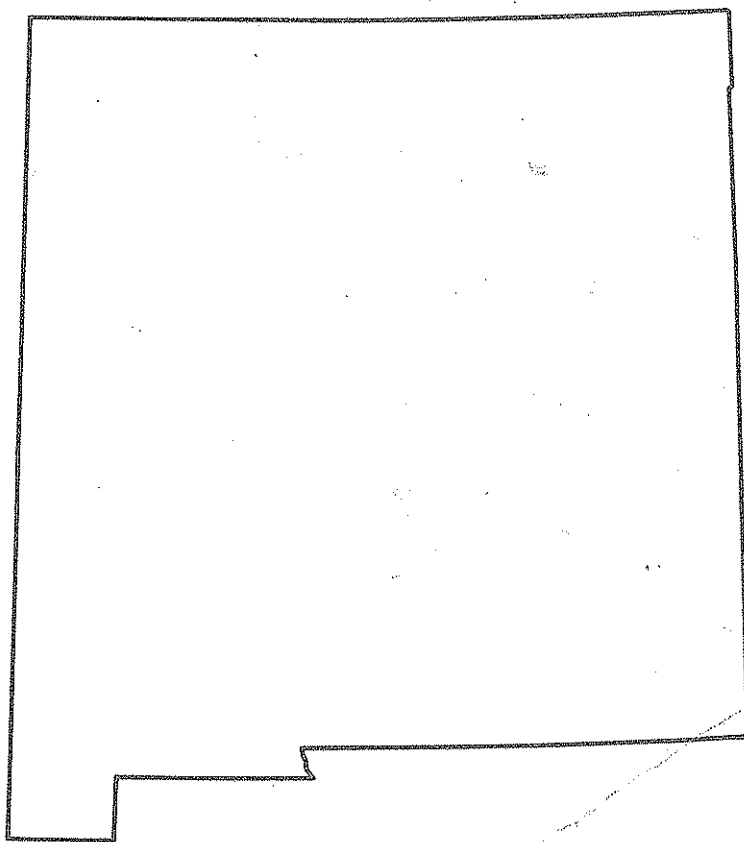




Water Resources Data New Mexico Water Year 1990



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-90-1
Prepared in cooperation with the State of New Mexico
and with other agencies

CALENDAR FOR WATER YEAR 1990

1989

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

1990

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
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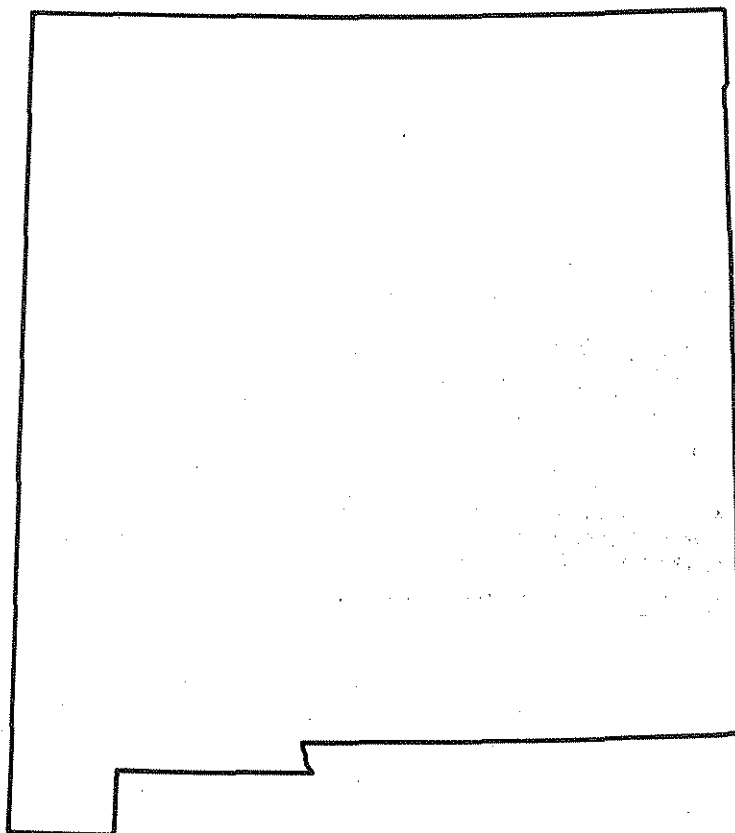
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8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						



Water Resources Data New Mexico Water Year 1990

by J.P. Borland, R.R. Cruz, R.L. McCracken, R.L. Lepp, D.Ortiz,
and D.A. Shaul



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-90-1
Prepared in cooperation with the State of New Mexico
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

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Albuquerque, New Mexico 87110

1991

PREFACE

This annual hydrologic data report of New Mexico is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by Federal, State, and local agencies and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for New Mexico are contained in this volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report:

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This report was prepared in cooperation with the State of New Mexico and other agencies under the supervision of Russell K. Livingston, District Chief, New Mexico, and James F. Blakey, Regional Hydrologist, Central Region.

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15. Supplementary Notes Prepared in cooperation with the State of New Mexico and with other agencies.			
16. Abstract (Limit: 200 words) Water-resources data for the 1990 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 167 gaging stations; stage and contents for 26 lakes and reservoirs; water quality for 59 gaging stations and 168 wells; and water levels at 114 observation wells. Also included are 109 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, 3 seepage investigations are 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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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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

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WELL 351051106395304	Local number 11N.03E.18.411		387
<u>CHAVES COUNTY</u>			
WELL 334645104344501	Local number 07S.23E.23.244		387
WELL 332615104303601	Local number 10S.24E.21.212		388
WELL 332255104360401	Local number 11S.23E.03.342		388
WELL 331930104261001	Local number 11S.25E.29.34333		388
WELL 332200104270001	Local number 12S.25E.09.422		388
WELL 331525104245201	(formerly 331205104245101) Local number 12S.25E.23.344		389
WELL 331524104245101	Local number 12S.25E.23.344A		389
WELL 331216104241701	Local number 13S.25E.12.311		389
WELL 331002104254701	(formerly 331002104272001) Local number 13S.25E.27.211		390
WELL 330700104402501	Local number 14S.23E.08.144		390
WELL 330640104174501	Local number 14S.26E.12.433B		390
WELL 330404104221201	Local number 14S.26E.30.444		390
WELL 325845104295501	Local number 15S.24E.25.433		391
<u>CIBOLA COUNTY</u>			
WELL 350400107510501	Local number 10N.10W.26.331		391
WELL 350925107523001	Local number 11N.10W.27.241		391
WELL 351400107524201	Local number 12N.10W.29.434		391
WELL 351650107535001	Local number 12N.11W.09.424		392
WELL 351637107584501	Local number 12N.11W.14.213		392
<u>COLFAX COUNTY</u>			
WELL 364500104031501	Local number 29N.27E.16.222		392
<u>COSTILLA COUNTY (COLORADO)</u>			
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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with Federal, State, and local agencies, obtains a large quantity 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 167 gaging stations and contents for 26 lakes and reservoirs; water quality for 59 gaging stations, 8 partial-record stations, and 168 wells; and water levels at 114 observation wells. Also included are 109 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. Three seepage investigations were made during the year. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating Federal, State, and local agencies in New Mexico.

Data on stream discharge and stage, and on lake or reservoir contents and stage 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 temperature, 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 generally are available 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 810, Box 25425, Denver, Colorado 80225.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports for each State. Water-quality records for water years 1964 through 1974 were similarly released in separate reports. Beginning with water year 1975, data for streamflow, water quality, and ground water were combined in reports published annually for each State. These 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-90-1." These Water-Data Reports are for sale by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22151.

COOPERATION

The U.S. Geological Survey and State and local agencies 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 agreements with the Survey are:

New Mexico State Engineer Office, E.L. Martinez, State Engineer.

New Mexico Interstate Stream Commission, E.L. Martinez, 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, Louis Medrano, Secretary.

Canadian River Municipal Water Authority, John C. Williams, General Manager.

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

Albuquerque Metropolitan Arroyo Flood Control Authority, L.A. Blair,
Executive Engineer.

City of Albuquerque, Louis E. Saavedra, Mayor.

City of Gallup, Edward Munoz, Mayor.

City of Raton, M.A. Baker, Mayor.

City of Ruidoso, Frank Potter, 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 26 gaging stations; by the Bureau of Reclamation, U.S. Department of Interior, for 7 gaging stations; by the Bureau of Indian Affairs, U.S. Department of Interior, for 15 gaging stations; and by the Bureau of Land Management, U.S. Department of Interior, for 2 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.

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1990

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. When flow is not regulated by releases from dams, several reaches of the Pecos River south of Santa Rosa have perennial flow that is maintained by relatively large spring runoff. 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.

Hydrologic conditions during water year 1990 reflected a general lack of precipitation until the last 3 months of the year when above-normal rainfall occurred within the State. The effect of this less-than-normal precipitation on streamflow and reservoir storage became more pronounced with time. However, though conditions were dry, streamflows and storage levels did not approach record-setting minimums. By the end of the year, streams had recovered to near-normal flow conditions.

Streamflow in New Mexico has been near normal or greater than normal since 1979, as generally was the case at the beginning of water year 1990, with recorded discharges in the State's streams. Discharges recorded in October on the Pecos (station 08378500) and Animas (station 09364500) Rivers were 190 and 88 percent of normal, respectively. However, during the subsequent winter period, snowpack, a major contributor to springtime streamflow, was generally near or less than normal. Streamflow at most recording gages continued to decrease during the winter months, but the general lack of precipitation was not reflected in most of the State's streams until the start of the irrigation season. After May, streams in all areas of the State were flowing at rates considerably less than normal. In June, the Delaware River near Red Bluff had only 1 percent of normal flow for the month and the Gila River near Gila had 68 percent of normal flow. Increased rainfall in June, July, and August prevented further decreases in flows, and by the end of the water year streamflows had increased to levels above normal, with flow in the Delaware River basin 261 percent of normal for September.

Discharges for water year 1990 at four index streamflow-gaging stations compared with median annual discharge for water years 1951-80 at the same stations are listed below:

Station number	Station name	Median annual discharge for water years 1951-80, in acre-feet	Discharge for water year 1990, in acre-feet	1990 discharge as a percentage of median
08276500	Rio Grande below Taos Junction Bridge	388,700	317,700	82
08378500	Pecos River near Pecos	56,090	56,020	100
08408500	Delaware River near Red Bluff	7,570	3,270	43
09430500	Gila River near Gila	79,950	58,300	73

Reservoir storage of the State's surface waters began water year 1990 at less-than-normal levels, and these levels continued to decrease during the year because of less-than-normal precipitation. The combined storage of Elephant Butte and Caballo Reservoirs was 71 percent of capacity at the end of October. Storage remained near this level until June when it decreased to 66 percent of capacity; at the end of September storage was 58 percent of capacity. Similarly, storage at Conchas Reservoir was 67 percent of capacity at the end of October; it maintained this level until September, then dropped to 60 percent of normal.

The combined storage of 13 major reservoirs in the State decreased by 373,000 acre-feet during water year 1990, totaling 3,864,000 acre-feet by September 30, 1990. The total combined capacity of these reservoirs is 8,537,000 acre-feet.

Surface-Water Quality

Dissolved-solids concentrations in water at selected streamflow-gaging stations were above normal throughout the State during the water year. Median values of specific conductance for water year 1990 at selected daily stations compared with median values of specific conductance for water years 1980-89 at the same stations are listed below:

Station number	Station name	Median specific conductance, in microsiemens per centimeter at 25 °Celsius, for water years 1980-89	Median specific conductance, in microsiemens per centimeter at 25 °Celsius, for water year 1990	1990 median as a percentage of 1980-89 median
08313000	Rio Grande at Otowi Bridge	311	361	116
08330000	Rio Grande at Albuquerque	388	436	112
08354900	Rio Grande FW at San Acacia	629	697	111
08396500	Pecos River near Artesia	7,500	8,570	114
09364500	Animas River at Farmington	534	572	107

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 will locate a well or spring to the nearest 10-acre tract, and 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. On 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 on 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 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.

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1990

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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures above 1,000 ft³/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 6.

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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 that 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.)

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 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 ensure 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:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
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.

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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 time of 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, "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 \pm 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of 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 \pm 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 \pm 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/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

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 2,443 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 [(ft³/s)/mi²] 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 (FT³/S, ft³/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 (CaCO₃).

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

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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 (m²), 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:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
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/(m².time)] for periphyton and macrophytes and [mg C/(m³.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/(m².time)] for periphyton and macrophytes and [mg O/(m³.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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 planimeted. All areas shown are those for the stage when the planimeted 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 um 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."

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- 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-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
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- 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.
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- 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.
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- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
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- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
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- 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.
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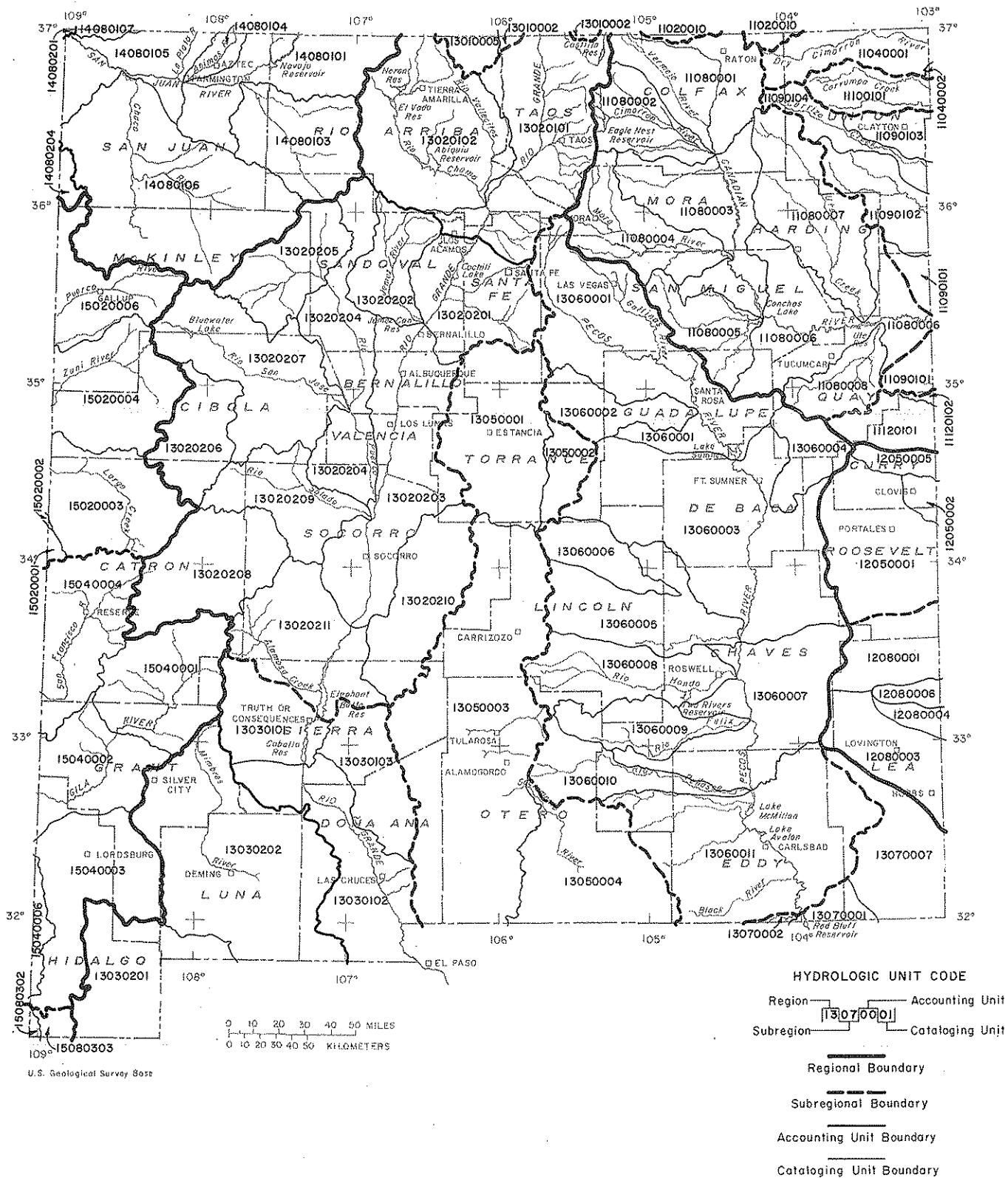


Figure 4.-- Location of hydrologic units.

HYDROLOGIC-DATA STATION RECORDS

LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

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 September 1987 (monthend contents only), October 1987 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 for municipal supply for City of Raton and releases to Vermejo Conservancy District.

COOPERATION.--Diversion, spillage and release data provided by City of Raton.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,970 acre-ft, May 31, 1975, elevation, 7,510.79 ft; maximum elevation observed, 7,512.18 ft, Apr. 30, 1987; minimum observed, 911 acre-ft, Feb. 28, 1979, elevation, 7,479.85 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,700 acre-ft, May 13-19, elevation, 7,511.00 ft; minimum contents, 2,370 acre-ft, Sept. 25-30, elevation, 7,498.96 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3020	3010	2930	2830	2790	2800	3130	3460	3420	2940	2800	2710
2	3010	3010	2930	2830	2790	2800	3140	3470	3420	2930	2800	2700
3	3010	3010	2920	2830	2790	2810	3150	3490	3410	2920	2800	2680
4	3010	3010	2920	2820	2790	2810	3160	3500	3400	2910	2790	2640
5	3020	3010	2920	2820	2780	2830	3170	3540	3400	2890	2790	2580
6	3020	3010	2910	2820	2780	2850	3180	3580	3340	2880	2790	2520
7	3020	3010	2900	2820	2780	2860	3190	3620	3260	2870	2790	2480
8	3020	3000	2900	2820	2780	2870	3200	3650	3180	2860	2790	2480
9	3010	3000	2900	2820	2780	2880	3210	3660	3140	2860	2780	2470
10	3010	3000	2890	2820	2780	2900	3230	3680	3150	2860	2780	2460
11	3010	3000	2890	2820	2780	2920	3240	3690	3150	2850	2770	2460
12	3000	3000	2890	2820	2780	2940	3240	3690	3140	2850	2770	2450
13	3000	2990	2880	2820	2780	2950	3270	3700	3130	2850	2760	2440
14	2990	2990	2890	2820	2780	2950	3290	3700	3120	2840	2760	2430
15	2990	2980	2880	2820	2780	2960	3300	3700	3110	2830	2760	2420
16	2980	2980	2880	2810	2780	2960	3300	3700	3090	2820	2760	2410
17	2980	2970	2870	2810	2780	2970	3310	3700	3070	2820	2770	2400
18	2980	2970	2870	2810	2780	2970	3320	3700	3050	2810	2760	2400
19	2980	2970	2870	2810	2780	2980	3330	3700	3050	2810	2760	2400
20	2990	2970	2870	2810	2790	2990	3340	3690	3040	2810	2760	2400
21	2980	2970	2860	2810	2790	3010	3350	3680	3040	2810	2760	2390
22	2990	2960	2860	2810	2790	3020	3370	3630	3030	2810	2760	2390
23	2990	2960	2860	2800	2790	3040	3390	3550	3020	2810	2770	2380
24	2990	2960	2860	2800	2790	3050	3400	3470	3010	2810	2770	2380
25	3000	2950	2850	2800	2800	3060	3410	3420	3000	2810	2770	2370
26	3000	2940	2850	2800	2800	3070	3430	3410	3000	2800	2770	2370
27	3000	2940	2850	2800	2800	3080	3430	3400	2990	2800	2760	2370
28	3000	2930	2840	2800	2800	3090	3450	3410	2980	2800	2750	2370
29	3000	2930	2840	2790	---	3100	3450	3420	2970	2790	2740	2370
30	3010	2930	2840	2790	---	3110	3450	3430	2950	2800	2730	2370
31	3010	---	2830	2790	---	3120	---	3430	---	2810	2720	---
MAX	3020	3010	2930	2830	2800	3120	3450	3700	3420	2940	2800	2710
MIN	2980	2930	2830	2790	2780	2800	3130	3400	2950	2790	2720	2370
(†)	7505.06	7504.38	7503.48	7503.11	7503.18	7506.08	7509.04	7508.81	7504.53	7503.20	7502.42	7498.99
(††)	-20	-80	-100	-40	+10	+320	+330	-20	-480	-140	-90	-350
(†††)	158	142	153	143	125	136	136	228	318	213	200	231
(††††)	0	0	0	0	0	0	0	282	238	0	0	288

CAL YR 1989 MAX 3700 MIN 2830 (††) -700 (†††) 2163 (††††) 0
WTR YR 1990 MAX 3700 MIN 2370 (††) -660 (†††) 2183 (††††) 808

(†) ELEVATION, IN FEET, AT END OF MONTH

(††) CHANGE IN CONTENTS, IN ACRE-FEET

(†††) DIVERSION FROM LAKE MALOYA, IN ACRE-FEET

(††††) RELEASE, IN ACRE-FEET, TO VERMEJO CONSERVANCY DISTRICT

ARKANSAS RIVER BASIN

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.

