96	52	9.9	765	45	106	65	130
19	878	76	61	63	86	57	8.2	796	41	95	107	120
20	659	76	60	60	80	48	7.5	729	37	84	85	118
21	465	75	62	58	74	43	10	741	69	82	63	120
22	398	74	66	59	71	41	12	734	68	83	46	116
23	355	73	71	57	68	41	11	739	107	67	39	182
24	308	73	69	56	64	43	12	745	297	61	32	329
25	244	74	68	54	62	40	8.9	751	2070	60	69	270
26	211	74	64	53	57	38	7.8	799	5000	58	338	195
27	204	72	63	53	52	37	6.8	836	9520	58	186	144
28	187	68	60	54	48	40	7.8	866	2440	48	162	138
29	184	68	60	54	---	48	16	781	887	43	137	138
30	162	68	60	59	---	36	14	681	604	37	141	137
31	159	---	61	62	---	28	---	651	---	34	184	---
TOTAL	8851	2977	2014	1877	1982	1333	377.3	19383	24706	7740	2357	9163
MEAN	286	99.2	65.0	60.5	70.8	43.0	12.6	625	824	250	76.0	305
MAX	878	161	71	77	99	57	25	866	9520	997	338	887
MIN	91	68	60	53	48	28	6.8	12	37	34	25	116
AC-FT	17560	5900	3990	3720	3930	2640	748	38450	49000	15350	4680	18170

CAL YR 1985 TOTAL 66826 MEAN 183 MAX 1330 MIN 12 AC-FT 132500
WTR YR 1986 TOTAL 82760.3 MEAN 227 MAX 9520 MIN 6.8 AC-FT 164200

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1937 to current year.
WATER TEMPERATURES: April 1949 to current year.
SUSPENDED-SEDIMENT DISCHARGES: January 1949 to current year.

REMARKS.--Water-temperature and specific-conductance recorder July 1981 to November 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 28,800 microsiemens, June 24, 1977; minimum daily, 111 microsiemens, Aug. 31, 1982.
WATER TEMPERATURES: Maximum daily, 36.0°C, July 27, 1966, July 25, 1969; minimum daily, 0.0°C on many days during winter months of most years.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 21,300 mg/L, Aug. 1, 1962; minimum daily mean, 0 mg/L on several days in 1982, 1984, and 1986.
SEDIMENT LOADS: Maximum daily, 183,000 tons, Sept. 26, 1955; minimum daily, 0 ton on many days during 1953-54, 1957, 1964, 1982, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 22,200 microsiemens, Aug. 7; minimum daily, 372 microsiemens, June 27.
WATER TEMPERATURES: Maximum daily, 34.0°C, Aug. 2; minimum daily, 1.0°C, Dec. 13.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,820 mg/L, Sept. 3; minimum daily mean, 0 mg/L, Jan. 7.
SEDIMENT LOADS: Maximum daily, 21,800 tons, June 28; minimum daily, 0 ton, Jan. 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
NOV										
04...	1345	162	4400	--	8.30	--	21.0	13.5	10.0	--
29...	1115	68	8500	8950	8.20	8.10	18.0	10.0	10.2	53
JAN										
06...	1115	57	9000	--	8.40	--	15.0	5.0	12.2	30
MAR										
04...	1145	42	11300	11700	8.50	7.80	15.0	13.0	10.8	52
MAY										
06...	1345	571	3050	3200	8.20	7.60	31.5	30.0	9.2	110
JUL										
31...	1315	71	17800	16300	7.90	7.50	31.0	27.0	--	160
AUG										
29...	1250	127	3530	--	8.11	--	20.5	21.0	7.2	47

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV										
04...	--	--	--	--	--	--	--	190	6.0	170
29...	2500	2300	640	220	1200	11	8.8	--	--	--
JAN										
06...	--	--	--	--	--	--	--	--	--	--
MAR										
04...	1600	1500	--	240	1800	20	10	195	0	146
MAY										
06...	1400	1200	550	15	210	3	11	267	0	221
JUL										
31...	3400	3200	760	360	2900	22	24	268	0	199
AUG										
29...	--	--	--	--	--	--	--	--	--	--

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV										
04...	--	--	--	--	--	--	--	--	--	--
29...	--	181	1800	2000	0.80	15	6000	1.10	1.10	0.510
JAN										
06...	--	--	--	1900	--	--	--	0.800	0.830	0.230
MAR										
04...	160	142	2400	2300	0.90	7.5	7100	<0.100	<0.100	0.200
MAY										
06...	219	101	1300	290	0.70	9.8	2500	0.200	0.160	0.340
JUL										
31...	220	192	2900	5200	0.70	15	12000	0.200	0.150	0.340
AUG										
29...	--	--	--	--	--	--	--	0.900	0.950	0.170

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	SAMPLING METHOD, CODES (82398)
NOV										
04...	--	--	--	--	--	29	72	--	--	10.0
29...	0.19	1.8	0.110	0.080	3.2	--	--	520	60	10.0
JAN										
06...	0.37	1.4	0.040	0.020	18	7	24	--	--	10.0
MAR										
04...	0.70	--	0.080	0.020	6.8	7	32	630	160	10.0
MAY										
06...	2.8	3.3	0.610	0.020	38	--	--	160	8700	10.0
JUL										
31...	0.96	1.5	0.060	<0.010	6.7	39	360	1100	60	10.0
AUG										
29...	1.0	2.1	0.060	0.010	11	290	1300	--	--	10.0

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
NOV											
04...	1345	--	--	--	--	--	--	--	--	--	--
29...	1115	2	2	1	<1	10	20	3	3	1	1
JUL											
31...	1315	3	2	<1	<1	20	10	3	3	<5	<5

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)
NOV										
04...	--	--	--	--	--	--	4.0	3.9	99	2
29...	--	<0.1	2	2	50	40	--	--	--	--
JUL										
31...	0.20	<0.1	1	1	40	40	--	--	--	--

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SAMPLING METHOD, CODES (82398)
NOV										
04...	<1	20	<10	20	950	<10	230	0.03	10	10.0
29...	--	--	--	--	--	--	--	--	--	10.0
JUL										
31...	--	--	--	--	--	--	--	--	--	10.0

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
13...	1400	858	--	18.0	6390	14800	98
19...	1715	942	--	19.0	7480	19000	--
MAY							
05...	0845	486	--	20.0	3850	5050	--
06...	1345	571	3050	30.0	2740	4220	97
07...	0856	579	--	20.0	3510	5490	--
14...	1630	687	--	23.0	2060	3820	--
26...	1907	820	--	20.0	2190	4850	--
29...	1803	766	--	22.0	2130	4410	--
JUN							
02...	1828	252	--	23.0	1520	1030	98
07...	1933	204	--	27.0	3500	1930	100
28...	0703	3550	--	23.5	4680	44900	100
JUL							
05...	0705	978	--	22.5	3790	10000	--
31...	1315	71	17800	27.0	73	14	74
AUG							
30...	0848	126	--	21.0	1760	599	99
SEP							
05...	0832	681	--	21.0	4820	8860	--
06...	1209	620	--	23.0	6170	10300	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SAMPLING METHOD, CODES (82398)
OCT							
13...	100	44	63	88	--	--	--
19...	--	42	54	78	98	100	--
MAY							
05...	--	34	47	74	94	100	--
06...	100	38	48	78	--	--	10.0
07...	--	27	37	63	91	100	--
14...	--	27	34	56	95	100	--
26...	--	21	23	40	85	100	--
29...	--	29	33	49	92	100	--
JUN							
02...	100	44	53	87	--	--	--
07...	--	67	84	92	--	--	--
28...	--	44	54	92	--	--	--
JUL							
05...	--	45	60	84	97	100	--
31...	--	--	--	--	--	--	10.0
AUG							
30...	100	66	85	98	--	--	--
SEP							
05...	--	54	71	90	98	100	--
06...	--	50	65	87	98	100	--

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5450	4740	9070	9250	9890	11700	12100	15300	1560	5120	19000	3640
2	5820	4630	9030	9510	9230	11800	12000	15700	2110	5080	18500	1620
3	5620	4900	9230	9370	9330	11700	13500	17600	2060	4250	19100	2390
4	5410	4860	9280	9490	9480	12600	14200	18000	1860	2560	19000	2450
5	5320	4680	9050	9490	10000	12000	15300	4120	1950	2830	21100	1430
6	5550	4540	8860	9490	9940	11800	14300	3060	1900	4860	21200	2420
7	5580	4550	8920	9760	9970	12200	16500	2860	2270	5490	22200	2250
8	5740	4630	8940	9190	9860	12500	19800	2750	2170	6350	21400	2420
9	5800	4960	9190	9460	9890	12500	14800	2710	2850	7510	20500	2410
10	5760	5950	9280	9230	9510	12600	13100	2670	3060	8190	20400	3210
11	5750	6230	9370	8980	9300	12700	14000	2660	3260	8140	21300	3630
12	5190	6610	9270	8910	8830	12400	18900	2650	4110	8050	14500	3040
13	1670	6820	9310	9790	8110	12200	19800	2610	4190	8430	10000	4130
14	1560	6990	9360	9820	8700	11500	14900	2540	4300	8160	10400	4600
15	1570	7390	9220	9820	8340	10400	14400	2530	4790	9000	10900	5190
16	1570	7650	9270	9790	8460	10600	13000	2460	5130	10100	10400	6300
17	1720	7920	9610	9560	8190	10900	12600	2390	5360	10700	12000	6050
18	3060	8050	9580	9420	7260	10900	13900	2420	5620	11500	12100	6530
19	2150	8010	9810	9390	7440	10600	13600	2330	5900	11900	13300	7300
20	1900	8060	9560	9660	7740	10000	16400	2210	6100	12400	8500	7510
21	1630	8110	9630	9870	8410	9860	17800	1850	6350	13700	6510	7790
22	1680	8190	9840	9950	8740	10300	19000	1740	6420	13800	10800	7640
23	1980	8440	9760	9970	9360	10800	15300	1850	3120	13200	10900	8600
24	2210	8700	9220	10100	9530	10600	15700	1890	3680	14100	11800	5090
25	2400	8500	8950	10400	9460	10500	15300	1900	525	14700	17000	3710
26	2830	8560	8600	10500	9690	11300	15600	1710	386	14800	3390	4250
27	3740	8720	8800	10700	9640	12000	16200	1830	372	15500	3040	5160
28	3690	8670	8820	10700	10300	11600	19300	1570	866	15400	3310	6470
29	3940	8740	9270	10700	---	11600	21400	1530	2700	16400	3130	7160
30	4020	8920	9250	10600	---	11600	14700	1700	3780	16300	3340	7290
31	4670	---	9250	10300	---	12800	---	1640	---	17300	---	---
MEAN	3710	6920	9250	9780	9090	11500	15600	4150	3290	10200	13300	4720

WTR YR 1986 MEAN 8450 MAX 22200 MIN 372

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	14.0	7.5	9.5	13.0	16.5	23.0	25.0	20.5	28.0	22.5	24.0
2	18.0	11.0	7.0	7.0	13.0	18.0	23.0	22.5	23.0	25.0	34.0	20.5
3	21.5	14.5	6.0	10.5	15.0	14.0	21.0	21.0	22.0	23.0	23.5	24.0
4	20.0	15.5	7.0	6.5	11.0	14.0	15.0	17.5	24.0	23.5	24.0	24.5
5	15.0	16.0	10.0	11.0	11.0	18.0	18.0	20.0	24.0	22.5	25.0	21.0
6	15.0	16.0	8.0	10.5	6.0	18.0	16.5	20.0	24.0	27.0	32.0	23.0
7	22.0	15.0	6.0	5.0	8.0	12.0	24.0	20.0	27.0	26.0	31.0	21.0
8	19.0	16.0	7.0	4.0	9.0	18.0	19.0	20.0	24.0	25.5	24.5	22.0
9	20.0	14.5	9.0	5.0	4.0	16.0	24.0	19.0	27.0	26.0	24.0	23.0
10	18.0	13.5	8.0	5.0	3.0	13.0	15.0	18.0	27.0	26.5	23.0	24.0
11	20.0	12.0	6.5	5.5	4.5	15.0	19.0	19.0	23.5	27.5	23.5	24.0
12	20.0	14.0	4.0	6.5	5.0	12.5	16.5	22.0	30.0	28.0	29.0	23.0
13	18.0	14.0	1.0	5.0	10.0	10.0	18.0	23.0	25.0	25.0	30.0	22.0
14	15.0	14.5	2.0	9.0	10.0	13.0	15.0	23.0	30.0	27.0	29.0	22.5
15	17.0	12.5	2.0	11.5	9.0	12.5	15.0	22.5	30.0	28.5	25.0	22.0
16	17.0	9.0	5.5	10.0	14.0	17.5	16.0	22.5	26.0	28.0	33.0	23.0
17	16.5	9.0	5.0	12.5	15.0	15.5	23.0	17.0	30.0	25.0	33.0	22.5
18	17.5	14.0	7.0	12.0	14.0	10.5	25.0	15.0	24.0	30.0	32.5	27.0
19	19.0	12.0	4.5	8.5	15.0	12.0	26.0	16.0	31.5	30.0	31.5	27.0
20	17.5	13.5	7.0	13.5	18.0	12.5	24.0	21.0	25.0	25.0	31.5	25.0
21	17.0	8.0	5.0	13.0	16.0	18.0	21.5	22.0	28.0	28.0	32.0	22.0
22	19.0	10.0	4.5	8.0	10.0	15.0	16.0	22.5	25.0	23.0	24.0	23.0
23	17.0	12.0	5.5	12.0	16.5	19.0	25.0	23.0	23.0	25.0	26.0	26.5
24	17.0	13.0	3.5	9.0	18.0	19.5	22.0	20.0	23.5	28.0	23.0	22.0
25	16.0	14.5	9.0	11.0	18.0	15.5	22.0	23.0	20.0	24.0	29.0	20.0
26	18.0	15.0	4.5	7.0	19.5	18.0	18.0	22.0	20.5	33.0	25.0	19.5
27	18.0	11.5	5.0	5.5	17.0	23.5	13.0	20.0	22.0	32.0	25.5	18.0
28	17.5	14.0	9.0	13.0	17.0	21.0	25.0	22.0	23.5	31.5	23.0	20.5
29	17.5	10.0	9.0	8.0	---	16.5	20.0	22.0	25.0	24.0	22.0	22.0
30	17.0	13.0	7.5	13.0	---	24.0	22.0	20.5	26.5	25.0	21.0	21.0
31	17.5	---	10.0	8.0	---	25.0	---	22.0	---	24.0	---	---
MEAN	18.0	13.0	6.0	9.0	12.0	16.0	20.0	20.5	25.0	26.5	27.0	22.5

WTR YR 1986 MEAN 18.0 MAX 34.0 MIN 1.0

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued
WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	152	37	258	109	3	.54	2	.32	7	1.1	9	1.1
2	151	40	238	96	6	1.1	2	.31	6	1.0	13	1.5
3	165	50	204	85	4	.71	1	.15	5	.85	8	.91
4	172	47	218	95	4	.76	2	.30	5	.82	13	1.5
5	464	125	191	83	5	.96	1	.15	7	1.2	10	1.2
6	297	77	173	71	6	1.1	1	.15	5	.84	9	1.1
7	140	36	187	70	6	1.1	0	.00	4	.68	5	.55
8	46	11	174	57	5	.92	2	.33	6	1.0	9	1.0
9	45	11	118	36	2	.37	1	.18	5	.88	11	1.2
10	45	12	59	17	5	.88	4	.83	7	1.4	17	1.8
11	2600	2440	48	13	4	.68	6	1.1	7	1.4	10	1.1
12	4800	6050	38	9.8	5	.86	5	.89	8	1.6	9	.95
13	8690	20200	30	7.4	7	1.2	3	.53	10	2.2	12	1.6
14	3700	5410	37	8.9	8	1.4	3	.53	8	1.9	7	.98
15	2650	2810	34	7.5	5	.84	4	.70	6	1.3	6	.83
16	1970	1650	18	3.8	6	1.0	4	.71	8	2.0	5	.65
17	1730	1180	27	5.9	7	1.2	3	.53	10	2.7	5	.59
18	2950	2330	33	7.1	8	1.4	1	.18	9	2.3	6	.84
19	6210	14700	26	5.3	6	.99	1	.17	11	2.6	7	1.1
20	4330	7700	37	7.6	6	.97	1	.16	12	2.6	8	1.0
21	2720	3410	23	4.7	5	.84	2	.31	12	2.4	8	.93
22	2030	2180	31	6.2	7	1.2	2	.32	11	2.1	6	.66
23	842	807	24	4.7	28	5.4	2	.31	12	2.2	8	.89
24	777	646	9	1.8	5	.93	4	.60	22	3.8	7	.81
25	567	374	9	1.8	3	.55	4	.58	14	2.3	10	1.1
26	521	297	7	1.4	3	.52	5	.72	10	1.5	18	1.8
27	632	348	4	.78	2	.34	3	.43	11	1.5	25	2.5
28	399	201	5	.92	2	.32	5	.73	10	1.3	38	4.1
29	282	140	6	1.1	2	.32	2	.29	---	---	22	2.9
30	316	138	6	1.1	3	.49	2	.32	---	---	24	2.3
31	252	108	---	---	3	.49	3	.50	---	---	33	2.5
TOTAL	---	73565	---	819.80	---	30.38	---	13.33	---	47.47	---	41.99

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	31	2.1	16	.5	1910	2200	534	708	61	4.9	1420	1220
2	28	1.7	16	.5	1560	1090	572	1130	67	5.1	3990	7990
3	34	1.6	12	.5	1680	1120	1830	4860	69	4.8	8820	16600
4	39	1.8	1120	726	6780	11100	2510	4660	68	5.0	5630	8910
5	32	1.1	3620	5130	3150	3120	3680	8000	41	3.1	5580	9510
6	30	.81	2950	4530	2080	1240	2430	3240	51	3.6	6330	15200
7	46	1.4	3290	5330	2920	1670	1270	1280	38	2.6	6470	10000
8	48	2.2	2590	4310	2480	1140	652	532	30	2.0	3930	5050
9	31	.92	2870	4830	3130	2030	351	244	13	.95	3380	2870
10	25	.57	2170	3810	1010	398	273	193	13	1.4	3040	3600
11	29	.63	3400	6120	343	112	273	198	29	5.6	1810	1530
12	34	1.2	3850	7040	196	60	246	158	29	5.2	2670	1690
13	29	1.3	3160	6060	182	54	204	112	29	4.9	2010	1060
14	32	1.2	2190	4200	171	41	180	86	31	5.7	1130	506
15	31	1.5	2300	4340	187	38	147	58	39	5.8	731	292
16	27	1.0	2180	4270	54	9.5	83	28	50	6.9	523	208
17	26	.77	2230	4320	40	6.0	45	14	50	6.2	986	421
18	23	.61	2730	5640	36	4.4	66	19	42	7.4	804	282
19	28	.62	2470	5310	47	5.2	67	17	39	11	444	144
20	24	.49	2210	4350	34	3.4	43	9.8	61	14	312	99
21	29	.78	2200	4400	81	15	68	15	42	7.1	158	51
22	30	.97	2120	4200	42	7.7	40	9.0	44	5.5	115	36
23	33	.98	1970	3930	741	214	35	6.3	52	5.5	115	57
24	30	.97	1910	3840	1910	1530	38	6.3	50	4.3	1460	1300
25	21	.50	2330	4720	1880	10500	17	2.8	130	24	1970	1440
26	17	.36	2180	4700	1110	15000	51	8.0	4530	4130	1750	921
27	23	.42	2140	4830	149	3830	53	8.3	3220	1620	1120	435
28	28	.59	2710	6340	3450	21800	49	6.4	1490	652	553	206
29	64	2.8	2240	4720	4540	10000	31	3.6	1360	503	387	144
30	21	.79	1530	2810	735	1220	41	4.1	1820	693	291	108
31	---	---	1410	2480	---	---	34	3.1	2130	1060	---	---
TOTAL	---	32.68	---	127287.5	---	89558.2	---	25619.7	---	8810.55	---	91880

TOTAL LOAD FOR YEAR: 417706.60 TONS.

08398500 RIO PENASCO AT DAYTON, NM

LOCATION.--Lat 32°44'36", long 104°24'49", in NE¼SE¼SE¼ sec.18, T.18 S., R.26 E., Eddy County, Hydrologic Unit 13060010, on left bank 1.2 mi upstream from U.S. Highway 285, 1.9 mi northwest of old Dayton railway station, 5.6 mi upstream from mouth, and 7.0 mi south of Artesia. Mouth at Pecos River mile 496.4.

DRAINAGE AREA.--1,060 mi², approximately.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1953, published as "near Dayton."

REVISED RECORDS.--WSP 1242: 1951(M). WSP 1512: 1956. WSP 1923: 1955.

GAGE.--Water-stage recorder and rock and concrete control. Elevation of gage is 3,385.19 ft above National Geodetic Vertical Datum of 1929. Prior to May 9, 1968, at site 2.4 mi downstream, at datum 44.30 ft lower. May 9, 1968 to June 12, 1975, at present site at datum 1.98 ft higher.

REMARKS.--Estimated daily discharges: Oct. 2 to Nov. 6, Jan. 7, 8, and June 26 to July 1. Records good except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation of about 3,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--35 years, 6.43 ft³/s, 4,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft³/s, Aug. 23, 1966, gage height, 16.4 ft, from floodmarks, present site and datum, from rating curve extended above 7,800 ft³/s on basis of slope-area measurements at gage heights 6.82 ft and 7.90 ft, at previous site and datum; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about Sept. 22, 1941, reached a stage of about 9 ft from floodmark, previous site and datum, discharge not determined. Peak discharge at discontinued station "near Dunken" (station 08397600), about 60 mi upstream, was 70,000 ft³/s, determined in 1956, from rating curve extended above a slope-area measurement of 36,300 ft³/s, for peak of Oct. 6 or 7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 25	0030	*18,500	*13.64	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.71
2	.00	.00	.00	.00	.00	.00	.00	.00	7.5	.00	.00	.71
3	.00	.00	.00	.00	.00	.00	.00	.00	.87	.00	.00	.66
4	.00	.00	.00	.00	.00	.00	.00	.00	.45	.00	.00	.96
5	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.83
6	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.71
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.66
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.66
9	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00	.60
10	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.55
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.06
24	.00	.00	.00	.00	.00	.00	.00	.00	7110	.00	.45	.60
25	.00	.00	.00	.00	.00	.00	.00	.00	7360	.00	.50	.60
26	.00	.00	.00	.00	.00	.00	.00	.00	682	.00	.36	.01
27	.00	.00	.00	.00	.00	.00	.00	.00	378	.00	.69	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	275	.00	.90	.00
29	.00	.00	.00	.00	---	.00	.00	.00	14	.00	.77	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.57	.00	.83	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.71	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	15828.50	.10	5.22	9.86
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	528	.00	.17	.33
MAX	.00	.00	.00	.00	.00	.00	.00	.00	7360	.10	.90	.96
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	31400	.2	10	20

CAL YR 1985	TOTAL	1.19	MEAN	.00	MAX	1.1	MIN	.00	AC-FT	2.4
WTR YR 1986	TOTAL	15843.68	MEAN	43.4	MAX	7360	MIN	.00	AC-FT	31430

08399500 PECOS RIVER (KAISER CHANNEL) NEAR LAKEWOOD, NM

LOCATION.--Lat 32°41'22", long 104°17'53", in NW¼SE¼ sec.5, T.19 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on left bank 3.0 mi upstream from high-water line of Lake McMillan, 6.0 mi northeast of Lakewood, 7.0 mi northeast of gates in McMillan Dam, 12 mi southeast of Artesia, and at mile 492.1.

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1954, published as Kaiser Lake-McMillan Channel near Lakewood.

GAGE.--Water-stage recorder. Elevation of gage is 3,268.53 ft above National Geodetic Vertical Survey of 1929 (U.S. Bureau of Reclamation bench mark). Prior to Mar. 23, 1955, at site 3.0 mi downstream at datum 7.83 ft lower. Mar. 23, 1955 to Sept. 30, 1963, at present site at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 1 to Dec. 3, Feb. 22 to Mar. 3, Mar. 12, 14-16, Mar. 30 to Apr. 7, Apr. 9-11, 16-18, May 1, 11, 12, 15, June 7-9, and Sept. 3-30. Records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) since April 1980, by Lake Sumner (station 08384000) since August 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 170,000 acres, 1959 determination, upstream from station. Above about 1,500 ft³/s, flow will begin bypassing station and depending on the magnitude and duration of flow, may reach Lake McMillan (station 08400500). Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--36 years, 151 ft³/s, 109,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,920 ft³/s, July 12, 1960; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,470 ft³/s, June 27, 28; minimum daily, 1.9 ft³/s, April 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	136	58	58	57	47	23	10	436	721	38	208
2	85	134	58	55	59	42	22	5.1	258	805	34	762
3	96	140	59	56	60	42	18	6.0	199	977	31	720
4	90	157	59	54	58	43	14	127	671	859	31	640
5	88	157	60	54	58	42	11	467	392	842	31	580
6	85	148	60	54	58	45	8.0	423	225	580	31	880
7	82	135	58	56	59	42	11	477	218	444	28	620
8	80	123	58	61	60	42	14	573	200	354	27	490
9	80	108	57	60	61	42	10	620	262	291	28	330
10	80	99	57	71	66	42	6.8	672	155	273	31	460
11	210	95	54	68	72	42	6.8	670	122	285	63	330
12	390	92	55	65	74	42	9.6	680	109	262	67	250
13	804	88	55	63	77	47	15	684	111	232	60	200
14	476	84	56	63	86	54	17	687	91	220	65	170
15	375	80	55	63	81	51	16	680	79	196	55	150
16	335	74	53	63	89	50	14	652	67	176	50	140
17	236	76	54	64	100	47	11	701	58	157	48	155
18	227	75	59	64	100	50	9.0	795	43	144	41	135
19	739	73	56	62	91	59	7.9	809	38	130	93	125
20	666	73	54	59	84	49	5.4	731	33	116	87	115
21	403	70	55	57	80	49	6.4	727	48	110	64	115
22	393	70	60	56	74	42	12	731	52	108	45	115
23	349	68	64	53	71	43	12	745	76	102	39	170
24	299	68	63	52	67	44	9.4	771	108	90	32	320
25	236	70	62	51	66	40	9.0	802	1270	81	35	280
26	190	68	60	50	61	38	5.6	824	1420	77	239	210
27	176	66	59	49	54	35	4.2	932	1470	76	220	160
28	160	64	58	50	51	35	1.9	948	1470	61	136	130
29	152	62	58	49	---	47	8.2	778	1380	54	121	130
30	147	60	56	53	---	30	15	624	1040	48	114	128
31	138	---	57	60	---	24	---	618	---	44	150	---
TOTAL	7953	2813	1787	1793	1974	1347	333.2	18969.1	12101	8915	2134	9218
MEAN	257	93.8	57.6	57.8	70.5	43.5	11.1	612	403	288	68.8	307
MAX	804	157	64	71	100	59	23	948	1470	977	239	880
MIN	80	60	53	49	51	24	1.9	5.1	33	44	27	115
AC-FT	15770	5580	3540	3560	3920	2670	661	37630	24000	17680	4230	18280

CAL YR 1985 TOTAL 61567.1 MEAN 169 MAX 1090 MIN 6.2 AC-FT 122100
WTR YR 1986 TOTAL 69337.3 MEAN 190 MAX 1470 MIN 1.9 AC-FT 137500

08400000 FOURMILE DRAW NEAR LAKEWOOD, NM

LOCATION.--Lat 32°40'20", long 104°22'07", in SW¼NW¼SE¼ sec.10, T.19 S., R.26 E., Eddy County, Hydrologic Unit 13060011, in left side of channel 360 ft downstream from ford on Lakewood-Dayton road, 1.9 mi downstream from U.S. Highway 285, 2.8 mi north of Lakewood, 3.8 mi upstream from mouth, and 11.5 mi south of Artesia. Mouth at Pecos River mile 490.6.

DRAINAGE AREA.--265 mi², approximately.

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WRD 1968: 1967.

GAGE.--Water-stage recorder. Elevation of gage is 3,299.14 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1951 to June 19, 1962, at site 1.8 mi 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.

REMARKS.--Estimated daily discharges: Dec. 14 to Jan. 8, June 8-10, 28, 29, July 3, 4, and Aug. 15, 16. Records good except for estimated daily discharges, which are poor. No surface diversions above station.

AVERAGE DISCHARGE.--35 years, 4.57 ft³/s, 3,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,300 ft³/s, Aug. 23, 1966, gage height, 19.9 ft, from floodmarks, present datum, from rating curve extended above 5,000 ft³/s 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2400	247	2.40	July 1	1800	304	1.80
June 25	0500	*16,800	*17.18	Aug. 13	2030	308	1.81

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	58	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	128	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	50	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	11	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	25	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	4.0	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	41	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	145	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	50	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	6520	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	4350	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	728	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	376	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	57	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	10	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	12081.00	246.00	246.00	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	403	7.94	7.94	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	6520	128	145	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	23960	488	488	.00

CAL YR 1985	TOTAL	.00	MEAN	.00	MAX	.00	MIN	.00	AC-FT	.00
WTR YR 1986	TOTAL	12573.00	MEAN	34.4	MAX	6520	MIN	.00	AC-FT	24940

08400500 LAKE MCMILLAN NEAR LAKEWOOD, NM

LOCATION.--Lat 32°35'42", long 104°20'49", in NE¼NE¼ sec.11, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, near outlet gates of McMillan Dam on Pecos River, 3.4 mi southeast of Lakewood, and at mile 484.3.

DRAINAGE AREA.--16,990 mi², approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (month end gage heights and contents), October 1965 to current year. Month end gage heights January 1918 to December 1938 in files of Pecos River Commission.

GAGE.--Nonrecording gage. Elevation of gage is 3,241.6 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

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 No. 2. Flashboards in spillway No. 2 may be used to increase this capacity. Maximum capacity without spill, 33,620 acre-ft, at gage height 26.1 ft, crest of spillway No. 1. No dead storage. No storage allocated to flood control. Figures given herein represent usable contents. Gage heights may be affected by variable drawdown due to flow through gates. Water is used for irrigation by Carlsbad Irrigation District.

COOPERATION.--Record provided by Carlsbad Irrigation District.

EXTREMES FOR PERIOD OF RECORD (SINCE 1938).--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, 1974, 1976, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 33,892 acre-ft, June 25-27, gage height, 27.04 ft; minimum, 2,756 acre-ft, May 5, gage height, 17.20 ft.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22752	33069	32525	32256	31986	32256	25584	4011	26813	29346	25340	15306
2	22752	33069	32525	32256	31986	32256	24145	4011	27562	32525	24858	15567
3	22752	33069	32525	32256	31986	31986	22752	3908	28066	32525	24620	16744
4	22752	33343	32256	32256	31986	31986	21629	3220	28319	32525	24145	17690
5	22980	33343	32256	32256	31986	31986	20431	2756	29346	33069	23675	18875
6	22980	33343	32256	32256	31986	31986	19488	3315	29866	32525	23211	20327
7	22980	33616	32256	32256	31986	31718	18673	3908	30128	31986	22752	22074
8	22980	33616	32256	32256	31986	31718	17883	4667	30654	31986	22299	23211
9	22752	33343	32256	32256	31986	31450	16931	5191	30918	31986	21851.5	24145
10	22752	33069	32256	32256	31986	31450	16194	6205	31184	32255	21309	24620
11	22299	33343	32256	32256	31986	31450	15482	6546	31184	32797	21189	25340
12	22524	33343	32256	32256	31986	31450	14791	7362	31184	33069	20972	25827
13	23442	33343	32256	32256	31986	31450	13793	8090	31184	33342.5	20755	26072.5
14	25099	33343	32256	32256	31986	31450	12991	8846	31184	33342.5	20327	26565.5
15	25827	33343	32256	32256	31986	31450	12216	9502	30918	33342.5	19904	26565.5
16	26566	33069	32256	32256	31986	31184	11466	10182	30390	33342.5	19078	26813
17	27311	33069	32256	32256	31986	30918	10600	10885	29606	33343	18275	27062
18	27562	33069	32256	32256	31986	30918	9907	11466	28574	33343	17498	27062
19	27813	33069	32256	32256	31986	30918	9106	12369	27562	33343	16744	27311
20	29346	32797	32256	32256	32525	30918	8339	13150	26566	33343	16013	27311
21	30390	32797	32256	32256	32525	30918	7722	13956	25584	33069	15306	27311
22	31184	32797	31986	32256	32525	30654	7008	14791	24620	31986	14453.5	27311
23	31718	32797	31986	32256	32525	30654	6205	15481	24145	30918	14453.5	27562
24	31986	32797	32256	32256	32525	30654	5866	16375	26813	29866	13309	27813
25	32256	32797	32256	32256	32525	30390	5529	17498	33892	29036.4	13309	28066
26	32797	32797	32256	32256	32525	30128	5080	18673	33892	28319	13309	28319
27	32797	32797	32256	32256	32525	29606	4860	20116	33892	27562	13793	27813
28	32797	32797	32256	32256	32525	29088	4217	21629	30918	27062	13956	27311
29	32797	32797	32256	32256	---	28575	4011	23211	31184	26565.5	14286	27062
30	33069	32797	32256	32256	---	27562	4113	24858	30918	26072.5	14621	27062
31	33069	---	32256	32256	---	26566	---	25827	---	25583.5	15134	---
MAX	33069	33616	32525	32256	32525	32256	25584	25827	33892	33343	25340	28319
MIN	22299	32797	31986	32256	31986	26566	4011	2756	24145	25583	13309	15306
(†)	+10089	-272	-541	0	+269	-5959	-22453	+21714	+5091	-5334.5	-10449.5	+11928

CAL YR 1985 MAX 34180 MIN 2750 (†) +1356
WTR YR 1986 MAX 33892 MIN 2756 (†) +4082

(†) CHANGE IN CONTENTS, IN ACRE-FEET.

08400500 LAKE MCMILLAN NEAR LAKEWOOD, NM -- Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.95	26.00	25.90	25.85	25.80	25.85	24.55	17.85	24.80	25.32	24.50	22.10
2	23.95	26.00	25.90	25.85	25.80	25.85	24.25	17.85	24.95	25.92	24.40	22.18
3	23.95	26.00	25.90	25.85	25.80	25.80	23.95	17.80	25.05	25.92	24.33	22.47
4	23.95	26.05	25.85	25.85	25.80	25.80	23.70	17.45	25.10	25.93	24.25	22.74
5	24.00	26.05	25.85	25.85	25.80	25.80	23.45	17.20	25.30	26.03	24.16	23.07
6	24.00	26.05	25.85	25.85	25.80	25.80	23.20	17.50	25.40	25.90	24.08	23.40
7	24.00	26.10	25.85	25.85	25.80	25.75	23.00	17.80	25.45	25.84	23.95	23.80
8	24.00	26.10	25.85	25.85	25.80	25.75	22.80	18.15	25.55	25.78	23.88	24.04
9	23.95	26.05	25.85	25.85	25.80	25.70	22.55	18.40	25.60	25.82	23.76	24.24
10	23.95	26.00	25.85	25.85	25.80	25.70	22.35	18.85	25.65	25.89	23.66	24.35
11	23.85	26.05	25.85	25.85	25.80	25.70	22.15	19.00	25.65	25.97	23.59	24.53
12	23.90	26.05	25.85	25.85	25.80	25.70	21.95	19.35	25.65	26.03	23.54	24.62
13	24.10	26.05	25.85	25.85	25.80	25.70	21.65	19.65	25.65	26.05	23.48	24.68
14	24.45	26.05	25.85	25.85	25.80	25.70	21.40	19.95	25.65	26.06	23.40	24.75
15	24.60	26.05	25.85	25.85	25.80	25.70	21.15	20.20	25.60	26.07	23.30	24.78
16	24.75	26.00	25.85	25.85	25.80	25.65	20.90	20.45	25.50	26.07	23.11	24.81
17	24.90	26.00	25.85	25.85	25.80	25.60	20.60	20.70	25.35	26.05	22.90	24.85
18	24.95	26.00	25.85	25.85	25.80	25.60	20.35	20.90	25.15	26.05	22.72	24.88
19	25.00	26.00	25.85	25.85	25.80	25.60	20.05	21.20	24.95	26.04	22.50	24.90
20	25.30	25.95	25.85	25.85	25.90	25.60	19.75	21.45	24.77	26.04	22.31	24.92
21	25.50	25.95	25.85	25.85	25.90	25.60	19.50	21.70	24.56	26.00	22.12	24.92
22	25.65	25.95	25.80	25.85	25.90	25.55	19.20	21.95	24.35	25.80	21.85	24.93
23	25.75	25.95	25.80	25.85	25.90	25.55	18.85	22.15	24.23	25.60	21.85	24.94
24	25.80	25.95	25.85	25.85	25.90	25.55	18.70	22.40	24.80	25.40	21.52	25.02
25	25.85	25.95	25.85	25.85	25.90	25.50	18.55	22.70	26.80	25.24	21.50	25.05
26	25.95	25.95	25.85	25.85	25.90	25.45	18.35	23.00	27.04	25.09	21.48	25.10
27	25.95	25.95	25.85	25.85	25.90	25.35	18.25	23.35	26.30	24.95	21.63	25.03
28	25.95	25.95	25.85	25.85	25.90	25.25	17.95	23.70	25.63	24.83	21.72	24.92
29	25.95	25.95	25.85	25.85	---	25.15	17.85	24.05	25.68	24.75	21.81	24.87
30	26.00	25.95	25.85	25.85	---	24.95	17.90	24.40	25.62	24.68	21.92	24.87
31	26.00	---	25.85	25.85	---	24.75	---	24.60	---	24.58	22.05	---
MEAN	24.83	26.00	25.85	25.85	25.83	25.58	20.96	20.51	25.39	25.67	22.94	24.33
MAX	26.00	26.10	25.90	25.85	25.90	25.85	24.55	24.60	27.04	26.07	24.50	25.10
MIN	23.85	25.95	25.80	25.85	25.80	24.75	17.85	17.20	24.23	24.58	21.48	22.10

CAL YR 1985 MEAN 23.86 MAX 26.20 MIN 17.20
WTR YR 1986 MEAN 24.47 MAX 27.04 MIN 17.20

08401000 PECOS RIVER BELOW MCMILLAN DAM, NM

LOCATION.--Lat 32°35'40", long 104°20'59", in NW¼NE¼ sec.11, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on left bank 700 ft downstream from gates in McMillan Dam, 3.4 mi southeast of Lakewood, and at mile 484.1.

DRAINAGE AREA.--16,990 mi², 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.

REVISED RECORDS.--WSP 1512: 1909.

GAGE.--Water-stage recorder and rock control. Elevation of gage is 3,238.21 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). See WSP 1732 for history of changes prior to Mar. 12, 1957. Supplemental water-stage recorders on McMillan Dam spillways No. 1 and 2, Apr. 6, 1960, to Sept. 30, 1970.

REMARKS.--Estimated daily discharges: June 26 to July 15. Records good except for estimated daily discharges, which are poor. Flow completely regulated by Lake McMillan (station 08400500). Flow also regulated by several other reservoirs. Discharge figures do not include flow if any over Lake McMillan spillways No. 1 and 2 which enters the Pecos River downstream from this gage. Diversions and ground-water withdrawals for irrigation of about 171,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--41 years (water years 1907, 1940, 1948-86), 97.2 ft³/s, 70,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s, Aug. 23, 1966, includes flow of spillways; no flow many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1904, may have reached 60,000 ft³/s. The flood of Aug. 3, 1893, damaged McMillan Dam, then under construction, and destroyed Avalon Dam; this flood was described as "highest in 50 years" at Carlsbad.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,430 ft³/s, June 28; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	.08	.00	.00	.00	.00	507	.51	.00	1500	130	15
2	.78	.00	.00	.00	.00	.00	504	.46	.00	600	130	15
3	.88	.00	.00	.00	.00	.00	497	179	.00	900	130	15
4	.74	.00	.00	.00	.00	.00	473	255	.00	1100	130	16
5	.55	.00	.00	.00	.00	.00	408	255	.00	670	130	16
6	.61	.00	.00	.00	.00	.00	387	256	.00	1080	129	16
7	44	.00	.00	.00	.00	.00	316	259	.00	535	128	16
8	125	.00	.00	.00	.00	.00	313	261	.00	510	127	16
9	171	.00	.00	.00	.00	.00	310	264	.00	30	127	16
10	153	.00	.00	.00	.00	.00	307	269	.00	29	127	16
11	153	.00	.00	.00	.00	.00	304	271	.00	28	112	16
12	115	.00	.00	.00	.00	.00	313	274	.00	27	90	16
13	72	.00	.00	.00	.00	.00	344	275	.00	26	135	16
14	48	.00	.00	.00	.00	.00	342	276	.00	25	210	16
15	1.1	.00	.00	.00	.00	.00	337	277	143	25	272	16
16	1.0	.00	.00	.00	.00	.00	331	278	310	25	295	16
17	.97	.00	.00	.00	.00	.00	329	286	322	26	293	16
18	.92	.00	.00	.00	.00	.00	328	282	362	22	291	17
19	.79	.00	.00	.00	.00	.00	326	284	359	22	289	19
20	.62	.00	.00	.00	.00	.00	323	288	359	21	273	19
21	.55	.00	.00	.00	.00	.00	320	290	358	300	372	19
22	.55	.00	.00	.00	.00	.00	316	293	356	461	369	19
23	.53	.00	.00	.00	.00	.00	212	275	120	475	232	18
24	.46	.00	.00	.00	.00	76	155	211	162	381	16	18
25	.35	.00	.00	.00	.00	120	153	166	2890	320	24	18
26	47	.00	.00	.00	.00	121	153	115	3200	299	15	225
27	64	.00	.00	.00	.00	121	153	73	3300	225	14	295
28	63	.00	.00	.00	.00	287	113	1.2	3430	163	13	198
29	64	.00	.00	.00	---	397	2.4	.17	3200	130	14	94
30	64	.00	.00	.00	---	416	.59	.01	2900	130	15	116
31	22	---	.00	.00	---	477	---	.00	---	130	15	---
TOTAL	1217.18	.08	.00	.00	.00	2015.00	8876.99	6214.35	21771.00	10215	4647	1344
MEAN	39.3	.00	.00	.00	.00	65.0	296	200	726	330	150	44.8
MAX	171	.08	.00	.00	.00	477	507	293	3430	1500	372	295
MIN	.35	.00	.00	.00	.00	.00	.59	.00	.00	21	13	15
AC-FT	2410	.2	.00	.00	.00	4000	17610	12330	43180	20260	9220	2670

CAL YR 1985	TOTAL	31038.09	MEAN	85.0	MAX	371	MIN	.00	AC-FT	61560
WTR YR 1986	TOTAL	56300.60	MEAN	154	MAX	3430	MIN	.00	AC-FT	111700

08401100 PECOS RIVER ABOVE SEVEN RIVERS, NEAR LAKEWOOD, NM

LOCATION.--Lat 32°34'42", long 104°22'42", in NE¼NE¼NE¼ sec.16, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank, 0.5 mi upstream from mouth of Seven Rivers, 2.6 mi downstream from Lake McMillan, and 3.6 mi south of Lakewood, and at mile 481.4.

DRAINAGE AREA.--17,000 mi², approximately (contributing area).

PERIOD OF RECORD.--May 1974 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,213.52 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Oct. 1-6, 15-25, Nov. 1 to Mar. 23, Mar. 29 to Apr. 1, Apr. 7-12, and June 23. Records good except for estimated daily discharges, which are poor. Flow regulated by Lake McMillan (station 08400500) and by several other reservoirs. Discharge figures do no include flow if any over Lake McMillan Spillway No. 2 which enters the Pecos River downstream from this gage. Diversions and ground-water withdrawals for irrigation of about 171,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge determined, 2,080 ft³/s, Oct. 26, 1974; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, greater than 500 ft³/s, at times; minimum, 0.02 ft³/s, Nov. 3 to Mar. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.2	.02	.02	.02	.02	490	.56	.62	---	139	14
2	.20	.30	.02	.02	.02	.02	495	.60	.62	---	138	14
3	.20	.02	.02	.02	.02	.02	497	142	.60	---	137	14
4	.20	.02	.02	.02	.02	.02	495	256	.61	---	136	14
5	.20	.02	.02	.02	.02	.02	424	275	.62	---	136	14
6	.20	.02	.02	.02	.02	.02	394	287	.61	---	136	13
7	31	.02	.02	.02	.02	.02	322	292	.61	---	136	14
8	114	.02	.02	.02	.02	.02	305	296	.66	47	135	13
9	160	.02	.02	.02	.02	.02	305	297	.62	31	136	13
10	143	.02	.02	.02	.02	.02	300	301	.62	28	134	13
11	143	.02	.02	.02	.02	.02	300	303	.74	25	123	14
12	109	.02	.02	.02	.02	.02	300	304	.74	24	98	13
13	64	.02	.02	.02	.02	.02	312	305	.74	24	136	13
14	49	.02	.02	.02	.02	.02	314	308	.75	24	218	14
15	1.6	.02	.02	.02	.02	.02	314	308	112	24	276	15
16	1.4	.02	.02	.02	.02	.02	311	309	313	24	308	14
17	1.2	.02	.02	.02	.02	.02	309	313	337	23	308	14
18	1.0	.02	.02	.02	.02	.02	307	314	374	21	308	15
19	.60	.02	.02	.02	.02	.02	303	315	386	21	306	16
20	.40	.02	.02	.02	.02	.02	303	319	389	21	281	16
21	.20	.02	.02	.02	.02	.02	300	319	389	279	412	17
22	.20	.02	.02	.02	.02	.02	305	320	393	429	414	16
23	.20	.02	.02	.02	.02	.02	309	322	120	436	279	16
24	.20	.02	.02	.02	.02	51	146	229	---	422	15	15
25	.20	.02	.02	.02	.02	107	138	163	---	373	24	15
26	31	.02	.02	.02	.02	108	135	104	---	347	14	206
27	54	.02	.02	.02	.02	107	135	76	---	236	13	304
28	54	.02	.02	.02	.02	273	112	2.3	---	178	13	212
29	58	.02	.02	.02	---	380	3.1	.86	---	139	13	102
30	54	.02	.02	.02	---	410	.63	.65	---	139	14	112
31	25	---	.02	.02	---	450	---	.63	---	138	14	---
TOTAL	1097.40	2.06	.62	.62	.56	1886.46	8683.73	6782.60	---	---	4950	1295
MEAN	35.4	.07	.02	.02	.02	60.9	289	219	---	---	160	43.2
MAX	160	1.2	.02	.02	.02	450	497	322	---	---	414	304
MIN	.20	.02	.02	.02	.02	.02	.63	.56	---	---	13	13
AC-FT	2180	4.1	1.2	1.2	1.1	3740	17220	13450	---	---	9820	2570

CAL YR 1985 TOTAL 31432.63 MEAN 86.1 MAX 363 MIN .00 AC-FT 62350

08401200 SOUTH SEVEN RIVERS NEAR LAKEWOOD, NM

LOCATION.--Lat 32°35'19", long 104°25'17", in SE¼SE¼NW¼ sec.7, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on downstream side of center pier of bridge on U.S. Highway 285, 0.4 mi south of Seven Rivers, 2.6 mi upstream from mouth, and 4.0 mi southwest of Lakewood. Mouth at Pecos River mile 480.9.

DRAINAGE AREA.--220 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,276 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 8, 1965, at site 400 ft upstream at datum 0.52 ft higher.

REMARKS.--Estimated daily discharges: Dec. 29 to Jan. 7 and June 26, 27. Records good except for estimated daily discharges, which are poor. No surface diversions above station, ground-water withdrawals for 240 acres, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--23 years, 5.09 ft³/s, 3,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft³/s, May 30, 1965, gage height, 20.0 ft, from floodmarks, present site and datum, from rating curve extended above 5,700 ft³/s on basis of slope-area measurements at gage heights 18.15 ft and 20.0 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1941, about 30,000 ft³/s, gage height, 22.8 ft, from old debris on left bank, former site and datum, from rating curve extended above 5,700 ft³/s, on basis of slope-area measurement at gage height, 21.8 ft. Probable date of flood, Oct. 7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of 450 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	1130	*11,300	*15.38	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.61	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.6	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	15	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	1540	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	5870	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	727	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	74	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	10	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	8237.20	9.73	.00	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	275	.31	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	5870	8.6	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	16340	19	.00	.00

CAL YR 1985	TOTAL	1.66	MEAN	.00	MAX	1.6	MIN	.00	AC-FT	3.3
WTR YR 1986	TOTAL	8246.93	MEAN	22.6	MAX	5870	MIN	.00	AC-FT	16360

08401500 PECOS RIVER BELOW MAJOR JOHNSON SPRINGS NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'38", long 104°22'00", in NE¼NW¼SE¼ sec.27, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on left bank, .8 miles downstream from Brantley Damsite, 3.2 mi downstream from South Seven Rivers, 4.7 mi southeast of Seven Rivers, 6.4 mi south of Lakewood, 11.0 mi northwest of Carlsbad, and at mile 477.8.

DRAINAGE AREA.--17,650 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1947 to September 1950, October 1971 to current year (operated as a low-flow station only). Records prior to October 1971 not equivalent due to spring inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 3,191.15 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation reference point). Prior to October 1971 at site 1.3 mi upstream at different datum. October 1971 to June 4, 1985 at site 0.8 mi upstream at datum 7.29 ft higher.

REMARKS.--Estimated daily discharges: Feb. 9 to Mar. 4. Records good except for estimated daily discharges, which are poor. Flow regulated by Lake McMillan (station 08400500) and by several other reservoirs. Flows when they occur, from Lake McMillan Spillways No. 1 and 2, that bypasses upstream station are included in the total flow. Diversions and ground-water withdrawals for irrigation of about 173,000 acres, 1959 determination, upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,160 ft³/s, Sept. 15, 1949, July 24, 1950, from rating curve extended above 780 ft³/s; maximum gage height, 5.38 ft, Sept. 15, 1949, site and datum then in use; minimum discharge, 7.0 ft³/s, July 20, 1977 and Aug. 12, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, greater than 500 ft³/s, many days; minimum, 16 ft³/s, Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	60	55	51	49	40	399	56	59	---	206	71
2	43	59	55	50	51	40	428	54	59	---	204	68
3	43	57	53	48	49	40	443	97	58	---	203	66
4	42	59	51	46	50	40	440	244	58	---	202	65
5	43	62	51	46	51	38	404	260	57	---	199	66
6	43	66	52	47	51	39	382	263	57	---	197	65
7	60	72	55	47	51	47	344	267	57	---	195	64
8	143	71	55	46	52	48	312	269	58	---	192	63
9	209	66	52	45	53	45	305	273	60	165	191	63
10	193	67	51	46	54	44	303	280	57	158	189	63
11	112	69	52	46	52	44	303	283	54	154	185	62
12	158	69	55	46	50	44	303	284	55	161	153	63
13	99	66	54	45	48	44	325	287	57	171	160	63
14	95	66	54	46	46	45	337	287	59	108	247	64
15	44	65	54	46	45	44	335	290	79	114	287	64
16	38	61	54	46	45	43	332	291	265	133	341	63
17	40	59	54	46	44	44	330	297	320	113	342	62
18	38	57	53	46	44	44	329	301	358	127	342	62
19	38	58	55	46	43	44	331	298	380	124	340	66
20	39	60	54	47	42	44	331	299	386	121	319	66
21	40	55	53	48	42	43	327	303	389	---	388	66
22	40	54	53	46	41	44	324	305	394	---	413	66
23	41	57	52	46	41	44	309	311	---	---	371	67
24	42	57	52	46	40	51	228	268	---	---	137	68
25	42	57	52	47	39	116	209	239	---	399	85	65
26	58	56	52	47	39	128	205	176	---	394	86	135
27	100	56	52	47	39	127	206	160	---	321	77	278
28	101	56	52	48	39	163	199	90	---	278	75	247
29	104	56	51	48	---	274	113	63	---	214	74	148
30	113	56	51	47	---	317	63	58	---	210	74	120
31	93	---	50	47	---	348	---	59	---	208	72	---
TOTAL	2337	1829	1639	1449	1290	2516	9199	7012	---	---	6546	2549
MEAN	75.4	61.0	52.9	46.7	46.1	81.2	307	226	---	---	211	85.0
MAX	209	72	55	51	54	348	443	311	---	---	413	278
MIN	38	54	50	45	39	38	63	54	---	---	72	62
AC-FT	4640	3630	3250	2870	2560	4990	18250	13910	---	---	12980	5060

08401500 PECOS RIVER BELOW MAJOR JOHNSON SPRINGS NEAR CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1962, 1978-79, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV												
06...	1540	66	4100	4440	7.60	7.70	20.0	17.0	7.7	2000	1900	470
FEB												
04...	1100	49	5500	--	8.10	--	22.0	14.0	9.8	--	--	--
MAR												
05...	1310	38	4810	5050	7.90	7.90	30.0	16.0	8.8	1400	1200	360
MAY												
07...	1245	266	8500	8410	--	7.40	32.5	22.0	8.2	2500	2300	620
JUL												
16...	1410	163	3720	3850	--	7.50	28.5	27.0	11.4	1300	1200	370
SEP												
03...	1500	68	9470	--	7.72	--	24.5	21.0	8.0	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
06...	200	420	4	4.6	129	1400	770	0.90	14	3400	250	50
FEB												
04...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
05...	120	470	6	5.5	151	1700	920	0.90	18	3700	280	460
MAY												
07...	220	1100	10	10	111	2200	1900	0.80	11	6100	490	50
JUL												
16...	90	360	5	6.3	141	1200	620	0.80	15	2700	220	520
SEP												
03...	--	--	--	--	--	--	--	--	--	--	--	--

08401900 ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'23", long 104°22'28", in SE¼SE¼ sec.3, T.21 S., R.25 E., Eddy County, Hydrologic Unit 13060011, at downstream end of bridge pier nearest left bank on U.S. Highway 285, 2.1 mi upstream from mouth and 10 mi northwest of Carlsbad. Mouth at Pecos River mile 475.2.

DRAINAGE AREA.--285 mi, approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,250 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of 220 acres, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--23 years, 8.84 ft³/s, 6,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft³/s Aug. 23, 1966, gage height, 15.35 ft, from rating curve extended above 8,500 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Since about 1941 the maximum discharge probably occurred Oct. 7, 1954, discharge, 63,600 ft³/s, gage height, 19.2 ft, from highwater marks on downstream end of bridge pier, by slope-area measurement at site 5 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of 1,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	1100	*20,800	*13.60	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	43	8.3	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.9	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.4	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.2	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.2	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.4	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.9	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	3030	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	9370	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	918	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	350	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	279	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	30	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	13	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	9.4	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	14042.40	95.75	.00	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	468	3.09	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	9370	22	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	27850	190	.00	.00

CAL YR 1985	TOTAL	17.00	MEAN	.05	MAX	17	MIN	.00	AC-FT	34
WTR YR 1986	TOTAL	14138.15	MEAN	38.7	MAX	9370	MIN	.00	AC-FT	28040

08402000 PECOS RIVER AT DAMSITE 3, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'40", long 104°19'58", in lot 14, sec.6, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank at damsite 3 of Carlsbad project of Bureau of Reclamation, about 1 mi upstream from flow line of Lake Avalon, 1.3 mi downstream from Rocky Arroyo, 8.0 mi northwest of Carlsbad, and at mile 473.8.

DRAINAGE AREA.--17,980 mi², approximately (contributing area).

PERIOD OF RECORD.--August 1939 to December 1940, August 1944 to current year.

REVISED RECORDS.--WSP 1512: 1946-47(M), 1948(P), 1949, 1950(P). WSP 1712: Drainage area.

GAGE.--Elevation of gage is 3,171.31 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). 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 datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Dec. 17, 18, Dec. 21 to Jan. 8, and Feb. 5-28. Records good except for estimated daily discharges, which are fair. Flow regulated by Lake McMillan (station 08400500) since 1893 and by several other reservoirs. Diversions and ground-water withdrawals for irrigation of about 17,300 acres, 1959 determination, upstream from station. Discharge represents inflow to Lake Avalon. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--43 years (water years 1940, 1945-86), 158 ft³/s, 114,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,000 ft³/s, Aug. 23, 1966, gage height, 21.32 ft, present datum, from floodmarks, from rating curve extended above 25,000 ft³/s on basis of slope-area measurement at gage height 19.53 ft; minimum, 4.3 ft³/s, Aug. 5, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks which probably exceeded 40,000 ft³/s, occurred in Aug. 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 ft³/s. Floods of 1893 and 1904 originated upstream from McMillan Dam and contributed to the two failures of Avalon Dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,500 ft³/s, June 24, gage height, 16.42 ft; minimum, 31 ft³/s, Mar. 11, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	70	49	41	56	41	401	57	53	2280	214	77
2	37	68	49	40	60	42	425	52	54	719	211	78
3	37	63	47	39	57	38	443	75	53	1140	205	66
4	37	61	42	38	53	37	441	233	53	1420	208	59
5	37	61	42	38	52	37	421	255	53	843	199	57
6	38	63	42	38	54	36	392	256	53	1410	199	57
7	46	70	42	38	54	43	345	265	53	677	199	57
8	128	68	42	38	56	51	303	266	53	610	199	57
9	213	66	42	38	56	41	295	271	57	183	193	56
10	205	66	43	38	56	39	296	282	55	173	193	58
11	117	66	44	38	55	37	296	286	52	165	190	64
12	168	66	45	40	52	37	296	286	50	183	162	62
13	109	66	45	41	50	37	306	289	50	199	160	61
14	104	64	45	39	48	37	320	292	50	131	241	61
15	60	59	45	39	46	36	326	294	58	108	289	61
16	42	59	45	38	45	37	326	296	244	144	358	61
17	42	58	44	41	43	37	322	304	321	126	364	61
18	42	52	43	44	42	34	317	306	365	131	365	61
19	42	46	45	46	40	36	321	306	394	126	365	60
20	42	56	45	44	40	36	327	306	398	129	349	60
21	42	51	44	44	39	36	332	307	407	218	397	60
22	42	43	43	46	39	36	331	309	415	518	441	63
23	42	46	43	46	38	38	317	317	2630	574	412	65
24	42	46	43	46	37	39	228	289	15600	565	163	64
25	44	45	42	50	36	98	198	255	9980	445	80	60
26	52	43	42	52	35	120	186	187	8940	425	82	114
27	99	46	42	50	35	113	186	165	5590	347	86	312
28	102	46	42	50	41	139	186	97	3560	315	83	306
29	113	46	42	51	---	261	124	60	3650	241	88	168
30	127	47	41	50	---	316	66	52	3480	223	86	115
31	111	---	41	50	---	345	---	51	---	217	82	---
TOTAL	2399	1707	1351	1331	1315	2310	9073	7066	56771	14985	6863	2561
MEAN	77.4	56.9	43.6	42.9	47.0	74.5	302	228	1892	483	221	85.4
MAX	213	70	49	52	60	345	443	317	15600	2280	441	312
MIN	37	43	41	38	35	34	66	51	50	108	80	56
AC-FT	4760	3390	2680	2640	2610	4580	18000	14020	112600	29720	13610	5080

CAL YR 1985	TOTAL	52888	MEAN	145	MAX	437	MIN	36	AC-FT	104900
WTR YR 1986	TOTAL	107732	MEAN	295	MAX	15600	MIN	34	AC-FT	213700

08403500 CARLSBAD MAIN CANAL AT HEAD, NEAR CARLSBAD, NM

LOCATION.--Lat 32°29'25", long 104°15'08", in NW¼SW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank 220 ft downstream from headgates in Avalon Dam, and 3.3 mi, north of Carlsbad. Pecos River mile 467.2.

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. Elevation of gage is 3,156.50 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to March 1951 at site 20 ft upstream at datum 0.9 ft higher.

REMARKS.--No estimated daily discharges. Records good. Carlsbad Main Canal diverts water from Lake Avalon (station 08403800) for irrigation of about 25,000 acres in the Carlsbad Irrigation District. About 1,600 acres are irrigated on the left bank, most of it upstream from gaging station 08405200. The remaining acreage (most of which is downstream from station 08405200) is on the right bank. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--47 years, 104 ft³/s, 75,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 526 ft³/s, Sept. 15, 16, 1946; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	34	.00	.00	.80	.00	341	129	18	.30	222	.00
2	63	.00	.00	.00	.97	.00	379	157	.05	.16	179	.00
3	71	.00	.00	.00	61	.00	357	134	.00	.00	165	.00
4	73	.00	.00	.00	106	.00	290	97	.00	.00	172	.00
5	83	.03	.00	.00	131	.00	249	111	.00	.00	189	.00
6	77	.00	.00	.12	168	.00	224	156	.00	.00	215	.00
7	158	.00	.00	.13	140	.00	245	196	.00	.00	215	.00
8	198	.01	.00	.30	82	.00	311	226	44	.00	188	72
9	194	.00	.00	.31	43	.00	358	223	59	.00	173	103
10	134	.12	.00	.20	.00	.00	350	200	65	.00	162	103
11	127	.06	.00	.23	.00	.00	314	204	82	.00	200	88
12	85	.20	.00	.40	.00	.00	305	296	94	.00	202	59
13	80	.20	.00	.40	.00	.00	317	322	80	.00	211	49
14	67	.20	.00	.40	.00	.00	314	342	70	99	293	45
15	78	.20	.00	.40	.00	.00	325	327	117	163	303	59
16	84	.20	.00	.40	.00	.00	320	343	210	248	295	43
17	41	.20	.00	.53	70	.00	295	317	310	298	271	40
18	47	.20	.00	.60	140	.00	275	261	369	309	315	40
19	42	.10	.00	.60	178	.00	275	267	380	338	295	40
20	42	.08	.00	.60	145	.00	236	265	367	385	223	48
21	38	.19	.00	.60	149	.00	210	257	346	454	249	73
22	36	.05	.00	.63	151	.00	215	240	330	446	217	141
23	37	.00	.00	.80	83	.00	234	227	90	423	162	169
24	43	.05	.00	.80	.00	82	225	176	.17	397	79	159
25	29	.04	.00	.80	.00	190	175	137	.15	373	107	213
26	32	.00	.00	.80	.00	279	150	165	.00	353	145	210
27	71	.00	.11	.80	.00	334	137	114	.00	296	123	233
28	88	.00	.20	.93	.00	343	143	99	.00	282	89	234
29	94	.00	.02	1.0	---	349	140	116	.00	274	48	190
30	101	.06	.00	1.0	---	342	111	89	.00	265	30	230
31	90	---	.00	.86	---	354	---	45	---	249	.00	---
TOTAL	2479	36.19	.33	14.64	1648.77	2273.00	7820	6238	3031.37	5652.46	5737.00	2641.00
MEAN	80.0	1.21	.01	.47	58.9	73.3	261	201	101	182	185	88.0
MAX	198	34	.20	1.0	178	354	379	343	380	454	315	234
MIN	29	.00	.00	.00	.00	.00	111	45	.00	.00	.00	.00
AC-FT	4920	72	.6	29	3270	4510	15510	12370	6010	11210	11380	5240

CAL YR 1985	TOTAL	40266.14	MEAN	110	MAX	362	MIN	.00	AC-FT	79870
WTR YR 1986	TOTAL	37571.76	MEAN	103	MAX	454	MIN	.00	AC-FT	74520

08403800 LAKE AVALON NEAR CARLSBAD, NM

LOCATION.--Lat 32°29'27", long 104°15'05", in NW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on headwall at outlet gate of dam on Pecos River, 3.3 mi north of Carlsbad, and at mile 467.2.

DRAINAGE AREA.--18,070 mi², approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (month end gage heights and contents). October 1965 to current year. Month end gage heights January 1919 to December 1938 in files of Pecos River Commission.

REVISED RECORDS.--WSP 898: 1939.

GAGE.--Nonrecording gage. Elevation of gage is 3,157.0 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Lake is formed by Avalon Dam, an earthfill structure. The original Eddy (Avalon) Dam was completed and storage began in 1891. The dam was destroyed by flood of Aug. 3, 1893; repaired immediately. The dam was destroyed again Oct. 2, 1904; construction of present dam commenced on June 1, 1906, and was 88 percent complete June 30, 1907. Capacity (based on 1979 resurvey, new capacity table put into use January 1, 1982), 4,330 acre-ft, between gage heights, 0.0 (sill of outlet gates) and 20.4 ft, crest of spillway No. 2. No dead storage. No storage allocated to flood control. Figures given herein represent usable contents. Water is used by Carlsbad Irrigation District.

COOPERATION.--Records provided by Carlsbad Irrigation District.

EXTREMES FOR PERIOD OF RECORD (SINCE 1938).--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.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,394 acre-ft, July 7, gage height, 21.50 ft; minimum, 0 acre-ft, Oct. 25, 26.

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1677	58	2403	3535	3535	1342	532	1608	1746	4152	1473	2178
2	1608	109	2480	3535	3535	1407	573	1214	1887	3707	1407	2252
3	1540	230	2480	3535	3535	1407	616	1152	1932	4427	1407	2327
4	1473	423	2557	3535	3365	1473	811	1152	1959	4804	1473	2403
5	1407	493	2557	3535	3115	1473	1091	1407	2031	4804	1540	2557
6	1214	616	2634	3535	2872	1540	1407	1608	2104	4998	1473	2634
7	1091	662	2713	3535	2557	1540	1608	1816	2178	5394	1407	2713
8	864	710	2713	3535	2403	1608	1677	1746	2252	4998	1342	2713
9	710	760	2792	3535	2403	1608	1608	1746	2178	4334	1342	2634
10	811	919	2792	3535	2327	1677	1407	1887	2104	4520	1342	2480
11	864	1032	2872	3535	2403	1746	1342	1959	2031	4520	1342	2327
12	919	1091	2872	3535	2480	1816	1277	2031	1887	4520	1277	2252
13	919	1214	2952	3535	2557	1887	1152	1887	1746	4520	1152	2178
14	975	1277	3033	3535	2634	1887	1152	1746	1677	4614	975	2178
15	975	1407	3033	3535	2634	1959	1152	1608	1608	4243	919	2178
16	864	1473	3115	3535	2713	1959	1091	1473	1473	3972	919	2178
17	811	1608	3115	3535	2713	2031	1091	1214	1473	3621	919	2178
18	811	1816	3115	3535	2557	2031	1152	1342	1407	3198	975	2178
19	760	1887	3198	3535	2252	2104	1214	1342	1342	2713	975	2178
20	710	1887	3198	3535	1959	2104	1277	1342	1277	2252	1091	2178
21	662	1959	3281	3535	1677	2178	1407	1342	1277	1677	1277	2178
22	662	1959	3281	3535	1540	2252	1540	1407	1342	1342	1540	1959
23	662	2031	3365	3450	1214	2252	1746	1540	1608	1407	1959	1816
24	84	2031	3365	3450	1091	2327	1816	1677	4804	1608	2327	1608
25	0	2104	3365	3450	1091	2104	1746	1816	4804	1746	2327	1342
26	0	2104	3365	3450	1152	1816	1746	1959	4804	1816	2178	1032
27	41	2178	3450	3450	1214	1473	1746	1959	4709	1887	2031	975
28	58	2178	3450	3450	1342	1032	1887	2031	4804	1887	1887	1091
29	41	2252	3450	3450	---	811	1887	1887	4709	1887	1887	1152
30	73	2327	3535	3450	---	573	1746	1746	4709	1746	1959	1032
31	90	---	3535	3450	---	532	---	1746	---	1540	2031	---
MAX	1677	2327	3535	3535	3535	2327	1887	2031	4804	5394	2327	2713
MIN	.00	58	2403	3450	1091	532	532	1152	1277	1342	919	975
(†)	-1730	+2237	+1208	-85	-2108	-810	+1214	0	+2963	-3169	+491	-999

CAL YR 1985 MAX 4520 MIN .00 (†) +5715
WTR YR 1986 MAX 5394 MIN .00 (†) -788

(†) CHANGE IN CONTENTS IN ACRE-FEET.