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, 0 acre-ft, Aug., Sept. 1989, lake drained.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 71 acre-ft Feb., May - Sept., elevation, 7,089.60 ft; minimum observed, 0 acre-ft Oct. - Jan.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
07199550 LAKE ALICE NEAR RATON, NM			
Sept. 30, 1989.....	Dry	0	0
Oct. 31.....	Dry	0	0
Nov. 30.....	Dry	0	0
Dec. 31.....	Dry	0	0
CAL YR 1989	-	-	0
Jan. 31, 1990.....	7,089.60	71	0
Feb. 28.....	7,089.60	71	+71
Mar. 31.....	7,089.00	40	-31
Apr. 30.....	7,089.00	40	0
May 31.....	7,089.60	71	+31
June 30.....	7,089.60	71	0
July 31.....	7,089.60	71	0
Aug. 31.....	7,089.60	71	0
Sept. 30.....	7,089.60	71	0
WTR YR 1990	-	-	0

ARKANSAS RIVER BASIN

07202400 VERMEJO RIVER AT VERMEJO PARK, NM

LOCATION.--Lat 37°57'28", long 105°07'25", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on left bank 0.2 mi upstream from Gold Creek, and 12 mi northwest of Vermejo Park.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--October 1985 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 8,240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 460 ft³/s, June 23, 1986, gage height, 4.21 ft, from rating curve extended above 60 cfs; minimum recorded, 2.9 ft³/s, Oct. 19, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft³/s, Aug. 15, gage height, 3.37 ft, minimum recorded, 2.9 ft³/s, Oct. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	---	---	---	---	---	---	8.3	20	11	12	6.8
2	3.6	---	---	---	---	---	---	8.3	19	9.3	10	6.7
3	3.5	---	---	---	---	---	---	8.8	18	9.7	9.8	6.4
4	5.8	---	---	---	---	---	---	9.3	18	10	9.0	6.3
5	5.9	---	---	---	---	---	---	10	18	11	9.5	6.2
6	5.2	---	---	---	---	---	---	16	18	9.6	9.9	6.2
7	4.8	---	---	---	---	---	---	27	17	9.2	9.4	7.6
8	4.2	---	---	---	---	---	---	34	17	9.9	8.3	6.6
9	3.8	---	---	---	---	---	---	31	18	9.5	7.8	6.3
10	3.7	---	---	---	---	---	---	26	19	11	7.5	6.2
11	3.6	---	---	---	---	---	---	26	18	12	7.6	5.9
12	3.4	---	---	---	---	---	6.6	24	17	9.7	8.4	5.7
13	3.3	---	---	---	---	---	6.6	23	16	12	21	5.5
14	3.3	---	---	---	---	---	6.7	25	15	15	16	5.4
15	3.1	---	---	---	---	---	8.3	25	15	15	45	5.2
16	3.4	---	---	---	---	---	8.7	24	14	13	31	6.9
17	3.6	---	---	---	---	---	8.9	22	14	16	17	7.7
18	3.4	---	---	---	---	---	7.9	24	13	12	15	6.4
19	3.0	---	---	---	---	---	7.8	23	13	12	14	6.4
20	---	---	---	---	---	---	8.1	21	12	13	13	6.8
21	---	---	---	---	---	---	8.3	22	12	11	14	7.4
22	---	---	---	---	---	---	9.3	22	12	11	12	6.3
23	---	---	---	---	---	---	9.9	23	11	10	11	6.8
24	---	---	---	---	---	---	9.5	25	11	9.9	10	6.1
25	---	---	---	---	---	---	9.1	24	11	10	9.3	6.8
26	---	---	---	---	---	---	8.7	23	11	9.6	8.6	6.3
27	---	---	---	---	---	---	8.8	22	10	9.6	8.2	6.0
28	---	---	---	---	---	---	8.3	23	9.8	9.3	7.9	8.2
29	---	---	---	---	---	---	9.4	24	9.5	9.6	7.5	14
30	---	---	---	---	---	---	8.4	22	11	11	7.1	8.6
31	---	---	---	---	---	---	---	21	---	11	6.9	---
TOTAL	---	---	---	---	---	---	---	666.7	437.3	341.9	383.7	203.7
MEAN	---	---	---	---	---	---	---	21.5	14.6	11.0	12.4	6.79
MAX	---	---	---	---	---	---	---	34	20	16	45	14
MIN	---	---	---	---	---	---	---	8.3	9.5	9.2	6.9	5.2
AC-FT	---	---	---	---	---	---	---	1320	867	678	761	404

ARKANSAS RIVER BASIN

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.--Records fair except for estimated daily discharges, 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.--19 years; water years (1946-49, 1976-90), 6.82 ft³/s, 4,940 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, 92 ft³/s, Aug. 22, gage height, 3.11 ft; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	3.8	3.8	e2.4	e3.2	e3.5	4.7	1.2	4.6	.00	16	.14
2	7.9	3.4	3.4	e2.7	e3.2	e3.5	5.3	1.9	3.5	.00	3.2	.69
3	e6.0	3.6	3.0	e2.7	e3.0	e3.5	4.1	4.5	3.1	.00	1.5	.18
4	e4.2	3.6	3.9	e2.4	e3.0	e3.5	3.4	4.4	2.7	.00	1.4	.01
5	e3.5	3.6	4.0	e2.2	e2.8	e3.7	3.6	3.3	2.5	.00	1.5	.00
6	e3.7	3.7	4.4	e2.2	e2.8	e4.5	4.6	5.8	2.0	.00	5.1	15
7	e3.6	3.5	4.4	e2.2	e3.0	e4.5	4.0	9.4	8.4	.00	2.2	22
8	e3.6	4.0	2.7	e2.3	e3.0	5.6	3.5	9.4	27	.00	1.5	23
9	e3.5	3.9	4.8	e2.7	e3.0	5.8	3.3	5.9	56	.00	.51	3.6
10	e3.3	4.6	3.1	e2.7	e3.3	6.1	3.2	4.9	30	.00	.67	.99
11	e3.3	4.1	e2.4	e2.7	e3.0	6.1	3.3	4.3	7.0	9.0	.52	.54
12	e3.1	3.9	e2.0	e2.7	e2.8	4.8	3.9	3.9	4.0	2.3	.34	.24
13	e3.0	3.8	e1.8	e2.7	e2.4	10	2.9	3.9	3.4	.53	.07	.04
14	e3.0	3.7	e2.2	e2.6	e2.4	16	2.6	3.6	3.7	.18	.88	.00
15	e3.0	3.8	e1.8	e2.6	e2.4	15	3.1	2.8	3.7	.28	1.9	.00
16	e3.6	3.3	e1.7	e2.6	e2.0	9.8	2.9	1.8	4.8	1.7	1.2	.00
17	e3.6	3.5	e1.8	e2.6	e2.0	6.9	2.7	1.0	4.2	.23	.37	.00
18	e3.5	3.5	e1.9	e2.4	e2.4	5.9	2.7	.82	3.8	.03	9.7	.00
19	3.4	3.6	e2.2	e2.0	e3.0	5.6	3.3	.61	5.9	.26	9.3	.07
20	3.6	3.8	e2.2	e1.8	e3.2	5.1	3.1	.51	4.2	.01	1.8	3.4
21	3.9	3.8	e1.8	e1.8	e3.7	5.7	2.0	.68	2.3	1.1	.74	1.0
22	4.0	3.9	e1.7	e2.0	e3.7	8.6	2.6	.83	1.7	.56	34	.20
23	3.6	3.7	e2.0	e2.7	e3.7	8.2	12	7.5	1.5	.26	24	.03
24	3.8	3.8	e2.4	e2.7	e3.8	8.5	9.0	26	2.3	.18	5.4	.00
25	3.8	3.9	e2.6	e2.4	e3.7	6.3	5.1	29	.99	1.2	4.3	.00
26	3.5	4.0	e2.6	e2.8	e4.1	5.4	3.9	23	.31	6.4	3.0	.00
27	3.4	3.9	e2.6	e2.5	e4.1	5.1	4.1	6.5	.02	2.2	1.7	.00
28	3.9	3.2	e2.6	e2.2	e4.1	5.6	2.8	4.3	.00	.54	1.5	.00
29	3.6	2.7	e2.2	e2.4	---	6.3	2.1	28	.00	3.9	1.2	2.6
30	3.8	3.5	e2.0	e2.8	---	5.2	1.5	15	.00	29	.64	32
31	3.8	---	e2.1	e3.0	---	4.4	---	7.5	---	17	.47	---
TOTAL	121.7	111.1	82.1	76.5	86.8	198.7	115.3	222.25	193.62	76.86	136.61	105.73
MEAN	3.93	3.70	2.65	2.47	3.10	6.41	3.84	7.17	6.45	2.48	4.41	3.52
MAX	8.2	4.6	4.8	3.0	4.1	16	12	29	56	29	34	32
MIN	3.0	2.7	1.7	1.8	2.0	3.5	1.5	.51	.00	.00	.07	.00
AC-FT	241	220	163	152	172	394	229	441	384	152	271	210

CAL YR 1989 TOTAL 1823.08 MEAN 4.99 MAX 65 MIN .00 AC-FT 3620
WTR YR 1990 TOTAL 1527.27 MEAN 4.18 MAX 56 MIN .00 AC-FT 3030

e Estimated

ARKANSAS RIVER BASIN

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 6,360 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.--Records fair. Diversions for irrigation of small acreage and mountain meadows upstream from station. Several observations of water temperature were made during year.

AVERAGE DISCHARGE.--66 years (water years 1916-17, 1920, 1928-90), 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 10	1915	*366	*4.63				

Minimum daily, 2.0 ft³/s, Dec. 22-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	e4.0	4.1	e3.0	8.2	8.7	8.9	13	24	8.6	14	9.3
2	3.7	e4.5	4.1	e3.0	e8.6	9.0	9.0	14	23	8.9	14	9.3
3	3.5	e4.5	e3.5	e3.0	e8.9	9.7	9.0	15	23	8.0	15	8.9
4	4.0	e4.5	e3.0	e3.0	e9.2	9.8	8.9	13	22	8.7	12	8.9
5	5.6	5.4	e3.0	e3.0	e9.8	10	8.8	15	20	11	34	8.5
6	8.2	5.3	e3.0	e3.5	e10	11	9.0	18	20	10	22	8.1
7	7.1	5.0	e3.5	e4.0	e10	9.8	9.0	23	19	9.7	17	9.1
8	6.3	5.1	e4.0	e4.0	e10	8.7	9.3	33	18	9.8	13	11
9	6.0	4.9	e4.0	e4.0	e11	8.3	9.3	38	19	12	11	11
10	5.3	4.9	e3.5	e4.0	e11	8.4	9.3	37	21	48	10	10
11	4.9	4.9	e3.5	e4.0	13	8.4	9.3	35	20	35	9.6	9.0
12	4.7	5.2	e3.5	e4.0	13	8.3	9.5	36	19	24	11	8.7
13	4.5	5.2	e3.0	e4.0	13	7.2	9.9	34	17	15	12	8.2
14	4.4	5.2	e3.0	e4.0	12	6.7	10	35	16	15	61	7.4
15	4.6	e2.3	e2.5	e4.0	e8.4	6.8	9.8	35	15	19	30	7.0
16	4.8	e2.3	e2.5	e4.5	e7.7	6.3	11	32	15	18	87	8.2
17	5.0	e2.5	e2.5	e4.5	e7.3	6.4	12	30	14	15	39	19
18	6.0	e3.0	e2.5	e4.5	e7.1	6.4	13	34	13	15	37	14
19	5.9	e3.5	e2.5	e4.5	e7.2	6.8	13	35	11	42	25	15
20	5.3	e3.5	e2.5	e4.5	e7.6	6.7	12	34	12	17	21	11
21	5.4	e4.0	e2.5	e4.5	e7.7	6.7	11	32	12	28	21	12
22	5.3	4.7	e2.0	e4.5	e7.9	6.5	11	31	11	29	20	13
23	5.3	4.7	e2.0	e4.5	e8.2	6.6	13	32	11	24	19	11
24	4.9	4.5	e2.0	e4.5	e9.6	6.9	13	33	9.6	16	20	10
25	5.1	4.8	e2.0	e5.0	11	7.4	13	36	9.2	13	16	11
26	5.0	e4.0	e2.0	e4.5	11	7.4	14	34	8.9	13	14	12
27	4.9	e3.5	e2.0	e5.5	10	7.5	13	33	9.1	12	13	11
28	e4.5	e3.5	e2.5	e6.0	10	7.7	13	32	9.0	12	12	12
29	e4.5	e3.0	e2.5	e6.5	---	9.6	12	33	8.5	14	11	28
30	e4.0	e3.0	e3.0	e7.0	---	9.3	14	32	8.7	14	10	26
31	e4.0	---	e3.0	e7.5	---	9.0	---	27	---	15	9.5	---
TOTAL	156.4	125.4	89.2	137.0	268.4	248.0	327.0	914	458.0	539.7	660.1	347.6
MEAN	5.05	4.18	2.88	4.42	9.59	8.00	10.9	29.5	15.3	17.4	21.3	11.6
MAX	8.2	5.4	4.1	7.5	13	11	14	38	24	48	87	28
MIN	3.5	2.3	2.0	3.0	7.1	6.3	8.8	13	8.5	8.0	9.5	7.0
AC-FT	310	249	177	272	532	492	649	1810	908	1070	1310	689

CAL YR 1989 TOTAL 3342.0 MEAN 9.16 MAX 30 MIN 1.3 AC-FT 6630
WTR YR 1990 TOTAL 4270.8 MEAN 11.7 MAX 87 MIN 2.0 AC-FT 8470

e Estimated

ARKANSAS RIVER BASIN

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 6,160 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.--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.

AVERAGE DISCHARGE.--9 years, 15.8 ft³/s, 11,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 229 ft³/s, June 8, 1986; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 95 ft³/s, Aug. 16; minimum daily, 0.45 ft³/s, Jan. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	4.3	4.0	e.65	e6.1	e5.0	e7.0	e16	28	5.5	16	17
2	5.0	4.5	3.6	e.70	e6.2	e5.5	e7.0	e15	25	5.4	15	17
3	4.7	4.0	3.1	e.70	e6.5	e5.5	e8.0	e16	24	4.7	16	17
4	4.6	3.7	3.2	e.60	e6.8	e6.0	e8.0	e17	21	4.7	16	17
5	5.3	4.2	2.7	e.50	e7.1	e6.0	e7.0	e18	20	8.6	20	17
6	8.5	4.1	2.9	e.55	e6.8	e5.5	e8.0	e19	19	7.5	42	17
7	8.2	4.0	5.9	e.60	e6.8	e5.8	e8.0	e26	18	7.0	20	20
8	6.2	3.7	2.3	e.65	e6.8	8.2	e8.5	e38	18	6.0	19	17
9	5.8	3.8	e1.3	e.70	e7.0	6.8	e8.5	e54	21	8.0	19	17
10	5.0	3.8	e1.0	e.70	e7.0	6.5	e8.7	e48	20	13	18	17
11	4.6	2.7	e.95	e.70	e8.0	6.8	9.1	e47	19	49	19	17
12	4.4	8.9	e.75	e.70	e7.0	6.6	9.3	e43	18	37	38	17
13	4.3	5.9	e.75	e.70	e6.3	5.9	9.8	e40	17	17	25	17
14	4.3	4.0	e.75	e.65	e5.8	9.3	10	e38	16	16	86	17
15	4.3	3.0	e.70	e.60	e5.6	9.6	10	e38	15	18	36	16
16	4.3	2.8	e.65	e.60	e5.5	4.5	10	e38	14	18	95	16
17	4.4	e1.8	e.55	e.55	e5.5	1.5	12	36	14	15	46	17
18	5.6	2.5	e.55	e.50	e5.5	.59	13	39	13	16	51	17
19	5.3	e1.7	e.55	e.45	e6.1	.69	14	43	11	46	32	15
20	4.9	2.6	e.65	e.50	e6.0	1.1	12	44	11	19	28	11
21	4.4	2.8	e.70	e.65	e5.5	1.1	12	41	11	20	25	9.6
22	4.4	2.9	e.70	e.90	e5.5	.82	12	39	9.9	46	21	11
23	4.4	e1.5	e.70	e1.2	e6.0	.72	14	40	9.5	27	20	9.9
24	4.4	2.9	e.70	e2.3	e7.0	1.0	13	41	8.7	19	22	8.5
25	4.2	2.7	e.70	e4.0	e7.0	1.0	13	46	7.5	33	19	8.7
26	4.2	2.7	e.70	e5.1	e7.0	e1.6	e13	45	7.0	18	18	8.9
27	4.0	e1.8	e.70	e6.0	e6.0	e2.0	e13	44	6.6	15	18	10
28	3.8	e1.8	e.70	e6.0	e5.5	e3.0	e14	44	7.0	15	18	9.3
29	3.9	2.6	e.70	e6.0	---	e8.0	e15	51	6.1	16	17	26
30	4.8	2.5	e.60	e5.8	---	e8.0	e14	41	5.2	16	17	29
31	4.7	---	e.65	e6.0	---	e8.0	---	35	---	16	17	---
TOTAL	152.2	100.2	44.40	56.25	177.9	142.62	320.9	1140	440.5	562.4	869	463.9
MEAN	4.91	3.34	1.43	1.81	6.35	4.60	10.7	36.8	14.7	18.1	28.0	15.5
MAX	8.5	8.9	5.9	6.0	8.0	9.6	15	54	28	49	95	29
MIN	3.8	1.5	.55	.45	5.5	.59	7.0	15	5.2	4.7	15	8.5
AC-FT	302	199	88	112	353	283	637	2260	874	1120	1720	920

CAL YR 1989 TOTAL 2906.50 MEAN 7.96 MAX 43 MIN .55 AC-FT 5770
WTR YR 1990 TOTAL 4470.27 MEAN 12.2 MAX 95 MIN .45 AC-FT 8870

e Estimated

ARKANSAS RIVER BASIN

07203525 VERMEJO RIVER NEAR MAXWELL, NM

LOCATION.--Lat 36°29'48", long 104°34'15", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on right bank 30 ft upstream from bridge on Interstate Highway 25, 3.6 mi southwest of Maxwell, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--486 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 5,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Diversions for irrigation above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--6 years, 7.40 ft³/s, 5,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s, June 10, 1988, gage height, 9.49 ft, from rating curve extended above 120 ft³/s on basis of step-backwater analysis of channel; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 194 ft³/s, Aug. 12, gage height, 4.75 ft; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.1	2.7	2.8	6.1	3.7	2.6	1.8	.95	.00	.14	.16
2	1.1	2.0	2.9	2.8	6.4	3.7	2.6	2.0	.68	.00	.15	.12
3	1.1	2.0	2.8	e2.5	5.8	3.6	2.6	2.8	.46	.00	.18	.10
4	1.1	2.0	2.7	e2.2	5.0	3.6	2.4	2.7	.33	.00	.16	.09
5	1.1	2.0	2.7	e2.1	6.7	4.1	2.4	2.4	.28	.00	.60	.09
6	1.3	2.0	2.7	e2.0	6.4	5.3	2.5	2.2	.25	.00	.53	.12
7	1.6	2.1	2.7	e2.0	6.7	4.1	2.4	2.1	.22	.00	.33	.28
8	e2.7	2.1	2.7	e1.9	5.7	3.7	2.4	2.0	.21	.64	.27	.24
9	e2.2	2.2	2.6	e2.2	5.5	3.5	2.3	1.8	.23	.35	.22	.18
10	e1.9	2.3	2.6	e2.5	5.2	3.3	2.3	1.7	.27	.08	.17	.13
11	e1.8	2.3	e2.4	3.3	5.0	3.2	2.3	1.7	.22	.11	.12	.15
12	e1.7	2.3	e2.2	3.4	4.5	3.0	2.3	1.7	.17	.23	10	.11
13	e1.6	2.4	e2.2	3.4	4.0	2.9	2.3	1.6	.12	.14	2.7	.09
14	e1.5	2.3	e2.1	2.6	3.8	2.8	2.3	1.6	.11	.15	1.8	.05
15	e1.4	2.4	e2.0	2.6	3.7	2.7	2.2	1.6	.11	.15	1.6	.02
16	e1.4	2.4	e1.9	2.9	3.9	2.8	2.2	1.5	.11	.10	1.8	.03
17	e1.3	2.5	e1.9	e2.5	3.5	2.7	2.2	1.6	.08	.10	.93	.16
18	e1.3	2.5	e1.8	e2.4	3.3	2.6	2.2	1.5	.08	.08	.65	.21
19	1.4	2.5	e1.8	e2.4	3.4	2.6	2.2	1.4	.06	.04	.68	.97
20	1.5	2.5	e1.8	e2.5	3.7	2.6	2.2	1.4	.02	.15	1.3	.30
21	1.5	2.5	e1.8	e2.5	4.0	2.6	2.2	1.3	.03	1.1	1.3	.29
22	1.4	2.5	e1.8	e2.5	3.9	2.5	2.9	1.3	.00	.42	1.6	.26
23	1.4	2.5	e1.8	e2.5	3.6	2.4	2.7	1.3	.00	.27	1.2	.25
24	1.4	2.5	e1.9	e2.6	3.4	2.3	2.4	1.2	.00	.26	.87	.24
25	1.3	2.6	e2.0	e2.8	3.4	2.4	2.3	1.1	.00	.19	.68	.24
26	1.5	2.5	e2.1	e2.8	3.5	2.4	2.2	1.1	.00	.18	.44	.29
27	1.4	2.5	e2.2	e3.1	3.7	2.4	2.1	1.1	.01	.14	.34	.27
28	1.3	2.4	e2.3	e4.0	3.8	2.5	2.0	1.2	.00	.43	.30	.34
29	1.5	2.4	e2.3	e4.5	---	2.7	1.8	4.8	.00	.27	.26	2.2
30	1.7	2.5	e2.4	e5.6	---	2.9	1.8	2.3	.00	.20	.22	.81
31	1.9	---	2.9	e6.2	---	2.8	---	1.3	---	.19	.15	---
TOTAL	46.5	69.8	70.7	90.1	127.6	94.4	69.3	55.1	5.00	5.97	31.69	8.79
MEAN	1.50	2.33	2.28	2.91	4.56	3.05	2.31	1.78	.17	.19	1.02	.29
MAX	2.7	2.6	2.9	6.2	6.7	5.3	2.9	4.8	.95	1.1	10	2.2
MIN	1.1	2.0	1.8	1.9	3.3	2.3	1.8	1.1	.00	.00	.12	.02
AC-FT	92	138	140	179	253	187	137	109	9.9	12	63	17

CAL YR 1989 TOTAL 962.79 MEAN 2.64 MAX 61 MIN .64 AC-FT 1910
WTR YR 1990 TOTAL 674.95 MEAN 1.85 MAX 10 MIN .00 AC-FT 1340

e Estimated

ARKANSAS RIVER BASIN

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.--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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	0030	*36	*2.37	No other peak greater than base discharge.			

Minimum discharge determined, 0.30 ft³/s, Oct. 1-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	---	---	---	---	---	12	20	5.7	.88	1.1	.75
2	.33	---	---	---	---	---	12	22	4.9	.74	1.1	.71
3	.38	---	---	---	---	---	12	24	4.6	.72	1.1	.67
4	1.1	---	---	---	---	---	12	31	4.0	.83	.96	.58
5	2.2	---	---	---	---	---	11	30	3.4	.87	.98	1.4
6	3.7	---	---	---	---	---	11	28	3.0	.78	.99	1.2
7	2.7	---	---	---	---	---	11	28	2.7	.77	.98	1.0
8	2.3	---	---	---	---	---	13	28	2.3	.99	.93	1.7
9	2.0	---	---	---	---	---	12	28	2.4	1.5	.85	1.1
10	1.8	---	---	---	---	---	12	28	3.2	2.7	.80	.72
11	1.7	---	---	---	---	---	13	27	3.1	2.3	.85	.94
12	1.5	---	---	---	---	---	13	25	2.6	1.6	1.3	.77
13	1.4	---	---	---	---	---	12	24	2.2	1.5	1.2	.77
14	1.4	---	---	---	---	---	12	22	1.9	1.5	1.4	.77
15	1.3	---	---	---	---	---	13	20	1.5	1.5	1.4	.72
16	1.4	---	---	---	---	---	14	19	1.3	1.4	1.4	.88
17	1.4	---	---	---	---	---	16	18	1.2	1.4	1.3	.97
18	1.7	---	---	---	---	---	19	17	1.1	1.2	1.5	1.1
19	1.8	---	---	---	---	---	18	14	1.1	1.3	1.4	1.0
20	e1.6	---	---	---	---	---	16	10	.98	1.6	1.5	1.1
21	e1.8	---	---	---	---	---	16	9.9	.92	1.6	1.5	1.2
22	e1.6	---	---	---	---	---	15	9.7	.88	1.3	1.5	1.3
23	e1.5	---	---	---	---	---	18	9.9	.84	1.2	1.3	1.1
24	e1.4	---	---	---	---	---	19	10	.78	1.1	1.2	1.1
25	e1.3	---	---	---	---	---	21	10	.80	1.1	1.1	1.1
26	e1.3	---	---	---	---	---	22	8.9	.78	1.0	1.0	1.0
27	e1.2	---	---	---	---	---	18	7.7	.74	.94	1.0	1.0
28	e1.2	---	---	---	---	---	16	7.6	.85	.94	.99	1.2
29	e1.1	---	---	---	---	13	16	7.6	.83	1.1	.93	2.6
30	e1.2	---	---	---	---	12	17	7.2	1.3	1.0	.85	2.5
31	e1.3	---	---	---	---	12	---	6.4	---	1.1	.80	---
TOTAL	46.95	---	---	---	---	---	442	557.9	61.90	38.46	35.21	32.95
MEAN	1.51	---	---	---	---	---	14.7	18.0	2.06	1.24	1.14	1.10
MAX	3.7	---	---	---	---	---	22	31	5.7	2.7	1.5	2.6
MIN	.33	---	---	---	---	---	11	6.4	.74	.72	.80	.58
AC-FT	93	---	---	---	---	---	877	1110	123	76	70	65

e Estimated

ARKANSAS RIVER BASIN

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 8,200 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.--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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 16	2015	*82	*4.21	No other peak greater than base discharge.			

Minimum discharge determined, 0.57 ft³/s, July 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	---	---	---	---	---	19	26	4.3	.96	2.7	1.5
2	---	---	---	---	---	---	18	26	3.7	.71	2.4	1.5
3	---	---	---	---	---	---	18	32	3.5	.94	2.3	1.4
4	---	---	---	---	---	---	18	36	3.4	2.7	1.8	1.4
5	---	---	---	---	---	---	18	35	2.9	2.3	2.7	1.3
6	---	---	---	---	---	---	20	32	2.6	1.5	3.4	1.8
7	---	---	---	---	---	---	21	27	2.5	1.1	3.5	2.4
8	---	---	---	---	---	---	28	26	2.3	1.6	2.3	2.6
9	---	---	---	---	---	---	28	25	2.7	2.1	2.2	2.9
10	---	---	---	---	---	---	26	23	3.9	1.7	1.7	2.4
11	---	---	---	---	---	---	26	22	4.6	1.9	1.3	1.9
12	---	---	---	---	---	---	30	20	4.7	3.0	2.0	1.6
13	---	---	---	---	---	---	34	19	3.7	2.8	2.0	1.5
14	---	---	---	---	---	---	35	19	3.3	2.8	1.7	1.3
15	---	---	---	---	---	---	45	17	3.0	3.6	4.3	1.1
16	---	---	---	---	---	---	59	16	3.0	3.5	4.0	1.5
17	---	---	---	---	---	---	68	15	2.4	2.5	5.4	3.3
18	---	---	---	---	---	---	61	14	2.2	1.8	4.1	3.2
19	---	---	---	---	---	---	62	12	2.3	1.7	4.8	2.9
20	---	---	---	---	---	---	55	11	2.1	4.2	6.2	2.5
21	---	---	---	---	---	---	55	9.7	2.0	4.3	9.4	2.4
22	---	---	---	---	---	---	60	8.8	1.8	2.8	6.0	2.2
23	---	---	---	---	---	---	64	8.4	1.6	2.4	4.3	2.3
24	---	---	---	---	---	---	55	8.0	.86	3.1	3.5	2.1
25	---	---	---	---	---	---	49	7.9	.85	2.4	3.0	1.9
26	---	---	---	---	---	---	42	5.8	.85	1.9	2.6	1.8
27	---	---	---	---	---	---	38	5.4	.97	1.6	2.4	1.8
28	---	---	---	---	---	---	33	5.3	1.1	1.4	2.4	2.3
29	---	---	---	---	---	---	33	6.7	.92	2.0	2.2	6.5
30	---	---	---	---	---	22	29	6.8	1.0	2.0	1.9	4.5
31	---	---	---	---	---	20	---	5.6	---	3.1	1.6	---
TOTAL	---	---	---	---	---	---	1147	531.4	75.05	70.41	100.1	67.8
MEAN	---	---	---	---	---	---	38.2	17.1	2.50	2.27	3.23	2.26
MAX	---	---	---	---	---	---	68	36	4.7	4.3	9.4	6.5
MIN	---	---	---	---	---	---	18	5.3	.85	.71	1.3	1.1
AC-FT	---	---	---	---	---	---	2280	1050	149	140	199	134

ARKANSAS RIVER BASIN

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.--Records fair except for estimated daily discharges, which are poor. 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 1	1600	*11	*1.14				

Minimum discharge determined, 0.20 ft³/s, June 23, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	---	---	---	---	---	7.8	e3.0	.63	.71	2.5	1.0
2	1.5	---	---	---	---	---	8.0	e3.7	.54	.67	1.8	1.2
3	---	---	---	---	---	---	6.3	e5.0	.55	.72	1.6	1.2
4	---	---	---	---	---	---	5.8	e7.0	.50	1.1	1.4	1.4
5	---	---	---	---	---	---	5.6	e8.0	.46	1.4	1.4	1.6
6	---	---	---	---	---	---	6.5	e8.0	.41	.93	1.5	1.0
7	---	---	---	---	---	---	6.8	e9.0	.37	.82	1.5	.87
8	---	---	---	---	---	---	6.3	e9.0	.45	.81	1.3	.86
9	---	---	---	---	---	---	5.6	e7.0	.55	.85	1.2	.78
10	---	---	---	---	---	---	4.6	e5.0	.84	1.7	1.2	.64
11	---	---	---	---	---	---	3.9	e4.0	.90	2.4	1.3	.57
12	---	---	---	---	---	---	3.5	e3.3	.63	1.8	1.7	.53
13	---	---	---	---	---	---	3.5	e3.0	.52	1.5	1.4	.66
14	---	---	---	---	---	---	3.6	3.1	.44	1.6	1.5	.66
15	---	---	---	---	---	---	3.6	2.9	.43	1.6	2.0	.61
16	---	---	---	---	---	---	3.4	2.8	.39	1.7	2.0	.66
17	---	---	---	---	---	---	6.0	2.3	.36	1.5	2.0	.70
18	---	---	---	---	---	---	5.6	2.0	.37	1.3	2.7	.59
19	---	---	---	---	---	---	4.7	1.7	.41	1.3	2.3	1.1
20	---	---	---	---	---	---	4.8	1.4	.35	2.0	2.2	2.2
21	---	---	---	---	---	---	5.8	1.3	.30	2.0	2.1	2.4
22	---	---	---	---	---	---	6.7	1.1	.29	1.7	1.9	2.2
23	---	---	---	---	---	---	6.8	1.0	.25	1.5	1.7	2.2
24	---	---	---	---	---	---	5.0	1.1	.25	1.4	1.6	2.1
25	---	---	---	---	---	---	3.4	1.0	.27	1.3	1.8	2.0
26	---	---	---	---	---	---	3.0	.87	.33	1.3	2.1	2.0
27	---	---	---	---	---	---	2.5	.87	.27	1.2	2.1	2.0
28	---	---	---	---	---	---	2.5	.84	.34	1.2	2.2	2.4
29	---	---	---	---	---	---	e3.2	.87	.42	1.4	2.0	3.4
30	---	---	---	---	---	6.1	e3.2	.83	.53	1.5	1.5	2.7
31	---	---	---	---	---	6.3	---	.75	---	1.5	1.2	---
TOTAL	---	---	---	---	---	---	148.0	101.73	13.35	42.41	54.7	42.23
MEAN	---	---	---	---	---	---	4.93	3.28	.44	1.37	1.76	1.41
MAX	---	---	---	---	---	---	8.0	9.0	.90	2.4	2.7	3.4
MIN	---	---	---	---	---	---	2.5	.75	.25	.67	1.2	.53
AC-FT	---	---	---	---	---	---	294	202	26	84	108	84

e Estimated

ARKANSAS RIVER BASIN

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 June 1987, (nonrecording gage read several times a month at random intervals), July 1987 to current year. Prior to January 1972 published as Eagle Nest Reservoir.

REVISED RECORDS.--WSP 1281: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,056.8 ft above 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, 71,800 acre-ft, May 14, gage height, 133.86 ft; minimum, 62,460 acre-ft, Sept. 23, gage height, 129.66 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 (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63930	62840	e62680	e63110	e63930	e64640	66790	70410	71130	67960	66350	64800
2	63870	62840	e62690	e63110	e63930	e64660	66880	70590	70930	67780	66350	64710
3	63890	62900	e62700	e63110	e63940	e64680	66950	70750	70880	67600	66350	64580
4	63980	62900	e62700	e63110	e63950	e64700	67130	70930	70820	67470	66260	64420
5	64090	62900	e62720	e63120	e63950	e64710	67110	71080	70610	67330	66260	64250
6	64130	62900	e62760	e63120	e63960	e64730	67220	71240	70610	67220	66190	64090
7	64160	62900	e62800	e63180	e63970	e64750	67330	71330	70350	67080	66210	63980
8	64180	62890	e62860	e63220	e63980	e64760	67380	71600	70260	66910	66100	63800
9	64180	62890	e62880	e63260	e63980	e64770	67490	71440	70210	66790	66080	63600
10	64220	62880	e62930	e63300	e63990	e64780	67620	71580	70150	66770	66030	63510
11	64250	62880	e62980	e63380	e64000	e64800	67580	71640	70100	66640	66030	63370
12	64090	62890	63000	e63440	e64010	e64920	67790	71710	70010	66500	65940	63220
13	64000	62890	e63020	e63490	e64030	e65210	67840	71710	69920	66480	65830	63110
14	63890	62900	e63020	e63500	e64050	e65300	68050	71800	69790	66440	65760	62940
15	63750	62900	e63040	e63510	e64060	65380	68140	71670	69740	66480	65650	62840
16	63600	62900	e63080	63530	e64080	65250	68270	71640	69540	66480	65560	62730
17	63530	62920	e63100	e63560	e64100	65340	68490	71690	69540	66460	65520	62580
18	63510	62920	e63110	e63560	e64130	65410	68650	71640	69680	66460	65450	62600
19	63420	62920	63130	e63580	e64150	65450	68810	71670	69410	66410	65360	62520
20	63440	62900	63130	e63600	e64180	65610	69010	71580	69300	66500	65300	62520
21	63350	62900	e63130	e63600	e64220	65360	69180	71580	69250	66460	65340	62500
22	63260	62880	e63130	e63620	e64300	65520	69270	71530	69180	66440	65300	62500
23	63200	62880	e63130	e63640	e64370	65680	69500	71420	69050	66440	65230	62460
24	63130	62830	e63130	e63680	e64400	65880	69770	71530	68890	66440	65180	62500
25	63110	62830	e63120	e63700	e64480	65920	69920	71420	68740	66410	65160	62480
26	62960	62780	e63120	e63740	e64540	66210	70060	71420	68540	66440	65140	62460
27	62940	62780	e63120	e63780	e64580	66300	70170	71310	68400	66390	65090	62480
28	62940	62740	e63120	e63810	64620	66460	70230	71380	68250	66320	65050	62460
29	62920	62700	e63120	e63860	---	66550	70260	71240	68140	66350	65010	62520
30	62920	62680	e63110	e63890	---	66660	70370	71150	68090	66350	64940	62520
31	62940	---	63110	63930	---	66730	---	71110	---	66320	64870	---
MAX	64250	62920	63130	63930	64620	66730	70370	71800	71130	67960	66350	64800
MIN	62920	62680	62680	63110	63930	64640	66790	70410	68090	66320	64870	62460
(†)	129.89	129.76	129.97	130.34	130.65	131.59	133.22	133.55	132.20	131.41	130.76	129.69
(††)	-1020	-260	+430	+820	+690	+2110	+3640	+740	-3020	-1770	-1450	-2350

CAL YR 1989 MAX 73590 MIN 62680 (†) -2950
WTR YR 1990 MAX 71800 MIN 62460 (††) -1440

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

e Estimated

ARKANSAS RIVER BASIN

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.--Records good except for estimated daily discharges, which are poor. Flow regulated by Eagle Nest Lake (station 07205500) 300 ft upstream. Diversions for irrigation of 2,500 acres upstream from station.

AVERAGE DISCHARGE.--40 years, 14.5 ft³/s, 10,500 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, 84 ft³/s, July 5, minimum daily, 0.25 ft³/s, Oct. 27-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	4.2	2.6	.75	.63	.63	1.1	.42	24	72	5.0	24
2	.52	3.8	2.6	.73	.63	.64	1.2	.42	24	72	5.0	24
3	.52	3.1	2.2	.75	.63	.65	1.2	.42	24	77	7.5	46
4	.52	2.9	1.7	.75	.63	.63	1.2	.37	48	82	13	62
5	.52	6.5	1.3	.76	.63	.69	1.2	.33	61	84	20	72
6	.52	9.3	1.1	.76	.63	.67	1.2	.33	61	75	22	78
7	.52	9.4	1.2	.76	.63	.65	1.3	.32	61	53	25	78
8	.52	9.4	1.2	.76	.64	.70	1.4	.32	60	80	29	78
9	.52	9.4	1.1	.76	.63	.75	1.1	1.7	53	80	29	76
10	.52	9.4	1.1	.75	.63	.76	1.1	6.4	52	79	29	63
11	.52	9.4	1.0	.76	.63	.74	1.1	4.3	53	78	29	62
12	23	6.1	1.0	.76	.62	.74	1.0	4.1	45	58	40	62
13	36	2.9	1.0	.65	.62	.74	.90	4.2	39	24	49	62
14	37	2.7	.99	.64	.63	.75	.83	15	39	14	49	62
15	38	2.6	.90	.63	.63	.76	.77	25	32	14	49	60
16	38	2.6	.90	.63	.63	.76	.77	26	25	14	48	55
17	38	2.5	.89	.63	.63	.82	.78	26	25	14	46	42
18	38	2.4	.80	.63	.63	.86	.76	26	24	14	46	22
19	38	2.4	.76	.63	.63	.90	.76	26	30	8.8	46	15
20	38	2.3	.76	.63	.63	.90	.76	26	35	3.0	37	11
21	38	2.2	.76	.64	.63	.89	.76	26	35	3.7	31	4.2
22	38	2.1	.76	.66	.63	.90	.65	29	35	2.8	31	.90
23	38	1.9	.76	.63	.63	.90	.62	31	53	1.4	29	.71
24	33	1.9	.76	.63	.63	.89	.62	31	74	1.4	15	.60
25	29	1.8	.76	.63	.63	.90	.63	31	73	1.4	5.7	.52
26	12	1.8	.76	.62	.63	.90	.49	31	74	1.4	5.7	.52
27	.25	9.9	.76	.63	.63	.90	.43	31	74	1.4	5.7	.52
28	.25	9.1	.75	.63	.63	.90	.41	31	74	1.4	17	.59
29	.25	3.4	.75	.62	---	.93	.42	27	61	1.4	24	.63
30	.25	2.5	.76	.63	---	.96	.42	24	47	3.8	24	.63
31	2.2	---	.76	.63	---	.94	---	24	---	5.0	24	---
TOTAL	520.92	139.9	33.44	21.07	17.63	24.75	25.88	509.63	1415	1020.9	835.6	1063.82
MEAN	16.8	4.66	1.08	.68	.63	.80	.86	16.4	47.2	32.9	27.0	35.5
MAX	38	9.9	2.6	.76	.64	.96	1.4	31	74	84	49	78
MIN	.25	1.8	.75	.62	.62	.63	.41	.32	24	1.4	5.0	.52
AC-FT	1030	277	66	42	35	49	51	1010	2810	2020	1660	2110

CAL YR 1989 TOTAL 5979.95 MEAN 16.4 MAX 70 MIN .08 AC-FT 11860
WTR YR 1990 TOTAL 5628.54 MEAN 15.4 MAX 84 MIN .25 AC-FT 11160

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.--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, siphons under river 0.9 mi upstream and bypasses station for off-channel storage and irrigation downstream; Raton diversion pipeline 300 ft upstream from station for City of Raton Water Supply started June, 1983. See tabulation below for monthly diversions.

AVERAGE DISCHARGE.--40 years, 21.7 ft³/s, 15,720 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, 105 ft³/s, at 1830 hours Sept. 16, gage height, 2.08 ft; maximum gage height, 2.84 ft, Jan. 2, backwater from ice; minimum daily, 0.08 ft³/s, Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	e6.4	e2.8	e2.6	3.1	e5.5	13	23	42	55	.79	19
2	5.4	e9.5	e3.2	e3.0	4.6	e5.5	13	25	41	57	.26	19
3	5.4	e9.0	e2.5	e2.8	2.6	e5.5	13	25	39	59	.08	25
4	7.8	e9.0	e2.8	e1.7	2.7	e6.0	12	26	43	66	2.2	45
5	9.6	e10	e3.2	e1.7	4.7	e4.0	12	25	53	70	4.6	47
6	12	e12	e3.0	e2.0	4.3	e3.5	13	26	51	68	14	54
7	8.8	e14	e1.7	e3.0	4.5	e4.2	12	25	51	40	14	58
8	7.7	e14	e1.7	e3.0	4.1	e5.5	13	31	52	58	19	59
9	7.3	e14	e2.4	e3.0	4.2	e5.5	13	36	50	59	19	58
10	7.1	e14	e2.0	e3.2	8.1	e6.0	14	41	50	61	19	53
11	6.8	e14	e1.8	e3.2	6.0	e5.0	14	40	49	64	20	50
12	14	e12	e2.2	e2.8	2.5	e5.0	15	38	47	59	22	50
13	47	e10	e3.0	e3.0	2.2	e5.6	16	36	37	36	36	50
14	48	8.0	e2.4	e3.2	1.9	e6.0	16	38	33	20	43	50
15	49	8.5	e2.0	e3.2	2.3	7.7	17	49	32	16	46	51
16	50	7.7	e1.5	e3.2	2.8	7.4	19	51	24	17	45	56
17	50	5.6	e1.7	e3.0	4.0	6.4	21	50	22	15	43	51
18	45	5.6	e2.2	e3.0	5.8	7.0	22	49	21	18	44	36
19	40	2.9	e2.8	e2.4	e2.6	7.1	25	48	22	20	45	24
20	e40	2.8	e3.0	e2.0	6.4	8.0	25	48	26	13	42	23
21	e40	2.7	e2.2	e2.4	5.3	9.4	25	46	25	12	29	18
22	e40	2.6	e2.0	e2.0	5.1	9.7	26	45	25	11	27	13
23	e40	2.7	e3.4	e2.4	7.3	11	27	47	28	9.1	24	9.4
24	e40	2.2	e3.4	e2.0	e7.0	12	24	49	53	6.9	17	8.3
25	e35	e2.4	e4.0	e2.8	e6.0	13	25	51	56	5.6	6.2	5.7
26	e20	e2.4	e3.4	e2.8	e4.0	13	25	51	57	4.6	2.6	3.0
27	e12	e7.0	e3.4	e1.8	e3.2	14	23	51	57	3.8	1.1	2.0
28	e10	e12	e3.4	3.0	e4.7	14	22	51	57	2.8	.51	2.4
29	e10	4.9	e3.4	5.7	---	15	22	50	57	2.4	8.4	8.8
30	e8.0	3.3	e1.8	5.1	---	14	22	44	36	3.1	10	6.3
31	e6.4	---	e2.7	6.6	---	13	---	43	---	1.7	15	---
TOTAL	727.7	231.2	81.0	91.6	122.0	254.5	559	1258	1236	934.0	619.74	954.9
MEAN	23.5	7.71	2.61	2.95	4.36	8.21	18.6	40.6	41.2	30.1	20.0	31.8
MAX	50	14	4.0	6.6	8.1	15	27	51	57	70	46	59
MIN	5.4	2.2	1.5	1.7	1.9	3.5	12	23	21	1.7	.08	2.0
AC-FT	1440	459	161	182	242	505	1110	2500	2450	1850	1230	1890
(†)	---	---	---	---	---	---	---	---	208	168	259	125
(††)	---	---	---	---	---	---	---	162	---	---	---	---

CAL YR 1989 TOTAL 7300.54 MEAN 20.0 MAX 68 MIN .94 AC-FT 14480 (†) 861 (††) 0
WTR YR 1990 TOTAL 7069.64 MEAN 19.4 MAX 70 MIN .08 AC-FT 14020 (†) 760 (††) 162

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

e Estimated

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CAC03) (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)
NOV 14...	1030	8.8	350	8.2	10.5	4.0	11.0	<10	170	50	9.8	16
MAR 14...	1315	5.2	353	8.2	9.5	7.0	10.4	--	170	52	9.9	16
MAY 15...	1130	51	215	8.3	19.0	11.5	10.2	--	130	40	6.3	11
JUN 12...	1200	50	282	8.8	24.0	15.0	8.5	36	130	38	8.1	12
SEP 18...	1435	36	332	8.6	18.0	14.5	8.8	--	--	--	--	--

DATE	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, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
	(00931)	(00935)	(90410)	(00945)	(00940)	(00950)	(00955)	(70301)	(00630)	(00631)	(00610)	(00605)

[illegible][illegible][illegible][illegible][illegible]

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.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 250 acres upstream from station. Diversion 1,000 ft downstream from station for irrigation of about 300 acres.

AVERAGE DISCHARGE.--51 years (water years 1916-25, 1928, 1951-90), 11.4 ft³/s, 8,260 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 New Mexico State Engineer.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 14	0100	*168	*2.75				

Minimum discharge, 0.49 ft³/s Feb. 7, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	3.9	3.0	e3.4	e2.3	2.7	20	38	18	1.3	4.6	2.3
2	1.2	3.8	2.6	e3.4	e2.3	4.0	21	34	16	.95	6.1	2.1
3	1.3	3.9	2.7	e2.4	e1.8	4.1	23	32	15	.82	6.2	1.8
4	2.0	3.7	2.7	e2.1	e2.2	4.6	23	29	13	1.2	5.1	1.7
5	5.4	3.8	3.0	e2.2	e2.3	8.7	24	31	12	2.1	5.4	1.7
6	10	3.6	3.0	e2.4	e2.3	10	24	45	10	4.8	9.0	1.7
7	8.5	3.4	2.9	e2.7	e2.3	7.2	27	101	9.3	3.9	8.6	12
8	7.5	3.3	3.2	e2.7	e2.3	6.3	30	129	8.5	3.0	7.1	19
9	6.5	3.5	2.8	e2.7	e2.3	6.7	33	126	9.4	4.9	4.9	15
10	5.6	3.4	e2.7	e2.7	e2.3	7.8	33	108	13	4.1	3.8	11
11	4.7	3.5	e2.2	e2.7	e2.2	7.8	35	93	11	8.1	3.3	8.9
12	4.3	3.5	e2.2	e2.3	e2.2	7.4	41	80	9.5	6.9	3.5	7.1
13	3.9	3.6	e2.4	e2.2	e2.2	7.3	43	69	7.9	8.4	9.5	5.8
14	3.5	3.4	e2.4	e2.6	1.6	4.8	43	62	6.9	8.0	57	4.9
15	3.3	2.9	e1.9	e2.5	e1.8	5.8	51	58	6.4	8.9	36	4.2
16	3.2	2.8	e1.8	e2.5	e1.8	5.4	59	55	6.0	9.8	30	6.1
17	3.7	3.0	e1.8	e2.0	e2.2	5.2	66	51	5.5	10	21	24
18	5.2	2.8	e2.2	e1.6	e2.2	5.5	62	46	5.0	5.2	37	14
19	4.3	2.9	e2.6	e1.6	e2.2	6.0	56	43	4.2	4.2	25	11
20	4.8	2.7	e2.2	e1.8	e2.0	6.3	53	39	3.9	5.0	19	11
21	4.5	2.7	e1.8	e1.8	e1.8	8.4	51	34	3.5	4.7	15	13
22	4.1	2.7	e1.7	e2.0	e2.2	12	57	31	3.1	5.3	17	12
23	3.9	2.8	e2.2	e1.7	e2.4	17	69	29	2.9	5.7	12	9.8
24	4.1	2.8	e2.8	e1.8	e2.5	19	69	30	2.5	4.4	12	8.8
25	3.9	2.8	e3.0	e2.0	e2.6	21	64	32	2.1	3.6	7.8	9.0
26	3.6	2.5	e3.2	e2.0	e2.8	22	56	29	2.4	3.1	6.0	8.0
27	3.5	2.3	e3.4	e1.7	e2.8	24	47	27	2.1	3.9	4.7	7.0
28	3.6	2.3	e3.4	e1.7	3.1	26	40	26	1.7	3.9	4.2	8.0
29	3.5	2.0	e3.8	e1.8	---	28	39	25	1.4	4.3	3.7	22
30	3.9	2.7	e2.8	e2.0	---	23	38	23	1.4	4.1	3.0	23
31	3.8	---	e3.2	e2.3	---	20	---	21	---	3.9	2.7	---
TOTAL	132.6	93.0	81.6	69.3	63.0	344.0	1297	1576	213.6	148.47	390.2	285.9
MEAN	4.28	3.10	2.63	2.24	2.25	11.1	43.2	50.8	7.12	4.79	12.6	9.53
MAX	10	3.9	3.8	3.4	3.1	28	69	129	18	10	57	24
MIN	1.2	2.0	1.7	1.6	1.6	2.7	20	21	1.4	.82	2.7	1.7
AC-FT	263	184	162	137	125	682	2570	3130	424	294	774	567

CAL YR 1989 TOTAL 2795.01 MEAN 7.66 MAX 46 MIN .00 AC-FT 5540
WTR YR 1990 TOTAL 4694.67 MEAN 12.9 MAX 129 MIN .82 AC-FT 9310

e Estimated

ARKANSAS RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (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)
NOV 14...	1615	3.2	250	8.3	11.5	8.0	9.5	120	34	9.0	16	0.6
MAR 14...	1530	5.5	224	8.4	7.0	8.0	9.8	100	28	7.5	12	0.5
MAY 15...	1600	62	130	8.4	21.0	16.5	8.2	58	16	4.3	5.4	0.3
JUN 12...	1445	9.5	192	8.4	28.0	24.0	6.9	82	23	6.0	8.4	0.4
SEP 18...	1705	12	232	8.4	16.0	15.0	8.3	--	--	--	--	--

[illegible]

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.--Water-discharge records good except for estimated daily discharges, which are fair. No diversion upstream from station.