08403800 LAKE AVALON NEAR CARLSBAD, NM -- Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.10	11.90	18.15	19.50	19.50	16.60	15.10	17.00	17.20	20.20	16.80	17.80
2	17.00	12.80	18.20	19.55	19.50	16.70	15.20	16.40	17.40	19.70	16.70	17.90
3	16.90	14.00	18.25	19.55	19.50	16.75	15.30	16.30	17.45	20.50	16.75	18.00
4	16.80	14.80	18.30	19.55	19.30	16.80	15.70	16.30	17.50	20.90	16.80	18.15
5	16.70	15.00	18.35	19.50	19.00	16.85	16.20	16.70	17.60	20.90	16.90	18.30
6	16.40	15.30	18.40	19.50	18.70	16.90	16.70	17.00	17.70	21.10	16.80	18.40
7	16.20	15.40	18.50	19.50	18.30	16.95	17.00	17.30	17.80	21.50	16.70	18.50
8	15.80	15.50	18.55	19.50	18.15	17.00	17.15	17.20	17.90	21.10	16.60	18.50
9	15.50	15.60	18.60	19.50	18.10	17.05	17.00	17.25	17.80	20.40	16.60	18.40
10	15.70	15.90	18.65	19.50	18.00	17.10	16.70	17.40	17.70	20.60	16.60	18.20
11	15.80	16.10	18.70	19.50	18.10	17.20	16.60	17.55	17.60	20.60	16.60	18.00
12	15.90	16.25	18.75	19.50	18.20	17.30	16.50	17.60	17.40	20.65	16.50	17.90
13	15.95	16.40	18.80	19.50	18.30	17.40	16.30	17.40	17.20	20.65	16.30	17.85
14	16.00	16.55	18.90	19.50	18.40	17.45	16.30	17.20	17.10	20.70	16.00	17.85
15	16.00	16.70	18.95	19.50	18.45	17.50	16.30	17.00	17.00	20.30	15.90	17.80
16	15.80	16.85	19.00	19.50	18.50	17.55	16.25	16.80	16.80	20.00	15.90	17.80
17	15.70	17.00	19.00	19.50	18.55	17.60	16.20	16.45	16.80	19.60	15.90	17.80
18	15.70	17.30	19.05	19.50	18.30	17.65	16.30	16.60	16.70	19.10	16.00	17.80
19	15.60	17.40	19.10	19.50	17.90	17.70	16.40	16.60	16.60	18.50	16.05	17.80
20	15.50	17.45	19.15	19.50	17.50	17.75	16.50	16.60	16.50	17.90	16.20	17.80
21	15.45	17.50	19.20	19.50	17.10	17.80	16.70	16.60	16.50	17.10	16.50	17.80
22	15.40	17.55	19.25	19.50	16.90	17.90	16.90	16.70	16.65	16.60	16.90	17.50
23	15.40	17.60	19.30	19.45	16.40	17.95	17.20	16.90	17.00	16.70	17.50	17.30
24	12.45	17.65	19.30	19.45	16.25	18.00	17.30	17.10	20.90	17.00	18.00	17.00
25	.00	17.70	19.35	19.45	16.25	17.70	17.20	17.30	20.90	17.20	18.00	16.60
26	.00	17.75	19.35	19.45	16.30	17.30	17.20	17.50	20.90	17.30	17.80	16.10
27	11.50	17.80	19.40	19.45	16.40	16.80	17.20	17.50	20.80	17.40	17.60	16.00
28	11.90	17.85	19.40	19.45	16.55	16.10	17.40	17.60	20.90	17.45	17.40	16.20
29	11.50	17.95	19.45	19.45	---	15.70	17.40	17.40	20.80	17.40	17.40	16.30
30	12.20	18.05	19.50	19.45	---	15.20	17.25	17.20	20.80	17.20	17.50	16.10
31	12.50	---	19.50	19.45	---	15.10	---	17.20	---	16.90	17.65	---
MEAN	14.20	16.39	18.91	19.49	17.94	17.08	16.58	17.02	18.06	19.13	16.80	17.58
MAX	17.10	18.05	19.50	19.55	19.50	18.00	17.40	17.60	20.90	21.50	18.00	18.50
MIN	.00	11.90	18.15	19.45	16.25	15.10	15.10	16.30	16.50	16.60	15.90	16.00

CAL YR 1985 MEAN 17.31 MAX 20.60 MIN .00
WTR YR 1986 MEAN 17.43 MAX 21.50 MIN .00

08404000 PECOS RIVER BELOW AVALON DAM, NM

LOCATION.--Lat 32°28'55", long 104°15'47", in SW¼SW¼NE¼ sec.14, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank 4,800 ft downstream from Avalon Dam, 4.5 mi northwest of Carlsbad, and at mile 466.3.

DRAINAGE AREA.--18,080 mi², approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1907, (published as "at Avalon"), June 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,130 ft above National Geodetic Vertical Datum of 1929, from topographic map. January 1906 to March 1907 nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.--Estimated daily discharges: June 23, 24 and July 12-15. Records good except for estimated daily discharges which are poor. Flow completely regulated by Lake Avalon (station 08403800) since 1891. Flow also regulated by several other reservoirs. Diversions and ground-water withdrawals upstream from station for irrigation of about 198,000 acres, 1959 determination. Station bypassed by Carlsbad Main Canal (station 08403500).

AVERAGE DISCHARGE.--35 years, 33.9 ft³/s, 24,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,500 ft³/s, Aug. 23, 1966, gage height, 26.4 ft, from floodmarks, from rating curve extended above 33,000 ft³/s on basis of computation of peak flow over Tansill Dam 5.8 mi downstream; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1904, caused in part, by failure of Avalon Dam, probably exceeded 90,000 ft³/s, and is probably the greatest flood since 1842. A major flood occurred Aug. 3, 1893, and was described as "greatest in 50 years"; it damaged McMillan Dam, then under construction, and washed out the original Avalon Dam. Another major flood occurred Aug. 7, 1916, discharge 70,000 ft³/s, at site 6.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft³/s, June 24, gage height, 15.20 ft; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	2470	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	576	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	745	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	1440	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	661	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	1370	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	464	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	591	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	172	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	67	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	91	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	103	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	112	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	107	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.73	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	260	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	18	.00	.00	.00	.00	.00	.00	.00	17000	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	11100	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	9480	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	5920	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	3750	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	3890	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	3810	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	278.00	.00	.00	.00	.00	.00	.00	.00	54950.00	8989.73	.00	.00
MEAN	8.97	.00	.00	.00	.00	.00	.00	.00	1832	290	.00	.00
MAX	260	.00	.00	.00	.00	.00	.00	.00	17000	2470	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	551	.00	.00	.00	.00	.00	.00	.00	109000	17830	.00	.00

CAL YR 1985	TOTAL	2774.98	MEAN	7.60	MAX	260	MIN	.00	AC-FT	5500
WTR YR 1986	TOTAL	64217.73	MEAN	176	MAX	17000	MIN	.00	AC-FT	127400

08405000 PECOS RIVER AT CARLSBAD, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 32°24'42", long 104°13'17", in SE¼NE¼NE¼ sec.7, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, immediately downstream from Lower Tansil Dam, which is approximately 0.2 mi upstream from Dark Canyon, and 0.5 mi downstream from the Greene Street Bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,100 mi², approximately (contributing area).

PERIOD OF RECORD.--Water years 1905-07, 1937-46, 1951 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1905 to April 1907, May 1937 to September 1946, July 1951 to June 1986 (discontinued).
WATER TEMPERATURES: July 1951 to June 1986 (discontinued).

REMARKS.--Prior to impoundment above Lower Tansil Dam in January 1970 samples were collected at gage on Greene Street Bridge. Additional samples were collected at 08405200 Pecos River below Dark Canyon for comparison with those collected at this station. Mean daily discharges are estimated from discharge station below Dark Canyon.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 6,800 microsiemens, Aug. 3, 1974; minimum daily, 401 microsiemens, Sept. 23, 1974.
WATER TEMPERATURES: Maximum daily, 38.0°C, May 28, 1969; minimum daily, 0.0°C on several days during 1965, 1985, and 1986

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,910 microsiemens May 18,20; minimum daily, 1030 microsiemens June 27-30.
WATER TEMPERATURES: Maximum daily, 30.0°C, Aug. 11; minimum daily, 0.0°C several days during November, December, and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV												
05...	1130	19	3050	3620	8.50	8.00	25.0	19.0	9.1	1300	1200	200
26...	1045	19	3700	3600	8.10	7.90	17.5	12.0	9.0	1300	1100	330
JAN												
03...	1130	21	2750	3090	8.20	7.70	14.0	9.0	11.2	1000	870	250
FEB												
03...	1230	24	3080	3120	8.00	7.70	27.0	12.5	11.2	1000	830	250
MAR												
03...	1140	21	3150	3240	8.10	7.90	17.0	14.5	9.7	1000	860	240
31...	1300	17	3280	3390	8.00	7.90	34.5	22.0	--	1200	1100	310
MAY												
09...	1520	11	3810	3870	8.20	7.90	29.5	23.5	7.6	1300	1200	320
JUN												
03...	1340	14	3720	3560	8.30	7.80	31.5	27.5	9.4	1200	1100	290
JUL												
10...	1540	98	1930	1980	7.20	7.70	34.0	25.0	7.8	630	510	180
AUG												
11...	1710	42	3390	3370	8.01	7.80	31.5	30.0	8.0	1200	1100	310
SEP												
04...	1635	34	3410	3490	7.92	7.80	31.0	28.0	7.8	1100	960	280

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
05...	200	350	4	4.8	119	1100	570	0.70	13	2500	220	110
26...	110	300	4	4.0	171	1100	580	0.80	15	2500	240	70
JAN												
03...	100	280	4	3.7	170	920	470	0.70	14	2100	190	90
FEB												
03...	93	280	4	3.7	178	930	460	0.60	15	2100	210	80
MAR												
03...	100	300	4	4.0	155	970	470	0.70	15	2200	190	50
31...	110	310	4	4.3	118	1000	540	0.60	13	2400	210	150
MAY												
09...	130	390	5	4.7	117	1100	630	0.70	11	2700	250	40
JUN												
03...	110	320	4	4.7	94	1100	420	0.70	11	2300	240	230
JUL												
10...	44	170	3	5.5	125	520	280	0.50	12	1300	120	10
AUG												
11...	110	330	4	4.3	165	980	540	0.70	17	2400	230	30
SEP												
04...	100	350	5	1.3	152	1000	580	0.70	17	2400	240	40

08405000 PECOS RIVER AT CARLSBAD, NM

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3720	3290	3440	3080	3020	3100	3310	3650	3480			
2	3720	3390	3410	3040	3020	3190	3320	3650	3490			
3	3760	3440	3440	3030	2990	3120	3290	---	3490			
4	3750	3480	3440	2930	2940	3180	3230	3800	3600			
5	3770	3480	3440	3030	2970	3230	3290	3770	3600			
6	3750	---	3380	3030	2980	3240	3290	3670	3620			
7	3740	3610	3490	2900	2940	3210	3260	3710	3600			
8	3730	---	3450	2900	2910	3190	3270	3780	3500			
9	3690	3670	3390	3030	2900	3230	3270	3730	3530			
10	---	3660	3390	3060	2910	3210	3300	3830	3530			
11	3630	---	3360	3050	2890	3210	3320	3830	3530			
12	---	3700	3310	3030	2880	3190	3320	3770	3530			
13	---	3690	3320	3030	3040	3260	3320	3850	3530			
14	---	3720	3250	3080	3040	3360	3320	3880	3640			
15	3660	3630	3250	3080	3040	3360	3360	3880	3610			
16	3660	3630	3280	3030	3070	3320	3430	3830	3640			
17	---	3600	3280	2980	3080	3320	3410	3850	3630			
18	3240	3590	3210	3000	3080	3390	3410	3910	3640			
19	3420	3450	3260	3000	3100	3360	3430	3900	3640			
20	---	3530	3260	2950	3070	3400	3440	3910	3670			
21	3420	3550	3170	2930	3080	3390	3540	3870	3670			
22	3260	3490	3200	2940	3040	3360	---	3860	3670			
23	3250	3520	3230	2970	3070	3360	3430	3890	3670			
24	3180	3600	3200	2980	3040	3390	3500	3850	3690			
25	3080	3560	3200	2970	3130	3390	3530	3880	3680			
26	3100	3520	3200	2970	3130	3360	3490	3880	1050			
27	3050	3490	3170	2940	3140	3360	3530	3890	1030			
28	3060	3450	3140	2900	3140	3300	3680	3720	1030			
29	3170	3470	3090	3020	---	3290	3640	3720	1030			
30	3110	3440	3140	3030	---	3290	3660	3710	1030			
31	3160	---	3140	3020	---	3320	---	3710	---			
MEAN	3440	3540	3290	3000	3020	3290	3400	3810	3170			

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	18.0	.0	3.0	.0	15.0	18.0	21.0	27.0			
2	17.0	18.0	2.0	2.0	.0	15.0	19.0	21.0	27.0			
3	19.0	18.0	3.0	3.0	.0	15.0	19.0	21.5	27.0			
4	16.0	15.0	2.0	3.0	.0	15.0	18.0	21.5	29.0			
5	16.0	15.0	3.0	4.0	1.0	15.0	18.0	21.5	29.0			
6	19.0	15.0	3.0	4.0	1.0	15.0	19.0	21.5	29.0			
7	17.0	15.0	2.5	4.0	2.0	15.0	20.0	22.0	29.0			
8	20.0	15.0	2.0	5.0	5.0	16.0	21.0	22.0	29.0			
9	20.0	15.0	2.0	4.0	5.0	16.0	20.0	22.5	28.0			
10	---	15.0	4.0	5.0	5.0	16.0	20.0	25.0	29.0			
11	19.5	15.0	5.0	5.0	7.0	15.0	20.5	25.0	27.0			
12	---	15.0	5.0	5.0	6.0	15.0	22.0	24.0	29.0			
13	---	15.0	6.0	5.0	4.0	15.0	19.0	23.0	28.0			
14	---	15.0	6.0	4.0	3.0	12.0	19.0	23.0	29.0			
15	20.0	13.0	6.0	3.0	2.0	12.0	19.0	23.0	29.0			
16	18.0	12.0	6.0	4.0	2.0	13.0	18.0	23.0	29.0			
17	---	12.0	6.0	4.0	2.0	12.0	18.0	23.0	29.5			
18	19.0	8.0	6.0	1.0	2.0	13.0	18.0	22.0	29.5			
19	19.0	7.5	5.5	2.0	2.0	13.0	18.0	19.0	29.5			
20	---	.0	5.0	2.0	2.0	14.0	19.0	19.0	29.0			
21	18.0	.0	6.0	2.0	5.0	15.0	20.0	20.0	29.0			
22	19.0	.0	4.0	2.0	4.0	15.0	20.0	21.0	29.0			
23	20.0	1.0	4.0	2.0	4.0	15.0	20.0	21.0	29.0			
24	19.0	1.0	5.0	3.0	3.0	15.0	21.0	21.0	29.0			
25	19.0	2.0	4.5	2.0	2.0	15.0	21.0	22.0	29.0			
26	20.0	.0	4.0	2.0	1.0	15.0	21.0	22.0	23.0			
27	19.0	2.0	5.0	2.0	3.0	15.0	20.0	22.0	23.0			
28	19.0	1.5	4.0	1.0	1.0	16.0	21.0	22.0	24.0			
29	19.0	2.0	5.5	1.0	---	22.0	21.0	22.0	24.0			
30	19.0	.0	4.0	1.0	---	21.0	21.0	22.0	24.0			
31	19.0	---	3.0	1.0	---	18.0	---	22.0	---			
MEAN	18.5	9.5	4.0	3.0	2.5	15.0	19.5	22.0	28.0			

WTR YR 1986 MEAN 13.5 MAX 29.5 MIN .0

08405150 DARK CANYON DRAW AT CARLSBAD, NM

LOCATION.--Lat 32°24'24", long 104°13'34", in NE¼NW¼SE¼ sec.7, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on downstream side of U.S. Highway 62-285 (Canal Street) bridge in Carlsbad, and 0.6 mi upstream from mouth. Mouth at Pecos River mile 459.2.

DRAINAGE AREA.--450 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,088.21 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. A Soil Conservation Service flood control project on Hackberry Draw, an upstream tributary, has some effect on flood peaks and flow duration. Ground-water withdrawals upstream from station for irrigation of approximately 2,100 acres, 1973 determination and for municipal supply for Carlsbad.

AVERAGE DISCHARGE.--13 years, 9.15 ft³/s, 6,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft³/s, Sept. 26, 1980, gage height, 12.10 ft, from rating curve extended above 7,100 ft³/s; maximum gage height, 12.53 ft, June 24, 1986: no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a discharge of 66,000 ft³/s, as determined by slope-area measurement at site 1.2 mi upstream. Another flood of approximately the same magnitude occurred Sept. 20, 1941.
Other major peaks occurred July 17, 1906, July 24, 1908, July 24, 1911, Apr. 18, 1915, Aug. 8, 1916, Sept. 15, 1919, Aug. 4, 1925, and May 23, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 500 ft³/s and maximum (*), from rating curve extended above 7,100 ft³/s on basis of slope-area measurements at gage height 12.53 ft.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	1130	*26,900	*12.53	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	1680	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	8360	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	1400	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	91	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	51	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	1.9	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.08	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	11583.98	.00	.00	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	386	.00	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	8360	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	22980	.00	.00	.00

CAL YR 1985	TOTAL	.00	MEAN	.00	MAX	.00	MIN	.00	AC-FT	.00
WTR YR 1986	TOTAL	11583.98	MEAN	31.7	MAX	8360	MIN	.00	AC-FT	22980

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD,NM

LOCATION.--Lat 32°24'37", long 104°12'58", in NE¼SW¼NW¼ sec.8, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on left bank, 700 ft downstream from mouth of Dark Canyon Draw, 0.3 mi downstream from Lower Tansill Dam and Bataan recreational area, 0.8 mi downstream from bridge on U.S. Highway 62-180 in Carlsbad, and at mile 459.1.

DRAINAGE AREA.--18,550 mi², approximately, contributing area.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,075.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 3-5. Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Avalon (station 08403800) since 1891 and by several other reservoirs and up to Nov. 1982 at low stages by power plant. Power plant discontinued operation Nov. 1982. Gage is bypassed on left bank by Carlsbad Main Canal East which irrigates several hundred acres adjacent to and downstream from gage site and on right bank by Carlsbad Main Canal South, which with supplemental ground-water withdrawals irrigates about 23,000 acres downstream. Diversions and ground-water withdrawals upstream from station for irrigation of about 198,000 acres, 1959 determination.

AVERAGE DISCHARGE.--16 years, 56.3 ft³/s, 40,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,200 ft³/s, Sept. 26, 1980, gage height, 14.60 ft, from floodmarks, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement at gage height 15.22 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a stage of about 22 ft, discharge not determined. (For dates of other historical floods see station 08404000.)

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,400 ft³/s, June 24, gage height, 17.35 ft, from rating curve extended as explained above; minimum, 4.7 ft³/s, May 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	21	17	18	30	21	16	13	14	2490	34	44
2	17	19	17	19	30	21	18	12	14	847	34	37
3	17	19	18	20	26	19	19	12	13	651	37	36
4	16	19	18	21	26	19	19	16	15	1590	34	36
5	16	19	17	19	26	20	19	14	15	785	33	34
6	17	18	18	23	24	18	21	12	15	1390	33	33
7	17	18	18	22	26	19	27	12	14	657	32	33
8	16	18	19	20	22	19	30	11	13	656	34	33
9	23	18	19	22	26	21	32	10	23	366	35	34
10	17	18	19	22	30	16	29	9.4	13	93	37	35
11	18	18	17	21	27	22	26	9.4	13	132	33	32
12	16	18	18	21	27	16	21	9.6	13	139	35	32
13	16	18	18	21	28	19	20	9.5	14	144	35	35
14	16	18	18	22	28	19	17	10	14	138	35	36
15	15	17	17	22	29	18	18	8.7	13	53	36	35
16	20	18	17	23	28	18	17	10	13	37	39	35
17	33	18	17	23	22	19	18	15	11	36	43	36
18	19	19	17	23	23	16	14	8.8	12	36	39	34
19	19	18	18	24	25	17	17	9.8	14	36	37	34
20	20	17	17	25	22	17	12	10	14	39	36	36
21	19	19	19	25	21	16	13	9.9	16	41	35	37
22	19	19	21	23	22	17	13	11	26	38	38	36
23	208	19	18	23	22	17	14	9.3	2680	34	42	40
24	68	19	18	28	22	17	17	8.8	22800	33	39	41
25	20	19	18	29	22	17	18	9.3	10700	34	35	37
26	19	19	18	25	22	16	14	9.5	8520	35	34	31
27	19	19	18	25	20	16	13	12	5560	36	34	31
28	19	19	18	30	20	16	13	11	3540	37	33	33
29	20	19	18	29	---	17	14	13	3570	35	33	38
30	20	20	19	28	---	17	14	13	3540	35	35	38
31	20	---	18	29	---	17	---	32	---	34	34	---
TOTAL	815	557	557	725	696	557	553	361.0	61232	10707	1103	1062
MEAN	26.3	18.6	18.0	23.4	24.9	18.0	18.4	11.6	2041	345	35.6	35.4
MAX	208	21	21	30	30	22	32	32	22800	2490	43	44
MIN	15	17	17	18	20	16	12	8.7	11	33	32	31
AC-FT	1620	1100	1100	1440	1380	1100	1100	716	121500	21240	2190	2110

CAL YR 1985	TOTAL	10789.7	MEAN	29.6	MAX	208	MIN	4.3	AC-FT	21400
WTR YR 1986	TOTAL	78925.0	MEAN	216	MAX	22800	MIN	8.7	AC-FT	156500

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--Samples collected at this station for comparison with those collected at 08405000 Pecos River at Carlsbad, NM.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV							
05...	1015	14	3290	7.80	25.0	19.5	9.3
26...	1015	19	3600	8.10	15.0	12.0	9.1
JAN							
03...	1050	21	2800	8.10	11.0	8.5	10.8
FEB							
03...	1200	24	3100	8.10	27.0	12.5	11.4
MAR							
03...	1035	21	3000	8.10	18.0	14.0	9.4
31...	1230	17	3300	7.90	34.5	22.0	--
MAY							
09...	1435	11	3850	8.23	30.5	23.0	8.6
JUN							
03...	1300	13	3700	8.31	31.5	27.5	9.2
JUL							
10...	1400	98	2000	8.30	35.5	27.5	7.4
AUG							
11...	1615	42	3480	7.80	33.0	30.5	--
SEP							
04...	1530	34	3400	7.92	32.5	27.0	8.2

08405500 BLACK RIVER ABOVE MALAGA, NM

LOCATION.--Lat 32°13'44", long 104°09'02", in SW¼NW¼SW¼ sec.12, T.24 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on right bank 0.6 mi upstream from Black River diversion dam, 4.6 mi west of Malaga, and 7.1 mi upstream from mouth. Mouth at Pecos River mile 436.3.

DRAINAGE AREA.--343 mi².

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

REVISED RECORDS.--WSP 1632: 1948, 1949-50(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. March to December 1940 water-stage recorder and Cippoletti weir at site 0.3 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--39 years (water years 1948-86), 13.0 ft³/s, 9,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,600 ft³/s, Aug. 23, 1966, gage height, 21.7 ft, from floodmarks, from rating curve extended above 5,900 ft³/s on basis of slope-area measurements at gage heights 12.60 ft and 21.7 ft; minimum, 0.51 ft³/s, June 1, 1983.
The flood of Aug. 23, 1966, exceeded the previous maximum stage which occurred in 1908 by about 1.0 ft, from information by local resident.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 20 or 21, 1941, reached a stage of 19.0 ft, present site and datum, determined in 1947 from well defined floodmarks, discharge, 33,000 ft³/s, from rating curve extended above 1,400 ft³/s on basis of slope-area measurements at gage heights 8.41 ft and 12.60 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	1330	*6,770	*9.08	July 3	2300	892	4.06

Minimum discharge, 2.5 ft³/s, May 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	15	13	7.1	16	7.1	8.6	9.9	6.9	132	9.9	18
2	7.8	14	13	7.1	16	6.9	11	9.9	13	87	11	18
3	7.8	14	13	6.1	17	5.5	11	9.9	11	68	11	17
4	7.6	14	13	5.1	16	4.5	11	9.9	10	154	11	18
5	7.3	14	13	4.7	16	4.2	11	11	9.7	39	11	19
6	7.4	14	13	4.6	17	4.0	11	11	9.2	25	11	18
7	7.5	14	13	9.4	16	3.8	11	10	8.9	23	11	18
8	7.5	14	13	13	16	3.7	11	10	8.6	21	11	18
9	8.0	14	13	13	17	3.6	11	10	9.2	20	12	16
10	8.9	14	13	13	19	3.5	11	10	9.0	20	12	10
11	8.6	14	13	13	18	3.4	11	10	8.5	19	12	8.9
12	9.8	14	13	16	17	3.3	11	10	8.3	19	12	8.2
13	10	14	13	16	17	3.1	11	10	8.0	19	12	8.3
14	10	14	13	16	17	3.2	10	9.8	8.1	19	12	9.4
15	11	14	13	16	17	3.4	11	9.4	8.2	19	14	9.4
16	12	14	13	16	17	3.4	11	9.6	8.2	19	22	8.9
17	46	14	13	16	17	3.4	11	9.6	8.2	19	16	9.0
18	22	14	13	16	17	3.4	11	9.8	9.1	19	14	10
19	14	14	13	16	17	3.4	12	9.9	11	19	13	9.4
20	17	14	13	16	17	3.4	13	9.8	13	19	13	8.6
21	15	14	14	16	17	3.4	13	9.4	14	19	13	8.6
22	14	14	14	16	16	3.4	13	9.3	17	18	14	8.6
23	14	14	13	16	17	3.3	13	9.0	208	14	13	8.7
24	15	14	13	16	17	4.1	12	9.7	1970	13	11	8.5
25	14	14	13	16	17	5.6	12	10	101	11	12	8.2
26	14	14	8.6	16	15	5.9	12	9.9	35	9.5	14	8.2
27	14	13	7.8	16	8.7	6.0	12	7.2	25	8.9	9.4	8.5
28	14	13	7.8	16	7.1	6.1	11	4.7	41	8.5	11	9.0
29	14	13	7.5	16	---	5.3	12	3.4	20	8.2	18	9.9
30	14	13	7.5	16	---	4.3	9.9	2.7	18	8.2	18	9.6
31	14	---	7.3	16	---	3.9	---	6.6	---	23	18	---
TOTAL	393.7	417	373.5	416.1	451.8	131.5	339.5	281.4	2635.1	920.3	402.3	347.9
MEAN	12.7	13.9	12.0	13.4	16.1	4.24	11.3	9.08	87.8	29.7	13.0	11.6
MAX	46	15	14	16	19	7.1	13	11	1970	154	22	19
MIN	7.3	13	7.3	4.6	7.1	3.1	8.6	2.7	6.9	8.2	9.4	8.2
AC-FT	781	827	741	825	896	261	673	558	5230	1830	798	690

CAL YR 1985	TOTAL	4622.8	MEAN	12.7	MAX	477	MIN	1.8	AC-FT	9170
WTR YR 1986	TOTAL	7110.1	MEAN	19.5	MAX	1970	MIN	2.7	AC-FT	14100

08406500 PECOS RIVER NEAR MALAGA, NM

LOCATION.--Lat 32°12'26", long 104°01'22", in SW¼NW¼NE¼ sec.19, T.24 S., R.29 E., Eddy County, Hydrologic Unit 13060011, on right bank 3.1 mi southeast of Malaga, 4.3 mi downstream from Black River, and at mile 432.2.

DRAINAGE AREA.--19,190 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1920 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1632: 1925, 1932-37.

GAGE.--Water-stage recorder. Elevation of gage is 2,895.64 ft above National Geodetic Vertical Datum of 1929. May 1, 1920 to Mar. 24, 1949, at datum 3 ft higher.

REMARKS.--Estimated daily discharges: Apr. 3-18 and Feb. 10-27. Records good except for estimated daily discharges, which are poor. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from 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 downstream from gage. This bypass is not gaged.

AVERAGE DISCHARGE.--16 years (water years 1921-36), 274 ft³/s, 198,500 acre-ft/yr, prior to completion of Lake Sumner.
50 years (water years 1938-86), 169 ft³/s, 122,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft³/s, Aug. 23, 1966, gage height, 42.1 ft, from floodmarks, from rating curve extended above 36,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.7 ft³/s, Oct. 20, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1904, discharge not determined. Flood of Aug. 7, 1916, reached a discharge of 70,000 ft³/s, at Carlsbad, 27 mi upstream. Flood in September 1919 reached a stage of 29.4 ft, present datum, discharge, 40,400 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,100 ft³/s, June 24, gage height, 31.41 ft, from rating curve extended as explained above; minimum, 15 ft³/s, May 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	116	60	55	69	37	46	26	62	3070	61	100
2	84	125	60	54	65	37	39	27	58	1870	54	96
3	67	80	55	57	60	38	30	26	43	391	56	91
4	70	65	57	59	60	38	27	22	42	1410	70	83
5	77	63	58	55	55	38	28	21	44	1050	67	83
6	80	62	60	55	40	36	27	21	46	971	63	92
7	89	63	58	56	45	37	26	22	45	1170	60	92
8	87	62	59	60	48	37	26	20	35	429	56	79
9	68	62	59	69	46	37	27	19	33	668	52	77
10	81	62	59	67	61	37	24	19	30	299	52	93
11	77	61	58	68	60	37	22	18	36	199	56	92
12	71	62	58	69	58	34	21	29	29	205	54	83
13	78	63	57	70	56	38	22	26	25	195	51	85
14	65	63	57	71	70	34	23	19	24	193	51	106
15	70	62	59	65	70	36	24	17	24	186	52	98
16	81	61	59	67	56	38	26	19	24	142	61	89
17	121	60	59	78	47	36	30	21	23	95	64	96
18	120	60	59	83	43	34	38	21	23	75	74	89
19	101	61	60	87	42	36	30	19	22	64	59	75
20	105	59	60	89	41	41	27	18	28	65	55	81
21	113	58	60	89	43	43	26	19	25	62	48	69
22	111	59	60	87	42	45	25	20	26	73	39	62
23	92	61	61	86	39	44	24	18	151	80	47	74
24	130	62	61	86	41	44	27	18	25700	68	96	73
25	168	62	60	84	45	44	27	16	19000	61	74	63
26	107	63	60	83	43	49	24	19	9830	76	84	61
27	78	62	56	83	40	53	24	22	7200	72	85	54
28	94	62	56	83	38	43	27	22	4270	59	98	49
29	93	61	55	81	---	35	29	32	3630	56	101	63
30	97	60	55	79	---	33	25	33	3620	62	100	70
31	90	---	55	72	---	36	---	53	---	63	106	---
TOTAL	2829	1982	1810	2247	1423	1205	821	702	74148	13479	2046	2418
MEAN	91.3	66.1	58.4	72.5	50.8	38.9	27.4	22.6	2472	435	66.0	80.6
MAX	168	125	61	89	70	53	46	53	25700	3070	106	106
MIN	64	58	55	54	38	33	21	16	22	56	39	49
AC-FT	5610	3930	3590	4460	2820	2390	1630	1390	147100	26740	4060	4800

CAL YR 1985 TOTAL 24534 MEAN 67.2 MAX 1420 MIN 14 AC-FT 48660
WTR YR 1986 TOTAL 105110 MEAN 288 MAX 25700 MIN 16 AC-FT 208500

08406500 PECOS RIVER NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Once-daily samples collected 2.5 mi upstream from discharge station.

PERIOD OF RECORD.--Water years 1937 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1937 to June 1986 (discontinued).
WATER TEMPERATURES: February 1959 to June 1986 (discontinued).

REMARKS.--No appreciable inflow between discharge station and once-daily sampling point except during periods of heavy local rains.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 28,100 microsiemens, June 7, 1966; minimum daily, 402 microsiemens, Aug. 12, 1984.
WATER TEMPERATURES: Maximum daily, 34.0°C, June 25, 1964; minimum daily, 2.0°C, Dec. 25, 26, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 9,750 microsiemens, May 12; minimum daily, 407 microsiemens, June 25.
WATER TEMPERATURES: Maximum daily, 30.0°C, June 17; minimum daily, 5.0°C, Jan. 8, Feb. 10, 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT											
31...	1100	88	5500	5810	8.70	7.40	20.0	18.5	11.1	1500	1300
NOV											
27...	0950	63	6000	6350	8.10	7.60	14.0	12.0	9.5	2100	1900
JAN											
02...	1315	55	6500	6610	8.50	7.40	18.5	10.5	--	2100	1900
31...	1130	71	5000	5590	8.20	7.40	17.0	10.5	11.8	1600	1500
FEB											
28...	1220	37	7030	7400	8.40	7.60	16.5	14.5	13.2	1700	1600
APR											
01...	1340	47	7000	6990	8.40	8.10	24.5	21.0	--	2000	1900
MAY											
12...	1445	34	9750	9110	8.20	7.60	34.5	26.0	9.8	2600	2400
JUN											
04...	1045	42	7900	7450	8.10	7.30	26.0	24.5	10.1	2300	2200
JUL											
14...	1245	191	3540	3860	8.20	7.30	29.0	27.0	8.8	850	720
AUG											
08...	1100	53	7000	6750	8.10	7.30	31.5	28.5	8.6	1900	1700
SEP											
11...	1530	88	--	5660	8.03	7.50	30.0	25.0	10.2	1700	1600

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT											
31...	310	170	660	8	9.1	160	1500	1100	0.80	13	3900
NOV											
27...	530	190	730	7	10	164	1600	1300	0.90	11	4500
JAN											
02...	530	180	800	8	12	142	1800	1400	0.70	8.5	4800
31...	400	150	610	7	8.8	135	1400	1100	0.70	8.4	3800
FEB											
28...	320	220	900	10	13	123	1800	1800	0.80	5.3	5100
APR											
01...	490	200	1000	10	21	110	1700	1500	0.80	7.8	5000
MAY											
12...	630	240	1200	11	23	128	2200	2100	0.90	14	6500
JUN											
04...	550	220	920	9	13	118	1800	1700	0.90	11	5300
JUL											
14...	210	80	430	7	11	129	850	740	0.50	12	2400
AUG											
08...	450	180	870	9	--	123	--	--	0.80	15	--
SEP											
11...	420	160	660	7	4.7	137	1600	1200	0.70	15	4100

08406500 PECOS RIVER NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SAM-PLING METHOD, CODES (82398)
OCT										
31...	1.00	0.960	0.240	1.1	2.3	0.060	0.040	350	210	10.0
NOV										
27...	2.10	1.90	0.260	0.74	3.1	0.050	0.020	360	100	10.0
JAN										
02...	2.00	2.00	0.170	1.4	3.6	0.120	0.010	150	90	10.0
31...	1.30	1.30	0.140	1.7	3.1	0.120	0.020	370	60	10.0
FEB										
28...	1.40	1.40	0.170	0.93	2.5	0.100	<0.010	460	50	10.0
APR										
01...	0.700	0.710	0.230	1.4	2.3	0.090	0.030	430	310	10.0
MAY										
12...	1.60	1.60	0.300	0.90	2.8	0.070	<0.010	580	50	10.0
JUN										
04...	0.800	0.780	0.330	1.7	2.8	0.080	0.030	510	360	10.0
JUL										
14...	0.500	0.520	0.170	1.5	2.2	0.670	<0.010	240	150	10.0
AUG										
08...	1.50	1.40	0.170	1.6	3.3	0.080	<0.010	460	30	10.0
SEP										
11...	1.50	1.50	0.190	1.0	2.7	0.050	<0.010	370	40	10.0

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5760	5190	6020	6300	5580	7210	6520	8290	7890			
2	4990	4770	6130	6300	5650	7130	6580	8170	7700			
3	5010	5470	5970	6640	5690	7130	6640	8200	7630			
4	5750	5910	6130	6430	5810	7120	6440	8260	7480			
5	5690	6090	6200	6700	5670	7090	6630	8380	7450			
6	5480	6040	6030	6650	5690	7140	6890	8620	7430			
7	5200	5990	6040	6760	5630	7160	6980	8880	7240			
8	5430	6000	6120	6650	4520	7110	7020	8820	7180			
9	5870	6060	6150	6650	4460	7050	7210	---	6970			
10	6050	6080	6040	6590	4700	7080	7150	9050	6940			
11	6240	6100	6120	6160	5160	7090	7290	8910	7240			
12	6480	6050	6110	5990	5480	7130	7520	8270	7380			
13	6140	6070	6200	5940	5910	7020	7630	8020	7530			
14	6220	6090	6060	5780	6020	7170	7470	7890	7800			
15	6290	6030	5940	5930	5860	7160	7430	8750	7910			
16	5900	6070	6130	6120	5970	7100	7330	8910	8120			
17	5250	6040	6120	6150	6530	7010	7040	8800	8320			
18	5530	6030	6070	6120	6820	7100	6650	8570	8460			
19	6030	6070	6130	6040	6860	7110	7290	8620	8470			
20	5170	6040	6160	5800	6970	7010	7790	9360	8320			
21	5110	6090	5980	5600	6820	6870	7760	---	8200			
22	5250	6120	5950	5550	6950	6810	7920	8840	8200			
23	5450	6090	6090	5520	6980	6740	7990	9250	5620			
24	5650	6100	5940	5440	6960	6750	8000	9250	510			
25	5910	6120	5950	5410	6970	6850	8010	9390	407			
26	5490	6120	5990	5410	7030	6960	7970	9540	1310			
27	5760	6160	6110	5400	7070	6850	8050	9330	1200			
28	5630	6140	6240	5330	7100	6460	8050	9180	799			
29	5060	6080	6340	5330	---	6430	8000	9520	1210			
30	5600	6140	6350	5320	---	6550	8010	9130	1170			
31	5730	---	---	5320	---	6790	---	8210	---			
MEAN	5650	5980	6090	5980	6100	6970	7380	8770	6070			

WTR YR 1986 MEAN 6550 MAX 9540 MIN 407

08406500 PECOS RIVER NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5760	5190	6020	6300	5580	7210	6520	8290	7890			
2	4990	4770	6130	6300	5650	7130	6580	8170	7700			
3	5010	5470	5970	6640	5690	7130	6640	8200	7630			
4	5750	5910	6130	6430	5810	7120	6440	8260	7480			
5	5690	6090	6200	6700	5670	7090	6630	8380	7450			
6	5480	6040	6030	6650	5690	7140	6890	8620	7430			
7	5200	5990	6040	6760	5630	7160	6980	8880	7240			
8	5430	6000	6120	6650	4520	7110	7020	8820	7180			
9	5870	6060	6150	6650	4460	7050	7210	---	6970			
10	6050	6080	6040	6590	4700	7080	7150	9050	6940			
11	6240	6100	6120	6160	5160	7090	7290	8910	7240			
12	6480	6050	6110	5990	5480	7130	7520	8270	7380			
13	6140	6070	6200	5940	5910	7020	7630	8020	7530			
14	6220	6090	6060	5780	6020	7170	7470	7890	7800			
15	6290	6030	5940	5930	5860	7160	7430	8750	7910			
16	5900	6070	6130	6120	5970	7100	7330	8910	8120			
17	5250	6040	6120	6150	6530	7010	7040	8800	8320			
18	5530	6030	6070	6120	6820	7100	6650	8570	8460			
19	6030	6070	6130	6040	6860	7110	7290	8620	8470			
20	5170	6040	6160	5800	6970	7010	7790	9360	8320			
21	5110	6090	5980	5600	6820	6870	7760	---	8200			
22	5250	6120	5950	5550	6950	6810	7920	8840	8200			
23	5450	6090	6090	5520	6980	6740	7990	9250	5620			
24	5650	6100	5940	5440	6960	6750	8000	9250	510			
25	5910	6120	5950	5410	6970	6850	8010	9390	407			
26	5490	6120	5990	5410	7030	6960	7970	9540	1310			
27	5760	6160	6110	5400	7070	6850	8050	9330	1200			
28	5630	6140	6240	5330	7100	6460	8050	9180	799			
29	5060	6080	6340	5330	---	6430	8000	9520	1210			
30	5600	6140	6350	5320	---	6550	8010	9130	1170			
31	5730	---	---	5320	---	6790	---	8210	---			
MEAN	5650	5980	6090	5980	6100	6970	7380	8770	6070			

WTR YR 1986 MEAN 6550 MAX 9540 MIN 407

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM

LOCATION.--Lat 32°11'19", long 103°58'43", in SW¼SW¼NW¼ sec.27, T.24 S., R.29 E., Eddy County, Hydrologic Unit 13060011, on right bank 550 ft upstream from Pierce Canyon Crossing, and 6.0 mi southeast of Malaga, and at mile 425.7.

DRAINAGE AREA.--19,260 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to September 1941, August 1951 to current year.

REVISED RECORDS.--WSP 898: 1938(M). WSP 1712: 1959.

GAGE.--Water-stage recorder. Elevation of gage is 2,889.18 ft above National Geodetic Vertical Datum of 1929. July 1938 to Sept. 1941 at datum 1.19 ft higher.

REMARKS.--Estimated daily discharges: Oct. 3-31, Nov. 18-22, 24, Apr. 8 to May 12, May 16-19, 21, May 23 to June 3, and July 19 to Aug. 11. Records good except those above 300 ft³/s, which are fair and estimated daily discharges, which are poor. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from station for irrigation of about 202,000 acres, 1959 determination.

AVERAGE DISCHARGE.--38 years (water years 1939-41, 1952-86), 133 ft³/s, 96,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge determined, 65,000 ft³/s, Aug. 23, 1966; maximum gage height, 31.6 ft, Aug. 23, 1966, from floodmarks; minimum discharge, 0.54 ft³/s, May 30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,300 ft³/s, June 24, gage height, 24.17 ft³/s, from rating curve extended above 220 ft³/s on basis of runoff comparisons with nearby stations; minimum, 15 ft³/s, May 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	112	69	61	68	45	37	27	64	3710	64	108
2	68	125	70	64	66	47	40	28	62	2460	62	97
3	86	89	67	61	62	52	32	28	56	700	68	101
4	73	72	67	62	61	45	29	27	47	1260	72	93
5	73	72	68	59	61	46	32	24	48	1420	68	92
6	82	71	68	58	53	44	30	21	48	889	66	102
7	90	70	67	58	50	38	27	24	49	1420	62	112
8	90	69	70	59	52	42	29	21	45	569	60	94
9	80	69	67	62	52	44	30	20	41	718	62	81
10	82	70	69	66	61	38	29	19	37	419	64	91
11	85	69	68	67	64	39	26	19	35	227	66	94
12	78	62	70	69	59	37	24	29	36	232	63	88
13	81	67	69	70	58	38	22	26	33	225	65	91
14	75	72	67	71	71	38	23	23	29	214	62	112
15	76	73	68	66	72	36	24	20	27	214	60	116
16	90	73	67	64	59	36	26	18	26	173	64	103
17	130	73	65	68	49	37	28	20	25	111	68	107
18	150	72	64	79	47	42	38	21	24	104	74	105
19	130	71	64	83	46	44	35	20	25	80	77	93
20	125	70	66	90	45	42	31	19	26	82	58	92
21	130	66	66	91	47	43	28	18	30	78	57	87
22	150	64	66	89	46	45	26	20	44	82	45	68
23	100	65	68	87	43	45	25	19	270	88	44	76
24	140	67	66	87	45	45	27	18	20900	84	81	83
25	180	66	66	86	47	46	29	17	21900	76	89	71
26	130	66	66	84	45	36	27	20	10400	84	85	68
27	96	66	63	83	44	43	26	24	7980	80	92	65
28	105	68	57	83	40	47	27	25	4930	72	102	74
29	115	69	59	82	---	43	29	30	3940	62	110	99
30	110	68	57	78	---	37	28	34	4010	64	106	81
31	103	---	58	74	---	34	---	69	---	66	105	---
TOTAL	3163	2186	2042	2261	1513	1294	864	748	75187	16063	2221	2744
MEAN	102	72.9	65.9	72.9	54.0	41.7	28.8	24.1	2506	518	71.6	91.5
MAX	180	125	70	91	72	52	40	69	21900	3710	110	116
MIN	60	62	57	58	40	34	22	17	24	62	44	65
AC-FT	6270	4340	4050	4480	3000	2570	1710	1480	149100	31860	4410	5440

CAL YR 1985	TOTAL	24767	MEAN	67.9	MAX	1410	MIN	15	AC-FT	49130
WTR YR 1986	TOTAL	110286	MEAN	302	MAX	21900	MIN	17	AC-FT	218800

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 0.2 mi downstream from discharge station.

PERIOD OF RECORD.--Water years 1938-41, 1952 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1938 to September 1941, October 1951 to June 1986 (discontinued).
WATER TEMPERATURES: October 1952 to June 1986 (discontinued).

REMARKS.--No appreciable inflow between discharge station and sampling point except during periods of heavy local rains.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 66,000 microsiemens, Aug. 1, 2, 1966; minimum daily, 402 microsiemens, June 25, 1986.
WATER TEMPERATURES: Maximum daily, 35.0°C, July 6, 1968; minimum daily, 1.0°C, Dec. 25, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 19,900 microsiemens, May 26; minimum daily, 402 microsiemens, June 25.
WATER TEMPERATURES: Maximum daily, 30.0°C, June 10; minimum daily, 4.0°C, Jan. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT												
31...	1430	104	6900	7360	7.80	7.50	22.5	22.5	11.2	1900	1700	230
NOV												
27...	1250	69	9000	9360	8.10	7.70	21.0	12.5	10.8	2200	2100	550
JAN												
02...	1600	64	9500	9770	8.50	7.50	22.0	9.5	14.4	2100	2000	510
31...	1430	72	--	8340	8.60	7.40	23.5	11.5	12.2	1600	1500	390
FEB												
28...	1520	40	12000	11900	8.70	7.40	19.0	16.0	13.4	1700	1600	280
APR												
01...	1600	40	13000	12600	8.40	7.40	24.5	21.0	--	2200	2100	510
MAY												
13...	1155	26	19800	18500	8.30	7.30	30.0	24.0	15.0	2700	2600	590
JUN												
04...	1430	47	11200	10900	8.40	7.40	33.0	26.5	13.9	2400	2200	550
JUL												
14...	1530	211	--	6190	8.20	7.30	30.0	27.5	9.2	1100	990	280
AUG												
11...	1220	66	12100	11400	8.38	7.40	29.5	27.5	11.8	2100	2000	480
SEP												
11...	1040	95	9970	8980	8.20	7.40	27.0	24.0	9.4	1600	1400	360

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT												
31...	310	980	10	26	133	1400	1600	0.70	13	4600	730	180
NOV												
27...	210	1300	12	32	164	1700	2300	0.80	10	6200	500	230
JAN												
02...	200	1500	15	37	127	1900	2600	0.70	6.9	6800	550	70
31...	160	1200	13	30	109	1500	1900	0.70	11	5300	510	110
FEB												
28...	250	1900	20	49	107	2000	3300	0.70	4.3	7800	670	60
APR												
01...	230	2000	19	57	107	2200	3500	0.80	6.2	8600	670	310
MAY												
13...	300	3300	28	100	114	2600	5800	0.90	6.1	13000	1000	70
JUN												
04...	240	1700	16	46	113	2000	3000	0.90	11	7600	660	340
JUL												
14...	100	900	12	28	119	930	1600	0.50	13	3900	350	490
AUG												
11...	230	2000	19	56	114	1800	3400	0.80	15	8100	730	60
SEP												
11...	160	1500	17	38	130	1700	2500	0.70	15	6400	570	40

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8470	7880	9320	9820	8280	11600	12400	18400	14300			
2	9260	7740	9190	9820	8420	11600	13000	17400	12200			
3	8860	7050	9060	9690	8560	11300	12600	17300	11600			
4	8690	6950	9080	9670	8950	10900	13100	16400	11400			
5	8560	7640	9170	9640	9100	10800	13300	16500	11600			
6	8340	8450	9250	9790	9270	11400	13000	16000	11700			
7	8710	8800	9140	9900	9270	11700	12600	16100	11700			
8	8580	9030	9280	10400	10100	11700	12800	16600	11700			
9	8120	9050	9130	9920	9620	12100	13300	---	11900			
10	8050	9170	9340	10000	9180	11800	13900	18600	12200			
11	8290	9040	9300	9970	8940	12300	13600	18200	12300			
12	8600	9050	9050	9820	8230	12300	14000	18400	12500			
13	8900	9460	9030	9770	7890	13300	14500	18600	12500			
14	9040	9180	8960	9380	8630	12200	15000	19500	12300			
15	9290	9010	9280	9220	8710	11500	16900	19800	12400			
16	9190	8890	9140	9430	8860	12100	16400	18900	13000			
17	9000	8990	9250	9310	9620	12300	---	18200	14200			
18	8520	9070	9120	9500	9810	12400	16100	18200	14700			
19	7220	9110	9280	9380	10100	12500	16000	19800	12200			
20	7390	9130	9340	9260	10300	10700	15000	19400	14900			
21	7940	8950	9270	9200	10800	11300	13500	19000	15500			
22	7380	9110	9300	8940	11200	11400	13500	18400	15800			
23	7090	9310	9420	8570	10900	11400	13800	18400	9090			
24	7260	9180	9210	8680	11300	11200	14400	18700	5550			
25	8030	9180	9190	8420	11400	11500	15000	19800	402			
26	7420	9140	9210	8350	11300	11300	15500	19900	991			
27	7390	9290	9190	8360	11700	11200	16100	19300	1070			
28	7600	9290	9180	8460	11900	14300	17200	18200	934			
29	7940	9330	9390	8380	---	12000	17800	18500	1050			
30	7700	9280	9410	8240	---	11500	17900	17000	1230			
31	7160	---	9690	8330	---	11800	---	14500	---			
MEAN	8190	8830	9230	9280	9730	11800	14600	18100	10100			

WTR YR 1986 MEAN 11100 MAX 19900 MIN 402

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	17.0	11.0	8.5	11.0	13.0	19.0	23.0	22.5			
2	16.0	14.5	9.0	9.0	12.0	14.0	19.0	23.0	23.5			
3	16.5	16.0	7.0	8.0	13.0	15.0	18.5	21.0	24.0			
4	18.0	16.5	7.0	8.0	13.0	14.0	16.5	21.0	24.5			
5	17.0	14.5	7.0	8.0	11.5	14.0	17.0	25.0	26.0			
6	17.0	15.0	8.0	7.0	10.0	14.0	18.5	24.0	26.0			
7	21.0	15.0	8.0	7.5	10.0	15.0	21.0	23.0	27.5			
8	20.5	14.5	9.5	4.5	8.0	14.0	21.0	21.5	27.0			
9	20.0	15.0	9.5	4.0	6.5	15.0	20.0	---	26.0			
10	19.0	15.0	9.0	5.5	5.0	14.0	19.5	20.0	30.0			
11	20.0	14.0	7.0	5.0	5.0	13.0	20.0	26.0	28.5			
12	20.0	14.0	5.0	6.5	5.0	12.5	19.0	27.0	26.0			
13	20.0	16.0	5.0	7.0	5.0	12.0	20.0	22.0	25.5			
14	17.0	16.0	6.0	7.5	7.0	12.0	18.0	24.0	25.5			
15	19.0	13.0	5.5	8.0	9.0	11.0	20.0	24.0	26.5			
16	18.0	14.0	5.0	9.0	10.0	12.0	19.5	23.0	28.0			
17	18.0	12.5	5.0	11.0	12.0	16.5	19.0	21.0	28.5			
18	19.0	13.0	6.0	11.0	13.0	13.0	18.0	18.0	28.0			
19	19.0	12.0	6.0	9.5	16.0	12.0	19.0	21.0	25.0			
20	20.0	10.0	6.5	9.0	15.5	16.0	17.5	23.0	26.5			
21	19.0	11.0	6.5	10.0	13.5	14.0	19.5	25.0	26.5			
22	20.0	9.0	6.0	10.0	13.5	14.0	18.5	24.0	27.5			
23	19.5	11.0	7.0	9.0	13.0	14.0	19.5	22.5	23.0			
24	19.0	11.0	8.0	10.0	13.0	16.0	25.0	23.0	---			
25	19.5	12.0	6.5	10.0	14.0	16.0	23.5	23.0	21.0			
26	20.5	13.5	8.0	10.0	14.5	16.0	21.5	22.0	22.5			
27	20.0	12.0	7.0	8.5	15.0	17.0	19.0	21.0	23.0			
28	19.0	12.0	6.5	9.0	14.0	17.5	22.0	21.0	24.0			
29	19.5	14.0	6.5	9.0	---	19.0	21.0	22.0	26.0			
30	18.0	12.0	6.5	9.5	---	19.0	20.0	22.0	27.0			
31	17.0	---	8.0	10.0	---	20.0	---	22.0	---			
MEAN	19.0	13.5	7.0	8.5	11.0	14.5	19.5	22.5	25.5			

WTR YR 1986 MEAN 15.5 MAX 30.0 MIN 4.0

08407500 PECOS RIVER AT RED BLUFF, NM
(National stream-quality accounting network station)

LOCATION.--Lat 32°04'30", long 104°02'21", in SW¼NW¼NE¼ sec.1, T.26 S., R.28 E., Eddy County, Hydrologic Unit 13060011, on right bank at Red Bluff, 0.2 mi downstream from Red Bluff Draw, 1.6 mi northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 mi north of the New Mexico-Texas state line, 5.5 mi upstream from Delaware River, and at mile 411.2.

DRAINAGE AREA.--19,540 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 2,850.05 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Apr. 23 to May 13 and June 24, 25. Records good except for estimated daily discharges, which are poor. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from station for irrigation of about 202,000 acres, 1959 determination.

AVERAGE DISCHARGE.--49 years, 164 ft³/s, 118,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111,000 ft³/s, Aug. 23, 1966, gage height, 33.32 ft, from rating curve extended above 32,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.19 ft³/s, Aug. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--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 stations 08404000, 08406500).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,800 ft³/s, June 25, gage height, 26.76 ft³/s, from rating curve extended as explained above; minimum, 16 ft³/s, part of each day May 12, 13, 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	113	70	62	72	45	39	28	67	4070	71	107
2	71	146	72	66	70	49	44	28	67	2900	68	99
3	86	141	72	66	65	54	39	29	65	1290	67	98
4	76	97	68	64	62	52	34	27	54	642	73	95
5	74	84	70	64	62	49	36	25	49	1550	81	90
6	81	81	71	62	60	49	36	22	49	847	74	102
7	85	79	69	63	50	45	34	23	50	1270	68	109
8	94	79	72	63	52	42	30	22	49	842	63	98
9	94	78	71	63	55	48	31	21	55	596	61	87
10	84	78	71	70	56	44	29	20	41	536	61	85
11	93	79	70	69	66	41	28	18	37	262	65	93
12	87	74	71	72	64	41	26	17	38	226	68	89
13	80	71	73	73	58	39	23	17	37	230	69	88
14	83	76	70	75	66	43	22	23	34	218	68	206
15	74	78	70	73	74	40	24	22	30	218	66	117
16	80	77	70	68	66	39	26	20	29	207	64	107
17	127	76	69	69	56	41	27	18	27	154	70	102
18	153	75	67	79	50	43	29	18	26	112	74	105
19	136	74	66	84	48	49	38	20	26	93	81	98
20	136	74	67	90	48	47	36	20	96	84	69	88
21	126	73	71	93	47	46	31	18	51	86	63	89
22	143	65	69	92	50	48	28	17	34	84	54	77
23	128	71	70	89	46	50	26	17	412	91	49	72
24	108	71	71	89	45	49	29	18	8320	92	68	80
25	181	71	69	89	48	48	29	19	28400	82	92	77
26	186	70	69	86	49	49	28	21	10900	80	83	71
27	123	69	68	85	47	37	26	26	8940	92	96	68
28	97	68	63	85	45	51	28	25	5510	83	98	105
29	114	71	61	84	---	49	30	27	3740	71	109	176
30	112	71	62	81	---	44	29	29	3970	68	105	79
31	115	---	61	78	---	40	---	78	---	77	102	---
TOTAL	3293	2430	2133	2346	1577	1411	915	733	71203	17253	2300	2957
MEAN	106	81.0	68.8	75.7	56.3	45.5	30.5	23.6	2373	557	74.2	98.6
MAX	186	146	73	93	74	54	44	78	28400	4070	109	206
MIN	66	65	61	62	45	37	22	17	26	68	49	68
AC-FT	6530	4820	4230	4650	3130	2800	1810	1450	141200	34220	4560	5870

CAL YR 1985	TOTAL	26334	MEAN	72.1	MAX	771	MIN	21	AC-FT	52230
WTR YR 1986	TOTAL	108551	MEAN	297	MAX	28400	MIN	17	AC-FT	215300

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 2 mi downstream from discharge station.

PERIOD OF RECORD.--Water years 1937 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1937 to 1982.
WATER TEMPERATURES: October 1952 to 1982.

REMARKS.--No appreciable inflow between discharge station and sampling point except during periods of heavy local rains.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
OCT											
30...	1400	110	7900	8410	--	7.50	21.5	18.0	23	9.4	1900
JAN											
02...	1000	69	10000	10300	8.40	7.20	12.0	7.5	15	13.8	2100
FEB											
27...	1045	47	12700	12600	8.40	7.60	15.5	14.5	24	9.8	1800
MAY											
08...	1300	19	18500	--	8.50	--	25.5	23.0	--	10.0	--
JUL											
30...	1320	74	17500	15700	8.12	7.00	38.0	29.0	24	--	2000
SEP											
10...	1130	83	11800	10300	8.28	7.40	27.5	24.0	5.0	8.2	1700

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
OCT										
30...	1800	210	340	1200	12	26	--	--	--	--
JAN										
02...	2000	520	200	1600	16	41	127	22	140	140
FEB										
27...	1700	280	270	2300	24	54	82	15	92	92
MAY										
08...	--	--	--	--	--	--	117	19	127	128
JUL										
30...	1800	450	210	3000	30	77	220	0	155	180
SEP										
10...	1600	400	180	1800	19	43	188	0	141	154

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT										
30...	128	1500	1800	0.70	9.8	5850	5200	0.390	0.030	0.420
JAN										
02...	138	1900	2700	0.70	6.7	7150	7100	1.26	0.040	1.30
FEB										
27...	93	2200	3900	0.70	0.8	8480	9100	0.090	0.030	0.120
MAY										
08...	--	--	--	--	--	--	--	--	<0.010	<0.100
JUL										
30...	129	1900	5100	0.70	15	11300	11000	0.560	0.040	0.600
SEP										
10...	125	1700	2900	0.70	14	--	7100	0.830	0.050	0.880

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
OCT 30...	0.300	0.320	0.80	0.090	0.030	180	1	<100	<10	<1
JAN 02...	0.180	0.160	1.4	0.210	0.070	--	--	--	--	--
FEB 27...	0.170	0.120	1.8	0.120	<0.010	--	--	--	--	--
MAY 08...	0.290	0.280	1.5	0.090	<0.010	--	--	--	--	--
JUL 30...	0.190	0.180	2.1	0.090	0.030	<10	2	<100	<10	4
SEP 10...	0.250	0.160	2.3	0.110	<0.010	30	2	100	<10	<1

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
OCT 30...	<1	<1	1	150	<1	80	70	<0.1	2	<1
JAN 02...	--	--	--	--	--	--	--	--	--	--
FEB 27...	--	--	--	--	--	--	--	--	--	--
MAY 08...	--	--	--	--	--	--	--	--	--	--
JUL 30...	<1	<1	3	50	<5	100	90	0.1	4	1
SEP 10...	<1	2	2	40	<5	90	20	0.3	10	<1

DATE	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 30...	2	<1	7000	34	30	21	6.2	99	30	4
JAN 02...	--	--	--	--	--	35	6.5	86	40	28
FEB 27...	--	--	--	--	--	53	6.7	98	28	80
MAY 08...	--	--	--	--	--	202	10	64	16	110
JUL 30...	2	<1	6800	20	50	52	10	88	40	24000
SEP 10...	2	<1	7300	90	30	54	12	82	61	72

08408500 DELAWARE RIVER NEAR RED BLUFF, NM

LOCATION.--Lat 32°01'23", long 104°03'15", in NE¼SW¼SE¼ sec.23, T.26 S., R.28 E., Eddy County, Hydrologic Unit 13070002, near center of channel on downstream side of pier of bridge on U.S. Highway 285, 2.1 mi north of the New Mexico-Texas state line, 3.6 mi southwest of Red Bluff, 3.7 mi upstream from mouth and 14 mi south of Malaga. Mouth at Pecos River mile 405.6.

DRAINAGE AREA.--689 mi².

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. Elevation of gage is 2,900.66 ft above National Geodetic Vertical Datum of 1929 (U.S. Boundary Commission post). Prior to May 1914, at site 3.0 mi upstream at different datum. May 1914 to June 1915 at site 2.5 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. One small upstream diversion. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--49 years (water years 1938-86), 12.9 ft³/s, 9,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,400 ft³/s, Oct. 2, 1955, gage height, 27.0 ft, from floodmarks, from rating curve extended above 6,500 ft³/s on basis of slope-area measurements at gage heights 12.84 ft, 17.55 ft, and 27.0 ft; no flow many days most years.
Maximum discharge since at least 1911 is that of Oct. 2, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 24	0945	*3,360	*8.40	Sept. 15	0030	2,060	7.49

Minimum discharge, 0.57 ft³/s, June 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.2	3.1	3.4	4.0	3.4	2.9	1.4	5.9	63	3.3	3.2
2	3.8	3.3	3.1	3.3	4.3	3.5	2.9	1.4	3.0	72	3.2	1.4
3	3.7	3.1	3.2	3.3	4.2	3.5	2.8	1.4	5.8	47	3.1	1.3
4	3.4	3.0	3.3	3.4	4.1	3.5	2.7	1.4	2.0	12	3.0	7.2
5	3.3	2.8	3.3	3.4	4.0	3.4	2.7	1.4	1.5	8.5	3.0	1.6
6	3.2	3.0	3.3	3.4	3.9	3.4	2.7	1.3	1.3	7.1	3.0	1.3
7	3.2	3.0	3.4	3.5	3.8	3.4	2.7	1.2	1.2	6.1	2.9	1.1
8	3.1	3.0	3.4	3.5	3.8	3.3	2.4	1.1	1.1	5.4	2.8	1.1
9	3.4	2.9	3.4	3.4	3.8	3.4	2.4	1.0	1.2	5.0	2.8	1.1
10	4.0	2.8	3.3	3.5	4.1	3.3	2.5	1.0	3.8	4.9	3.0	1.1
11	3.5	2.9	3.3	3.6	4.2	3.3	2.4	1.0	1.9	4.6	3.1	1.1
12	3.1	3.0	3.3	3.7	4.2	3.2	2.3	1.0	1.2	4.3	2.9	.97
13	3.0	3.0	3.3	3.7	4.1	3.2	2.2	.97	1.0	4.0	3.0	.97
14	2.8	3.0	3.3	3.7	4.1	3.3	2.1	.92	.92	3.8	3.0	297
15	2.8	3.0	3.2	3.8	4.0	3.4	2.0	.77	.86	3.7	30	368
16	3.1	2.9	3.3	3.8	3.9	3.4	2.1	.73	.79	3.7	14	41
17	7.0	3.0	3.3	3.7	3.8	3.3	2.1	.70	.73	3.5	2.8	23
18	4.7	3.0	3.3	3.7	3.7	3.3	2.0	.81	.72	3.3	2.4	2.9
19	3.4	3.0	3.3	3.7	3.6	3.3	2.0	.93	.74	3.2	2.3	2.2
20	4.5	3.1	3.3	3.7	3.5	3.3	1.9	.93	55	3.1	2.2	1.8
21	3.4	3.1	3.3	3.8	3.4	3.2	1.9	.82	87	3.0	2.0	1.7
22	3.2	3.2	3.3	3.7	3.4	3.3	1.9	.71	7.3	2.9	1.9	1.6
23	3.1	3.2	3.3	3.7	3.5	3.3	1.9	.64	486	3.0	3.6	1.4
24	3.0	3.2	3.3	3.7	3.5	3.3	1.8	.64	1450	2.9	2.3	1.4
25	2.9	3.3	3.3	3.8	3.6	3.3	1.8	.63	284	2.8	2.1	1.3
26	3.0	3.3	3.3	3.7	3.6	3.3	1.7	.78	126	2.7	2.1	1.2
27	3.0	3.3	3.3	3.8	3.5	3.3	1.6	.95	161	3.1	24	1.1
28	3.0	3.2	3.4	3.8	3.5	3.2	1.5	1.0	99	3.9	140	1.1
29	3.0	3.2	3.3	4.0	---	3.1	1.5	.93	26	3.8	134	65
30	2.9	3.2	3.3	4.0	---	3.1	1.4	67	124	3.8	13	2.0
31	2.9	---	3.3	4.0	---	3.1	---	33	---	3.5	3.1	---
TOTAL	106.1	92.2	102.1	113.2	107.1	102.6	64.8	128.46	2940.96	303.6	423.9	837.14
MEAN	3.42	3.07	3.29	3.65	3.82	3.31	2.16	4.14	98.0	9.79	13.7	27.9
MAX	7.0	3.3	3.4	4.0	4.3	3.5	2.9	67	1450	72	140	368
MIN	2.8	2.8	3.1	3.3	3.4	3.1	1.4	.63	.72	2.7	1.9	.97
AC-FT	210	183	203	225	212	204	129	255	5830	602	841	1660

CAL YR 1985	TOTAL	1942.10	MEAN	5.32	MAX	560	MIN	.00	AC-FT	3850
WTR YR 1986	TOTAL	5322.16	MEAN	14.6	MAX	1450	MIN	.63	AC-FT	10560

08410000 RED BLUFF RESERVOIR NEAR ORLA, TX

LOCATION.--Lat 31°54'04", long 103°54'35", Reeves County, Hydrologic Unit 13070001, at right end of Red Bluff Dam on the Pecos River, 2.8 mi upstream from Salt Creek, and 5.2 mi north of Orla.

DRAINAGE AREA.--20,720 mi², approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage. Datum of gage is 0.43 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--The reservoir is formed by a rock-faced earthfill dam 9,200 ft long. The dam was completed and storage began in September 1936. The dam and reservoir are owned and operated by the Red Bluff Water Power Control District. The water is used for power development and for irrigation from Mentone and Grandfalls. The uncontrolled emergency spillway is a cut through natural ground located to the right of right end of dam is 790 ft wide. The controlled service spillway is equipped with 12 tainter gates that are 25 by 15 ft high. Inflow is regulated by many reservoirs and diversion dams. The capacity curve is based on Geological Survey topographic map, survey of 1925. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	2,856.0	-
Crest of spillway	2,845.0	340,000
Top of gates (top of conservation pool)	2,842.0	310,000
Crest of spillway	2,827.0	166,500
Lowest gated outlet (invert)	2,764.0	3,000

COOPERATION.--Gage-height records and capacity curve were furnished by Red Bluff Water Power and Control District.

EXTREMES FOR 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.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 212,000 acre-ft, July 10-11, gage height, 2,832.2 ft; minimum observed, 62,100 acre-ft, June 20, gage height, 2,807.6 ft.