AVERAGE DISCHARGE.--71 years (water years 1912, 1914, 1916-20, 1924, 1928-90), 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 11	0330	*193	*3.67	No other peak greater than base discharge.			

Minimum discharge, 0.05 ft³/s, Nov. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.5	e1.8	2.3	4.0	4.2	11	27	14	2.5	9.9	4.4
2	2.0	2.9	e2.0	2.8	4.0	4.8	12	26	13	2.1	7.6	4.1
3	2.2	3.2	e2.2	2.6	4.6	4.6	13	24	12	2.3	7.0	4.0
4	5.2	3.6	2.2	e2.2	4.9	5.0	14	27	11	4.1	6.0	4.0
5	7.0	3.3	2.1	e1.9	4.4	5.5	14	27	10	4.3	7.5	4.0
6	10	3.1	2.0	e2.1	4.3	6.6	13	33	9.4	3.3	11	4.0
7	6.3	3.0	1.9	e3.0	3.9	5.8	16	37	8.7	2.8	12	4.6
8	4.9	2.6	2.4	e3.2	3.5	5.7	18	33	8.4	2.6	8.8	5.6
9	4.2	2.8	2.0	e3.3	3.8	5.9	21	34	11	2.7	7.5	5.8
10	3.6	3.2	1.9	e3.7	4.5	6.8	21	35	15	2.6	6.4	5.1
11	3.1	3.3	1.9	e3.7	3.5	7.0	23	35	11	30	6.0	4.5
12	2.9	3.2	3.2	e3.2	3.6	7.0	25	35	8.9	7.7	6.4	4.1
13	2.8	3.3	3.0	e3.6	3.6	6.8	24	34	7.6	12	6.6	3.9
14	2.7	3.1	2.4	e3.5	3.6	6.6	24	33	6.8	8.5	7.1	3.6
15	2.6	2.1	2.4	e3.8	2.5	6.8	28	32	6.1	6.8	10	3.5
16	2.6	1.5	2.5	e4.1	e2.3	5.8	31	31	6.2	7.4	7.2	3.9
17	2.9	2.7	e4.0	e3.0	e3.2	6.1	35	31	5.6	9.7	8.0	6.0
18	4.1	1.9	e3.5	e2.3	e3.7	5.1	35	29	5.0	6.4	7.2	4.6
19	3.7	2.3	e2.9	e2.0	e3.8	4.5	34	28	4.8	5.7	7.8	9.3
20	4.1	2.6	4.5	e1.9	e3.6	4.8	32	28	4.4	7.0	15	5.8
21	3.8	3.0	e2.2	e2.8	e3.8	5.4	32	26	4.1	7.4	13	6.0
22	3.5	2.5	e2.0	e3.1	e3.9	7.2	36	25	3.8	7.8	11	5.1
23	3.4	2.2	e2.4	e3.2	e4.1	8.7	40	23	3.6	6.4	9.8	4.7
24	3.2	2.3	e2.8	e3.5	e4.3	10	37	22	3.2	6.9	8.7	4.4
25	3.0	2.4	e2.9	e4.0	5.0	17	35	21	3.3	5.1	7.5	4.2
26	2.9	2.2	e2.8	e4.4	4.5	22	31	20	3.4	4.7	6.6	3.9
27	2.7	1.2	e2.8	e3.7	4.5	27	29	19	3.2	4.3	6.0	3.7
28	2.7	.80	e3.1	e3.9	4.2	24	27	18	3.3	4.5	5.6	4.5
29	2.9	.81	e3.2	e4.3	---	19	28	22	2.8	6.4	5.2	17
30	3.3	1.4	e2.5	e4.2	---	14	28	18	2.7	7.7	4.8	9.0
31	2.8	---	e2.6	4.1	---	12	---	16	---	7.7	4.5	---
TOTAL	113.2	75.01	80.1	99.4	109.6	281.7	767	849	212.3	199.4	247.7	157.3
MEAN	3.65	2.50	2.58	3.21	3.91	9.09	25.6	27.4	7.08	6.43	7.99	5.24
MAX	10	3.6	4.5	4.4	5.0	27	40	37	15	30	15	17
MIN	2.0	.80	1.8	1.9	2.3	4.2	11	16	2.7	2.1	4.5	3.5
AC-FT	225	149	159	197	217	559	1520	1680	421	396	491	312

CAL YR 1989 TOTAL 2460.01 MEAN 6.74 MAX 63 MIN .80 AC-FT 4880
WTR YR 1990 TOTAL 3191.71 MEAN 8.74 MAX 40 MIN .80 AC-FT 6330

e Estimated

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
NOV 14...	1345	3.1	160	7.0	12.5	9.0	9.8	75	20	6.0	6.8	0.3
MAR 14...	1010	5.1	152	8.0	1.5	1.0	11.8	79	21	6.4	6.3	0.3
MAY 15...	1345	32	72	8.1	20.0	14.0	8.3	36	10	2.7	3.4	0.2
JUN 12...	0930	9.1	109	8.1	22.5	15.5	8.3	49	13	3.9	4.2	0.3
SEP 18...	1140	4.1	138	8.4	19.0	14.0	8.8	--	--	--	--	--

[illegible]

ARKANSAS RIVER BASIN

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 in Springer, 400 ft downstream from bridge on State Highway 21, 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.--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 temperature were made during the year.

AVERAGE DISCHARGE.--66 years (water years 1921, 1925, 1927-90), 18.5 ft³/s, 13,400 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 20	1045	509	4.99	Aug. 12	1815	*3,500	*7.92

Minimum discharge, 0.24 ft³/s, June 24, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	4.5	6.0	e1.8	3.3	7.8	5.7	51	9.3	.40	.81	.69
2	.61	4.9	9.8	e1.6	4.1	8.2	5.3	59	6.6	.35	.61	.62
3	.73	4.1	6.6	e1.3	4.5	9.1	4.9	85	4.1	.84	.62	.58
4	.84	4.5	5.6	e1.1	5.9	11	4.9	73	3.1	2.0	4.1	.51
5	1.5	4.5	4.8	e1.6	5.3	14	4.5	65	2.4	.55	3.9	.48
6	2.2	4.5	4.8	e1.9	4.4	24	4.6	61	2.8	.33	2.4	.46
7	1.4	5.9	5.4	3.8	4.6	21	5.9	72	2.2	.31	1.3	1.1
8	1.1	5.2	5.9	2.1	5.4	13	6.0	92	3.5	.33	.86	1.6
9	.96	3.2	4.5	1.8	6.6	11	4.6	109	3.5	3.7	.68	2.2
10	.84	2.9	3.7	2.2	7.6	8.6	6.8	99	15	.91	.58	3.2
11	.84	2.9	e3.5	3.0	7.4	8.0	2.0	72	12	.95	.50	2.8
12	.84	2.9	e3.0	4.5	7.9	6.2	1.9	61	7.4	1.6	427	3.0
13	.73	2.8	e3.4	4.2	7.4	4.6	7.7	62	5.7	1.7	36	3.5
14	.84	2.8	e3.0	3.1	e5.7	3.1	11	22	6.0	.94	13	2.7
15	.84	2.6	e2.2	3.5	e5.0	2.6	10	11	7.9	.75	8.2	2.2
16	.84	2.7	e2.4	5.2	e4.6	2.4	12	7.6	6.5	.46	5.3	2.2
17	.96	2.6	e2.2	4.0	6.1	2.1	4.1	6.7	3.0	.39	3.8	2.1
18	1.3	2.6	e2.6	2.6	4.0	2.1	5.1	5.1	1.4	.36	3.8	2.5
19	1.3	2.9	2.9	e2.2	4.0	3.5	5.9	5.3	.81	.37	3.5	7.2
20	1.3	3.1	3.2	e2.8	e3.4	3.6	5.3	12	.55	83	4.6	8.4
21	4.6	3.2	e1.5	e3.4	e3.8	3.3	14	10	.36	15	6.8	7.1
22	2.1	2.5	e1.4	e4.3	e4.4	3.5	20	7.5	.33	7.7	5.9	3.5
23	1.6	2.8	e2.3	5.6	e5.0	2.6	81	4.1	.31	5.7	4.4	2.3
24	1.3	3.1	2.8	3.2	6.3	2.8	93	5.6	.29	6.1	4.3	1.9
25	1.5	2.9	2.9	e2.3	5.4	3.5	90	5.8	1.6	3.3	3.8	1.9
26	1.3	2.9	3.7	2.8	5.3	3.6	84	4.2	5.2	2.2	2.4	2.5
27	1.3	2.7	2.1	2.3	6.9	3.9	73	3.6	.90	1.5	1.6	1.6
28	1.5	2.6	2.1	e2.2	8.1	3.6	64	4.4	.38	2.6	1.3	1.6
29	1.6	2.9	e2.0	e2.1	---	5.5	55	14	.38	1.6	1.0	35
30	2.0	3.0	e1.8	e2.0	---	6.2	57	16	.42	1.4	.81	14
31	3.4	---	e1.6	e2.7	---	6.6	---	11	---	1.1	.73	---
TOTAL	42.82	100.7	109.7	87.2	152.4	211.0	749.2	1116.9	113.93	148.44	554.60	119.44
MEAN	1.38	3.36	3.54	2.81	5.44	6.81	25.0	36.0	3.80	4.79	17.9	3.98
MAX	4.6	5.9	9.8	5.6	8.1	24	93	109	15	83	427	35
MIN	.61	2.5	1.4	1.1	3.3	2.1	1.9	3.6	.29	.31	.50	.46
AC-FT	85	200	218	173	302	419	1490	2220	226	294	1100	237

CAL YR 1989 TOTAL 2191.68 MEAN 6.00 MAX 143 MIN .61 AC-FT 4350
WTR YR 1990 TOTAL 3506.33 MEAN 9.61 MAX 427 MIN .29 AC-FT 6950

e Estimated

ARKANSAS RIVER BASIN

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, and 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 5,640 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.--Records fair. Diversions for irrigation of about 30,000 acres upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--45 years (water years 1940-58, 1965-90), 78.3 ft³/s, 56,730 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.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 13	0015	*5,620	*6.56	No other peak greater than base discharge.			
No flow at times.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	11	e9.0	e8.6	e19	20	20	45	18	.48	6.2	4.0
2	3.6	9.8	e9.0	e10	e20	21	19	53	14	.83	5.3	3.5
3	4.8	11	e10	e9.0	e19	21	18	88	11	.78	3.8	3.2
4	5.3	11	e11	e8.5	e20	22	17	78	8.7	.64	2.6	3.0
5	5.3	11	13	e8.0	e21	29	18	68	7.2	2.6	37	2.8
6	9.6	11	e13	e8.0	e21	108	19	59	6.0	1.1	47	2.9
7	11	11	e11	e10	22	73	19	63	6.2	.64	29	5.1
8	11	11	e12	e13	23	33	19	76	5.3	.67	13	5.9
9	8.1	10	14	e15	27	26	18	87	56	.86	6.6	4.2
10	8.6	9.9	14	e16	36	25	16	85	34	6.1	4.0	5.2
11	7.0	10	e8.5	e14	44	25	15	62	26	3.1	3.4	5.9
12	6.5	10	e8.0	e13	36	24	14	52	15	2.5	636	5.7
13	6.3	10	e8.0	e11	32	22	15	53	9.8	2.6	477	6.3
14	7.2	9.3	e7.0	e14	e17	20	20	26	7.7	2.7	59	6.5
15	6.9	8.4	e7.0	e13	e13	18	20	17	8.1	2.0	29	7.0
16	6.3	8.3	e6.5	e11	e9.5	17	20	13	8.2	1.5	25	7.0
17	6.3	8.6	e7.6	e9.0	e15	16	17	12	5.5	1.1	16	7.1
18	7.9	8.5	e8.0	e8.1	e13	16	15	14	3.0	.88	12	5.6
19	8.0	9.2	e11	e7.6	e14	16	17	11	1.8	1.0	52	14
20	8.1	9.6	e10	e7.4	e10	17	16	15	1.3	42	22	24
21	11	9.7	e9.6	e8.0	e13	16	19	16	.88	18	19	31
22	9.6	9.0	e8.0	e10	e17	14	31	14	.99	45	25	20
23	8.2	8.9	e11	e13	e18	14	81	11	.94	14	25	11
24	7.5	9.5	e14	e14	e16	14	96	9.2	.75	9.5	19	8.2
25	6.9	9.6	e14	e13	e18	15	88	11	.67	5.7	13	6.7
26	6.7	9.3	e13	e15	e17	15	82	11	2.1	3.8	9.7	6.3
27	6.4	8.3	e14	e16	20	15	68	8.8	3.2	15	8.4	5.7
28	6.7	9.0	e15	e16	20	16	60	8.9	1.2	57	7.2	6.1
29	6.6	8.2	e14	e13	---	19	51	43	.66	28	5.9	306
30	7.5	9.4	e12	e15	---	22	51	67	.58	9.6	5.0	141
31	9.0	---	e10	e18	---	22	---	27	---	10	4.4	---
TOTAL	227.9	289.5	332.2	365.2	570.5	751	979	1203.9	264.77	289.68	1627.5	670.9
MEAN	7.35	9.65	10.7	11.8	20.4	24.2	32.6	38.8	8.83	9.34	52.5	22.4
MAX	11	11	15	18	44	108	96	88	56	57	636	306
MIN	3.6	8.2	6.5	7.4	9.5	14	14	8.8	.58	.48	2.6	2.8
AC-FT	452	574	659	724	1130	1490	1940	2390	525	575	3230	1330

CAL YR 1989 TOTAL 9423.2 MEAN 25.8 MAX 697 MIN 1.6 AC-FT 18690
WTR YR 1990 TOTAL 7572.05 MEAN 20.7 MAX 636 MIN .48 AC-FT 15020

e Estimated

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 518 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.--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.--63 years (water years 1907-10, 1932-90), 28.3 ft³/s, 20,500 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	0245	ice jam	*3.71	Sept. 20	1315	*195	3.18
Minimum discharge, 0.85 ft ³ /s, Dec. 26.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	17	2.8	e1.2	11	14	11	21	22	25	e70	30
2	8.4	16	3.3	e1.2	12	16	14	26	22	22	e50	29
3	9.9	17	3.4	1.0	13	17	11	34	25	21	e40	25
4	16	17	2.9	e1.1	17	21	11	34	24	26	e50	25
5	28	17	2.4	e1.2	13	31	12	27	22	35	e110	22
6	39	15	2.1	e1.2	14	29	15	20	23	30	e90	21
7	28	14	2.0	e1.3	15	17	15	21	23	30	e80	22
8	25	13	1.9	e1.3	15	14	16	25	22	32	e70	28
9	22	12	1.8	1.4	14	18	14	30	27	34	e50	25
10	22	12	1.6	e1.4	14	15	13	34	37	35	e40	27
11	28	12	1.5	12	13	14	12	39	33	72	e40	27
12	25	13	e3.5	12	14	13	13	32	31	40	e45	17
13	21	12	e4.2	e10	13	13	15	23	28	48	e40	16
14	16	9.4	e4.0	12	13	12	15	17	28	38	e80	17
15	20	5.4	e3.0	12	13	12	14	21	29	34	e85	17
16	13	5.1	1.4	14	e13	11	18	20	26	34	59	20
17	12	5.4	1.9	16	e14	10	22	12	25	35	55	23
18	7.2	5.4	e1.9	e12	14	11	34	13	26	34	53	23
19	7.3	5.5	1.9	e12	14	11	35	13	24	34	59	29
20	8.7	5.7	1.3	e11	e14	11	31	14	22	37	89	44
21	5.4	5.8	1.1	e11	e15	8.4	26	13	35	33	89	35
22	4.3	8.1	e1.0	e10	15	8.5	31	13	33	41	80	24
23	13	6.0	e1.0	e11	15	9.8	35	14	30	36	77	26
24	12	5.4	1.2	13	15	9.8	37	16	29	33	68	25
25	6.6	5.2	1.2	16	14	7.9	38	24	29	32	61	20
26	10	5.0	e1.2	20	13	7.4	34	21	28	31	58	19
27	9.3	4.0	e1.2	23	14	8.2	32	18	28	36	54	23
28	14	3.3	e1.2	19	14	9.2	32	17	27	e35	53	28
29	13	5.7	e1.2	26	---	12	27	26	27	e35	47	71
30	13	2.8	e1.2	28	---	12	23	23	26	e55	34	55
31	15	---	e1.2	12	---	11	---	25	---	e80	30	---
TOTAL	481.1	280.2	61.5	324.3	388	414.2	656	686	811	1143	1906	813
MEAN	15.5	9.34	1.98	10.5	13.9	13.4	21.9	22.1	27.0	36.9	61.5	27.1
MAX	39	17	4.2	28	17	31	38	39	37	80	110	71
MIN	4.3	2.8	1.0	1.0	11	7.4	11	12	22	21	30	16
AC-FT	954	556	122	643	770	822	1300	1360	1610	2270	3780	1610
(†)	325	469	644	167	11	117	357	396	504	435	304	388

CAL YR 1989 TOTAL 5190.5 MEAN 14.2 MAX 54 MIN 1.0 AC-FT 10300 (†) 6203
WTR YR 1990 TOTAL 7964.3 MEAN 21.8 MAX 110 MIN 1.0 AC-FT 15800 (†) 4117

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

e Estimated

ARKANSAS RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 15...	1445	4.7	478	8.3	--	11.0	7.5	10.3	240
FEB 23...	1100	17	500	8.5	--	-3.5	0.0	16.3	--
APR 19...	1630	34	415	--	8.3	18.0	16.0	8.2	210
JUN 14...	1800	28	488	7.1	--	28.0	23.0	7.1	250
SEP 13...	1730	18	420	8.3	--	28.0	20.0	10.1	--

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- LITY LAB AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV 15...	73	13	12	0.3	0.90	157	62	4.7
FEB 23...	--	--	--	--	--	--	--	--
APR 19...	64	13	13	0.4	0.90	162	65	9.2
JUN 14...	76	15	12	0.3	2.1	202	66	4.8
SEP 13...	--	--	--	--	--	--	--	--

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 15...	0.50	8.8	269	290	5	45	0.57	58
FEB 23...	--	--	--	--	--	--	--	--
APR 19...	0.40	10	273	50	19	--	--	--
JUN 14...	0.20	8.9	306	40	33	55	4.2	72
SEP 13...	--	--	--	--	--	20	0.97	74

ARKANSAS RIVER BASIN

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 161, 1.2 mi east of Golondrin, 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 September 1986, March 1988 to current year. 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.--Records good. 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. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--71 years (water years 1916-20, 1922, 1924-86, 1989-90), 33.6 ft³/s, 24,340 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 discharge greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 28	2230	*505	*3.03	No other peak greater than base discharge.			

Minimum discharge, 1.7 ft³/s, Dec. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	15	7.0	6.0	19	18	15	19	18	16	67	31
2	10	16	7.1	7.6	e19	20	18	24	17	17	54	30
3	12	17	7.5	6.2	19	22	17	35	20	13	52	27
4	16	18	7.9	6.1	19	25	15	55	22	14	55	24
5	27	18	10	6.9	18	81	14	41	16	21	73	21
6	53	17	7.1	9.3	17	67	15	30	17	19	141	20
7	35	15	6.4	9.5	e16	30	17	27	18	18	104	20
8	29	13	5.8	10	e15	24	17	29	19	19	70	24
9	27	12	5.9	7.9	e14	24	16	32	19	22	58	24
10	25	12	5.8	6.4	13	26	15	36	34	25	56	24
11	29	13	5.1	13	e16	23	14	39	35	131	50	24
12	30	13	5.4	22	24	20	14	35	28	46	44	21
13	24	13	5.9	25	26	18	17	26	30	53	42	19
14	19	11	7.1	24	e28	16	16	19	26	39	47	19
15	22	6.3	7.1	19	e25	15	13	16	26	34	59	17
16	19	6.0	6.6	15	e24	15	16	17	26	32	69	20
17	17	6.0	6.6	e12	e25	13	19	9.5	23	32	63	28
18	14	7.2	6.6	13	e28	15	28	8.1	24	31	69	28
19	13	7.8	6.6	e13	e26	14	38	8.1	21	34	89	29
20	11	8.1	6.5	e15	e26	14	31	9.6	19	35	153	53
21	13	8.7	4.9	e17	e27	13	25	7.5	25	32	186	38
22	8.0	9.7	5.3	e20	e30	12	27	7.2	20	42	147	31
23	11	9.4	5.6	22	e20	13	29	7.3	20	36	123	32
24	16	8.6	5.7	e19	e18	14	34	9.9	19	30	102	31
25	12	8.0	5.6	e18	18	12	35	19	19	29	84	26
26	12	7.4	5.2	19	18	11	33	20	21	29	71	26
27	12	7.4	5.5	18	20	11	28	13	19	30	62	28
28	15	6.4	4.9	18	19	13	28	15	15	30	59	65
29	15	6.4	4.9	e19	---	16	27	21	17	29	53	126
30	14	6.3	5.2	e19	---	18	25	18	18	31	37	96
31	15	---	5.9	19	---	17	---	19	---	58	32	---
TOTAL	586.0	322.7	192.7	454.9	587	650	656	672.2	651	1027	2371	1002
MEAN	18.9	10.8	6.22	14.7	21.0	21.0	21.9	21.7	21.7	33.1	76.5	33.4
MAX	53	18	10	25	30	81	38	55	35	131	186	126
MIN	8.0	6.0	4.9	6.0	13	11	13	7.2	15	13	32	17
AC-FT	1160	640	382	902	1160	1290	1300	1330	1290	2040	4700	1990

CAL YR 1989 TOTAL 5798.4 MEAN 15.9 MAX 146 MIN 1.2 AC-FT 11500
WTR YR 1990 TOTAL 9172.5 MEAN 25.1 MAX 186 MIN 4.9 AC-FT 18190

e Estimated

ARKANSAS RIVER BASIN

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 Golondrinás, 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 6,780 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.--Records fair except those for estimated daily discharges, 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.--62 years, 12.2 ft³/s, 8,840 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 31	2200	659	4.88	Aug. 5	2330	*795	*5.17

Minimum discharge, 0.74 ft³/s, June 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	4.6	6.1	e6.5	e8.6	10	13	15	2.3	1.2	46	6.3
2	6.5	4.7	6.7	e6.2	e8.2	12	15	14	2.1	1.2	13	5.8
3	6.1	5.2	7.1	e7.0	e7.3	13	14	24	2.1	1.3	10	5.6
4	6.7	5.8	7.0	e8.9	e7.5	13	14	31	2.1	2.3	9.8	5.4
5	8.0	5.8	7.3	e8.7	e8.5	15	13	37	1.6	2.1	70	7.1
6	9.8	5.7	7.5	e7.7	8.8	15	16	40	1.4	1.5	61	9.2
7	9.4	5.4	7.2	e6.8	10	12	17	38	1.3	1.6	25	8.5
8	8.6	5.4	6.8	e7.0	9.7	11	19	35	1.2	1.5	18	9.6
9	8.1	5.4	6.9	e8.8	9.9	10	19	29	1.3	1.9	16	9.9
10	7.7	5.4	6.9	e8.9	10	11	16	24	1.7	2.2	14	8.7
11	7.4	5.2	6.8	e9.0	12	12	15	20	1.6	2.5	13	6.4
12	7.4	5.2	e6.6	e8.8	12	17	13	17	1.2	2.4	16	3.7
13	7.7	4.6	e6.0	e8.3	e10	23	15	16	1.1	3.1	24	3.4
14	8.2	3.8	e7.0	e8.0	e9.0	18	15	15	1.1	10	20	3.2
15	7.7	3.0	e8.1	e8.7	e8.8	16	13	13	1.1	4.5	12	3.3
16	7.1	3.1	e8.3	e8.7	e8.8	14	11	12	1.1	3.3	11	3.6
17	7.7	3.1	e8.5	e7.8	e9.2	14	12	8.7	.94	3.4	13	4.5
18	8.3	3.2	e8.7	e8.0	e9.5	8.6	16	7.4	.90	3.2	17	4.2
19	8.0	3.4	e8.9	e8.7	e9.0	9.8	18	4.5	.91	3.9	18	3.6
20	7.6	3.5	e8.6	e9.0	e8.4	9.9	15	4.1	.95	4.6	25	9.8
21	7.5	3.6	e8.3	e8.7	e7.5	8.2	12	4.6	1.2	4.8	30	4.9
22	7.4	3.7	e7.7	e8.7	e7.7	7.2	17	3.4	1.0	6.4	19	3.1
23	6.9	4.4	e8.0	e9.7	e8.5	7.2	18	2.5	1.1	6.6	10	3.2
24	6.4	4.6	e8.8	e11	e8.9	8.8	15	2.4	1.0	6.3	9.6	3.5
25	5.1	4.6	e7.9	e9.8	e9.5	9.3	17	2.7	1.0	6.6	9.5	3.1
26	4.9	5.2	e7.4	e8.4	e10	8.5	22	2.3	1.1	5.9	8.7	2.8
27	4.7	5.2	e7.3	e9.2	e11	12	17	2.3	1.1	5.6	7.1	3.1
28	4.6	4.3	e7.8	e8.8	e10	14	15	2.5	1.1	5.5	7.8	5.1
29	4.7	4.0	e8.1	e7.7	---	18	15	3.7	1.2	5.8	9.7	20
30	4.7	5.3	e8.3	e7.8	---	19	16	2.5	1.3	6.0	11	8.3
31	4.5	---	e7.8	e8.5	---	15	---	2.4	---	71	10	---
TOTAL	216.7	136.4	234.4	259.8	258.3	391.5	463	436.0	39.10	188.2	584.2	178.9
MEAN	6.99	4.55	7.56	8.38	9.22	12.6	15.4	14.1	1.30	6.07	18.8	5.96
MAX	9.8	5.8	8.9	11	12	23	22	40	2.3	71	70	20
MIN	4.5	3.0	6.0	6.2	7.3	7.2	11	2.3	.90	1.2	7.1	2.8
AC-FT	430	271	465	515	512	777	918	865	78	373	1160	355

CAL YR 1989 TOTAL 2212.5 MEAN 6.06 MAX 35 MIN 1.5 AC-FT 4390
WTR YR 1990 TOTAL 3386.50 MEAN 9.28 MAX 71 MIN .90 AC-FT 6720

e Estimated

ARKANSAS RIVER BASIN

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). WDR NM-75-1: 1974. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 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.--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.--72 years (water years 1915-18, 1920-24, 1928-90), 57.2 ft³/s, 41,440 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 21	1830	*1,880	*5.37	No other peak greater than base discharge.			

Minimum discharge, 2.7 ft³/s, March 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	28	22	e24	e38	49	4.2	16	10	5.8	79	41
2	16	34	22	e25	e37	47	3.7	13	10	7.8	71	38
3	13	34	23	e26	37	49	3.5	17	10	6.3	57	35
4	14	36	20	e27	34	52	3.4	37	10	6.7	82	26
5	22	31	22	e25	34	55	5.3	57	8.7	6.7	54	11
6	28	32	24	e25	30	103	4.9	63	8.2	5.6	155	8.4
7	45	32	23	e24	31	96	4.2	61	7.8	5.5	127	7.6
8	37	33	23	e23	34	71	4.4	50	7.6	6.0	91	9.3
9	32	31	21	37	34	59	4.1	49	8.0	7.2	67	16
10	30	29	20	29	34	56	5.5	47	8.4	6.5	58	18
11	28	31	22	25	37	52	5.7	47	9.0	7.3	57	10
12	31	30	e26	24	39	55	4.8	47	7.8	18	53	9.4
13	32	25	e26	28	40	55	4.7	41	7.6	9.4	155	10
14	34	26	e25	33	42	47	4.6	30	7.2	17	88	8.1
15	30	24	e25	33	39	32	4.3	24	7.2	26	123	8.0
16	30	20	e26	32	36	16	4.4	19	6.9	12	79	15
17	32	19	e27	33	40	12	4.8	13	6.8	8.9	74	29
18	33	20	e28	29	43	11	5.8	9.8	6.7	7.7	76	24
19	31	19	e27	30	43	9.6	5.9	8.7	6.5	7.5	85	30
20	30	18	e27	44	38	4.4	6.7	8.6	6.5	36	123	33
21	28	19	e27	44	38	3.7	13	9.3	6.6	159	171	80
22	28	20	e27	47	58	3.3	9.3	10	6.4	41	192	75
23	25	19	e27	48	50	3.2	19	9.6	6.5	22	128	63
24	20	20	e27	44	49	3.1	19	9.3	6.0	49	105	105
25	24	21	e26	43	47	3.2	21	8.8	5.9	19	90	68
26	24	20	e26	40	49	3.3	25	8.7	5.7	17	81	53
27	23	19	e25	41	48	2.9	25	8.9	5.6	14	79	49
28	28	20	e25	e38	52	3.0	22	9.8	5.4	12	79	47
29	28	e20	e25	e38	---	3.5	17	9.5	5.4	13	66	237
30	28	21	e24	e36	---	3.4	18	9.2	5.4	27	62	190
31	33	---	e23	e36	---	3.2	---	9.8	---	31	49	---
TOTAL	855	751	761	1031	1131	966.8	283.2	761.0	219.8	617.9	2856	1353.8
MEAN	27.6	25.0	24.5	33.3	40.4	31.2	9.44	24.5	7.33	19.9	92.1	45.1
MAX	45	36	28	48	58	103	25	63	10	159	192	237
MIN	13	18	20	23	30	2.9	3.4	8.6	5.4	5.5	49	7.6
AC-FT	1700	1490	1510	2040	2240	1920	562	1510	436	1230	5660	2690

CAL YR 1989 TOTAL 7228.6 MEAN 19.8 MAX 330 MIN 3.9 AC-FT 14340
WTR YR 1990 TOTAL 11587.5 MEAN 31.7 MAX 237 MIN 2.9 AC-FT 22980

e Estimated

ARKANSAS RIVER BASIN

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 419, 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-82-1: 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 4,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to November 1966.

REMARKS.--Water-discharge records good. Diversions for irrigation of about 56,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--57 years (water years 1913-14, 1936-90), 182 ft³/s, 131,900 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 14	0715	*4,800	*9.24	No other peak greater than base discharge.			

Minimum discharge, 0.09 ft³/s, July 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	35	32	38	55	91	24	82	7.8	1.2	48	70
2	38	37	40	39	58	96	24	75	21	.54	59	59
3	33	39	38	39	66	91	28	87	29	.17	112	51
4	30	39	39	35	54	89	29	82	22	.66	136	47
5	27	40	34	32	52	90	29	92	17	1.1	341	44
6	28	45	37	34	52	94	29	101	13	.77	393	40
7	25	43	42	34	49	100	27	122	11	.38	235	34
8	30	41	45	35	52	185	28	115	8.9	2.5	175	77
9	46	43	47	41	53	185	29	108	8.1	7.0	138	34
10	50	46	45	42	49	148	30	105	7.1	4.1	97	25
11	43	45	44	41	57	125	29	117	6.3	22	73	22
12	40	41	35	42	55	111	27	118	6.6	46	63	25
13	42	41	37	38	57	99	25	105	5.0	22	1360	30
14	41	41	36	38	68	97	26	92	9.3	11	2790	26
15	43	39	40	41	75	95	24	82	17	7.8	496	22
16	42	36	32	43	86	86	23	74	14	6.1	251	66
17	41	36	36	48	70	71	22	56	10	11	163	75
18	42	35	37	45	54	56	22	45	8.9	15	216	30
19	44	32	35	54	54	44	28	37	6.3	18	189	23
20	44	30	39	50	86	36	28	30	5.2	144	164	38
21	44	30	36	44	91	34	27	25	4.5	247	490	100
22	41	29	35	39	76	32	25	20	3.0	649	298	67
23	39	28	37	55	60	30	26	17	2.6	e70	321	87
24	37	30	45	58	84	28	26	14	2.6	e60	230	80
25	37	30	42	49	89	27	31	13	2.1	e170	165	104
26	34	30	45	58	95	25	106	13	1.6	123	130	100
27	30	31	40	55	89	24	109	14	1.4	81	112	80
28	32	32	43	40	94	23	106	12	1.3	71	99	66
29	33	31	45	44	---	23	100	11	1.2	94	92	67
30	31	31	46	49	---	24	91	11	1.2	93	85	147
31	35	---	43	48	---	24	---	8.9	---	90	75	---
TOTAL	1165	1086	1227	1348	1880	2283	1178	1883.9	255.0	2069.32	9596	1736
MEAN	37.6	36.2	39.6	43.5	67.1	73.6	39.3	60.8	8.50	66.8	310	57.9
MAX	50	46	47	58	95	185	109	122	29	649	2790	147
MIN	25	28	32	32	49	23	22	8.9	1.2	.17	48	22
AC-FT	2310	2150	2430	2670	3730	4530	2340	3740	506	4100	19030	3440

CAL YR 1989 TOTAL 22279.4 MEAN 61.0 MAX 762 MIN 2.4 AC-FT 44190
WTR YR 1990 TOTAL 25707.22 MEAN 70.4 MAX 2790 MIN .17 AC-FT 50990

e Estimated

ARKANSAS RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 14...	1230	42	810	--	8.3	25.0	13.0	12	9.4	<10	350
JAN 17...	1400	52	1250	--	7.3	14.0	11.0	3.0	12.1	--	530
MAR 29...	1300	E24	2080	--	8.3	10.0	9.0	6.5	10.4	--	780
APR 24...	1200	27	2180	--	8.4	25.0	22.0	10	7.2	34	920
JUN 13...	1100	6.2	--	1180	8.3	32.0	24.0	15	6.9	31	420
SEP 18...	1200	30	620	--	8.3	28.0	20.0	95	7.7	22	240

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	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 DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
NOV 14...	180	79	37	63	1	2.5	203	5	174	170	310
JAN 17...	350	110	61	100	2	2.4	220	0	180	172	520
MAR 29...	580	130	110	190	3	4.2	239	0	196	185	1100
APR 24...	760	170	120	210	3	4.9	161	19	164	198	1200
JUN 13...	210	83	52	94	2	3.9	259	0	212	155	470
SEP 18...	100	58	24	50	1	2.9	177	0	145	131	190

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 CONSTITUENTS, 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)
NOV 14...	15	0.40	11	613	624	0.010	<0.100	0.020	<0.010	0.38	<0.010
JAN 17...	24	0.40	9.8	984	936	<0.010	<0.100	0.060	0.060	--	<0.010
MAR 29...	13	<0.10	6.5	1800	1670	<0.010	<0.100	<0.010	0.010	--	0.010
APR 24...	56	0.30	4.6	1980	1870	<0.010	<0.100	<0.010	<0.010	--	0.020
JUN 13...	23	0.20	7.5	886	862	<0.010	<0.100	<0.010	<0.010	--	0.050
SEP 18...	13	0.40	10	428	436	<0.010	<0.100	0.030	0.010	0.27	0.040

ARKANSAS RIVER BASIN

07221500 CANADIAN RIVER NEAR SANCHEZ, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)
NOV 14...	<0.010	2.5	10	<1	100	<0.5	<1.0	1	<3	1
JAN 17...	0.010	--	--	--	--	--	--	--	--	--
MAR 29...	<0.010	--	--	--	--	--	--	--	--	--
APR 24...	<0.010	3.9	<10	<1	<100	<10	<1.0	<1	<1	2
JUN 13...	<0.010	6.5	30	1	72	<0.5	1.0	<1	<3	4
SEP 18...	0.020	4.4	<10	1	200	<0.5	<1.0	<1	<3	3

DATE	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)	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)
NOV 14...	9	<1	32	4	<0.1	<10	1	<1	<1.0	1100
JAN 17...	--	--	--	--	--	--	--	--	--	--
MAR 29...	--	--	--	--	--	--	--	--	--	--
APR 24...	10	<1	70	20	<0.1	4	2	<1	<1.0	3000
JUN 13...	16	1	47	7	0.1	<10	2	<1	<1.0	1300
SEP 18...	9	<1	21	3	0.1	<10	<1	<1	<1.0	810

DATE	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)	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)
NOV 14...	<6	13	<10	<10	80	2	<1	3	<5	3
JAN 17...	--	--	--	--	--	--	--	--	--	--
MAR 29...	--	--	--	--	--	--	--	--	--	--
APR 24...	<1	<10	--	--	--	--	--	--	--	--
JUN 13...	<6	16	--	--	--	--	--	--	--	--
SEP 18...	<6	14	--	--	--	--	--	--	--	--

DATE	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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 14...	2400	<10	210	<0.01	10	80	9.1	89	K4	K2
JAN 17...	--	--	--	--	--	155	22	74	K2	<5
MAR 29...	--	--	--	--	--	174	--	93	K6	<5
APR 24...	--	--	--	--	--	111	8.1	90	<3	K21
JUN 13...	--	--	--	--	--	75	1.3	94	>600	450
SEP 18...	--	--	--	--	--	152	12	100	680	310

ARKANSAS RIVER BASIN

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.--Records fair. Diversions for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years, 13.6 ft³/s, 9,850 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 22	0100	1,730	4.74	July 24	0400	*1,800	*4.83

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.06	.23	.09	e.10	.31	.21	.03	.00	.00	2.4	.57
2	.14	.08	.29	.09	e.10	.26	.18	.10	.00	.00	1.5	.47
3	.13	.12	.24	.09	e.10	.23	.16	.47	.00	.00	1.2	.23
4	.11	.14	.22	.09	e.10	.21	.16	.42	.00	.00	.78	.15
5	.10	.15	.22	.09	e.10	.22	.15	.25	.00	.00	2.0	.18
6	.14	.14	.21	.08	e.10	.19	.14	.18	.00	.00	88	.09
7	.14	.14	.21	.06	e.10	.19	.16	.12	.00	.00	70	.03
8	.16	.14	.19	.06	e.10	.19	.21	.08	.00	.00	25	.01
9	.19	.14	.18	.08	e.10	.18	.17	.06	.00	.00	9.2	.00
10	.19	.14	.18	.09	e.10	.19	.14	.04	.00	.00	4.9	.00
11	.16	.14	.16	.09	e.05	.22	.12	.05	.00	.00	2.4	.01
12	.14	.17	.14	.06	e.05	.18	.11	.05	.00	.00	3.0	1.5
13	.11	.19	.15	.06	e.05	.16	.13	.04	.00	.00	6.5	1.2
14	.09	.17	.16	.06	e.10	.14	.15	.03	.00	.00	46	.39
15	.08	.15	.14	.06	e.10	.14	.14	.01	.00	.00	57	.03
16	.06	.16	.14	.06	e.05	.14	.14	.01	.00	42	68	78
17	.07	.17	.14	e.06	e.05	.14	.11	.00	.00	2.5	24	41
18	.10	.19	.14	e.05	e.05	.14	.13	.00	.00	.31	10	24
19	.06	.19	.14	e.10	e.05	.14	.25	.00	.00	.03	5.7	9.0
20	.07	.18	.15	e.10	e.20	.11	.22	.00	.00	.54	18	5.8
21	.15	.19	.14	e.10	.60	.13	.20	.00	.00	54	42	367
22	.16	.19	.14	e.10	.47	.14	.14	.00	.00	297	20	52
23	.14	.19	.14	e.10	.41	.14	.11	.00	.00	18	12	21
24	.14	.18	.16	e.10	.31	.14	.10	.00	.00	463	13	14
25	.14	.16	.19	e.10	.25	.14	.08	.00	.00	31	12	8.5
26	.13	.17	.17	e.05	.24	.15	.07	.00	.00	15	5.6	4.9
27	.09	.16	.14	e.05	.28	.17	.08	.00	.00	4.0	3.3	3.3
28	.10	.14	.14	e.05	.33	.16	.07	.00	.00	9.7	2.0	2.3
29	.09	.15	.12	e.05	---	.27	.07	.00	.00	6.7	1.3	2.1
30	.09	.18	.11	e.05	---	.32	.03	.00	.00	2.0	.66	16
31	.07	---	.10	e.05	---	.28	---	.00	---	46	.56	---
TOTAL	3.70	4.67	5.18	2.32	4.64	5.72	4.13	1.94	0.00	991.78	558.00	653.76
MEAN	.12	.16	.17	.075	.17	.18	.14	.063	.000	32.0	18.0	21.8
MAX	.19	.19	.29	.10	.60	.32	.25	.47	.00	463	88	367
MIN	.06	.06	.10	.05	.05	.11	.03	.00	.00	.00	.56	.00
AC-FT	7.3	9.3	10	4.6	9.2	11	8.2	3.8	.00	1970	1110	1300

CAL YR 1989 TOTAL 2523.93 MEAN 6.91 MAX 521 MIN .00 AC-FT 5010
WTR YR 1990 TOTAL 2235.84 MEAN 6.13 MAX 463 MIN .00 AC-FT 4430

e Estimated

ARKANSAS RIVER BASIN

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 OF 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 ft³/s, Aug. 31, 1961; no flow many days each year.

MONTHLY DIVERSION, IN ACRE-FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

Month	Mean	Diversion in acre-feet
October.....	163	10,040
November.....	6.27	373
December.....	0	0
January.....	0	0
February.....	0	0
March.....	0	0
April.....	93.0	5,540
May.....	226	13,880
June.....	268	15,930
July.....	191	11,770
August.....	186	11,440
September.....	180	10,690
WTR YR 1990.....	110	79,660

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. U.S. Army Corps of Engineers satellite telemeter at station.

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, 223,580 acre-ft, Oct. 1, elevation, 4,190.03 ft; minimum, 165,300 acre-ft, July 19, elevation, 4,180.84 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 (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223580	211380	209550	209350	210700	213710	216480	209550	194410	174690	172360	195110
2	223000	211240	209620	209350	210770	213710	216480	209210	193840	174110	171950	194340
3	222500	211110	209620	209350	210970	213850	216480	209010	193650	173930	171780	193650
4	222070	211110	209620	209350	211110	213990	216480	208870	192700	173290	171610	193080
5	221780	210970	209620	209350	211180	214120	216480	208600	192320	171900	171490	192570
6	220570	210970	209550	209350	211240	214260	216480	208400	191560	170740	172710	191880
7	220210	210900	209550	209350	211310	214400	216480	208070	190810	169940	173170	191750
8	219790	210160	209480	209350	211380	214470	216480	207600	190060	169370	173230	191380
9	219360	210160	209480	209350	211380	214540	216480	207060	189690	168800	173060	191000
10	219010	210160	209410	209350	211450	215020	216410	206720	188810	168450	172880	190560
11	218590	210160	209410	209350	211520	215300	216270	206320	188070	168510	172480	190060
12	218160	210160	209410	209350	211590	215370	216270	205860	187510	167830	172710	189620
13	217810	210160	209410	209480	211590	215440	216340	205330	186520	167380	176280	189000
14	217460	210160	209350	209480	211590	215510	216340	204790	185660	167150	188810	188380
15	216970	210090	209350	209480	211650	215580	216270	204200	185110	166700	190870	188320
16	216480	210090	209350	209550	211720	216060	216130	204130	184440	166250	191820	189250
17	216200	210090	209280	209550	211720	216130	216060	203870	184130	166080	192130	189190
18	216060	210090	209210	209890	211790	216200	215990	203210	183710	165630	192320	189130
19	215720	210090	209140	210360	211860	216200	215720	202680	183100	165300	192760	188880
20	215440	210090	209140	210430	212410	216200	215160	202090	182250	165520	194340	188810
21	215090	210090	209080	210500	212540	216270	214610	201830	182070	166080	195940	189310
22	214810	210090	209010	210560	212680	216270	214330	201370	181710	166880	196900	189500
23	214540	210090	209010	210630	212820	216270	213780	200780	180500	169420	197350	189500
24	214330	210020	209010	210630	213020	216200	213230	199870	179600	170170	197800	189440
25	213920	209950	209010	210630	213020	216200	212680	199290	179010	170740	197800	189500
26	213500	209950	209010	210630	213160	216200	212060	198700	178410	170800	197670	189440
27	213090	209750	209010	210630	213300	216200	211450	198190	177700	170800	197480	189250
28	212820	209620	209080	210700	213500	216200	211110	197730	176750	170690	197150	189060
29	212340	209550	209080	210700	---	216200	210630	196710	176100	170690	196710	189060
30	212060	209550	209280	210700	---	216410	209950	195870	175510	170800	196190	189060
31	211720	---	209350	210700	---	216480	---	195110	---	172190	195550	---
MAX	223580	211380	209620	210700	213500	216480	216480	209550	194410	174690	197800	195110
MIN	211720	209550	209010	209350	210700	213710	209950	195110	175510	165300	171490	188320
(†)	4195.70	4195.20	4195.32	4195.53	4195.77	4195.07	4193.12	4191.01	4190.66	4189.03	4190.18	4190.11
(††)	-12430	-2170	-200	+1350	+2800	+2980	-6530	-14840	-19600	-3320	+23360	-6490

CAL YR 1989 MAX 268810 MIN 209010 (††) -55440
WTR YR 1990 MAX 223580 MIN 165300 (††) -35090

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

e Estimated

ARKANSAS RIVER BASIN

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-81-1: 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 3,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to Oct. 1, 1964.