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

2,807.0	60,000	2,824.0	145,500
2,815.0	94,000	2,833.0	220,000

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62450	68300	71100	73900	76400	78200	68300	65900	63500	193800	203700	199200
2	62800	68300	71100	73900	76400	78200	68300	65900	63500	201000	202800	199200
3	62800	68700	71100	73900	76850	78200	68300	65900	63500	205500	202800	200100
4	62800	69100	71100	73900	76850	78200	68300	65900	63900	205500	202800	200100
5	63150	69100	71100	73900	76850	78200	68300	65900	63900	206400	201900	200100
6	63150	69100	71500	73900	76850	78200	68300	65900	63900	208200	201900	200100
7	63150	69500	71500	73900	76850	78200	68300	65900	63900	209100	201000	200100
8	63500	69500	71500	73900	76850	78650	67900	65900	63900	211000	201000	200100
9	63500	69500	71500	73900	76850	78650	67900	65900	63900	211000	201000	200100
10	63900	69500	71500	73900	77300	78650	67900	65900	63900	212000	201000	200100
11	63900	69900	71900	73900	77300	78650	67900	65900	63900	212000	200100	200100
12	63900	69900	71900	74300	77300	77750	67900	65900	63900	211000	200100	201000
13	64300	69900	71900	74300	77300	77300	67900	65900	63900	210000	200100	201000
14	64300	69900	72300	74300	77300	76400	67900	65500	63900	209100	200100	202800
15	64300	69900	72300	74300	77750	75500	67900	65500	63500	208200	200100	204600
16	64700	69900	72300	74300	77750	75100	67900	65100	63500	208200	200100	204600
17	65100	70300	72700	74700	77750	74300	67900	64700	63500	207300	199200	204600
18	65100	70300	72700	74700	77750	73500	67500	64300	63150	206400	199200	204600
19	65100	70300	72700	74700	77750	73100	67500	63900	62800	206400	199200	204600
20	65500	70300	72700	75100	77750	72300	67100	63500	62100	205500	199200	204600
21	65900	70300	72700	75100	77750	71500	66700	62800	62450	205500	198300	204600
22	66300	70300	73100	75100	77750	70700	66700	62800	62450	205500	198300	204600
23	66300	70300	73100	75500	77750	70300	66300	62800	63500	205500	198300	204600
24	66700	70700	73100	75500	78200	69500	66300	62800	66700	204600	197400	204600
25	66700	70700	73100	75500	78200	68700	66300	62800	96000	204600	197400	204600
26	67100	70700	73100	75500	78200	68700	66300	62800	136600	204600	197400	204600
27	67500	70700	73500	75950	78200	68300	66300	62800	154100	204600	197400	203700
28	67500	70700	73500	75950	78200	68300	65900	62800	169700	204600	198300	203700
29	67500	70700	73500	75950	---	68300	65900	62800	179600	204600	198300	202800
30	67900	70700	73500	76400	---	68300	65900	62800	186600	203700	199200	202800
31	68300	---	73500	76400	---	68300	---	63150	---	203700	199200	---
MAX	68300	70700	73500	76400	78200	78650	68300	65900	186600	212000	203700	204600
MIN	62450	68300	71100	73900	76400	68300	65900	62800	62100	193800	197400	199200
(†)	2809.2	2809.8	2810.5	2811.2	2811.6	2809.2	2808.6	2807.9	2829.4	2831.3	2830.8	2831.2
(††)	+5850	+2400	+2800	+2900	+1800	-9900	-2400	-2750	+123400	+17100	-4500	+3600

CAL YR 1985 MAX 102000 MIN 56850 (††) -17500
WTR YR 1986 MAX 212000 MIN 62100 (††) +140400

(†) ELEVATION, IN FEET, AT END OF MONTH.
(††) CHANGE IN CONTENTS, IN ACRE-FEET.

08477110 MIMBRES RIVER AT MIMBRES, NM
(National stream-quality accounting network station)

LOCATION.--Lat 32°51'17", long 107°58'23", in NW¼SW¼ sec.3, T.16 S., R.11 W., Grant County, Hydrologic Unit 13030202, on left bank 100 ft downstream from Willow Springs Canyon, 0.3 mi east of Mimbres, 1.1 mi downstream from Shepard Canyon, 2.5 mi downstream from Bear Canyon and at mile 73.1.

DRAINAGE AREA.--184 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,920 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 17, 1979 at datum 2.29 ft higher.

REMARKS.--Estimated daily discharges: Nov. 6-20, Dec. 9-21, Jan. 6-8, 10-12, 14-20, Feb. 3-18, Feb. 26 to Mar. 1, and May 4-25. Water-discharge records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--8 years, 20.5 ft³/s, 14,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft³/s, Dec. 28, 1984, gage height, 8.05 ft, from floodmarks, from rating curve extended above 450 ft³/s on basis of slope-area measurements at gage heights 6.70 ft and 8.05 ft; minimum, 0.22 ft³/s, Aug. 22, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 10	1900	499	5.48	July 8	2000	*4,330	*7.68
Oct. 17	0130	845	5.90	Aug. 14	1930	989	6.12

Minimum daily discharge, 4.9 ft³/s, Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	25	17	13	8.5	6.0	11	16	18	15	11	15
2	8.1	25	17	11	8.5	5.6	16	16	16	16	11	13
3	7.7	24	17	9.2	8.2	5.9	18	16	16	60	11	13
4	8.2	23	17	9.2	8.2	6.0	18	15	17	44	10	14
5	8.3	22	17	9.1	8.1	5.8	17	15	23	40	11	16
6	8.4	22	16	9.0	8.0	5.3	16	14	20	38	12	13
7	8.5	21	16	8.5	8.0	5.8	18	14	17	62	11	12
8	19	21	16	8.0	7.5	5.5	17	13	15	309	11	12
9	19	20	15	9.0	7.0	5.5	15	13	13	73	11	11
10	95	20	15	8.8	6.5	6.3	14	12	11	150	11	11
11	147	19	15	8.6	6.0	9.6	14	12	8.5	81	11	10
12	60	19	14	8.6	7.0	8.7	15	11	7.3	51	11	7.6
13	45	18	14	8.3	8.0	8.9	13	11	5.4	41	11	7.6
14	40	18	13	8.3	8.4	9.6	14	11	5.8	33	104	8.1
15	38	17	13	8.3	8.8	8.7	14	10	6.7	28	90	7.5
16	185	17	13	8.3	9.0	8.4	14	10	5.6	28	54	8.5
17	534	17	12	8.4	9.2	8.7	14	9.5	5.4	28	43	8.1
18	282	16	12	8.6	9.6	8.8	15	9.5	6.1	30	31	6.8
19	131	16	11	8.8	7.6	8.8	15	9.0	7.6	33	22	7.6
20	69	16	11	9.0	16	8.8	14	8.5	8.1	31	17	7.0
21	55	16	11	9.5	17	8.7	14	8.5	10	30	15	6.8
22	47	16	11	9.8	15	8.9	12	8.0	9.3	61	14	7.0
23	41	16	10	9.8	13	11	10	7.5	9.5	91	15	9.3
24	36	16	11	10	11	12	12	7.5	10	78	14	9.6
25	33	17	12	10	10	14	12	7.0	11	52	15	6.2
26	32	18	12	9.6	9.9	14	13	6.9	10	34	14	5.5
27	30	17	13	9.3	8.5	14	16	6.3	9.2	23	13	4.9
28	29	17	13	8.8	7.4	14	15	6.8	18	17	19	5.5
29	28	17	12	7.7	---	13	15	6.9	17	13	17	7.5
30	27	17	12	7.6	---	13	15	18	17	12	19	6.9
31	26	---	13	7.4	---	12	---	21	---	12	17	---
TOTAL	2104.9	563	421	279.5	259.9	281.3	436	349.9	353.5	1614	676	278.0
MEAN	67.9	18.8	13.6	9.02	9.28	9.07	14.5	11.3	11.8	52.1	21.8	9.27
MAX	534	25	17	13	17	14	18	21	23	309	104	16
MIN	7.7	16	10	7.4	6.0	5.3	10	6.3	5.4	12	10	4.9
AC-FT	4180	1120	835	554	516	558	865	694	701	3200	1340	551

CAL YR 1985	TOTAL	13187.9	MEAN	36.1	MAX	534	MIN	2.3	AC-FT	26160
WTR YR 1986	TOTAL	7617.0	MEAN	20.9	MAX	534	MIN	4.9	AC-FT	15110

08477110 MIMBRES RIVER AT MIMBRES, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT												
18...	1000	268	143	161	7.60	7.90	13.0	11.0	76	8.5	64	10
JAN												
16...	1100	8.4	206	239	8.00	8.30	8.0	8.0	1.0	8.7	98	0
MAR												
17...	1500	8.9	225	236	8.40	8.40	6.0	14.0	0.90	10.2	93	0
MAY												
02...	0800	19	240	252	8.60	8.20	19.0	15.5	1.5	8.8	100	0
JUL												
16...	1545	28	240	245	--	7.90	24.0	20.0	1.5	8.8	110	0
AUG												
20...	1530	15	220	229	8.10	8.40	32.0	27.0	7.2	7.0	98	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
18...	18	4.5	5.9	0.3	2.1	66	0	--	54	52	22	1.9
JAN												
16...	29	6.3	9.8	0.4	2.4	126	--	102	103	103	14	3.0
MAR												
17...	27	6.2	10	0.5	2.6	146	14	141	143	103	13	4.4
MAY												
02...	30	6.7	10	0.4	2.8	171	10	155	156	109	15	2.8
JUL												
16...	31	6.9	9.8	0.4	2.9	--	--	--	--	106	17	3.4
AUG												
20...	29	6.2	8.2	0.4	3.1	--	--	--	--	101	16	2.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT												
18...	0.20	36	144	120	<0.010	0.130	0.080	0.040	0.52	0.200	0.080	290
JAN												
16...	0.20	45	166	170	<0.010	0.270	0.010	0.010	0.19	0.070	0.070	--
MAR												
17...	0.30	44	172	210	<0.010	0.130	0.040	0.040	0.36	0.070	0.060	--
MAY												
02...	0.20	46	192	220	<0.010	0.150	0.030	0.050	0.17	0.090	0.070	--
JUL												
16...	0.30	47	178	180	<0.010	0.290	0.020	0.030	0.38	0.090	0.070	20
AUG												
20...	0.20	48	194	170	<0.010	0.130	0.030	0.040	0.37	0.130	0.140	50

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT 18...	1	25	<0.5	<1	<1	20	3	100	2	<4	38	<0.1
JAN 16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 02...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	4	41	<0.5	<1	<1	<3	3	17	<5	<4	18	<0.1
AUG 20...	1	36	<0.5	<1	<1	<3	6	30	<5	4	16	<0.1

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 18...	<10	6	<1	<1	99	<6	8	289	209	85	110	360
JAN 16...	--	--	--	--	--	--	--	3	0.07	71	K20	41
MAR 17...	--	--	--	--	--	--	--	7	0.17	75	K6	24
MAY 02...	--	--	--	--	--	--	--	9	0.46	90	0	K2
JUL 16...	<10	<1	<1	<1	150	8	11	9	0.68	86	24	21
AUG 20...	<10	4	<1	<1	150	8	5	148	5.9	8	52	130

08481500 TULAROSA CREEK NEAR BENT, NM
(National stream-quality accounting network station)

LOCATION.--Lat 33°08'41", long 105°53'50", in SE¼NW¼ sec.32, T.13 S., R.11 E., Otero County, Hydrologic Unit 13050003, on right bank 50 ft downstream from old U.S. Highway 70 bridge, 2.6 mi west of Bent, and 8.5 mi northeast of Tularosa, and at mile 19.4.

DRAINAGE AREA.--120 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1947 to current year. Prior to October 1982 published as "Rio Tularosa near Bent".

REVISED RECORDS.--WSP 1312: 1949(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,450 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 20, 1983 to Nov. 19, 1985 water-stage recorder at site 200 ft upstream at datum 3.70 ft higher.

REMARKS.--Estimated daily discharges: Oct. 11, 17, 18, Nov. 19-21, and July 20-31. Water-discharge records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--38 years (1949-86), 10.8 ft³/s, 7,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 4,280 ft³/s June 18, 1965, gage height, 5.02 ft, from rating curve extended above 160 ft³/s on basis of slope-area measurement of peak flow; no flow May 14, 1955, result of unusual regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 ft³/s was computed for station approximately 6 mi downstream near Tularosa. Another flood may have occurred July 2, 1914.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 125 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 8	0730	225	3.17	July 21	1415	342	3.02
Oct. 11	0130	173	3.08	Aug. 15	1615	283	2.96
July 16	1745	*2,210	*3.97	Aug. 30	0115	209	2.87
July 20	1515	265	2.94				

Minimum discharge, 8.6 ft³/s, Apr. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	22	22	21	21	20	18	16	20	18	21
2	21	22	22	22	21	22	18	18	21	22	18	21
3	21	23	22	22	21	22	21	17	22	22	18	21
4	21	22	22	22	22	22	20	15	22	21	17	21
5	21	22	22	22	22	22	19	15	23	18	17	20
6	20	22	22	22	22	22	15	14	23	18	16	20
7	20	22	22	22	22	22	16	17	23	18	16	18
8	31	22	22	23	22	22	19	17	22	18	16	20
9	21	22	22	23	22	16	19	18	21	19	18	21
10	21	22	22	23	22	18	20	17	21	19	17	21
11	35	22	22	23	22	22	20	18	17	19	18	20
12	28	22	22	23	23	22	20	17	17	19	19	20
13	26	22	22	23	22	21	21	17	19	15	19	21
14	25	21	22	23	22	21	21	16	19	17	19	21
15	22	20	22	22	22	21	20	16	14	24	26	20
16	24	20	22	23	22	21	15	15	16	67	21	20
17	33	20	22	22	22	21	14	17	20	22	17	20
18	28	20	22	22	22	21	15	14	22	17	17	20
19	27	20	22	22	22	21	15	16	23	20	17	20
20	27	20	21	22	22	21	12	15	23	32	18	20
21	22	21	21	22	22	21	14	18	23	40	19	17
22	21	21	21	22	21	21	15	18	23	25	21	20
23	23	21	22	21	18	15	17	18	24	23	22	21
24	22	22	22	21	21	18	18	17	25	21	19	23
25	21	22	22	21	21	21	18	18	25	20	19	21
26	20	22	22	21	21	21	18	18	21	20	18	21
27	20	22	22	21	21	22	19	19	20	20	18	21
28	20	22	22	21	21	23	19	19	20	19	19	21
29	20	22	22	21	---	24	19	19	16	19	20	20
30	20	22	22	21	---	24	19	22	19	19	37	20
31	21	---	22	21	---	21	---	21	---	19	22	---
TOTAL	724	644	679	681	604	652	536	534	620	692	596	611
MEAN	23.4	21.5	21.9	22.0	21.6	21.0	17.9	17.2	20.7	22.3	19.2	20.4
MAX	35	23	22	23	23	24	21	22	25	67	37	23
MIN	20	20	21	21	18	15	12	14	14	15	16	17
AC-FT	1440	1280	1350	1350	1200	1290	1060	1060	1230	1370	1180	1210

CAL YR 1985	TOTAL	7554	MEAN	20.7	MAX	35	MIN	14	AC-FT	14980
WTR YR 1986	TOTAL	7573	MEAN	20.7	MAX	67	MIN	12	AC-FT	15020

08481500 TULAROSA CREEK NEAR BENT, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
NOV											
27...	1345	21	1320	1360	7.90	7.90	13.0	10.5	27	8.8	730
JAN											
30...	1300	21	1180	1280	8.10	7.80	16.5	10.0	18	9.4	660
MAR											
25...	1130	21	1350	1370	8.10	7.90	21.5	13.5	12	8.4	690
MAY											
29...	1300	18	1310	1350	8.10	6.80	22.0	19.0	25	7.8	680
JUL											
31...	1345	18	1380	1240	8.10	7.90	30.0	19.0	32	7.3	700
SEP											
23...	1250	22	1260	1170	8.20	7.90	24.0	17.0	2.5	7.8	640

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)
NOV										
27...	340	200	55	44	0.7	1.7	480	0	--	390
JAN										
30...	440	180	52	41	0.7	1.1	239	19	226	228
MAR										
25...	450	190	52	40	0.7	1.5	286	0	230	234
MAY										
29...	460	180	55	44	0.8	1.1	268	0	219	220
JUL										
31...	490	190	53	43	0.7	1.4	254	0	206	208
SEP										
23...	430	170	52	41	0.7	1.3	256	0	208	210

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV										
27...	218	380	46	0.50	14	976	980	--	<0.010	0.640
JAN										
30...	208	430	70	0.40	13	892	940	--	--	--
MAR										
25...	153	480	61	0.50	12	1000	980	--	<0.010	0.780
MAY										
29...	192	470	58	0.40	14	999	960	0.700	0.010	0.710
JUL										
31...	200	440	59	0.40	15	947	930	--	<0.010	0.800
SEP										
23...	196	430	58	0.50	14	947	900	--	<0.010	0.750

08481500 TULAROSA CREEK NEAR BENT, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
NOV 27...	0.140	0.140	0.26	0.050	<0.010	<10	<1	36	<0.5	<1
JAN 30...	--	--	--	--	--	--	--	--	--	--
MAR 25...	0.080	0.120	0.22	0.030	<0.010	--	--	--	--	--
MAY 29...	0.130	0.130	0.27	0.080	<0.010	--	--	--	--	--
JUL 31...	0.090	0.110	0.31	0.070	0.010	<10	<1	31	<0.5	2
SEP 23...	0.080	0.080	0.32	0.060	0.010	20	<1	26	<0.5	<1

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
NOV 27...	1	<3	2	24	<1	22	33	<0.1	<10	<1
JAN 30...	--	--	--	--	--	--	--	--	--	--
MAR 25...	--	--	--	--	--	--	--	--	--	--
MAY 29...	--	--	--	--	--	--	--	--	--	--
JUL 31...	<1	<3	2	5	<5	20	25	<0.1	<10	2
SEP 23...	<1	<3	2	6	<5	21	16	<0.1	<10	2

DATE	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 27...	2	<1	2300	<6	370	51	2.9	66	--	46
JAN 30...	--	--	--	--	--	35	2.0	76	5	49
MAR 25...	--	--	--	--	--	66	3.7	43	K17	53
MAY 29...	--	--	--	--	--	54	2.6	70	39	250
JUL 31...	1	<1	2200	<6	16	98	4.9	60	67	610
SEP 23...	1	1	2200	<6	24	47	2.8	60	80	--

08484500 LA LUZ CREEK AT LA LUZ, NM

LOCATION.--Lat 32°58'56", long 105°55'30", in SW¼NE¼ sec.25, T.15 S., R.10 E., Otero County, Hydrologic Unit 13050003, on right bank retaining wall of old diversion dam, 200 ft downstream of low-water crossing of county road, and 1.0 mi east of La Luz.

DRAINAGE AREA.--62.7 mi²

PERIOD OF RECORD.--October 1982 to current year. Records for November 1931 to September 1932 published in WSP 733, are unreliable and should not be used.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water stage recorder. Elevation of gage is 4,870 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: July 21-29 and Aug. 30 to Sept. 25. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for municipal water supply for city of Alamogordo. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s, Aug. 23, 1984, gage height 10.2 ft, from floodmarks, on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 8	0730	620	4.95	July 21	1300	575	4.80
Oct. 11	0045	*821	*5.58	Aug. 13	2030	503	4.55
Oct. 17	0230	397	4.15	Aug. 30	0100	789	5.55
July 16	2100	517	4.60				

Minimum discharge, 1.6 ft³/s, May 13, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	19	17	16	15	13	13	6.9	13	13	4.4	11
2	6.3	19	17	17	16	17	15	7.6	11	14	5.1	11
3	3.8	19	17	17	16	11	16	7.5	12	14	5.2	25
4	3.7	19	17	16	16	9.2	15	5.3	13	14	5.6	15
5	3.7	17	17	16	16	15	15	5.5	14	14	7.4	12
6	3.8	17	17	16	16	14	13	5.0	10	12	6.7	10
7	3.9	17	17	16	16	14	13	8.3	6.3	11	6.0	9.0
8	101	16	17	16	15	15	14	11	6.5	11	5.0	9.0
9	22	16	17	16	16	14	13	11	5.8	11	5.4	11
10	51	16	17	15	16	8.9	13	11	4.9	15	5.1	11
11	115	16	16	14	16	8.6	12	5.7	4.3	14	4.9	9.0
12	21	17	11	14	15	16	11	2.2	4.3	14	4.7	9.0
13	19	19	12	13	14	17	11	2.0	4.5	14	34	7.0
14	19	19	15	11	15	17	11	2.4	4.2	15	12	7.0
15	17	19	14	12	14	17	11	2.3	4.0	15	11	7.0
16	32	19	14	15	15	17	12	2.2	3.9	32	11	9.0
17	78	19	15	16	15	14	12	2.9	3.9	15	8.1	8.6
18	23	19	15	16	14	17	12	7.3	4.2	17	7.6	8.6
19	24	20	16	16	14	17	12	9.9	5.4	11	7.1	7.4
20	23	19	16	16	14	17	12	9.3	8.6	13	6.4	7.0
21	21	19	16	16	14	17	8.3	9.9	12	40	6.1	8.6
22	20	19	16	16	14	17	6.3	5.4	8.7	14	6.0	9.0
23	20	19	16	16	14	17	6.4	2.4	4.9	13	7.9	11
24	20	19	16	16	14	11	6.4	2.1	9.7	11	8.3	10
25	20	19	16	16	14	2.2	7.4	1.9	14	8.6	8.2	9.0
26	20	19	17	16	14	7.9	11	6.2	14	5.5	11	8.8
27	20	18	16	16	15	15	12	9.7	14	4.3	9.8	8.9
28	21	17	16	12	12	14	11	11	14	4.0	8.0	8.7
29	21	17	16	8.6	---	12	6.8	11	14	4.5	7.1	8.7
30	20	18	16	13	---	13	6.3	12	14	4.8	80	8.7
31	20	---	16	15	---	13	---	14	---	4.6	15	---
TOTAL	802.4	545	491	464.6	415	427.8	337.9	210.9	263.1	403.3	330.1	295.0
MEAN	25.9	18.2	15.8	15.0	14.8	13.8	11.3	6.80	8.77	13.0	10.6	9.83
MAX	115	20	17	17	16	17	16	14	14	40	80	25
MIN	3.7	16	11	8.6	12	2.2	6.3	1.9	3.9	4.0	4.4	7.0
AC-FT	1590	1080	974	922	823	849	670	418	522	800	655	585

CAL YR 1985	TOTAL	4158.17	MEAN	11.4	MAX	115	MIN	.79	AC-FT 8250
WTR YR 1986	TOTAL	4986.1	MEAN	13.7	MAX	115	MIN	1.9	AC-FT 9890

08492900 SACRAMENTO RIVER NEAR SUNSPOT, NM

LOCATION.--Lat 32°42'50", long 105°45'15", in SW¼NE¼ sec.30, T.18 S., R.12 E., Otero County, Hydrologic Unit 13050004, on left abutment of concrete weir in Lincoln National Forest, 100 ft downstream from natural soda dam, 0.5 mi downstream from Hornbuckle Canyon, 3.2 mi downstream from Sacramento Lake, and 6.4 mi southeast of Sunspot.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--July 1984 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 13-23. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for municipal water supply for village of Orogrande. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22 ft³/s, Aug. 14, 1984, gage height, 2.24 ft; minimum, 0.80 ft³/s, July 16, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21 ft³/s, Oct. 17, gage height, 2.09 ft; minimum, 1.3 ft³/s, July 28, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	11	8.9	6.3	4.1	3.2	2.9	2.4	2.2	1.9	1.5	2.4
2	3.8	11	8.6	6.0	4.2	3.3	3.0	2.4	2.3	2.0	1.6	2.2
3	3.7	11	8.6	5.9	4.0	3.2	3.0	2.4	2.4	2.0	1.6	2.1
4	3.7	11	8.1	5.8	4.0	3.2	2.9	2.5	2.2	2.7	1.7	2.3
5	3.7	11	8.1	5.8	4.0	3.1	2.9	2.3	2.1	2.0	1.9	2.2
6	3.7	10	8.1	5.8	3.7	3.1	2.9	2.3	2.1	2.0	1.6	2.0
7	3.7	10	7.9	5.4	3.8	3.1	2.8	2.3	2.1	2.0	1.5	1.9
8	8.4	10	8.0	5.2	3.6	3.1	2.7	2.3	2.1	2.0	1.5	1.9
9	6.2	10	7.9	5.2	3.8	3.0	2.7	2.3	2.0	2.1	1.6	1.9
10	5.4	10	8.2	5.2	3.0	3.0	2.7	2.3	1.9	2.0	1.6	2.0
11	6.9	10	8.0	5.1	3.1	2.8	2.7	2.3	1.9	1.9	1.5	1.9
12	5.8	10	8.0	5.0	3.5	2.6	2.7	2.2	1.9	1.9	1.6	1.9
13	5.9	10	7.9	5.0	4.1	2.8	2.6	2.2	1.9	1.8	1.8	2.5
14	6.1	10	7.9	4.9	4.0	2.4	2.6	2.2	1.9	1.8	2.3	2.1
15	6.2	9.9	7.7	5.0	3.9	2.5	2.6	2.1	1.8	2.5	3.2	2.0
16	7.7	9.9	7.7	4.9	3.9	3.5	2.6	2.1	1.8	2.4	2.4	3.5
17	14	9.9	7.5	4.9	3.7	3.4	2.5	2.3	1.8	2.2	2.2	2.1
18	11	9.8	7.5	4.8	3.8	3.2	2.6	2.2	1.9	2.0	2.0	2.0
19	11	9.7	7.3	4.7	3.7	3.1	2.6	2.1	1.9	2.0	1.9	1.9
20	11	9.7	7.1	4.6	3.6	3.0	2.6	2.1	1.8	1.8	1.7	1.9
21	11	9.6	7.1	4.5	3.5	3.2	2.6	2.1	1.8	1.8	1.6	1.9
22	11	9.5	6.9	4.4	3.4	3.3	2.5	2.1	1.9	1.9	1.7	2.0
23	11	9.4	6.8	4.4	3.4	3.3	2.5	2.1	2.1	2.2	1.7	2.0
24	11	9.2	6.6	4.4	3.4	3.3	2.5	2.1	2.9	1.8	2.0	2.3
25	11	9.3	6.5	4.3	3.4	3.2	2.4	2.1	4.0	1.7	1.9	2.0
26	11	9.6	6.5	4.3	3.3	3.1	2.5	2.1	2.9	1.6	2.1	2.0
27	11	9.1	6.4	4.2	3.3	3.2	2.5	2.1	2.2	1.6	2.0	1.9
28	11	9.1	6.3	4.2	3.2	3.1	2.4	2.2	2.2	1.6	1.8	1.9
29	11	9.0	6.3	4.1	---	3.0	2.4	2.1	2.1	1.6	1.9	1.9
30	11	9.2	6.2	4.1	---	2.9	2.4	2.7	1.9	1.6	5.8	1.9
31	11	---	6.3	4.1	---	2.9	---	2.6	---	1.5	2.5	---
TOTAL	252.8	296.9	230.9	152.5	102.4	95.1	79.3	69.6	64.0	59.9	61.7	62.5
MEAN	8.15	9.90	7.45	4.92	3.66	3.07	2.64	2.25	2.13	1.93	1.99	2.08
MAX	14	11	8.9	6.3	4.2	3.5	3.0	2.7	4.0	2.7	5.8	3.5
MIN	3.7	9.0	6.2	4.1	3.0	2.4	2.4	2.1	1.8	1.5	1.5	1.9
AC-FT	501	589	458	302	203	189	157	138	127	119	122	124

CAL YR 1985	TOTAL	2778.1	MEAN	7.61	MAX	14	MIN	3.1	AC-FT	5510
WTR YR 1986	TOTAL	1527.6	MEAN	4.19	MAX	14	MIN	1.5	AC-FT	3030

SAN JUAN RIVER BASIN

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,090 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Estimated daily discharges: Oct. 21-30, Nov. 20-17, 30, Dec. 11 to Feb. 18 and Apr. 4-10. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande Basin through Azotea tunnel (08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published in Water Resources Data for Colorado.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft³/s, 457,900 acre-ft/yr, prior to completion of Azotea tunnel.
16 years (water years 1971-86), 656 ft³/s, 475,300 acre-ft/yr, since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft³/s on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s, Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Apr. 2	1900	*6,840	*7.02	June 7	0800	4,710	6.12
May 5	0600	4,250	5.83	June 26	0600	4,810	6.09
May 24	0700	3,240	5.31	July 5	2000	3,070	5.14

Minimum daily discharge, 210 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	547	453	370	310	370	884	2050	1820	2350	2200	487	395
2	502	428	351	310	370	905	5010	2480	2310	2040	459	361
3	480	412	356	300	360	905	3550	2860	2560	1900	433	330
4	454	398	334	270	330	1070	2400	3400	2670	1870	405	305
5	428	383	301	250	320	1230	1400	3660	3130	2110	402	287
6	399	374	308	240	300	1190	1500	3340	3450	1880	393	279
7	457	351	329	240	280	1200	1600	2890	4100	1630	393	264
8	774	334	305	240	270	1180	1600	2500	3620	1390	357	264
9	678	338	325	250	280	1230	1600	2260	3230	1740	338	399
10	638	329	319	270	270	1030	1600	2070	2820	1990	334	1110
11	826	325	270	280	240	962	1540	2040	2690	1600	329	1080
12	1040	368	230	290	210	993	1460	2070	2780	1360	316	808
13	900	365	220	300	270	792	1470	2130	3010	1230	304	647
14	818	326	220	300	270	742	1360	2210	3190	1120	291	608
15	736	316	230	310	290	688	1300	2210	3190	1050	275	554
16	677	300	250	310	290	638	1340	2210	3150	1120	257	513
17	645	333	270	300	300	662	1440	2180	3130	1120	245	524
18	668	329	280	280	400	694	1320	2100	3170	1220	242	470
19	657	316	270	280	647	658	1230	2150	3220	1120	260	444
20	589	290	280	300	1270	586	1210	2410	3260	1300	229	413
21	560	320	290	320	890	582	1300	2680	3340	1290	218	389
22	540	290	310	300	600	649	1510	2820	3300	1190	242	374
23	520	320	310	300	536	752	1690	2950	3170	1170	245	379
24	480	360	320	300	587	918	1650	2950	3010	1140	390	504
25	480	380	330	280	680	962	1590	2640	2990	996	437	654
26	480	440	320	270	856	1070	1680	2850	3730	892	403	1180
27	480	430	330	290	1020	1240	1520	2950	3240	818	343	828
28	480	413	330	300	970	1430	1410	2850	3040	745	415	729
29	480	398	320	320	---	1540	1440	2840	2870	665	422	773
30	470	350	350	340	---	1680	1580	2700	2570	620	585	781
31	453	---	350	360	---	1830	---	2430	---	565	492	---
TOTAL	18336	10769	9378	9010	13476	30892	51350	79650	92290	41081	10941	16646
MEAN	591	359	303	291	481	997	1712	2569	3076	1325	353	555
MAX	1040	453	370	360	1270	1830	5010	3660	4100	2200	585	1180
MIN	399	290	220	240	210	582	1210	1820	2310	565	218	264
AC-FT	36370	21360	18600	17870	26730	61270	101900	158000	183100	81480	21700	33020

CAL YR 1985 TOTAL 439109 MEAN 1203 MAX 6700 MIN 140 AC-FT 871000
WTR YR 1986 TOTAL 383819 MEAN 1052 MAX 5010 MIN 210 AC-FT 761300

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 5.2 mi northeast of Arboles Post Office, and 8 mi upstream from mouth.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-1899, 1910-1927 at a site 7.5 mi downstream at elevation 6,000 ft. Low flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft above National Geodetic Vertical Datum of 1929, from Colorado State Highway Department benchmark.

REMARKS.--Estimated daily discharges: Oct. 1-30, Dec. 11-21 and Feb. 25 to Mar. 6. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several ovservations of specific conductance and water temperature were obtained and are published in Water Resources Data for Colorado.

AVERAGE DISCHARGE.--24 years, 407 ft³/s, 294,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s, Sept. 6, 1970, gage height, 6.38 ft recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft³/s on basis of slope-area measurement of peak flow; minimum, 11 ft³/s, Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Apr. 2	1800	*3,800	*4.64	June 14	0400	1,920	3.48
May 4	0100	3,140	4.32	June 26	0400	1,730	3.33
May 27	0500	2,020	3.56	July 20	0300	1,740	3.29
June 7	0600	2,470	3.88				

Minimum daily discharge, 120 ft³/s, Dec. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	249	218	146	164	430	1850	1890	1290	1000	356	187
2	300	229	225	143	173	470	3240	2090	1290	918	335	187
3	280	225	225	143	177	540	2390	2670	1460	869	317	170
4	260	221	213	137	161	630	1710	2830	1750	813	308	161
5	240	209	185	135	155	720	1340	2530	1980	859	321	149
6	220	209	194	137	152	710	1480	2130	2080	876	295	140
7	370	187	201	140	152	740	1600	1720	2290	729	273	132
8	420	184	191	140	152	733	1540	1420	2190	637	246	163
9	400	187	205	130	146	787	1460	1200	1960	1030	222	227
10	480	177	187	132	140	645	1370	1060	1610	1090	201	460
11	680	180	130	127	140	608	1330	1040	1390	849	201	450
12	640	204	120	127	127	589	1280	1030	1470	701	201	352
13	580	201	130	130	146	500	1270	1100	1670	623	209	295
14	520	174	130	130	143	475	1070	1190	1780	565	201	262
15	450	170	130	130	155	436	1000	1180	1730	529	180	238
16	430	167	140	132	204	415	1070	1100	1700	626	201	221
17	400	187	150	130	217	415	1200	1050	1650	595	209	217
18	390	180	150	130	233	430	1020	991	1680	620	198	198
19	360	161	150	127	280	391	886	1130	1610	839	187	184
20	340	143	150	130	600	380	853	1390	1430	1350	184	177
21	320	161	160	140	448	390	1010	1630	1400	1140	180	161
22	310	146	173	140	352	434	1390	1720	1340	1060	180	152
23	290	146	173	130	309	538	1620	1790	1290	1160	161	170
24	270	170	173	135	330	688	1680	1860	1210	1170	259	267
25	260	180	167	127	340	718	1550	1660	1230	960	257	343
26	260	279	164	125	360	881	1520	1830	1510	792	237	458
27	260	261	158	127	440	1040	1230	1900	1380	672	221	377
28	260	222	158	130	430	1230	1100	1830	1290	572	229	341
29	260	229	158	130	---	1310	1260	1860	1380	488	213	394
30	270	241	155	137	---	1430	1590	1630	1210	446	213	405
31	253	---	158	149	---	1590	---	1360	---	401	209	---
TOTAL	11113	5879	5221	4146	6826	21293	42909	49811	47250	24979	7204	7638
MEAN	358	196	168	134	244	687	1430	1607	1575	806	232	255
MAX	680	279	225	149	600	1590	3240	2830	2290	1350	356	460
MIN	220	143	120	125	127	380	853	991	1210	401	161	132
AC-FT	22040	11660	10360	8220	13540	42230	85110	98800	93720	49550	14290	15150

CAL YR 1985 TOTAL 255568 MEAN 700 MAX 2820 MIN 88 AC-FT 506900
WTR YR 1986 TOTAL 234269 MEAN 642 MAX 3240 MIN 120 AC-FT 464700

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 13 mi upstream from mouth.

DRAINAGE AREA.--510 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 10 to Feb. 18, Feb. 21 to Mar. 6, Apr. 3-10, Aug. 7 to Sept. 3, and Sept. 9-30. Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published in Water Resources Data for Colorado.

AVERAGE DISCHARGE.--36 years, 235 ft³/s, 170,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s, July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft³/s; minimum daily, 6.1 ft³/s, May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911 at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,720 ft³/s, at 0500 hours May 5, gage height, 6.14 ft; minimum daily, 48 ft³/s, Jan. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	592	180	170	90	150	443	772	795	1350	393	370
2	400	592	180	160	80	150	1560	960	773	1100	361	370
3	390	592	180	160	80	160	740	1600	678	673	360	370
4	385	586	180	48	80	170	540	1640	412	652	339	365
5	380	586	170	48	75	180	460	1680	371	707	326	350
6	380	586	170	48	75	190	460	1590	390	683	342	346
7	447	551	170	100	75	198	500	1570	406	653	360	334
8	419	331	160	100	75	202	480	1590	535	593	350	334
9	406	314	160	100	75	202	450	1590	591	538	330	510
10	418	310	170	100	75	187	410	1560	592	479	320	760
11	571	330	170	100	75	194	385	1540	574	437	320	760
12	486	380	180	55	75	202	365	1500	545	421	370	660
13	466	360	200	80	80	167	355	1420	801	418	470	620
14	460	320	220	80	85	157	323	1360	1610	400	430	560
15	542	310	210	85	85	151	302	1170	1640	442	390	520
16	615	310	200	85	85	145	306	827	1630	530	350	480
17	634	320	190	80	85	154	314	509	1590	509	330	450
18	652	320	170	75	100	151	294	443	1460	496	320	420
19	640	320	170	75	261	163	271	407	1440	600	320	400
20	622	310	180	70	486	142	258	339	1400	675	320	380
21	616	340	180	80	160	139	308	311	1290	641	310	360
22	616	350	180	75	95	154	663	302	1250	874	310	400
23	604	350	190	75	90	180	707	306	1120	1260	330	600
24	604	350	190	75	95	205	638	286	928	1210	380	780
25	504	360	190	85	110	210	290	282	925	1160	410	810
26	549	200	190	80	130	230	398	282	893	1150	390	760
27	579	190	180	80	150	242	788	286	822	1150	370	710
28	592	170	180	80	150	269	788	286	804	991	370	720
29	598	170	180	85	---	286	788	349	951	705	380	750
30	598	180	180	80	---	298	772	687	1260	629	390	700
31	598	---	170	85	---	333	---	763	---	458	370	---
TOTAL	16177	10980	5620	2699	3177	5961	15356	28207	28476	22584	11111	15949
MEAN	522	366	181	87.1	113	192	512	910	949	729	358	532
MAX	652	592	220	170	486	333	1560	1680	1640	1350	470	810
MIN	380	170	160	48	75	139	258	282	371	400	310	334
AC-FT	32090	21780	11150	5350	6300	11820	30460	55950	56480	44800	22040	31630

CAL YR 1985 TOTAL 174445 MEAN 478 MAX 2130 MIN 65 AC-FT 346000
WTR YR 1986 TOTAL 166297 MEAN 456 MAX 1680 MIN 48 AC-FT 329900

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16-30, Nov. 17-20, 22, 23, Dec. 11-30, Jan. 1-31, Feb. 1-4, 7-13 and Apr. 6-10. Records good except for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from the Los Pinos River near Bayfield, Co. which causes a considerable change in the annual pattern and natural flow. Several observations of specific conductance and water temperature were obtained and are published in Water Resources Data for Colorado.

AVERAGE DISCHARGE.--36 years, 31.6 ft³/s, 22,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s, Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft³/s on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 ft³/s, Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharges, 434 ft³/s, at 0800 hours Aug. 24, gage height, 2.13 ft; minimum daily, 4.2 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	6.5	30	6.0	4.6	7.9	15	12	72	102	60	78
2	55	6.1	17	5.5	4.6	7.4	99	15	72	92	62	78
3	55	6.1	14	5.5	4.6	7.4	73	17	74	88	71	76
4	54	6.1	16	5.5	4.4	7.8	41	26	72	88	71	72
5	52	6.1	9.3	5.5	4.4	7.8	24	25	69	102	66	69
6	52	6.1	8.5	5.5	4.4	7.4	14	25	71	108	67	71
7	67	5.6	8.5	5.5	4.4	6.5	14	36	67	88	69	71
8	54	5.6	7.4	5.0	4.4	6.1	14	43	71	88	69	78
9	48	5.6	7.4	5.5	4.4	7.4	13	40	72	104	69	105
10	52	5.6	6.5	5.5	4.4	7.8	12	43	71	94	71	173
11	76	5.6	6.0	5.5	4.4	8.5	11	42	70	80	72	70
12	43	6.1	6.5	5.0	4.2	10	10	37	74	78	72	57
13	39	6.5	6.0	5.0	4.4	6.6	9.2	40	74	76	72	62
14	36	6.1	6.0	5.0	4.8	5.6	7.8	43	74	76	71	64
15	30	5.2	6.0	5.5	14	5.6	7.4	57	72	86	69	64
16	20	4.8	6.0	5.0	54	4.4	6.9	57	74	111	69	54
17	10	5.0	6.5	4.8	50	6.1	7.4	67	72	92	71	48
18	9.0	5.0	6.5	4.6	52	6.5	6.9	62	72	88	69	50
19	8.5	5.0	6.5	4.4	39	7.4	6.5	62	72	88	69	52
20	8.0	4.6	6.5	4.4	48	5.6	6.1	62	74	113	71	52
21	8.0	5.8	6.5	4.8	24	4.4	5.2	63	74	100	76	55
22	8.0	6.5	7.0	4.6	11	4.8	5.2	66	75	114	74	52
23	7.5	7.0	7.0	4.4	8.6	6.1	5.6	62	80	108	78	55
24	7.5	7.6	7.0	4.6	10	6.5	6.1	66	80	73	207	93
25	7.5	10	7.0	4.6	11	6.1	28	66	109	69	104	60
26	7.0	59	7.0	4.6	13	6.1	7.8	69	112	66	92	103
27	7.0	21	6.5	4.4	12	6.1	6.1	69	98	66	90	51
28	7.0	9.4	6.5	4.6	10	6.5	5.2	69	96	64	129	40
29	7.0	14	7.0	4.4	---	6.9	5.2	62	112	60	112	71
30	7.0	71	6.5	4.6	---	7.4	5.6	71	104	59	110	55
31	6.5	---	6.5	5.0	---	7.8	---	72	---	59	83	---
TOTAL	903.5	324.6	261.6	154.8	419.0	208.5	478.2	1546	2379	2680	2535	2079
MEAN	29.1	10.8	8.44	4.99	15.0	6.73	15.9	49.9	79.3	86.5	81.8	69.3
MAX	76	71	30	6.0	54	10	99	72	112	114	207	173
MIN	6.5	4.6	6.0	4.4	4.2	4.4	5.2	12	67	59	60	40
AC-FT	1790	644	519	307	831	414	949	3070	4720	5320	5030	4120

CAL YR 1985 TOTAL 14437.4 MEAN 39.6 MAX 235 MIN 3.6 AC-FT 28640
WTR YR 1986 TOTAL 13969.2 MEAN 38.3 MAX 207 MIN 4.2 AC-FT 27710

09355100 NAVAJO RESERVOIR NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'28", long 107°36'31", in SW¼SE¼ sec.18, T.30 N., R.7 W., San Juan County, Hydrologic Unit 14080101, in gate shaft of outlet works structure near right abutment of Navajo Dam on San Juan River, 5.5 mi east of Archuleta, 33 mi east of Farmington, and at mile 298.6.

DRAINAGE AREA.--3,240 mi², approximately.

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

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1968 dead storage included.

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 elevation 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 provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 1,731,000 acre-ft, July 2-4, 1973, elevation, 6,087.25 ft; minimum daily contents after June 1964 (initial filling period), 244,300 acre-ft, Mar. 10, 11, 1965, elevation, 5,906.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 1,681,500 acre-ft, June 30, elevation, 6,084.04 ft; minimum daily contents, 1,204,400 acre-ft, Feb. 17, elevation, 6,048.49 ft.

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

6,015	864.5	6,035	1,056.7	6,055	1,281.3	6,075	1,546.2
6,020	910.1	6,040	1,109.4	6,060	1,343.5	6,080	1,619.5
6,025	957.2	6,045	1,164.3	6,065	1,408.3	6,085	1,696.0
6,030	1,006.0	6,050	1,221.6	6,070	1,475.8	6,090	1,775.7

RESERVOIR STORAGE (AC-FT), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1586600	1603700	1515000	1389300	1249000	1210700	1244900	1366000	1540300	1680800	1640800	1537300
2	1586900	1601400	1511600	1384600	1245300	1211400	1259700	1373700	1544600	1680500	1635300	1534900
3	1587000	1599000	1508500	1380000	1241300	1211800	1270000	1382800	1548800	1678900	1629900	1532200
4	1587200	1596300	1505300	1375300	1237000	1212600	1275100	1395500	1554200	1677400	1624500	1529900
5	1587500	1593700	1502100	1370600	1232800	1213800	1280200	1407600	1560800	1675800	1619200	1527300
6	1587800	1590900	1498400	1365700	1228400	1214700	1285200	1416900	1569000	1674400	1614000	1524800
7	1588900	1588100	1496300	1361100	1224100	1215800	1290500	1424800	1577400	1671700	1608600	1523800
8	1590000	1584400	1493500	1356500	1219600	1217100	1295200	1431700	1585700	1668100	1602100	1520900
9	1590900	1582200	1489800	1351800	1215200	1218200	1298500	1436400	1590600	1668700	1597200	1521500
10	1591400	1578500	1485200	1347400	1212100	1218700	1301300	1441600	1595100	1667500	1591600	1524900
11	1594100	1574900	1480400	1342500	1210600	1219400	1303700	1446700	1599700	1664400	1587800	1525500
12	1595900	1571500	1475900	1338200	1208900	1218700	1306000	1451200	1604600	1661200	1584800	1524600
13	1598500	1568000	1471400	1333800	1207800	1217500	1308400	1455700	1611900	1657700	1581700	1523600
14	1601200	1564800	1466900	1329400	1206800	1217100	1310000	1460400	1619200	1653700	1578500	1522900
15	1602700	1561500	1462300	1324700	1206000	1216100	1311200	1465200	1626600	1649600	1575200	1521500
16	1603700	1558400	1457800	1320100	1205200	1215300	1312500	1467300	1634000	1648800	1571700	1519500
17	1604900	1555500	1453500	1315300	1204400	1214700	1314100	1470600	1641200	1649100	1568300	1517700
18	1605800	1551800	1448700	1310600	1204600	1214200	1315000	1473900	1647300	1652500	1565500	1515700
19	1607100	1548200	1445500	1305900	1205100	1213200	1316000	1476900	1651000	1655400	1562900	1513400
20	1608500	1544300	1441100	1302200	1208700	1211800	1317000	1481200	1655800	1656600	1560300	1511500
21	1609100	1541600	1436700	1297600	1208400	1211600	1319700	1486400	1660600	1659800	1557900	1509500
22	1610000	1538400	1432400	1293300	1207900	1211300	1324200	1491600	1665300	1661200	1555000	1507200
23	1610700	1535900	1428000	1288700	1207500	1211000	1329600	1497300	1669300	1662900	1552700	1505600
24	1611300	1532000	1423600	1284100	1207200	1210700	1334100	1503000	1672400	1663700	1550900	1504400
25	1611600	1530200	1419200	1279500	1207300	1210400	1337700	1508800	1676300	1662700	1548800	1506700
26	1612100	1528300	1414600	1275000	1208000	1212300	1341600	1514600	1678400	1661700	1547300	1507400
27	1612400	1526000	1410300	1270400	1209300	1214700	1346800	1520100	1679400	1660400	1545000	1508000
28	1612500	1523100	1405900	1265900	1210000	1218400	1350100	1524300	1680100	1657500	1543200	1509100
29	1610600	1520400	1401500	1261700	---	1222000	1353900	1529600	1680900	1653900	1542000	1509200
30	1608800	1517700	1397500	1257400	---	1225700	1359300	1533300	1681500	1649900	1540600	1508900
31	1606100	---	1392900	1253200	---	1230200	---	1536900	---	1645300	1539300	---
MAX	1612500	1603700	1515000	1389300	1249000	1230200	1359300	1536900	1681500	1680800	1640800	1537300
MIN	1586600	1517700	1392900	1253200	1204400	1210400	1244900	1366000	1540300	1645300	1539300	1504400
(†)	6079.07	6072.97	6063.80	6052.64	6048.97	6050.70	6061.21	6074.32	6084.04	6081.68	6074.49	6072.35
(††)	+20000	-88400	-124800	-139700	-43200	+20200	+129100	+177600	+144600	-36200	-106000	-30400

CAL YR 1985 MAX 1666100 MIN 1363200
WTR YR 1986 MAX 1681500 MIN 1204400

(†) ELEVATION, IN FEET, AT END OF MONTH.
(††) CHANGE IN CONTENTS, IN ACRE-FEET.

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'05", long 107°41'51", in N½ sec.20, T.30 N., R.8 W., San Juan County, Hydrologic Unit 14080101, on left bank 0.5 mi upstream from Gobernador Canyon, 0.8 mi northeast of Archuleta, 7.2 mi downstream from Navajo Dam, and at mile 291.4.

DRAINAGE AREA.--3,260 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1954 to current year.

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Elevation of gage is 5,653 ft above National Geodetic Vertical Datum of 1929, from river-profile survey. Prior to Dec. 29, 1959, at site 5.0 mi upstream at elevation 55 ft higher. Dec. 29, 1959 to Nov. 15, 1964, at site 0.4 mi upstream at elevation 5 ft higher. Prior to Nov. 28, 1966, at elevation 2.0 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow completely regulated by Navajo Reservoir (station 09355100) 7 mi upstream except for minor inflow from 30 mi² intervening drainage area. Highwater diversions through Azotea tunnel (station 08284160) into Rio Grande Basin began in March 1971. Diversions for irrigation of about 47,000 acres upstream from station. Releases from Navajo Reservoir, beginning in January 1976, for use on Navajo Indian Irrigation Project bypass gage in tunnel on left bank. See tabulation below for monthly and annual releases as furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--7 years (water years 1956-62), 1,304 ft³/s, 944,700 acre-ft/yr, prior to closure of Navajo Dam. 24 years (water years 1963-86), 1,216 ft³/s, 880,900 acre-ft/yr, since closure of Navajo Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft³/s, July 27, 1957, gage height, 11.00 ft, site and datum then in use; minimum determined, 8 ft³/s, Feb. 28, 1963. Maximum discharge since construction of Navajo Dam in 1962, 6,500 ft³/s, June 20, 1965, gage height, 4.57 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,980 ft³/s, June 28-30, July 1; minimum daily, 999 ft³/s, Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	999	2430	2440	2800	2700	1230	1200	1170	1440	3980	3240	2010
2	999	2420	2450	2810	2720	1230	1200	1170	1450	3720	3230	2010
3	1000	2430	2450	2810	2700	1350	1340	1170	1450	3450	3230	2010
4	1000	2420	2450	2820	2700	1460	1480	1180	1460	3520	3230	2010
5	1000	2420	2430	2810	2680	1470	1490	1180	1460	3530	3220	2010
6	1000	2420	2420	2810	2670	1470	1500	1190	1470	3530	3220	2010
7	1010	2420	2420	2800	2660	1470	1500	1190	1480	3530	3220	2020
8	1010	2410	2440	2780	2670	1470	1510	1180	1480	3540	3220	2020
9	1000	2420	2430	2780	2670	1480	1510	1190	1490	3540	3220	2040
10	1000	2420	2440	2800	2410	1470	1510	1190	1490	3530	3220	2050
11	1000	2420	2550	2800	1450	1480	1520	1190	1500	3540	2780	2020
12	1010	2420	2670	2790	1140	1480	1520	1200	1500	3540	1830	2000
13	1010	2420	2680	2800	1190	1480	1510	1200	1510	3550	1900	2010
14	1010	2420	2680	2780	1190	1480	1520	1200	1510	3560	2180	2020
15	1010	2430	2680	2780	1190	1500	1530	1200	1510	3550	2200	2020
16	1010	2430	2670	2770	1190	1500	1530	1190	1510	2960	2180	2020
17	1010	2440	2690	2760	1190	1500	1530	1200	1510	1590	2160	2020
18	1020	2440	2810	2760	1190	1500	1530	1200	1750	1410	2020	2020
19	1020	2440	2390	2760	1200	1500	1530	1200	2470	1400	1760	2020
20	1020	2440	2430	2760	1210	1510	1540	1210	3040	1400	1740	2020
21	1030	2440	2780	2760	1200	1510	1360	1210	3120	1910	1800	2020
22	1030	2440	2810	2760	1200	1510	1150	1200	3130	2920	1980	2020
23	1030	2450	2800	2750	1210	1510	1150	1200	3130	3240	2000	2020
24	1030	2450	2800	2740	1220	1520	1160	1200	3120	3220	2010	2030
25	1030	2460	2800	2730	1220	1520	1160	1200	3140	3240	2000	2030
26	1030	2470	2810	2730	1220	1320	1160	1200	3440	3240	2000	2040
27	1030	2460	2800	2730	1220	1160	1160	1310	3970	3240	2010	2030
28	1040	2450	2790	2720	1220	1160	1160	1420	3980	3240	2020	2040
29	1600	2450	2780	2710	---	1170	1170	1430	3980	3230	2040	2040
30	2400	2440	2790	2700	---	1170	1170	1430	3980	3240	2010	2040
31	2440	---	2800	2710	---	1170	---	1440	---	3230	2010	---
TOTAL	34828	73020	81380	85820	48430	43750	41300	38040	67470	96320	74880	60670
MEAN	1123	2434	2625	2768	1730	1411	1377	1227	2249	3107	2415	2022
MAX	2440	2470	2810	2820	2720	1520	1540	1440	3980	3980	3240	2050
MIN	999	2410	2390	2700	1140	1160	1150	1170	1440	1400	1740	2000
AC-FT	69080	144800	161400	170200	96060	86780	81920	75450	133800	191100	148500	120300
(†)	1720	0	0	0	0	8440	16420	19280	30200	42200	29190	7300

CAL YR 1985 TOTAL 929411 MEAN 2546 MAX 5120 MIN 707 AC-FT 1843000
WTR YR 1986 TOTAL 745908 MEAN 2044 MAX 3980 MIN 999 AC-FT 1480000

(†) DISCHARGE, IN ACRE-FT, THROUGH NAVAJO INDIAN IRRIGATION TUNNEL.

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV										
04...	1400	2330	220	241	8.00	8.50	21.5	11.5	10	14.0
JAN										
13...	1300	2740	205	219	7.80	8.50	11.0	7.0	12	12.8
MAR										
24...	1045	1530	250	265	7.80	8.10	14.5	5.5	14	11.4
MAY										
05...	1330	1200	260	--	8.33	--	16.5	9.5	--	15.6
JUL										
08...	1330	3510	250	251	8.30	8.10	30.0	10.5	6.5	10.8
AUG										
14...	1430	2230	250	251	8.40	8.20	26.5	12.5	4.2	11.7

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV										
04...	95	26	28	6.0	11	0.5	1.5	70	7.0	69
JAN										
13...	81	16	24	5.0	9.8	0.5	1.4	79	--	64
MAR										
24...	98	22	28	6.7	14	0.6	1.6	93	0	73
MAY										
05...	--	--	--	--	--	--	--	76	7	72
JUL										
08...	94	19	27	6.4	12	0.6	1.6	92	0	67
AUG										
14...	98	26	28	6.9	13	0.6	0.40	67	8.0	72

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
NOV								
04...	--	69	38	1.8	0.20	11	150	150
JAN								
13...	65	68	29	1.5	0.20	12	128	120
MAR								
24...	76	76	51	2.1	0.20	11	167	160
MAY								
05...	74	--	--	--	--	--	--	--
JUL								
08...	75	76	50	2.0	0.20	11	158	160
AUG								
14...	--	74	47	2.6	0.20	11	165	160

SAN JUAN RIVER BASIN

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi², approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Elevation of gage is 5,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft higher.

REMARKS.--Estimated daily discharges: Dec. 12-21, 25, and Jan. 1-11. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 20,000 acres upstream from station. During water years 1944-49, Twin Rocks Canal diverted upstream from station for irrigation downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 921 ft³/s, 667,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, June 19, 1949, gage height, 11.45 ft; minimum, 63 ft³/s, Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in October 1911 at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
May 4	1000	5,220	8.07	June 7	1630	*5,760	*8.38
May 29	1115	4,970	7.92	June 14	1115	4,720	7.80

Minimum daily discharge, 271 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	508	470	367	372	559	1470	2570	3560	2540	923	835
2	656	447	439	356	343	536	2300	3040	3340	2420	914	844
3	657	482	459	357	344	545	1680	4140	3490	2350	869	795
4	586	464	439	359	331	595	1290	4970	4350	2220	852	773
5	612	504	414	337	302	622	1110	4840	4750	2690	768	722
6	533	477	412	350	295	644	1110	4280	4810	2540	739	680
7	571	477	420	346	307	663	1250	3540	5290	2240	792	651
8	653	451	377	350	299	664	1440	2880	5170	2010	742	651
9	695	415	384	357	297	684	1510	2460	4640	2420	721	808
10	745	405	406	356	275	625	1460	2040	3640	3090	704	1410
11	841	395	409	338	279	645	1510	1900	2990	2550	691	1570
12	893	494	340	328	271	591	1460	1910	3080	2130	751	1360
13	821	484	390	330	283	513	1370	2060	3800	1910	921	1270
14	796	403	370	343	318	488	1240	2200	4290	1750	956	1150
15	766	399	380	354	328	481	1210	2230	4280	1700	830	1050
16	731	415	390	333	427	434	1200	2120	4250	1810	771	1000
17	731	438	380	302	416	462	1290	2020	4100	1950	729	957
18	715	440	390	307	443	490	1230	1880	3990	1760	688	881
19	663	432	420	294	488	456	1110	2030	4020	1730	690	846
20	635	390	420	285	566	423	1030	2570	3540	1630	686	809
21	607	458	520	318	485	429	1120	3190	3440	1500	679	768
22	584	454	433	310	398	426	1490	3310	3320	1640	683	750
23	584	442	403	296	368	447	1990	3480	3200	1840	702	1050
24	558	453	411	305	363	515	2130	3790	2970	2020	880	1640
25	545	493	419	346	416	577	2100	3480	2630	1860	996	1770
26	546	606	415	339	458	609	1920	4070	2920	1690	897	1740
27	523	528	396	303	527	724	1700	4410	3370	1590	821	1480
28	520	418	380	349	564	837	1590	4510	3130	1460	883	1410
29	530	434	391	327	---	950	1700	4590	3240	1320	979	1480
30	517	522	394	323	---	1010	2090	4050	2910	1050	919	1460
31	503	---	397	372	---	1120	---	3510	---	962	828	---
TOTAL	20007	13728	12668	10337	10563	18764	45100	98070	112510	60372	25004	32610
MEAN	645	458	409	333	377	605	1503	3164	3750	1947	807	1087
MAX	893	606	520	372	566	1120	2300	4970	5290	3090	996	1770
MIN	503	390	340	285	271	423	1030	1880	2630	962	679	651
AC-FT	39680	27230	25130	20500	20950	37220	89460	194500	223200	119700	49600	64680

CAL YR 1985	TOTAL	496914	MEAN	1361	MAX	7710	MIN	210	AC-FT 985600
WTR YR 1986	TOTAL	459733	MEAN	1260	MAX	5290	MIN	271	AC-FT 911900

09364500 ANIMAS RIVER AT FARMINGTON, NM
(National stream-quality accounting network station)

LOCATION.--Lat 36°43'17", long 108°12'05", in SW¼SW¼ sec.15, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080104, in Boyd City Park, on right bank 900 ft upstream from bridge on Miller Ave., 0.4 mi downstream from bridge on U.S. Highway 64 in Farmington, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--1,360 mi², approximately.

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1243: 1931. WSP 1313: 1913.

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1905, non-recording gage at old bridge 0.1 mi upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.8 mi downstream at lower datums (datum lowered 2.0 ft Aug. 15, 1927, and raised 0.2 ft Dec. 16, 1929). Oct. 5, 1938 to Nov. 1, 1973 at site 900 ft downstream at datum 1.74 ft lower.

REMARKS.--Estimated daily discharges: Apr. 2-11. Water-discharge records good. Diversions for irrigation of about 30,000 acres upstream from station.

AVERAGE DISCHARGE.--75 years, 927 ft³/s, 671,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 25,000 ft³/s, June 29, 1927, gage height, 8.5 ft, site and datum then in use, from rating curve extended above 10,000 ft³/s; minimum, 1.0 ft³/s, Aug. 11, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911, when a stage of about 16.5 ft was reached (datum in use Oct. 1938 to Nov. 1973). Flood of Sept. 6, 1909, reached a stage of 11.1 ft, 1904-5 site and datum (discharge, about 19,000 ft³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	1645	4,960	7.98	June 14	1645	4,850	7.93
May 29	1730	4,770	7.89	July 19	2245	*8,130	*9.30
June 7	2130	5,870	8.39				

Minimum discharge, 315 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	701	536	499	424	400	569	1150	2040	3310	2730	733	665
2	645	528	462	406	383	558	2450	2640	3260	2440	706	750
3	635	521	446	409	372	562	1500	3500	3260	2330	667	680
4	588	509	454	414	358	592	1200	4660	4180	2240	608	635
5	568	513	432	392	341	622	1100	4740	4750	2630	570	580
6	520	516	412	397	334	653	1090	4140	4840	2790	490	532
7	511	495	415	403	346	661	1100	3490	5280	2450	501	494
8	566	457	397	404	338	670	1230	2750	5510	2190	482	496
9	625	458	377	380	336	686	1310	2320	4960	2230	457	646
10	679	444	385	401	321	658	1350	1860	4010	3420	446	1170
11	769	433	394	398	315	643	1380	1580	3060	2880	424	1530
12	893	462	382	397	330	642	1060	1530	2920	2280	435	1250
13	837	513	378	374	328	580	1010	1600	3610	1950	496	1150
14	844	448	442	376	349	539	907	1720	4310	1740	636	1060
15	810	426	453	376	373	540	859	1850	4410	1660	517	986
16	744	432	421	380	421	509	842	1780	4350	1740	454	927
17	733	451	416	349	446	509	911	1720	4250	1990	427	891
18	739	482	415	340	431	519	896	1550	4110	1820	403	834
19	683	449	422	335	508	544	817	1550	4160	2330	396	788
20	650	427	423	327	542	475	724	2030	3820	2210	405	769
21	626	440	419	328	575	470	715	2720	3490	1800	408	705
22	607	476	429	355	470	486	884	3060	3410	2010	403	674
23	592	462	429	331	420	493	1370	3160	3290	2400	412	799
24	601	461	437	331	412	513	1710	3460	3080	2190	903	1320
25	567	478	444	340	422	562	1730	3350	2770	2060	908	1740
26	548	561	444	364	472	589	1630	3630	2890	1770	853	1720
27	542	561	439	359	529	620	1430	4160	3380	1600	732	1420
28	533	465	419	350	571	726	1270	4330	3320	1460	694	1280
29	534	429	422	367	---	807	1240	4410	3310	1300	929	1330
30	535	506	428	352	---	898	1550	4150	3140	1040	918	1400
31	533	---	430	366	---	946	---	3480	---	845	744	---
TOTAL	19958	14339	13165	11525	11443	18841	36415	88960	114440	64525	18157	29221
MEAN	644	478	425	372	409	608	1214	2870	3815	2081	586	974
MAX	893	561	499	424	575	946	2450	4740	5510	3420	929	1740
MIN	511	426	377	327	315	470	715	1530	2770	845	396	494
AC-FT	39590	28440	26110	22860	22700	37370	72230	176500	227000	128000	36010	57960

CAL YR 1985	TOTAL	482437	MEAN	1322	MAX	8110	MIN	219	AC-FT	956900
WTR YR 1986	TOTAL	440989	MEAN	1208	MAX	5510	MIN	315	AC-FT	874700

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1941 to current year.
WATER TEMPERATURES: December 1950 to current year.
SUSPENDED-SEDIMENT DISCHARGES: December 1950 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,980 microsiemens, Aug. 19, 1944; minimum daily, 89 microsiemens, June 15, 1985.
WATER TEMPERATURES: Maximum daily, 32.0°C, Aug. 26, 1966 and July 16, 1977; minimum daily, 0.0°C, on many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 36,800 mg/L, July 23, 1954; minimum daily mean, 1 mg/L on several days during 1956, 1958, and 1974.
SEDIMENT LOADS: Maximum daily, 337,000 tons, July 23, 1954; minimum daily, less than .50 ton on many days during 1955-57, 1959-60, 1963, 1972, 1974, and 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 985 microsiemens, Sept. 10; minimum daily, 203 microsiemens, June 16.
WATER TEMPERATURES: Maximum daily, 27.0°C, Aug. 11, 22; minimum daily, 0.0°C on several days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 10,100 mg/L, Sept.10; minimum daily mean, 16 mg/L, Nov. 15.
SEDIMENT LOADS: Maximum daily, 35,300 tons, July 23; minimum daily, 18 tons, Nov. 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV 06...	1645	523	--	570	8.10	8.40	14.5	9.5	2.5	9.5
MAR 25...	1000	576	550	564	8.10	7.90	13.0	7.0	42	10.6
APR 15...	0945	859	360	--	7.90	--	--	8.5	--	--
MAY 08...	1330	2720	260	282	8.10	8.10	13.0	7.5	32	9.8
AUG 11...	1430	449	500	501	8.10	8.40	29.5	27.0	15	7.6

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV 06...	250	130	78	12	25	0.7	2.2	110	15	120
MAR 25...	240	99	74	13	21	0.6	2.2	171	0	135
APR 15...	--	--	--	--	--	--	--	--	--	--
MAY 08...	130	38	41	6.1	6.1	0.2	1.2	110	0	90
AUG 11...	220	100	71	10	21	0.6	2.4	--	0	--

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 06...	--	118	140	15	0.40	6.8	362	370	<0.010	<0.100
MAR 25...	140	145	120	13	0.30	7.0	454	340	<0.010	<0.100
APR 15...	--	--	--	8.0	--	--	--	--	--	--
MAY 08...	90	90	44	3.2	0.20	5.7	165	160	<0.010	0.130
AUG 11...	--	114	130	14	0.40	5.9	400	320	<0.010	<0.100

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
NOV 06...	0.040	0.050	0.16	0.020	0.010	6	26	5	17
MAR 25...	0.040	0.030	0.36	0.030	<0.010	61	74	8	13
APR 15...	--	--	--	--	--	--	--	--	--
MAY 08...	0.020	0.030	0.38	0.170	0.010	500	220	--	--
AUG 11...	0.030	0.070	0.27	0.060	<0.010	36	62	5	15

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	LEAD, DISSOLVED (UG/L AS PB) (01049)
NOV 06...	1645	20	<1	74	<0.5	2	2	<3	3	2
MAR 25...	1000	20	<1	84	<0.5	<1	<1	<3	2	2
AUG 11...	1430	30	1	87	<0.5	<1	1	<3	3	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
NOV 06...	36	--	<10	6	<1	<1	940	<6	17
MAR 25...	34	0.1	<10	<1	1	<1	840	<6	14
AUG 11...	38	0.1	<10	5	<1	<1	1	<6	4

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 26...	1800	573	--	6.5	1370	2120	100
FEB 19...	1800	501	--	10.0	2130	2880	100
MAR 25...	1000	576	550	7.0	146	227	83
MAY 08...	1330	2720	260	7.5	227	1670	56
JUL 20...	2100	1920	--	19.0	1240	6430	94
22...	2230	3180	--	16.0	4620	39700	--
AUG 11...	1430	449	500	27.0	49	59	87
SEP 01...	2230	624	--	21.0	--	--	99
10...	1700	1440	--	--	18700	72700	--
23...	2230	995	--	--	4240	11400	--
24...	1700	1520	--	--	4330	17800	--
25...	1630	1740	--	--	3490	16400	--
26...	1730	1720	--	--	3470	16100	--

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)
NOV						
26...	--	59	74	97	--	--
FEB						
19...	--	45	61	90	--	--
MAR						
25...	--	--	--	--	--	--
MAY						
08...	--	--	--	--	--	--
JUL						
20...	100	32	36	59	--	--
22...	--	35	51	78	95	100
AUG						
11...	--	--	--	--	--	--
SEP						
01...	100	46	63	90	--	--
10...	--	35	47	74	98	100
23...	--	42	55	79	98	100
24...	--	42	55	81	98	100
25...	--	41	57	82	98	100
26...	--	41	57	83	98	100

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	625	---	648	709	577	372	293	249	259	435	555
2	516	620	645	642	735	570	379	280	256	262	433	548
3	516	618	648	647	769	585	380	246	248	243	433	561
4	533	645	654	638	749	606	---	235	245	256	466	592
5	557	619	656	638	---	553	---	233	215	278	484	606
6	551	642	646	667	743	548	---	240	210	247	514	---
7	603	621	659	681	744	522	---	256	---	255	507	616
8	586	631	655	615	773	516	401	284	207	278	---	614
9	549	665	650	682	770	528	384	---	207	---	---	615
10	532	662	664	672	---	516	386	332	231	229	535	985
11	---	---	662	663	769	536	381	354	264	224	540	504
12	479	633	645	---	770	544	385	358	---	252	566	442
13	469	638	---	651	---	587	403	336	223	---	565	483
14	497	657	671	682	804	593	404	336	217	298	513	464
15	505	653	619	686	808	---	420	322	207	304	---	481
16	506	656	638	692	623	---	426	---	203	317	588	488
17	518	662	630	---	650	635	411	360	210	292	539	498
18	490	651	621	697	707	640	410	357	210	286	534	499
19	520	683	622	738	692	625	434	358	209	---	554	518
20	500	682	622	737	887	630	434	300	223	359	587	523
21	546	679	616	725	---	623	462	287	221	366	601	531
22	587	686	609	727	686	628	---	267	229	392	632	552
23	596	556	605	724	670	629	369	255	237	388	622	551
24	---	585	603	693	675	610	327	248	251	327	---	554
25	---	578	609	697	686	512	332	243	262	304	642	470
26	---	643	610	678	---	513	331	228	262	320	---	454
27	598	---	609	684	---	501	362	226	---	322	603	---
28	610	645	640	696	591	499	371	220	228	334	605	424
29	598	642	641	710	---	397	360	222	221	375	600	411
30	619	645	644	712	---	399	356	240	226	383	585	409
31	627	---	---	707	---	404	---	249	---	428	585	---
MEAN	545	640	635	684	728	553	387	282	229	306	549	534

WTR YR 1986 MEAN 503 MAX 985 MIN 203

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.0	11.0	---	4.0	6.0	11.0	9.5	13.0	15.0	19.5	24.0	21.0
2	11.0	11.0	5.0	4.0	6.0	11.0	5.0	13.0	16.0	21.0	23.5	20.0
3	11.0	11.0	5.0	5.0	6.0	13.0	5.0	---	14.5	21.0	20.0	---
4	16.0	12.0	5.5	3.0	6.5	13.0	---	---	13.5	13.5	23.0	---
5	16.0	12.0	5.0	2.0	---	11.0	---	12.5	16.0	21.0	23.0	---
6	15.0	12.0	4.5	1.0	2.5	8.0	---	11.0	15.0	21.0	23.5	---
7	14.0	11.5	4.5	.0	1.5	14.0	---	10.0	---	13.0	20.0	---
8	14.5	11.0	4.5	2.5	2.0	8.0	13.0	10.0	16.0	18.0	---	---
9	14.0	11.0	4.0	4.0	2.0	8.0	12.5	---	13.0	---	---	---
10	14.5	11.0	1.5	4.0	---	6.5	12.5	15.0	15.5	16.5	25.0	---
11	---	---	.0	4.0	2.5	8.0	12.5	15.0	17.0	15.5	26.0	---
12	11.5	7.0	.0	---	3.0	7.0	12.5	17.0	---	21.5	25.0	---
13	11.5	6.0	---	3.0	---	10.5	12.0	16.5	16.0	---	25.0	---
14	12.5	6.0	.0	2.5	4.5	7.0	12.0	14.0	14.0	21.5	25.0	---
15	13.5	6.0	.0	2.0	5.0	---	10.0	15.5	---	22.0	---	---
16	11.0	6.0	.5	3.0	6.0	---	13.0	---	12.5	20.5	25.0	---
17	12.5	4.5	2.0	---	10.0	8.5	12.0	---	18.5	20.0	25.5	---
18	11.0	3.0	2.5	5.0	10.0	9.0	10.0	---	19.0	20.0	22.0	---
19	14.0	3.0	2.5	5.0	10.0	9.0	10.0	17.0	15.0	---	21.5	---
20	14.0	3.0	3.0	5.0	9.0	10.0	10.0	16.5	18.5	19.0	23.0	---
21	14.0	3.0	3.0	5.0	---	10.0	18.0	15.0	20.0	20.0	24.0	---
22	14.0	3.5	3.0	7.0	8.5	16.0	---	15.0	19.0	16.0	27.0	---
23	14.0	4.0	3.0	7.5	6.5	16.0	14.0	12.0	19.5	16.0	23.5	---
24	---	4.5	3.0	7.0	11.0	15.0	12.5	15.0	15.0	21.0	---	---
25	---	5.0	3.0	6.0	12.0	15.0	10.5	17.0	16.0	21.0	25.0	---
26	---	6.5	3.0	6.0	13.0	10.0	9.0	---	17.0	21.5	---	---
27	15.0	---	3.0	6.0	13.0	16.0	13.5	16.5	---	23.0	26.0	---
28	15.0	5.0	5.0	6.0	13.0	13.0	15.0	---	17.0	23.0	21.0	---
29	14.0	5.0	3.0	6.0	---	13.0	15.0	13.0	17.0	23.0	20.0	---
30	14.0	5.0	4.0	6.0	---	13.0	16.0	11.0	18.0	23.0	---	---
31	12.0	---	---	6.0	---	11.5	---	14.0	---	23.5	23.0	---
MEAN	13.5	7.0	3.0	4.5	7.0	11.0	12.0	14.0	16.5	20.0	23.5	20.5

WTR YR 1986 MEAN 12.0 MAX 27.0 MIN .0

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	138	261	28	41	85	115	29	33	57	62	169	259
2	139	242	32	46	85	106	28	31	55	57	160	241
3	179	307	27	38	134	161	27	30	47	47	145	220
4	241	383	23	32	133	163	22	25	40	39	206	329
5	184	282	29	40	60	70	23	24	42	39	222	373
6	188	264	22	31	43	48	27	29	45	41	185	326
7	245	338	28	37	37	41	26	28	47	44	210	375
8	273	417	34	42	32	34	31	34	40	37	195	353
9	97	164	27	33	38	39	35	36	39	35	747	1380
10	160	293	30	36	46	48	37	40	35	30	370	658
11	168	349	31	36	66	70	36	39	32	27	167	290
12	156	376	32	40	68	70	36	39	47	42	429	744
13	143	323	35	48	50	51	36	36	90	80	117	183
14	113	258	34	41	41	49	28	28	134	126	118	172
15	115	251	16	18	41	50	27	27	127	128	215	313
16	96	193	32	37	78	89	31	32	568	646	220	302
17	88	174	39	47	73	82	27	25	1800	2170	231	318
18	86	172	31	40	53	59	27	25	2060	2400	249	349
19	106	196	33	40	46	52	29	26	2130	2920	174	256
20	72	126	30	35	47	54	30	26	4620	6760	206	264
21	60	101	32	38	45	51	29	26	2400	3730	210	266
22	260	426	38	49	44	51	25	24	223	283	84	110
23	88	141	32	40	37	43	34	30	194	220	78	104
24	43	70	39	49	36	42	29	26	351	390	109	151
25	43	66	33	43	45	54	30	28	340	387	235	357
26	43	64	370	561	42	50	30	29	300	382	367	584
27	43	63	700	1060	40	47	32	31	200	286	346	580
28	47	68	121	152	42	47	26	25	157	242	299	586
29	34	49	117	135	38	43	47	47	---	---	276	601
30	34	49	85	116	31	36	49	47	---	---	267	647
31	29	42	---	---	32	37	46	45	---	---	323	825
TOTAL	---	6508	---	3001	---	1952	---	971	---	21650	---	12516

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	617	1920	698	3840	80	715	60	442	68	135	533	956
2	2630	17400	688	4910	68	599	62	408	80	152	2880	5830
3	2360	9560	1240	11700	368	3240	124	781	66	119	424	778
4	854	2770	1260	15900	735	8290	141	852	68	112	391	670
5	470	1400	622	7950	370	4750	231	1640	62	95	430	674
6	465	1370	379	4230	277	3620	246	1850	60	79	320	460
7	465	1380	270	2550	393	5600	119	787	64	87	179	239
8	487	1620	267	1980	384	5710	71	419	53	69	133	178
9	299	1060	119	746	304	4070	76	458	51	63	414	722
10	265	966	85	427	208	2250	127	1170	46	55	10100	31800
11	218	812	86	367	142	1170	112	871	68	78	6060	25000
12	221	635	70	289	223	1760	95	585	82	96	827	2790
13	177	483	66	285	256	2490	92	484	76	102	338	1050
14	173	424	75	348	294	3420	141	663	101	174	413	1180
15	284	659	77	384	182	2170	214	959	68	95	282	750
16	293	666	61	293	152	1780	130	610	46	56	251	629
17	213	524	48	223	165	1890	65	350	41	47	186	448
18	166	402	45	189	144	1600	46	226	36	39	127	286
19	167	368	60	252	125	1400	2140	13500	39	42	143	304
20	150	293	293	1600	133	1370	3470	20700	49	54	309	642
21	141	272	347	2550	137	1290	775	3760	47	52	508	966
22	293	699	207	1710	145	1330	1220	6610	40	43	622	1130
23	738	2730	254	2170	132	1170	5460	35300	64	71	116	250
24	655	3020	522	4870	101	839	2400	14200	1350	3290	369	1310
25	296	1380	236	2140	95	712	356	1980	1410	3460	371	1740
26	271	1190	402	3940	92	718	388	1850	1310	3020	324	1510
27	189	731	450	5050	111	1010	271	1170	862	1700	148	569
28	174	595	298	3480	109	977	218	858	865	1620	214	740
29	147	493	172	2050	91	812	230	807	1550	3890	182	651
30	187	782	132	1480	60	508	246	692	1120	2780	155	586
31	---	---	112	1050	---	---	130	297	595	1200	---	---
TOTAL	---	56604	---	88953	---	67260	---	115279	---	22875	---	84838

TOTAL LOAD FOR YEAR: 482407 TONS.