REMARKS.--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.--48 years, 22.1 ft³/s, 16,010 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 13	0830	*4,100	*5.05	No other peak greater than base discharge.			
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	e.50	.00	e.20	6.9	.00	.00	.00	e.00	e.00
2	.00	.00	.00	e.30	.00	e.20	4.9	.00	.00	.00	e.00	e.00
3	.00	.00	.00	e.20	.00	e.20	3.1	.00	.00	.00	e.00	e.00
4	.00	.00	.00	e.00	.00	e.30	1.6	.00	.00	.00	e.00	e.00
5	.00	.00	.00	e.00	.00	e.40	.57	.00	.00	.00	e.00	e.00
6	.00	.00	.00	e.00	.00	e.50	.27	.01	.00	.00	e.00	e.00
7	.00	.00	.00	e.00	.00	e.60	.23	.01	.00	.00	e.00	2.3
8	.00	.00	.00	e2.0	.00	e.70	.06	.00	.00	.00	e.00	.61
9	.00	.00	.00	e.50	.00	e.80	.00	.00	.00	.00	e.00	.08
10	.00	.00	.00	e.20	.00	e1.0	.00	.00	.00	.00	e.00	7.0
11	.00	.00	.00	e.00	.00	e1.4	.00	.00	.00	.00	e.00	.29
12	.00	.01	.00	e.00	.00	e1.0	.00	.00	.00	.00	e.00	e.00
13	.00	.02	.00	e.00	.00	.33	.00	.00	.00	.00	1030	e.00
14	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	623	e.00
15	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	253	.00
16	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	e60	.00
17	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	18	e10	19
18	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	25	e2.0	e2.0
19	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	e.00	e1.0
20	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	66	e.00	e.00
21	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	8.7	e60	e.00
22	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	124	e50	e2.0
23	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	25	e20	5.0
24	.00	.00	e.10	e.00	e.00	.00	.00	.00	.00	32	e10	e.60
25	.00	.00	e.50	e.00	e.00	.00	.00	.00	.00	e8.0	e5.0	e.00
26	.00	.00	e.40	e.00	e.00	.00	.00	.00	.00	e4.0	e.00	e.00
27	.00	.00	e.30	e.00	e.10	.00	.00	.00	.00	e.00	e.00	e.00
28	.00	.00	e.30	e.00	e.20	.00	.00	.00	.00	e.00	e.00	e.00
29	.00	.00	e.30	e.00	---	1.0	.00	.00	.00	e2.0	e.00	e.00
30	.00	.00	e.30	e.00	---	5.2	.00	.00	.00	e1.0	e.00	e.00
31	.00	---	e.30	e.00	---	7.5	---	.00	---	e.00	e.00	---
TOTAL	0.01	0.03	2.50	3.70	0.30	21.33	17.63	0.02	0.00	313.70	2123.00	39.88
MEAN	.000	.001	.081	.12	.011	.69	.59	.001	.000	10.1	68.5	1.33
MAX	.01	.02	.50	2.0	.20	7.5	6.9	.01	.00	124	1030	19
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.02	.06	5.0	7.3	.6	42	35	.04	.00	622	4210	79

CAL YR 1989 TOTAL 1938.21 MEAN 5.31 MAX 348 MIN .00 AC-FT 3840
WTR YR 1990 TOTAL 2522.10 MEAN 6.91 MAX 1030 MIN .00 AC-FT 5000

e Estimated

ARKANSAS RIVER BASIN

57

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.--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, 250,000 acre-ft, May 20, 21, 1987, elevation, 3,787.40 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, 239,880 acre-ft, Oct. 1, elevation, 3,786.15 ft; minimum, 210,910 acre-ft, July 16, elevation, 3,782.26 ft.

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

3,744	41,110	3,780	195,000
3,760	89,600	3,788	255,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239880	235660	222610	221570	222020	222980	222680	220760	219200	213720	212930	229120
2	239730	235130	222610	221430	222170	223130	222680	221130	218900	213360	212860	228820
3	239650	234440	222680	221210	222240	223350	222910	221200	218900	213220	212860	228740
4	239570	233910	222680	221130	222310	223280	222830	221420	219350	212860	212710	228440
5	239250	233070	222680	221280	222310	223130	222540	221570	218460	212570	212860	228210
6	239250	232310	222540	221130	222390	223130	222460	221570	218090	212570	212860	228130
7	239170	231550	222460	221280	222390	222980	222680	221650	217950	212130	212860	228290
8	239250	230870	222540	221210	222390	223130	222760	221650	217430	211990	212710	228440
9	239170	230260	222460	221350	222390	223280	222540	221280	217350	211920	212570	228510
10	239250	229650	222090	221570	222390	223060	222310	221130	217210	211780	212360	228290
11	238940	228900	221940	221430	222390	223280	222310	221130	217130	211340	212280	228290
12	238850	228290	221870	221350	222390	223200	222380	220980	216980	211200	212640	228210
13	238620	227450	222020	221430	222090	222980	222460	221050	216690	211060	215590	228130
14	238700	226610	222020	221280	221870	222760	222310	220980	216540	211410	220690	227830
15	238320	225630	221790	221430	222020	222830	222610	220980	216240	211270	225550	227750
16	237860	224710	221650	221720	222170	222830	222390	220610	215880	210910	227830	228820
17	237630	223880	221720	221500	222090	222910	222170	220540	215730	211410	228360	228970
18	237710	223650	221430	221940	222020	222610	221870	220680	215590	212350	228440	229120
19	237710	223570	221430	222020	222570	222680	222170	220540	215660	212350	228360	229050
20	237710	223650	221350	222090	222540	222830	222010	220310	215230	212420	228360	228900
21	237790	223420	221130	222090	222760	222830	222090	220240	215230	212200	229200	228670
22	237710	223280	221210	222240	222680	222680	222090	220240	215010	212500	229500	228740
23	237710	223350	221430	222170	222830	222240	222380	220160	214940	212930	229730	228740
24	237480	223500	221350	222020	222980	222090	221940	219940	214940	212780	229880	228670
25	237400	223130	221430	222170	222910	222090	221940	219870	214730	212710	229880	228740
26	237250	223420	221500	222460	223130	222390	221720	219570	214660	212420	229800	228670
27	237250	222760	221500	221940	222980	222540	221650	219280	214300	212420	229650	228670
28	237030	222680	221500	222020	222830	222390	221420	219200	214220	212280	229650	227980
29	236720	222610	221280	222240	---	222310	220910	219420	213940	212640	229580	228590
30	236570	222680	221130	222240	---	222540	220830	219350	213720	212710	229350	228900
31	236500	---	221350	222170	---	222680	---	219280	---	212930	229200	---
MAX	239880	235660	222680	222460	223570	223350	222910	221650	219350	213720	229880	229120
MIN	236500	222610	221130	221130	221870	222090	220830	219200	213720	210910	212280	227750
(†)	3785.71	3783.89	3783.71	3783.82	3783.91	3783.89	3783.66	3783.40	3782.43	3782.56	3784.75	3784.71
(††)	-3700	-13820	-1330	+820	+660	-150	-1850	-1550	-5560	-790	+16270	-300

CAL YR 1989 MAX 241230 MIN 216690 (††) -1780
WTR YR 1990 MAX 239880 MIN 210910 (††) -11300

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

e Estimated

ARKANSAS RIVER BASIN
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 annually at Site B which is located 0.6 mi upstream from Ute Dam. Samples are collected 5 feet from the bottom of the reservoir.

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 1989 TO SEPTEMBER 1990

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
JUN												
14...	0919	1.00	62.0	950	8.5	--	21.5	7.2	--	--	--	
14...	0920	5.00	62.0	--	--	--	21.5	7.2	--	--	--	
14...	0921	10.0	62.0	--	--	--	21.5	7.2	--	--	--	
14...	0922	15.0	62.0	--	--	--	21.5	7.2	--	--	--	
14...	0923	20.0	62.0	--	--	--	21.5	7.2	--	--	--	
14...	0924	25.0	62.0	--	--	--	21.5	7.2	--	--	--	
14...	0925	30.0	62.0	950	8.5	--	21.5	7.1	--	--	--	
14...	0926	35.0	62.0	--	--	--	21.0	6.9	--	--	--	
14...	0927	40.0	62.0	--	--	--	20.0	6.6	--	--	--	
14...	0928	45.0	62.0	--	--	--	18.0	5.9	--	--	--	
14...	0930	50.0	62.0	--	--	--	17.5	5.8	--	--	--	
14...	0931	55.0	62.0	930	8.3	29.5	17.0	5.6	260	67	51	
14...	0932	60.0	62.0	--	--	--	16.5	5.5	--	--	--	
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 WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS (39086)	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)
JUN												
14...	31	110	3	5.4	209	10	187	184	260	44	0.50	
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, 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)
JUN												
14...	1.7	617	<0.100	<0.100	0.030	0.77	0.020	<0.010	4.6	1	1	
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)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
JUN												
14...	150	<1	<1.0	3	<1	2	1	8	<1	<1	0.10	
DATE		MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL RECOV- ERABLE (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)
JUN												
14...	0.2	<1	<1	<10	10	<2.0	43	450	8	<1	6	
DATE		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)	SED. SUSP. SIEVE DIAM. % FINER THAN (MG/L) (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC- CI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	
JUN												
14...	10	20	4800	20	510	0.02	20	71	75	<1	<1	

ARKANSAS RIVER BASIN

59

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 3,667.1 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1987 same site at datum 1.0 ft higher. See WSP 1311 or 1731 for history of changes prior to Oct. 1, 1934.

REMARKS.--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. 28 years (water years 1963-90), 36.4 ft³/s, 26,370 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 New Mexico State Engineer.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 357 ft³/s, Nov. 1, gage height, 3.72; minimum daily, 3.2 ft³/s, Nov. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	171	3.7	4.2	4.6	5.2	4.9	4.3	3.5	3.5	3.4	3.9
2	3.7	347	3.7	4.1	4.6	5.2	4.9	4.3	3.5	3.5	3.5	3.9
3	3.7	341	3.7	5.3	4.6	5.2	4.8	4.6	3.6	3.5	3.5	4.0
4	3.8	341	3.7	4.2	4.5	5.4	4.6	4.5	3.6	3.5	3.6	3.9
5	4.1	336	3.7	4.3	4.6	5.5	4.6	4.1	3.6	3.5	3.4	3.9
6	4.5	332	3.7	4.3	4.5	5.8	4.6	4.0	3.6	3.5	3.4	3.9
7	4.2	328	3.7	4.3	4.5	6.1	4.5	3.9	3.6	3.5	3.5	4.0
8	4.3	309	3.7	4.3	4.6	5.8	4.4	3.9	3.7	3.6	3.5	4.0
9	4.4	323	3.7	4.3	4.6	5.8	4.4	3.9	3.6	3.5	3.4	3.8
10	4.6	320	3.7	4.4	4.7	5.8	4.3	3.8	3.5	3.5	3.5	3.9
11	4.6	317	3.7	4.4	4.7	6.7	4.1	3.8	3.5	3.6	3.6	4.1
12	4.0	314	3.7	4.4	5.1	6.5	4.1	3.9	3.5	3.5	3.6	4.1
13	4.0	311	3.7	4.4	4.8	6.5	4.1	3.8	3.5	3.5	3.9	4.2
14	4.0	326	3.7	4.4	4.6	6.2	4.1	3.8	3.5	3.5	4.5	4.3
15	4.2	342	3.7	4.5	4.7	5.8	4.1	3.8	3.5	3.5	5.7	4.7
16	4.0	341	3.7	4.5	4.7	5.8	4.0	3.8	3.5	3.5	3.9	7.4
17	4.0	340	3.7	4.5	4.6	5.7	4.0	3.8	3.6	3.4	3.6	4.9
18	4.1	209	3.7	4.6	4.7	5.6	4.0	3.8	3.5	4.2	3.8	3.7
19	4.2	4.5	3.7	4.6	4.7	5.6	4.2	3.8	3.5	3.6	4.0	3.7
20	4.1	3.3	3.7	4.7	5.6	5.6	4.3	3.8	3.5	3.4	4.0	3.6
21	4.3	3.2	3.8	4.7	4.9	5.5	4.1	3.8	3.6	3.5	4.0	3.6
22	4.3	3.3	3.9	4.7	4.9	5.3	4.1	3.7	3.5	3.5	3.8	3.6
23	4.3	3.4	4.0	4.7	4.9	5.3	4.2	3.5	3.5	3.4	3.9	3.7
24	4.6	3.5	4.0	4.7	4.9	5.3	4.3	3.5	3.5	3.6	3.9	4.0
25	4.7	3.6	3.8	4.6	5.1	5.3	4.2	3.5	3.5	3.5	3.8	4.0
26	9.0	3.7	4.0	4.6	5.2	5.3	4.2	3.5	3.5	3.4	3.9	3.9
27	5.4	3.7	4.0	4.5	5.2	5.3	4.2	3.5	3.5	3.5	3.9	3.7
28	6.0	3.7	4.0	4.5	5.1	5.0	4.0	3.5	3.5	3.5	3.9	3.6
29	4.8	3.7	4.0	4.7	---	5.2	4.1	4.5	3.5	4.0	3.9	3.7
30	4.1	3.7	4.0	4.7	---	5.0	4.6	3.9	3.5	3.5	4.0	3.6
31	4.4	---	4.1	4.7	---	5.0	---	3.9	---	3.4	3.9	---
TOTAL	138.0	5691.3	117.6	139.8	134.2	173.3	129.0	120.2	106.0	109.6	118.2	121.3
MEAN	4.45	190	3.79	4.51	4.79	5.59	4.30	3.88	3.53	3.54	3.81	4.04
MAX	9.0	347	4.1	5.3	5.6	6.7	4.9	4.6	3.7	4.2	5.7	7.4
MIN	3.6	3.2	3.7	4.1	4.5	5.0	4.0	3.5	3.5	3.4	3.4	3.6
AC-FT	274	11290	233	277	266	344	256	238	210	217	234	241

CAL YR 1989 TOTAL 7190.3 MEAN 19.7 MAX 347 MIN 2.2 AC-FT 14260
WTR YR 1990 TOTAL 7098.5 MEAN 19.4 MAX 347 MIN 3.2 AC-FT 14080

ARKANSAS RIVER BASIN

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 469, 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 3,660 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.--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.--31 years, 44.2 ft³/s, 32,020 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 29	0830	*4,970	*6.96	No other peak greater than base discharge.			

No flow part of each day June 29 - July 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	e2.0	1.6	1.9	39	4.1	1.9	3.0	3.2	.00	e20	e16
2	2.6	e2.0	1.7	2.4	22	4.1	1.6	4.1	1.9	.56	e13	e16
3	4.4	e2.0	1.3	2.3	28	3.1	1.3	27	1.1	.80	e20	e16
4	4.8	e2.0	1.4	1.8	11	2.7	1.0	130	.79	2.6	e11	e16
5	8.5	e2.0	1.5	1.8	8.4	2.6	.76	47	.64	3.1	e8.0	e16
6	15	e2.0	1.4	1.7	8.5	2.3	.66	31	.44	2.2	35	e16
7	14	e2.0	1.6	3.0	11	1.5	.71	22	.25	.70	219	11
8	15	e2.0	1.8	1.9	10	1.4	.58	15	.24	1.3	e112	e45
9	13	e2.0	1.7	2.4	8.2	1.4	.49	14	.38	4.0	e90	e80
10	12	e2.0	1.5	1.9	6.5	1.6	.40	10	.26	4.7	e80	e50
11	12	e2.0	1.5	1.6	6.4	3.2	.32	9.0	.17	5.1	e70	e20
12	7.0	e2.0	1.8	1.3	3.6	14	.37	10	.07	5.6	e60	e15
13	3.4	e4.0	2.4	1.5	.93	3.7	.47	10	1.2	3.9	e300	8.5
14	3.3	5.0	3.1	1.5	.75	1.8	.45	13	2.5	4.3	e400	4.6
15	7.6	5.8	3.0	1.5	1.1	1.6	.48	9.2	1.8	3.8	e100	4.3
16	8.7	4.0	1.9	1.3	1.8	1.6	.39	7.4	1.6	2.3	e90	96
17	9.5	2.7	2.8	1.4	1.7	1.4	.32	3.8	1.1	1.5	e70	1070
18	15	2.5	4.8	3.3	1.4	1.2	.28	4.6	.60	30	e60	754
19	e10	2.0	3.7	8.2	1.2	.95	.87	4.6	.18	13	e50	146
20	e5.0	1.9	4.2	11	264	.88	24	3.3	.55	7.6	e40	17
21	e3.5	1.8	4.7	18	149	.81	9.2	3.7	1.7	58	e30	146
22	e2.5	1.5	4.8	21	111	.79	3.0	3.8	1.1	169	e28	238
23	e2.5	1.4	13	111	58	.71	6.2	5.0	1.1	77	e25	121
24	e2.5	1.4	12	230	12	.98	1.6	2.8	2.4	28	e22	16
25	e2.5	1.2	11	110	7.7	1.2	4.5	2.4	.83	13	e20	5.3
26	e2.5	1.2	12	79	5.6	1.4	2.0	1.7	.32	7.8	e20	2.4
27	e2.5	1.2	9.1	98	4.7	1.4	1.9	1.4	.19	5.1	e19	1.3
28	e2.5	1.1	4.2	60	4.9	1.2	2.6	1.8	.16	78	e18	.82
29	e2.5	1.1	2.5	29	---	2.9	2.4	3.7	.02	59	e17	1200
30	e2.5	1.4	2.1	32	---	5.0	2.4	2.6	.00	e45	e17	286
31	e2.5	---	2.2	23	---	3.2	---	3.3	---	e30	e16	---
TOTAL	203.8	65.2	122.3	864.7	788.38	74.72	73.15	410.2	26.79	666.96	2080.0	4434.22
MEAN	6.57	2.17	3.95	27.9	28.2	2.41	2.44	13.2	.89	21.5	67.1	148
MAX	15	5.8	13	230	264	14	24	130	3.2	169	400	1200
MIN	2.5	1.1	1.3	1.3	.75	.71	.28	1.4	.00	.00	8.0	.82
AC-FT	404	129	243	1720	1560	148	145	814	53	1320	4130	8800

CAL YR 1989 TOTAL 14419.52 MEAN 39.5 MAX 1310 MIN .05 AC-FT 28600
WTR YR 1990 TOTAL 9810.42 MEAN 26.9 MAX 1200 MIN .00 AC-FT 19460

e Estimated

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 1989 TO SEPTEMBER 1990

[illegible]

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO
(National stream-quality accounting network station)

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, and 14 mi east of Antonito.

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 Cenicerio" 1899-1901, and as "near Cenicerio" 1902-04.

REVISED RECORDS.--WSP 210: Drainage area. WSP 1312: 1919 (monthly runoff). WRD CO-78-1: 1976.

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

REMARKS.--Estimated daily discharges: Nov. 23 to Mar. 3 and Mar. 4-19. 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: 60 years (water years 1931-90), 449 ft³/s; 325,300 acre-ft/yr. 58 years (water years 1931-1988), 455 ft³/s, 329,600 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, 1,860 ft³/s at 1315 May 10, gage height, 3.27 ft; minimum daily, 28 ft³/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	79	80	185	200	330	82	169	212	179	178	89
2	39	96	55	180	205	370	92	238	158	195	174	90
3	35	118	80	185	210	350	83	401	148	181	164	89
4	37	110	85	160	210	355	89	595	151	181	165	85
5	39	104	110	150	215	355	99	854	160	160	165	76
6	42	102	130	150	210	390	92	903	290	170	157	74
7	62	102	115	150	210	380	95	986	457	178	147	79
8	88	105	125	150	215	355	97	1270	302	223	139	90
9	71	105	135	150	215	345	90	1560	195	300	133	94
10	75	100	140	150	220	340	82	1790	226	242	120	82
11	71	97	90	160	220	355	86	1100	278	174	102	69
12	66	95	95	165	230	360	85	696	420	202	99	62
13	66	94	165	175	245	350	78	462	550	270	105	53
14	66	97	160	175	225	335	76	350	594	237	115	48
15	69	88	175	180	210	325	76	278	365	236	133	43
16	76	80	165	180	205	302	77	350	226	254	154	41
17	80	75	160	180	240	286	75	315	262	274	178	46
18	83	80	180	195	250	286	85	266	286	266	193	44
19	77	90	185	205	255	291	103	227	286	230	172	32
20	88	105	180	205	240	298	122	216	238	223	164	28
21	91	82	180	200	250	302	139	206	297	216	174	29
22	93	80	185	195	255	298	148	156	315	206	164	33
23	93	80	185	195	235	307	139	172	266	202	188	60
24	93	80	185	190	240	332	130	292	210	223	216	69
25	94	81	190	190	255	353	167	445	174	202	194	81
26	95	75	190	195	275	348	181	692	180	184	163	76
27	85	55	190	195	290	296	157	615	220	213	148	67
28	86	60	195	190	290	228	157	350	209	203	135	58
29	85	80	195	195	---	158	147	242	220	196	120	81
30	78	85	195	195	---	135	138	216	184	195	108	73
31	80	---	185	200	---	120	---	302	---	188	105	---
TOTAL	2249	2680	4685	5570	6520	9635	3267	16714	8079	6603	4672	1941
MEAN	72.5	89.3	151	180	233	311	109	539	269	213	151	64.7
MAX	95	118	195	205	290	390	181	1790	594	300	216	94
MIN	35	55	55	150	200	120	75	156	148	160	99	28
AC-FT	4460	5320	9290	11050	12930	19110	6480	33150	16020	13100	9270	3850
CAL YR 1989	TOTAL	108554	MEAN 297	MAX 1780	MIN 31	AC-FT 215300						
WTR YR 1990	TOTAL	72615	MEAN 199	MAX 1790	MIN 28	AC-FT 144000						

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY RECORDS

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

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (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 TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
OCT 26...	0945	85	350	8.6	5.0	11	10.0	50	250	90	27
DEC 06...	1000	82	540	8.8	0.5	4.6	10.9	K3	<11	110	33
FEB 27...	1200	290	235	8.7	0.5	3.3	11.4	K3	69	55	16
APR 19...	1230	81	519	8.7	13.5	40	9.6	K3	43	130	40
JUN 13...	0900	450	259	8.2	16.5	17	7.4	220	110	60	17
AUG 23...	0845	185	298	8.7	18.0	13	8.5	46	2000	65	18

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (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)
OCT 26...	5.5	32	42	1	5.9	146	4	126	27	8.1	0.50
DEC 06...	6.9	74	56	3	11	201	4	171	64	27	0.60
FEB 27...	3.7	18	39	1	4.0	90	3	78	20	9.5	<0.10
APR 19...	8.4	61	48	2	5.9	184	8	165	74	14	0.60
JUN 13...	4.3	21	41	1	3.8	105	0	86	24	6.2	0.30
AUG 23...	4.9	32	49	2	5.6	125	2	107	27	7.7	0.40

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	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, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT 26...	26	185	208	42.5	<0.01	<0.1	0.01	<0.01	0.5	0.11	0.05
DEC 06...	33	363	353	80.4	<0.01	0.1	0.02	0.01	0.7	0.15	0.07
FEB 27...	25	149	145	117	0.01	0.2	0.01	<0.01	0.5	0.04	0.01
APR 19...	28	334	331	73.0	<0.01	<0.1	<0.01	<0.01	0.4	0.10	0.06
JUN 13...	24	166	153	202	<0.01	<0.1	0.03	<0.01	0.8	0.22	0.07
AUG 23...	27	182	187	90.9	<0.01	<0.1	0.02	0.01	0.6	0.16	0.07

K BASED ON NON-IDEAL COLONY COUNT.

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 26...	0.05	10	3	34	<0.5	1.0	1	<3	1	54	<1
DEC 06...	0.08	--	--	--	--	--	--	--	--	--	--
FEB 27...	0.02	<10	1	21	<0.5	<1.0	<1	<3	1	43	<1
APR 19...	0.06	--	--	--	--	--	--	--	--	--	--
JUN 13...	0.06	30	2	27	<0.5	<1.0	1	<3	2	92	<1
AUG 23...	0.06	20	3	29	<0.5	<1.0	<1	<3	3	22	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 26...	9	5	--	<10	1	<1	<1.0	230	<6	35
DEC 06...	--	--	--	--	--	--	--	--	--	--
FEB 27...	6	17	<0.1	<10	<1	<1	<1.0	160	<6	72
APR 19...	--	--	--	--	--	--	--	--	--	--
JUN 13...	6	12	<0.1	<10	1	<1	<1.0	200	<6	17
AUG 23...	5	5	<0.1	<10	<1	<1	<1.0	200	<6	9

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
DEC 06...	1000	2.7	<0.4	6.5	0.5	7.7	0.5	0.05	5.2
AUG 23...	0845	**	**	**	**	**	**	**	**

NOTE: ** Indicates analysis pending at time of publication, data available in district office.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 26...	0945	85	36	8.3
DEC 06...	1000	82	46	10
FEB 27...	1200	290	14	11
APR 19...	1230	81	22	4.8
JUN 13...	0900	450	88	107
AUG 23...	0845	185	46	23

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	TEMPER- ATURE WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)
DEC							
06...	1101	15.0	0.5	550	8.7	11.0	22
06...	1102	25.0	0.5	546	8.7	11.0	31
06...	1103	35.0	0.5	544	8.7	11.0	31
06...	1104	45.0	1.0	543	8.7	10.9	42
06...	1105	55.0	1.0	543	8.7	10.9	49
06...	1106	65.0	1.0	542	8.7	10.9	39
06...	1107	75.0	1.0	542	8.8	10.9	42
06...	1108	85.0	1.0	542	8.8	10.9	43
06...	1109	95.0	1.0	543	8.8	10.9	38
06...	1110	105	0.5	549	8.8	10.9	29
06...	1111	115	0.5	566	8.8	10.9	20
AUG							
23...	0900	40.0	20.0	304	8.9	10.2	--
23...	0901	50.0	18.5	298	8.9	9.0	33
23...	0902	60.0	18.0	304	8.7	8.7	38
23...	0903	70.0	18.0	301	8.7	8.5	36
23...	0904	80.0	18.0	298	8.8	8.4	35
23...	0905	90.0	18.0	297	8.7	8.4	42
23...	0906	100	18.0	297	8.8	8.4	42
23...	0907	110	18.0	295	8.7	8.4	31
23...	0908	120	18.0	295	8.7	8.5	36
23...	0909	130	18.0	295	8.7	8.5	36
23...	0910	140	18.0	295	8.8	9.0	33
23...	0911	150	19.0	292	8.9	10.8	--

RIO GRANDE BASIN

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 9,430 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1923 for history of changes prior to Sept. 17, 1965.