09365000 SAN JUAN RIVER AT FARMINGTON, NM

LOCATION.--Lat 36°43'22", long 108°13'30", in NW¼SE¼ sec.17, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080105, on left bank 360 ft downstream from highway bridge on State Highway 371 in Farmington, 4,000 ft downstream from Animas River, 2.3 mi upstream from La Plata River, and at mile 251.4.

DRAINAGE AREA.--7,240 mi², 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.

REVISED RECORDS.--WSP 1119: Drainage area. WSP 1243: 1938. WSP 1313: 1905, 1914. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 5,230.37 ft above National Geodetic Vertical Datum of 1929. See WSP 1313 or 1733 for history of changes prior to Nov. 19, 1933.

REMARKS.--No estimated daily discharges. Records good. Since June 1962 flow is partly controlled by operation of Navajo Reservoir (station 09355100) 50 mi upstream. Diversions upstream from 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 downstream from this station. National Weather Service gage height telemeter at station.

AVERAGE DISCHARGE.--74 years (water years 1913-86), 2,384 ft³/s, 1,727,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 68,000 ft³/s, June 29, 1927, gage height, 10.2 ft, site and datum then in use, from rating curve extended above 37,000 ft³/s; minimum, 14 ft³/s, Aug. 22, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 27	1700	8,440	5.88	July 23	1300	10,000	5.97
July 19	2330	*11,000	*6.98				

Minimum discharge, 1,400 ft³/s, Oct. 6,.7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	2900	3010	3270	3330	1830	2310	2930	4760	7220	3950	2610
2	1630	2920	2970	3250	3310	1850	3340	3330	4720	6720	3820	2660
3	1580	2900	2960	3240	3300	1840	2980	4050	4760	5990	3740	2590
4	1520	2940	2940	3240	3290	2020	2640	4970	5570	6180	3660	2520
5	1500	2920	2910	3220	3250	2080	2470	5100	6180	6610	3610	2420
6	1450	2950	2890	3230	3250	2130	2410	4600	6300	6780	3550	2350
7	1560	2940	2900	3250	3260	2140	2470	4160	6720	6400	3520	2270
8	1510	2890	2900	3260	3260	2140	2670	3620	6960	5950	3440	2280
9	1570	2880	2870	3230	3250	2160	2710	3220	6500	6120	3420	2520
10	1650	2840	2900	3270	3190	2170	2730	2830	5550	7240	3440	3750
11	1760	2830	2950	3280	2150	2150	2720	2570	4690	6680	3350	4750
12	1900	2850	3120	3300	1460	2150	2690	2520	4620	6060	2540	3260
13	1890	2940	3100	3290	1530	2180	2620	2580	5120	5760	2240	3120
14	1880	2940	3150	3330	1570	2050	2520	2680	5770	5520	2390	3040
15	1850	2890	3190	3290	1610	2120	2480	2820	5870	5490	2370	2960
16	1780	2880	3190	3330	1730	2040	2430	2800	5850	5620	2270	2900
17	1740	2900	3190	3300	1730	2050	2530	2780	5730	4510	2240	2830
18	1780	2960	3290	3290	1700	2060	2480	2650	5630	3950	2200	2800
19	1710	2940	3260	3280	1790	2060	2410	2650	6310	4510	2060	2710
20	1670	2910	2750	3270	1900	2030	2300	3080	6750	5480	1990	2640
21	1620	2920	3310	3260	1940	2010	2230	3730	6490	4480	1980	2560
22	1590	2970	3320	3290	1750	2040	2010	4050	6410	5780	2090	2500
23	1580	2960	3310	3240	1660	2040	2490	4150	6270	7320	2060	2560
24	1590	2940	3310	3230	1660	2040	2740	4460	6180	5910	2600	3220
25	1630	2970	3310	3250	1650	2090	2670	4450	5970	5620	2880	3420
26	1570	3080	3310	3290	1710	2050	2590	4680	6330	5330	3330	3590
27	1540	3080	3300	3290	1730	1760	2430	5180	7690	5040	3210	3370
28	1480	2990	3280	3270	1810	1920	2270	5550	7490	4840	2710	3100
29	1500	2960	3270	3300	---	2000	2230	5670	7420	4650	3110	3130
30	2510	3010	3290	3280	---	2080	2500	5390	7380	4370	4010	3150
31	2860	---	3290	3290	---	2090	---	4840	---	4100	2820	---
TOTAL	53150	88000	96740	101410	63770	63370	76070	118090	181990	176230	90600	87580
MEAN	1715	2933	3121	3271	2278	2044	2536	3809	6066	5685	2923	2919
MAX	2860	3080	3320	3330	3330	2180	3340	5670	7690	7320	4010	4750
MIN	1450	2830	2750	3220	1460	1760	2010	2520	4620	3950	1980	2270
AC-FT	105400	174500	191900	201100	126500	125700	150900	234200	361000	349600	179700	173700

CAL YR 1985	TOTAL	1371192	MEAN	3757	MAX	12100	MIN	776	AC-FT 2720000
WTR YR 1986	TOTAL	1197000	MEAN	3279	MAX	7690	MIN	1450	AC-FT 2374000

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, Colorado, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 4, Dec. 11-16, Jan. 7-9, Feb. 10-12, and Apr. 2-11. Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 15,000 acres, most of which are upstream from station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--66 years, 35.9 ft³/s, 26,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft³/s on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, gage height, unknown; minimum daily, 5.2 ft³/s, Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	37	24	22	58	165	97	91	56	11	22
2	20	20	35	23	24	59	450	143	96	40	11	23
3	20	21	36	23	22	58	350	243	92	36	9.0	22
4	19	21	34	22	22	59	250	313	155	36	8.6	20
5	19	21	31	20	22	62	210	263	145	45	6.6	20
6	19	20	31	21	23	73	200	193	143	40	13	18
7	23	20	30	20	22	84	200	138	140	32	10	18
8	24	20	31	18	22	90	190	86	110	33	9.5	18
9	24	20	30	18	22	90	180	65	91	29	8.6	25
10	27	34	30	20	18	91	170	56	70	35	9.0	25
11	44	36	22	21	20	91	160	46	53	25	8.6	23
12	47	39	16	20	20	87	147	40	51	23	8.6	20
13	36	37	16	19	22	80	127	39	62	27	8.1	20
14	36	24	18	19	23	77	102	56	60	27	6.6	20
15	34	24	18	19	26	73	94	80	43	29	6.2	20
16	32	24	18	19	29	70	88	71	52	31	6.2	19
17	34	25	20	19	30	73	88	72	68	31	6.2	20
18	38	27	20	19	31	68	83	62	83	38	5.2	19
19	48	24	20	19	31	69	64	62	68	29	5.7	19
20	36	24	21	20	36	68	54	105	63	27	5.7	20
21	26	26	21	20	38	66	47	107	54	22	5.7	20
22	19	24	21	20	35	68	58	78	63	46	5.7	20
23	19	28	21	20	33	77	77	70	62	37	6.6	21
24	19	28	20	20	37	79	110	70	65	27	22	75
25	19	33	20	19	43	74	92	70	72	20	59	62
26	36	42	20	20	56	78	75	117	83	17	24	63
27	42	37	22	20	74	91	70	99	65	14	15	49
28	31	35	24	20	63	108	56	83	56	14	32	39
29	20	39	24	20	---	127	56	75	70	14	97	37
30	20	42	24	20	---	153	68	70	63	14	51	39
31	20	---	24	22	---	154	---	63	---	12	25	---
TOTAL	872	835	755	624	866	2555	4081	3132	2389	906	506.4	836
MEAN	28.1	27.8	24.4	20.1	30.9	82.4	136	101	79.6	29.2	16.3	27.9
MAX	48	42	37	24	74	154	450	313	155	56	97	75
MIN	19	20	16	18	18	58	47	39	43	12	5.2	18

CAL YR 1985	TOTAL	22537.5	MEAN	61.7	MAX	485	MIN	2.9
WTR YR 1986	TOTAL	18357.4	MEAN	50.3	MAX	450	MIN	5.2

09367500 LA PLATA RIVER NEAR FARMINGTON, NM

LOCATION.--Lat 36°44'24", long 108°14'51", in NE¼SW¼ sec.7, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080105, on right bank 1,300 ft upstream from bridge on U.S. Highway 550 in Farmington, and 1,800 ft upstream from mouth.

DRAINAGE AREA.--583 mi².

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

REVISED RECORDS.--WSP 1243: 1944-45. WSP 1313: 1943-44(M), 1946-50(M). WSP 1733: 1951(M).

GAGE.--Water-stage recorder. Elevation of gage is 5,210 ft above National Geodetic Vertical Datum of 1929, from river-profile map. Prior to July 28, 1978 at elevation 1.0 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1-8, Oct. 29 to Nov. 7, Dec. 11 to Jan. 1, Jan. 7-12, Feb. 1-23, Apr. 11 to May 2, May 11-15, 24, 25, May 29 to June 2, June 10 to July 8, July 12-15, 17, 18, July 25 to Aug. 10, Aug. 12-20, 27, 31 and Sept. 1-23, 25, 27-30. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 24,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 28.5 ft³/s, 20,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, that of Sept. 10, 1939, "discharge not determined", gage height, 6.03 ft, site and datum then in use; no flow for long periods in some years.
Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,960 ft³/s at 1845 hours July 19, gage height, 6.83 ft; minimum daily, 0.96ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	14	51	27	25	70	212	91	17	66	8.0	80
2	9.7	13	42	30	24	65	847	98	20	50	5.1	73
3	9.7	13	42	29	24	63	828	165	45	46	4.6	62
4	9.8	13	40	29	24	63	472	332	273	48	3.1	50
5	10	12	35	27	23	66	273	275	155	30	2.3	45
6	11	12	37	29	23	73	211	165	131	40	2.5	40
7	12	13	36	26	23	83	197	80	125	32	2.8	43
8	11	14	37	27	23	82	183	47	92	25	3.0	32
9	10	14	37	26	22	87	167	23	83	10	4.0	30
10	12	21	36	26	21	91	163	16	70	9.8	3.8	45
11	72	32	28	25	20	90	135	10	63	10	4.0	41
12	54	34	27	26	21	83	130	9.8	61	12	3.5	38
13	37	36	27	26	24	71	122	9.9	71	10	3.0	36
14	38	31	26	25	26	65	118	10	70	9.8	2.2	34
15	25	33	26	25	28	61	110	12	53	7.5	.96	30
16	23	35	28	24	30	55	108	20	62	3.4	1.0	28
17	25	36	29	24	33	65	106	26	78	2.9	2.1	27
18	31	41	30	24	33	72	104	23	93	1.2	3.0	25
19	42	37	31	24	34	65	103	17	78	455	3.5	23
20	39	33	31	24	35	64	101	25	64	525	4.0	24
21	32	39	32	24	38	58	100	45	73	202	10	23
22	22	31	30	24	39	61	99	35	72	667	3.0	22
23	18	38	30	25	38	70	98	22	75	667	3.2	20
24	17	37	29	25	41	67	96	17	75	524	76	312
25	16	40	30	23	50	47	94	15	82	86	403	95
26	14	56	29	23	60	44	91	32	93	25	152	103
27	15	54	31	25	90	53	90	43	75	21	8.1	70
28	17	45	29	23	82	66	89	36	66	16	25	65
29	16	46	27	23	---	83	88	25	80	12	41	63
30	14	60	27	23	---	133	90	19	73	10	279	60
31	14	---	26	26	---	162	---	19	---	11	108	---
TOTAL	686.0	933	996	787	954	2278	5625	1762.7	2468	3634.6	1174.76	1639
MEAN	22.1	31.1	32.1	25.4	34.1	73.5	188	56.9	82.3	117	37.9	54.6
MAX	72	60	51	30	90	162	847	332	273	667	403	312
MIN	9.7	12	26	23	20	44	88	9.8	17	1.2	.96	20
AC-FT	1360	1850	1980	1560	1890	4520	11160	3500	4900	7210	2330	3250

CAL YR 1985	TOTAL	21345.70	MEAN	58.5	MAX	606	MIN	.10	AC-FT	42340
WTR YR 1986	TOTAL	22938.06	MEAN	62.8	MAX	847	MIN	.96	AC-FT	45500

09367540 SAN JUAN RIVER NEAR FRUITLAND, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°44'25", long 108°24'09", in NW¼SE¼ sec.10, T.29 N., R.15 W., San Juan County, Hydrologic Unit 14080105, on right bank 300 ft downstream from Four Corners Powerplant highway bridge, 0.4 mi west of Fruitland, 10 mi downstream from La Plata River, 14.0 mi upstream from Chaco River, and at mile 239.

DRAINAGE AREA.--8,010 mi², approximately.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Discharge record estimated from station 09365000 San Juan River at Farmington, which is approxmiately 11 miles upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV 07...	1220	E2930	330	356	7.30	8.20	9.5	8.5	34	9.8
JAN 15...	0945	E3200	330	341	7.80	8.20	3.5	5.0	16	9.9
MAR 25...	1200	E2180	550	493	8.00	8.00	18.0	9.0	110	9.6
MAY 08...	0745	E4500	310	322	8.50	8.10	16.0	7.0	40	10.5
JUL 11...	0800	E6400	250	269	8.00	8.00	8.5	3.5	150	10.8
AUG 13...	1545	E2280	418	421	8.10	8.00	33.0	20.0	280	8.1

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)
NOV 07...	140	45	41	8.0	18	0.7	1.6	110	--
JAN 15...	120	32	36	7.3	18	0.7	1.5	107	--
MAR 25...	160	49	47	10	33	1	2.1	134	0
MAY 08...	130	37	40	7.3	13	0.5	1.2	113	--
JUL 11...	97	26	30	5.3	14	0.6	1.4	90	0
AUG 13...	160	78	51	8.1	27	1	2.4	102	0

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
NOV 07...	90	--	88	74	4.6	0.20	11	212	210
JAN 15...	84	88	84	78	5.2	0.20	11	209	210
MAR 25...	104	110	105	130	7.9	0.30	9.5	312	310
MAY 08...	90	93	91	62	3.5	0.20	7.4	192	190
JUL 11...	71	--	73	56	3.2	0.20	8.2	157	160
AUG 13...	83	--	98	110	7.3	0.30	9.7	300	270

09367561 SHUMWAY ARROYO NEAR WATERFLOW, NM

LOCATION.--Lat 36°46'24", long 108°26'26", in SE¼NW¼ sec.32, T.30 N., R.15 W., San Juan County, Hydrologic Unit 14080105, on right bank 0.6 mi downstream from Westwater Arroyo, 0.7 mi upstream from highway to San Juan Power Plant, 14 mi west of Farmington, and at mile 4.5.

DRAINAGE AREA.--73.8 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 5,130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 20, 1978, at datum, 10.0 ft higher.

REMARKS.--Estimated daily discharges: Dec. 1 to Mar. 25, and Apr. 9 to June 23. Water-discharge records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years, 1.82 ft³/s, 1,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft³/s, May 20, 1978, gage height, 18.94 ft, from floodmark, from rating curve extended above 6.0 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 19	2245	215	8.25	July 20	2230	*282	*8.67

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.13	.09	.08	.07	.06	.10	.01	.01	.00	.07	1.9
2	.10	.10	.08	.07	.06	.05	.12	.01	.01	.00	.07	.07
3	.10	.08	.08	.06	.06	.04	.62	.01	.01	.00	.07	.02
4	.10	.08	.08	.06	.05	.07	.18	.01	.01	.00	.07	.00
5	.09	.10	.07	.05	.03	.05	.00	.01	.01	.00	.09	.00
6	.12	.10	.07	.04	.04	.06	.00	.01	.01	.00	.02	.00
7	.14	.09	.05	.06	.06	.06	.00	.01	.01	.00	.04	.00
8	.14	.11	.08	.05	.07	.07	.00	.01	.01	.00	.08	.00
9	.13	.11	.08	.05	.06	.06	.01	.01	.01	.00	.09	.29
10	.14	.10	.07	.04	.04	.08	.00	.00	.02	.00	.09	.12
11	.21	.10	.09	.06	.00	.07	.01	.01	.05	.00	.04	.11
12	.14	.10	.15	.08	.00	.08	.01	.01	.01	.00	.02	.05
13	.15	.10	.10	.06	.00	.08	.01	.01	.01	.00	.10	.01
14	.15	.09	.12	.05	.04	.11	.01	.01	.01	.00	.09	.07
15	.15	.08	.12	.06	.10	.08	.01	.01	.01	.00	.00	.10
16	.15	.09	.08	.06	.11	.08	.01	.01	.01	.00	.00	.20
17	.16	.10	.08	.06	.08	.08	.01	.01	.01	.00	.00	.21
18	.17	.10	.09	.06	.06	.11	.01	.00	.01	.00	.00	.06
19	.16	.09	.09	.08	.10	.07	.00	.01	.01	9.5	.00	.07
20	.15	.08	.10	.10	.18	.07	.01	.01	.01	21	.00	.09
21	.16	.11	.08	.06	.06	.07	.01	.01	.01	15	.00	.10
22	.16	.10	.07	.08	.16	.12	.01	.00	.01	9.5	.00	.12
23	.15	.21	.07	.12	.04	.07	.01	.01	.01	3.7	2.2	.11
24	.14	.12	.07	.14	.03	.07	.01	.01	.00	.16	3.0	4.2
25	.14	.13	.14	.12	.02	.10	.01	.01	.02	.12	.11	.34
26	.14	.16	.10	.04	.02	.04	.01	.01	.01	.08	.06	.16
27	.14	.11	.12	.06	.04	.05	.01	.01	.00	.07	.03	.16
28	.15	.11	.11	.08	.04	.05	.01	.01	.00	.07	.03	.12
29	.17	.12	.10	.12	---	.05	.01	.01	.00	.07	.05	.11
30	.24	.14	.10	.14	---	.05	.01	.01	.00	.07	.08	.11
31	.15	---	.10	.12	---	.05	---	.01	---	.07	.51	---
TOTAL	4.47	3.24	2.83	2.31	1.62	2.15	1.22	.28	.31	59.41	7.01	8.90
MEAN	.14	.11	.09	.07	.06	.07	.04	.01	.01	1.92	.23	.30
MAX	.24	.21	.15	.14	.18	.12	.62	.01	.05	21	3.0	4.2
MIN	.08	.08	.05	.04	.00	.04	.00	.00	.00	.00	.00	.00
AC-FT	8.9	6.4	5.6	4.6	3.2	4.3	2.4	.6	.6	118	14	18

CAL YR 1985	TOTAL	67.50	MEAN	.18	MAX	18	MIN	.00	AC-FT	134
WTR YR 1986	TOTAL	93.75	MEAN	.26	MAX	21	MIN	.00	AC-FT	186

09367561 SHUMWAY ARROYO NEAR WATERFLOW, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to September 1984, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
AUG 13...	1600	0.12	6730	8.30	7.90	32.0	28.5	6.9	3000

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
AUG 13...	2900	450	450	900	7	12	150	0	123

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
AUG 13...	204	4600	170	0.60	0.1	6700	460	50

09367680 CHACO WASH AT CHACO CULTURE NATIONAL HISTORICAL PARK, NM

LOCATION.--Lat 36°01'43", long 107°55'04", in NW¼NE¼ sec.29, T.21 N., R.10 W., San Juan County, Hydrologic Unit 14080106, on downstream side of center bridge pier, 800 ft downstream from Fajada Wash, and 0.5 mi southwest of Chaco Culture National Historical Park Visitors Center.

DRAINAGE AREA.--578 mi².

PERIOD OF RECORD.--April 1976 to current year. Published as "at Chaco Canyon National Monument" prioe to October 1985.

REVISED RECORDS.--WDR NM-80-1: 1979.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-10, 12-28, Mar. 14-18, Apr. 5-13, June 29 to July 2, July 10, 18, 19, 21, 22, Aug. 27 to Sept. 1 and Sept. 12-30. Records poor.

AVERAGE DISCHARGE.--10 years, 4.03 ft³/s, 2,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,260 ft³/s, Jan. 18, 1979, gage height, 6.62 ft, from rating curve extended above 350 ft³/s on basis of slope-area measurements at gage heights, 3.44 ft, 3.68 ft and 5.32 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
June 26	0315	*300	*3.08	Aug. 25	0415	206	2.68
July 16	0930	278	2.98	Sept. 11	0415	210	2.70
July 20	1045	124	2.32	Sept. 24	2230	112	2.26
July 23	0900	275	2.97				

No flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
3	.00	.00	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	6.0	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.76	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.36	.00	.00	20	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	.00	.02
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00	16
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.76	.00	70
11	1.8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	75
12	.42	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.50
14	.04	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	2.0
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	109	.00	3.0
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	25	.00	1.0
18	3.4	.00	.00	.00	.00	.00	.00	.00	.00	.30	.00	25
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.00	1.5
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	57	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.1	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	89	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	84	.44	29
25	.00	.00	.00	.00	.00	.00	.00	.00	7.6	23	42	4.4
26	.00	.00	.00	.00	.00	.00	.00	.00	97	4.1	2.1	.10
27	.00	.00	.00	.00	.00	.00	.00	.00	1.9	.36	.10	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.24	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.65	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.10	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	5.66	.00	.00	.00	.00	.03	8.22	.00	106.74	461.90	45.39	228.36
MEAN	.18	.00	.00	.00	.00	.00	.27	.00	3.56	14.9	1.46	7.61
MAX	3.4	.00	.00	.00	.00	.03	6.0	.00	97	109	42	75
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	11	.00	.00	.00	.00	.06	16	.00	212	916	90	453

CAL YR 1985	TOTAL	1540.49	MEAN	4.22	MAX	226	MIN	.00	AC-FT	3060
WTR YR 1986	TOTAL	856.30	MEAN	2.35	MAX	109	MIN	.00	AC-FT	1700

09367950 CHACO RIVER NEAR WATERFLOW, NM

LOCATION.--Lat 36°43'28", long 108°35'27", in SW¼SW¼ sec.13, T.29 N., R.17 W., San Juan County, Hydrologic Unit 14080106, on downstream end of right bridge pier, 4.2 mi upstream from Dead Mans Wash, 5.3 mi downstream from the Hogback, 6.6 mi southwest of Waterflow, 7.2 mi southeast of Shiprock and at mile 4.5.

DRAINAGE AREA.--4,350 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1959-69 (annual maximum only), November 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1975 at site 1.8 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1, Nov. 29 to Dec. 3, Apr. 11-14, 26-27, July 7-9 and Aug. 29 to Sept. 30. Water-discharge records fair except for estimated daily discharges, which are poor. Base flow is mostly waste water from Four Corners Power Plant.

AVERAGE DISCHARGE.--10 years (water years 1977-86), 43.3 ft³/s, 31,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s, Sept. 20, 1969, gage height, 7.88 ft site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
June 26	2245	939	4.88	July 24	0415	*5,100	*9.68
July 17	0115	2,720	7.17	Aug. 25	1745	1,640	6.40

No flow Jan. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	18	.92	.14	.16	19	22	16	18	11	3.9	79
2	10	18	.45	.15	.10	19	45	16	21	6.2	1.6	70
3	32	18	.20	.17	.07	19	87	17	20	6.2	.95	65
4	10	18	.11	.14	.02	19	82	17	21	5.5	.60	59
5	10	18	.08	.12	.01	20	104	17	22	4.6	.39	55
6	11	19	.11	.09	.07	20	74	18	23	150	.33	51
7	11	20	.11	.09	.37	18	60	18	24	84	.23	47
8	21	20	.11	.14	.45	1.6	40	18	24	28	.19	46
9	64	20	.08	.22	.38	.84	23	20	24	6.4	.49	43
10	58	20	.08	.21	.16	.78	15	18	28	61	.53	41
11	52	20	.08	.24	.09	.96	10	17	30	21	.71	39
12	36	21	.06	.27	.10	.95	9.8	18	42	20	.02	37
13	26	21	.06	.25	.26	.59	10	17	58	5.5	16	36
14	21	21	.06	.24	2.4	.57	11	17	61	1.0	1.9	35
15	19	21	.06	.30	16	.59	16	17	56	12	.32	33
16	15	21	.03	.31	7.4	.41	16	17	41	506	.03	32
17	14	21	.08	.23	6.4	2.0	17	18	40	1500	.70	32
18	136	22	.08	.21	2.2	1.8	17	24	43	341	.32	31
19	80	22	.08	.20	1.1	.72	16	29	50	278	.08	30
20	51	22	.11	.21	.86	.41	17	20	53	2640	.22	29
21	37	22	.11	.19	2.2	1.3	16	17	63	1150	.58	28
22	24	23	.11	.15	25	19	16	17	52	2110	.09	28
23	21	22	.11	.16	25	20	26	18	53	2390	54	27
24	18	21	.14	.13	24	21	33	18	68	2810	75	27
25	16	21	.14	.06	23	20	21	18	20	460	534	26
26	16	20	.11	.00	21	19	14	18	120	233	248	26
27	16	18	.11	.02	20	21	10	20	279	112	114	26
28	16	4.7	.14	.08	19	20	25	24	78	62	275	25
29	16	3.1	.17	.10	---	20	28	23	23	45	160	25
30	17	2.2	.20	.10	---	20	23	19	16	31	98	25
31	17	---	.17	.15	---	21	---	18	---	20	90	---
TOTAL	900.2	558.0	4.46	5.07	197.80	348.52	903.8	579	1471	15110.4	1678.18	1153
MEAN	29.0	18.6	.14	.16	7.06	11.2	30.1	18.7	49.0	487	54.1	38.4
MAX	136	23	.92	.31	25	21	104	29	279	2810	534	79
MIN	9.2	2.2	.03	.00	.01	.41	9.8	16	16	1.0	.02	25
AC-FT	1790	1110	8.8	10	392	691	1790	1150	2920	29970	3330	2290

CAL YR 1985	TOTAL	14977.88	MEAN	41.0	MAX	2260	MIN	.03	AC-FT	29710
WTR YR 1986	TOTAL	22909.43	MEAN	62.8	MAX	2810	MIN	.00	AC-FT	45440

09367950 CHACO RIVER NEAR WATERFLOW, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGES: October 1976 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 140,000 mg/L, Jan. 18, 1979; minimum daily mean, no flow on many days in 1981 and 1982.
SEDIMENT LOADS: Maximum daily, 740,000 tons, Sept. 25, 1978; minimum daily, 0 ton on many days in 1981 and 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
MAR												
25...	1400	20	1200	1220	8.30	8.10	20.5	18.0	7.8	330	220	78
MAY												
06...	1500	17	1100	1170	8.82	8.20	29.5	18.0	8.3	330	220	82
AUG												
13...	1400	20	1200	1210	7.80	8.00	34.0	26.0	7.0	180	110	56

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
MAR												
25...	33	130	3	5.3	137	0	110	112	107	450	51	0.80
MAY												
06...	30	120	3	5.1	121	7.0	111	111	109	400	43	0.70
AUG												
13...	10	190	6	5.3	83	0	68	--	105	460	30	1.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
MAR												
25...	5.1	820	--	--	460	--	--	--	--	--	9	--
MAY												
06...	5.5	760	--	--	450	--	--	--	--	--	9	--
AUG												
13...	9.5	800	19	1	110	<1	<1	120	<10	5	30	200

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
06...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	<5	0.30	0.2	6	3	830	21	2.0	4.4	630	4

09367950 CHACO RIVER NEAR WATERFLOW, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
MAR 25...	--	--	--	--	--	--	--	--	--	7.6	15
MAY 06...	--	--	--	--	--	--	--	--	--	4.6	7.8
AUG 13...	<1	1	<10	1	2100	<10	240	0.07	6	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
MAR 25...	7.7	20	5.4	18	0.07	2.6	539	30	95	98	100
MAY 06...	7.2	5.8	5.3	4.8	0.08	3.1	535	25	--	--	--
AUG 13...	--	--	--	--	--	--	11800	628	100	--	--

09368000 SAN JUAN RIVER AT SHIPROCK, NM
(National stream-quality accounting network, surveillance network, and radiochemical network station)

LOCATION.--Lat 36°47'32", long 108°43'54", in NW¼ sec.27, T.30 N., R.18 W., San Juan County, Hydrologic Unit 14080105, on left bank 3 mi west of Shiprock, 6 mi downstream from Chaco River, and at mile 215.0.

DRAINAGE AREA.--12,900 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to October 1911, February 1927 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1931, 1934-38, 1951. WSP 1313: 1911, 1933. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,848.68 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Apr. 6, 1922, nonrecording gage and Apr. 7, 1922, to Oct. 25, 1933, water-stage recorder, at site 3 mi 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.

REMARKS.--Estimated daily discharges: Nov. 4-6, Nov. 11 to Dec. 3, Dec. 13-18, Feb. 10-12, and Mar. 21-26. Water-discharge records fair except for estimated daily discharges, which are poor. Since 1962 flow partly regulated by Navajo Reservoir (station 09355100). Diversions for irrigation of about 118,000 acres upstream from station. Ungaged canals bypass station on both right and left bank, though some of bypass flow is returned to river downstream from gage.

AVERAGE DISCHARGE.--60 years (water years 1927-86), 2,225 ft³/s, 1,612,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD (SINCE 1927).--Maximum discharge, about 80,000 ft³/s, Aug. 11, 1929, gage height, 5.7 ft, site and datum then in use; minimum daily, 8 ft³/s, Aug. 25, 26, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911, and reached a stage of 22 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	2245	6,460	6.57	July 24	0200	*12,200	*8.31
June 8	0600	7,450	6.96	Aug. 30	0700	7,000	6.72
June 28	0145	8,640	7.38	Sept. 11	0930	7,240	6.71

Minimum daily discharge, 1,400 ft³/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	2950	2800	3200	3130	1970	2560	2970	4260	7010	3650	2850
2	1560	2910	2800	3170	3140	1960	3880	3700	4360	6410	3630	2730
3	1530	2900	2800	3140	3090	1940	4400	4470	4190	5460	3570	2650
4	1490	2900	2830	3140	3060	2110	3450	5830	4970	5490	3500	2550
5	1410	2880	2840	3120	3060	2260	2950	6240	5700	5680	3400	2500
6	1400	2880	2830	3130	3080	2360	2750	5480	6100	6160	3300	2400
7	1450	2830	2850	3170	3110	2390	2860	4570	6420	5910	3230	2310
8	1460	2900	2850	3150	3070	2350	3080	3700	7100	5650	3230	2370
9	1520	2900	2800	3090	3050	2420	3190	3150	6590	5460	3160	3170
10	1550	2870	2850	3110	3080	2440	3290	2840	5630	6440	3200	3930
11	1710	2900	2850	3140	2410	2470	3170	2510	4430	6360	3160	5890
12	1900	2900	2900	3140	1460	2450	3190	2450	4090	5760	2400	3920
13	1910	2900	3000	3120	1470	2440	3080	2370	4570	5420	1860	3350
14	1900	2900	3000	3130	1540	2260	2980	2460	5180	5020	1960	2910
15	1880	2900	3000	3080	1590	2340	2860	2640	5530	5080	1920	2620
16	1860	2900	3000	3090	1710	2220	2720	2700	5500	5340	1840	2540
17	1790	2900	3000	3070	1710	2220	2740	2740	5440	5150	1810	2540
18	1970	2900	3000	3060	1680	2230	2840	2650	5080	3840	1800	2530
19	1870	2900	2930	3060	1730	2210	2750	2490	5390	3810	1580	2480
20	1740	2900	2700	3030	1880	2160	2580	2710	5950	7200	1510	2470
21	1710	2900	3000	3000	2040	2100	2480	3560	5920	5240	1550	2480
22	1650	2900	3200	3040	1900	2150	2160	4270	5940	6480	1640	2440
23	1610	2900	3200	3020	1800	2200	2370	4280	5780	9190	1800	2500
24	1610	2900	3200	2970	1750	2250	3000	4460	5570	9280	2890	3640
25	1640	2900	3150	2990	1740	2300	3050	4330	5420	5780	3840	4000
26	1570	2900	3100	3070	1800	2200	3040	3960	5790	4650	3990	4080
27	1610	2900	3100	3090	1860	1960	2850	4790	7050	4320	3550	3800
28	1560	2850	3210	3080	1910	2030	2610	5160	7920	4240	2700	3410
29	1530	2850	3210	3110	---	2180	2370	5330	7360	4210	3150	3240
30	2300	2850	3200	3100	---	2320	2500	5300	7260	4080	5200	3270
31	2930	---	3220	3090	---	2380	---	4640	---	3810	3120	---
TOTAL	53480	86770	92420	95900	62850	69270	87750	118750	170490	173930	87140	91570
MEAN	1725	2892	2981	3094	2245	2235	2925	3831	5683	5611	2811	3052
MAX	2930	2950	3220	3200	3140	2470	4400	6240	7920	9280	5200	5890
MIN	1400	2830	2700	2970	1460	1940	2160	2370	4090	3810	1510	2310
AC-FT	106100	172100	183300	190200	124700	137400	174100	235500	338200	345000	172800	181600

CAL YR 1985 TOTAL 1341665 MEAN 3676 MAX 12600 MIN 920 AC-FT 2661000
WTR YR 1986 TOTAL 1190320 MEAN 3261 MAX 9280 MIN 1400 AC-FT 2361000

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1941-45, 1951 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1941 to September 1945, July 1957 to current year.
WATER TEMPERATURES: December 1950 to current year.
SUSPENDED-SEDIMENT DISCHARGES: December 1950 to current year.

INSTRUMENTATION.--Water-temperature and specific-conductance recorders since March 1978.

REMARKS.--Unable to produce continuous record for part of the year because of difficulties with sensors in the channel and malfunctioning instruments. Data from the recorder approximates the daily extremes.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years, 1957-86): Maximum, 4,360 microsiemens, July 31, 1959; minimum, 138 microsiemens, Nov. 1, 1981.
WATER TEMPERATURES: Maximum, 34.0°C, July 20, 1968; minimum, 0.0°C on many days during winter months of most years.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 114,000 mg/L, Aug. 11, 1967; minimum daily mean, 2 mg/L, May 4, 1963.
SEDIMENT LOADS: Maximum daily, 2,000,000 tons, Aug. 11, 1967; minimum daily, 1 ton on several days during 1959, 1962, and 1963.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 963 microsiemens, July 19; minimum daily, 231 microsiemens, June 16.
WATER TEMPERATURES: Maximum, 22.0°C, Aug. 18; minimum, 2.0°C, Dec. 14-15, 20, Jan. 8, 9.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 17,200 mg/L, Aug. 27; minimum daily mean, 47 mg/L, Feb. 12.
SEDIMENT LOADS: Maximum daily, 165,000 tons, Aug. 27; minimum daily, 197 tons, Feb. 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)
NOV											
05...	1200	2900	360	392	7.50	8.20	20.0	11.5	40	9.5	150
JAN											
14...	1330	3090	345	349	7.80	8.30	8.0	6.0	--	10.8	130
MAR											
26...	1400	2430	430	446	8.30	8.00	22.0	9.5	43	9.8	160
MAY											
06...	1130	5250	250	284	8.40	8.10	20.5	12.0	130	8.7	110
JUL											
09...	0945	5380	305	306	7.80	8.00	22.0	14.5	--	8.8	110
AUG											
12...	1430	2390	348	351	7.90	8.20	33.0	18.5	46	7.9	130

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L PO70A) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
NOV									
05...	57	43	9.2	22	0.8	1.9	110	--	89
JAN									
14...	39	38	7.8	19	0.8	1.5	107	--	83
MAR									
26...	66	47	11	25	0.9	1.8	118	0	96
MAY									
06...	26	35	6.2	9.5	0.4	1.2	106	0	84
JUL									
09...	15	35	6.6	17	0.7	1.6	100	0	75
AUG									
12...	57	39	8.2	18	0.7	2.0	92	0	75

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 05...	--	87	89	5.9	0.20	11	242	240	0.140	0.010	0.150
JAN 14...	88	83	82	5.4	0.20	11	--	220	--	--	--
MAR 26...	97	102	110	11	0.20	9.9	272	270	--	0.010	<0.100
MAY 06...	87	84	54	2.9	0.20	6.3	170	170	--	<0.010	0.140
JUL 09...	100	78	68	4.4	0.20	9.1	--	190	--	--	--
AUG 12...	--	89	82	4.6	0.20	11	248	210	--	<0.010	<0.100

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV 05...	0.040	0.050	0.36	0.030	0.040	3300	120	--	36	3
JAN 14...	--	--	--	--	--	--	30	30	12	--
MAR 26...	0.040	0.030	0.46	0.050	0.020	23	55	--	16	4
MAY 06...	0.030	0.030	0.47	0.090	0.020	230	440	10	--	--
JUL 09...	--	--	--	--	--	440	1000	20	5	--
AUG 12...	0.060	0.060	0.24	0.090	0.020	K160	K210	30	28	18

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
NOV 05...	1200	40	1	68	--	<1	1	<1	2
MAR 26...	1400	30	<1	63	<0.5	<1	<1	<3	4
AUG 12...	1430	20	1	77	<0.5	1	<1	<3	4

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)
NOV 05...	<1	17	--	<1	1	<1	<1	490	<1
MAR 26...	3	19	<0.1	<10	<1	1	<1	540	<6
AUG 12...	<5	20	<0.1	<10	4	<1	<1	440	<6

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
NOV									
05...	12	<0.4	<0.6	<0.7	<0.6	<0.7	<0.6	0.01	<0.04
MAR									
26...	11	--	--	--	--	--	--	--	--
AUG									
12...	8	--	--	--	--	--	--	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)
OCT								
19...	1735	1760	--	14.0	1090	5180	98	99
JAN								
14...	1330	3090	345	6.0	335	2790	19	--
MAR								
26...	1400	2430	430	9.5	88	577	94	--
APR								
04...	0755	3520	--	8.0	3660	34800	95	99
MAY								
06...	1130	5250	250	12.0	552	7820	--	--
JUN								
03...	0800	4240	--	13.0	1010	11600	92	98
25...	1400	5230	--	16.0	1520	21500	96	100
JUL								
09...	0945	5380	305	14.5	681	9890	67	--
24...	2035	7000	--	17.0	11200	212000	--	--
AUG								
12...	1430	2390	348	18.5	191	1230	81	--
25...	1230	5580	--	20.0	13300	200000	100	--
SEP								
10...	1530	3520	--	18.0	5540	52700	99	100

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
OCT								
19...	100	58	73	88	--	--	--	--
JAN								
14...	--	--	--	--	--	--	--	--
MAR								
26...	--	--	--	--	--	--	--	--
APR								
04...	100	43	53	74	--	--	--	--
MAY								
06...	--	13	14	25	69	87	99	100
JUN								
03...	100	34	43	66	--	--	--	--
25...	--	48	61	75	--	--	--	--
JUL								
09...	--	--	--	--	--	--	--	--
24...	--	47	56	69	88	98	100	--
AUG								
12...	--	--	--	--	--	--	--	--
25...	--	50	63	87	--	--	--	--
SEP								
10...	--	55	66	84	--	--	--	--

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)
MAY										
06...	1130	--	--	--	--	--	--	--	--	--
AUG										
12...	1430	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010

DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALATHION, TOTAL (UG/L) (39530)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHYL PARATHION, TOTAL (UG/L) (39600)	METHYL TRITHION, TOTAL (UG/L) (39790)
MAY									
06...	--	--	--	--	--	--	--	--	--
AUG									
12...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01

DATE	PARATHION, TOTAL (UG/L) (39540)	TOXAPHENE, TOTAL (UG/L) (39400)	TOTAL TRITHION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PERTHANE TOTAL (UG/L) (39034)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)
MAY									
06...	--	--	--	0.03	<0.01	<0.01	--	--	--
AUG									
12...	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	411	341	348	355	356	494	644	302	291	300	328	422
2	395	341	368	354	351	476	555	307	286	301	328	421
3	456	364	361	354	345	474	551	269	258	301	325	421
4	432	339	380	344	348	465	574	269	400	304	326	409
5	451	368	348	344	339	443	487	277	240	291	326	404
6	444	367	368	344	339	436	449	273	239	291	329	404
7	455	364	379	339	356	435	447	316	232	293	329	405
8	455	365	380	361	360	419	414	319	232	312	332	542
9	451	367	368	347	353	422	412	380	234	312	329	540
10	435	372	373	345	441	422	413	381	244	293	328	518
11	438	361	373	342	363	427	411	402	291	337	335	425
12	447	372	374	342	456	438	413	403	304	306	423	423
13	414	376	351	347	493	484	414	406	281	309	427	396
14	425	364	363	347	493	439	414	406	238	318	388	380
15	440	370	363	349	558	477	414	406	237	315	385	378
16	462	373	344	352	533	441	409	405	231	906	386	377
17	439	376	344	347	525	478	409	413	237	899	387	390
18	438	376	348	342	497	469	413	413	247	908	384	390
19	477	379	354	350	496	470	412	412	249	963	418	388
20	449	375	365	347	501	470	408	445	256	931	420	390
21	469	341	348	350	529	468	366	337	256	918	422	391
22	449	348	345	349	529	465	429	292	253	921	423	395
23	462	364	341	350	487	459	364	289	256	472	430	403
24	449	296	344	347	487	459	366	291	357	472	597	386
25	462	353	344	346	507	466	366	277	359	371	691	384
26	359	344	341	349	500	442	321	279	362	321	432	385
27	496	369	348	346	500	467	387	260	433	318	451	388
28	502	363	347	341	482	467	328	260	313	318	444	388
29	460	353	368	341	---	447	287	259	305	317	454	384
30	466	389	345	340	---	432	312	255	308	303	485	376
31	328	---	---	340	---	439	---	276	---	356	487	---
MEAN	442	361	357	347	447	455	420	332	281	461	405	410

WTR YR 1986 MEAN 393 MAX 963 MIN 231

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	10.0	7.0	5.0	7.0	8.0	8.0	14.0	14.0	17.0	16.0	20.0
2	13.0	9.0	6.0	5.0	7.0	9.0	7.0	11.0	13.0	17.0	16.0	20.0
3	15.0	8.0	7.0	7.0	7.0	9.0	9.0	11.0	13.0	17.0	16.0	20.0
4	15.0	9.0	6.0	4.0	5.0	10.0	8.0	13.0	13.0	17.0	16.0	19.0
5	14.0	8.0	6.0	4.0	5.0	9.0	11.0	13.0	15.0	18.0	16.0	19.0
6	15.0	8.0	6.0	3.0	5.0	9.0	12.0	13.0	15.0	18.0	17.0	18.0
7	13.0	8.0	6.0	3.0	4.0	9.0	9.0	12.0	12.0	15.0	19.0	18.0
8	14.0	8.0	6.0	2.0	4.0	10.0	10.0	13.0	14.0	16.0	19.0	16.0
9	13.0	8.0	7.0	2.0	4.0	9.0	9.0	13.0	12.0	16.0	16.0	17.0
10	13.0	8.0	6.0	5.0	4.0	8.0	12.0	13.0	13.0	16.0	15.0	18.0
11	13.0	7.0	5.0	6.0	4.0	7.0	10.0	13.0	15.0	17.0	18.0	18.0
12	15.0	6.0	3.0	6.0	4.0	8.0	10.0	13.0	15.0	16.0	15.0	18.0
13	11.0	8.0	3.0	5.0	5.0	8.0	10.0	13.0	16.0	16.0	16.0	17.0
14	8.0	7.0	2.0	6.0	5.0	7.0	10.0	18.0	15.0	17.0	15.0	18.0
15	10.0	7.0	2.0	6.0	6.0	7.0	10.0	18.0	16.0	17.0	15.0	17.0
16	9.0	7.0	3.0	8.0	8.0	9.0	9.0	18.0	15.0	16.0	16.0	17.0
17	10.0	7.0	3.0	8.0	8.0	8.0	10.0	14.0	16.0	16.0	21.0	17.0
18	12.0	6.0	5.0	7.0	9.0	7.0	12.0	15.0	16.0	18.0	22.0	17.0
19	14.0	5.0	3.0	7.0	9.0	6.0	11.0	15.0	17.0	15.0	21.0	15.0
20	14.0	4.0	2.0	7.0	8.0	7.0	13.0	18.0	16.0	17.0	21.0	16.0
21	13.0	7.0	3.0	5.0	8.0	8.0	13.0	17.0	16.0	17.0	18.0	13.0
22	9.0	6.0	4.0	4.0	9.0	10.0	13.0	17.0	17.0	17.0	18.0	14.0
23	10.0	7.0	5.0	6.0	9.0	9.0	13.0	16.0	17.0	16.0	18.0	14.0
24	14.0	7.0	5.0	8.0	10.0	10.0	13.0	14.0	16.0	15.0	18.0	10.0
25	11.0	6.0	5.0	4.0	9.0	15.0	13.0	13.0	16.0	16.0	20.0	10.0
26	9.0	9.0	5.0	5.0	9.0	9.0	12.0	16.0	16.0	15.0	20.0	10.0
27	11.0	9.0	5.0	5.0	9.0	12.0	9.0	14.0	16.0	15.0	20.0	14.0
28	10.0	8.0	5.0	5.0	8.0	15.0	14.0	16.0	16.0	15.0	19.0	15.0
29	9.0	8.0	5.0	7.0	---	9.0	15.0	15.0	17.0	18.0	19.0	15.0
30	9.0	7.0	5.0	7.0	---	9.0	15.0	14.0	17.0	18.0	19.0	11.0
31	9.0	---	---	8.0	---	10.0	---	15.0	---	20.0	20.0	---
MEAN	12.0	7.5	4.5	5.5	7.0	9.0	11.0	14.5	15.0	16.5	18.0	16.0

WTR YR 1986 MEAN 11.5 MAX 22.0 MIN 2.0

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	580	450	488
2							---	---	---	505	410	447
3							---	---	---	415	405	409
4							---	---	---	435	415	427
5							---	---	---	460	435	448
6							---	---	---	480	460	468
7							---	---	---	485	470	480
8							---	---	---	485	475	482
9							---	---	---	695	480	569
10							---	---	---	630	560	579
11							---	---	---	855	560	606
12							---	---	---	570	540	553
13							---	---	---	460	425	440
14							---	---	---	445	435	439
15							---	---	---	---	---	---
16							---	---	---	---	---	---
17							---	---	---	---	---	---
18							---	---	---	---	---	---
19							---	---	---	---	---	---
20							---	---	---	---	---	---
21							490	435	456	---	---	---
22							480	420	448	---	---	---
23							435	420	428	---	---	---
24							1070	455	545	---	---	---
25							715	490	599	---	---	---
26							1050	520	692	---	---	---
27							1090	560	713	---	---	---
28							675	465	543	---	---	---
29							750	495	582	---	---	---
30							1010	460	701	---	---	---
31							695	475	558	---	---	---
MONTH							1090	420	570	855	405	488
YEAR	1090	0	89									

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	9.5	11.5	9.0	8.5	8.5						
2	13.0	10.5	11.5	9.0	9.0	9.0						
3	14.0	10.5	12.0	9.5	9.0	9.0						
4	14.0	11.0	12.5	9.5	9.5	9.5						
5	14.5	11.0	12.5	10.0	9.5	9.5						
6	14.0	11.0	12.5	10.0	9.5	9.5						
7	14.5	12.5	13.5	---	---	---						
8	13.0	12.0	12.5	---	---	---						
9	13.5	12.0	12.5	---	---	---						
10	14.0	12.5	13.0	---	---	---						
11	13.5	12.5	13.0	---	---	---						
12	13.0	10.5	11.5	---	---	---						
13	12.5	11.0	11.5	---	---	---						
14	12.0	10.0	11.0	---	---	---						
15	11.5	9.5	10.5	---	---	---						
16	11.5	9.5	10.5	---	---	---						
17	10.5	10.0	10.0	---	---	---						
18	12.0	9.5	10.5	---	---	---						
19	13.0	10.5	11.5	---	---	---						
20	13.5	10.5	12.0	---	---	---						
21	13.0	11.0	12.0	---	---	---						
22	12.5	11.0	12.0	---	---	---						
23	12.0	9.5	10.5	---	---	---						
24	11.5	9.0	10.0	---	---	---						
25	11.5	9.5	10.5	---	---	---						
26	12.0	10.0	11.0	---	---	---						
27	12.0	10.0	11.0	---	---	---						
28	12.0	10.5	11.5	---	---	---						
29	12.0	11.5	11.5	---	---	---						
30	11.5	9.5	10.5	---	---	---						
31	10.5	9.0	10.0	---	---	---						
MONTH	14.5	9.0	11.5	10.0	8.5	9.0						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1							---	---	---	16.0	13.0	14.5
2							---	---	---	15.0	12.5	14.0
3							---	---	---	16.0	12.5	14.0
4							---	---	---	14.0	13.0	13.0
5							---	---	---	13.0	11.5	12.0
6							---	---	---	12.0	9.5	10.5
7							---	---	---	10.0	8.5	9.5
8							---	---	---	10.5	8.0	9.0
9							---	---	---	11.0	8.0	9.5
10							---	---	---	14.0	9.5	11.5
11							---	---	---	16.0	11.5	13.5
12							---	---	---	16.5	12.5	14.5
13							---	---	---	17.0	13.0	15.0
14							11.0	7.5	9.0	16.0	13.5	14.5
15							12.5	8.5	10.5	15.5	13.0	14.0
16							13.5	10.5	12.0	14.0	11.5	12.5
17							11.5	8.5	9.5	15.0	10.5	12.5
18							9.5	7.5	8.5	16.5	11.5	14.0
19							11.5	7.5	9.5	18.0	13.0	15.5
20							12.5	9.0	10.5	18.0	14.0	16.0
21							15.5	10.5	12.5	16.5	14.0	15.5
22							16.0	12.5	14.0	15.0	12.5	14.0
23							15.0	13.0	14.0	15.5	12.5	14.0
24							14.0	11.5	12.5	14.5	13.0	13.5
25							12.5	10.0	11.0	15.0	12.0	13.5
26							10.0	7.5	9.5	16.5	13.0	14.5
27							10.5	6.0	8.5	15.5	13.5	14.5
28							13.5	8.5	11.0	15.0	13.0	14.5
29							16.0	11.5	13.5	15.5	13.5	14.5
30							17.0	13.0	14.5	15.0	13.0	14.0
31							---	---	---	14.0	12.0	13.0
MONTH							17.0	6.0	11.0	18.0	8.0	13.5

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.0	13.0	13.5	16.0	14.0	15.0	18.5	16.0	17.0	19.0	17.0	18.0
2	15.5	13.0	14.0	17.0	15.5	16.0	17.5	16.0	17.0	18.5	16.0	17.5
3	---	---	---	17.5	16.0	16.5	17.5	16.0	17.0	18.5	16.0	17.0
4	15.0	13.0	14.0	17.5	15.0	16.5	17.5	16.0	17.0	---	---	---
5	15.0	13.5	14.5	16.0	14.5	15.5	17.0	16.0	16.5	---	---	---
6	16.0	14.0	15.0	16.5	15.0	15.5	18.0	15.5	16.5	19.0	16.0	17.0
7	15.5	13.5	15.0	16.0	13.0	14.5	18.5	16.0	17.0	18.5	16.5	17.5
8	15.0	13.0	14.0	15.5	13.0	14.5	18.5	16.0	17.0	---	---	---
9	14.0	12.0	13.0	16.0	14.0	15.0	18.0	16.0	17.0	17.0	15.0	15.5
10	14.5	12.5	13.5	16.5	15.0	16.0	17.5	15.5	16.0	17.0	15.5	16.0
11	16.5	13.0	14.5	16.0	14.5	15.5	18.5	15.5	17.0	15.0	13.0	14.0
12	18.0	14.0	16.0	17.0	15.0	16.0	18.5	16.0	17.0	16.0	13.5	14.5
13	18.0	15.0	16.5	17.5	15.5	16.5	20.5	17.0	18.5	16.0	14.5	15.0
14	17.0	15.0	16.0	17.5	16.0	16.5	21.0	18.0	19.5	16.0	15.0	15.5
15	16.5	14.0	15.5	17.0	15.5	16.0	21.5	17.5	19.5	16.0	15.5	16.0
16	16.5	14.0	15.5	16.5	15.0	16.0	21.5	17.0	19.0	16.0	15.0	15.5
17	17.0	15.0	16.0	18.5	15.0	16.5	21.5	17.5	19.5	16.0	15.0	15.5
18	17.5	16.0	16.5	20.5	17.5	19.0	22.5	18.5	20.5	16.0	14.0	15.5
19	17.0	16.0	16.5	21.0	18.5	19.5	21.5	18.5	20.0	15.0	14.5	14.5
20	16.0	15.0	15.5	19.0	17.0	18.0	21.5	18.5	20.0	15.0	14.0	14.5
21	16.0	14.0	15.0	18.5	17.5	18.0	22.0	19.0	20.5	15.0	14.0	14.5
22	16.0	14.0	14.5	17.5	16.0	17.0	23.0	18.5	20.5	15.0	14.0	14.0
23	17.0	14.5	15.5	17.5	15.5	16.5	20.5	18.5	19.5	15.0	13.5	14.0
24	15.0	12.5	14.0	17.5	16.0	17.0	20.0	17.0	18.5	14.0	11.5	13.0
25	13.5	12.0	13.0	17.5	16.0	16.5	19.5	18.0	19.0	12.0	11.0	11.5
26	16.0	12.5	14.0	18.0	16.0	17.0	20.0	17.5	19.0	12.5	10.5	11.5
27	17.0	15.0	16.0	17.5	15.5	16.5	20.5	18.0	19.0	13.0	10.5	12.0
28	17.0	15.5	16.0	17.5	15.0	16.0	19.0	17.5	18.5	14.0	11.5	12.5
29	16.0	14.0	15.0	17.0	15.0	16.0	19.0	17.0	18.0	14.0	12.5	13.0
30	15.0	13.5	14.0	18.0	15.0	16.5	18.5	15.0	17.0	14.0	11.5	13.0
31	---	---	---	18.0	15.5	16.5	19.5	17.0	18.0	---	---	---
MONTH	18.0	12.0	15.0	21.0	13.0	16.5	23.0	15.0	18.5	19.0	10.5	14.5
YEAR	23.0	6.0	14.5									

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	186	934	248	2270	262	2120	103	912	94	726	210	1120
2	162	682	296	2630	142	1150	94	772	73	564	118	624
3	187	772	285	2420	203	1630	119	970	92	698	110	576
4	162	652	254	2040	212	1710	72	585	60	450	170	968
5	107	407	295	2290	145	1260	69	557	50	374	171	1040
6	105	397	222	1730	104	938	115	931	62	465	151	962
7	1180	4620	290	2220	103	873	102	840	53	402	159	1030
8	1330	5240	199	1560	121	987	87	709	50	374	161	1020
9	1020	4190	240	1880	108	799	94	754	47	348	142	928
10	1020	4240	178	1380	94	700	69	555	65	486	118	774
11	1610	7350	249	1950	93	698	86	699	56	364	103	687
12	1530	7720	196	1530	133	1040	90	731	52	197	97	642
13	747	3790	168	1350	119	1030	67	541	51	201	191	1260
14	706	3560	212	1710	229	1950	85	684	207	861	160	976
15	705	3480	240	1880	276	2380	70	546	298	1280	138	868
16	543	2650	175	1370	148	1270	104	817	354	1630	112	671
17	380	1770	160	1270	157	1200	98	762	302	1390	120	719
18	777	3990	129	1040	151	1140	59	456	391	1770	154	927
19	1030	4980	152	1220	235	1800	74	567	412	1910	164	979
20	679	3040	110	891	257	1550	58	443	506	2570	146	851
21	296	1290	389	3130	157	1110	60	452	791	4360	134	825
22	148	619	151	1300	447	3430	92	700	814	4180	181	1080
23	172	701	151	1220	178	1350	57	431	312	1520	251	1470
24	381	1550	184	1490	130	962	66	492	238	1120	249	1450
25	370	1530	183	1500	140	1040	64	479	183	860	190	1090
26	289	1130	178	1510	122	919	76	579	228	1110	116	664
27	423	1700	369	2990	121	970	70	539	192	964	174	921
28	327	1250	257	2120	107	893	62	474	206	1060	182	998
29	97	364	167	1370	123	1030	73	564	---	---	384	2260
30	456	2720	193	1620	92	763	56	428	---	---	397	2490
31	357	3020	---	---	100	837	62	474	---	---	401	2580
TOTAL	---	80338	---	52881	---	39529	---	19443	---	32234	---	33450

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3290	22700	1920	15400	115	1320	1020	19300	235	2680	2790	21500
2	6050	63400	2050	20500	191	2250	742	12800	141	1630	1000	7370
3	5300	63000	1290	15600	823	9310	632	9320	273	3190	648	4640
4	3230	30100	1070	16800	994	13300	812	12000	436	5000	463	3190
5	2100	16700	710	12000	622	9570	885	13600	214	2420	340	2300
6	793	5890	550	8140	460	7580	805	13400	199	2130	1610	10400
7	610	4710	246	3040	570	9880	771	12300	162	1710	424	2640
8	384	3190	217	2170	459	8800	577	8800	139	1460	3790	24300
9	375	3230	131	1110	382	6800	487	7180	114	1180	6800	58200
10	432	3840	115	882	250	3800	1040	18100	247	2570	5790	61400
11	331	2830	97	657	335	4010	1150	19700	195	2030	6460	103000
12	270	2330	88	582	191	2110	606	9420	239	1740	5940	62900
13	241	2000	81	518	269	3320	532	7790	348	1750	1980	17900
14	263	2120	70	465	209	2920	505	6840	144	762	1080	8490
15	264	2040	64	456	212	3170	434	5950	91	472	674	4770
16	148	1090	66	481	176	2610	423	6100	105	522	925	6340
17	135	999	145	1070	154	2260	532	7400	75	367	401	2750
18	111	851	173	1240	154	2110	2070	21500	71	345	401	2740
19	119	884	173	1160	154	2240	927	9540	106	452	471	3150
20	142	989	141	1030	151	2430	4830	93900	102	416	277	1850
21	157	1050	135	1300	155	2480	4140	58600	811	3390	276	1850
22	253	1480	151	1740	139	2230	4060	71000	1110	4920	317	2090
23	297	1900	166	1920	182	2840	1630	40400	1120	5440	384	2590
24	323	2620	161	1940	1050	15800	1160	29100	1060	8270	868	8530
25	327	2690	263	3070	1510	22100	425	7000	15600	162000	1480	16000
26	487	4000	304	3250	1700	26600	675	9590	14800	159000	1570	17300
27	178	1370	362	4680	3480	66200	889	11800	17200	165000	964	9890
28	523	3690	327	4560	840	18000	797	10300	2800	20400	1060	9760
29	729	4660	495	7120	695	13800	658	8150	2600	22100	798	6980
30	1790	12100	355	5080	887	17400	439	5290	2830	39700	423	3730
31	---	---	202	2530	---	---	420	4710	2790	23500	---	---
TOTAL	---	268453	---	140491	---	287240	---	570880	---	646546	---	488550

TOTAL LOAD FOR YEAR: 2660035 TONS.

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO

LOCATION.--Lat 37°00'20", long 109°02'00", SE¼NE¼ sec.21, T.32 N., R.20 W., Montezuma County, Hydrologic Unit 14080201, on left bank 1,300 ft upstream from bridge on U.S. Highway 160, 0.1 mi north of New Mexico-Colorado State line, 1.0 mi east of Four Corners Monument, 3.0 mi downstream from Mancos River, and at mile 187.2.

DRAINAGE AREA.--14,600 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Water-discharge records fair.

AVERAGE DISCHARGE.--9 years, 2,656 ft³/s, 1,924,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s, May 29, 1979, gage height, 6.25 ft; maximum gage height, 14.43 ft, Dec. 12, 1978 (backwater from ice); minimum, 110 ft³/s, Aug. 19, 1978.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 5	0930	6,160	4.35	July 22	2030	*12,700	*5.72
June 8	1245	7,020	4.51	Aug. 30	1145	6,470	4.14
June 28	1045	7,850	4.72	Sept. 10	1545	7,660	4.45

Minimum daily discharge, 1,460 ft³/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	2900	3160	3300	3340	2050	2610	2830	4840	6800	4010	3130
2	1790	2920	3100	3290	3340	2080	3620	3410	4850	6560	3920	2900
3	1630	2920	3030	3270	3290	2060	5200	4150	4570	6040	3870	2800
4	1610	2940	3030	3270	3240	2160	4170	5650	5120	5970	3810	2640
5	1530	2910	3040	3270	3210	2260	3570	5950	6060	6160	3690	2520
6	1460	2880	3030	3240	3220	2290	3220	5730	6380	6700	3500	2450
7	1500	2920	3050	3290	3280	2340	3050	5140	6370	6360	3430	2320
8	1640	2890	3050	3270	3250	2330	3180	4450	6740	6000	3460	2290
9	1630	2850	2970	3250	3230	2390	3330	3770	6550	5800	3390	3540
10	1680	2830	3010	3220	3170	2420	3420	3220	5950	6670	3420	4610
11	1890	2870	3020	3270	2890	2410	3330	2700	4870	6710	3410	5890
12	2160	2870	3080	3290	1950	2420	3300	2510	4240	6130	2990	4320
13	2160	2920	3100	3260	1570	2400	3190	2380	4360	5770	2270	3500
14	2070	2910	3160	3270	1670	2280	3010	2500	5140	5410	2250	3200
15	2030	2840	3200	3220	1690	2290	2920	2710	5550	5480	2220	3020
16	2040	2850	3170	3240	1840	2210	2800	2770	5570	5700	2060	2890
17	1950	2910	3170	3230	1880	2180	2750	2800	5510	5930	1990	2850
18	2070	2940	3170	3250	1830	2230	2900	2790	5420	4530	1960	2740
19	2100	2950	3230	3250	1840	2170	2780	2580	5570	3980	1840	2650
20	1940	2960	2890	3220	2010	2210	2670	2670	6100	6950	1610	2540
21	1880	2970	3030	3170	2190	2140	2540	3270	6020	5900	1680	2530
22	1810	3010	3270	3230	2050	2260	2360	4050	5940	7740	1760	2450
23	1760	2950	3290	3220	1910	2270	2300	4170	5790	8520	1860	2400
24	1780	2960	3290	3180	1840	2310	2910	4310	5730	8640	2530	4100
25	1800	2980	3330	3200	1790	2360	3020	4590	5660	6970	3300	4660
26	1770	3120	3310	3240	1840	2390	3090	4270	5920	5810	4130	4030
27	1730	3250	3290	3260	1940	2240	2880	5060	6510	5410	3800	4010
28	1740	3140	3290	3260	2020	2150	2650	5460	7360	5120	2900	3490
29	1680	3030	3270	3310	---	2320	2370	5650	6840	4870	3730	3380
30	2040	3080	3320	3300	---	2410	2430	5820	7020	4580	5190	3430
31	2740	---	3340	3280	---	2530	---	5310	---	4240	3520	---
TOTAL	57830	88470	97690	100820	67320	70560	91570	122670	172550	187450	93500	97280
MEAN	1865	2949	3151	3252	2404	2276	3052	3957	5752	6047	3016	3243
MAX	2740	3250	3340	3310	3340	2530	5200	5950	7360	8640	5190	5890
MIN	1460	2830	2890	3170	1570	2050	2300	2380	4240	3980	1610	2290
AC-FT	114700	175500	193800	200000	133500	140000	181600	243300	342300	371800	185500	193000

CAL YR 1985 TOTAL 1402087 MEAN 3841 MAX 12800 MIN 760 AC-FT 2781000
WTR YR 1986 TOTAL 1247710 MEAN 3418 MAX 8640 MIN 1460 AC-FT 2475000

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-81, November 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV										
06...	1130	2900	390	416	7.90	8.40	17.5	10.5	31	9.5
JAN										
14...	0930	3230	355	363	7.70	8.20	-2.5	3.5	2.0	11.0
MAR										
26...	1130	2470	500	519	8.10	8.00	19.5	9.0	89	9.9
MAY										
07...	1500	5160	295	318	8.50	8.10	21.0	11.0	120	9.6
JUL										
10...	1100	6330	320	335	7.90	8.00	25.0	6.0	230	10.6
AUG										
12...	1100	3150	345	344	7.90	8.20	32.0	19.0	27	7.8

DATE	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)
NOV									
06...	160	63	47	10	23	0.8	1.9	120	0
JAN									
14...	130	40	39	8.5	20	0.8	1.5	112	0
MAR									
26...	180	63	52	13	35	1	2.0	146	0
MAY									
07...	130	25	38	7.6	12	0.5	1.3	123	--
JUL									
10...	120	32	37	7.1	19	0.8	1.7	110	0
AUG									
12...	130	46	40	8.2	19	0.7	2.0	--	--

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
NOV									
06...	96	96	92	93	6.4	0.20	10	254	250
JAN									
14...	88	92	85	86	5.3	0.20	11	217	230
MAR									
26...	109	120	107	140	8.6	0.20	9.7	335	330
MAY									
07...	98	101	90	63	3.4	0.20	6.7	196	190
JUL									
10...	84	90	82	80	4.6	0.20	9.0	213	210
AUG									
12...	--	--	88	81	9.1	0.20	10	276	220

09386900 RIO NUTRIA NEAR RAMAH, NM

LOCATION.--Lat 35°16'57", long 108°33'10", in NW¼SW¼ sec.8, T.12 N., R.16 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank at mouth of Nutria Canyon, 0.9 mi upstream from Nutria Diversion Dam, 1.3 mi northeast of Upper Nutria, and 10.4 mi northwest of Ramah.

DRAINAGE AREA.--71.4 mi².

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

REVISED RECORDS.--WDR NM-78-1: 1977.

GAGE.--Water-stage recorder and concrete control. Concrete control raised 1.0 ft June 6, 1975. Control raised 2.35 ft June 28, 1984. Elevation of gage is 6,860 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 15-20, Jan. 5-12, and Feb. 15 to Mar. 12. Records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 7.18 ft³/s, 5,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 782 ft³/s, Apr. 14, 1973, gage height, 5.58 ft, datum then in use, from rating curve extended above 470 ft³/s; maximum gage height, 7.90 ft, Mar. 12, 1985; no flow Oct. 1-20, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Aug. 27	0430	*70	*5.50	No other peak greater than base discharge.			

Minimum daily discharge, 0.08 ft³/s, Sept. 17-21, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.18	.54	.31	.28	.69	.76	.19	.17	.15	.17	.24
2	.29	.17	.48	.31	.40	.61	2.2	.18	.16	.19	.17	.18
3	.26	.17	.48	.33	.50	.59	5.5	.18	.17	.15	.17	.16
4	.18	.17	.48	.37	.43	.60	6.0	.17	.15	.15	.17	.14
5	.18	.18	.43	.31	.38	.55	7.2	.14	.14	.16	.17	.12
6	.18	.18	.38	.27	.37	.51	3.5	.14	.17	.13	.16	.12
7	.27	.18	.37	.25	.40	.54	1.9	.14	.25	.12	.18	.12
8	.21	.19	.36	.25	.39	.51	1.2	.14	.23	.13	.18	.12
9	.19	.20	.33	.24	.41	.51	.77	.14	.12	.14	.18	.13
10	.26	.18	.31	.25	.39	.41	.63	.15	.12	.14	.18	.17
11	.21	.18	.30	.26	.38	.51	.51	.15	.14	.12	.21	.15
12	.20	.20	.29	.28	.41	1.0	.47	.14	.15	.13	.21	.12
13	.18	.23	.25	.33	.50	1.3	.41	.14	.14	.13	.25	.11
14	.18	.21	.24	.37	.60	2.1	.40	.14	.14	.12	.23	.12
15	.18	.18	.23	.37	.51	2.7	.30	.14	.14	.13	.24	.11
16	.18	.20	.22	.31	.80	3.6	.29	.14	.13	.19	.21	.10
17	.25	.23	.22	.24	.66	4.4	.29	.17	.13	.19	.17	.08
18	.24	.25	.21	.24	.59	8.0	.29	.15	.12	.19	.16	.08
19	.17	.24	.22	.22	.51	6.4	.25	.14	.13	.17	.16	.08
20	.16	.24	.23	.22	.66	8.6	.25	.14	.14	.16	.16	.08
21	.16	.25	.26	.23	.73	9.6	.26	.14	.14	.16	.16	.08
22	.16	.24	.29	.23	.80	10	.29	.14	.12	.16	.18	.09
23	.16	.28	.29	.23	.66	7.5	.24	.14	.12	.15	.18	.08
24	.16	.29	.29	.23	.80	4.9	.21	.13	.13	.16	.15	.62
25	.16	.31	.30	.21	.73	3.2	.18	.12	.23	.17	.45	.20
26	.16	.47	.31	.20	1.0	2.2	.24	.12	.21	.16	2.6	.19
27	.16	.47	.31	.20	.94	1.3	.37	.12	.16	.16	16	.15
28	.17	.47	.31	.20	.80	1.1	.31	.14	.21	.15	.80	.13
29	.16	.47	.31	.20	---	.93	.25	.15	.17	.16	2.3	.12
30	.16	.56	.34	.21	---	.83	.21	.16	.15	.16	3.1	.12
3115	.80	.13										
29	.16	.47	.31	.20	---	.93	.25	.15	.17	.16	2.3	.12
30	.16	.56	.34	.21	---	.83	.21	.16	.15	.16	3.1	.12
31	.17	---	.40	.23	---	.77	---	.18	---	.16	.43	---
TOTAL	6.01	7.77	9.98	8.10	16.03	86.46	35.68	4.56	4.68	4.74	30.08	4.31
MEAN	.19	.26	.32	.26	.57	2.79	1.19	.15	.16	.15	.97	.14
MAX	.29	.56	.54	.37	1.0	10	7.2	.19	.25	.19	16	.62
MIN	.16	.17	.21	.20	.28	.41	.18	.12	.12	.12	.15	.08
AC-FT	12	15	20	16	32	171	71	9.0	9.3	9.4	60	8.5

CAL YR 1985	TOTAL	4890.76	MEAN	13.4	MAX	414	MIN	.16	AC-FT	9700
WTR YR 1986	TOTAL	218.40	MEAN	.60	MAX	16	MIN	.08	AC-FT	433

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM

LOCATION.--Lat 35°06'03", long 108°45'03", in NE¼ sec.17, T.10 N., R.18 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank downstream from highway bridge on State Highway 36, 0.8 mi upstream from flow line of Black Rock Reservoir, 2.3 mi northeast of Black Rock, and 5.9 mi northeast of Zuni Pueblo.

DRAINAGE AREA.--810 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year. Prior to October 1974 published as "above Zuni Reservoir".

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 5-14, Jan. 23-27 and Feb. 3-15, 17-25. Water-discharge records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 14.1 ft³/s, 10,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft³/s, Aug. 4, 1974, gage height, 6.61 ft, from rating curve extended above 670 ft³/s on basis of slope-area measurements at gage heights 4.05 ft, 3.94 ft, 5.16 ft, and 6.61 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Mar. 28	1715	*5.0	*3.01				

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.77	1.5	1.5	1.2	1.2	2.0	1.5	.00	.00	.00	.00
2	.21	.83	1.6	1.2	1.2	1.1	2.7	1.5	.22	.00	.00	.00
3	.22	.81	1.6	1.3	1.2	1.2	3.6	1.8	.66	.00	.00	.00
4	.20	.79	1.5	1.2	1.1	1.2	3.6	1.6	.64	.00	.00	.00
5	.13	.82	1.2	1.1	1.2	1.2	2.9	1.4	.42	.00	.00	.00
6	.11	.82	1.1	1.1	1.1	1.6	2.1	1.3	.25	.00	.00	.00
7	.25	.80	1.1	1.1	1.2	1.4	1.9	1.4	.06	.00	.00	.00
8	.46	.92	1.0	1.1	1.3	1.4	1.9	1.4	.00	.00	.00	.00
9	.42	.67	1.0	1.0	1.2	1.2	1.9	1.1	.00	.00	.00	.00
10	.40	.75	.98	1.0	1.1	1.3	1.9	1.1	.00	.00	.00	.00
11	.55	.76	.96	1.1	1.2	3.0	1.9	.92	.00	.00	.00	.00
12	.63	.90	.94	1.3	1.3	3.1	1.8	.73	.00	.00	.00	.00
13	.63	.99	.90	1.6	1.2	2.9	1.8	.68	.00	.00	.00	.00
14	.54	1.1	.88	1.7	1.2	3.2	1.7	.71	.00	.00	.00	.00
15	.52	1.1	.86	1.2	1.1	2.9	1.7	.59	.00	.00	.00	.00
16	.52	1.2	.85	1.3	2.6	2.5	1.7	.47	.00	.00	.00	.00
17	.75	1.5	.84	1.3	2.2	2.7	1.7	.94	.00	.00	.00	.00
18	1.2	1.3	.85	1.2	1.8	2.8	1.5	1.1	.00	.15	.00	.00
19	.89	1.3	.90	1.2	1.6	2.5	1.8	.92	.00	2.0	.00	.00
20	.76	1.2	.92	1.2	1.4	1.8	1.9	.65	.00	1.2	.00	.00
21	.70	1.2	.98	1.2	1.3	1.6	1.8	.50	.00	1.0	.00	.00
22	.72	1.3	1.0	1.2	1.2	1.7	1.9	.36	.00	.99	.00	.00
23	.70	1.3	1.0	1.1	1.2	1.8	2.1	.26	.00	1.0	.00	.01
24	.79	1.3	1.0	1.1	1.2	1.7	2.3	.14	.00	.76	.00	.56
25	.61	1.3	1.1	1.0	1.2	1.7	1.8	.04	.00	.62	.00	1.7
26	.54	1.4	1.1	1.0	1.3	1.6	1.8	.00	.00	.49	.00	.95
27	.55	1.3	1.0	1.1	1.4	1.6	2.4	.00	.00	.38	.00	.53
28	.58	1.2	1.0	1.2	1.4	2.8	2.3	.00	.00	.30	.00	.30
29	.64	1.4	.99	1.2	---	3.4	2.0	.00	.00	.22	.00	.22
30	.56	1.6	1.0	1.2	---	2.2	1.5	.00	.00	.09	.00	.18
31	.64	---	1.4	1.2	---	1.9	---	.00	---	.00	.00	---
TOTAL	16.69	32.63	33.05	37.2	37.6	62.2	61.9	23.11	2.25	9.20	.00	4.45
MEAN	.54	1.09	1.07	1.20	1.34	2.01	2.06	.75	.07	.30	.00	.15
MAX	1.2	1.6	1.6	1.7	2.6	3.4	3.6	1.8	.66	2.0	.00	1.7
MIN	.11	.67	.84	1.0	1.1	1.1	1.5	.00	.00	.00	.00	.00
AC-FT	33	65	66	74	75	123	123	46	4.5	18	.00	8.8

CAL YR 1985	TOTAL	12424.45	MEAN	34.0	MAX	1530	MIN	.00	AC-FT	24640
WTR YR 1986	TOTAL	320.28	MEAN	.88	MAX	3.6	MIN	.00	AC-FT	635

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Field and sediment data collected and analyzed by USGS. Chemical analyses performed on USGS collected samples by BIA Laboratory in Gallup, New Mexico.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
29...	1223	0.65	732	8.20	12.0	220	0	44	26	76	2
JAN											
28...	1203	1.3	768	8.10	1.0	260	0	60	26	80	2
MAR											
12...	1200	3.3	1060	8.20	7.0	390	0	90	40	92	2
APR											
29...	1345	1.9	--	--	12.5	--	--	--	--	--	--
JUL											
10...	1400	<1.0	--	--	13.0	--	--	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WH WAT TOTAL FIELD MG/L AS HCO3 (00440)	CAR-BONATE WH WAT TOTAL FIELD MG/L AS CO3 (00445)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	BORON, DIS-SOLVED (UG/L AS B) (01020)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
29...	6.6	290	12	100	27	0.30	439	650	5	0.01	72
JAN											
28...	3.1	370	0	120	20	0.40	479	280	4	0.01	78
MAR											
12...	8.6	370	0	250	28	0.30	686	240	25	0.22	41
APR											
29...	--	--	--	--	--	--	--	--	15	0.08	66
JUL											
10...	--	--	--	--	--	--	--	--	25	--	80

09430500 GILA RIVER NEAR GILA, NM

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼NW¼ sec.30, T.14 S., R.16 W., Grant County, Hydrologic Unit 15040001, on left bank at Hooker damsite, 1.6 mi upstream from Mogollon Creek, 7 mi northeast of Gila, and at mile 572.5.

DRAINAGE AREA.--1,864 mi².

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1944 (M), 1949 (M). WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft above National Geodetic Vertical Datum of 1929, (river-profile survey). Prior to Dec. 31, 1928, at site 5 mi upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 500 acres upstream from station. Several observations of water temperature were made during the year. National Weather Service gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--59 years (water years 1928-86), 148 ft³/s, 107,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft³/s, Dec. 28, 1984, gage height, 13.0 ft, from floodmark, from rating curve extended above 7,000 ft³/s on basis of slope-area measurement at gage height 12.5 ft; maximum gage height, 17.2 ft from floodmark, Sept. 29, 1941; minimum, 14 ft³/s, July 15, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in November 1905, December 1906, and January 1916.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Oct. 11	0215	*9,320	*7.05	Feb. 16	2130	1,870	3.70
Oct. 17	1130	7,140	6.05	July 23	0445	1,710	3.65

Minimum discharge, 46 ft³/s, June 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	166	205	100	89	288	303	122	70	72	138	164
2	74	163	183	101	93	276	290	121	69	92	146	178
3	70	155	168	100	94	265	276	127	68	83	132	154
4	69	150	160	99	93	257	260	139	68	99	129	133
5	65	145	156	99	94	250	242	131	68	94	125	125
6	64	139	149	99	94	240	221	128	69	87	133	123
7	62	136	142	99	96	228	208	123	70	83	131	114
8	133	134	138	98	96	219	196	115	62	140	136	110
9	169	130	133	96	110	210	181	111	57	155	158	113
10	1600	129	128	95	111	201	178	108	54	156	212	111
11	4560	125	125	95	105	226	177	103	52	175	211	110
12	1020	125	126	94	102	227	173	100	50	140	160	105
13	494	123	122	94	103	224	166	95	50	122	139	100
14	348	121	117	93	115	234	159	92	50	114	140	99
15	283	121	112	94	155	260	157	89	49	109	221	97
16	391	117	113	94	1040	245	155	86	48	165	183	95
17	5300	116	112	94	1530	255	153	84	49	226	162	93
18	3170	115	110	94	812	285	151	82	48	190	181	93
19	1220	110	110	94	744	282	150	81	50	202	136	90
20	759	108	109	93	731	272	146	79	51	188	121	89
21	552	111	108	93	685	270	142	77	52	172	113	87
22	429	111	107	93	587	285	135	75	50	256	107	88
23	344	110	106	92	479	306	134	72	49	1370	117	89
24	298	111	106	92	401	327	132	72	52	769	120	100
25	263	113	105	90	347	348	138	71	58	422	115	108
26	239	187	105	90	314	359	143	69	62	313	125	101
27	220	250	104	90	303	349	141	67	65	260	233	96
28	202	212	103	89	297	332	133	66	61	218	218	94
29	192	186	100	88	---	322	130	66	63	186	216	93
30	179	184	100	89	---	317	126	68	73	163	210	91
31	174	---	100	88	---	315	---	67	---	148	205	---
TOTAL	23016	4203	3862	2919	9820	8474	5296	2886	1737	6969	4873	3243
MEAN	742	140	125	94.2	351	273	177	93.1	57.9	225	157	108
MAX	5300	250	205	101	1530	359	303	139	73	1370	233	178
MIN	62	108	100	88	89	201	126	66	48	72	107	87
AC-FT	45650	8340	7660	5790	19480	16810	10500	5720	3450	13820	9670	6430

CAL YR 1985	TOTAL	130075	MEAN	356	MAX	5300	MIN	46	AC-FT 258000
WTR YR 1986	TOTAL	77298	MEAN	212	MAX	5300	MIN	48	AC-FT 153300

09430600 MOGOLLON CREEK NEAR CLIFF, NM
(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'01", long 108°38'58", in SE¼SE¼ sec.13, T.13 S., R.18 W., Grant County, Hydrologic Unit 15040001, on right bank 0.3 mi downstream from Rain Creek, 0.8 mi downstream from Gila Wilderness Boundary, 12 mi upstream from mouth, and 14 mi north of Cliff.

DRAINAGE AREA.--69 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 12-15. Water-discharge records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--19 years, 32.1 ft³/s, 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s, Aug. 12, 1967, gage height, 13.7 ft, from floodmarks, from rating curve extended above 220 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Oct. 10	2130	399	3.36	July 22	2200	229	2.67
Oct. 17	0130	920	4.60	Aug. 28	2245	370	3.22
Feb. 16	1700	*946	*4.69				

No flow June 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	46	12	8.3	83	96	12	2.9	12	6.6	72
2	11	11	46	11	12	73	85	12	3.3	9.2	6.4	42
3	9.5	9.5	46	10	14	67	71	16	3.1	8.8	6.4	29
4	8.1	8.6	47	9.5	13	60	59	13	3.4	7.5	4.7	22
5	7.0	8.0	42	9.1	13	55	50	11	3.7	6.1	4.2	18
6	6.3	7.4	37	8.8	12	50	45	9.7	3.8	4.2	5.1	14
7	6.4	7.1	32	8.2	12	48	41	8.5	2.4	4.0	7.0	11
8	20	6.8	28	7.5	14	46	39	8.1	2.1	9.4	8.2	9.7
9	82	6.4	25	7.6	16	45	41	7.6	1.6	8.2	8.9	8.7
10	199	6.2	22	7.4	16	43	39	6.9	1.3	8.0	12	10
11	230	6.1	19	6.8	18	51	36	6.3	1.2	19	10	7.9
12	109	6.5	18	6.5	23	45	34	5.7	.98	11	8.2	6.4
13	66	6.2	17	6.3	38	49	32	5.5	.81	7.0	6.5	5.7
14	46	5.8	16	6.2	65	55	31	5.2	.60	6.2	10	5.2
15	34	5.4	15	6.2	97	55	28	4.9	.35	19	16	4.6
16	104	5.2	14	6.2	551	65	27	4.7	.27	45	7.8	4.3
17	523	5.1	15	6.1	380	79	26	4.7	.34	60	22	3.9
18	253	4.9	13	5.9	239	74	23	4.6	.34	36	22	3.5
19	144	4.8	12	5.6	217	72	21	4.2	.37	24	9.9	3.0
20	96	5.1	12	5.6	197	75	18	3.8	.27	17	6.5	2.7
21	70	4.9	12	5.8	165	86	17	3.6	.13	15	4.7	2.6
22	54	4.9	12	5.8	120	107	17	3.4	.10	105	3.7	2.4
23	42	4.7	12	5.7	94	122	19	3.2	.10	131	4.2	3.3
24	33	4.8	12	5.6	81	137	20	3.1	.10	62	4.3	8.2
25	26	10	12	5.8	83	141	18	2.9	5.5	38	4.6	7.0
26	22	105	12	5.7	101	143	16	2.6	3.7	26	7.4	4.4
27	18	84	11	5.5	105	145	15	2.5	5.6	19	7.2	3.6
28	16	60	11	5.5	96	144	13	2.4	3.3	15	41	3.1
29	14	44	10	5.7	---	138	12	2.5	2.4	11	177	2.7
30	13	56	10	5.6	---	126	12	3.0	1.8	8.8	137	2.6
31	12	---	10	6.5	---	106	---	2.8	---	7.5	89	---
TOTAL	2285.3	517.4	646	215.7	2800.3	2585	1001	186.4	55.86	759.9	668.5	323.5
MEAN	73.7	17.2	20.8	6.96	100	83.4	33.4	6.01	1.86	24.5	21.6	10.8
MAX	523	105	47	12	551	145	96	16	5.6	131	177	72
MIN	6.3	4.7	10	5.5	8.3	43	12	2.4	.10	4.0	3.7	2.4
AC-FT	4530	1030	1280	428	5550	5130	1990	370	111	1510	1330	642

CAL YR 1985	TOTAL	19863.39	MEAN	54.4	MAX	784	MIN	.05	AC-FT	39400
WTR YR 1986	TOTAL	12044.86	MEAN	33.0	MAX	551	MIN	.10	AC-FT	23890

09430600 MOGOLLON CREEK NEAR CLIFF, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
19...	1230	5.6	115	128	8.10	8.30	12.5	5.0	0.50	12.0	46	8
MAR												
19...	1200	73	100	100	7.60	--	16.0	7.0	4.0	10.9	35	0
APR												
29...	1100	13	100	92	8.50	8.00	20.0	12.0	1.5	9.2	33	3
AUG												
19...	1030	10	105	--	7.80	--	26.5	18.0	--	8.1	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV												
19...	13	3.3	11	0.7	1.0	47	0	38	--	42	15	6.6
MAR												
19...	10	2.5	4.9	0.4	0.90	71	0	56	58	33	16	1.0
APR												
29...	9.5	2.2	4.9	0.4	0.90	27	5.0	34	30	32	11	1.2
AUG												
19...	--	--	--	--	--	46	0	38	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV											
19...	0.30	21	88	94	<0.010	<0.100	0.030	<0.010	0.27	0.030	0.020
MAR											
19...	0.30	20	76	91	<0.010	0.170	0.020	0.020	0.38	0.020	<0.010
APR											
29...	0.30	20	65	73	<0.010	<0.100	<0.010	0.010	--	0.020	0.010
AUG											
19...	--	--	--	--	<0.010	<0.100	0.030	0.070	0.27	0.030	0.160

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
NOV											
19...	10	<1	5	<0.5	<1	<1	<3	2	8	<1	<4
MAR											
19...	170	<1	8	<0.5	<1	<1	<3	<1	37	<1	<4
APR											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--

09430600 MOGOLLON CREEK NEAR CLIFF, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
NOV 19...	<1	<0.1	<10	2	<1	<1	65	<6	<3	0.9	<0.7
MAR 19...	<1	0.3	<10	1	1	<1	57	<6	10	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 19...	1.1	<0.5	0.9	<0.5	0.03	0.27	0	0.0	50	4	3
MAR 19...	--	--	--	--	--	--	2	0.39	75	K7	K0
APR 29...	--	--	--	--	--	--	5	0.18	81	<1	K14
AUG 19...	--	--	--	--	--	--	6	0.17	75	20	52

09431100 MANGAS CREEK BELOW MANGAS SPRINGS, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 32°50'48", long 108°30'57", in NW¼NE¼ sec.8, T.17 S., R.16 W., Grant County, Hydrologic Unit 15040002, 0.4 mi northwest of Mangas Springs.

DRAINAGE AREA.--177 mi².

PERIOD OF RECORD.--Water years 1970 to current year.

REMARKS.--Location formerly published as lat 32°50'57", long 108°31'13", in SE¼SW¼ sec.5, T.17 S., R.16 W., 0.1 mi upstream from Blacksmith Canyon and 15 mi southeast of Gila.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV												
21...	0900	3.2	690	709	8.10	8.10	10.0	13.0	11.3	300	130	95
JAN												
16...	1500	2.8	760	--	7.90	--	8.0	8.0	8.3	--	--	--
MAR												
20...	1500	2.2	800	706	7.90	8.20	6.5	13.5	9.4	300	190	92
APR												
30...	1300	2.1	700	704	8.50	8.10	28.5	22.0	7.9	300	170	95
JUL												
18...	1015	2.3	775	748	--	8.00	33.0	28.0	8.0	330	120	100

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
21...	16	27	0.7	1.8	174	140	19	0.40	32	440	40	7
JAN												
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
20...	16	28	0.7	1.7	105	150	17	0.40	30	400	40	17
APR												
30...	16	28	0.7	0.90	130	140	58	0.40	31	450	40	24
JUL												
18...	19	33	0.8	4.1	211	150	23	0.50	36	490	60	94

09431500 GILA RIVER NEAR REDROCK, NM
(National stream-quality accounting network and radiochemical network station)

LOCATION.--Lat 32°43'37", long 108°40'30", in W½ sec.23, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 0.2 mi downstream from Copper Canyon, 0.2 mi upstream from lower end of box canyon, 4.7 mi northeast of Redrock, 14 mi downstream from Mangas Creek, and at mile 539.2.

DRAINAGE AREA.--2,829 mi².

WATER-DISCHARGE RECORDS

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" 1904-7.

REVISED RECORDS.--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above National Geodetic Vertical Datum of 1929, from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Water-discharge records fair. Diversions for irrigation of about 5,000 acres upstream from station. Gage height and rain gage satellite telemeter at gage.

AVERAGE DISCHARGE.--70 years (water years 1906, 1909-10, 1913-55, 1963-86), 209 ft³/s, 151,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,800 ft³/s, Dec. 19, 1978, gage height, 29.8 ft, in gage well, 34.1, ft from floodmarks, from rating curve extended above 9,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 2.2 ft³/s, Aug. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 11	0915	*7,210	*12.75	Aug. 30	0345	3,040	10.32
Oct. 17	1230	6,130	12.04				

Minimum discharge, 36 ft³/s, June 15, 16, 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	230	385	148	121	445	447	148	60	67	237	378
2	96	218	334	154	118	428	434	148	63	65	229	270
3	108	216	305	152	116	407	428	156	62	79	216	258
4	84	214	280	152	121	395	404	160	60	105	199	231
5	77	204	264	149	122	374	365	162	75	140	204	196
6	70	191	254	142	123	354	340	144	77	125	197	186
7	72	191	250	145	134	337	320	155	69	116	199	180
8	205	189	233	143	134	319	301	125	61	123	185	170
9	328	179	220	142	174	303	283	112	55	190	237	162
10	1830	178	196	135	184	296	274	117	51	198	239	188
11	4180	178	182	132	181	325	277	122	46	230	369	160
12	1010	176	189	139	165	332	264	117	43	200	244	162
13	632	168	181	147	155	325	266	109	41	174	213	166
14	484	152	184	146	181	355	236	97	40	170	257	151
15	415	149	179	145	346	462	214	97	38	160	240	150
16	526	144	163	225	803	399	201	85	40	355	239	129
17	4530	145	161	129	1750	373	201	75	47	403	204	123
18	2220	144	160	128	1050	433	200	78	48	332	257	115
19	1180	137	162	127	893	434	196	78	47	299	195	109
20	860	139	166	126	830	402	187	77	49	310	164	89
21	689	139	166	128	759	381	188	79	43	282	134	89
22	590	137	162	127	654	396	184	71	38	375	123	101
23	527	135	155	124	582	418	189	67	39	892	138	99
24	473	137	154	123	529	448	170	66	48	840	145	118
25	403	155	152	120	497	475	167	60	55	554	144	139
26	351	224	153	115	475	485	162	59	60	468	129	148
27	316	291	158	110	468	485	161	57	63	421	189	126
28	295	323	158	126	462	480	167	64	58	367	338	117
29	275	302	154	128	---	474	156	58	58	322	398	111
30	256	289	145	128	---	462	153	57	58	282	756	99
31	242	---	145	122	---	456	---	60	---	250	426	---
TOTAL	23417	5674	6150	4257	12127	12458	7535	3060	1592	8894	7444	4720
MEAN	755	189	198	137	433	402	251	98.7	53.1	287	240	157
MAX	4530	323	385	225	1750	485	447	162	77	892	756	378
MIN	70	135	145	110	116	296	153	57	38	65	123	89
AC-FT	46450	11250	12200	8440	24050	24710	14950	6070	3160	17640	14770	9360

CAL YR 1985	TOTAL	158275	MEAN	434	MAX	5170	MIN	29	AC-FT	313900
WTR YR 1986	TOTAL	97328	MEAN	267	MAX	4530	MIN	38	AC-FT	193100

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV												
20...	0930	137	345	366	7.90	8.30	7.5	6.5	1.7	10.8	130	0
JAN												
15...	1200	145	335	359	8.20	8.30	10.5	7.0	4.1	8.9	130	2
MAR												
18...	1200	455	250	264	8.10	8.20	11.0	10.0	23	8.0	83	0
MAY												
01...	1100	149	300	322	9.10	8.60	25.0	18.0	2.0	9.0	110	0
JUL												
16...	1000	328	220	221	7.90	7.80	27.5	21.0	6500	7.9	67	0
AUG												
20...	1200	163	310	317	8.00	8.50	38.0	24.0	62	7.9	110	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV												
20...	38	7.7	27	1	1.0	160	--	130	--	125	32	10
JAN												
15...	38	7.7	28	1	1.8	153	--	125	125	130	28	11
MAR												
18...	24	5.7	19	0.9	1.6	148	0	118	122	93	19	7.4
MAY												
01...	32	6.7	26	1	25	140	11	133	133	119	28	6.5
JUL												
16...	20	4.2	22	1	2.2	--	--	--	--	--	18	5.8
AUG												
20...	32	6.7	27	1	2.6	--	--	--	--	121	27	9.8

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV												
20...	1.6	33	225	230	--	<0.010	0.280	0.030	0.010	0.27	0.130	0.110
JAN												
15...	1.8	32	230	220	--	<0.010	0.310	0.020	0.010	0.18	0.060	0.060
MAR												
18...	1.3	30	183	180	--	<0.010	0.150	0.020	0.020	0.48	0.080	0.040
MAY												
01...	1.7	31	215	250	--	<0.010	<0.100	<0.010	0.020	--	0.050	0.040
JUL												
16...	1.2	28	158	--	3.39	0.010	3.40	0.100	0.020	11	0.260	0.190
AUG												
20...	1.7	38	236	220	0.250	0.020	0.270	0.020	0.480	0.28	0.110	0.120

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)
NOV 20...	<10	1	17	<0.5	1	<1	<3	2	9	<1	70
JAN 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	210	2	15	<0.5	<1	<1	<3	10	150	<5	<4
AUG 20...	30	2	24	<0.5	<1	1	<3	2	20	<5	27

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
NOV 20...	5	<0.1	10	2	<1	<1	160	<6	4	5.0	<0.7
JAN 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	5	0.4	<10	1	<1	<1	94	19	14	--	--
AUG 20...	4	<0.1	<10	<1	<1	<1	150	7	5	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 20...	1.7	<0.6	1.7	<0.6	0.03	1.8	10	3.7	82	27	37
JAN 15...	--	--	--	--	--	--	21	8.2	49	K6	39
MAR 18...	--	--	--	--	--	--	78	96	93	K14	K84
MAY 01...	--	--	--	--	--	--	23	9.3	47	6	36
JUL 16...	--	--	--	--	--	--	4470	3960	100	23	22
AUG 20...	--	--	--	--	--	--	252	111	99	88	200

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1,300 ft downstream from Rainbow Bridge Canyon, 1.7 mi northwest of Reserve, and at mile 563.1.

DRAINAGE AREA.--350 mi², approximately.

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

REVISED RECORDS.--WDR NM-78-1: 1977. WRD NM-84-1: 1973, 1979-80.

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 15, 1972 at site 1,800 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Apr. 21-27, Aug. 17 and Sept. 17-30. Records good except for estimated daily discharges, which are poor. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 27.9 ft³/s, 20,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft³/s, Oct. 1, 1983, gage height, 11.71 ft recorded, 11.3 ft, from outside floodmarks, from rating curve extended above 1,400 ft³/s on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s, Mar. 16, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft³/s at Alma (downstream). See WSP 1313.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
July 18	1645	*281	*2.12				

Minimum discharge, 4.3 ft³/s, May 22, June 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	11	11	14	35	17	9.2	8.9	7.8	14	16
2	26	13	11	10	17	34	21	10	8.7	9.4	14	13
3	21	13	10	11	16	41	25	11	8.3	9.6	13	12
4	17	13	9.3	10	17	39	27	10	9.1	13	13	10
5	14	13	9.1	10	18	36	24	9.8	8.2	13	13	9.3
6	14	12	9.6	10	18	32	20	9.3	8.8	12	13	8.8
7	14	12	9.0	9.9	18	29	20	8.7	7.1	12	12	9.3
8	15	12	9.0	9.3	17	28	19	8.8	6.7	13	12	21
9	14	12	8.3	11	22	27	16	9.1	6.3	16	12	15
10	17	11	7.0	12	17	27	15	8.6	5.1	15	12	13
11	19	11	6.8	12	17	31	16	7.7	4.9	14	12	11
12	15	11	6.0	11	18	33	16	5.6	4.9	12	14	9.9
13	13	11	5.3	11	16	34	16	6.4	5.2	8.6	13	8.6
14	12	10	5.6	10	19	36	16	7.2	5.2	9.2	15	6.9
15	12	10	5.9	12	29	38	16	7.3	6.3	10	13	7.1
16	24	10	6.3	12	79	38	15	7.6	7.1	13	12	8.6
17	41	11	7.0	11	111	41	15	8.2	7.3	39	11	9.0
18	27	11	7.5	12	116	38	16	7.6	7.9	38	10	9.5
19	21	11	8.5	12	126	37	16	7.0	7.3	35	8.5	10
20	19	12	9.5	12	117	33	15	7.3	5.7	35	6.3	10
21	19	11	10	11	85	29	15	6.8	6.4	38	6.0	12
22	18	11	11	10	57	28	15	5.3	7.6	41	5.5	14
23	17	11	10	10	45	26	14	6.1	8.4	29	9.1	20
24	17	11	10	12	39	25	14	7.6	10	25	11	18
25	17	11	10	11	37	23	13	8.9	12	22	9.9	12
26	15	13	10	12	35	21	12	8.7	12	19	11	9.0
27	15	11	10	13	36	20	11	8.1	9.8	17	12	8.5
28	14	10	10	13	36	20	10	6.4	11	17	15	9.0
29	16	10	10	13	---	21	9.6	7.3	10	17	14	10
30	13	11	10	12	---	19	9.4	8.3	7.4	16	15	10
31	14	---	10	14	---	17	---	8.6	---	15	14	---
TOTAL	559	344	272.7	350.2	1192	936	484.0	248.5	233.6	590.6	365.3	340.5
MEAN	18.0	11.5	8.80	11.3	42.6	30.2	16.1	8.02	7.79	19.1	11.8	11.3
MAX	41	15	11	14	126	41	27	11	12	41	15	21
MIN	12	10	5.3	9.3	14	17	9.4	5.3	4.9	7.8	5.5	6.9
AC-FT	1110	682	541	695	2360	1860	960	493	463	1170	725	675

CAL YR 1985	TOTAL	21825.6	MEAN	59.8	MAX	1120	MIN	1.9	AC-FT	43290
WTR YR 1986	TOTAL	5916.4	MEAN	16.2	MAX	126	MIN	4.9	AC-FT	11740

09442692 TULAROSA RIVER ABOVE ARAGON, NM

LOCATION.--Lat 33°53'29", long 108°30'54", in NE¼NW¼ sec.9, T.5 S., R.16 W., Catron County, Hydrologic Unit 15040004, on right bank 0.4 mi upstream from first diversion, 1.4 mi northeast of Aragon, and 8 mi upstream from Apache Creek.

DRAINAGE AREA.--94 mi².

PERIOD OF RECORD.--July 1966 to current year. 1955 to 1965 at site 0.6 mi upstream (drainage area, 89 mi²), annual maximum only.

REVISED RECORD.--WDR NM-78-1: 1977. WDR NM-85-1: 1967-69, 1971-77, 1981, 1983 (P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years, 3.44 ft³/s, 2,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 660 ft³/s Oct. 2, 1983, gage height, 3.90 ft in gage well, 4.23 ft from floodmarks, from rating curve extended above 80 ft³/s on basis of slope-area measurements at gage heights 3.13 ft and 3.90 ft; minimum, 1.1 ft³/s July 22, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Aug. 12	0100	*8.6	*1.35				

Minimum discharge, 2.3 ft³/s, July 12-14, 30, 31, Aug. 5, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.7	3.5	2.8	2.7	2.8	3.0	2.8	2.7	2.6	2.4	2.6
2	3.6	3.7	3.4	2.8	2.8	2.8	3.1	2.8	3.0	2.4	2.4	2.6
3	3.5	3.9	3.4	2.8	2.7	2.8	3.0	2.9	2.7	2.4	2.4	2.5
4	3.5	3.9	3.4	2.8	2.8	2.8	3.0	2.8	2.7	2.4	2.4	2.5
5	3.5	3.9	3.4	2.8	2.7	2.8	3.0	2.8	2.7	2.4	2.3	2.5
6	3.6	3.9	3.3	2.7	2.8	2.8	3.0	2.8	2.6	2.4	2.4	2.5
7	3.7	3.9	3.3	2.7	2.7	2.8	3.0	2.8	2.5	2.4	2.4	2.5
8	3.6	3.9	3.3	2.6	2.8	2.8	3.0	2.8	2.5	2.4	2.4	2.5
9	4.0	3.9	3.3	2.7	2.8	2.8	3.0	2.8	2.5	2.4	2.4	2.6
10	3.9	3.9	3.3	2.6	2.8	2.8	3.0	2.8	2.5	2.4	2.5	2.6
11	3.9	3.9	3.2	2.6	2.7	3.0	3.0	2.7	2.5	2.4	2.5	2.6
12	3.7	4.0	3.2	2.6	2.7	3.0	3.0	2.7	2.5	2.3	2.9	2.6
13	3.7	3.9	3.2	2.6	2.8	3.0	2.9	2.6	2.4	2.3	2.5	2.6
14	3.7	3.9	3.2	2.6	3.0	3.0	2.9	2.7	2.4	2.3	2.5	2.6
15	3.6	3.9	3.2	2.6	3.0	2.9	2.9	2.6	2.4	2.8	2.4	2.6
16	4.2	3.9	3.1	2.6	3.2	2.9	2.9	2.7	2.5	2.6	2.4	2.6
17	4.1	3.9	3.1	2.6	3.0	3.0	2.9	2.7	2.5	2.6	2.4	2.6
18	3.9	3.9	3.1	2.6	2.9	2.9	2.9	2.7	2.5	2.6	2.4	2.6
19	3.7	3.9	3.1	2.6	2.9	2.9	2.9	2.6	2.5	2.5	2.4	2.6
20	3.7	3.9	3.1	2.6	2.9	2.9	2.9	2.6	2.4	2.5	2.4	2.6
21	3.7	3.7	3.0	2.6	2.8	3.0	2.9	2.6	2.4	2.4	2.4	2.6
22	3.7	3.7	3.0	2.6	2.8	2.9	2.9	2.6	2.4	2.9	2.3	2.6
23	3.7	3.7	3.0	2.6	2.8	2.9	2.9	2.6	2.4	2.6	2.5	2.7
24	3.7	3.7	3.0	2.7	2.8	2.9	2.9	2.6	2.5	2.5	2.5	2.8
25	3.7	3.7	3.0	2.6	2.8	2.9	2.9	2.6	2.6	2.4	2.5	2.7
26	3.7	3.9	3.0	2.6	2.8	2.9	2.9	2.6	2.5	2.4	2.6	2.7
27	3.7	3.6	2.9	2.7	2.8	2.9	2.8	2.6	2.5	2.4	2.6	2.7
28	3.7	3.6	2.9	2.7	2.8	3.0	2.8	2.7	2.5	2.4	2.6	2.8
29	3.7	3.5	2.9	2.6	---	3.1	2.9	2.7	2.5	2.4	2.7	2.8
30	3.7	3.8	2.9	2.7	---	3.0	2.8	2.7	2.6	2.3	2.6	2.8
31	3.8	---	2.9	2.7	---	3.0	---	2.7	---	2.3	2.6	---
TOTAL	115.4	114.6	97.6	82.4	79.1	90.0	88.0	83.7	75.9	76.1	76.7	78.6
MEAN	3.72	3.82	3.15	2.66	2.82	2.90	2.93	2.70	2.53	2.45	2.47	2.62
MAX	4.2	4.0	3.5	2.8	3.2	3.1	3.1	2.9	3.0	2.9	2.9	2.8
MIN	3.5	3.5	2.9	2.6	2.7	2.8	2.8	2.6	2.4	2.3	2.3	2.5
AC-FT	229	227	194	163	157	179	175	166	151	151	152	156

CAL YR 1985	TOTAL	1673.6	MEAN	4.59	MAX	103	MIN	2.0	AC-FT	3320
WTR YR 1986	TOTAL	1058.1	MEAN	2.90	MAX	4.2	MIN	2.3	AC-FT	2100

09443000 SAN FRANCISCO RIVER NEAR ALMA, NM

LOCATION.--Lat 33°22'05", long 108°54'35", in SW¼SE¼ sec.4, T.11 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank 1.2 mi downstream from Alma, 4 mi northwest of Glenwood, 6 mi upstream from Whitewater Creek, and at mile 523.5.

DRAINAGE AREA.--1,546 mi².

PERIOD OF RECORD.--September 1904 to January 1914, fragmentary (see WSP 1313), January 1964 to September 1986 (discontinued). Prior to October 1911, published as "at Alma".

REVISED RECORD.--WDR NM-78-1: 1977. WDR NM-85-1: 1983.

GAGE.--Water-stage recorder. Elevation of gage is 4,840 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft of each other, 0.8 mi upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum. Jan. 10, 1964 to Nov.1, 1972, at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 12-19, Dec. 12-17 and Feb. 17-23. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--22 years (water years 1965-86), 86.4 ft³/s, 62,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,600 ft³/s, Oct. 2, 1983, gage height, 21.44 ft, present datum, from floodmarks in well, from rating curve extended above 9,000 ft³/s on basis of slope-area measurements at gage heights 18.16 ft and 21.44 ft; no flow many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 60,000 ft³/s were computed at Clifton, Az.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	0215	1,230	4.32	July 16	2315	*1,240	*4.47

No flow June 27-29, July 8, 14, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	49	136	34	31	112	102	12	5.7	.99	.53	22
2	11	51	73	44	36	104	89	12	6.0	.83	.53	16
3	9.4	47	53	49	37	103	100	15	7.9	.41	.12	12
4	8.3	44	46	43	41	109	97	17	6.7	.07	.12	9.2
5	8.0	42	41	38	49	104	95	15	5.6	.01	.04	7.2
6	7.5	40	40	36	46	91	82	14	5.2	.53	.03	7.1
7	8.2	37	38	32	51	79	70	14	5.6	.21	.03	6.2
8	14	37	36	29	54	68	62	14	5.7	.00	.29	4.2
9	27	36	37	29	66	61	54	13	5.2	1.2	36	6.2
10	93	36	37	29	65	58	50	16	4.5	5.1	21	13
11	120	35	36	30	55	80	48	12	4.2	3.6	14	14
12	106	35	32	29	42	74	46	7.2	4.0	1.0	7.8	10
13	75	34	26	29	48	76	44	4.2	3.5	.09	8.6	7.4
14	57	34	23	29	56	79	41	3.8	2.9	.00	19	5.6
15	48	34	23	29	95	82	39	3.7	2.3	.59	36	4.4
16	70	33	23	30	580	78	38	4.4	2.1	38	24	3.8
17	414	33	23	30	800	81	35	4.8	1.8	172	19	3.1
18	210	33	23	29	550	80	28	6.7	1.6	55	20	2.4
19	137	33	26	28	420	75	22	7.5	1.3	13	16	1.2
20	94	32	34	29	350	66	22	8.1	.98	19	13	.94
21	74	32	34	28	270	60	21	8.5	.83	35	8.8	.29
22	63	31	35	28	210	58	20	8.7	.66	43	6.5	.00
23	53	31	37	27	180	62	12	8.1	.49	144	5.6	.64
24	47	31	37	27	160	70	19	4.3	.35	137	4.4	26
25	43	35	36	26	129	87	22	4.2	.17	61	6.5	22
26	41	50	36	25	115	97	20	4.2	.02	35	21	13
27	39	51	35	25	112	98	18	4.6	.00	18	16	6.7
28	40	44	34	26	114	101	17	4.9	.00	5.6	13	4.7
29	47	40	33	26	---	108	15	4.5	.00	.87	19	3.0
30	50	196	32	26	---	117	14	5.0	.08	.49	28	2.3
31	45	---	32	27	---	113	---	5.5	---	.47	23	---
TOTAL	2076.4	1296	1187	946	4762	2631	1342	266.9	85.38	792.06	387.89	234.57
MEAN	67.0	43.2	38.3	30.5	170	84.9	44.7	8.61	2.85	25.6	12.5	7.82
MAX	414	196	136	49	800	117	102	17	7.9	172	36	26
MIN	7.5	31	23	25	31	58	12	3.7	.00	.00	.03	.00
AC-FT	4120	2570	2350	1880	9450	5220	2660	529	169	1570	769	465

CAL YR 1985	TOTAL	62508.54	MEAN	171	MAX	3640	MIN	.00	AC-FT	124000
WTR YR 1986	TOTAL	16007.20	MEAN	43.9	MAX	800	MIN	.00	AC-FT	31750

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, Hydrologic Unit 15040004, on left bank 0.2 mi upstream from hot springs, 5 mi south of Glenwood, 6 mi downstream from Whitewater Creek, and at mile 511.5.

DRAINAGE AREA.--1,653 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area. WDR NM-78-1: 1977. WDR NM-79-1: 1973, 1975-77 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 15, 1934, at site 4.5 mi upstream at datum 98.82 ft higher.

REMARKS.--Estimated daily discharges: May 14 to June 12. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 2,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--59 years, 82.9 ft³/s, 60,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s, Oct. 2, 1983, gage height, 18.15 ft recorded, 20.80 ft from outside floodmarks, from rating curve extended above 4,200 ft³/s on basis of slope-area measurements at gage heights 10.74 ft, 15.6 ft and 20.8 ft; minimum, 1.5 ft³/s Aug. 6, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 60,000 ft³/s or greater were computed for station at Clifton, AZ. On Nov. 26, 1905, a peak of 25,000 ft³/s was measured (by float-area method) at station at Alma (about 12 mi upstream, drainage area, 1,560 mi²); a similar measurement of 21,000 ft³/s was made at the Alma station for peak of Dec. 3, 1906.

EXTREMES FOR CURRENT YEAR.--Peaks discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	0700	1,100	3.45	July 16	2315	*2,940	*5.67
Feb. 17	0745	1,100	3.54				

Minimum discharge, 14 ft³/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	81	161	55	44	175	172	51	26	18	41	48
2	75	78	95	55	47	164	162	55	29	20	42	44
3	65	78	76	68	49	152	156	67	27	21	43	41
4	61	76	70	66	50	146	142	71	29	23	40	35
5	56	75	65	62	52	143	127	69	30	24	40	32
6	51	72	65	55	55	139	122	60	31	23	48	28
7	52	81	63	56	59	126	116	59	27	22	34	28
8	58	75	62	54	59	112	109	58	26	21	59	27
9	66	72	63	51	70	106	100	56	25	23	62	23
10	171	75	63	51	70	101	97	53	22	22	79	27
11	213	72	65	51	68	118	95	52	21	27	62	32
12	185	70	68	51	60	118	96	48	24	29	53	32
13	143	69	63	51	56	122	88	42	23	33	50	31
14	114	66	59	52	59	124	88	33	20	31	51	31
15	91	66	54	52	70	120	87	32	21	82	65	25
16	103	66	52	51	543	120	84	29	18	176	63	24
17	752	72	51	51	959	120	81	24	17	549	53	23
18	441	70	51	51	610	118	80	24	18	238	50	22
19	269	69	51	50	574	116	73	22	23	167	48	20
20	203	68	52	50	497	120	70	24	22	167	43	19
21	171	65	56	50	430	113	69	24	18	168	34	20
22	143	63	56	49	347	112	63	22	18	176	31	16
23	118	62	56	47	279	114	57	27	19	266	33	14
24	101	60	58	44	223	115	56	31	18	281	40	36
25	92	62	58	43	203	121	62	28	18	184	42	45
26	87	70	58	42	195	130	62	26	22	142	37	37
27	86	70	58	42	188	134	61	23	22	116	52	32
28	81	69	56	42	183	148	60	20	20	83	43	27
29	83	65	56	42	---	167	54	25	25	59	43	26
30	81	140	56	42	---	188	51	29	23	51	58	23
31	86	---	55	41	---	188	---	30	---	46	52	---
TOTAL	4395	2177	1972	1567	6099	4090	2740	1214	682	3288	1491	868
MEAN	142	72.6	63.6	50.5	218	132	91.3	39.2	22.7	106	48.1	28.9
MAX	752	140	161	68	959	188	172	71	31	549	79	48
MIN	51	60	51	41	44	101	51	20	17	18	31	14
AC-FT	8720	4320	3910	3110	12100	8110	5430	2410	1350	6520	2960	1720

CAL YR 1985	TOTAL	84209	MEAN	231	MAX	3730	MIN	27	AC-FT	167000
WTR YR 1986	TOTAL	30583	MEAN	83.8	MAX	959	MIN	14	AC-FT	60660

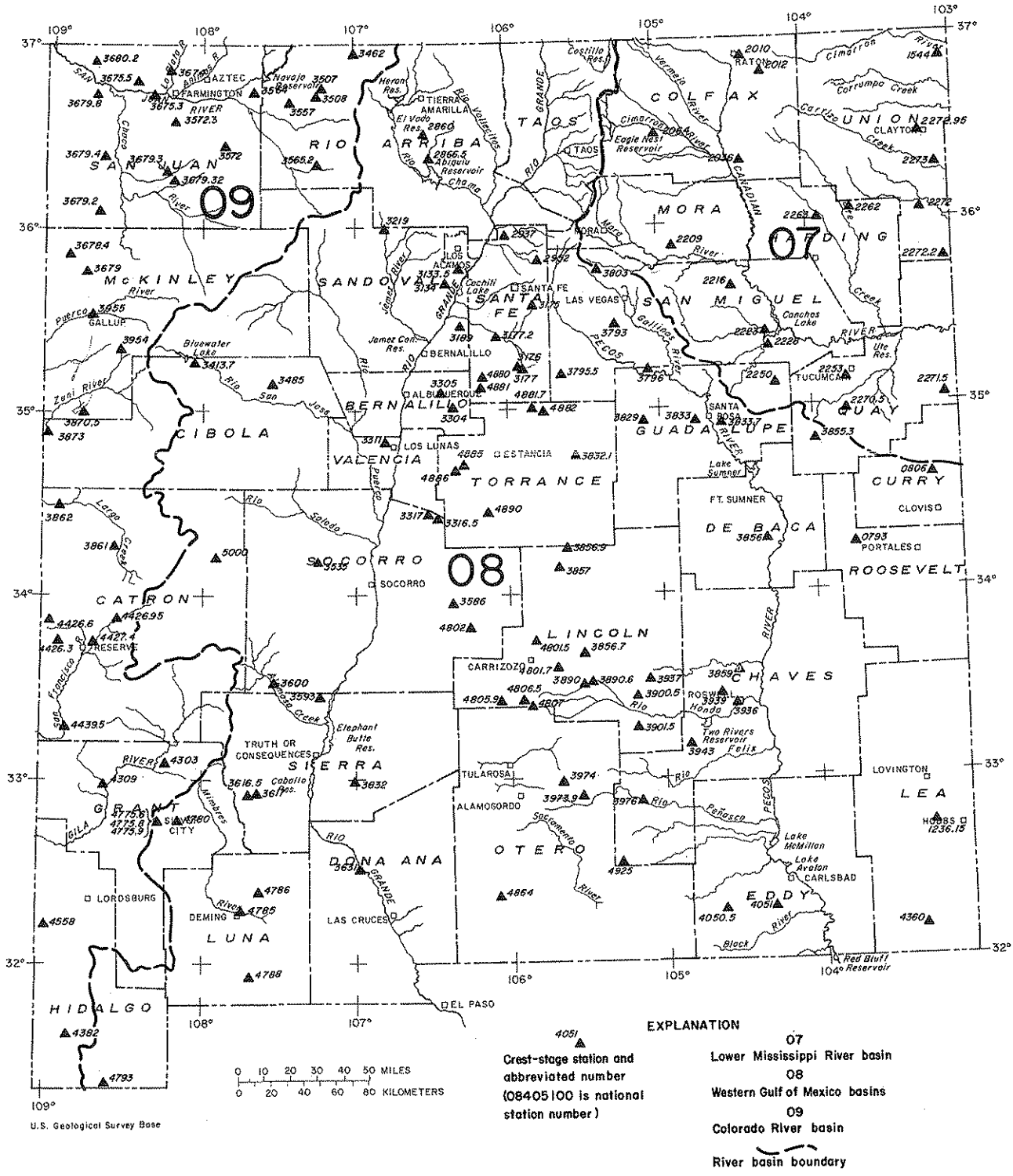


Figure 7.--Map of New Mexico showing location of partial-record stations.

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 floodflow analyses. 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 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 the second table.

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each 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 year given in the period of record column represents the first year of a period extending through the current year unless otherwise noted. For some stations, publication of discharge is delayed pending definition of stage-discharge relationship. Published maximums are for water years.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		ARKANSAS RIVER BASIN					
07154400	Carrizozo Creek near Kenton, OK.	Lat 36°52'55", long 103°01'05", Union County, under bridge on New Mexico State Highway 18, 4 miles southwest of Kenton, OK.	111	1953-	09-29-86	2.68	637
07201000	Raton Creek at Raton.	Lat 36°55'38", long 104°26'22", Colfax County, 60 ft above bridge on State Highway 72 at Raton.	14.4	1953-	04-03-86	2.51	705
07201200	Chicorica Creek tributary near Raton.	Lat 36°49'41", long 104°19' 58", Colfax County, upstream from culvert on U.S. Highway 64-87, 7.7 miles southeast of Raton.	5.18	1971-	- -86	---	(k)
07203600	Rio del Plano tributary near Taylor Springs.	Lat 36°26'59", long 104°22'34", Colfax County, 1.7 miles south of Sauble Ranch, and 11.0 miles northeast of Taylor Springs.	6.71	g1971-86	08-10-86	9.80	(+)
07206400	Clear Creek near Ute Park.	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-	08-11-86	2.72	76
07220900	Dog Creek near Shoemaker.	Lat 36°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-	- -86	---	(b)
07221600	Lagartija Creek tributary near Sanchez.	Lat 35°39'21", long 104°24'57" San Miguel County, at bridge on State Highway 65, 0.9 mile northeast of Sanchez.	1.19	1961-	- -86	(e)	(+)
07222300	Trementina Creek at Trementina.	Lat 35°29'28", long 104°24'59", San Miguel County, at bridge on State Highway 65, at Trementina.	63.9	1959-	10-17-85	7.30	3,120
07222800	Garita Creek tributary near Variadero.	Lat 35°20'10", long 104°21'50", San Miguel County, 1.2 miles upstream from mouth, and 6.3 miles southeast of Variadero.	23.0	1971-	10-17-85	9.70	989
07225000	Pajarito Creek at Newkirk.	Lat 35°04'20", long 104°14'50" Guadalupe County, downstream side of bridge on U.S. Highway 66, 1 mile east of Newkirk.	55.0	1954-	09-07-86	6.52	2,340

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		ARKANSAS RIVER BASIN - Continued					
07225300	Bluewater Creek near Tucumcari	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-	09-02-86	3.91	44
07226200	Bueyeros Creek at Bueyeros.	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.	h33.4	1957-	06-09-86	6.43	(+)
07226300	Carrizo Creek near Roy.	Lat 36°02'58", long 103°57'48", Harding County, 800 ft below State Highway 120, and 15 miles northeast of Roy.	a68	1954-	08-22-86	4.43	523
07227050	Plaza Larga Creek tributary near Ragland.	Lat 34°48'29", long 103°45'35", Quay County, at culvert on State Highway 18, 1.2 miles northwest of Ragland.	.36	1952-	08-15-85 09-04-86	7.77 7.73	h321 316
07227150	Arroyo del Puerto near Endee.	Lat 35°03'32", long 103°06'04", Quay County, at bridge on State Highway 93, 5.4 miles south of Endee.	a25	1961-	09-02-86	4.22	203
07227200	Tramperos Creek near Stead.	Lat 36°04'15", long 103°12'10", in NW¼NW¼ sec.10, T.21 N., R.35 E., Union County, at bridge on State Highway 18, 2.1 miles south of Stead and 26 miles south Clayton.	a556	1966-73* 1974-	09-13-86	8.15	1,600
07227220	Fullingim Draw near Nara Visa.	Lat 35°45'50", long 103°07'30", Union County upstream from culvert on State Highway 18, 11.3 miles north of Nara Visa.	15.1	g1971-86	05-31-86	3.37	(+)
07227295	Sand Draw tributary near Clayton.	Lat 36°23'20", long 103°19'05", Union County, above culvert on State Highway 56, 8 miles southwest of Clayton.	1.25	1952-	08-20-86	0.74	34
07227300	Sand Draw near Clayton.	Lat 36°20'30", long 103°11'30", Union County, on downstream side of bridge on State Highway 18, 7.5 miles south of Clayton.	a42	1953-	- -86	---	(b)
08079300	Blackwater Draw tributary near Floyd.	Lat 34°14'52", long 103°44'51", Roosevelt County, 0.5 mile below section road and 10 miles west of Floyd.	a10	1963-	04-09-86	0.33	3
08080600	Running Water Draw near Clovis.	Lat 34°31'55", long 103°12'05", Curry County, 0.25 mile upstream from Highway 18, and 8 miles north of Clovis.	109	1953-56 1957-64* 1965-	09-15-86	1.07	2
08123615	Monument Draw near Monument.	Lat 32°41'48", long 103°16'10", SW¼SE¼ sec.32, T.18 S., R.37 E., Lea County upstream from culvert on U.S. Highway 62-180, 8 miles west of Hobbs, and 5 miles north of Monument.	17.2	g1975-86	- -86	---	(k)
08286000	Rio Nutrias near Cebolla.	Lat 36°34'45", long 106°30'43", Rio Arriba County, on upstream from culvert on U.S. Highway 84, 4.8 miles upstream from Canada del Policarpo, and 3.2 miles northwest of Cebolla.	74.3	g1980-86	04-02-86	1.60	89

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		ARKANSAS RIVER BASIN - Continued					
08286650	Canjilon Creek above Abiquiu Reservoir.	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-	- -86	---	(m)
08293700	Arroyo Seco tributary near Pojoaque.	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-	07-09-86	6.46	93
08295200	Rio en Medio near Santa Fe.	Lat 35°47'30", long 105°47'38", Santa Fe County, in Santa Fe National Forest, on right bank 300 feet east of Santa Fe Ski Basin parking area, and 10.8 miles northeast of Santa Fe.	0.63	1963-73* g1973-86	- -86	---	(m)
08313350	Rito de los Frijoles in Bandelier National Monument.	Lat 35°46'35", long 106°16'06" Sandoval County, in Bandelier National Monument, downstream from Monument headquarters, 6.5 miles south of Los Alamos, and 18.5 miles northwest of Santa Fe.	18.1	1963-69* 1977-82* 1983-	06-27-86	2.56	23
08313400	Bland Canyon near Cochiti Pueblo.	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, and 7.5 miles north of Cochiti Pueblo.	7.57	1962-	04-26-86	3.12	137
08317500	Galisteo Creek at Canoncito.	Lat 35°33'02", long 105°49'20", Santa Fe County, above railroad bridge, 0.2 mile above Apache Canyon at Canoncito.	11.3	1955-56 1959-	07-17-83 08-23-84 09-07-86	h4.67 h2.92 3.16	h1,680 h748 882
08317600	San Cristobal Arroyo near Galisteo.	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-	06-24-86	4.05	395
08317700	Tarhole Canyon near Galisteo.	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	g1952-86	06-26-86	14.78	297
08317720	Canada de la Cueva near Galisteo.	Lat 35°26'13", long 106°00'45", Santa Fe County, 6.4 miles east of Cerrillos and 4.8 miles northwest of Galisteo.	h1.81	1970-	- -86	---	(k)
08318900	San Pedro Creek near Golden.	Lat 35°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-	06-17-86	0.14	160
08321900	Rio de las Vacas near Senorita.	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-	09-10-86	4.32	370

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		RIO GRANDE BASIN - Continued					
08330400	Juan Toro Canyon near Miera.	Lat 35°00'57", long 106°20'14", Bernalillo County, 150 ft east of State Highway 10, 1 mile southeast of Cedro, and 4.5 miles northwest of Miera.	1.57	1959-	- -86	---	(k)
08330500	Tijeras Arroyo at Albuquerque.	Lat 35°03'40", long 106°28'40", Bernalillo County, 300 ft south of U.S. Highway 66 and 0.4 mile southeast of city limits of Albuquerque.	75.3	1943-48* 1958-	10-10-85	(b)	<250
08331100	Belen Highline Canal tributary near Los Lunas.	Lat 34°49'20", long 106°49'10", Valencia County, above culvert on Highway 6, 5.0 miles west of Los Lunas.	.16	1952-53 1955-	07-05-86	5.15	230
08331650	Canada Montoso near Scholle.	Lat 34°23'11", long 106°28'37", Socorro County, 130 ft upstream from dip on abandoned highway, 500 ft upstream from bridge on U.S. Highway 60, and 3.6 miles southwest of Scholle.	a35	1961-	07-07-86	1.69	185
08331700	Abo Arroyo tributary near Scholle.	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, southwest of Scholle.	.23	g1954-86	- -86	(e)	(+)
08341370	Pine Canyon near Thoreau.	Lat 35°18'34", long 108°10'14", McKinley County, about 1 mile southwest of the north end of Bluewater Lake and about 7 miles southeast of Thoreau.	6.09	1969-	- -86	---	(k)
08348500	Encinal Creek near Casa Blanca.	Lat 35°08'35", long 107°27'55", Valencia County, 1.8 miles north of village of Encinal and 6.8 miles north of Casa Blanca.	6.19	1937-39* 1959-	07-16-86	5.24	520
08353500	La Jencia Creek near Magdalena.	Lat 34°09'45", long 107°12'35", Socorro County, 3.5 miles northeast of Magdalena.	195	1957-	07-02-86	2.75	1,240
08358600	Chupadera Wash tributary at Bingham.	Lat 33°51'39", long 106°22'06", Socorro County, 75 ft upstream from culvert on U.S. Highway 380, and 0.1 mile west of Bingham.	1.29	1961-	- -86	1.55	<100
08359300	San Jose Arroyo near Monticello.	Lat 33°28'05", long 107°14'30", Sierra County, at head of box canyon just below major tributary, 800 ft below culvert on U.S. Highway 85, and 13 miles northeast of Monticello.	26.9	1959-	10-11-85	1.99	(+)
08360000	Alamosa Creek near Monticello.	Lat 33°34'09", long 107°35'33", Socorro County, on left bank at Alamosa damsite and below Old Fort Ojo Caliente, just downstream from Wildhorse Creek, 15 miles northwest of Monticello.	403	1931-42* 1956-58 1958-69* 1973-	10-11-85	3.16	170

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		RIO GRANDE BASIN - Continued					
08361650	Percha Creek near Kingston.	Lat 32°55'05", long 107°38'55", Sierra County, at bridge on State Highway 180, 3.3 miles east of Kingston.	21.5	1953-	07-08-86	4.64	600
08361700	Percha Creek near Hillsboro.	Lat 32°54'55", long 107°36'05", Sierra County, 150 ft south of State Highway 180, and 2 miles west of Hillsboro.	35.4	1957-78 1980-	07-08-86	6.44	3,000
08363100	Rio Grande tributary near Radium Springs.	Lat 32°30'05", long 106°57'05", Dona Ana County, above culvert on U.S. Highway 85, 120 ft above mouth, and 1.4 miles west of Radium Springs.	.40	1955-	08-22-86	5.88	173
08363200	Aleman Draw at Aleman.	Lat 33°00'00", long 107°00'20", Sierra County, on Santa Fe Railroad bridge, 140 ft above dip on Engle-Rincon road, and 0.26 mile west of Aleman.	25.5	1959-	08-23-86	7.06	2,200
08379300	Tecolote Creek at Tecolote.	Lat 35°27'20", long 105°16'55", San Miguel County, on bridge on U.S. Highway 85 at Tecolote.	122	1954-	09-08-86	5.26	441
08379550	Canon Blanco near Leyba.	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	g1971-86	06-26-86	4.59	(+)
08379600	Pecos River tributary near Dilia.	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	g1952-86	- -86	(e)	(m)
08380300	Sandoval Canyon at Gallinas.	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-	09-08-86	0.87	10
08382900	Pecos River tributary near Pintada.	Lat 34°58'06", long 105°05'38", Guadalupe County, in Anton Chico Grant, 1,500 ft south of U.S. Highway 66, and 6.8 miles north of Pintada.	.16	1961-	- -86	---	(k)
08383210	Pintada Arroyo tributary near Encino.	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.	h.55	g1959-86	- -86	---	(k)
08383300	Pintada Arroyo near Santa Rosa.	Lat 34°53'20", long 104°43'50", Guadalupe County, at bridge on U.S. Highway 54, and 4.5 miles southwest of Santa Rosa.	896	g1959-86	09-01-86	7.87	3,400
08383370	Pecos River tributary near Puerto de Luna.	Lat 34°52'35", long 104°38'16", Guadalupe County, 25 ft upstream from culvert on State Highway 91, and 3.1 miles north of Puerto de Luna.	.37	1961-	10-17-85	7.26	113