REMARKS.--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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 7	1845	55	2.79	July 8	1345	*72	*2.93
May 23	2045	53	2.77				

Minimum recorded, 2.6 ft³/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	---	---	---	---	---	---	e10	26	7.5	5.9	4.4
2	2.8	---	---	---	---	---	---	10	21	6.9	6.1	4.5
3	2.9	---	---	---	---	---	---	9.7	19	9.7	6.2	4.2
4	8.3	---	---	---	---	---	---	11	19	15	4.8	4.2
5	7.9	---	---	---	---	---	---	14	20	12	5.0	4.4
6	6.6	---	---	---	---	---	---	25	21	8.8	6.5	4.6
7	5.5	---	---	---	---	---	---	30	20	8.1	6.1	6.2
8	4.6	---	---	---	---	---	---	26	20	21	5.2	5.0
9	4.3	---	---	---	---	---	---	24	22	10	5.1	4.6
10	4.1	---	---	---	---	---	---	24	25	13	5.2	4.3
11	3.9	---	---	---	---	---	---	26	22	10	5.4	4.0
12	3.8	---	---	---	---	---	---	23	19	7.4	7.2	3.9
13	3.8	---	---	---	---	---	---	25	16	8.3	9.8	3.7
14	3.9	---	---	---	---	---	---	29	14	13	9.6	3.5
15	3.9	---	---	---	---	---	---	30	13	11	12	3.5
16	4.2	---	---	---	---	---	---	28	11	8.1	9.3	5.1
17	4.7	---	---	---	---	---	---	26	9.9	8.2	7.4	5.9
18	4.8	---	---	---	---	---	---	30	9.1	6.7	7.6	5.1
19	5.6	---	---	---	---	---	---	31	8.7	7.0	7.6	5.0
20	5.6	---	---	---	---	---	---	28	8.2	6.6	8.2	6.2
21	e4.6	---	---	---	---	---	---	29	7.9	6.3	7.4	6.5
22	e4.1	---	---	---	---	---	---	32	7.6	9.2	7.0	4.9
23	e3.9	---	---	---	---	---	---	38	7.2	6.2	6.7	4.5
24	e3.8	---	---	---	---	---	---	43	6.6	6.2	6.1	4.1
25	e3.8	---	---	---	---	---	---	36	6.7	6.7	5.6	4.1
26	e3.8	---	---	---	---	---	---	32	6.8	6.1	5.2	4.0
27	e3.9	---	---	---	---	---	---	31	6.7	5.7	5.2	4.0
28	e4.7	---	---	---	---	---	---	32	6.4	5.5	5.3	6.4
29	e4.4	---	---	---	---	---	---	40	6.0	5.3	5.0	11
30	e4.8	---	---	---	---	---	---	36	9.4	5.4	4.5	6.0
31	e6.9	---	---	---	---	---	---	30	---	5.2	4.4	---
TOTAL	142.8	---	---	---	---	---	---	838.7	415.2	266.1	202.6	147.8
MEAN	4.61	---	---	---	---	---	---	27.1	13.8	8.58	6.54	4.93
MAX	8.3	---	---	---	---	---	---	43	26	21	12	11
MIN	2.8	---	---	---	---	---	---	9.7	6.0	5.2	4.4	3.5
AC-FT	283	---	---	---	---	---	---	1660	824	528	402	293

e Estimated

RIO GRANDE BASIN

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 9,400 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.--Records good. 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 6	1700	38	1.05	July 4	1500	36	1.04
May 28	2300	*38	*1.06	July 8	1345	*38	*1.06

Minimum recorded, 0.77 ft³/s, Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	6.0	---	---	---	---	---	e6.0	27	16	7.6	6.2
2	2.8	---	---	---	---	---	---	6.2	25	15	8.2	6.0
3	3.1	---	---	---	---	---	---	7.0	25	15	7.7	5.8
4	8.7	---	---	---	---	---	---	8.1	25	18	7.1	5.9
5	6.8	---	---	---	---	---	---	11	25	13	7.1	5.8
6	6.1	---	---	---	---	---	---	16	26	11	7.8	6.0
7	4.6	---	---	---	---	---	---	12	26	10	7.5	7.3
8	4.3	---	---	---	---	---	---	11	27	17	8.4	6.6
9	4.0	---	---	---	---	---	---	10	29	12	7.8	5.8
10	4.0	---	---	---	---	---	---	10	31	14	8.2	5.7
11	4.0	---	---	---	---	---	---	11	32	12	8.2	5.5
12	4.0	---	---	---	---	---	---	11	31	10	9.7	5.4
13	4.0	---	---	---	---	---	---	12	30	9.7	11	5.2
14	3.9	---	---	---	---	---	---	13	28	11	9.9	5.1
15	4.0	---	---	---	---	---	---	14	26	10	11	5.0
16	4.1	---	---	---	---	---	---	14	24	9.0	9.4	6.4
17	4.2	---	---	---	---	---	---	14	22	8.7	8.6	7.1
18	e4.0	---	---	---	---	---	---	16	21	8.4	8.3	6.1
19	5.3	---	---	---	---	---	---	16	21	8.3	8.1	6.4
20	6.2	---	---	---	---	---	---	16	20	8.3	8.4	7.5
21	4.4	---	---	---	---	---	---	17	20	8.2	7.9	7.3
22	4.0	---	---	---	---	---	---	20	19	10	8.2	6.4
23	3.8	---	---	---	---	---	---	24	18	8.3	7.8	6.0
24	3.8	---	---	---	---	---	---	28	17	8.7	7.5	5.8
25	3.7	---	---	---	---	---	---	25	17	8.5	7.2	5.8
26	3.6	---	---	---	---	---	---	25	18	7.9	6.9	5.6
27	3.8	---	---	---	---	---	---	26	17	7.7	6.8	5.5
28	4.4	---	---	---	---	---	---	30	16	7.5	6.8	7.6
29	4.2	---	---	---	---	---	---	35	16	7.3	6.6	11
30	4.4	---	---	---	---	---	---	32	17	7.4	6.3	7.5
31	6.6	---	---	---	---	---	---	29	---	7.3	6.2	---
TOTAL	137.6	---	---	---	---	---	---	525.3	696	325.2	248.2	189.3
MEAN	4.44	---	---	---	---	---	---	16.9	23.2	10.5	8.01	6.31
MAX	8.7	---	---	---	---	---	---	35	32	18	11	11
MIN	2.8	---	---	---	---	---	---	6.0	16	7.3	6.2	5.0
AC-FT	273	---	---	---	---	---	---	1040	1380	645	492	375

e Estimated

RIO GRANDE BASIN

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 9,490 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.--Records good. 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	2000	*7.5	*0.86	No other peak greater than base discharge.			

Minimum recorded, 0.23 ft³/s, May 2, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.56	---	---	---	---	---	1.0	5.5	4.0	2.1	1.3
2	.82	---	---	---	---	---	---	.93	5.6	3.8	2.1	1.2
3	.87	---	---	---	---	---	---	.99	5.8	3.7	2.0	1.2
4	1.5	---	---	---	---	---	---	1.0	5.9	4.0	1.9	1.2
5	1.1	---	---	---	---	---	---	.99	6.1	3.8	1.8	1.2
6	1.0	---	---	---	---	---	---	1.1	6.2	3.5	2.1	1.2
7	.89	---	---	---	---	---	---	1.2	6.1	3.5	2.0	1.7
8	.84	---	---	---	---	---	---	1.3	6.1	3.8	1.9	1.3
9	.83	---	---	---	---	---	---	1.3	6.5	3.5	1.9	1.2
10	.83	---	---	---	---	---	---	1.5	6.5	3.5	1.9	1.2
11	.79	---	---	---	---	---	---	1.6	6.8	3.3	1.9	1.1
12	.77	---	---	---	---	---	---	1.7	6.8	3.2	2.1	1.1
13	.74	---	---	---	---	---	---	1.8	6.9	3.0	2.3	1.0
14	.73	---	---	---	---	---	---	1.9	6.9	3.2	2.0	1.0
15	.70	---	---	---	---	---	---	2.1	6.8	3.0	2.0	1.0
16	.72	---	---	---	---	---	---	2.1	6.5	2.9	1.9	1.3
17	.70	---	---	---	---	---	---	2.2	6.1	2.8	1.8	1.2
18	.70	---	---	---	---	---	---	2.3	5.9	2.8	1.8	1.2
19	1.2	---	---	---	---	---	---	2.4	5.6	2.8	1.7	1.2
20	1.0	---	---	---	---	---	---	2.4	5.5	2.7	1.8	1.4
21	.69	---	---	---	---	---	---	2.5	5.2	2.6	1.7	1.2
22	.68	---	---	---	---	---	---	2.6	5.2	2.8	1.7	1.1
23	.64	---	---	---	---	---	---	3.0	5.0	2.5	1.6	1.0
24	.63	---	---	---	---	---	---	3.5	4.9	2.6	1.6	.99
25	.62	---	---	---	---	---	---	3.7	4.7	2.5	1.5	.92
26	.59	---	---	---	---	---	---	3.8	4.5	2.3	1.5	.90
27	.79	---	---	---	---	---	---	3.9	4.4	2.3	1.5	.90
28	.60	---	---	---	---	---	---	4.3	4.3	2.2	1.5	1.2
29	.52	---	---	---	---	---	---	4.9	4.1	2.2	1.4	1.5
30	.53	---	---	---	---	---	---	5.2	4.1	2.2	1.4	1.1
31	.63	---	---	---	---	---	---	5.4	---	2.2	1.3	---
TOTAL	24.47	---	---	---	---	---	---	74.61	170.5	93.2	55.7	35.01
MEAN	.79	---	---	---	---	---	---	2.41	5.68	3.01	1.80	1.17
MAX	1.5	---	---	---	---	---	---	5.4	6.9	4.0	2.3	1.7
MIN	.52	---	---	---	---	---	---	.93	4.1	2.2	1.3	.90
AC-FT	49	---	---	---	---	---	---	148	338	185	110	69

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 right bank approximately 1000 ft downstream from Costilla Dam, 16 mi southeast of Costilla, and at mile 34.5.

DRAINAGE AREA.--54.6 mi².

PERIOD OF RECORD.--April 1937 to current year (no winter records 1937-44, 1947-49, 1988-90). 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. Elevation of gage is 9,290 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 7, 1989, at site 500 ft upstream at different datum.

REMARKS.--Records fair 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.--41 years (water years 1945-47, 1950-87), 18.6 ft³/s, 13,480 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, 99 ft³/s, Aug. 15, 16; minimum daily, no flow, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.00	.00	37	32	37	12
2	---	---	---	---	---	---	e.00	.00	37	78	37	21
3	---	---	---	---	---	---	e.00	.00	48	84	22	42
4	---	---	---	---	---	---	.00	.00	71	85	14	55
5	---	---	---	---	---	---	.00	.00	80	85	26	63
6	---	---	---	---	---	---	.00	.00	80	38	49	63
7	---	---	---	---	---	---	.00	.00	77	13	49	28
8	---	---	---	---	---	---	.00	.00	37	18	50	9.2
9	---	---	---	---	---	---	.00	.00	13	30	50	15
10	---	---	---	---	---	---	.00	.00	45	30	25	32
11	---	---	---	---	---	---	.00	.00	77	31	12	39
12	---	---	---	---	---	---	.00	.00	77	31	27	39
13	---	---	---	---	---	---	.00	.00	77	21	72	38
14	---	---	---	---	---	---	.00	.00	77	16	90	16
15	---	---	---	---	---	---	.00	.00	41	26	99	5.3
16	---	---	---	---	---	---	.00	.00	23	46	99	5.3
17	---	---	---	---	---	---	.00	.00	36	46	45	29
18	---	---	---	---	---	---	.00	.00	68	47	17	51
19	---	---	---	---	---	---	.00	.00	68	47	36	49
20	---	---	---	---	---	---	.00	.00	67	24	75	48
21	---	---	---	---	---	---	.00	.00	67	12	75	18
22	---	---	---	---	---	---	.00	.00	32	22	74	3.6
23	---	---	---	---	---	---	.00	.00	13	55	74	10
24	---	---	---	---	---	---	.00	.00	24	63	33	24
25	---	---	---	---	---	---	.00	17	47	63	12	24
26	---	---	---	---	---	---	.00	36	46	63	22	24
27	---	---	---	---	---	---	.00	36	46	30	42	23
28	---	---	---	---	---	---	.00	36	46	14	42	23
29	---	---	---	---	---	---	.00	36	26	21	41	23
30	---	---	---	---	---	---	.00	37	14	36	41	9.8
31	---	---	---	---	---	---	---	36	---	37	21	---
TOTAL	---	---	---	---	---	---	0.00	234.00	1497	1244	1408	842.2
MEAN	---	---	---	---	---	---	.000	7.55	49.9	40.1	45.4	28.1
MAX	---	---	---	---	---	---	.00	37	80	85	99	63
MIN	---	---	---	---	---	---	.00	.00	13	12	12	3.6
AC-FT	---	---	---	---	---	---	.00	464	2970	2470	2790	1670

e Estimated

RIO GRANDE BASIN

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.--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.--49 years (water years 1942-90), 44.3 ft³/s, 32,100 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, 128 ft³/s, June 6, gage height, 2.78 ft; maximum gage height, 3.28 Dec. 27, backwater from ice; minimum daily, 7.3 ft³/s Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	e12	12	e8.5	12	16	16	54	83	46	59	25
2	20	e11	e10	e8.6	12	16	17	52	80	80	58	24
3	18	e11	e10	e8.5	11	16	19	50	79	89	53	45
4	46	13	e9.5	e8.6	10	18	20	55	96	93	35	56
5	42	25	e9.5	e9.0	e9.0	18	24	61	116	98	35	67
6	44	26	e13	e9.1	e9.1	17	24	69	123	81	61	68
7	41	21	e13	e9.4	e9.2	17	27	80	121	46	67	65
8	32	13	e10	e10	11	14	28	80	106	48	64	33
9	27	11	e10	e11	e10	16	31	84	69	65	64	25
10	25	11	e10	e12	e9.4	19	32	81	79	65	57	37
11	24	28	e9.0	e13	e10	18	37	86	117	66	30	50
12	23	25	e8.5	e14	e11	16	44	82	119	63	32	50
13	22	19	e8.0	e15	e11	16	42	78	112	57	89	49
14	22	12	e8.0	e13	e12	14	44	79	110	48	96	42
15	22	13	e8.0	e10	e11	14	57	76	96	49	108	19
16	23	e11	e8.0	e9.6	e10	14	57	74	67	69	106	18
17	24	13	e8.5	e10	e11	13	68	72	62	69	86	26
18	25	16	e8.5	11	e10	15	58	74	91	68	42	64
19	24	13	e9.0	e9.5	e12	15	55	71	93	68	38	66
20	18	11	e9.0	e10	e13	16	55	68	90	61	80	69
21	25	11	e9.0	10	14	18	55	67	89	38	87	62
22	28	11	e9.5	11	14	21	63	69	77	37	88	25
23	25	9.4	e9.5	e9.8	13	23	68	68	45	61	86	21
24	16	9.6	e10	e9.0	15	22	65	76	43	76	71	37
25	14	e10	e10	e10	15	24	61	74	67	79	32	41
26	20	e10	e9.5	e11	15	26	60	90	68	78	28	40
27	20	e9.0	e9.5	e9.4	16	30	52	92	69	66	50	40
28	28	e7.5	e9.5	e10	15	25	48	97	68	37	56	44
29	26	7.3	e9.5	e9.0	---	25	52	106	61	34	56	65
30	19	e10	e9.0	e8.4	---	20	50	95	43	54	54	47
31	15	---	e8.5	e11	---	18	---	88	---	59	47	---
TOTAL	766.1	409.8	295.0	318.4	330.7	570	1329	2348	2539	1948	1915	1320
MEAN	24.7	13.7	9.52	10.3	11.8	18.4	44.3	75.7	84.6	62.8	61.8	44.0
MAX	46	28	13	15	16	30	68	106	123	98	108	69
MIN	8.1	7.3	8.0	8.4	9.0	13	16	50	43	34	28	18
AC-FT	1520	813	585	632	656	1130	2640	4660	5040	3860	3800	2620

CAL YR 1989 TOTAL 14571.1 MEAN 39.9 MAX 126 MIN 7.0 AC-FT 28900
WTR YR 1990 TOTAL 14089.0 MEAN 38.6 MAX 123 MIN 7.3 AC-FT 27950

e Estimated

RIO GRANDE BASIN

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 7,760 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.--Records good. 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, 112 ft³/s, July 5, gage height, 3.65 ft; maximum gage height 3.96 ft, Apr. 22, backwater from channel obstruction; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.50	.63	1.3	16	.00	.00
2	---	---	---	---	---	---	e.40	.52	6.5	.97	.00	.00
3	---	---	---	---	---	---	e.50	.43	15	.00	2.7	.00
4	---	---	---	---	---	---	e.25	.25	2.1	.00	.18	.00
5	---	---	---	---	---	---	.56	4.1	.53	12	.07	.00
6	---	---	---	---	---	---	.30	12	4.0	3.8	.16	.00
7	---	---	---	---	---	---	.00	15	6.2	.01	.00	1.0
8	---	---	---	---	---	---	.00	16	3.8	.00	.13	3.4
9	---	---	---	---	---	---	.00	24	1.8	1.2	.00	.13
10	---	---	---	---	---	---	.00	15	9.9	.00	1.5	.04
11	---	---	---	---	---	---	.00	7.0	15	.44	3.2	.00
12	---	---	---	---	---	---	.00	1.4	1.3	.00	.00	.00
13	---	---	---	---	---	---	.00	.57	.00	5.0	1.5	.00
14	---	---	---	---	---	---	.00	.00	1.3	.02	.00	.00
15	---	---	---	---	---	---	.00	.00	5.3	.81	.00	.00
16	---	---	---	---	---	---	e.50	.00	2.6	1.8	.00	.00
17	---	---	---	---	---	---	e.40	.00	2.3	.00	.66	.00
18	---	---	---	---	---	---	.49	.00	.10	.00	.73	.96
19	---	---	---	---	---	---	.74	.00	.22	.00	.00	.00
20	---	---	---	---	---	---	e18	.00	.21	.87	.00	.00
21	---	---	---	---	---	---	e52	.00	2.1	.00	.00	3.7
22	---	---	---	---	---	---	e60	.00	1.0	.00	.00	14
23	---	---	---	---	---	---	e31	.00	3.0	.14	.00	12
24	---	---	---	---	---	---	e16	.00	.00	.22	.04	3.6
25	---	---	---	---	---	---	11	.00	.21	3.2	.02	.00
26	---	---	---	---	---	---	7.4	1.2	.00	1.1	1.1	.21
27	---	---	---	---	---	---	2.2	1.8	.09	.02	.00	.00
28	---	---	---	---	---	---	1.9	1.7	1.1	.06	.00	.00
29	---	---	---	---	---	---	1.8	6.7	.16	.85	.00	16
30	---	---	---	---	---	---	1.1	3.5	.45	.00	.03	11
31	---	---	---	---	---	---	---	1.4	---	.00	.00	---
TOTAL	---	---	---	---	---	---	207.04	113.20	87.57	48.51	12.02	66.04
MEAN	---	---	---	---	---	---	6.90	3.65	2.92	1.56	.39	2.20
MAX	---	---	---	---	---	---	60	24	15	16	3.2	16
MIN	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	411	225	174	96	24	131

e Estimated

RIO GRANDE BASIN

PRINCIPAL DIVERSIONS FROM COSTILLA CREEK, NEW MEXICO-COLORADO

Records of discharge are collected at 4 gaging stations on 2 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 522 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 ft³/s, June 25, 1944, July 31, 1945; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 22 ft³/s, May 20; minimum daily, 0.59 ft³/s, Apr. 27, 28.

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 522 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 ft³/s, June 9, 1985; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 100 ft³/s, June 12; minimum daily, no flow, Apr. 21, 22.

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 522 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, 85 ft³/s, July 8, 1987; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 60 ft³/s, Apr. 17; no flow, Apr. 21, 22.

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 ft³/s, July 10, 1986; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 59 ft³/s, Apr. 17; minimum daily, 0.09 ft³/s, Apr. 22.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	08256000 Acequia Madre	08258000 Cerro Canal at Costilla	08258600 Cerro Canal below Association ditch	08259600 Cerro Canal at State line nr Jaroso
October	-	-	-	-
November	-	-	-	-
December	-	-	-	-
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	85	2150	1520	1310
May	789	3690	1640	1320
June	877	3740	1120	935
July	946	2720	1280	1040
August	867	2730	1040	768
September	589	1690	791	563

RIO GRANDE BASIN

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.

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.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 7,000 acres in New Mexico. Several observations of water temperature were made during year.

AVERAGE DISCHARGE.--42 years, 456 ft³/s, 330,400 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 10	2000	*1,860	*8.18	No other peak greater than base discharge.			

Minimum discharge, 60 ft³/s, Nov. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	117	118	226	235	351	162	174	e450	214	e222	141
2	92	118	113	221	236	389	125	203	e365	210	e219	136
3	89	133	91	217	240	432	126	325	e335	223	e218	e127
4	88	164	116	219	243	437	122	501	e300	213	e217	e126
5	82	154	121	197	247	447	125	863	e290	221	e218	e125
6	82	144	144	187	250	460	142	1030	e350	198	e219	e120
7	82	140	164	185	243	473	131	1060	514	214	e220	e115
8	85	142	149	185	245	446	129	1220	553	218	e185	e124
9	133	141	162	187	248	426	131	1510	323	300	163	e125
10	113	142	171	187	250	410	127	1750	240	358	162	e128
11	111	139	175	187	256	410	123	1600	267	281	151	e125
12	107	136	125	193	260	422	127	957	350	215	136	e120
13	104	132	129	202	271	429	127	729	476	256	136	e114
14	101	131	199	210	284	412	117	500	731	322	136	e110
15	101	130	197	212	263	407	111	e450	605	285	147	e100
16	101	129	210	216	250	383	108	e400	369	290	161	e90
17	109	108	200	216	245	356	109	e465	259	300	191	e100
18	119	114	196	217	280	346	107	e420	299	323	214	e113
19	121	120	215	229	289	351	112	e350	321	298	229	e95
20	115	130	220	241	297	353	133	e340	318	270	207	84
21	123	144	214	240	282	365	157	e300	270	257	217	75
22	128	125	213	237	292	366	176	e290	352	241	210	73
23	131	120	218	229	297	368	186	e275	358	226	201	77
24	132	117	220	231	287	385	173	e270	290	221	225	90
25	132	114	222	223	288	416	163	e400	234	e360	253	114
26	130	117	223	223	307	443	198	663	201	e240	229	124
27	131	114	224	231	323	433	216	864	210	e210	201	121
28	125	89	227	231	349	360	191	614	255	e230	185	117
29	120	96	230	225	---	279	177	e500	241	e225	171	116
30	126	117	232	230	---	210	170	e425	251	e220	156	122
31	116	---	229	232	---	180	---	e365	---	e225	145	---
TOTAL	3419	3817	5667	6666	7557	11945	4301	19813	10377	7864	5944	3347
MEAN	110	127	183	215	270	385	143	639	346	254	192	112
MAX	133	164	232	241	349	473	216	1750	731	360	253	141
MIN	82	89	91	185	235	180	107	174	201	198	136	73
AC-FT	6780	7570	11240	13220	14990	23690	8530	39300	20580	15600	11790	6640

CAL YR 1989 TOTAL 131131 MEAN 359 MAX 1870 MIN 73 AC-FT 260100
WTR YR 1990 TOTAL 90717 MEAN 249 MAX 1750 MIN 73 AC-FT 179900

e Estimated

RIO GRANDE BASIN

08265000 RED RIVER NEAR QUESTA, NM

LOCATION.--Lat 36°42'12", Long 105°34'04", in NE¼ 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.