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		RIO GRANDE BASIN - -Continued					
08385530	Alamosa Creek tributary near Jordan.	Lat 34°47'44", long 103°58'07", Quay County, 500 ft upstream from dip on State Highway 156, and 6.9 miles west of Jordon.	9.71	1962-	06-04-86	3.24	145
08385600	Yeso Creek near Fort Sumner.	Lat 34°16'32", long 104°17'28", De Baca County, at abandoned bridge 1 mile downstream from State Highway 20, and 14.5 miles south of Fort Sumner.	242	1937-	10-17-85	5.78	4,350
08385670	Aragon Creek tributary near Encinoso.	Lat 33°43'35", long 105°31'43", Lincoln County, 0.3 mile upstream from wooden bridge on dirt road, 1.2 miles north of State Highway 48, and 4.3 miles west of Encinoso.	6.07	1961-	07-09-86	4.54	1,040
08385690	Bonita Canyon tributary near Corona.	Lat 34°14'04", long 105°37'12", Lincoln County, above culvert on U.S. Highway 54, and 1.8 miles southwest of Corona.	a.6	g1959-86	- -86	---	(k)
08385700	Cloud Canyon tributary near Gallinas.	Lat 34°07'53", long 105°40'57", Lincoln County, above culvert on U.S. Highway 54, and 2.0 miles southwest of Gallinas.	a10	g1957-86	08-21-86	2.40	27
08385900	Salt Creek tributary near Roswell.	Lat 33°32'22", long 104°31'08", 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-	- -86	---	(m)
08389000	Rio Bonito near Fort Stanton.	Lat 33°31'05", long 105°29'10", Lincoln County, at bridge on U.S. Highway 380, 2.5 miles northeast of Fort Stanton.	a85	1955-	08-17-85 10-17-85	4.85 5.28	h710 980
08389060	Rio Bonito tributary near Fort Stanton.	Lat 33°31'15", long 105°28'05", Lincoln County, at culvert on U.S. Highway 380, 150 ft above mouth, and 3.5 miles northeast of Fort Stanton.	.72	1955-	- -86	---	(k)
08390050	Rio Hondo tributary at Tinnie.	Lat 33°22'36", long 105°13'01", Lincoln County, upstream from culvert on U.S. Highway 70-380, 0.5 mile east of junction of U.S. Highway 70-380 and State Highway 368, and at Tinnie.	.23	1971-	- -86	---	(m)
08390150	Gallo Canyon near Picacho.	Lat 33°17'23", long 105°10'49", Lincoln County, 500 ft east of road, 5 miles south of Arabela.	1.32	1962-	09-20-86	6.70	770
08393600	North Spring River at Roswell.	Lat 33°23'47", long 105°32'53", Chavez County, Roswell Municipal Golf Course, 2,400 ft upstream from Montana Ave. in Roswell.	19.5	g1958-86	06-25-86	3.06	47

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		RIO GRANDE BASIN - Continued					
08393700	Pancho Canyon near Arabela.	Lat 33°30'36", long 105°11'38", Lincoln County, 200 ft downstream from dip on State Highway 368, and 5.6 miles south of Arabela.	16.7	1962-	10-17-85	3.59	(+)
08393900	Eight Mile Draw near Roswell.	Lat 33°24'05", long 104°37'54", Chavez County, 5.3 miles west of Roswell and 1.3 miles morthwest of U.S. Highway 70.	397	1941 1952-	- -86	---	(k)
08394300	Twin Butte Canyon tributary near Roswell.	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-	07-10-69 07-31-71 09-11-72 09-22-74 09-09-76 06-25-86	1.56 7.63 4.93 3.84 1.54 7.75	h26 h3,300 h1,020 h550 h25 3,600
08397390	Curtis Canyon near Mayhill.	Lat 32°51'52", long 105°31'05", Otero County, 0.26 mile above SCS dam, 0.4 mile west of State Highway 130, and 2.5 miles southwest of Mayhill.	10.3	1959-	06-24-86	<.50	<20
08397400	Hyatt Canyon near Cloudcroft.	Lat 32°56'06", long 105°37'37", Otero County, 0.5 mile south of State Highway 83, and 7 miles east of Cloudcroft.	3.08	1953-	06-24-86	2.10	(+)
08397600	Rio Penasco near Dunken.	Lat 33°52'55", long 105°10'40", Chavez County, on bridge on State Highway 24, 5 miles north of Dunken.	583	1952-56 1956-62* 1963-	06-24-86	13.34	4,750
08405050	Last Chance Canyon tributary near Carlsbad Caverns.	Lat 32°17'30", long 104°36'20", 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.	0.2	1959-	06-24-86	5.38	390
08405100	Mosley Canyon near White City.	Lat 32°15'27", long 104°22'43", Eddy County, 600 ft below dip on Dark Canyon Road, and 5.5 miles north of White City.	14.6	1959-	06-24-86	10.19	6,300
08436000	Antelope Draw near Jal.	Lat 32°09'18", long 103°21'51", Lea County, 0.4 mile south of State Highway 128, and 10.7 miles west of Jal.	a20	1963-	- -86	1.38	(+)
		MIMBRES BASIN					
08477560	Little Walnut Creek near Silver City.	Lat 32°48'20", long 108°17'35", Grant County, 85 ft above dip on Bear Mountain Road, and 2 miles north of Silver City.	5.10	g1959-86	08-28-86	1.50	c245
08477580	Silva Creek at Silver City.	Lat 32°46'41", long 108°16'41", Grant County, 190 ft above Twelfth Street bridge at Silver City.	10.0	1958-	09-03-75 05-19-76 -77 -78 -79 09-12-80 08-02-81 10-02-83 09-11-85 08-28-86	h3.23 h1.92 h2.67 h2.18 h1.93 h2.71 h2.98 h2.76 h2.05 3.74	h855 h120 h455 h205 h120 h480 h660 h510 h155 1,270

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		MIMBRES BASIN - Continued					
08477590	Pinos Altos Creek at Silver City.	Lat 32°46'52", long 108°16'04", Grant County, 2 blocks below U.S. Highway 260 at Silver City.	4.63	1958-	-85 08-28-86	(b) 1.66	(+) 360
08478000	Cameron Creek at Central.	Lat 32°47'38", long 108°08'58", Grant County, 0.5 mile above culvert on U.S. Highway 260, at north edge of Central.	18.8	1954-	08-28-86	(e)	(+)
08478500	Mimbres River at Deming.	Lat 32°17'00", long 107°45'35", Luna County, at bridge on U.S. Highway 260, at north end of Deming.	1,370	1983-	10-17-85	8.76	(+)
08478600	Mimbres basin tributary near Florida.	Lat 32°21'30", long 107°37'30", Luna County, above culvert on State Highway 26, and 5 miles southwest of Florida.	.55	1959-	07-08-86	2.25	143
08478800	Seventysix Draw tributary near Waterloo.	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-	10-16-85	4.00	83
		PLAYAS BASIN					
08479300	Deer Creek tributary near Antelope Wells.	Lat 31°23'00", long 108°42'15", 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-	07-15-86	1.22	150
		TULAROSA BASIN					
08480150	White Oaks Canyon near Carrizozo.	Lat 33°43'51", long 105°50'11", Lincoln County, 100 ft upstream from culvert on U.S. Highway 54, 6 miles north of Carrizozo.	31	1959- 1961-	10-11-85	1.91	750
08480170	Nogal Creek tributary near Nogal.	Lat 33°34'54", long 105°41'10", 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-	06-25-86	3.32	44
08480200	Taylor Canyon tributary near Bingham.	Lat 33°48'11", long 106°12'00", Socorro County, 200 ft north of U.S. Highway 380, and 12 miles southeast of Bingham.	2.66	1961-	- -86	---	(k)
08480590	Tularosa Valley tributary near Oscura.	Lat 33°24'41", long 106°04'09", Lincoln County, 50 ft below culvert on U.S. Highway 54, and 5.2 miles south of Oscura.	3.22	g1958-86	10-11-85	1.67	(+)

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		TULAROSA BASIN - Continued					
08480650	Minnie Hall Draw near Three Rivers.	Lat 33°23'40", long 105°58'11", Lincoln County, 8 miles northeast of Three Rivers.	9.70	g1956-86	- -86	---	(+)
08480700	Indian Creek near Three Rivers.	Lat 33°22'10", long 105°53'25", Otero County, 150 ft above diversion dam, and 12 miles east of Three Rivers.	6.8	1956-58* 1959-	09-04-86	3.27	79
08486400	Tularosa Valley tributary near Orogrande.	Lat 32°24'55", long 106°04'20", Otero County, at bridge on U.S. Highway 54, and 2.7 miles northeast of Orogrande.	2.53	g1959-86	09-15-85 - -86	6.00 ---	828 (m)
		ESTANCIA BASIN					
08488000	Estancia Valley tributary at Cedar Grove.	Lat 35°10'05", long 106°10'08", Santa Fe County, 50 ft upstream from culvert on State Highway 344, 0.1 mile south of Cedar Grove.	1.21	1955 1961-	08-26-86	7.15	(+)
08488100	Juan Tomas Canyon near Edgewood.	Lat 35°04'35", long 106°13'46", Santa Fe County, 140 ft upstream from culvert on U.S. Highway 66, 2.5 miles northwest of Edgewood.	a20	1962-	- -86	---	(k)
08488170	Chavez Draw tributary near Clines Corners.	Lat 35°01'06", long 105°49'06", Torrance County, one mile north of Interstate 40, 13 miles east of Moriarty and 9 miles west of Clines Corners.	2.73	g1968-86	- -86	---	(k)
08488200	Osita Draw near Clines Corners.	Lat 35°00'18", long 105°48'00", Torrance County, 100 ft upstream from culvert on U.S. Highway 66, 7.5 miles west of Clines Corners.	a10	1961-	- -86	---	(k)
08488500	Canon de Torreon at Torreon.	Lat 34°43'20", long 106°17'50", Torrance County, at culvert on State Highway 10, in Torreon.	18.2	1954-	07-07-86	1.32	62
08488600	Arroyo del Cuervo near Torreon.	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-	07-07-86	2.65	260
08489000	Big Draw near Mountainair.	Lat 34°18'45", long 106°11'35", Torrance County, 0.25 mile above culvert on State Highway 14, and 8.4 miles southeast of Mountainair.	4.06	1953-	07-07-86	4.64	185
		SALT BASIN					
08492500	Fleming Draw near Pinon.	Lat 32°31'01", long 105°20'42", Otero County, 0.2 mile above dip in ranch road, and 7.5 miles south of Pinon.	16.6	1959-	08-27-86	5.90	1,770

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		SAN AUGUSTIN PLAINS BASIN					
08500000	Swingle Canyon near Datil.	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	1970-72 1976-	06-25-86	3.96	4
		SAN JUAN RIVER BASIN					
09346200	Rio Amargo at Dulce.	Lat 36°56'00", long 107°00'00", Rio Arriba County, under bridge on State Highway 17, at Dulce.	168	1956-	10-07-85	8.65	1,960
09350700	Ruben Canyon near Gobernador.	Lat 36°44'26", long 107°14'33", Rio Arriba County, in Carson National Forest, upstsream from culvert on State Highway 17, and 6.5 miles east of Gobernador.	5.06	1970-	- -78 - -81 10-07-85	(b) (b) 3.43	h<5 h<5 8
09350800	Vaqueros Canyon near Gobernador.	Lat 36°43'23", long 107°16'47", Rio Arriba County, 100 ft east of State Highway 17, and 4.2 miles east of Gobernador.	60.5	1956-	04-25-78 04-27-79 05-15-80 08-11-82 03-18-83 08-06-84 03-12-85 07-07-86	h2.88 h4.76 h7.51 h3.94 h2.26 h3.96 h2.98 2.37	h135 h410 h1,200 h265 h80 h270 h145 90
09355700	Gobernador Canyon near Gobernador.	Lat 36°41'05", long 107°25'10", San Juan County, 0.2 mile south of State Highway 17, and 4 miles southwest of Gobernador.	19.8	1956-	- -86	---	(k)
09356400	Manzanares Canyon near, Turley.	Lat 36°44'15", long 107°42'15", San Juan County, 600 ft above culvert on State Highway 17, and 4.2 miles east of Turley.	3.20	1956-	07-22-86	2.43	450
09356520	Burro Canyon near Lindrith.	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-	09-10-86	5.08	108
09357200	Gallegos Canyon tributary near Nageezi.	Lat 36°24'59", long 107°51'45", 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	g1952-86	09-10-86	3.60	235
09357230	West Draw near Farmington.	Lat 36°35'24", long 108°11'03", San Juan County, 15 ft upstream of culvert on State Highway 371, 11 miles south of Farmington.	.32	1975-	09-23-86	2.89	22
09367400	La Plata River tributary near Farmington.	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-	07-20-86	4.19	236

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		SAN JUAN RIVER BASIN - Continued					
09367530	Locke Arroyo near Kirtland.	Lat 36°43'51", long 108°17'46", 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	g1951-86	07-20-86	5.71	425
09367550	Stevens Arroyo near Kirtland.	Lat 36°45'56", long 108°21'59", 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.	4.52	1970-	08-19-76	11.89	h150
					07-03-77	11.72	h121
					09-10-80	11.27	h60
					10-03-81	11.23	h55
					08-22-82	12.24	h225
					01-17-83	11.43	h79
					09-18-85	11.24	h56
					07-20-86	15.13	1,470
09367840	Yazzie Wash near Mexican Springs.	Lat 35°50'40", long 108°53'00", McKinley County, 5.0 miles northwest of Mexican Springs, and 23 miles north of Gallup.	2.1	1953-54 g1956-86	08-05-86	5.53	900
09367900	Black Springs Wash near Mexican Springs.	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	1954-78 1979-82* 1983-	08-05-86	3.16	670
09367920	Coyote Wash tributary near Naschitti.	Lat 36°05'56", 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-	08-05-86	5.18	(+)
09367930	Hunter Wash at Bisti Trading Post.	Lat 36°16'37", long 108°15'12", San Juan County, Hydrologic Unit 14080106, on right bank upstream from road crossing at Bisti Trading Post.	45.6	1975-82* 1983-	09-10-86	4.39	(+)
09367932	Hunter Wash tributary near Bisti Trading Post.	Lat 36°15'33", long 108°15'06", San Juan County, on left bank upstream of culverts, 1.2 mile south of Bisti Trading Post.	8.47	g1975-86	09-10-86	6.63	(+)
09367940	Pena Blanca Arroyo near Newcomb.	Lat 36°21'39", long 108°43'09", San Juan County, on bridge on U.S. Highway 666, 5.2 miles north of Newcomb.	46.8	g1967-86	07-22-86	12.05	(+)
09367980	Rattlesnake Arroyo near Shiprock.	Lat 36°46'14", long 108°43'32", San Juan County, upstream from bridge on State Highway 504, 0.8 mile west of Shiprock.	---	1980-	09-10-80	6.19	3,100
					07-14-81	2.81	136
					08-03-82	5.77	2,100
					09-30-83	2.95	160
					08-16-84	2.46	84
					03-19-85	2.92	155
					07-22-86	4.76	890
09368020	Malpais Arroyo near Shiprock.	Lat 36°55'33", long 108°43'26", San Juan County, upstream from bridge on U.S. Highway 666, 8.3 miles north of Shiprock.	---	1980-	09-24-86	1.48	91

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft³/s)
		LITTLE COLORADO RIVER BASIN					
09386100	Largo Creek near Quemado.	Lat 34°19'25", long 108°31'40", Catron County, on downstream side of bridge on ranch road 2.5 miles southwest of Quemado.	151	1954-	07-09-86	1.64	170
09386200	Carrizo Wash near Salt Lake.	Lat 34°30'39", long 109°01'35", 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.	af560	1957-	07-09-86	0.39	205
09387050	Galestena Creek tributary near Black Rock.	Lat 34°58'45", long 108°40'00", McKinley County, 100 ft below bridge on State Highway 32 and 10.5 miles southeast of Black Rock.	a19	1957-	04-03-86	1.36	36
09387300	Zuni River near NM-AZ State line.	Lat 34°52'35", long 109°02'29", Cibola County, about 5 miles southwest of Ojo Caliente.	---	1981-	04-03-86	5.52	580
09395400	Milk Ranch Canyon near Fort Wingate.	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-	09-24-86	0.80	122
09395500	Puerco River at Gallup.	Lat 35°31'49", long 108°44'23", 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* 1957-77 1977-82* 1983-	08-26-86	3.67	165
		GILA RIVER BASIN					
09430300	Copperas Canyon near Pinos Altos.	Lat 33°04'42", long 108°12'14", Grant County, on east side of Copperas Canyon road and 15 miles north of Pinos Altos.	3.95	1963-	07-22-86	3.21	181
09430900	Duck Creek at Cliff.	Lat 32°58'03", long 108°36'36", Grant County, at Cliff below bridge on State Highway 211, and 0.6 mile above mouth.	a228	1957-	07-22-86	5.34	2,420
09438200	Animas Creek near Cloverdale.	Lat 31°34'15", long 108°52'30", Hidalgo County, near head of small box canyon, 0.1 mile west of State Highway 338, and 11 miles north of Cloverdale.	157	1959-	10-16-85	5.55	1,140
09442630	Mail Hollow near Luna.	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-	08-14-86	3.04	66

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		GILA RIVER BASIN - Continued					
09442660	Trout Creek at Luna.	Lat 33°50'50", long 108°59'38", Catron County, 500 ft downstream from bridge on Luna-Red Hill road and 2.6 miles north of Luna.	31.9	1954-	02-04-86	1.39	62
09442695	Negro Canyon at Aragon.	Lat 33°52'47", long 108°33'08", Catron County, above culvert on State Highway 12, at west edge of Aragon.	9.62	1958-	07-19-86	2.53	405
09442740	Tularosa River near Reserve.	Lat 33°44'00", long 108°42'10", Catron County, 150 ft west of Eagle Peak Lookout road and 3.3 miles northeast of Reserve.	426	g1956-86	- -86	(b)	<150
09443950	Red Colt Canyon at Pleasanton.	Lat 33°15'30", long, 108°52'15", Catron County, above culvert on U.S. Highway 260, and 1 mile south of Pleasanton.	3.00	g1959-86	07-15-86	10.50	(+)
09455800	Steins Creek at Steins.	Lat 32°13'47", long 109°00'01", Hidalgo County, at culvert on State Highway 14, 0.9 mile west of Steins.	1.26	1959-	10-16-85	1.73	<100

< Less than
+ Discharge not yet determined.
* Operated as continuous-record gaging station.
a Approximately.
b Peak too low to register on gage.
c Estimated.
d From floodmark.
e Gage height not determined.
f Contributing area.
g Discontinued at end of year.
h Revised.
j May not have been peak for year.
k No evidence of any flow during water year.
m No record.
n Correction.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1986

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
ARKANSAS RIVER BASIN						
Chicorica Creek 07199555	Canadian River	Lat 36°57'13", long 104°23'06", Colfax County, Hydrologic Unit 11080001, 200 ft downstream from Lake Alice, and 4.2 mi northeast of Raton.	a15	1983-	10-24-85	0.18
					12-11-86	0.14
					01-23-86	0.14
					03-06-86	0.15
					04-25-86	1.97
					05-22-86	21.2
					07-10-86	2.51
					08-21-86	0.01
Raton Creek 07201050	Chicorica Creek	Lat 36°48'01", long 104°24'28", Colfax County, Hydrologic Unit 11080001, at mouth 7.5 mi south of Raton.	a60	1984-	10-22-85	2.27
					12-11-85	1.16
					01-23-86	1.14
					03-05-86	1.82
					04-24-86	0.26
					05-21-86	0.11
					07-09-86	2.19
					08-20-86	0.58
RIO GRANDE BASIN						
Turkey Creek 08291900	Santa Clara Creek	Lat 35°58'43", long 106°26'03", Sandoval County, Hydrologic Unit 13020101, at mouth on Santa Clara Indian Reservation, 400 ft downstream from boundary with Baca Location Land Grant, and 19 mi west of Espanola.	a4	1984-	10-21-85	1.30
					04-08-86	1.06
					05-16-86	2.05
					06-19-86	1.11
					07-15-86	1.56
					08-19-86	0.98
					09-02-86	1.30
Alamosa Creek 08360000	Rio Grande	Lat 33°34'09", long 107°35'33", in SE¼ sec.31, T.8 S., R.7 W., Socorro County, Hydrologic Unit 13020211, 0.9 mi downstream from Wildhorse Creek, and 15 mi northwest of Monticello.	403	1931-42 1958-71 1972-	01-28-86	6.53
					04-21-86	6.58
					08-08-86	6.57
Lea Lake Drain 08394018	Pecos River	Lat 33°18'56", long 104°19'56", in SW¼SE¼SW¼ sec.34, T.11 S., R.26 E., Chaves County, Hydrologic Unit 13060007, on downstream side of road crossing at Bottomless Lake State Park near Roswell.	---	1976-	10-29-85	4.96
					01-24-86	4.79
					04-24-86	3.12
					07-29-86	3.82
Blue Springs 08405450	Black River	Lat 32°11'07", long 104°16'50", in SW¼NE¼SW¼ sec.27, T.24 S., R.26 E., Eddy County, Hydrologic Unit 13060011, upstream from all diversions, 5.5 mi east of White City.	---	1907 1919-20 1923 1935 1952-70 1974-	11-01-85	13.0
					02-07-86	19.1
					05-09-86	15.1
					08-04-86	15.4
Castle Springs 08405490	Black River	Lat 32°11'59", long 104°15'13", in SW¼SW¼SW¼ sec.24, T.24 S., R.26 E., Eddy County, Hydrologic Unit 13060011, upstream from mouth at Black River Village, 7.2 mi east of White City.	---	1975-	11-01-85	0.60
					02-07-86	0.99
					05-09-86	0.53
					08-04-86	0.99
Scott Able Creek 08492910	Sacramento River	Lat 32°42'35", long 105°44'34",in SE¼NW¼SW¼ sec.29, T.18 S, R.12 E, Otero County, Hydrologic Unit 13050004, at mouth 7.0 mi southwest of Sunspot.	---	1985-	12-23-85	1.04
					01-31-86	0.49
					02-25-86	0.37
					03-28-86	0.53
					04-24-86	0.61
					05-27-86	0.33
					06-18-86	0.16
					07-29-86	0.34
					08-26-86	0.94
					09-25-86	1.06
GILA RIVER BASIN						
Mangas Creek 09431100	Gila River	Lat 32°50'48", long 108°30'57", in NW¼NE¼ sec.8, T.17 S., R.16 W., Grant County, Hydrologic Unit 15040002, 0.4 mi northwest of Mangas Springs.	177	1970-	01-16-86	2.75
					03-20-86	2.24
					04-30-86	2.10

a estimated

Water-quality partial-record stations are particular sites where chemical data are collected systematically over a period of years for use in hydrological analyses. The data are collected less than quarterly, usually one to three times a year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

LITTLE COLORADO RIVER BASIN

09386187 CINDER CONE LAKE NR QUEMADO, NM (LAT 34°26'42" LONG 108°46'07")
(LOCAL IDENTIFIER - 03N.18W.31.114)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT									
28...	1230	148000	143000	8.00	7.60	21.5	14.0	9300	9100
DEC									
03...	1300	147000	139000	8.20	7.60	7.0	4.0	13000	13000
JAN									
29...	1300	--	132000	--	7.60	--	--	7300	7000
MAR									
11...	1300	143000	135000	8.80	8.00	4.0	7.5	6700	--
APR									
28...	1200	--	133000	8.60	8.00	19.0	12.0	5700	5500
JUN									
10...	1315	156000	134000	8.50	7.80	22.0	18.5	7000	6800
JUL									
08...	1330	152000	117000	8.30	7.90	28.0	23.0	10000	9800
AUG									
20...	1300	156000	135000	8.30	7.90	33.0	26.0	10000	10000

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT									
28...	600	1900	45000	200	310	196	10000	72000	0.60
DEC									
03...	520	2800	49000	190	290	209	9400	90000	0.60
JAN									
29...	600	1400	44000	230	260	222	10000	74000	0.80
MAR									
11...	--	1600	41000	220	270	222	8800	72000	0.60
APR									
28...	--	--	46000	280	290	223	3000	80000	0.50
JUN									
10...	500	1400	60000	310	330	220	16000	92000	0.50
JUL									
08...	700	2000	47000	210	340	215	13000	82000	0.50
AUG									
20...	600	2100	45000	200	380	208	12000	94000	0.60

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	BORON, DIS-SOLVED (UG/L AS B) (01020)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT								
28...	26	10	--	130000	0.630	5200	350	4600
DEC								
03...	19	10	132000	150000	0.860	--	320	4800
JAN								
29...	18	5.6	125000	130000	1.60	6000	---	4900
MAR								
11...	24	11	128000	120000	<0.100	5800	310	12000
APR								
28...	23	13	134000	130000	0.100	6200	340	6700
JUN								
10...	5.2	13	142000	170000	0.160	6700	360	15000
JUL								
08...	27	14	145000	150000	0.160	6400	390	8000
AUG								
20...	27	11	124000	150000	0.190	7200	390	21000

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

LITTLE COLORADO RIVER BASIN -- Continued

09386189 ZUNI SALT LAKE NR QUEMADO, NM (LAT 34°27'07" LONG 108°46'08")
(LOCAL IDENTIFIER - 03N.18W.30.314)

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
OCT									
28...	1400	221000	209000	7.70	7.40	22.0	17.5	17000	17000
DEC									
03...	1500	224000	210000	7.80	7.50	6.5	3.5	14000	14000
JAN									
29...	1400	215000	200000	8.00	7.50	15.0	7.0	13000	13000
MAR									
11...	1400	213000	201000	8.10	7.60	4.0	7.0	12000	--
APR									
28...	1400	225000	198000	7.90	7.30	21.0	17.0	14000	14000
JUN									
10...	1430	216000	184000	7.80	7.40	21.0	22.0	20000	20000
JUL									
08...	1430	210000	--	7.90	7.50	28.5	26.5	22000	21000
AUG									
20...	1600	213000	181000	7.90	7.40	32.5	29.5	21000	21000

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT									
28...	90	4100	110000	370	750	220	44000	210000	0.50
DEC									
03...	160	3300	110000	410	720	328	26000	220000	0.60
JAN									
29...	500	2900	93000	350	580	275	19000	170000	1.0
MAR									
11...	--	2800	96000	390	540	261	23000	180000	0.60
APR									
28...	100	3300	120000	440	660	164	22000	180000	0.40
JUN									
10...	1000	4200	140000	440	1100	294	38000	220000	0.40
JUL									
08...	700	4800	110000	330	1200	264	37000	180000	0.40
AUG									
20...	200	5000	120000	360	1300	261	38000	190000	0.50

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	BORON, DIS-SOLVED (UG/L AS B) (01020)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT								
28...	64	8.0	--	370000	0.170	6200	850	1400
DEC								
03...	41	8.0	298000	360000	0.250	--	760	2100
JAN								
29...	40	4.4	270000	290000	0.280	16000	200	---
MAR								
11...	47	8.0	275000	300000	0.300	15000	640	1600
APR								
28...	52	9.6	328000	330000	0.150	18000	740	1000
JUN								
10...	82	12	341000	400000	0.160	27000	1200	5000
JUL								
08...	93	15	356000	330000	0.140	31000	1400	5800
AUG								
20...	84	7.4	348000	350000	0.110	29000	1300	8700

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

RIO GRANDE BASIN

SANTA FE SEWAGE TREATMENT PLANT EFFLUENT AT SANTA FE, NM (LAT 35°37'51" LONG 106°05'18")
(LOCAL IDENTIFIER - 16N.08E.10.3114)

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
JUN 23...	1610	501	524	6.80	7.30	27.5	24.0	3.5	69	0	23

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFIDE TOTAL (MG/L AS S) (00745)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
JUN 23...	2.7	82	5	8.5	175	0	149	152	138	<0.5	46

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
JUN 23...	40	1.1	19	323	320	0.870	0.100	0.970	1.50	1.0	2.60

DATE	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)
JUN 23...	11	30	<1	2	33	<0.5	180	<1	<1	<1	3

DATE	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JUN 23...	39	<5	28	24	<0.1	1	1	<1	<1	140	62

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN BASIN

CEDAR DITCH NR CEDAR HILL, NM (LAT 36°56'18" LONG 107°52'56")
(LOCAL IDENTIFIER - 32N.10W.33.4144)

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBON-TETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)
AUG 20...	1040	440	8.00	17.0	1.2	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	ETHYLBENZENE TOTAL (UG/L) (34371)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYL CHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)
AUG 20...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	CHLOROETHYLENE TOTAL (UG/L) (34546)	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)
AUG 20...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	1,2-DIBROMOETHYLENE TOTAL (UG/L) (39082)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	SAMPLING METHOD, CODES (82398)
AUG 20...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	70.0

ANIMAS RIVER BL HIWAY 550 AT AZTEC, NM (LAT 36°49'30 LONG 108°00'12")
(LOCAL IDENTIFIER - 30N.11W.09.311)

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
APR 17...	1440	350	7.60	9.0	10

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN BASIN -- Continued

09357000 SAN JUAN RIVER AT BLOOMFIELD,NM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR						
16...	1400	1530	290	7.80	8.5	6.0

09357100 SAN JUAN RIVER AT HAMMOND BRIDGE NR BLOOMFIELD,NM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
FEB						
28...	1200	1240	330	8.40	--	6.0
APR						
16...	0835	1600	295	7.70	8.0	3.0

SAN JUAN RIVER AT PUMPING STATION NEAR FARMINGTON, NM (LAT 36°42'26 LONG 108°11'52")

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR					
15...	1005	300	7.70	7.5	6.0

09365000 SAN JUAN RIVER AT FARMINGTON, NM

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR						
15...	0930	2780	320	7.70	8.0	6.0

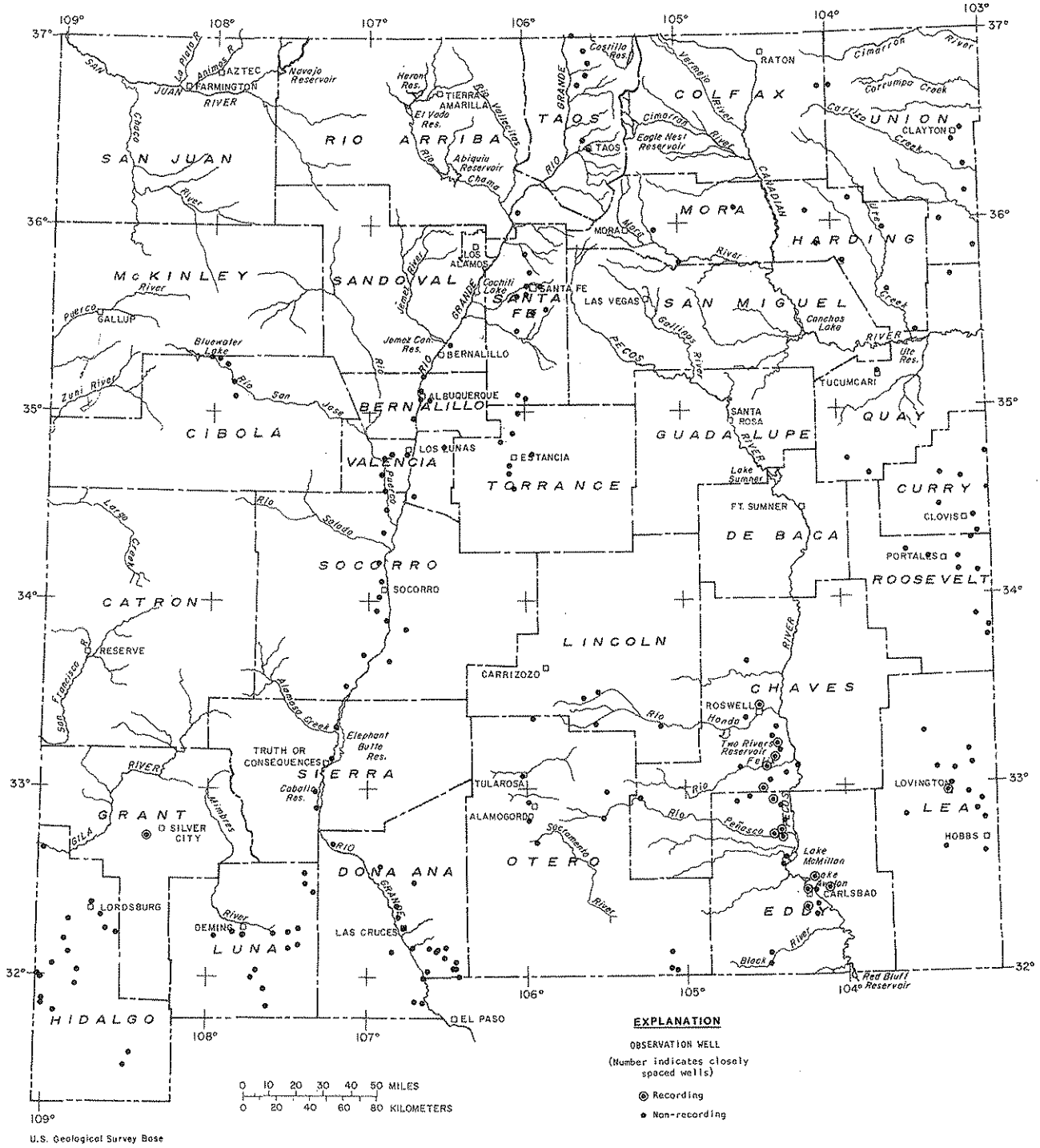


Figure 8.--Location of observation wells in New Mexico.

BERNALILLO COUNTY
Albuquerque Area

345730106431001. Local number, 09N.02E.34.322.
LOCATION.--Lat 34°57'30", long 106°43'10", Hydrologic Unit 13020203. Owner: Denison.
AQUIFER.--Santa Fe Group of middle (?) Miocene to Pleistocene (?) Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,910 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.38 ft above land-surface datum.
PERIOD OF RECORD.--July 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.22 ft below land-surface datum, Aug. 10, 1973; lowest, 16.30 ft below land-surface datum, Jan. 12, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 7	13.52
Sept. 11	12.58

350655106395001. Local number, 10N.02E.12.223.
LOCATION.--Lat 36°06'55", long 106°39'50", Hydrologic Unit 13020203. Owner: City of Albuquerque.
AQUIFER.--Alluvium and Santa Fe Group.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 950 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,962 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top north side of casing, 6.00 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1953, Jan. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.10 ft below land-surface datum, Apr. 16, 1953, lowest measured, 34.74 ft below land-surface datum, Aug. 31, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 3	31.80
Sept.	not measured

350415106403001. Local number, 10N.02E.24.413.
LOCATION.--Lat 35°04'15", long 106°40'30", Hydrologic Unit 13020203. Owner: City of Albuquerque.
AQUIFER.--Alluvium and Santa Fe Group.
WELL CHARACTERISTICS--Drilled observation water-table well, diameter 6 in., depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,945 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top east side of casing, 5.50 ft above land-surface datum.
PERIOD OF RECORD.--Nov. 1956 to current year.
EXTREMES FOR PERIOD OF RECORD--Highest water level measured, 9.72 ft below land-surface datum, July 30, 1985; lowest measured, 27.05 ft below land-surface datum, Aug. 12, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 7	10.00
Sept.	not measured

CHAVES COUNTY
Roswell Basin

334645104344501. Local number, 07S.23E.23.244.
LOCATION.--Lat 33°46'45", long 104°34'45", Hydrologic Unit 13060005. Owner: Jess Corn.
AQUIFER.--San Andres Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 14 in., depth 426 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,810 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower outer edge of mouth of discharge pipe, 3.71 ft above land-surface datum.
PERIOD OF RECORD.--May 1951 to Mar. 1960, Jan. 1962 to Jan. 1966, Jan. 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 239.83 ft below land-surface datum, May 26, 1951; lowest, 290.80 ft below land-surface datum, Aug. 21, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	277.25
Sept. 4	276.60

CHAVES COUNTY
Roswell Basin

332615104303601. Local number, 10S.24E.21.212.
LOCATION.--Lat 33°26'15", long 104°30'36", Hydrologic Unit 13060008. Owner: U.S. Geological Survey.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled artesian observation well completed in San Andres Limestone, diameter 10 in., depth 324 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,580.65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.60 ft above land-surface datum.
PERIOD OF RECORD.--June 1940 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.06 ft below land-surface datum, Jan. 19, 1946; lowest, 74.40 ft below land-surface datum, July 30, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.10	52.90	51.22	49.88	48.97	49.09	52.15	54.68	54.25	51.63	55.40	53.02
10	55.28	52.58	50.99	49.74	48.71	49.24	53.01	55.25	54.17	51.54	56.19	---
15	54.89	52.29	50.79	49.42	48.40	49.83	54.01	55.52	54.15	51.89	55.85	---
20	54.23	51.93	50.67	49.21	48.47	50.27	54.41	55.47	54.31	52.99	56.06	52.38
25	53.88	51.61	50.36	49.37	48.63	50.40	55.13	55.73	53.07	53.98	54.97	52.35
EOM	53.24	51.43	50.19	49.13	48.90	50.80	55.22	54.99	52.26	55.11	53.94	51.48

WTR YEAR 1986 HIGHEST 48.37 FEB 16, 1986 LOWEST 57.93 AUG 8, 1986

331930104261001. Local number, 11S.25E.29.34333.
LOCATION.--Lat 33°19'30", long 104°26'10", Hydrologic Unit 13060007. Owner: Valle Ranch.
AQUIFER.--Valley Fill
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 160 ft, cased to 160 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,535 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of pump base, southeast corner, at land-surface datum.
PERIOD OF RECORD.--Aug. 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.01 ft below land-surface datum, Jan. 21, 1985; lowest measured, 21.72 ft below land-surface datum, Aug. 26, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	18.04
Sept. 4	19.17

332200104270001. Local number, 12S.25E.09.422.
LOCATION.--Lat 33°22'00", long 104°27'00", Hydrologic Unit 13060007. Owner: Cumberland Townsite.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., reported depth 90 ft, cased to 90 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,564 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4 in. collar, 0.62 ft above land-surface datum.
PERIOD OF RECORD.--May 1937 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.64 ft below land-surface datum, Oct. 16, 1941; lowest measured, 83.06 ft below land-surface datum, Aug. 21, 1973.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	74.47
Sept. 4	74.76

331525104245201.(formerly 331205104245101) Local number, 12S.25E.23.344.
LOCATION.--Lat 33°12'05", long 104°24'51", Hydrologic Unit 13060007. Owner: U.S. Geological Survey.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 9 to 7 in., depth 930 ft, 9 in. casing 0-304 ft, 7 in. casing 304-714 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,539 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.
REMARKS.--Lost record, several days, due to recorder malfunction.
PERIOD OF RECORD.--Jan. 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.06 ft below land-surface datum, Feb. 14, 1986; lowest, 199.68 ft below land-surface datum, June 20, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.00	30.93	27.03	24.94	---	39.55	108.02	90.59	89.86	46.64	119.23	51.26
10	46.81	32.74	29.24	22.20	21.12	54.69	108.10	---	73.30	52.08	106.79	44.25
15	44.27	29.29	26.67	21.41	---	65.56	109.79	---	70.93	71.65	113.00	42.28
20	36.38	27.90	26.44	---	---	76.14	95.39	106.40	96.68	84.66	114.69	52.22
25	35.42	28.18	23.81	22.12	27.54	84.77	103.76	108.47	61.35	109.53	106.32	43.98
EOM	33.24	27.68	24.01	---	31.62	84.29	102.98	107.73	49.98	122.18	83.86	41.18

WTR YEAR 1986 HIGHEST 19.72 FEB 14, 1986 LOWEST 128.77 AUG 7, 1986

CHAVES COUNTY
Roswell Basin

331524104245101. Local number, 12S.25E.23.344A.
LOCATION.--Lat 33°15'24", long 104°24'51", Hydrologic Unit 13060007. Owner: U.S. Geological Survey.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled observation well, diameter 7 in., total depth 231 ft, cased to total depth, perforated 105-231 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 2.90 ft above land-surface datum.
PERIOD OF RECORD.--1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 102.79 ft below land-surface datum, April 6 and 14, 1969; lowest, 111.17 below land-surface datum, Sept. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	108.03	107.78	107.59	107.26	107.01	106.64	106.42	106.52	106.76	106.87	106.86	107.15
10	108.01	107.83	107.58	107.31	106.94	106.55	106.32	106.62	106.87	106.78	106.92	107.06
15	108.08	107.79	107.48	107.17	106.80	106.55	106.41	106.59	106.86	106.79	106.91	107.16
20	107.99	107.70	107.44	107.10	106.79	106.59	106.45	106.57	106.92	106.78	106.95	107.07
25	107.93	107.65	107.40	107.22	106.73	106.42	106.44	106.68	106.90	106.81	106.96	107.04
EOM	107.75	107.62	107.37	107.02	106.72	106.40	106.55	106.71	106.87	106.88	107.03	106.95

WTR YEAR 1986 HIGHEST 106.26 APR 2, 1986 LOWEST 108.45 OCT 4, 1985

331216104241701. Local number, 13S.25E.12.311.
LOCATION.--Lat 33°12'16", long 104°24'17", Hydrologic Unit 13060007. Owner: Hal Bogle.
AQUIFER.--Alluvium
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 13 in., depth 190 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,506 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in pump base, 1.27 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1939 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.23 ft below land-surface datum, Feb. 3, 1942; lowest measured, 90.13 ft below land-surface datum, Aug. 27, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	82.37
Sept. 4	86.75

331002104254701.(formerly 331002104272001) Local number, 13S.25E.27.211.
LOCATION.--Lat 33°10'02", long 104°27'20", Hydrologic Unit 13060007. Owner: Hal Bogle.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled artesian observation well completed in San Andres Limestone, diameter 10 in., depth 880 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land-surface datum is 3,523.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 3.59 ft above land-surface datum.
REMARKS.--Lost records, June and July.
PERIOD OF RECORD.--1940 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.42 ft above land-surface datum, Feb. 16, 1986; lowest, 198.30 ft below land-surface datum, July 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.97	25.40	20.75	15.31	15.53	39.20	110.00	105.12		---	127.97	50.67
10	36.15	---	17.44	13.56	13.95	54.30	121.78	108.32		---	107.60	40.67
15	38.18	---	17.62	13.12	11.42	72.74	117.88	123.17		---	122.70	37.34
20	30.88	21.45	18.57	12.90	14.19	84.88	113.20	124.60		87.30	124.42	44.70
25	29.80	22.00	15.00	13.86	24.50	92.50	114.17	117.10		123.55	120.86	38.42
EOM	27.60	21.04	16.47	14.20	27.99	90.45	117.17	---		140.20	95.66	41.60

WTR YEAR 1986 HIGHEST 11.20 FEB 17, 1986 LOWEST 146.00 JUL 31, 1986

330700104402501. Local number, 14S.23E.08.144 .
LOCATION.--Lat 33°07'00", long 104°40'25", Hydrologic Unit 13060009. Owner: M.D. Kincaid.
AQUIFER.--San Andres Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled stock water-table well, diameter 8 in., depth 460 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,900 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1940 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 257.55 ft below land-surface datum, Feb. 9, 1943; lowest measured, 327.34 ft below land-surface datum, Aug. 27, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 21	304.48
Sept. 11	302.70

CHAVES COUNTY
Roswell Basin

330640104174501. Local number, 14S.26E.12.433B.
LOCATION.--Lat 33°06'40", long 104°17'45", Hydrologic Unit 13060007. Owner: C. B. Donaghay.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 13 in., depth 125 ft, cased 0-125 ft, perforated 50-115 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,396.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--Jan. 1940 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.50 ft below land-surface datum, Jan. 22, 1942; lowest measured, 23.77 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	19.29
Sept. 4	16.04

325845104295501. Local number, 15S.24E.25.433.
LOCATION.--Lat 32°58'45", long 104°29'55", Hydrologic Unit 13060007. Owner: U.S. Geological Survey.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 910 ft, casing 0-548 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,528.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.15 ft above land-surface datum.
REMARKS.--+ indicates water level above land surface. Lost record, many days, due to well flowing and recorder malfunction.
PERIOD OF RECORD.--1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.33 ft above land-surface datum, Dec. 1, 1984; lowest, 102.30 ft below land-surface datum, July 17, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	.70					---	67.95	28.17	35.89	+0.20	61.60	6.97
10	.90					---	66.22	44.93	13.78	1.72	54.79	1.85
15	+1.08					---	69.84	68.47	16.99	3.73	45.81	+1.30
20	+1.18					41.06	69.16	70.74	46.47	13.79	37.09	4.69
25	---					51.86	66.30	69.70	17.45	30.69	46.50	2.77
EOM	---					60.49	56.87	51.05	4.17	56.60	12.12	2.89

WTR YEAR 1986 HIGHEST +1.30 SEPT 15, 1986 LOWEST 78.39 MAY 22, 1986

CIBOLA COUNTY
Grants-Bluewater Area

350400107510501. Local number, 10N.10W.26.331.
LOCATION.--Lat 35°04'00", long 107°51'05", Hydrologic Unit 13020207 Owner: Monico Mirabal.
AQUIFER.--Glorieta Sandstone of Permian Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 216 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,455 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1/2 in. hole in pump base, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.18 ft below land-surface datum, Feb. 21, 1952; lowest measured, 34.69 ft below land-surface datum, Jan. 17, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	28.98
Sept. 18	28.67

350925107523001. Local number, 11N.10W.27.241.
LOCATION.--Lat 35°09'25", long 107°52'30", Hydrologic Unit 13020207. Owner: City of Grants.
AQUIFER.--San Andres Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled industrial water-table well, diameter 16 to 12 in., depth 158 ft, perforated to 58 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,840 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--Feb. 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.86 ft below land-surface datum, Feb. 20, 1953; lowest measured, 39.08 ft below land-surface datum, Aug. 1, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	19.98
July 30	21.26

CIBOLA COUNTY
Grants-Bluewater Area

351400107524201. Local number, 12N.10W.29.434.
LOCATION.--Lat 35°14'00", long 107°52'42", Hydrologic Unit 13020207. Owner: A. R. Card.
AQUIFER.--San Andres Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 in., reported depth 205 ft, cased 0-150 ft, perforated 93-130 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,552 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower edge of hole in north side of casing, 2.20 ft above land-surface datum.
PERIOD OF RECORD.--Oct. 1944, Feb. 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.46 ft below land-surface datum, Oct. 14, 1944; lowest measured, 107.61 ft below land-surface datum, Aug. 6, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	76.51
Sept. 19	73.55

351650107535001. Local number, 12N.11W.09.424.
LOCATION.--Lat 35°16'50", long 107°53'50", Hydrologic Unit 13020207. Owner: Tom Yager.
AQUIFER.--San Andres Limestone and Yeso Formation of Permian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 16 in., reported depth 505 ft, 16 in. casing to 175 ft, 12 in. casing to 325 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,642 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 3.05 ft above land-surface datum.
PERIOD OF RECORD.--May. 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 90.04 ft below land-surface datum, Sept. 5, 1986; lowest measured, 274.81 ft below land-surface datum, Jan. 23, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	91.36
Sept. 5	90.04

351610107513501. Local number, 12N.11W.14.213.
LOCATION.--Lat 35°16'10", long 107°51'35", Hydrologic Unit 13020207. Owner: Duane Berryhill.
AQUIFER.--Alluvium of Quaternary Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 130 ft, surface casing 5 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,605.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in casing, 3.70 ft above land-surface datum (since Feb. 10, 1966).
PERIOD OF RECORD.--June 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.74 ft below land-surface datum, Sept. 25, 1986; lowest measured, 101.39 ft below land-surface datum, June 10, 1954.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	81.87
Sept. 25	81.74

COLFAX COUNTY
Capulin Basin

364500104031501. Local number, 29N.27E.16.222.
LOCATION.--Lat 36°45'00", long 104°03'15", Hydrologic unit 11040001. Owner: John King.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 120 ft, cased to 20 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,821.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1957 to Feb. 1969, Feb. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.65 ft below land-surface datum, Feb. 3 and Aug. 24, 1960; lowest measured, 9.37 ft below land-surface datum, Aug. 13, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 28	8.48
Sept. 9	8.69

COSTILLA COUNTY (in Colorado)
Sunshine Valley

370009105410001. Local number, 01N.74W.33.322.
LOCATION.--Lat 37°00'09", long 105°41'00", Hydrologic unit 13020101. Owner: Waller and Allen.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 15 in., depth 232 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,495 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of hole inside pump base, 2.00 ft above land-surface datum (since 1971).
PERIOD OF RECORD.--Feb. 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 101.82 ft below land-surface datum, Aug. 26, 1968; lowest measured, 139.24 ft below land-surface datum, Sept. 2, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Mar. 6	137.00
Sept. 10	116.18

CURRY COUNTY
Clovis area

342358103093601. Local number, 02N.36E.15.111.
LOCATION.--Lat 34°23'58", long 103°09'36", Hydrologic Unit 12050001. Owner: Unknown.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter, depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,227 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete base 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 266.89 ft below land-surface datum, Jan. 4, 1974; lowest measured, 291.29 ft below land-surface datum, Aug. 6, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	283.60
Sept. 4	282.28

342815103270001. Local number, 03N.34E.23.433.
LOCATION.--Lat 34°28'15", long 103°27'00", Hydrologic Unit 12050001. Owner: Monte Matlock.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in., depth 418 ft, cased to 418 ft, perforated 365-418 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,432 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, level with concrete base, 0.40 ft above land-surface datum (since 1967).
PERIOD OF RECORD.--Apr. 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 340.62 ft below land-surface datum, Mar. 16, 1957; lowest measured, 360.64 ft below land-surface datum, July 23, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 11	355.11
Sept. 4	355.65

343743103201501. Local number, 05N.34E.21.443.
LOCATION.--Lat 34°37'43", long 103°20'15", Hydrologic Unit 11120101. Owner: Garrett Farms.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled abandoned irrigation well, diameter 16 in., depth 510 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,632 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 ft X 4 ft concrete pump base, 0.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 6, 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 440.14 ft below land-surface datum, Jan. 6, 1971; lowest measured, 448.41 ft below land-surface datum, Jan. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	442.28
Sept. 4	441.75

CURRY COUNTY
Clovis area

343615103123801. Local number, 05N.35E.35.313.
LOCATION.--Lat 34°36'15", long 103°12'38", Hydrologic Unit 11120101. Owner: S. W. Pipkin.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation well, diameter 16 in., depth 527 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,504 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 376.40 ft Mar. 26, 1954; lowest measured, 444.02 ft Sept. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	442.99
Sept. 4	444.02

344500103032001. Local number, 06N.37E.08.333.
LOCATION.--Lat 34°45'00", long 103°03'20", Hydrologic Unit 11120101. Owner: Paul Harrison.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 400 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,430 ft above National Geodetic Vertical Datum of 1929. Measuring point: Southeast anchor bolt hole, 0.10 ft above concrete base and 0.70 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 288.95 ft below land-surface datum, Sept. 4, 1986; lowest measured, 295.98 ft below land-surface datum, Aug. 15, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	289.27
Sept. 4	288.95

DONA ANA COUNTY
Rincon and Mesilla Valleys

322210106483001. Local number, 22S.01E.26.411.
LOCATION.--Lat 32°22'10", long 106°48'30", Hydrologic Unit 13030102. Owner: H. Wortheim.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 107 ft, cased to 107 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,920 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of east side of casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.12 ft below land-surface datum, Jan. 27, 1977; lowest measured, 25.57 ft below land-surface datum, Apr. 25, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 22	11.87
Aug.	not measured

321620106461501. Local number, 23S.02E.31.213.
LOCATION.--Lat 32°16'20", long 106°46'15", Hydrologic Unit 13030102. Owner: New Mexico State University.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 14 in., reported depth 70 ft, cased to 70 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,880 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 5/8 in. hole in pump base, 1.08 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1948, Apr. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.13 ft below land-surface datum, Feb. 10, 1948; lowest measured, 29.12 ft below land-surface datum, Jan. 7, 1958.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 23	20.91
Aug.	not measured

EDDY COUNTY
Roswell Basin

325510104410001. Local number, 16S.23E.15.323.
LOCATION.--Lat 32°55'10", long 104°41'00", Hydrologic Unit 13060007. Owner: D.W. Runyan.
AQUIFER.--San Andres Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled stock water-table well, diameter 10 in., depth 1,458 ft, cased.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,900 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.70 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1951 to Jan. 1965, Feb. 1970 to Aug. 1971, Jan. 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 225.16 ft below land-surface datum, Jan. 12, 1951; lowest measured, 277.60 ft below land-surface datum, Aug. 5, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 4	256.57
Sept. 11	257.74

325735104360701. Local number, 16S.24E.04.23123.
LOCATION.--Lat 32°57'35", long 104°36'07", Hydrologic Unit 13060007. Owner: Ellis Hunlic.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter not available, depth 610 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,623 ft above National Geodetic Vertical Datum of 1929. Measuring point: Southwest side of pump, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.61 ft below land-surface datum, Sept. 11, 1986; lowest measured, 100.54 ft below land-surface datum, Aug. 27, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 4	77.11
Sept. 11	75.61

325712104314501. Local number, 16S.25E.06.313.
LOCATION.--Lat 32°57'12", long 104°31'45", Hydrologic Unit 13060007. Owner: Frank Childress.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 20 in., depth 39 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,600 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of cribbing 0.40 ft above land-surface datum.
PERIOD OF RECORD.--Sept. 1937 to Jan. 1966, Aug. 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.41 ft below land-surface datum, July 17, 1961; lowest measured, 31.66 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 4	29.40
Sept. 11	26.04

325638104274801. Local number, 16S.25E.11.111A.
LOCATION.--Lat 32°56'38", long 104°27'48", Hydrologic Unit 13060007. Owner: U.S. Geological Survey.
AQUIFER.--Valley Fill.
WELL CHARACTERISTIC.--Drilled observation well, diameter 7 in., depth 171 ft, casing 0-171 ft, perforated 94-170 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,450 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 3.00 ft above land-surface datum.
PERIOD OF RECORD.--1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.90 ft below land-surface datum, Feb. 18, 1966; lowest measured, 64.72 ft below land-surface datum, June 25, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.06	63.37	62.92	62.48	62.23	62.44	62.94	63.67	64.44	64.32	64.12	64.17
10	63.95	63.30	62.84	62.45	62.30	62.46	63.10	63.80	64.55	64.14	64.16	64.05
15	63.87	63.21	62.77	62.40	62.30	62.48	63.23	63.95	64.62	64.03	64.17	63.92
20	63.74	63.15	62.70	62.35	62.36	62.57	63.33	64.08	64.67	63.99	64.18	63.78
25	63.60	63.07	62.58	62.26	62.42	62.64	63.39	64.22	64.72	64.02	64.18	63.64
EOM	63.47	62.99	62.53	62.22	62.44	62.79	63.51	64.35	64.51	64.08	64.19	63.49

WTR YEAR 1986 HIGHEST 62.21 FEB 2-3, 1986 LOWEST 64.74 JUNE 25, 1986

EDDY COUNTY
Roswell Basin

325445104253501. Local number, 16S.26E.19.211.
LOCATION.--Lat 32°54'45", long 104°25'35", Hydrologic Unit 13060007. Owner: H. V. Parker.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth 175 ft, cased to 107 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,397.9 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in top of pump, west side, 0.30 ft above top of casing (since 1975).
PERIOD OF RECORD.--Jan. 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.34 ft below land-surface datum, Jan. 15, 1942; lowest measured, 112.85 ft below land-surface datum, Sept. 13, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 4	105.04
Sept. 11	105.30

324831104435701. Local number, 17S.23E.30.13244
LOCATION.--Lat 32°48'31", long 104°43'57", Hydrologic Unit 13060007. Owner: Village of Hope.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled public-supply artesian well, diameter 16 in., depth 600 ft, cased to 558 ft, perforated 498-558 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,095 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. pipe extension on north side of concrete base, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--Dec. 1968, Jan. 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 534.08 ft below land-surface datum, Feb. 19, 1986; lowest measured, 553.18 ft below land-surface datum, Aug. 7, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 19	534.08
Sept. 11	535.20

324930104234501. Local number, 17S.26E.21.112
LOCATION.--Lat 32°49'30", long 104°23'45", Hydrologic Unit 13060007. Owner: Western Land Co., Inc.
AQUIFER.--Artesia Group.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth 242 ft, cased to 242 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,373 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4 in. plug on discharge pipe, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1938 to Jan. 1945, Jan. 1947 to Aug. 1958, Jan. 1960 to Jan. 1963, Jan. 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.23 ft below land-surface datum, Jan. 13, 1955; lowest measured, 109.80 ft below land-surface datum, Aug. 12, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Sept. 13	pumping

324620104255001.(formerly 324624104244501) Local number, 18S.26E.06.442A.
LOCATION.--Lat 32°46'24", long 104°24'45", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 9 in., depth 1,008 ft, cased to 726 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,402.1 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.40 ft above land-surface datum.
REMARKS.--Depth to artesian aquifers 768 ft, 820 ft, 889 ft, and 999 ft. Lost record due to recorder malfunction.
PERIOD OF RECORD.--June 1961 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.79 ft below land-surface datum, Jan. 26, 1962; lowest, 209.15 ft below land-surface datum, July 31-Aug. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	118.55	103.39	94.94	87.89	82.41	85.70	120.00	---	126.09	102.83	139.11	---
10	115.13	101.39	93.25	87.03	81.52	88.18	125.56	---	117.07	100.01	134.89	---
15	112.63	99.88	92.43	85.82	80.82	91.79	130.28	129.43	113.06	101.35	132.36	106.15
20	109.40	98.28	91.31	85.06	81.39	98.44	130.03	132.42	120.29	107.81	132.09	105.07
25	107.45	96.88	90.27	84.59	81.77	102.50	---	139.53	114.63	116.74	130.13	103.80
EOM	104.42	95.85	88.84	83.55	82.72	110.39	---	137.93	107.31	133.25	118.08	103.56

WTR YEAR 1986 HIGHEST 80.61 FEB 17, 1986 LOWEST 143.69 MAY 30, 1986

EDDY COUNTY
Roswell Basin

324620104255101. Local number, 18S.26E.06.442B.
LOCATION.--Lat 32°46'20", long 104°25'51", Hydrologic Unit 13060007. Owner: U.S. Geological Survey
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled observation well, diameter 7 in., depth 246 ft, casing 0-246 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,402 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.70 ft above land-surface datum.
REMARKS.--Lost record , several days, due to recorder malfunction.
PERIOD OF RECORD.--1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.83 ft below land-surface datum, Jan. 7, 1974; lowest measured, 140.59 ft below land-surface datum, Sept. 13, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	135.47	---	126.81	123.47	120.91	118.97	122.86	128.15	131.77	128.94	128.32	128.67
10	134.69	---	126.28	123.26	120.53	118.80	123.90	128.96	131.60	128.01	129.05	127.74
15	134.07	---	125.76	122.59	120.04	118.94	125.23	129.20	130.86	127.39	128.98	127.05
20	133.08	128.58	125.21	122.07	119.66	119.46	126.12	129.38	130.50	126.75	128.96	126.28
25	---	127.87	124.67	122.00	119.41	119.91	126.74	130.26	130.49	126.65	129.37	125.55
EOM	---	127.28	124.13	121.22	119.31	121.38	127.37	131.25	129.70	127.40	129.31	124.81

WTR YEAR 1986 HIGHEST 118.66 MAR 11, 1986 LOWEST 136.55 OCT 1, 1985

324325104233001. Local number, 18S.26E.28.122.
LOCATION.--Lat 32°43'25", long 104°23'30", Hydrologic Unit 13060011. Owner: Town of Dayton.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 250 ft, cased to 182 ft, casing slotted 92-182 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,403 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.06 ft above land-surface datum.
PERIOD OF RECORD.--Aug. 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 59.79 ft below land-surface datum, Feb. 5, 1952; lowest, 124.87 ft below land-surface datum, Feb. 25, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	121.99	121.97	122.12	122.06	122.18	122.13	122.29	122.15	122.24	122.22	122.25	122.47
10	122.07	122.08	122.12	122.16	122.19	122.18	122.14	122.25	122.28	122.18	122.34	122.41
15	122.12	122.11	122.12	122.11	122.12	122.27	122.27	122.22	122.21	122.22	122.34	122.50
20	122.06	122.06	122.13	122.08	122.16	122.38	122.24	122.14	122.26	122.19	122.45	122.51
25	122.07	122.07	122.17	122.23	122.15	122.19	122.20	122.25	122.21	122.21	122.46	122.49
EOM	121.88	122.07	122.15	122.11	122.19	122.23	122.23	122.19	122.21	122.25	122.43	122.50

WTR YEAR 1986 HIGHEST 121.88 OCT 31, 1985 LOWEST 122.57 SEPT 11, 1986

323540104232001. Local number, 20S.26E.08.1211.
LOCATION.--Lat 32°35'40", long 104°23'20", Hydrologic Unit 13060011. Owner: Moutry
AQUIFER.--Valley Fill
WELL CHARACTERISTICS.--Drilled irrigation water-table well,diameter 13in., depth 346 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 2,386 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of basal flange of pump head, 0.20 ft above land-surface datum.
REMARKS.--c indicates nearby well being pumped.
PERIOD OF RECORD.--Jan. 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.87 ft below land-surface datum, Jan. 2, 1943; lowest measured, 90.25 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	67.81
Aug. 19	c 87.69

EDDY COUNTY
Carlsbad Area

322637104142301.(formerly 322652104141901) Local number, 21S.26E.36.221.
LOCATION.--Lat 32°26'52", long 104°14'19", Hydrologic Unit 13060011. Owner: City of Carlsbad.
AQUIFER.--Capitan Limestone.
WELL CHARACTERISTICS.--Drilled municipal well, diameter 20 in., depth 327 ft, casing 0-290 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land-surface datum is 3,121.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 4.14 ft above land-surface datum.
REMARKS.--Lost record, many days, due to recorder malfunction.
PERIOD OF RECORD.--April 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.23 ft below land-surface datum, Jan. 9 and Feb. 15, 1975; lowest measured, 26.07 ft below land-surface datum, Aug. 2, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.87	22.45	22.63	22.12	21.22	22.06	22.50	23.20	23.22	19.65	20.70	20.66
10	22.76	22.50	22.53	---	21.20	22.12	22.72	23.48	23.24	19.77	20.90	20.63
15	22.80	22.60	22.54	21.77	21.20	22.12	22.80	23.57	23.43	20.03	20.87	20.66
20	22.71	22.60	22.42	21.64	21.27	22.22	23.16	23.58	23.23	20.17	21.06	20.62
25	22.52	22.50	22.34	21.45	21.50	22.34	23.15	23.97	20.82	20.26	21.03	20.60
EOM	22.38	22.48	22.24	21.40	21.67	22.44	23.14	23.42	19.78	20.57	20.75	20.58

WTR YEAR 1986 HIGHEST 19.63 JULY 4, 1986 LOWEST 23.97 MAY 5, 25, 1986

322640104165801. Local number, 21S.27E.32.112.
LOCATION.--Lat 32°26'40", long 104°16'58", Hydrologic Unit 13060011. Owner: L. E. Loman.
AQUIFER.--Capitan Limestone of Permian Age.
WELL CHARACTERISTICS.--Drilled domestic and irrigation artesian well, diameter 12 in., reported depth 305 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,112 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.
PERIOD OF RECORD.--Oct. 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.64 ft below land-surface datum, Jan. 17, 1950; lowest measured, 17.35 ft below land-surface datum, Aug. 9, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	12.44
Aug. 18	11.87

322712104074501.(formerly 322710104073901) Local number, 21S.28E.30.141.
LOCATION.--Lat 32°27'10", long 104°07'39", Hydrologic Unit 13060011. Owner: Forrest Miller.
AQUIFER.--Capitan Limestone.
WELL CHARACTERISTICS.--Drilled exploration well, diameter 8 5/8 - 5 1/2 in., reported depth 1,060 ft, plugged back, total depth 906 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,181.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.64 ft above land-surface datum.
PERIOD OF RECORD.--1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.72 ft below land-surface datum, Jan. 9 and Feb. 10, 1975; lowest measured, 98.68 ft below land-surface datum, Aug. 3, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.37	93.78	93.93	93.37	92.48	93.26	93.85	94.44	94.46	91.12	91.93	91.91
10	94.22	93.84	93.78	93.34	92.50	93.34	93.89	94.73	94.46	91.14	92.20	91.90
15	94.20	94.00	93.83	93.04	92.50	93.50	94.26	94.88	94.61	91.40	92.12	91.91
20	94.10	93.95	93.75	92.84	92.60	93.65	94.38	94.78	94.49	91.44	92.33	91.90
25	93.95	93.82	93.64	92.84	92.84	93.58	94.37	---	92.42	91.60	92.33	91.87
EOM	93.69	93.77	93.57	92.65	93.07	93.77	94.44	94.67	91.36	91.86	92.00	91.81

WTR YEAR 1986 HIGHEST 91.08 JULY 4, 1986 LOWEST 95.39 MAY 25, 1986

322120104151501. Local number, 22S.26E.25.3333 (formerly 22S.26E.36.111A)
LOCATION.--Lat 32°21'20", long 104°15'15", Hydrologic Unit 13060011. Owner: Carlsbad Airfield.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 260 ft, cased to 260 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,225 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.70 ft above land-surface datum.
PERIOD OF RECORD.--July 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.50 ft below land-surface datum, Oct. 14, 1942; lowest, 214.82 ft below land-surface datum, Sept. 15, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	165.65	159.88	156.20	153.78	152.31	151.56	154.87	159.22	160.83	---	138.47	143.37
10	164.52	159.20	155.63	153.79	152.23	151.62	156.21	159.24	160.32	---	139.78	142.98
15	163.69	158.56	155.31	153.33	152.00	152.10	157.06	159.80	160.08	---	140.54	142.81
20	162.72	157.83	154.94	152.99	151.80	152.40	158.19	160.83	160.24	---	141.29	142.52
25	161.83	157.09	154.52	152.96	151.78	152.49	158.77	161.61	147.47	133.78	142.18	142.12
EOM	160.50	156.45	154.10	152.55	151.77	153.32	159.24	161.42	---	136.41	143.28	141.86

WTR YEAR 1986 HIGHEST 133.60 JULY 24, 1986 LOWEST 166.77 OCT 1, 1985

EDDY COUNTY
Carlsbad Area

322231104131001. Local number, 22S.27E.22.421.
LOCATION.--Lat 32°22'31", long 104°13'10", Hydrologic Unit 13060011. Owner: Enea Grandi.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., reported depth 150 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,100 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.20 ft above land-surface datum.
PERIOD OF RECORD.--Sept. 1947 to Aug. 1968, Jan. 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.43 ft below land-surface datum, Sept. 15, 1950; lowest measured, 81.10 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	38.46
Aug.	not measured

321741104204901.(formerly 321721104204801) Local number, 23S.25E.24.213.
LOCATION.--Lat 32°17'21", long 104°20'48", Hydrologic Unit 13060011. Owner: City of Carlsbad.
AQUIFER.--Capitan Limestone.
WELL CHARACTERISTICS.--Drilled observation well, diameter 16 in. 0-20 ft, open hole 20-900 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land-surface datum is 3,501.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.17 ft above land-surface datum.
REMARKS.--Lost record Dec. and Jan.
PERIOD OF RECORD.--1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 369.53 ft below land-surface datum, June 27, 1986; lowest measured, 404.06 ft below land-surface datum, July 10, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	400.33	400.15	400.20	---	399.03	399.57	400.30	400.89	400.92	394.02	397.42	397.55
10	400.25	400.14	400.11	---	399.09	399.60	400.41	401.33	400.93	395.70	397.56	397.45
15	400.29	400.15	400.06	399.48	399.06	399.75	400.60	401.42	401.06	396.30	397.80	397.47
20	400.22	400.10	399.97	399.36	399.07	399.92	400.73	401.33	401.11	396.66	398.13	397.30
25	400.29	399.94	399.86	399.34	399.30	400.03	400.85	401.62	373.87	397.05	397.85	395.87
EOM	400.08	400.02	---	399.13	399.40	400.10	400.87	401.20	381.08	397.83	397.61	397.10

WTR YEAR 1986 HIGHEST 369.53 JUNE 27, 1986 LOWEST 401.72 MAY 23, 1986

321930104113301. Local number, 23S.27E.09.211.
LOCATION.--Lat 32°19'30", long 104°11'33", Hydrologic Unit 13060011. Owner: H.C. Bindel.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 200 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,150 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, under pump base, 1.25 ft above land-surface datum.
PERIOD OF RECORD.--July 1949 to Nov. 1955, Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.70 ft below land-surface datum, Sept.15, 1950; lowest measured, 60.92 ft below land-surface datum, Jan. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	56.08
Aug. 18	53.25

320602104285201. Local number, 25S.24E.27.421.
LOCATION.--Lat 32°06'02", long 104°28'52", Hydrologic Unit 13060011. Owner: Walker Hood.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 101 ft, uncased.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,701 ft above National Geodetic Vertical Datum of 1929. Measuring point: Northwest corner of pump base, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1952 to Aug. 1967, Jan. 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.50 ft below land-surface datum, Jan. 15, 1986; lowest measured, 85.10 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	54.50
Aug.	not measured

320257104295201. Local number, 26S.24E.09.441.
LOCATION.--Lat 32°02'57", long 104°29'52", Hydrologic Unit 13060011. Owner: John Mayes.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth 100 ft, cased to 85 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,749.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of air-line flange support, 1.40 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.57 ft below land-surface datum, Aug. 20, 1986; lowest measured, 54.98 ft below land-surface datum, Sept. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	40.75
Aug. 20	39.57

GRANT COUNTY
Silver City Area

324600108222501. Local number, 18S.15W.11.323
LOCATION.--Lat 32°46'00", long 108°22'25", Hydrologic Unit 15040002. Owner: Town of Silver City.
AQUIFER.--Gila Conglomerate.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 580 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 5,845 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 12 in. casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Mar. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 262.34 ft below land-surface datum, Mar. 3, 1962; lowest measured, 294.52 ft below land-surface datum, Apr. 20, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	293.59	293.93	294.34	294.28	293.71	294.23	294.21	294.18	293.82	293.34	292.51	292.27
10	293.15	294.01	294.03	294.28	293.76	293.96	294.03	294.19	293.69	293.18	292.52	292.12
15	293.75	294.33	294.51	293.74	293.80	294.01	294.37	293.99	293.63	293.10	292.43	292.12
20	293.49	294.31	294.28	293.97	293.58	294.24	294.52	293.84	293.52	292.92	292.58	292.03
25	293.72	293.87	294.35	294.34	293.98	293.96	294.38	293.77	293.36	292.79	292.38	291.90
EOM	293.46	293.83	294.48	293.92	294.04	294.04	294.40	293.64	293.34	292.63	292.23	291.85

WTR YEAR 1986 HIGHEST 291.70 SEPT 24, 1986 LOWEST 294.52 APR 20, 1986

HARDING COUNTY
Roy Area

355352104054201. Local number, 19N.27E.05.334.
LOCATION.--Lat 35°53'52", long 104°05'42", Hydrologic Unit 11080007. Owner: Town of Roy.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled used water-table well, diameter 10 in., depth 75 ft, cased to 75 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,658 ft above National Geodetic Vertical Datum of 1929. Measuring point: Bottom edge of slot in steel casing, 3.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1967 to present.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.34 ft below land-surface datum, Jan. 18, 1983; lowest measured, 51.67 ft below land-surface datum, Aug. 7, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 3	50.50
Aug.	not measured

360340104085001. Local number, 21N.26E.03.4443.
LOCATION.--Lat 36°03'40", long 104°08'50", Hydrologic Unit 11080007. Owner: Unknown.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 120 ft, cased to 120 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,870 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 5 in. galvanized casing, 0.30 ft above land-surface datum on east side.
PERIOD OF RECORD.--Jan. 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.92 ft below land-surface datum, Jan. 28, 1976; lowest measured, 84.45 ft below land-surface datum, Sept. 3, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 3	83.06
Aug.	not measured

HIDALGO COUNTY
Virden Valley

324053108594101. Local number, 19S.21W.03.414.
LOCATION.--Lat 32°40'53", long 108°59'41", Hydrologic Unit 15040002. Owner: Jones, Clouse, and Jensen.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 20 in., depth 72 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,750 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole inside pump shell, 0.90 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.27 ft below land-surface datum, Jan. 12, 1979; lowest measured, 14.54 ft below land-surface datum, Sept. 12, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	11.40
July 14	11.67

HIDALGO COUNTY
Lordsburg Area

321848108391401. Local number, 23S.18W.12.333.
LOCATION.--Lat 32°18'48", long 108°39'14", Hydrologic Unit 15040003. Owner: R.I. McDonald.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,365 ft above National Geodetic Vertical Datum of 1929. Measuring point: End of entry port pipe, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.02 ft below land-surface datum, Jan. 11, 1958; lowest measured, 190.45 ft below land-surface datum, Aug. 2, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	168.43
July 16	183.82

321540108514101. Local number, 23S.20W.25.422.
LOCATION.--Lat 32°15'40", long 108°51'41", Hydrologic Unit 15040003. Owner: Kerr Cattle Co.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 150 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,150 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.80 ft above land-surface datum.
PERIOD OF RECORD.--May 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.36 ft below land-surface datum, May 21, 1948; lowest measured, 50.07 ft below land-surface datum, July 14, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 8	49.69
July 14	50.07

321257108331201. Local number, 24S.17W.14.442.
LOCATION.--Lat 32°12'57", long 108°33'12", Hydrologic Unit 15040003. Owner: E.W. Richens.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 420 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,276 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.97 ft below land-surface datum, Jan. 7, 1981; lowest measured, 114.90 ft below land-surface datum, Jan. 15, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	87.69
July 14	89.41

Animas Valley

315645108493501. Local number, 27S.19W.20.343.
LOCATION.--Lat 31°56'45", long 108°49'35", Hydrologic Unit 15040003. Owner: Felix Gauthier.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 358 ft, cased to 358 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,420 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 1 1/4 in. pipe in concrete pump base, 1.25 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.12 ft below land-surface datum, Jan. 19, 1950; lowest measured, 198.50 ft below land-surface datum, Aug. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 8	189.34
July	not measured

HIDALGO COUNTY
San Simon Valley

315010108570001. Local number, 28S.21W.30.222.
LOCATION.--Lat 31°50'10", long 108°57'00", Hydrologic Unit 15040006. Owner: C.L. Johnston.
AQUIFER.--Bolson deposits
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 8 in. depth 471 ft, cased to 471 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,440 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in west side of casing, 0.70 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.62 ft below land-surface datum, Jan. 19, 1971; lowest measured, 124.20 ft below land-surface datum, July 15, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 7	123.90
July 15	124.20

Playas Valley

313502108275001. Local number, 31S.16W.33.233.
LOCATION.--Lat 31°35'02", long 108°27'50", Hydrologic Unit 13030201. Owner: U-Bar Ranch.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 16 in., depth 654 ft, 16 in. casing.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,400 ft above National Geodetic Vertical Datum of 1929. Measuring point: Bottom edge of shelf, 4.05 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.66 ft below land-surface datum, Apr. 18-20, and 30, 1973; lowest, 54.95 ft below land-surface datum, Sept. 4, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 9	47.40
July 16	47.26

LEA COUNTY
Tatum-Lovington-Hobbs Area

331740103285001. Local number, 12S.34E.11.421.
LOCATION.--Lat 33°17'40", long 103°28'50", Hydrologic Unit 12080006. Owner: A. D. Jones.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 15 in., depth 87 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,150 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--May 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.57 ft below land-surface datum, May 24, 1949; lowest measured, 34.14 ft below land-surface datum, Aug. 17, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 6	31.55
Sept. 3	31.50

330400103193401. Local number, 14S.36E.32.121.
LOCATION.--Lat 33°04'00", long 103°19'34", Hydrologic Unit 12080003. Owner: E. T. Howell.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,990 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1949 to Jan. 1950, Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.38 ft below land-surface datum, Jan. 19, 1949; lowest measured, 70.07 ft below land-surface datum, Jan. 14, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 8	66.80
Sept. 3	66.96

LEA COUNTY
Tatum-Lovington-Hobbs Area

325730103213901.(formerly 325703103213201) Local number, 16S.36E.04.322.
LOCATION.--Lat 32°57'03", long 103°21'32", Hydrologic Unit 12080003. Owner: City of Lovington.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 13 in., depth 212 ft, perforated 80-208 ft.
INSTRUMENTATION.--Digital recorder, 1-hour punch.
DATUM.--Elevation of land-surface datum is 3,926 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelf, 4.00 ft above land-surface datum.
PERIOD OF RECORD.--Aug. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.09 ft below land-surface datum, Sept. 29, 1986; lowest measured, 67.11 ft below land-surface datum, Aug. 24, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	63.02	62.81	62.71	62.50	62.29	62.19	62.14	62.14			---	62.32
10	63.02	---	62.67	62.43	62.27	62.18	62.10	62.19			---	62.24
15	62.97	---	62.64	62.41	62.24	62.19	62.13	62.20			---	62.22
20	62.93	---	62.60	62.37	62.22	62.20	62.14	62.22			---	62.19
25	62.87	62.74	62.55	62.38	62.21	62.13	62.13	62.23			62.32	62.13
EOM	62.82	62.67	62.49	62.31	62.22	62.12	62.14	---			62.32	62.09

WTR YEAR 1986 HIGHEST 62.09 SEPT 29, 1986 LOWEST 63.05 OCT 3, 1985

325658103200001. Local number, 16S.37E.11.111.
LOCATION.--Lat 32°56'58", long 103°20'00", Hydrologic Unit 12080003. Owner: H. J. Taylor.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., reported depth 118 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,900 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in southwest side of pump, 1.34 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.93 ft below land-surface datum, Jan. 23, 1949; lowest measured, 78.64 ft below land-surface datum, Jan. 3, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 8	68.25
Sept. 3	67.58

324947103371001. Local number, 17S.33E.13.341.
LOCATION.--Lat 32°49'47", long 103°37'10", Hydrologic Unit 12080003. Owner: Potash Co. of America.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 252 ft, cased to 252 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,124 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.10 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 146.00 ft below land-surface datum, Jan. 21, 1953; lowest measured, 169.95 ft below land-surface datum, Sept. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 8	169.50
Sept. 3	169.95

325132103112501. Local number, 17S.38E.07.111A.
LOCATION.--Lat 32°51'32", long 103°11'25", Hydrologic Unit 12080003. Owner: L. R. Sebings.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., reported depth 125 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,740 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of small pipe projecting from west side of pump, 0.96 ft above concrete pump base, and 1.91 ft above land-surface datum (since 1971).
PERIOD OF RECORD.--July 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.59 ft below land-surface datum, Mar. 21, 1952; lowest measured, 74.15 ft below land-surface datum, July 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 9	69.78
Sept. 3	69.03

LEA COUNTY
Tatum-Lovington Hobbs Area

324745103082001. Local number, 17S.38E.34.113.
LOCATION.--Lat 32°47'45", long 103°08'20", Hydrologic Unit 12080003. Owner: W. E. Busby.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth 125 ft, cased to 90 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,660 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1/2 in. hole in pump base, 0.54 ft above land-surface datum.
PERIOD OF RECORD.--Nov. 1943 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.78 ft below land-surface datum, Jan. 15, 1944; lowest measured, 62.29 ft below land-surface datum, Sept. 4, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 9	59.46
Sept. 3	60.29

LINCOLN COUNTY
Hondo Valley

333015105382201. Local number, 09S.13E.25.113.
LOCATION.--Lat 33°30'15", long 105°38'22", Hydrologic Unit 13060008, 0.4 mi southwest of intersection of Magado Creek and State Highway 48. Owner: M. W. Coll.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation and domestic water-table well, diameter 8 in., depth 90 ft, cased to 40 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,750 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--Dec. 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.04 ft below land-surface datum, Nov. 25, 1958; lowest measured, 44.36 ft below land-surface datum, Aug. 13, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Sept. 11	pumping

333242105340701. Local number, 09S.14E.10.132.
LOCATION.--Lat 33°32'42", long 105°34'07", Hydrologic Unit 13060008, east end of village on south side of Highway U.S. 380. Owner: Village of Capitan.
AQUIFER.--Mancos Shale of Late Cretaceous Age.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 8 in., depth 324 ft, cased to 271 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,340 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of breather hole on west side of pump base, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--June 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.34 ft below land-surface datum, Aug. 30, 1979; lowest measured, 69.77 ft below land-surface datum, Nov. 28, 1956.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 21	40.33
Aug. 20	40.51

332145105333001. Local number, 11S.14E.15.432.
LOCATION.--Lat 33°21'45", long 105°33'30", Hydrologic Unit 13060008. Owner: E.H. Fuchs.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 90 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,200 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
PERIOD OF RECORD.--July 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.16 ft below land-surface datum, Mar. 26, 1958; lowest measured, 63.75 ft below land-surface datum, Aug. 10, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 21	60.35
Aug. 20	60.56

LINCOLN COUNTY
Hondo Valley

332157105094101. Local number, 11S.18E.15.333.
LOCATION.--Lat 33°21'57", long 105°09'41", Hydrologic Unit 13060008. Owner: Lincoln County Livestock Co.
AQUIFER.--Yeso Formation of Permian Age.
WELL CHARACTERISTICS.--Drilled domestic and stock water-table well, diameter 12 in., depth 125 ft, cased to 110 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,010 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.5 ft above land-surface datum.
PERIOD OF RECORD.--Oct. 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.02 ft below land-surface datum, Jan. 25, 1977; lowest measured, 60.18 ft below land-surface datum, Jan. 15, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 21	51.66
Aug. 20	48.76

LUNA COUNTY
Nutt-Hockett

322930107221001. Local number, 21S.05W.08.444.
LOCATION.--Lat 32°29'30", long 107°22'10", Hydrologic Unit 13030202. Owner: Leonard Farms (formerly Jack Carter).
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 435 ft, cased to 435 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,530 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in NE side of pump shell, 1.60 ft above land-surface datum.
REMARKS.--b indicates well pumped recently.
PERIOD OF RECORD.--Nov. 1961 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.06 ft below land-surface datum, Jan. 17, 1962; lowest measured, 181.13 ft below land-surface datum, Aug. 19, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Mar. 17	b 177.17
Aug. 19	181.13

Mimbres Valley

321352107493901. Local number, 24S.10W.12.431.
LOCATION.--Lat 32°13'52", long 107°49'39", Hydrologic Unit 13030202. Owner: Steve Hrna.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Dug and drilled unused water-table well, diameter 36 in., reported depth 132 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,330 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter shelf, 1.36 ft above land-surface datum.
REMARKS.--Recorder removed June 30, 1986.
PERIOD OF RECORD.--Apr. 1939 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.61 ft below land-surface datum, May 6-13, 1940; lowest, 113.30 ft below land-surface datum, Aug. 12 and 20, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEVEL
Jan. 22	102.07
June 30	103.11

321415107565501. Local number, 24S.11W.14.122.
LOCATION.--Lat 32°14'15", long 107°56'55", Hydrologic Unit 13030202. Owner: Charles Waldrop.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., reported depth 210 ft, cased to 198 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,405 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in pump base, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--July 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.66 ft below land-surface datum, Jan. 23, 1952; lowest measured, 228.00 ft below land-surface datum, May 11, 1956.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 9	172.44
July	not measured

LUNA COUNTY
Mimbres Valley

321015107260501. Local number, 25S.06W.02.111.
LOCATION.--Lat 32°10'15", long 107°26'05", Hydrologic Unit 13030202. Owner: C. W. Johnson, Jr.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in., depth 235 ft, perforated 180-235 ft, gravel packed.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,220 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
PERIOD OF RECORD.--May 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.45 ft below land-surface datum, Mar. 14, 1953; lowest measured, 117.66 ft below land-surface datum, Aug. 6, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	22.85
July 16	24.99

320915104294501. Local number, 25S.06W.07.211.
LOCATION.--Lat 32°09'15", long 104°29'45", Hydrologic Unit 13030202. Owner: H. C. Telles.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 230 ft, cased to 230 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,084.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in pump base, 1.20 ft above land-surface datum (since Jan. 15, 1966).
PERIOD OF RECORD.--Jan. 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.34 ft below land-surface datum, Mar. 14, 1953; lowest measured, 122.16 ft below land-surface datum, Aug. 13, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	86.14
July 16	87.71

315525107374501. Local number, 27S.08W.35.122.
LOCATION.--Lat 31°55'25", long 107°37'45", Hydrologic Unit 13030202. Owner: M. M. Gibson.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 12 to 8 in., depth 550 ft, cased to 550 ft, perforated 155-550 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,070 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.20 ft above land-surface datum.
PERIOD OF RECORD.--July 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.84 ft below land-surface datum, Mar. 16, 1953; lowest measured, 119.34 ft below land-surface datum, Aug. 3, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	78.13
July 16	83.38

315905107425001. Local number, 27S.09W.01.431
LOCATION.--Lat 31°59'05", long 107°42'50", Hydrologic Unit 13030202. Owner: I. G. Burns.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 62 ft, cased to 62 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,135 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of rectangular hole in pump base, 0.65 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.61 ft below land-surface datum, Jan. 19, 1954; lowest measured, 47.26 ft below land-surface datum, Aug. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	38.45
July 16	39.23

LUNA COUNTY
Mimbres Valley

314938107371401. Local number, 28S.08W.36.411.
LOCATION.--Lat 31°49'38", long 107°37'14", Hydrologic Unit 13030202. Owner: M. R. Hemley.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 250 ft, cased to 250 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,008 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.85 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1961 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.18 ft below land-surface datum, Aug. 2, 1983; lowest measured, 27.85 ft below land-surface datum, Jan. 14, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 13	10.72
July 16	10.33

MORA COUNTY
Watrous Area

354840104590301. Local number, 18N.18E.01.333.
LOCATION.--Lat 35°48'40", long 104°59'03", Hydrologic Unit 11080004. Owner: Sellman Bros.
AQUIFER:--Alluvium.
WELL CHARACTERSTICS.--Drilled irrigation water-table well, diameter 14 in., depth 100 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,420 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in southeast corner of pump base, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.21 ft below land-surface datum, July 17, 1984; lowest measured, 6.74 ft below land-surface datum, Feb. 14, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 3	6.40
Aug.	not measured

OTERO COUNTY
Tularosa-Alamogordo Area

330324106011201. Local number, 14S.10E.31.144.
LOCATION.--Lat 33°03'24", long 106°01'12", Hydrologic Unit 13050003. Owner: Luther Watson.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, depth 230 ft, diameter 17 in., casing 0-130 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,450 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 1 in. hole in pump base, 0.70 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.75 ft below land-surface datum, Apr. 8, 1952; lowest measured, 134.21 ft below land-surface datum, Aug. 3, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Aug.	not measured

324853105582501. Local number, 17S.09E.24.343.
LOCATION.--Lat 32°48'53", long 105°58'25", Hydrologic Unit 13050003. Owner: U.S. Air Force.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 10 in., depth 236 ft, cased to 236 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,144 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 1/2 in. pipe, 2.10 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.42 ft below land-surface datum, Apr. 6, 1960; lowest measured, 82.18 ft below land-surface datum, Sept. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Aug.	not measured

OTERO COUNTY
Crow Flats Basin
(Salt Basin)

320657105061501. Local number, 25S.18E.21.233.
LOCATION.--Lat 32°06'57", long 105°06'15", Hydrologic Unit 13050004. Owner: Gene Lewis.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,690 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.80 ft below land-surface datum, Apr. 20, 1956; lowest measured, 101.55 ft below land-surface datum, Sept. 15, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	94.48
Aug. 22	95.52

320650105034801. Local number, 26S.18E.21.331.
LOCATION.--Lat 32°06'50", long 105°03'48", Hydrologic Unit 13050004. Owner: Frank Gentry.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 544 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,000 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.08 ft below land-surface datum, Jan. 8, 1973; lowest measured, 82.94 ft below land-surface datum, Aug. 17, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	59.48
Aug. 22	77.03

QUAY COUNTY
House Area

343810103463001. Local number, 05N.30E.18.331.
LOCATION.--Lat 34°38'10", long 103°46'30", Hydrologic Unit 13060004. Owner: W.C. and H.J. Lee.
AQUIFER.--Ogallala Formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 75 ft, cased to 60 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,640 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.50 ft above land-surface datum.
PERIOD OF RECORD.--May. 1944 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.76 ft below land-surface datum, Mar. 28, 1946; lowest measured, 51.49 ft below land-surface datum, Aug. 11, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Sept. 4	44.70

344350103553001. Local number, 06N.28E.24.233.
LOCATION.--Lat 34°43'50", long 103°55'30", Hydrologic Unit 13060004. Owner: G. B. Irwin.
AQUIFER.--Ogallala formation of Pliocene Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., reported depth 131 ft, cased to 131 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,790 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. opening in concrete base, 1.21 ft above land-surface datum.
PERIOD OF RECORD.--Mar. 1944 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 77.97 ft below land-surface datum, Mar. 27, 1944; lowest measured, 113.50 ft below land-surface datum, Aug. 20, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	100.63
Sept. 4	108.85

ROOSEVELT COUNTY
Portales Valley

341852103090701. Local number, 01N.36E.21.213.
LOCATION.--Lat 34°18'52", long 103°09'07", Hydrologic Unit 12050001. Owner: Unknown.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation well, casing data and depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,141 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1 in. hole in west side of pump base, 1.45 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 141.57 ft below land-surface datum, Jan. 30, 1963; lowest measured, 208.91 ft below land-surface datum, Sept. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 11	205.32
Sept. 4	208.91

341037103254501. Local number, 01S.33E.36.23111.
LOCATION.--Lat 34°10'37", long 103°25'45", Hydrologic Unit 12050002. Owner: State of New Mexico.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 105 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,048 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.95 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.19 ft below land-surface datum, Jan. 25, 1952; lowest measured, 86.42 ft below land-surface datum, Jan. 17, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	85.96
Sept. 4	86.13

340740103145501. Local number, 02S.35E.23.111.
LOCATION.--Lat 34°07'40", long 103°14'55", Hydrologic Unit 12050001. Owner: P. O. Dozier.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter, depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,963 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.32 ft below land-surface datum, Mar. 27, 1951; lowest measured, 49.26 ft below land-surface datum, Aug. 11, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 10	47.70
Sept. 4	48.37

Causey-Lingo Area

335655103032001. Local number, 06S.38E.21.233.
LOCATION.--Lat 33°56'55", long 103°03'20", Hydrologic Unit 12050001. Owner: C. C. Harvey.
AQUIFER.--Undifferentiated Cretaceous rocks.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 140 ft, cased to 140 ft, casing slotted 100-140 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,927 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in north side of pump, 2.10 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.18 ft below land-surface datum, Jan. 13, 1956; lowest measured, 115.21 ft below land-surface datum, Aug. 11, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 9	97.41
Sept.	not measured

SANDOVAL COUNTY
Bernalillo Area

352235106282401. Local number, 13N.04E.12.112.
LOCATION.--Lat 35°22'35", long 106°28'24", Hydrologic Unit 13020201. Owner: Unknown.
AQUIFER.--Valley Fill
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 12 in., depth 50 ft, cased.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,265 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower inside edge of hole in south side of casing 0.45 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.37 ft below land-surface datum, July 30, 1985; lowest measured, 25.27 ft below land-surface datum, Jan. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 7	23.56
Sept. 11	22.13

SANTA FE COUNTY
Estancia Valley

350525106025001. Local number, 10N.08E.13.133.
LOCATION.--Lat 35°05'25", long 106°02'50", Hydrologic Unit 13050001. Owner: W. R. Irby.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter unknown, reported depth 513 ft, casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,265 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower inside edge of hole in south side of casing, 0.45 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.75 ft below land-surface datum, Feb. 22, 1950; lowest measured, 150.00 ft below land-surface datum, July 17, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	134.58
Aug. 13	146.65

350340106005001. Local number, 10N.09E.29.130.
LOCATION.--Lat 35°03'40", long 106°00'50", Hydrologic Unit 13050001. Owner: Glen Terry.
AQUIFER.--Glorieta Sandstone of Permian Age.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 14 in., reported depth 200 ft, cased to 140 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,240 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 3 in. pipe on north side of pump, 1.30 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.96 ft below land-surface datum, Feb. 16, 1951; lowest measured, 120.20 ft below land-surface datum, Aug. 13, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	105.70
Aug. 13	115.62

Santa Fe Area

353810106025501. Local number, 16N.08E.12.131.
LOCATION.--Lat 35°38'10", long 106°02'55", Hydrologic Unit 13020201. Owner: Santa Fe Country Club.
AQUIFER.--Ancha Formation(?) and Tesuque Formation (?).
WELL CHARACTERISTICS.--Drilled unused well, diameter 5 in., depth 400 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,420 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/8 in. hole in cover plate, 0.20 ft above land-surface datum.
PERIOD OF RECORD.--Aug. 1951, Jan. 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 247.93 ft below land-surface datum, Jan. 22, 1979; lowest measured, 272.06 ft below land-surface datum, Aug. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 4	252.23
July	not measured

SANTA FE COUNTY
Santa Fe Area

354005105574501. Local number, 17N.09E.27.441.
LOCATION.--Lat 35°40'05", long 105°57'45", Hydrologic Unit 13020201. Owner: U.S. Indian School.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 8 in., depth 989 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,848 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.40 ft above land-surface datum.
PERIOD OF RECORD.--Dec. 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.33 ft below land-surface datum, Dec. 27, 1951; lowest measured, 203.12 ft below land-surface datum, Sept. 12, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 13	201.58
July 31	197.50

SIERRA COUNTY
Hot Springs Area

331002107150001. Local number, 13S.04W.21.213.
LOCATION.--Lat 33°10'02", long 107°15'00", Hydrologic Unit 13030101. Owner: Unknown.
AQUIFER.--Alluvium Formation.
WELL CHARACTERISTICS.--Drilled unused irrigation well, diameter 13 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,355 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1 1/2 in. hole in top of discharge pipe, 3.0 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 25, 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.36 ft below land-surface datum, Feb. 28, 1986; lowest measured, 65.56 ft below land-surface datum, Feb. 25, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 28	57.36
Aug.	not measured

325550107184001. Local number, 15S.05W.24.312.
LOCATION.--Lat 32°55'50", long 107°18'40", Hydrologic Unit 13030101. Owner: William M. Dawson.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled used irrigation water-table well, diameter 16 in., depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,279 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.20 ft above land-surface datum.
PERIOD OF RECORD.--May 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.13 ft below land-surface datum, Sept. 11, 1975; lowest, 41.97 ft below land-surface datum, Feb. 29, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 28	37.71
Aug.	not5measured

Rincon Valley

325350107175501. Local number, 16S.05W.25.211.
LOCATION.--Lat 32°53'35", long 107°17'55", Hydrologic Unit 13030102. Owner: U.S. Government.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., depth 32 ft, cased to 32 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,050 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.
PERIOD OF RECORD.--Apr. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.03 ft below land-surface datum, Jan. 8, 1975; lowest measured, 27.78 ft below land-surface datum, Jan. 6, 1958.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 20	13.45
Aug.	not measured

TAOS COUNTY
Sunshine Valley

365036105355301. Local number, 30N.13E.18.1121.
LOCATION.--Lat 36°50'36", long 105°35'53", Hydrologic Unit 13020101. Owner: Unknown.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 10 in., depth 500 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,600 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--Sept. 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.52 ft below land-surface datum, Jan. 21, 1985; lowest measured, 77.33 ft below land-surface datum, Aug. 9, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Mar. 6	71.68
Sept. 10	71.42

365650105370001. Local number, 01S.74W.24.244.
LOCATION.--Lat 36°56'50", long 105°37'00", Hydrologic Unit 13020101. Owner: Dimmitt.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 270 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,620 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 3.00 ft above land-surface datum.
PERIOD OF RECORD.--June 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 188.83 ft below land-surface datum, Sept. 10, 1986; lowest measured, 213.53 ft below land-surface datum, Aug. 10, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Mar. 6	189.43
Sept. 10	188.83

365410105354501. Local number, 02S.73W.05.222.
LOCATION.--Lat 36°54'10", long 105°35'45", Hydrologic Unit 13020101. Owner: Unknown.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled domestic and stock water-table well, diameter 6 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,587 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1 in. hole in plate over casing, 0.10 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.78 ft below land-surface datum, Sept. 23, 1985; lowest measured, 84.78 ft below land-surface datum, Jan. 27, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Mar. 6	75.35
Sept. 10	73.79

TORRANCE COUNTY
Estancia Valley

343443106024401. Local number, 04N.09E.07.334.
LOCATION.--Lat 34°34'43", long 106°02'44", Hydrologic Unit 13050001. Owner: F. D. Breedlove.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in., reported depth 163 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,118 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in south side of pump base, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.70 ft below land-surface datum, Feb. 10, 1958; lowest measured, 83.86 ft below land-surface datum, Oct. 10, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan.	not measured
Sept.	not measured

TORRANCE COUNTY
Estancia Valley

344016106064701. Local number, 05N.08E.08.424.
LOCATION.--Lat 34°40'16", long 106°06'47", Hydrologic Unit 13050001. Owner: A.T. Austin.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., reported depth 204 ft, cased to 98 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,214 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--Jan. 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.03 ft below land-surface datum, Mar. 23, 1948; lowest measured, 129.74 ft below land-surface datum, Sept. 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	127.13
Sept. 17	129.74

344234106074901. Local number, 06N.08E.32.212.
LOCATION.--Lat 34°42'34", long 106°07'49", Hydrologic Unit 13050001. Owner: Revis Strong.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., reported depth 209 ft, cased to 84 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,165 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 1/2 in. hole in pump base, 0.04 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.22 ft below land-surface datum, Feb. 18, 1947; lowest measured, 83.51 ft below land-surface datum, Spet. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	79.29
Sept. 4	83.51

344622105575501. Local number, 06N.09E.11.211.
LOCATION.--Lat 34°46'22", long 105°57'55", Hydrologic Unit 13050001. Owner: R. O. Brown.
AQUIFER.--Valley Fill.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., reported depth 148 ft, cased to 140 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,086 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.75 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.80 ft below land-surface datum, Feb. 8, 1950; lowest measured, 28.25 ft below land-surface datum, July 19, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	14.99
Aug. 26	16.06

344937106092201. Local number, 07N.07E.13.4312.
LOCATION.--Lat 34°49'37", long 106°09'22", Hydrologic Unit 13050001. Owner: Woodrow Clements.
AQUIFER.--Madera Formation.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 7 in., depth and casing information not available.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,500 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, level with concrete slab, 0.2 ft above land-surface datum.
REMARKS.--Old CO2 well.
PERIOD OF RECORD.--Feb. 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.01 ft below land-surface datum, Jan. 19, 1979; lowest measured, 111.40 ft below land-surface datum, Jan. 10, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 15	110.31
Aug. 14	110.28

TORRANCE COUNTY
Estancia Valley

345900106034301. Local number, 09N.08E.24.334.
LOCATION.--Lat 34°59'00", long 106°03'43", Hydrologic Unit 13050001. Owner: Unknown
AQUIFER.--Valley Fill
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,200 ft above National Geodetic Vertical Datum of 1929. Measuring point: Anchor bolt hole, northwest corner, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Feb. 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.08 ft below land-surface datum, Jan. 30, 1980; lowest measured, 81.48 ft below land-surface datum, Aug. 8, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 14	79.58
Aug. 14	80.01

UNION COUNTY
Clayton Area

360940103083501. Local number, 19N.36E.23.244.
LOCATION.--Lat 36°09'40", long 103°08'35", Hydrologic Unit 11090102. Owner: Stevens.
AQUIFER.--Dakota and Purgatoire Sandstone.
WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 14 in., depth 206 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,326 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--c indicated nearby well being pumped.
PERIOD OF RECORD.--Mar. 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.22 ft below land-surface datum, Mar. 17, 1971; lowest measured, 158.42c ft below land-surface datum, July 18, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 19	147.25
Sept. 8	147.40

355944103165601. Local number, 21N.34E.35.344.
LOCATION.--Lat 35°59'44", long 103°16'56", Hydrologic Unit 11090102. Owner: J. Hauser.
AQUIFER.--Morrison Formation.
WELL CHARACTERISTICS.--Drilled unused domestic and stock water-table well, diameter 5 in., depth 86 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,747 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--Apr. 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.05 ft below land-surface datum, Feb. 6, 1974; lowest measured, 60.54 ft below land-surface datum, Aug. 7, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 6	60.50
Sept. 8	60.50

361015103075201. Local number, 22N.36E.05.131.
LOCATION.--Lat 36°10'15", long 103°07'52", Hydrologic Unit 11090104. Owner: James Parker.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 14 in., depth 224 ft, cased to 224 ft, perforated 144-224 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,646 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.40 ft above land-surface datum.
PERIOD OF RECORD.--Dec. 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 190.34 ft below land-surface datum, Dec. 8, 1965; lowest measured, 212.78 ft below land-surface datum, Sept. 9, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 6	211.40
Sept. 9	212.78

UNION COUNTY
Clayton Area

361910103170501. Local number, 24N.36E.17.244.
LOCATION.--Lat 36°19'10", long 103°17'05", Hydrologic Unit 11090103. Owner: Glen Burrows.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 10 in., depth 231 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,707 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
PERIOD OF RECORD.--May 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.99 ft below land-surface datum, Jan. 8, 1972; lowest measured, 92.28 ft below land-surface datum, Sept. 9, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 5	91.92
Sept. 9	92.28

363005103081001. Local number, 26N.36E.07.142.
LOCATION.--Lat 36°30'05", long 103°08'10", Hydrologic Unit 11090103. Owner: J. E. Armes.
AQUIFER.--Dakota, Purgatoire, and Morrison Sandstone.
WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 16 in., depth 770 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,980 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 16 in. casing level with concrete base, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--Mar. 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.41 ft below land-surface datum, Mar. 17, 1971; lowest measured, 252.90 ft below land-surface datum, Aug. 24, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Feb. 6	149.02
Sept. 9	148.44

Capulin Area

364430103595501. Local number, 29N.28E.18.341.
LOCATION.--Lat 36°44'30", long 103°59'55", Hydrologic Unit 11040001, 300 ft north of U.S. Highway 64-87 at Capulin. Owner: City of Raton.
AQUIFER.--Cinders.
WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in., depth 78 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,821.2 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of 2 in. hole in west side of steel plate, at land-surface datum.
PERIOD OF RECORD.--July 1951, Feb. 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.01 ft below land-surface datum, Feb. 8, 1974; lowest measured, 37.59 ft below land-surface datum, Sept. 9, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL
Jan. 28	35.08
Sept. 9	37.59

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE) U-UPPER, M-MIDDLE, L-LOWER: 000 EXRV-UNKNOWN, Extrusive Rocks; 110 AVMB-Cenozoic, Quaternary, Alluvium, Bolson Deposits and other Surface Deposits; 110 BLSN-Cenozoic, Quarternary, Bolson Fill; 112 ANCH-Cenozoic, Pleistocene, Ancha Formation, Upper Part of Santa Fe, Group; 112 SNTF-Cenozoic, Quaternary, Pleistocene, Santa Fe Group; 121 TSUQ-Cenozoic, Tertiary, Pliocene, Tesuque Formation; Undifferentiated Unit, 122 SNTFL-Cenozoic, Tertiary, Miocene, Santa Fe Group, Lower Part; 211 CRVC-Mesozoic, Upper Cretaceous, Crevasse Canyon Formation of Mesaverde Group; 211 DKOT-Mesozoic, Upper Cretaceous, Dakota Sandstone; 211 GLLP-Mesozoic, Upper Cretaceous, Gallup Sandstone; 211 PNLK-Mesozoic Upper Cretaceous, Point Lookout Sandstone; 221 MRSN-Mesozoic, Upper Jurassic, Morrison Formation; 221 WSRC-Mesozoic, Upper Jurassic, Westwater Canyon Sandstone Member of Morrison Formation; 310 GLRT-Paleozoic, Permian, Glorietta Sandstone Member of San Andres Formation of Manzano Group; 313 SADG-Paleozoic, Permian, Guadalupian, San Andres Limestone and Glorietta Sandstone; 313 SADR-Paleozoic, Permian, Guadalupian, San Andres, Limestone of Manzano Group.

REMARKS.--Ground-water sites in this table are segregated by county, which appear alphabetically. The sites are then listed in ascending local identifiers.

BERNALILLO COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT) (72003)
09N.03E.08.213C RIO BR-4E	350135106390603	001	GW	04-15-86	1130	112SNTF	17.00	44

LOCAL IDENTIFIER	DEPTH TO TOP OF WATER-BEARING ZONE (FT) (72002)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS (MG/L AS CACO3) (00900)
09N.03E.08.213C RIO BR-4E	39	1900	1970	7.00	7.30	23.0	17.0	31	770

LOCAL IDENTIFIER	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (99440)	BICARBONATE IT-FLD (MG/L AS HCO3) (00410)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)
09N.03E.08.213C RIO BR-4E	230	48	130	2	14	411	331	337

LOCAL IDENTIFIER	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
09N.03E.08.213C RIO BR-4E	334	510	140	0.40	61	1300	<0.010	7.50

LOCAL IDENTIFIER	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	SAMPLING METHOD, CODES (82398)
09N.03E.08.213C RIO BR-4E	0.130	0.57	<0.010	5.1	250	18	9	4040

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CIBOLA COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT) (72003)	DEPTH TO TOP OF WATER-BEARING ZONE (FT) (72002)
09N.05W.12.442	350108107183501	006	GW	03-20-86	1040	313SADG	--	--
09N.09W.28.1344	345850107475401	006	GW	03-10-86	1410	313SADR	2520	2390
09N.10W.10.414	350111107523501	006	GW	03-05-86	1550	313SADG	--	--
09N.10W.15.212	350053107523301	006	GW	03-05-86	1445	313SADG	--	--
10N.09W.23.423 HORACE SP	350440107450801	006	SP	03-11-86	1220		--	--
10N.09W.25.3241	350352107442601	006	GW	07-10-86	1430	313SADG	2900	2710
11N.10W.04.333	351216107541701	006	GW	03-06-86	1410	313SADG	168	100
12N.10W.23.233	351519107513901	006	GW	03-06-86	0830	313SADR	--	--

LOCAL IDENTIFIER	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	HARDNESS (MG/L AS CACO3) (00900)
09N.05W.12.442	--	5642	11700	10800	6.63	7.00	26.5	31	600
09N.09W.28.1344	2520.00	6655	1280	1330	6.75	7.00	27.0	54	520
09N.10W.10.414	105.00	6519	575	565	7.26	7.70	16.0	--	200
09N.10W.15.212	164.00	6529	420	442	7.40	7.90	15.5	0.30	150
10N.09W.23.423 HORACE SP	--	--	1430	1460	7.38	7.80	13.5	1.0	410
10N.09W.25.3241	2901.00	6280	7000	7290	6.27	7.20	53.0	9.8	2300
11N.10W.04.333	198.00	6540	1150	1160	6.99	7.50	13.5	0.50	500
12N.10W.23.233	865.00	6592	1900	2000	8.13	8.20	14.0	0.40	140

LOCAL IDENTIFIER	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)
09N.05W.12.442	--	120	3600	64	24	1640	1330	1340	1330
09N.09W.28.1344	140	40	88	2	7.1	418	338	343	327
09N.10W.10.414	52	18	40	1	3.3	265	216	218	221
09N.10W.15.212	39	13	37	1	2.8	215	173	176	176
10N.09W.23.423 HORACE SP	89	46	150	3	5.9	303	245	248	246
10N.09W.25.3241	730	110	1100	10	47	1320	1080	1080	979
11N.10W.04.333	140	36	66	1	3.4	342	277	280	235
12N.10W.23.233	41	9.7	400	15	1.8	335	274	275	276

LOCAL IDENTIFIER	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
09N.05W.12.442	3800	2100	2.8	1.7	16	9450	10000	<0.050	<0.100
09N.09W.28.1344	300	70	0.70	0.26	19	893	880	<0.010	<0.100
09N.10W.10.414	48	19	0.90	--	24	--	340	--	1.10
09N.10W.15.212	19	14	1.1	0.065	29	257	260	<0.010	<0.100
10N.09W.23.423 HORACE SP	350	120	0.80	0.31	32	946	950	<0.010	1.20
10N.09W.25.3241	2000	1300	0.60	3.0	24	5450	6000	<0.010	<0.100
11N.10W.04.333	300	33	0.30	0.23	26	805	780	<0.010	4.30
12N.10W.23.233	690	43	0.80	0.36	10	1330	1400	<0.010	<0.100

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CIBOLA COUNTY -- Continued

LOCAL IDENTIFIER	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
09N.05W.12.442	0.450	0.15	<0.050	--	28	<100	--	3500	<1
09N.09W.28.1344	0.040	--	<0.010	<10	1	45	0.8	280	<1
09N.10W.10.414	--	--	--	--	--	--	--	--	--
09N.10W.15.212	<0.010	--	<0.010	<10	11	100	<0.5	90	<1
10N.09W.23.423 HORACE SP	<0.010	--	0.160	<10	6	48	<0.5	340	<1
10N.09W.25.3241	0.360	0.0	<0.010	30	88	<100	<10	3200	<1
11N.10W.04.333	0.020	0.18	0.020	<10	3	40	<0.5	160	<1
12N.10W.23.233	0.380	--	<0.010	<10	2	11	<0.5	630	<1

LOCAL IDENTIFIER	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
09N.05W.12.442	<1	<1	<1	4000	1	680	80	<0.1	--
09N.09W.28.1344	<1	<3	<1	8200	<1	290	56	<0.1	<10
09N.10W.10.414	--	--	--	<3	--	--	<1	--	--
09N.10W.15.212	<1	<3	1	<3	1	79	<1	<0.1	<10
10N.09W.23.423 HORACE SP	<1	<3	1	<3	<1	340	<1	<0.1	<10
10N.09W.25.3241	<1	<1	1	2000	<5	4000	100	<0.1	1
11N.10W.04.333	<1	<3	<1	21	1	77	3	<0.1	<10
12N.10W.23.233	<1	<3	<1	7	<1	160	100	<0.1	<10

LOCAL IDENTIFIER	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	C-13/C-12 STABLE ISOTOPE RATIO PER MIL (82081)	CARBON 14 PERCENT MODERN (82172)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
09N.05W.12.442	3	<1	<1	6200	38	20	-7.2	<0.90	--
09N.09W.28.1344	<1	<1	<1	1900	<6	21	-3.8	2.2	--
09N.10W.10.414	--	--	--	--	--	--	--	--	--
09N.10W.15.212	<1	7	<1	290	13	30	-6.1	24.3	--
10N.09W.23.423 HORACE SP	<1	5	<1	1300	11	4	--	--	0.04
10N.09W.25.3241	1	<1	<1	8600	30	300	-4.5	2.8	--
11N.10W.04.333	<1	22	<1	1600	<6	<3	-11.2	95.7	--
12N.10W.23.233	<1	17	<1	1700	<6	13	-8.4	29.2	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	SAMPLING DEPTH (FEET) (00003)
21S.05E.32.222 T-13	322635106264401	013	GW	08-26-86	--	110BLSN	--
22S.01E.09.241 USBR-26	322446106502401	013	GW	04-29-86	1145	110AVMB	--
22S.01E.09.333 USBR-20	322412106510601	013	GW	04-29-86	1000	110AVMB	--
22S.01E.16.433 USBR-19	322312106503601	013	GW	04-29-86	0800	110AVMB	--
22S.01E.33.341 USBR-15	322047106505001	013	GW	04-29-86	1315	110AVMB	--
22S.01E.35.334 USBR-18	322040106485301	013	GW	04-28-86	1630	110AVMB	--
22S.01E.35.4346 USBR-17	322041106485601	013	GW	04-28-86	1445	110AVMB	--
22S.04E.01.431 T-9	322503106290801	013	GW	08-26-86	--	110BLSN	--
22S.04E.11.224 T-8	322434106295001	013	GW	08-26-86	--	110BLSN	--
22S.04E.12.214 SW-20	322446106290801	013	GW	09-09-86	--	110BLSN	--
22S.04E.12.414 SW-19	322424106290301	013	GW	02-04-86	1510	110BLSN	--
		013	GW	03-11-86	1045	110BLSN	--
22S.04E.12.434 SW-18	322405106290101	013	GW	02-04-86	1535	110BLSN	--
		013	GW	03-11-86	1100	110BLSN	--
22S.04E.13.241 SW-17	322347106285801	013	GW	02-04-86	1550	110BLSN	--
		013	GW	03-11-86	1435	110BLSN	--
22S.04E.13.311 SW-13	322331106293801	013	GW	02-04-86	1610	110BLSN	--
		013	GW	03-11-86	0755	110BLSN	--
		013	GW	09-09-86	--	110BLSN	--
22S.04E.13.432 SW-16	322325106290401	013	GW	02-04-86	1000	110BLSN	--
		013	GW	03-11-86	1300	110BLSN	--
		013	GW	09-09-86	--	110BLSN	--
22S.04E.14.133 T-6	322339106304301	013	GW	08-28-86	--	110BLSN	--
22S.04E.23.214 OS-12	322250106302501	013	GW	08-26-86	--	110BLSN	--
22S.04E.24.112 SW-11	322310106293401	013	GW	03-11-86	0940	110BLSN	--
		013	GW	09-09-86	--	110BLSN	--
22S.04E.24.144 SW-15A	322249106291801	013	GW	02-04-86	1125	110BLSN	--
		013	GW	03-11-86	0845	110BLSN	--
22S.04E.24.212A SW-10A	322309106290201	013	GW	02-04-86	1110	110BLSN	--
		013	GW	09-09-86	--	110BLSN	--
22S.05E.05.313 T-10	322510106274101	013	GW	08-26-86	--	110BLSN	--
22S.05E.07.342 T-7	322415106281801	013	GW	08-26-86	--	110BLSN	--
22S.05E.15.221 T-14	321401106245201	013	GW	08-25-86	--	110BLSN	--
22S.05E.16.111 T-4	322403106263901	013	GW	08-25-86	--	110BLSN	325
22S.05E.19.141 SW-22	322256106282601	013	GW	02-04-86	1049	110BLSN	--
		013	GW	03-11-86	0930	110BLSN	--
22S.05E.19.323 SW-21	322237106282801	013	GW	02-04-86	1020	110BLSN	--
		013	GW	03-11-86	0905	110BLSN	--
22S.05E.20.111 T-5	322311106274101	013	GW	08-25-86	--	110BLSN	--
22S.05E.29.412 T-11	322155106270201	013	GW	08-25-86	--	110BLSN	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
21S.05E.32.222 T-13	522.00	4057	468	--	8.10	--	--	27.0
22S.01E.09.241 USBR-26	23.10	3930	2200	2260	--	7.40	--	21.0
22S.01E.09.333 USBR-20	20.00	3928	2350	2410	--	7.90	26.5	19.0
22S.01E.16.433 USBR-19	20.00	3923	1050	1030	--	8.20	24.5	18.0
22S.01E.33.341 USBR-15	20.00	3907	830	804	--	7.70	28.5	20.0
22S.01E.35.334 USBR-18	24.00	3910	1040	1060	--	7.50	30.5	19.0
22S.01E.35.4346 USBR-17	24.90	3909	718	703	--	7.60	32.0	18.0
22S.04E.01.431 T-9	598.00	4410	855	--	7.70	--	--	27.0
22S.04E.11.224 T-8	1060.00	4442	640	--	8.00	--	--	27.0
22S.04E.12.214 SW-20	838.00	4354	--	553	--	8.10	--	--
22S.04E.12.414 SW-19	800.00	4294	375	--	7.80	--	--	--
	800.00	4294	398	--	7.60	--	--	--
22S.04E.12.434 SW-18	800.00	4264	374	--	7.80	--	--	--
	800.00	4264	384	--	7.70	--	--	--
22S.04E.13.241 SW-17	900.00	4260	406	--	8.00	--	--	--
	900.00	4260	371	--	7.50	--	--	--
22S.04E.13.311 SW-13	534.00	4330	625	--	7.30	--	--	--
	534.00	4330	610	--	7.30	--	--	--
	534.00	4330	--	592	--	7.80	--	--
22S.04E.13.432 SW-16	890.00	4270	488	--	7.50	--	--	--
	890.00	4270	404	--	7.40	--	--	--
	890.00	4270	--	426	--	8.00	--	--
22S.04E.14.133 T-6	515.00	4507	438	--	7.30	--	--	26.0
22S.04E.23.214 OS-12	570.00	4369	449	--	7.70	--	--	23.0
22S.04E.24.112 SW-11	500.00	4333	718	--	7.20	--	--	--
	500.00	4333	--	684	--	8.00	--	--
22S.04E.24.144 SW-15A	--	--	350	--	7.80	--	--	--
	--	--	345	--	7.70	--	--	--
22S.04E.24.212A SW-10A	805.00	4273	354	--	7.50	--	--	--
	805.00	4273	--	355	--	7.90	--	--
22S.05E.05.313 T-10	555.00	4160	334	--	8.10	--	--	27.0
22S.05E.07.342 T-7	970.00	4185	346	--	8.00	--	--	26.0
22S.05E.15.221 T-14	--	--	1920	--	8.20	--	--	25.0
22S.05E.16.111 T-4	336.00	4051	313	--	8.00	--	--	25.5
22S.05E.19.141 SW-22	733.00	4217	342	--	8.00	--	--	--
	733.00	4217	345	--	8.10	--	--	--
22S.05E.19.323 SW-21	700.00	4207	302	--	7.30	--	--	--
	700.00	4207	298	--	7.30	--	--	--
22S.05E.20.111 T-5	351.00	4150	368	--	7.80	--	--	26.0
22S.05E.29.412 T-11	576.00	4000	265	--	8.20	--	--	27.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
21S.05E.32.222 T-13	--	--	--	--	--	--	--	--
22S.01E.09.241 USBR-26	630	180	45	240	4	30	271	540
22S.01E.09.333 USBR-20	760	220	52	250	4	23	319	540
22S.01E.16.433 USBR-19	79	29	1.5	170	9	7.1	66	230
22S.01E.33.341 USBR-15	250	71	18	68	2	4.6	234	120
22S.01E.35.334 USBR-18	250	65	21	120	3	14	185	180
22S.01E.35.4346 USBR-17	190	58	11	60	2	11	176	120
22S.04E.01.431 T-9	--	--	--	--	--	--	--	--
22S.04E.11.224 T-8	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-20	210	64	13	35	1	2.7	124	120
22S.04E.12.414 SW-19	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-18	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-17	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-13	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	230	64	16	39	1	2.9	166	100
22S.04E.13.432 SW-16	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	150	44	10	25	0.9	2.4	102	65
22S.04E.14.133 T-6	--	--	--	--	--	--	--	--
22S.04E.23.214 OS-12	--	--	--	--	--	--	--	--
22S.04E.24.112 SW-11	--	--	--	--	--	--	--	--
	300	85	21	35	0.9	3.2	163	140
22S.04E.24.144 SW-15A	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.24.212A SW-10A	--	--	--	--	--	--	--	--
	120	36	8.2	23	0.9	2.1	88	53
22S.05E.05.313 T-10	--	--	--	--	--	--	--	--
22S.05E.07.342 T-7	--	--	--	--	--	--	--	--
22S.05E.15.221 T-14	--	--	--	--	--	--	--	--
22S.05E.16.111 T-4	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-22	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-21	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.05E.20.111 T-5	--	--	--	--	--	--	--	--
22S.05E.29.412 T-11	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	BORON, DISSOLVED (UG/L AS B) (01020)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
21S.05E.32.222 T-13	--	--	--	--	--	--	--	--
22S.01E.09.241 USBR-26	180	0.80	22	--	1400	<0.100	360	1600
22S.01E.09.333 USBR-20	220	0.30	16	--	1500	11.0	400	510
22S.01E.16.433 USBR-19	140	1.0	2.1	--	620	<0.100	60	170
22S.01E.33.341 USBR-15	49	1.2	23	--	500	0.300	110	22
22S.01E.35.334 USBR-18	83	0.50	18	--	610	0.200	190	540
22S.01E.35.4346 USBR-17	48	0.80	16	--	430	0.140	100	140
22S.04E.01.431 T-9	--	--	--	--	--	--	--	--
22S.04E.11.224 T-8	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-20	27	0.50	44	405	380	2.70	--	--
22S.04E.12.414 SW-19	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-18	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-17	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-13	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	21	0.50	39	470	380	5.70	--	--
22S.04E.13.432 SW-16	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	24	0.30	42	304	270	3.90	--	--
22S.04E.14.133 T-6	--	--	--	--	--	--	--	--
22S.04E.23.214 OS-12	--	--	--	--	--	--	--	--
22S.04E.24.112 SW-11	--	--	--	--	--	--	--	--
	26	0.40	45	533	450	9.50	--	--
22S.04E.24.144 SW-15A	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.04E.24.212A SW-10A	--	--	--	--	--	--	--	--
	20	0.40	45	280	240	2.10	--	--
22S.05E.05.313 T-10	--	--	--	--	--	--	--	--
22S.05E.07.342 T-7	--	--	--	--	--	--	--	--
22S.05E.15.221 T-14	--	--	--	--	--	--	--	--
22S.05E.16.111 T-4	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-22	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-21	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
22S.05E.20.111 T-5	--	--	--	--	--	--	--	--
22S.05E.29.412 T-11	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT) (72003)	DEPTH TO TOP OF WATER-BEARING ZONE (FT) (72002)	DEPTH OF WELL, TOTAL (FEET) (72008)
22S.05E.33.244 T-15	322108106254701	013	GW	08-25-86	--	110BLSN	--	--	670.00
23S.01E.09.433 USBR-16	321853106504001	013	GW	04-29-86	1515	110AVMB	--	--	--
23S.01E.16.424 USBR-12	321820106501601	013	GW	04-29-86	1610	110AVMB	--	--	26.58
23S.01E.27.334 USBR-11	321619106495801	013	GW	04-29-86	1745	110AVMB	--	--	20.00
23S.05E.05.321 T-18	322010106272701	013	GW	08-25-86	--	110BLSN	--	--	704.00
23S.05E.10.413 T-16	321910106250701	013	GW	08-28-86	--	110BLSN	--	--	710.00
23S.05E.27.142 T-17	321647106251301	013	GW	08-25-86	--	110BLSN	--	--	564.00
24S.02E.09.433 USBR-14	321342106443301	013	GW	04-24-86	1300	110AVMB	--	--	24.80
24S.02E.23.342 USBR-9	321206106423601	013	GW	04-24-86	1000	110AVMB	--	--	20.00
25S.01E.06.333	320924106531201	013	GW	05-28-86	1150	112SNTF	--	--	--
		013	GW	05-30-86	0600	112SNTF	--	--	--
		013	GW	05-30-86	1045	112SNTF	--	--	--
		013	GW	05-31-86	1630	112SNTF	--	--	--
		013	GW	06-01-86	1215	112SNTF	--	--	--
		013	GW	06-06-86	1800	112SNTF	--	--	--
25S.02E.01.411 USBR-25	320946106412401	013	GW	04-23-86	1600	110AVMB	--	--	20.00
25S.02E.04.114 USBR-7	321001106445101	013	GW	04-24-86	1530	110AVMB	--	--	29.40
25S.02E.25.322 USBR-5	320615106413301	013	GW	04-24-86	1800	110AVMB	--	--	20.00
25S.03E.20.421 USBR-24	320706106390901	013	GW	04-23-86	1445	110AVMB	--	--	20.00
25S.03E.28.343 USBR-21	320456106382801	013	GW	04-23-86	1330	110AVMB	--	--	20.00
25S.04E.10.334 HBNM-1	320832106313701	013	GW	03-25-86	1200		--	--	457.00
25S.04E.11.123	320906106302901	013	GW	05-09-86	1545		--	--	800.00
		013	GW	05-29-86	1545		--	--	800.00
25S.05E.16.232 HBNM-2	320808106255701	013	GW	03-25-86	1530	110BLSN	--	--	345.00
25S.06E.19.443	320645106215101	013	GW	05-09-86	1625		440	402	440.00
26S.03E.22.211 USBR-30	320210106371701	013	GW	04-24-86	0845	110AVMB	--	--	20.00
26S.03E.27.211 USBR-32	320128106372401	013	GW	05-01-86	0830	110AVMB	--	--	--
26S.03E.32.441 USBR-39	315953106391501	013	GW	04-23-86	1000	110AVMB	--	--	21.30
27S.01E.04.121A	315939106505602	013	GW	07-16-86	0930	112SNTF	--	--	--
		013	GW	07-16-86	1530	112SNTF	--	--	--
		013	GW	07-17-86	0900	112SNTF	--	--	--
27S.02E.13.331	315720106415601	013	GW	08-17-86	2230	112SNTF	--	--	--
		013	GW	08-19-86	0635	112SNTF	--	--	--
		013	GW	08-19-86	1430	112SNTF	--	--	--
		013	GW	08-19-86	2120	112SNTF	--	--	--
		013	GW	08-20-86	2330	112SNTF	--	--	--
27S.03E.09.444 USBR-38	315804106375901	013	GW	04-22-86	1500	110AVMB	--	--	20.00
27S.03E.28.314 USBR-1	315537106384801	013	GW	04-22-86	1300	110AVMB	--	--	20.00
28S.01E.34.414	314932106493401	013	GW	08-29-86	0030	112SNTF	--	--	--
		013	GW	08-29-86	0815	112SNTF	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
22S.05E.33.244 T-15	--	--	3990	293	--	7.90	--	--	26.0
23S.01E.09.433 USBR-16	--	--	3895	2400	2510	--	7.70	31.0	19.5
23S.01E.16.424 USBR-12	--	--	3866	990	942	--	7.50	32.0	20.5
23S.01E.27.334 USBR-11	--	--	3882	730	714	--	8.00	28.0	17.5
23S.05E.05.321 T-18	--	--	4065	692	--	7.30	--	--	27.0
23S.05E.10.413 T-16	--	--	3980	360	--	7.40	--	--	23.5
23S.05E.27.142 T-17	--	--	4020	248	--	7.80	--	--	25.0
24S.02E.09.433 USBR-14	--	--	3862	2100	2140	--	7.80	31.0	19.5
24S.02E.23.342 USBR-9	--	--	3848	1790	1810	--	7.40	30.0	18.5
25S.01E.06.333	2220	2200	4209	3200	3330	8.50	7.70	--	29.5
	1920	1900	4209	3150	3150	8.00	7.80	--	28.0
	1600	1580	4209	1800	1800	8.20	8.00	--	--
	1190	1170	4209	2050	2070	8.60	8.10	--	28.5
	655	635	4209	845	828	8.70	8.50	--	27.5
	675	665	4209	760	755	8.00	8.50	--	--
25S.02E.01.411 USBR-25	--	--	3835	900	940	--	7.80	27.5	17.5
25S.02E.04.114.USBR-7	--	--	3847	2490	2450	--	7.50	28.0	20.0
25S.02E.25.322 USBR-5	--	--	3821	4050	4020	--	7.80	24.5	--
25S.03E.20.421 USBR-24	--	--	3819	1350	1380	--	7.90	31.0	19.5
25S.03E.28.343 USBR-21	--	--	3810	2450	2600	--	7.50	23.0	20.0
25S.04E.10.334 HBNM-1	--	--	9999	545	590	8.30	7.90	--	26.5
25S.04E.11.123	--	--	--	600	601	7.70	8.40	--	29.5
	--	--	--	600	601	7.70	8.40	--	29.5
25S.05E.16.232 HBNM-2	--	--	9999	340	359	7.60	8.00	--	24.5
25S.06E.19.443	--	--	--	1600	1640	7.60	8.10	--	--
26S.03E.22.211 USBR-30	--	--	3794	5600	5640	--	7.90	23.0	19.0
26S.03E.27.211 USBR-32	--	--	3794	760	789	--	8.10	--	--
26S.03E.32.441 USBR-39	--	--	3790	1620	1620	--	7.50	22.5	21.0
27S.01E.04.121A	1550	1530	4189	10900	10100	8.60	7.90	28.0	42.5
	1150	1130	4189	2100	2010	8.70	8.80	--	35.0
	917	897	4189	1580	1510	8.60	8.70	--	31.5
27S.02E.13.331	1800	1780	4098	2200	2180	8.00	7.40	--	30.5
	1590	1570	4098	600	584	8.60	8.20	--	32.0
	816	796	4098	1000	993	8.90	8.60	--	30.5
	478	458	4098	860	829	8.50	8.50	--	28.5
	717	707	4098	885	846	8.60	8.40	--	29.0
27S.03E.09.444 USBR-38	--	--	3779	820	759	--	4.80	35.0	21.0
27S.03E.28.314 USBR-1	--	--	3771	2400	3650	--	9.10	34.5	23.5
28S.01E.34.414	999	979	4127	5700	5510	7.80	7.80	--	31.0
	814	794	4127	2350	2330	7.80	8.20	--	28.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
22S.05E.33.244 T-15	--	--	--	--	--	--	--	--	--
23S.01E.09.433 USBR-16	580	170	37	330	6	10	--	345	640
23S.01E.16.424 USBR-12	340	110	16	70	2	7.1	--	307	140
23S.01E.27.334 USBR-11	200	66	9.4	70	2	5.0	--	157	99
23S.05E.05.321 T-18	--	--	--	--	--	--	--	--	--
23S.05E.10.413 T-16	--	--	--	--	--	--	--	--	--
23S.05E.27.142 T-17	--	--	--	--	--	--	--	--	--
24S.02E.09.433 USBR-14	570	170	35	260	5	14	--	236	540
24S.02E.23.342 USBR-9	470	140	29	210	4	16	--	449	340
25S.01E.06.333	100	37	2.5	690	31	11	--	77	760
	130	47	2.5	590	24	9.0	--	49	750
	85	32	1.3	310	15	4.9	--	73	230
	180	51	13	390	13	28	--	484	180
	69	22	3.4	140	8	16	--	215	96
	76	25	3.4	130	7	17	195	205	82
25S.02E.01.411 USBR-25	290	86	19	78	2	10	--	242	170
25S.02E.04.114 USBR-7	790	250	40	280	5	11	--	315	600
25S.02E.25.322 USBR-5	910	250	70	650	10	7.8	--	202	1400
25S.03E.20.421 USBR-24	150	44	10	200	7	38	--	236	270
25S.03E.28.343 USBR-21	140	32	15	520	20	20	--	314	540
25S.04E.10.334 HBNM-1	120	36	7.8	71	3	5.8	--	168	64
25S.04E.11.123	170	40	18	58	2	4.1	197	--	62
	170	40	18	58	2	4.1	197	--	62
25S.05E.16.232 HBNM-2	83	26	4.3	33	2	4.4	--	97	19
25S.06E.19.443	450	130	31	110	2	15	72	--	50
26S.03E.22.211 USBR-30	200	30	30	1200	38	34	--	501	1300
26S.03E.27.211 USBR-32	200	50	19	78	2	8.7	--	200	130
26S.03E.32.441 USBR-39	260	74	19	240	7	10	--	370	290
27S.01E.04.121A	770	290	10	2100	35	19	--	66	1700
	99	20	12	370	17	13	--	240	180
	130	25	16	280	11	6.6	--	329	160
27S.02E.13.331	190	76	0.60	390	13	3.4	--	43	300
	24	9.5	0.10	110	10	1.5	--	90	130
	29	9.7	1.1	210	18	2.8	--	244	190
	60	22	1.2	160	9	3.5	--	121	150
	44	14	2.3	180	12	2.4	--	220	140
27S.03E.09.444 USBR-38	190	72	3.2	20	0.7	1.4	--	<3.0	59
27S.03E.28.314 USBR-1	--	0.50	<0.10	560	--	9.8	--	450	220
28S.01E.34.414	310	84	24	1200	31	9.1	--	81	1000
	91	30	4.0	460	22	5.3	--	118	560

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
22S.05E.33.244 T-15	--	--	--	--	--	--	--	--	--
23S.01E.09.433 USBR-16	240	0.60	28	--	1700	<0.100	410	--	680
23S.01E.16.424 USBR-12	50	0.60	24	--	600	0.270	150	--	22
23S.01E.27.334 USBR-11	48	0.80	18	--	410	<0.100	140	--	170
23S.05E.05.321 T-18	--	--	--	--	--	--	--	--	--
23S.05E.10.413 T-16	--	--	--	--	--	--	--	--	--
23S.05E.27.142 T-17	--	--	--	--	--	--	--	--	--
24S.02E.09.433 USBR-14	130	0.40	20	--	1300	9.10	470	--	480
24S.02E.23.342 USBR-9	130	1.1	38	--	1200	1.00	330	--	450
25S.01E.06.333	460	4.0	63	--	2100	<0.100	--	30	110
	430	4.4	57	--	1900	<0.100	--	30	80
	330	1.7	39	--	990	<0.100	--	10	55
	240	0.80	34	--	1200	<0.100	--	40	100
	52	4.5	29	--	490	<0.100	--	1100	68
	53	4.4	32	--	460	<0.100	--	27	26
25S.02E.01.411 USBR-25	60	0.80	23	--	590	0.700	130	--	86
25S.02E.04.114 USBR-7	220	0.40	33	--	1600	<0.100	380	--	1400
25S.02E.25.322 USBR-5	440	2.5	15	--	3000	<0.100	770	--	2700
25S.03E.20.421 USBR-24	110	1.4	29	--	840	<0.100	350	--	110
25S.03E.28.343 USBR-21	300	1.7	33	--	1700	<0.100	470	--	340
25S.04E.10.334 HBNM-1	38	0.60	30	--	350	0.910	--	41	19
25S.04E.11.123	31	0.40	33	--	360	1.50	--	--	--
	31	0.40	33	--	360	1.50	--	--	--
25S.05E.16.232 HBNM-2	29	0.60	29	--	200	1.40	--	17	270
25S.06E.19.443	440	0.50	36	--	860	1.80	--	--	--
26S.03E.22.211 USBR-30	850	1.8	33	--	3800	<0.100	1700	--	200
26S.03E.27.211 USBR-32	55	0.70	18	--	480	0.750	140	--	130
26S.03E.32.441 USBR-39	110	1.0	25	--	990	<0.100	370	--	410
27S.01E.04.121A	2700	2.6	63	6990	6900	<0.100	--	<10	<10
	400	0.90	52	1350	1200	<0.100	--	290	<10
	200	0.90	67	955	950	<0.100	--	17	3
27S.02E.13.331	460	0.80	45	1300	1300	<0.100	--	30	50
	40	1.7	22	475	320	<0.100	--	24	3
	44	2.2	42	656	650	<0.100	--	21	1
	80	1.6	37	524	460	<0.100	--	110	3
	48	2.2	43	535	560	<0.100	--	87	28
27S.03E.09.444 USBR-38	180	0.50	1.5	--	--	<0.100	50	--	2100
27S.03E.28.314 USBR-1	510	0.40	0.8	--	1600	<0.100	220	--	10
28S.01E.34.414	1200	1.0	34	3780	3600	<0.100	--	30	40
	330	1.3	37	1500	1500	<0.100	--	30	10

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)
28S.01E.34.414	314932106493401	013	GW	08-29-86	2300	112SNTF	528

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DONA ANA COUNTY -- Continued

LOCAL IDENTIFIER	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	HARDNESS (MG/L AS CACO3) (00900)
28S.01E.34.414	518	4127	1250	1210	7.90	8.50	29.0	63

LOCAL IDENTIFIER	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
28S.01E.34.414	15	6.1	240	14	11	317	130	140

LOCAL IDENTIFIER	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
28S.01E.34.414	1.3	59	713	790	<0.100	73	5

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)
22S.01E.09.241 USBR-26	322446106502401	013	GW	04-29-86	1145	--	--
22S.01E.09.333 USBR-20	322412106510601	013	GW	04-29-86	1000	--	--
22S.01E.16.433 USBR-19	322312106503601	013	GW	04-29-86	0800	--	--
22S.01E.33.341 USBR-15	322047106505001	013	GW	04-29-86	1315	--	--
22S.01E.35.334 USBR-18	322040106485301	013	GW	04-28-86	1630	--	--
22S.01E.35.4346 USBR-17	322041106485601	013	GW	04-28-86	1445	--	--
23S.01E.09.433 USBR-16	321853106504001	013	GW	04-29-86	1515	--	--
23S.01E.16.424 USBR-12	321820106501601	013	GW	04-29-86	1610	--	--
23S.01E.27.334 USBR-11	321619106495801	013	GW	04-29-86	1745	--	--
24S.02E.09.433 USBR-14	321342106443301	013	GW	04-24-86	1300	--	--
24S.02E.23.342 USBR-9	321206106423601	013	GW	04-24-86	1000	--	--
25S.01E.06.333	320924106531201	013	GW	05-28-86	1150	<1	100
		013	GW	05-30-86	0600	7	100
		013	GW	05-30-86	1045	4	62
		013	GW	05-31-86	1630	8	100
		013	GW	06-01-86	1215	3	49
		013	GW	06-06-86	1800	3	45
25S.02E.01.411 USBR-25	320946106412401	013	GW	04-23-86	1600	--	--
25S.02E.04.114.USBR-7	321001106445101	013	GW	04-24-86	1530	--	--
25S.02E.25.322 USBR-5	320615106413301	013	GW	04-24-86	1800	--	--
25S.03E.20.421 USBR-24	320706106390901	013	GW	04-23-86	1445	--	--
25S.03E.28.343 USBR-21	320456106382801	013	GW	04-23-86	1330	--	--
25S.04E.10.334 HBNM-1	320832106313701	013	GW	03-25-86	1200	3	57
25S.05E.16.232 HBNM-2	320808106255701	013	GW	03-25-86	1530	1	120
26S.03E.22.211 USBR-30	320210106371701	013	GW	04-24-86	0845	--	--
26S.03E.27.211 USBR-32	320128106372401	013	GW	05-01-86	0830	--	--
26S.03E.32.441 USBR-39	315953106391501	013	GW	04-23-86	1000	--	--
27S.01E.04.121A	315939106505602	013	GW	07-16-86	0930	6	200
		013	GW	07-16-86	1530	21	100
		013	GW	07-17-86	0900	20	60
27S.02E.13.331	315720106415601	013	GW	08-17-86	2230	9	200
		013	GW	08-19-86	0635	17	25
		013	GW	08-19-86	1430	32	32
		013	GW	08-19-86	2120	12	140
		013	GW	08-20-86	2330	26	52
27S.03E.09.444 USBR-38	315804106375901	013	GW	04-22-86	1500	--	--
27S.03E.28.314 USBR-1	315537106384801	013	GW	04-22-86	1300	--	--
28S.01E.34.414	314932106493401	013	GW	08-29-86	0030	8	<100
		013	GW	08-29-86	0815	36	<100
		013	GW	08-29-86	2300	27	39

DONA ANA COUNTY -- Continued

LOCAL IDENT-I-FIER	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
22S.01E.09.241 USBR-26	--	--	--	1	--	--	--	--
22S.01E.09.333 USBR-20	--	--	--	37	--	--	--	--
22S.01E.16.433 USBR-19	--	--	--	2	--	--	--	--
22S.01E.33.341 USBR-15	--	--	--	<1	--	--	--	--
22S.01E.35.334 USBR-18	--	--	--	1	--	--	--	--
22S.01E.35.4346 USBR-17	--	--	--	<1	--	--	--	--
23S.01E.09.433 USBR-16	--	--	--	1	--	--	--	--
23S.01E.16.424 USBR-12	--	--	--	<1	--	--	--	--
23S.01E.27.334 USBR-11	--	--	--	1	--	--	--	--
24S.02E.09.433 USBR-14	--	--	--	2	--	--	--	--
24S.02E.23.342 USBR-9	--	--	--	<1	--	--	--	--
25S.01E.06.333	<1	<10	1	<1	--	<1	<1	1400
	<1	<10	1	<1	--	<1	<1	1600
	<1	<10	<1	<1	--	<1	<1	450
	<1	<10	2	1	--	<1	<1	190
	<1	<10	2	23	--	<1	<1	500
	<1	<10	1	<1	--	<1	<1	82
25S.02E.01.411 USBR-25	--	--	--	2	--	--	--	--
25S.02E.04.114.USBR-7	--	--	--	<1	--	--	--	--
25S.02E.25.322 USBR-5	--	--	--	28	--	--	--	--
25S.03E.20.421 USBR-24	--	--	--	2	--	--	--	--
25S.03E.28.343 USBR-21	--	--	--	4	--	--	--	--
25S.04E.10.334 HBNM-1	<1	<10	4	1	<0.1	2	<1	9
25S.05E.16.232 HBNM-2	<1	<10	3	1	<0.1	1	<1	11
26S.03E.22.211 USBR-30	--	--	--	2	--	--	--	--
26S.03E.27.211 USBR-32	--	--	--	<1	--	--	--	--
26S.03E.32.441 USBR-39	--	--	--	<1	--	--	--	--
27S.01E.04.121A	<1	<10	6	<5	--	1	<1	120
	2	<10	4	5	--	2	<1	70
	<1	<10	4	<5	--	1	<1	33
27S.02E.13.331	<1	<10	2	<5	--	<1	<1	340
	<1	<10	2	<5	--	<1	<1	40
	<1	<10	3	<5	--	<1	<1	20
	<1	<10	2	5	--	2	<1	20
	<1	<10	4	15	--	<1	<1	180
27S.03E.09.444 USBR-38	--	--	--	<1	--	--	--	--
27S.03E.28.314 USBR-1	--	--	--	2	--	--	--	--
28S.01E.34.414	<1	<10	1	<5	--	<1	<1	290
	<1	<10	1	<5	--	<1	<1	50
	<1	<10	4	<5	--	<1	<1	46

MCKINLEY COUNTY

LOCAL IDENT-I-FIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEO-LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
13N.11N.17.123	352135108014801	031	GW	03-07-86	0930	313SADG	--	790.00	6802
13N.13W.22.1333	352037108123701	031	GW	07-25-86	1100	310GLRT	--	398.00	7420
14N.10W.22.414	352532107524901	031	GW	03-05-86	1011	313SADR	--	3080.00	7030
17N.11W.30.431	354013108024201	031	GW	04-24-86	1100	211CRVC	--	478.00	6765
20N.10W.16.4413	355734107535301	031	GW	04-24-86	1500	221MRSN	--	3988.00	6330
		031	GW	04-24-86	1501	221MRSN	--	3988.00	6330
20N.10W.30.3244	355553107562301	031	GW	04-21-86	1500	211GLLP	--	--	6401
		031	GW	04-21-86	1501	211GLLP	--	--	6401
NR085.0830X0270	355752108085001	031	GW	11-05-85	0930		--	--	6094
NR085.0930X0900	355217108095201	031	GW	11-08-85	1115	211PNLK	--	730.00	6360
NR085.1045X0030	355928108105301	031	GW	11-05-85	1115		--	--	6097
ZUNI RESERVATION ZB-1	350811109020201	031	GW	04-23-86	1030		625.40	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

MCKINLEY COUNTY -- Continued

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
13N.11N.17.123	1330	1440	7.10	7.50	--	18.5	8.0	770	180
13N.13W.22.1333	725	727	7.48	8.00	--	12.5	1.4	240	62
14N.10W.22.414	2850	3100	6.50	6.90	--	40.0	71	980	260
17N.11W.30.431	950	1000	8.95	8.70	--	15.5	--	8	2.2
20N.10W.16.4413	1800	1700	8.20	8.70	--	42.0	--	36	13
	1800	--	8.20	--	--	42.0	--	--	--
20N.10W.30.3244	2900	2960	8.55	8.50	20.0	32.5	--	23	7.0
	2900	--	8.55	--	20.0	32.5	--	--	--
NR085.0830X0270	2600	2830	8.30	8.40	--	20.5	--	10	2.5
NR085.0930X0900	3200	3450	8.30	8.50	--	28.0	--	22	6.1
NR085.1045X0030	1800	1980	8.60	8.80	--	16.5	--	5	1.5
ZUNI RESERVATION ZB-1	315	339	7.80	8.00	--	19.5	--	140	46

LOCAL IDENTIFIER	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	BICARBONATE WATER WHOLE IT-FLD (MG/L) (00450)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	CARBONATE WATER WHOLE IT-FLD (MG/L) (00447)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
13N.11N.17.123	76	40	0.6	3.1	228	--	--	--	185
13N.13W.22.1333	20	79	2	1.7	283	--	--	--	232
14N.10W.22.414	79	370	5	14	577	--	--	--	468
17N.11W.30.431	0.60	220	35	1.3	313	--	18	--	283
20N.10W.16.4413	0.09	360	29	2.1	189	--	6.0	--	165
	--	--	--	--	189	--	6.0	--	164
20N.10W.30.3244	1.2	670	64	2.3	--	239	--	11	213
	--	--	--	--	--	239	--	11	211
NR085.0830X0270	0.70	630	94	2.2	--	--	--	--	--
NR085.0930X0900	1.5	760	74	2.2	--	--	--	--	362
NR085.1045X0030	0.20	430	91	1.1	--	--	--	--	--
ZUNI RESERVATION ZB-1	5.1	14	0.5	1.9	--	--	--	--	115

LOCAL IDENTIFIER	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	ALKALINITY, CARBONATE IT-FLD (MG/L CACO3) (00419)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	IODIDE, DISSOLVED (MG/L AS I) (71865)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
13N.11N.17.123	187	--	185	680	3.8	0.40	0.050	--	9.1
13N.13W.22.1333	--	--	212	150	6.5	0.50	0.10	--	9.8
14N.10W.22.414	473	--	446	1000	240	0.40	0.52	--	22
17N.11W.30.431	287	--	--	200	4.7	0.60	0.050	0.008	8.0
20N.10W.16.4413	165	--	167	560	14	1.5	0.16	0.009	26
	165	--	--	--	--	--	--	--	--
20N.10W.30.3244	--	213	216	1000	81	0.70	0.16	0.004	17
	--	213	--	--	--	--	--	--	--
NR085.0830X0270	--	--	--	240	270	3.0	0.39	--	9.6
NR085.0930X0900	--	--	--	1300	57	1.8	0.21	--	9.3
NR085.1045X0030	--	--	--	260	140	3.0	0.32	--	9.3
ZUNI RESERVATION ZB-1	--	--	115	14	14	0.10	--	--	23

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

MCKINLEY COUNTY -- Continued

LOCAL IDENTIFIER	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
13N.11N.17.123	1140	1100	<0.010	<0.100	0.040	--	<0.010	--	<10
13N.13W.22.1333	464	470	<0.010	<0.100	0.020	--	<0.010	--	<10
14N.10W.22.414	2330	2300	<0.010	<0.100	0.200	0.20	<0.010	--	<10
17N.11W.30.431	--	630	--	--	--	--	--	1.4	<10
20N.10W.16.4413	--	1100	--	--	--	--	--	0.5	<10
	--	--	--	--	--	--	--	--	<10
20N.10W.30.3244	--	1900	--	--	--	--	--	1.1	10
	--	--	--	--	--	--	--	--	10
NR085.0830X0270	--	--	--	--	--	--	--	--	20
NR085.0930X0900	--	2400	--	--	--	--	--	--	20
NR085.1045X0030	--	--	--	--	--	--	--	--	20
ZUNI RESERVATION ZB-1	--	190	--	5.30	--	--	--	--	--

LOCAL IDENTIFIER	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
13N.11N.17.123	<1	11	<0.5	90	<1	<1	6	<1	980
13N.13W.22.1333	<1	17	<0.5	80	<1	4	<3	2	2100
14N.10W.22.414	2	<100	<10	1100	<1	<1	<1	<1	12000
17N.11W.30.431	--	--	--	120	--	--	--	--	59
20N.10W.16.4413	6	30	<0.5	--	<1	<1	<3	1	160
	--	--	--	--	--	--	--	--	160
20N.10W.30.3244	<1	100	<10	--	<1	<1	<1	1	40
	--	--	--	--	--	--	--	--	50
NR085.0830X0270	--	--	--	530	--	--	--	--	190
NR085.0930X0900	--	--	--	380	--	--	--	--	12
NR085.1045X0030	--	--	--	280	--	--	--	--	91
ZUNI RESERVATION ZB-1	--	--	--	--	--	--	--	--	91

LOCAL IDENTIFIER	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
13N.11N.17.123	<1	53	130	<0.1	<10	<1	<1	<1	3800
13N.13W.22.1333	<5	41	39	--	<10	<1	<1	<1	960
14N.10W.22.414	<1	1000	180	<0.1	3	<1	2	<1	4600
17N.11W.30.431	--	--	3	--	--	--	--	--	140
20N.10W.16.4413	1	110	8	<0.1	30	<1	<1	<1	2400
	--	--	10	--	--	--	--	--	--
20N.10W.30.3244	<1	70	20	<0.1	<1	1	<1	<1	280
	--	--	20	--	--	--	--	--	--
NR085.0830X0270	--	--	3	--	--	--	--	--	450
NR085.0930X0900	--	--	9	--	--	--	--	--	370
NR085.1045X0030	--	--	3	--	--	--	--	--	130
ZUNI RESERVATION ZB-1	--	--	22	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

MCKINLEY COUNTY -- Continued

LOCAL IDENT-I-FIER	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)	C-13/C-12 STABLE ISOTOPE RATIO PER MIL (82081)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL (82082)	O-18/O-16 STABLE ISOTOPE RATIO PER MIL (82085)	CARBON 14 PERCENT MODERN (82172)	FILTER PORE SIZE (MICRO-METERS) (81352)	SAM-PLING METHOD, CODES (82398)
13N.11N.17.123	<6	1000	--	-6.6	--	--	8.3	--	--
13N.13W.22.1333	<6	14	--	-7.4	--	--	19.2	--	--
14N.10W.22.414	23	10	--	-4.4	--	--	4.4	--	--
17N.11W.30.431	--	--	--	--	--	--	--	0.45	--
20N.10W.16.4413	<6	<3	--	--	-114.0	-14.3	--	0.45	4100
	--	--	--	--	--	--	--	0.10	4100
20N.10W.30.3244	<1	<10	28	--	-110.0	-14.3	--	0.45	4100
	--	--	28	--	--	--	--	0.10	4100
NR085.0830X0270	--	--	--	--	--	--	--	--	--
NR085.0930X0900	--	--	--	--	--	--	--	--	--
NR085.1045X0030	--	--	--	--	--	--	--	--	--
ZUNI RESERVATION ZB-1	--	--	--	--	--	--	--	--	--

OTERO COUNTY

LOCAL IDENT-I-FIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEO-LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
25S.06E.06.323 HBNM-3	320933106221601	035	GW	03-25-86	1730	110BLSN	387.00	4040	5600

LOCAL IDENT-I-FIER	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
25S.06E.06.323 HBNM-3	5930	7.50	7.40	24.5	2400	640	190	470	4	24

LOCAL IDENT-I-FIER	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
25S.06E.06.323 HBNM-3	62	1200	1500	0.30	33	4100	0.670	2	<100	1

LOCAL IDENT-I-FIER	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
25S.06E.06.323 HBNM-3	10	13	410	1	220	0.4	1	<1	30

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANDOVAL COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)
16N.03W.17.33	353642107110201	043	GW	04-29-86	0900	211DKOT	1840.00	6130	2970
		043	GW	04-29-86	0901	211DKOT	1840.00	6130	2970
16N.04W.36.2321	353429107121301	043	GW	04-29-86	1400	211GLLP	602.00	6165	548
		043	GW	04-29-86	1401	211GLLP	602.00	6165	548

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
16N.03W.17.33	2950	8.93	8.70	17.5	19.5	11	2.3	1.1	700	98
	--	8.93	--	17.5	19.5	--	--	--	--	--
16N.04W.36.2321	556	9.11	9.00	24.0	18.0	5	1.4	0.30	130	27
	--	9.11	--	24.0	18.0	--	--	--	--	--

LOCAL IDENTIFIER	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	BROMIDE DISSOLVED (MG/L AS BR) (71870)
16N.03W.17.33	1.7	388	31	376	376	367	910	85	1.5	0.24
	--	388	31	371	376	--	--	--	--	--
16N.04W.36.2321	0.80	255	21	244	244	246	32	4.3	0.50	0.044
	--	255	21	242	244	--	--	--	--	--

LOCAL IDENTIFIER	IODIDE, DISSOLVED (MG/L AS I) (71865)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
16N.03W.17.33	0.005	11	2000	1.0	<10	<1	<100	<10	<1	<1
	--	--	--	--	<10	--	--	--	--	--
16N.04W.36.2321	0.008	13	350	1.1	<10	<1	7	<5	<1	<1
	--	--	--	--	<10	--	--	--	--	--

LOCAL IDENTIFIER	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
16N.03W.17.33	1	2	70	1	100	60	<0.1	<1	<1
	--	--	30	--	--	10	--	--	--
16N.04W.36.2321	<3	1	10	<1	23	2	<0.1	<10	1
	--	--	10	--	--	<10	--	--	--

LOCAL IDENTIFIER	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL (82082)	O-18/O-16 STABLE ISOTOPE RATIO PER MIL (82085)	FILTER PORE SIZE (MICROMETERS) (81352)	SAMPLING METHOD, CODES (82398)
16N.03W.17.33	<1	<1	350	2	<10	-96.0	-13.0	0.45	4100
	--	--	--	--	--	--	--	0.10	4100
16N.04W.36.2321	<1	<1	27	<6	<3	-87.0	-11.8	0.45	--
	--	--	--	--	--	--	--	0.10	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
21N.10W.21.3444	360152107541401	045	GW	04-22-86	1500	211GLLP	--	3090.00	6195
		045	GW	04-22-86	1501	211GLLP	--	3090.00	6195
26N.19W.12.311 12T-644	363009108493301	045	GW	06-18-86	1400	221WSRC	--	1912.00	5735
		045	GW	06-18-86	1401	221WSRC	--	1912.00	5735
29N.11W.29.41324	364139108004501	045	GW	08-20-86	1435	110AVMB	--	--	5403
29N.11W.29.43122	364135108004501	045	GW	08-20-86	1445	110AVMB	--	--	5408
29N.17W.32.31 12T-629	364056108392601	045	GW	06-19-86	1045	221MRSN	--	2520.00	5139
		045	GW	06-19-86	1046	221MRSN	--	2520.00	5139
32N.10W.33.4243 TOWNSEND NO	365617107524601	045	GW	08-20-86	1330		--	29.50	5863
32N.10W.33.44111 N. BRIXNER	365616107525601	045	GW	08-20-86	1050	110AVMB	16.00	31.00	5869
32N.10W.33.44112A HUNTER NO	365616107525301	045	GW	08-20-86	1155	110AVMB	16.00	32.00	5868
32N.10W.33.4421 TOWNSEND NO	365616107524701	045	GW	08-20-86	1315	110AVMB	14.50	30.00	5864
NR017.1085X1545 12T-520	364635108413801	045	GW	06-16-86	1700	221MRSN	--	1777.00	4941
		045	GW	06-16-86	1701	221MRSN	--	1777.00	4941
NR018.0550X1400 12T-636	364757108505501	045	GW	07-02-86	1000	221MRSN	--	2035.00	5100
		045	GW	07-02-86	1001	221MRSN	--	2035.00	5100
NR018.0670X1050 12T-637	365052108521901	045	GW	06-24-86	1000	221MRSN	--	2000.00	5120
		045	GW	06-24-86	1001	221MRSN	--	2000.00	5120
NR032.0755X0247 12T-630	364255108381301	045	GW	06-19-86	1530	221MRSN	--	2300.00	5060
		045	GW	06-19-86	1531	221MRSN	--	2300.00	5060
NR032.1266X0462 12T-628	364058108434101	045	GW	06-18-86	1800	221MRSN	--	2597.00	5290
		045	GW	06-18-86	1801	221MRSN	--	2597.00	5290
NR032.1280X0895 12T-638	363713108434101	045	GW	07-01-86	1030	221MRSN	--	2682.00	5270
		045	GW	07-01-86	1031	221MRSN	--	2682.00	5270
NR032.1320X1305 12K-320	363338108443201	045	GW	06-17-86	1330	221MRSN	--	1992.00	5522
		045	GW	06-17-86	1331	221MRSN	--	1992.00	5522
NR049.1285X0335 12T-620	362706108435301	045	GW	06-30-86	1300	221MRSN	--	2034.00	5595
		045	GW	06-30-86	1301	221MRSN	--	2034.00	5595
NR050.0220X0690 12T-651	362359108473501	045	GW	06-24-86	1515	221MRSN	--	1691.00	5830
		045	GW	06-24-86	1516	221MRSN	--	1691.00	5830

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
21N.10W.21.3444	2720	2850	8.21	8.30	--	33.0	--	37	11	2.1
	2720	--	8.21	--	--	33.0	--	--	--	--
26N.19W.12.311 12T-644	375	372	9.40	9.50	28.5	24.0	0	2	0.80	0.04
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	--	--	--	--	--	--	--	--	--	--
29N.11W.29.43122	--	--	--	--	--	--	--	--	--	--
29N.17W.32.31 12T-629	4070	3910	8.00	8.00	31.5	29.0	--	360	98	25
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	500	--	6.60	--	--	--	--	--	--	--
32N.10W.33.44111 N. BRIXNER	780	--	7.10	--	--	16.0	--	--	--	--
32N.10W.33.44112A HUNTER NO	530	--	7.30	--	--	16.5	--	--	--	--
32N.10W.33.4421 TOWNSEND NO	510	--	6.60	--	--	17.0	--	--	--	--
NR017.1085X1545 12T-520	4000	3900	8.00	8.00	--	31.0	--	220	58	14
	--	--	--	--	--	--	--	--	--	--
NR018.0550X1400 12T-636	3700	3610	8.50	8.30	31.0	23.0	--	120	40	3.4
	--	--	--	--	--	--	--	--	--	--
NR018.0670X1050 12T-637	680	568	9.20	9.00	17.0	20.0	0.2	3	1.1	0.08
	--	--	--	--	--	--	--	--	--	--
NR032.0755X0247 12T-630	6000	6250	7.60	7.80	33.0	33.0	--	330	78	31
	--	--	--	--	--	--	--	--	--	--
NR032.1266X0462 12T-628	3800	3700	8.30	7.90	28.5	--	0.1	120	39	3.0
	3800	--	--	--	--	--	--	--	--	--
NR032.1280X089512T-638	1430	1440	8.11	8.30	29.0	18.0	0	69	14	8.1
	--	--	--	--	--	--	--	--	--	--
NR032.1320X1305 12K-320	510	496	9.30	9.40	34.5	27.0	0.1	3	1.0	0.04
	--	--	--	--	--	--	--	--	--	--
NR049.1285X0335 12T-620	620	606	9.33	9.40	31.5	22.0	0.1	6	1.8	0.20
	--	--	--	--	--	--	--	--	--	--
NR050.0220X0690 12T-651	302	301	9.05	9.20	14.5	22.0	0.1	3	1.0	0.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN COUNTY -- Continued

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	BICARBONATE WATER WHOLE IT-FLD (MG/L) (00450)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	CARBONATE WATER WHOLE IT-FLD (MG/L) (00447)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY, CARBONATE IT-FLD (MG/L CACO3) (00419)
21N.10W.21.3444	630	47	3.3	375	--	0	--	307	307	--
	--	--	--	375	--	0	--	302	307	--
26N.19W.12.311 12T-644	81	25	0.30	156	156	34	34	182	184	184
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	--	--	--	--	--	--	--	--	--	--
29N.11W.29.43122	--	--	--	--	--	--	--	--	--	--
29N.17W.32.31 12T-629	740	18	8.2	57	57	0	0	48	46	46
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44111 N. BRIXNER	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44112A HUNTER NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4421 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
NR017.1085X1545 12T-520	800	25	7.7	58	58	0	0	49	47	47
	--	--	--	--	--	--	--	--	--	--
NR018.0550X1400 12T-636	810	35	3.6	124	124	4.0	4	110	108	108
	--	--	--	--	--	--	--	--	--	--
NR018.0670X1050 12T-637	130	34	1.0	244	--	29	--	247	248	--
	--	--	--	--	--	--	--	--	--	--
NR032.0755X0247 12T-630	1400	35	19	158	158	0	0	130	129	129
	--	--	--	--	--	--	--	--	--	--
NR032.1266X0462 12T-628	770	34	4.6	128	128	0	0	105	105	105
	--	--	--	--	--	--	--	--	--	--
NR032.1280X0895 12T-638	290	16	2.7	327	--	0	--	265	268	--
	--	--	--	--	--	--	--	--	--	--
NR032.1320X1305 12K-320	110	31	0.40	143	143	30	30	166	168	168
	--	--	--	--	--	--	--	--	--	--
NR049.1285X0335 12T-620	130	26	0.90	170	--	36	--	199	199	--
	--	--	--	--	--	--	--	--	--	--
NR050.0220X0690 12T-651	71	19	0.60	151	--	14	--	147	148	--
	--	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	IODIDE, DISSOLVED (MG/L AS I) (71865)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)
21N.10W.21.3444	306	910	47	1.6	0.18	0.004	17	1800	--	1.3
	--	--	--	--	--	--	--	--	--	--
26N.19W.12.311 12T-644	180	9.8	1.1	0.30	0.014	0.002	17	260	--	0.2
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	--	--	--	--	--	--	--	--	0.0	--
29N.11W.29.43122	--	--	--	--	--	--	--	--	0.0	--
29N.17W.32.31 12T-629	49	1900	60	1.9	0.12	0.016	16	2900	--	0.2
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44111 N. BRIXNER	--	--	--	--	--	--	--	--	0.0	--
32N.10W.33.44112A HUNTER NO	--	--	--	--	--	--	--	--	0.0	--
32N.10W.33.4421 TOWNSEND NO	--	--	--	--	--	--	--	--	0.0	--
NR017.1085X1545 12T-520	60	1600	110	2.0	0.13	0.015	14	2600	--	0.2
	--	--	--	--	--	--	--	--	--	--
NR018.0550X1400 12T-636	111	1700	61	1.6	0.13	0.015	13	2700	--	0.1
	--	--	--	--	--	--	--	--	--	--
NR018.0670X1050 12T-637	246	33	10	2.0	0.050	0.006	17	370	--	0.4
	--	--	--	--	--	--	--	--	--	--
NR032.0755X024712T-630	127	3200	190	2.1	0.20	0.035	16	5000	--	0.2
	--	--	--	--	--	--	--	--	--	--
NR032.1266X0462 12T-628	104	1600	67	1.1	0.15	0.020	14	2600	--	0.1
	--	--	--	--	--	--	--	--	--	--
NR032.1280X0895 12T-638	265	390	38	1.3	0.12	0.005	12	920	--	0.6
	--	--	--	--	--	--	--	--	--	--
NR032.1320X1305 12K-320	195	52	4.2	0.40	0.019	0.002	19	320	--	0.2
	--	--	--	--	--	--	--	--	--	--
NR049.1285X0335 12T-620	197	71	28	0.40	0.032	0.006	19	410	--	0.2
	--	--	--	--	--	--	--	--	--	--
NR050.0220X0690 12T-651	149	5.6	1.6	0.20	0.018	0.001	19	200	--	0.2
	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN COUNTY -- Continued

LOCAL IDENTIFIER	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)
21N.10W.21.3444	<10	<1	17	<18	<3	<1	<1	2	310	1
	<10	--	--	--	--	--	--	--	250	--
26N.19W.12.311 12T-644	20	3	25	<0.5	<1	<1	<3	1	<3	<5
	10	--	--	--	--	--	--	--	<10	--
29N.11W.29.41324	--	--	--	--	--	--	--	--	--	--
29N.11W.29.43122	--	--	--	--	--	--	--	--	--	--
29N.17W.32.31 12T-629	<10	2	100	<10	<1	<1	<1	<1	140	<5
	10	--	--	--	--	--	--	--	150	--
32N.10W.33.4243 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44111 N. BRIXNER	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44112A HUNTER NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4421 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
NR017.1085X1545 12T-520	<10	<1	100	<10	<1	<1	<1	<1	170	<5
	<10	--	--	--	--	--	--	--	160	--
NR018.0550X1400 12T-636	<10	12	<100	<10	<1	<1	<1	<1	30	<5
	<10	--	--	--	--	--	--	--	<10	--
NR018.0670X1050 12T-637	<10	21	17	<0.5	<1	<1	<3	<1	7	<5
	20	--	--	--	--	--	--	--	10	--
NR032.0755X0247 12T-630	<10	13	<100	<10	<1	<1	<1	<1	990	<5
	30	--	--	--	--	--	--	--	900	--
NR032.1266X0462 12T-628	<10	1	100	<10	<1	<1	<1	1	540	<5
	10	--	--	--	--	--	--	--	540	--
NR032.1280X0895 12T-638	<10	<1	10	<0.5	<1	<1	<3	2	160	<5
	<10	--	--	--	--	--	--	--	180	--
NR032.1320X1305 12K-320	20	4	36	<0.5	<1	<1	<3	<1	6	<5
	20	--	--	--	--	--	--	--	<10	--
NR049.1285X0335 12T-620	10	3	15	<0.5	<1	<1	<3	1	3	<5
	10	--	--	--	--	--	--	--	<10	--
NR050.0220X0690 12T-651	20	2	24	<0.5	<1	1	<3	1	7	<5
	20	--	--	--	--	--	--	--	<10	--

LOCAL IDENTIFIER	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
21N.10W.21.3444	99	8	<0.1	<1	<1	<1	<1	350	1	<9
	--	20	--	--	--	--	--	--	--	--
26N.19W.12.311 12T-644	40	<1	<0.1	<10	<1	<1	<1	67	<6	7
	--	<10	--	--	--	--	--	--	--	--
29N.11W.29.41324	--	--	--	--	--	--	--	--	--	--
29N.11W.29.43122	--	--	--	--	--	--	--	--	--	--
29N.17W.32.31 12T-629	220	160	<0.1	3	<1	<1	<1	11000	<1	<10
	--	160	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44111 N. BRIXNER	--	--	--	--	--	--	--	--	--	--
32N.10W.33.44112A HUNTER NO	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4421 TOWNSEND NO	--	--	--	--	--	--	--	--	--	--
NR017.1085X1545 12T-520	300	100	<0.1	1	<1	<1	<1	12000	<1	10
	--	90	--	--	--	--	--	--	--	--
NR018.0550X1400 12T-636	270	70	<0.1	1	<1	<1	<1	7500	<1	<10
	--	70	--	--	--	--	--	--	--	--
NR018.0670X1050 12T-637	61	<1	<0.1	<10	<1	<1	<1	62	<6	6
	--	<10	--	--	--	--	--	--	--	--
NR032.0755X0247 12T-630	540	110	<0.1	13	<1	<1	<1	10000	2	10
	--	120	--	--	--	--	--	--	--	--
NR032.1266X0462 12T-628	270	70	<0.1	2	1	<1	<1	7500	<1	<10
	--	70	--	--	--	--	--	--	--	--
NR032.1280X0895 12T-638	89	3	<0.1	<10	1	<1	<1	470	<6	8
	--	<10	--	--	--	--	--	--	--	--
NR032.1320X1305 12K-320	29	3	0.3	<10	<1	<1	<1	70	<6	9
	--	<10	--	--	--	--	--	--	--	--
NR049.1285X0335 12T-620	38	<1	<0.1	<10	<1	<1	<1	260	<6	10
	--	<10	--	--	--	--	--	--	--	--
NR050.0220X0690 12T-651	41	3	<0.1	<10	<1	2	<1	42	14	10
	--	<10	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN COUNTY -- Continued

LOCAL IDENTIFIER	C-13/C-12 STABLE ISOTOPE RATIO PER MIL (82081)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL (82082)	O-18/O-16 STABLE ISOTOPE RATIO PER MIL (82085)	CARBON 14 PERCENT MODERN (82172)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROM-OFORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)
21N.10W.21.3444	--	-113.0	-13.5	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
26N.19W.12.311 12T-644	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.11W.29.43122	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.17W.32.31 12T-629	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44111 N. BRIXNER	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44112A HUNTER NO	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.4421 TOWNSEND NO	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
NR017.1085X1545 12T-520	-8.8	-104.0	-14.2	<1.2	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
NR018.0550X1400 12T-636	--	-103.0	-14.1	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
NR018.0670X1050 12T-637	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
NR032.0755X0247 12T-630	--	-103.0	-13.9	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
NR032.1266X0462 12T-628	--	-103.0	-14.1	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL CHLOR-IDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)
21N.10W.21.3444	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
26N.19W.12.311 12T-644	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.11W.29.43122	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.17W.32.31 12T-629	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44111 N. BRIXNER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44112A HUNTER NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.4421 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

LOCAL IDENTIFIER	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L) (34516)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	CHLORO-ETHYL-ENE TOTAL (UG/L) (34546)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L) (34561)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L) (34566)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)
21N.10W.21.3444	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
26N.19W.12.311 12T-644	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
29N.11W.29.41324	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.11W.29.43122	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
29N.17W.32.31 12T-629	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
32N.10W.33.4243 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44111 N. BRIXNER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.44112A HUNTER NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
32N.10W.33.4421 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SAN JUAN COUNTY -- Continued

LOCAL IDENTIFIER	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	1,2-DIBROMOETHYLENE TOTAL (UG/L) (39082)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	FILTER PORE SIZE (MICROMETERS) (81352)	SAMPLING METHOD, CODES (82398)
21N.10W.21.3444	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	4100
26N.19W.12.311 12T-644	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
29N.11W.29.41324	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	--
29N.11W.29.43122	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	--
29N.17W.32.31 12T-629	--	--	--	--	--	--	--	0.45	--
	--	--	--	--	--	--	--	0.10	--
32N.10W.33.4243 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	--
32N.10W.33.44111 N. BRIXNER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	4020
32N.10W.33.44112A HUNTER NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	4020
32N.10W.33.4421 TOWNSEND NO	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--	4020
NR017.1085X1545 12T-520	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
NR018.0550X1400 12T-636	--	--	--	--	--	--	--	0.45	--
	--	--	--	--	--	--	--	0.10	--
NR018.0670X1050 12T-637	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
NR032.0755X0247 12T-630	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
NR032.1266X0462 12T-628	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
NR032.1280X0895 12T-638	--	--	--	--	--	--	--	0.45	--
	--	--	--	--	--	--	--	0.10	--
NR032.1320X1305 12K-320	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--
NR049.1285X0335 12T-620	--	--	--	--	--	--	--	0.45	--
	--	--	--	--	--	--	--	0.10	--
NR050.0220X0690 12T-651	--	--	--	--	--	--	--	0.45	4100
	--	--	--	--	--	--	--	0.10	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY

LOCAL IDENT-I-FIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEO-LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
15N.07E.15.232431 LA BAJADA	353158106105601	049	GW	07-31-86	1640	112SNTF	--	--	--
15N.07E.26.21312 WALDO	353024106100201	049	GW	08-06-86	1330	112SNTF	--	--	--
15N.08E.12.2143 EAST PENITE	353255106023001	049	GW	08-01-86	1310	112SNTF	--	--	--
15N.08E.22.2422 PEACH TREE	353108106042001	049	GW	08-22-86	1500	112SNTF	--	--	--
15N.08E.27.2142 LITTLE PEAC	353012106033301	049	GW	08-22-86	1515	112SNTF	--	--	--
16N.08E.10.42433 ROAK	353742106041801	049	GW	07-03-86	1135	121TSUQ	--	--	--
16N.08E.15.143 AIRPORT	353703106050201	049	GW	07-11-86	1031	121TSUQ	--	--	--
16N.08E.25.3142 NEWMAN	353508106025701	049	GW	07-24-86	1500	112SNTF	--	--	--
16N.08E.27.124 LEE	353533106045301	049	GW	08-27-86	1600	121TSUQ	--	--	--
16N.09E.06.4333 GONZALES	353822106013601	049	GW	08-07-86	1740	112SNTF	--	--	--
16N.09E.08.33214 SHANNON	353738106005301	049	GW	08-13-86	1620	112SNTF	--	--	--
16N.09E.08.3332K.SHANNON	353733106005701	049	GW	08-14-86	1651	112SNTF	--	--	--
16N.09E.18.1224 EVERGREEN	353722106013901	049	GW	07-25-86	1155	112SNTF	--	--	--
16N.09E.19.312 WILSON	353608106015701	049	GW	08-09-86	0845	112SNTF	--	320.00	--
16N.10E.17.411 STAMM	353655105541801	049	GW	08-14-86	1407	112SNTF	--	--	--
17N.09E.21.4222 JIMENEZ	354119105590501	049	GW	07-25-86	0750	112SNTF	--	--	--
17N.09E.21.4432 LOESCH	354059105591501	049	GW	07-24-86	1710	112SNTF	--	--	--
17N.09E.28.4424 FERGUSON	354013105590501	049	GW	07-18-86	1058	112ANCH	--	--	--
17N.09E.35.1314A	353945105574501	049	GW	09-16-86	--	121TSUQ	--	1952.00	6880
17N.09E.35.1314C	353945105574503	049	GW	09-16-86	--	121TSUQ	--	780.00	6880
17N.10E.05.3123 BISHOPS LOD	354354105543001	049	GW	08-15-86	1455	112SNTF	--	--	--
18N.08E.13.224 KUCKLEMAN	354747106021701	049	GW	08-27-86	0905	112SNTF	--	--	--
18N.08E.24.3144 WINDMILL	354623106025701	049	GW	08-28-86	1818	112SNTF	--	350.00	6395
18N.08E.33.1431 WINDMILL	354427106060601	049	GW	08-28-86	1735	112SNTF	--	--	--
18N.09E.25.241 B.JIMENEZ	354553105555401	049	GW	08-28-86	1630		--	--	--
19N.07E.36.3113 SF-2A	355000106092801	049	GW	07-27-86	1000	121TSUQ	1.50	1863.00	--
19N.07E.36.3113 SF-2B	355000106092802	049	GW	07-27-86	1900	121TSUQ	--	824.00	--
19N.07E.36.3113 SF-2C	355000106092803	049	GW	07-28-86	1800	121TSUQ	119.51	346.00	--
CANADA DE LOS ALAMOS GRANT	353205105571001	049	GW	08-14-86	1115	121TSUQ	--	--	--
CIENEGUILLA GRANT	353608106070201	049	GW	08-28-86	1325		--	--	--
	353723106064301	049	GW	08-28-86	1416		--	--	--
LOS CERRILLOS GRANT	353222106071001	049	GW	08-22-86	1345		--	--	--
MESITA DE JUAN LOPEZ GRANT	353243106084101	049	GW	08-13-86	1045		--	--	--
PACHECO GRANT	353808106031001	049	GW	08-07-86	1900		--	--	--
	353808106031801	049	GW	08-08-86	1405		--	--	--
	353814106031701	049	GW	08-27-86	1359		--	--	--
SANTA FE GRANT	354256105550801	049	GW	08-15-86	1119	112SNTF	--	--	--
	354012105540201	049	GW	08-27-86	1905	112SNTF	--	--	--
	353953105540201	049	GW	08-27-86	1930		--	--	--
SITIO DE LOS CERRILLOS GRAN	353251106073101	049	GW	08-06-86	1125		--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
15N.07E.15.232431 LA BAJADA	4080	4270	8.10	8.10	21.5	19.5	1.0	41	8.0	5.0
15N.07E.26.21312 WALDO	--	932	7.90	8.00	28.5	18.0	10	110	20	14
15N.08E.12.2143 EAST PENITE	280	307	7.70	8.00	31.5	16.0	2.0	130	37	8.5
15N.08E.22.2422 PEACH TREE	320	339	7.80	7.80	27.0	15.5	0.60	110	31	9.0
15N.08E.27.2142 LITTLE PEAC	330	341	8.00	8.40	27.0	15.5	0.80	130	32	11
16N.08E.10.42433 ROAK	210	226	6.80	8.20	24.5	17.5	1.5	110	33	5.5
16N.08E.15.143 AIRPORT	265	288	8.00	8.40	25.0	21.0	1.0	24	8.6	0.60
16N.08E.2 .3142 NEWMAN	210	237	7.90	8.30	26.0	18.0	0.70	86	30	2.6
16N.08E.27.124 LEE	510	514	7.40	8.20	28.0	15.0	0.30	240	81	8.6
16N.09E.06.4333 GONZALES	260	279	7.90	8.30	27.5	16.5	2.0	120	40	4.9
16N.09E.08.33214 SHANNON	215	242	8.20	8.30	27.5	16.5	0.20	110	36	4.6
16N.09E.08.3332K.SHANNON	285	203	8.45	8.30	27.0	17.0	0.20	83	28	3.1
16N.09E.18.1224 EVERGREEN	210	234	7.40	8.40	27.0	17.0	0.90	110	36	4.8
16N.09E.19.312 WILSON	188	210	7.90	8.40	23.0	17.0	0.10	90	30	3.6
16N.10E.17.411 STAMM	680	733	7.50	7.60	26.0	14.5	22	330	88	27
17N.09E.21.4222 JIMENEZ	189	217	7.80	8.20	17.5	16.0	0.60	96	30	5.0
17N.09E.21.4432 LOESCH	240	284	7.70	8.20	26.5	15.5	0.70	130	36	9.9
17N.09E.28.4424 FERGUSON	340	375	7.40	7.80	24.0	13.0	1.4	190	69	3.5
17N.09E.35.1314A	417	423	--	9.29	--	--	--	6	2.1	0.07
17N.09E.35.1314C	750	766	--	8.52	--	--	--	22	8.5	0.20
17N.10E.05.3123 BISHOPS LOD	348	347	7.80	8.40	26.5	14.0	0.20	160	47	10
18N.08E.13.224 KUCKLEMAN	320	337	7.80	8.10	16.0	17.0	1.4	70	25	1.9
18N.08E.24.3144 WINDMILL	330	344	7.70	8.40	20.5	16.5	0.40	150	51	4.8
18N.08E.33.1431 WINDMILL	370	391	7.70	8.10	22.0	17.0	0.30	150	41	11
18N.09E.25.241 B.JIMENEZ	730	733	7.00	8.40	23.5	17.0	0.40	370	110	22
19N.07E.36.3113 SF-2A	1350	1280	--	9.20	--	22.5	--	61	20	2.8
19N.07E.36.3113 SF-2B	900	788	--	8.80	--	20.0	--	61	19	3.2
19N.07E.36.3113 SF-2C	310	352	--	8.50	--	18.0	--	39	15	0.39
CANADA DE LOS ALAMOS GRANT	320	348	8.70	8.00	27.0	16.0	0.30	150	44	9.6
CIENEGUILLA GRANT	220	234	7.20	8.30	25.0	16.0	1.2	100	34	4.3
	200	217	7.40	8.00	23.5	15.0	0.20	88	28	4.4
LOS CERRILLOS GRANT	293	311	7.90	8.10	29.5	19.5	0.30	120	35	8.2
MESITA DE JUAN LOPEZ GRANT	385	402	8.10	8.10	26.0	18.0	0.10	130	34	12
PACHECO GRANT	--	170	8.20	8.30	27.0	18.0	2.0	71	25	2.0
	--	177	8.00	8.10	28.0	17.0	0.20	75	26	2.3
	170	184	7.80	8.20	26.0	17.0	0.10	75	26	2.5
SANTA FE GRANT	510	538	8.60	8.70	24.0	15.0	0.40	28	6.9	2.5
	491	486	7.40	8.30	15.0	13.0	6.5	220	63	16
	580	542	7.60	8.70	15.0	19.0	0.30	150	32	18
SITIO DE LOS CERRILLOS GRAN	288	311	7.40	8.00	25.5	15.5	0.60	110	32	8.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	BICARBONATE WATER WHOLE IT-FLD (MG/L) (00450)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	CARBONATE WATER WHOLE IT-FLD (MG/L) (00447)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03) (99430)	ALKALINITY, CARBONATE IT-FLD (MG/L CACO3) (00419)
15N.07E.15.232431 LA BAJADA	1000	70	5.3	1530	--	0	--	1240	1260	--
15N.07E.26.21312 WALDO	170	7	4.3	304	--	0	--	245	249	--
15N.08E.12.2143 EAST PENITE	13	0.5	2.7	168	--	0	--	136	138	--
15N.08E.22.2422 PEACH TREE	25	1	3.2	156	--	0	--	129	128	--
15N.08E.27.2142 LITTLE PEAC	21	0.8	3.4	159	--	0	--	130	130	--
16N.08E.10.42433 ROAK	7.2	0.3	1.2	115	--	0	--	93	94	--
16N.08E.15.143 AIRPORT	51	5	1.4	151	--	0	--	121	124	--
16N.08E.25.3142 NEWMAN	16	0.8	1.7	133	--	0	--	108	109	--
16N.08E.27.124 LEE	21	0.6	2.6	312	--	0	--	256	256	--
16N.09E.06.4333 GONZALES	7.0	0.3	1.0	98	--	0	--	80	80	--
16N.09E.08.33214 SHANNON	8.2	0.4	1.2	132	--	0	--	110	108	--
16N.09E.08.3332K.SHANNON	12	0.6	1.2	115	--	6	--	103	104	--
16N.09E.18.1224 EVERGREEN	8.0	0.3	2.2	142	--	0	--	115	116	--
16N.09E.19.312 WILSON	7.1	0.3	1.5	120	--	0	--	98	98	--
16N.10E.17.411 STAMM	29	0.7	4.1	286	--	0	--	233	234	--
17N.09E.21.4222 JIMENEZ	5.4	0.3	1.8	112	--	0	--	90	92	--
17N.09E.21.4432 LOESCH	9.7	0.4	2.8	133	--	0	--	106	109	--
17N.09E.28.4424 FERGUSON	6.1	0.2	0.80	168	--	0	--	138	138	--
17N.09E.35.1314A	90	18	1.3	--	--	--	--	--	--	--
17N.09E.35.1314C	150	15	5.8	--	--	--	--	--	--	--
17N.10E.05.3123 BISHOPS LOD	10	0.4	1.3	192	--	0	--	157	157	--
18N.08E.13.224 KUCKLEMAN	45	2	2.2	154	--	0	--	125	126	--
18N.08E.24.3144 WINDMILL	17	0.6	2.1	146	--	0	--	119	120	--
18N.08E.33.1431 WINDMILL	21	0.8	3.4	162	--	0	--	133	133	--
18N.09E.25.241 B.JIMENEZ	28	0.7	2.5	373	--	0	--	304	306	--
19N.07E.36.3113 SF-2A	310	18	7.6	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2B	170	10	5.1	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2C	64	5	2.3	--	--	--	--	--	--	--
CANADA DE LOS ALAMOS GRANT	15	0.6	3.0	156	--	24	--	172	168	--
CIENEGUILLA GRANT	8.5	0.4	1.2	117	--	0	--	95	96	--
	9.6	0.5	1.5	115	--	0	--	93	94	--
LOS CERRILLOS GRANT	18	0.7	2.9	166	--	0	--	137	136	--
MESITA DE JUAN LOPEZ GRANT	31	1	2.3	1.9	--	0	--	154	153	--
PACHECO GRANT	7.0	0.4	0.80	101	--	0	--	83	83	--
	7.7	0.4	0.80	105	--	0	--	85	86	--
	9.1	0.5	1.0	113	--	0	--	94	93	--
SANTA FE GRANT	110	9	2.0	259	--	7.0	--	224	224	--
	21	0.6	1.8	--	--	0	--	--	--	--
	27	1	2.4	--	--	0	--	--	--	--
SITIO DE LOS CERRILLOS GRAN	21	0.9	2.3	29	--	0	--	35	24	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
15N.07E.15.232431 LA BAJADA	1230	0.7	750	4.0	10	2500	--	<0.010	<0.100	1.30
15N.07E.26.21312 WALDO	241	190	35	1.6	12	600	--	0.030	<0.100	0.810
15N.08E.12.2143 EAST PENITE	136	14	6.2	0.50	24	190	0.680	0.010	0.690	0.040
15N.08E.22.2422 PEACH TREE	128	24	11	0.60	24	210	--	<0.010	1.20	0.020
15N.08E.27.2142 LITTLE PEAC	131	23	13	0.70	25	210	--	<0.010	1.30	0.010
16N.08E.10.42433 ROAK	97	6.9	6.7	0.40	19	140	--	<0.010	0.930	0.050
16N.08E.15.143 AIRPORT	123	20	3.1	0.40	19	180	--	<0.010	0.700	0.020
16N.08E.25.3142 NEWMAN	110	10	1.6	0.20	25	150	--	<0.010	0.640	0.040
16N.08E.27.124 LEE	168	20	10	0.20	25	270	--	<0.010	1.90	0.030
16N.09E.06.4333 GONZALES	82	29	16	0.20	18	180	2.39	0.010	2.40	0.040
16N.09E.08.33214 SHANNON	110	8.8	4.2	0.20	21	150	--	<0.010	0.950	0.020
16N.09E.08.3332K.SHANNON	99	10	1.6	0.30	22	140	--	<0.010	0.210	0.020
16N.09E.18.1224 EVERGREEN	116	2.8	1.4	0.20	24	150	--	<0.010	0.470	0.020
16N.09E.19.312 WILSON	101	4.3	2.3	0.20	22	130	--	<0.010	0.440	0.020
16N.10E.17.411 STAMM	227	92	61	0.40	17	460	0.210	0.020	0.230	0.090
17N.09E.21.4222 JIMENEZ	92	6.0	3.5	0.40	20	136	--	<0.100	1.800	<0.010
17N.09E.21.4432 LOESCH	107	7.2	13	0.30	22	170	--	<0.010	2.70	0.030
17N.09E.28.4424 FERGUSON	134	18	16	0.10	16	210	--	<0.010	3.70	0.040
17N.09E.35.1314A	169	27	8.8	1.7	18	250	--	--	<0.100	--
17N.09E.35.1314C	131	100	86	1.6	21	450	--	--	0.460	--
17N.10E.05.3123 BISHOPS LOD	133	20	8.0	0.50	19	580	--	<0.010	0.430	<0.010
18N.08E.13.224 KUCKLEMAN	123	36	6.6	0.40	19	210	--	<0.010	1.00	0.010
18N.08E.24.3144 WINDMILL	116	21	9.6	0.30	23	200	--	<0.010	4.40	0.040
18N.08E.33.1431 WINDMILL	117	16	14	0.20	31	210	--	<0.010	13.0	0.030
18N.09E.25.241 B.JIMENEZ	--	36	34	0.40	26	--	--	<0.010	11.0	0.020
19N.07E.36.3113 SF-2A	580	49	55	0.40	17	810	--	--	0.350	--
19N.07E.36.3113 SF-2B	392	27	4.6	0.30	28	490	--	--	0.980	--
19N.07E.36.3113 SF-2C	130	21	9.4	0.30	22	210	--	--	2.70	--
CANADA DE LOS ALAMOS GRANT	150	17	7.4	0.60	25	250	--	<0.010	1.60	0.030
CIENEGUILLA GRANT	92	7.2	6.3	0.20	23	140	--	<0.010	3.10	0.040
	90	8.4	4.8	0.20	23	130	--	<0.010	1.70	<0.010
LOS CERRILLOS GRANT	136	17	5.1	0.60	26	190	--	<0.010	0.550	0.030
MESITA DE JUAN LOPEZ GRANT	156	40	10	1.0	25	160	--	<0.010	0.860	0.020
PACHECO GRANT	84	3.0	1.4	0.30	21	110	0.240	0.010	0.250	0.020
	87	2.9	1.3	0.20	21	110	--	<0.010	0.180	--
	92	3.2	1.1	0.30	21	120	--	<0.010	0.140	0.010
SANTA FE GRANT	222	29	23	0.80	13	330	--	<0.010	0.380	0.020
	215	15	15	0.60	22	280	--	<0.010	<0.100	0.020
	112	76	14	0.50	20	260	--	<0.010	<0.100	0.020
SITIO DE LOS CERRILLOS GRAN	130	22	6.8	0.60	25	130	--	<0.010	0.440	0.030

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, DISSOLVED (UG/L AS CU) (01040)
15N.07E.15.232431 LA BAJADA	0.0	0.020	1.0	0	600	--	1700	<1	<10	2
15N.07E.26.21312 WALDO	0.09	<0.010	0.5	0	0	--	710	<1	<10	3
15N.08E.12.2143 EAST PENITE	--	<0.010	1.0	0	180	--	30	<1	<10	4
15N.08E.22.2422 PEACH TREE	0.18	0.010	26	4	77	--	60	1	<10	2
15N.08E.27.2142 LITTLE PEAC	0.39	0.010	0.7	4	94	--	70	<1	60	1
16N.08E.10.42433 ROAK	0.35	0.020	0.1	<1	68	--	10	<1	<10	4
16N.08E.15.143 AIRPORT	--	0.010	0.1	19	67	<0.5	70	<1	10	2
16N.08E.25.3142 NEWMAN	--	0.010	0.3	3	160	--	30	<1	<10	9
16N.08E.27.124 LEE	--	<0.010	1.0	1	410	--	30	<1	<10	1
16N.09E.06.4333 GONZALES	0.16	0.010	1.0	<1	54	--	<10	<1	<10	<1
16N.09E.08.33214 SHANNON	0.28	0.020	0.2	<1	85	--	<10	<1	<10	2
16N.09E.08.3332K.SHANNON	--	<0.010	<0.1	2	140	--	20	<1	<10	5
16N.09E.18.1224 EVERGREEN	--	0.020	0.5	2	120	--	30	<1	<10	4
16N.09E.19.312 WILSON	0.28	0.010	0.1	4	150	--	20	<1	<10	2
16N.10E.17.411 STAMM	0.31	<0.010	1.3	<1	18	--	60	<1	<10	1
17N.09E.21.4222 JIMENEZ	--	0.010	0.3	8	250	--	<10	<1	<10	9
17N.09E.21.4432 LOESCH	--	0.010	0.1	8	310	--	30	<1	<10	1
17N.09E.28.4424 FERGUSON	0.36	0.010	0.3	2	590	--	<10	<1	<10	1
17N.09E.35.1314A	--	--	--	--	--	--	--	--	--	--
17N.09E.35.1314C	--	--	--	--	--	--	--	--	--	--
17N.10E.05.3123 BISHOPS LOD	--	<0.010	0.2	1	39	--	20	<1	<10	1
18N.08E.13.224 KUCKLEMAN	--	<0.010	<0.1	3	58	--	60	<1	<10	<1
18N.08E.24.3144 WINDMILL	0.96	<0.010	0.1	3	140	--	40	<1	<10	<1
18N.08E.33.1431 WINDMILL	1.8	<0.010	0.3	7	120	--	50	<1	<10	<1
18N.09E.25.241 B.JIMENEZ	0.68	<0.010	1.3	2	230	--	50	<1	<10	5
19N.07E.36.3113 SF-2A	--	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2B	--	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2C	--	--	--	--	--	--	--	--	--	--
CANADA DE LOS ALAMOS GRANT	0.37	<0.010	<0.1	2	170	--	20	<1	<10	4
CIENEGUILLA GRANT	0.56	0.040	0.1	1	110	--	10	1	<10	4
	--	0.020	0.1	<1	73	--	20	<1	<10	2
LOS CERRILLOS GRANT	0.47	<0.010	30	4	130	--	40	1	<10	4
MESITA DE JUAN LOPEZ GRANT	0.48	<0.010	0.2	4	50	--	80	<1	<10	2
PACHECO GRANT	--	<0.010	0.3	2	200	--	10	<1	<10	24
	--	--	0.2	3	210	--	20	<1	<10	<1
	--	<0.010	<0.1	1	160	--	30	<1	<10	4
SANTA FE GRANT	--	0.020	0.9	2	25	--	120	<1	<10	3
	0.18	<0.010	1.6	<1	56	--	30	<1	<10	2
	0.18	<0.010	0.6	<1	28	--	30	1	<10	140
SITIO DE LOS CERRILLOS GRAN	--	<0.010	0.4	0	89	--	30	<1	<10	39

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)
15N.07E.15.232431 LA BAJADA	10	<5	--	<10	<0.1	--	<1	<1	--	--
15N.07E.26.21312 WALDO	10	<5	--	20	<0.1	--	<1	<1	--	--
15N.08E.12.2143 EAST PENITE	7	<5	--	15	0.5	--	<1	<1	--	--
15N.08E.22.2422 PEACH TREE	9	<5	--	2	<0.1	--	1	<1	--	--
15N.08E.27.2142 LITTLE PEAC	4	<5	--	2	<0.1	--	<1	<1	--	--
16N.08E.10.42433 ROAK	6	<5	--	2	<0.1	--	<1	<1	--	--
16N.08E.15.143 AIRPORT	17	<5	31	2	<0.1	<10	<1	<1	96	19
16N.08E.25.3142 NEWMAN	5	<5	--	2	<0.1	--	<1	<1	--	--
16N.08E.27.124 LEE	8	<5	--	1	<0.1	--	<1	<1	--	--
16N.09E.06.4333 GONZALES	4	<5	--	6	<0.1	--	1	<1	--	--
16N.09E.08.33214 SHANNON	8	<5	--	<1	<0.1	--	<1	<1	--	--
16N.09E.08.3332K.SHANNON	7	<5	--	<1	0.1	--	<1	<1	--	--
16N.09E.18.1224 EVERGREEN	10	<5	--	<1	<0.1	--	<1	<1	--	--
16N.09E.19.312 WILSON	4	<5	--	<1	0.3	--	<1	<1	--	--
16N.10E.17.411 STAMM	1600	<5	--	32	0.1	--	3	<1	--	--
17N.09E.21.4222 JIMENEZ	<3	<5	--	1	<0.01	--	<1	<1	--	--
17N.09E.21.4432 LOESCH	13	<5	--	<1	<0.1	--	2	<1	--	--
17N.09E.28.4424 FERGUSON	12	<5	--	1	<0.1	--	<1	1	--	--
17N.09E.35.1314A	37	--	--	4	--	--	--	--	--	--
17N.09E.35.1314C	54	--	--	8	--	--	--	--	--	--
17N.10E.05.3123 BISHOPS LOD	4	<5	--	<1	<0.1	--	1	<1	--	--
18N.08E.13.224 KUCKLEMAN	10	<5	--	1	<0.1	--	2	<1	--	--
18N.08E.24.3144 WINDMILL	12	<5	--	3	<0.1	--	1	<1	--	--
18N.08E.33.1431 WINDMILL	4	<5	--	6	<0.1	--	2	<1	--	--
18N.09E.25.241 B.JIMENEZ	4	<5	--	<1	<0.1	--	<1	<1	--	--
19N.07E.36.3113 SF-2A	31	--	--	490	--	--	--	--	--	--
19N.07E.36.3113 SF-2B	14	--	--	3	--	--	--	--	--	--
19N.07E.36.3113 SF-2C	58	--	--	2	--	--	--	--	--	--
CANADA DE LOS ALAMOS GRANT	<3	<5	--	<1	<0.1	--	1	<1	--	--
CIENEGUILLA GRANT	8	<5	--	4	<0.1	--	<1	1	--	--
	6	<5	--	<1	<0.1	--	<1	<1	--	--
LOS CERRILLOS GRANT	19	<5	--	1	<0.1	--	<1	<1	--	--
MESITA DE JUAN LOPEZ GRANT	4	<5	--	2	<0.1	--	1	1	--	--
PACHECO GRANT	10	<5	--	<10	<0.1	--	<1	<1	--	--
	<3	<5	--	<1	<0.1	--	<1	<1	--	--
	7	<5	--	<1	<0.1	--	<1	<1	--	--
SANTA FE GRANT	33	<5	--	3	0.2	--	2	<1	--	--
	44	<5	--	42	0.1	--	<1	<1	--	--
	7	<5	--	17	<0.1	--	<1	<1	--	--
SITIO DE LOS CERRILLOS GRAN	3	5	--	2	<0.1	--	<1	<1	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENT-I-FIER	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	PCB, DIS-SOLVED (UG/L) (39517)	ALDRIN, DIS-SOLVED (UG/L) (39331)	CHLOR-DANE, DIS-SOLVED (UG/L) (39352)	DDD, DIS-SOLVED (UG/L) (39361)	DDE, DIS-SOLVED (UG/L) (39366)	DDT, DIS-SOLVED (UG/L) (39371)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	ENDRIN, DIS-SOLVED (UG/L) (39391)
15N.07E.15.232431 LA BAJADA	170	--	--	--	--	--	--	--	--
15N.07E.26.21312 WALDO	70	--	--	--	--	--	--	--	--
15N.08E.12.2143 EAST PENITE	150	--	--	--	--	--	--	--	--
15N.08E.22.2422 PEACH TREE	300	--	--	--	--	--	--	--	--
15N.08E.27.2142 LITTLE PEAC	38	--	--	--	--	--	--	--	--
16N.08E.10.42433 ROAK	200	--	--	--	--	--	--	--	--
16N.08E.15.143 AIRPORT	26	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
16N.08E.25.3142 NEWMAN	74	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
16N.08E.27.124 LEE	160	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
16N.09E.06.4333 GONZALES	240	--	--	--	--	--	--	--	--
16N.09E.08.33214 SHANNON	6	--	--	--	--	--	--	--	--
16N.09E.08.3332K.SHANNON	48	--	--	--	--	--	--	--	--
16N.09E.18.1224 EVERGREEN	160	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
16N.09E.19.312 WILSON	10	--	--	--	--	--	--	--	--
16N.10E.17.411 STAMM	350	--	--	--	--	--	--	--	--
17N.09E.21.4222 JIMENEZ	13	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
17N.09E.21.4432 LOESCH	160	--	--	--	--	--	--	--	--
17N.09E.28.4424 FERGUSON	4	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
17N.09E.35.1314A	--	--	--	--	--	--	--	--	--
17N.09E.35.1314C	--	--	--	--	--	--	--	--	--
17N.10E.05.3123 BISHOPS LOD	13	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
18N.08E.13.224 KUCKLEMAN	750	--	--	--	--	--	--	--	--
18N.08E.24.3144 WINDMILL	160	--	--	--	--	--	--	--	--
18N.08E.33.1431 WINDMILL	390	--	--	--	--	--	--	--	--
18N.09E.25.241 B.JIMENEZ	740	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2A	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2B	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2C	--	--	--	--	--	--	--	--	--
CANADA DE LOS ALAMOS GRANT	22	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
CIENEGUILLA GRANT	7	--	--	--	--	--	--	--	--
	140	--	--	--	--	--	--	--	--
LOS CERRILLOS GRANT	79	--	--	--	--	--	--	--	--
MESITA DE JUAN LOPEZ GRANT	22	--	--	--	--	--	--	--	--
PACHECO GRANT	120	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
	110	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
	85	--	--	--	--	--	--	--	--
SANTA FE GRANT	38	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
	74	--	--	--	--	--	--	--	--
	220	--	--	--	--	--	--	--	--
SITIO DE LOS CERRILLOS GRAN	31	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SANTA FE COUNTY -- Continued

LOCAL IDENTIFIER	HEPTACHLOR, DISSOLVED (UG/L) (39411)	HEPTACHLOR EPOXIDE DISSOLVED (UG/L) (39421)	LINDANE DISSOLVED (UG/L) (39341)	MIREX, DISSOLVED (UG/L) (39756)	TOXAPHENE, DISSOLVED (UG/L) (39401)	PERTHANE DISSOLV (UG/L) (82348)	METHOXYCHLOR DISSOLV (UG/L) (82350)	ENDOSULFAN DISSOLV (UG/L) (82354)	PCN DISSOLV (UG/L) (82360)
15N.07E.15.232431 LA BAJADA	--	--	--	--	--	--	--	--	--
15N.07E.26.21312 WALDO	--	--	--	--	--	--	--	--	--
15N.08E.12.2143 EAST PENITE	--	--	--	--	--	--	--	--	--
15N.08E.22.2422 PEACH TREE	--	--	--	--	--	--	--	--	--
15N.08E.27.2142 LITTLE PEAC	--	--	--	--	--	--	--	--	--
16N.08E.10.42433 ROAK	--	--	--	--	--	--	--	--	--
16N.08E.15.143 AIRPORT	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
16N.08E.25.3142 NEWMAN	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
16N.08E.27.124 LEE	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
16N.09E.06.4333 GONZALES	--	--	--	--	--	--	--	--	--
16N.09E.08.33214 SHANNON	--	--	--	--	--	--	--	--	--
16N.09E.08.3332K.SHANNON	--	--	--	--	--	--	--	--	--
16N.09E.18.1224 EVERGREEN	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
16N.09E.19.312 WILSON	--	--	--	--	--	--	--	--	--
16N.10E.17.411 STAMM	--	--	--	--	--	--	--	--	--
17N.09E.21.4222 JIMENEZ	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
17N.09E.21.4432 LOESCH	--	--	--	--	--	--	--	--	--
17N.09E.28.4424 FERGUSON	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
17N.09E.35.1314A	--	--	--	--	--	--	--	--	--
17N.09E.35.1314C	--	--	--	--	--	--	--	--	--
17N.10E.05.3123 BISHOPS LOD	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
18N.08E.13.224 KUCKLEMAN	--	--	--	--	--	--	--	--	--
18N.08E.24.3144 WINDMILL	--	--	--	--	--	--	--	--	--
18N.08E.33.1431 WINDMILL	--	--	--	--	--	--	--	--	--
18N.09E.25.241 B.JIMENEZ	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2A	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2B	--	--	--	--	--	--	--	--	--
19N.07E.36.3113 SF-2C	--	--	--	--	--	--	--	--	--
CANADA DE LOS ALAMOS GRANT	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
CIENEGUILLA GRANT	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
LOS CERRILLOS GRANT	--	--	--	--	--	--	--	--	--
MESITA DE JUAN LOPEZ GRANT	--	--	--	--	--	--	--	--	--
PACHECO GRANT	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
	--	--	--	--	--	--	--	--	--
SANTA FE GRANT	<0.01	<0.01	<0.01	<0.01	<1.0	<0.10	<0.01	<0.01	<0.10
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
SITIO DE LOS CERRILLOS GRAN	--	--	--	--	--	--	--	--	--

SOCORRO COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
08S.05E.32.431 MURRAY-SW	333412106265601	053	GW	08-13-86	1122		290.00	5115

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE (DEG C) (00010)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
08S.05E.32.431 MURRAY-SW	1000	952	7.80	22.5	390	98	36	62	1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOCORRO COUNTY -- Continued

LOCAL IDENTIFIER	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
08S.05E.32.431 MURRAY-SW	1.6	134	330	40	1.4	27	723	680	2.20

TAOS COUNTY

LOCAL IDENTIFIER	STATION NUMBER	COUNTY	SITE	DATE	TIME	GEOLOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPECIFIC CONDUCTANCE (US/CM) (00095)
28N.12E.08 N. BIG ARSENIC S	364058105411701	055	SP	08-27-86	1300	000EXRV	6880	205
28N.12E.09.BLM VISITOR CENT	364057105401701	055	GW	08-27-86	1200	122SNTFL	--	205
28N.12E.09.MOTTL SPRING BEL	364042105393901	055	SP	08-26-86	1930	122SNTFL	--	210
29N.12E.20.BLM CHIFLO WELL	364422105403201	055	GW	08-27-86	1430	122SNTFL	--	210

LOCAL IDENTIFIER	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE (DEG C) (00010)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
28N.12E.08 N. BIG ARSENIC S	236	8.10	8.20	16.5	0.800	<0.010	0.020	0.4
28N.12E.09.BLM VISITOR CENT	236	7.96	8.00	19.0	0.700	0.020	0.010	--
28N.12E.09.MOTTL SPRING BEL	229	8.00	8.10	17.5	0.700	<0.010	0.020	0.2
29N.12E.20.BLM CHIFLO WELL	244	8.01	8.00	17.5	0.800	<0.010	0.020	--

LOCAL IDENTIFIER	ARSENIC DISSOLVED (UG/L AS AS) (01000)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
28N.12E.08 N. BIG ARSENIC S	--	0	2	--	5	<1	4	13
28N.12E.09.BLM VISITOR CENT	2	--	--	4	14	3	4	39
28N.12E.09.MOTTL SPRING BEL	2	0	1	3	10	7	4	6
29N.12E.20.BLM CHIFLO WELL	1	--	--	9	22	5	4	92

*U.S. GOVERNMENT PRINTING OFFICE: 1987-0-777-220/65333

CALENDAR FOR WATER YEAR 1986

1985

OCTOBER

S	M	T	W	T	F	S
		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		

NOVEMBER

S	M	T	W	T	F	S
					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

DECEMBER

S	M	T	W	T	F	S
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				

1986

JANUARY

S	M	T	W	T	F	S
			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	

FEBRUARY

S	M	T	W	T	F	S
						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	

MARCH

S	M	T	W	T	F	S
						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					

APRIL

S	M	T	W	T	F	S
		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			

MAY

S	M	T	W	T	F	S
				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

JUNE

S	M	T	W	T	F	S
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					

JULY

S	M	T	W	T	F	S
		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		

AUGUST

S	M	T	W	T	F	S
					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						

SEPTEMBER

S	M	T	W	T	F	S
	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				

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