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.--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). Several observations of water temperature were made during year.

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. 25 years (water years 1966-90), 39.7 ft³/s, 28,760 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 11	2400	*164	*3.47	No other peak greater than base discharge.			

Minimum discharge, 3.6 ft³/s, Jan. 28. May have been less due to ice effect.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	10	e7.4	e6.0	14	19	56	103	51	37	28
2	16	16	8.1	e6.8	e6.1	14	19	55	99	48	32	25
3	19	17	7.5	e6.4	e6.1	14	18	54	96	46	29	24
4	72	18	7.5	e6.0	e6.2	15	18	53	98	47	30	26
5	78	18	9.2	e5.8	e6.3	15	18	53	108	53	31	22
6	64	18	11	e5.6	e6.5	14	19	58	114	47	36	17
7	54	17	10	e5.9	e6.3	13	20	65	116	43	37	22
8	47	16	7.1	e6.2	e6.7	14	22	74	112	46	26	28
9	40	17	9.4	e6.4	e7.5	14	21	78	114	47	24	21
10	34	17	11	e6.8	e8.2	14	21	80	133	42	24	19
11	33	17	7.4	e6.8	e9.0	14	19	87	151	46	25	16
12	31	17	5.9	e7.3	e11	13	24	83	153	42	29	16
13	29	17	6.2	e7.2	12	13	29	85	142	39	37	16
14	28	16	6.8	e7.2	13	11	29	88	128	36	34	13
15	26	13	7.5	e7.1	11	12	41	91	120	36	37	17
16	26	14	8.8	e7.1	12	11	48	91	113	34	39	19
17	26	15	9.0	e7.1	14	12	54	86	103	33	34	27
18	26	13	e9.4	e7.0	16	13	54	88	96	31	35	30
19	22	14	e9.0	e6.9	15	13	52	89	93	30	32	23
20	22	15	e9.0	e6.7	14	13	52	89	87	40	31	27
21	22	15	e9.0	e5.7	14	14	56	87	80	40	28	29
22	23	14	e8.6	e6.3	14	14	67	90	77	38	28	23
23	23	13	e8.0	e6.8	14	15	72	96	72	37	25	22
24	22	14	e7.8	e6.4	13	15	71	107	67	37	24	21
25	23	14	e8.0	e5.9	14	16	65	109	62	35	22	19
26	23	13	e8.4	e7.2	13	17	58	107	59	34	21	17
27	21	11	e8.0	e7.0	14	18	55	107	57	29	20	17
28	21	e7.0	e8.0	e5.5	14	19	51	109	55	27	27	21
29	19	5.7	e7.8	e6.0	---	20	58	114	53	32	26	42
30	18	7.9	e7.8	e6.1	---	19	58	108	53	37	25	30
31	17	---	e7.6	e6.3	---	19	---	103	---	39	25	---
TOTAL	942	437.6	258.8	202.9	302.9	452	1208	2640	2914	1222	910	677
MEAN	30.4	14.6	8.35	6.55	10.8	14.6	40.3	85.2	97.1	39.4	29.4	22.6
MAX	78	18	11	7.4	16	20	72	114	153	53	39	42
MIN	16	5.7	5.9	5.5	6.0	11	18	53	53	27	20	13
AC-FT	1870	868	513	402	601	897	2400	5240	5780	2420	1800	1340

CAL YR 1989 TOTAL 14300.8 MEAN 39.2 MAX 152 MIN 5.7 AC-FT 28370
WTR YR 1990 TOTAL 12167.2 MEAN 33.3 MAX 153 MIN 5.5 AC-FT 24130

e Estimated

RIO GRANDE BASIN

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.--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. Several observations of water temperature were made during year.

AVERAGE DISCHARGE.--47 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 ft/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, 33 ft³/s, May 13, gage height, 1.99 ft; minimum, 2.0 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.6	4.7	4.5	4.4	4.9	7.7	11	17	12	13	10
2	6.1	5.3	4.3	4.7	4.4	4.9	7.8	11	16	12	12	10
3	6.4	5.4	4.5	5.1	4.5	5.0	7.9	11	14	12	12	10
4	11	5.6	4.8	4.6	4.5	5.1	7.8	12	13	12	12	10
5	13	5.7	4.9	4.4	4.5	5.3	8.0	11	12	12	12	9.9
6	11	5.7	4.9	4.3	4.7	4.9	8.1	12	12	12	13	9.9
7	11	5.6	4.9	4.8	4.7	5.2	8.3	13	12	12	13	10
8	9.8	5.5	4.0	5.1	4.7	5.2	8.7	17	12	12	12	11
9	8.4	5.5	5.0	4.9	4.7	5.5	8.8	23	12	12	12	9.9
10	6.4	5.6	5.1	4.8	4.8	5.7	8.8	22	13	12	12	9.7
11	7.2	5.6	3.8	4.6	4.8	5.6	9.4	23	11	13	12	9.5
12	8.3	5.7	2.9	4.6	4.9	5.5	10	22	11	12	12	9.3
13	8.2	5.6	2.9	4.7	4.8	5.5	10	24	12	12	15	9.2
14	8.2	5.5	3.1	4.6	4.7	5.1	11	27	12	12	14	9.0
15	8.0	5.4	3.8	4.6	4.2	5.1	13	26	11	12	14	8.9
16	8.0	5.1	5.2	4.6	3.8	5.3	15	25	12	12	13	8.9
17	8.3	5.3	5.2	4.5	4.6	5.5	18	25	12	12	13	10
18	8.5	5.2	5.2	4.8	5.1	5.8	16	25	12	12	12	10
19	7.6	5.3	5.1	4.8	5.0	5.9	14	25	12	12	12	9.8
20	6.4	5.4	4.8	4.9	5.0	5.9	14	23	12	13	12	11
21	6.2	5.4	5.0	4.3	4.9	6.2	14	23	12	12	12	11
22	6.1	5.4	4.9	4.8	4.9	6.6	16	22	12	12	13	10
23	6.0	5.3	4.9	4.9	4.9	7.5	18	22	11	12	12	9.7
24	5.9	5.4	5.1	4.6	4.9	7.4	13	23	11	12	12	9.5
25	5.9	5.4	5.1	4.3	5.0	7.8	11	24	12	12	11	9.3
26	5.9	5.3	5.1	5.1	5.0	8.0	11	22	12	12	11	9.1
27	5.6	5.0	5.1	5.0	5.0	8.6	12	21	12	12	11	9.1
28	5.7	3.6	5.0	3.6	5.0	8.1	12	21	12	12	12	9.4
29	5.7	2.8	4.9	4.3	---	8.3	13	21	12	12	12	12
30	5.5	3.8	4.7	4.5	---	8.1	12	20	12	12	11	11
31	5.5	---	4.4	4.6	---	7.9	---	18	---	13	11	---
TOTAL	232.0	157.0	143.3	143.9	132.4	191.4	344.3	625	368	375	380	296.1
MEAN	7.48	5.23	4.62	4.64	4.73	6.17	11.5	20.2	12.3	12.1	12.3	9.87
MAX	13	5.7	5.2	5.1	5.1	8.6	18	27	17	13	15	12
MIN	5.5	2.8	2.9	3.6	3.8	4.9	7.7	11	11	12	11	8.9
AC-FT	460	311	284	285	263	380	683	1240	730	744	754	587
(†)	9.0	0	0	0	0	0	203	1060	730	131	37	0

CAL YR 1989 TOTAL 3323.7 MEAN 9.11 MAX 28 MIN 2.8 AC-FT 6590 (†) 1622.4
 WTR YR 1990 TOTAL 3388.4 MEAN 9.28 MAX 27 MIN 2.8 AC-FT 6720 (†) 2170
 (†) DIVERSION, IN ACRE-FEET, BY LLANO DITCH

RIO GRANDE BASIN

08266820 RED RIVER BELOW FISH HATCHERY, NEAR QUESTA, NM

LOCATION.--Lat 36°40'54", long 105°39'21", in NW¼ 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.

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.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 3,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (water years 1979-90), 84.6 ft³/s, 61,290 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 12	0315	*161	*2.89				

Minimum discharge, 32 ft³/s, Dec. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	46	36	e42	e38	e42	49	87	129	69	66	56
2	49	44	36	e44	e40	e42	48	86	127	65	62	53
3	52	45	36	e46	e42	e42	48	86	122	65	61	50
4	109	46	37	e44	e40	e44	48	82	117	65	59	51
5	131	46	38	e42	e42	e44	47	81	119	76	60	51
6	111	46	39	e40	e41	e41	49	84	123	71	60	46
7	96	46	41	e42	e40	e40	51	95	125	67	65	46
8	84	45	38	e43	e43	e41	52	102	123	67	56	56
9	76	45	39	e44	e40	e41	52	109	122	75	53	54
10	68	45	41	e44	e40	e41	52	105	137	72	51	48
11	65	45	38	45	e42	e41	49	111	151	78	52	46
12	62	45	34	40	e45	e40	54	107	156	75	52	45
13	57	45	33	e39	e44	e40	58	106	147	69	67	44
14	57	44	34	e39	e46	37	57	114	135	68	67	42
15	56	43	34	e40	40	41	69	120	128	68	69	42
16	56	40	35	e42	39	41	78	121	122	67	69	44
17	55	41	36	e43	e40	42	91	113	115	66	68	48
18	53	40	36	e44	e50	43	92	111	110	61	65	58
19	51	40	e40	e39	e45	43	89	114	107	57	62	54
20	49	41	e41	e44	e42	43	89	114	101	67	59	52
21	50	42	e41	e40	e42	43	91	110	95	76	54	53
22	49	41	e40	e37	e42	44	101	100	94	73	55	51
23	49	40	e42	e36	e42	45	108	107	90	69	54	49
24	48	40	e43	e39	e40	43	108	121	87	65	53	48
25	47	40	e41	e37	e42	42	102	128	82	65	52	46
26	46	39	e40	e36	e40	43	95	127	78	62	50	44
27	45	39	e42	e42	e42	45	85	127	74	59	50	44
28	44	36	e43	e36	e42	47	76	130	73	57	52	45
29	46	33	e45	e36	---	49	86	136	69	60	60	60
30	46	33	e45	e36	---	50	86	129	69	64	57	56
31	46	---	e40	e34	---	50	---	125	---	66	57	---
TOTAL	1902	1261	1204	1255	1171	1330	2160	3388	3327	2084	1817	1482
MEAN	61.4	42.0	38.8	40.5	41.8	42.9	72.0	109	111	67.2	58.6	49.4
MAX	131	46	45	46	50	50	108	136	156	78	69	60
MIN	44	33	33	34	38	37	47	81	69	57	50	42
AC-FT	3770	2500	2390	2490	2320	2640	4280	6720	6600	4130	3600	2940

CAL YR 1989 TOTAL 25059 MEAN 68.7 MAX 170 MIN 33 AC-FT 49700
WTR YR 1990 TOTAL 22381 MEAN 61.3 MAX 156 MIN 33 AC-FT 44390

e Estimated

RIO GRANDE BASIN

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.--Water-discharge records fair. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--56 years, 34.8 ft³/s, 25,210 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 base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 4	2045	94	2.40	June 10	0345	*144	2.73
Jan. 27	----	ice jam	*3.99				

Minimum discharge, 6.8 ft³/s, Jan. 24 but may have been less during estimated days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	14	e7.0	9.5	10	15	40	93	50	36	30
2	16	17	15	e8.5	9.5	10	15	38	91	48	32	30
3	17	17	16	e10	9.7	10	15	36	91	46	31	29
4	54	18	15	e8.0	10	10	15	36	95	45	31	29
5	72	17	14	e6.0	9.5	11	17	35	104	43	30	29
6	59	17	14	e6.5	9.5	10	17	36	107	41	31	27
7	44	17	13	e8.0	9.4	10	18	43	107	40	31	29
8	36	17	e12	e9.0	9.3	12	21	51	107	43	28	29
9	31	16	e14	e11	9.2	12	24	57	117	41	27	26
10	27	17	e14	e13	9.4	13	23	60	136	43	26	24
11	25	17	e13	13	9.2	13	27	64	138	42	26	24
12	25	17	e11	10	9.2	12	31	60	134	40	26	23
13	24	16	e9.0	10	9.0	12	30	57	129	38	28	22
14	24	16	e7.0	10	8.9	12	31	61	125	38	28	22
15	24	15	e6.0	10	8.1	14	40	69	119	36	31	21
16	24	15	e8.0	10	e7.0	13	47	72	107	36	31	22
17	24	15	e10	11	e6.0	11	53	70	99	34	29	24
18	24	15	e12	10	e6.0	11	51	74	94	33	28	22
19	23	15	e11	10	e7.5	11	48	78	90	35	27	25
20	23	15	e10	9.9	e8.5	12	44	75	82	47	27	25
21	23	15	e11	e7.0	e9.0	13	47	74	76	41	27	25
22	23	15	e9.0	e9.0	9.3	15	55	79	73	39	50	23
23	22	14	e7.0	e9.9	9.4	17	62	84	69	35	42	22
24	22	14	e8.5	e9.3	9.7	17	60	95	66	34	37	21
25	22	14	e11	e5.5	9.7	18	54	99	63	34	34	21
26	22	14	e13	e8.0	9.8	18	46	98	61	34	32	20
27	21	13	e12	e6.5	9.9	20	42	96	58	33	32	20
28	21	e10	e11	e5.0	10	19	40	98	56	35	32	22
29	21	e9.0	e11	e9.5	---	19	44	106	54	34	31	30
30	19	e8.0	e11	e8.5	---	17	43	98	53	35	31	24
31	18	---	e9.0	e10	---	16	---	94	---	35	31	---
TOTAL	846	453.0	351.5	279.1	251.2	418	1075	2133	2794	1208	963	740
MEAN	27.3	15.1	11.3	9.00	8.97	13.5	35.8	68.8	93.1	39.0	31.1	24.7
MAX	72	18	16	13	10	20	62	106	138	50	50	30
MIN	16	8.0	6.0	5.0	6.0	10	15	35	53	33	26	20
AC-FT	1680	899	697	554	498	829	2130	4230	5540	2400	1910	1470

CAL YR 1989 TOTAL 11280.8 MEAN 30.9 MAX 125 MIN 6.0 AC-FT 22380
WTR YR 1990 TOTAL 11511.8 MEAN 31.5 MAX 138 MIN 5.0 AC-FT 22830

e Estimated

RIO GRANDE BASIN

08267500 RIO HONDO NEAR VALDEZ, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD to current year.--Water years 1963, 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
NOV 07...	1600	17	140	7.8	4.0	4.5	12.3	<10	64	10
JAN 31...	1145	9.2	142	8.2	2.0	0.0	14.3	15	--	--
MAR 06...	1200	9.7	160	7.5	-3.0	0.0	13.0	11	70	13
MAY 17...	1245	67	101	7.5	19.0	7.0	10.0	19	50	8
JUL 25...	1230	36	128	7.6	24.0	10.0	9.0	11	51	0
SEP 13...	1530	22	139	8.1	24.0	12.0	9.6	16	--	--

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 WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)
NOV 07...	22	2.3	3.0	0.2	0.70	66	0	54	56
JAN 31...	--	--	--	--	--	--	--	--	--
MAR 06...	24	2.5	5.7	0.3	0.80	70	0	57	58
MAY 17...	17	1.8	2.5	0.2	0.60	51	0	42	43
JUL 25...	17	2.0	2.4	0.1	0.70	62	0	51	53
SEP 13...	--	--	--	--	--	--	--	--	--

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, 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)
NOV 07...	13	2.0	0.10	7.3	84	0.200	0.140	0.020	--
JAN 31...	--	--	--	--	--	0.400	0.330	<0.010	--
MAR 06...	15	7.4	<0.10	7.1	99	0.400	0.400	<0.010	--
MAY 17...	9.7	1.9	0.50	8.1	67	0.100	<0.100	<0.010	--
JUL 25...	1.4	7.4	<0.10	7.2	69	0.100	0.200	0.020	0.38
SEP 13...	--	--	--	--	--	0.200	0.200	<0.010	--

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 07...	--	<0.010	0.010	0.7	<10	<3	--	--	--
JAN 31...	--	<0.010	<0.010	0.5	--	--	--	--	--
MAR 06...	0.60	0.030	<0.010	0.9	<10	11	7	0.18	98
MAY 17...	--	0.010	<0.010	2.6	<10	41	2	0.36	82
JUL 25...	0.50	<0.010	<0.010	0.6	<10	4	1	0.10	88
SEP 13...	0.50	0.020	<0.010	1.0	--	--	--	--	--

RIO GRANDE BASIN

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.--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.--27 years, 677 ft³/s, 490,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,550 ft³/s, May 19, 1987, gage height, 8.52 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 10	2230	*2,080	*4.08	No other peak greater than base discharge.			

Minimum discharge, 177 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	248	242	364	366	468	311	375	622	355	373	296
2	207	244	250	362	367	492	274	397	527	326	360	282
3	208	261	217	364	367	528	256	475	463	352	358	271
4	281	289	229	358	367	552	260	657	427	342	354	272
5	357	303	243	340	373	561	258	925	428	355	356	271
6	321	283	268	319	378	571	279	1170	429	330	359	259
7	291	278	293	318	374	581	285	1210	583	325	363	254
8	275	275	292	324	377	560	282	1370	781	343	345	277
9	302	273	277	330	373	544	285	1710	624	387	325	279
10	289	274	313	329	373	527	280	1950	524	501	318	277
11	273	273	310	332	380	523	275	1920	565	445	305	273
12	264	271	276	336	387	530	284	1180	612	352	287	253
13	250	266	205	347	394	539	294	954	754	354	299	243
14	247	264	322	353	409	525	287	749	907	447	297	233
15	246	260	324	357	387	512	288	633	897	413	309	224
16	245	253	349	360	361	500	306	548	655	402	328	220
17	249	245	342	359	353	475	330	621	494	408	352	226
18	261	234	338	358	396	464	331	576	512	429	380	243
19	267	240	350	368	403	464	322	508	532	419	398	241
20	261	255	357	383	417	471	333	486	520	404	385	237
21	264	269	351	375	402	483	360	460	472	400	365	227
22	274	260	345	376	405	490	408	450	509	387	398	218
23	275	248	351	372	418	493	434	401	539	371	367	215
24	276	243	357	368	408	503	433	422	481	362	375	216
25	275	236	356	350	405	535	412	575	402	510	416	250
26	273	237	357	359	426	561	415	805	360	381	402	262
27	273	240	360	363	436	569	434	1070	337	345	364	265
28	269	208	364	357	468	517	398	917	397	369	344	262
29	255	203	366	354	---	470	389	694	373	379	337	292
30	258	219	368	361	---	369	376	575	392	368	320	273
31	255	---	362	367	---	334	---	514	---	379	302	---
TOTAL	8242	7652	9734	10963	10970	15711	9879	25297	16118	11940	10841	7611
MEAN	266	255	314	354	392	507	329	816	537	385	350	254
MAX	357	303	368	383	468	581	434	1950	907	510	416	296
MIN	201	203	205	318	353	334	256	375	337	325	287	215
AC-FT	16350	15180	19310	21750	21760	31160	19590	50180	31970	23680	21500	15100

CAL YR 1989 TOTAL 186986 MEAN 512 MAX 2220 MIN 199 AC-FT 370900
WTR YR 1990 TOTAL 144958 MEAN 397 MAX 1950 MIN 201 AC-FT 287500

RIO GRANDE BASIN

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.

WATER-DISCHARGE RECORDS

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.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years (water years 1911-16, 1941-51, 1963-90), 29.5 ft³/s, 21,370 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	0745	*108	*1.55	No other peak greater than base discharge.			
Minimum daily, 2.7 ft ³ /s, Jan. 31, - Feb. 2.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	9.8	9.2	e8.1	e2.7	e7.6	21	61	52	15	18	9.1
2	6.5	8.7	8.9	e8.6	e2.7	e8.0	20	56	49	15	17	9.2
3	6.8	9.5	8.3	e9.0	e2.8	e8.0	20	52	47	17	18	8.8
4	22	10	8.9	e8.6	e2.8	e7.6	21	49	45	19	16	8.7
5	35	10	9.4	e9.0	e2.8	e8.0	22	46	47	19	15	8.8
6	31	9.8	9.5	e8.6	e2.9	e7.0	23	45	48	16	16	8.5
7	24	9.7	9.4	e8.1	e3.0	e7.5	24	52	47	14	18	9.0
8	19	9.4	10	e8.5	e3.3	e8.0	31	62	44	15	15	10
9	17	9.5	9.9	8.1	e4.0	e8.5	40	69	45	16	14	8.5
10	16	9.4	9.9	6.8	e5.0	e8.0	39	70	47	14	13	8.1
11	15	9.7	9.4	6.7	e7.0	e8.3	44	71	51	16	13	8.0
12	14	9.7	e9.0	6.5	e8.0	e7.5	50	67	48	18	13	7.6
13	13	9.5	e8.6	6.5	8.2	e6.5	49	64	45	17	14	7.7
14	13	9.2	e8.4	6.4	8.6	e6.0	50	66	41	17	14	7.6
15	12	8.6	e8.0	5.8	e7.6	e5.6	63	72	37	17	15	7.4
16	12	7.3	e8.5	5.6	e7.0	e6.5	73	71	34	16	15	8.0
17	12	8.7	e8.5	5.1	e4.5	e8.0	83	65	31	15	14	12
18	13	8.3	e9.0	4.9	e5.3	e8.5	81	63	29	14	14	9.6
19	12	8.8	8.9	e4.5	e5.5	e9.0	78	66	28	14	13	10
20	12	9.3	8.8	e4.0	e5.4	e10	70	61	25	23	13	9.2
21	12	9.5	8.1	e3.7	e6.0	12	72	57	24	21	13	10
22	12	9.1	8.8	e3.6	e6.3	17	87	59	23	22	14	8.9
23	11	8.8	8.9	e3.5	e7.0	22	104	64	22	20	13	8.6
24	11	9.0	9.4	e3.3	e7.0	23	99	71	20	18	12	8.5
25	11	8.9	9.1	e3.0	e7.5	27	84	70	19	17	11	8.2
26	11	8.5	9.0	e3.0	e7.8	29	72	66	19	16	10	7.9
27	11	8.3	9.0	e3.0	e8.0	31	66	62	18	15	10	7.8
28	11	6.2	8.9	e2.9	e7.5	30	63	62	17	15	10	8.6
29	10	5.8	8.6	e2.8	---	29	70	64	17	16	10	14
30	9.8	7.7	e8.2	e2.8	---	25	67	59	16	17	9.4	10
31	9.5	---	e8.7	e2.7	---	22	---	55	---	21	9.1	---
TOTAL	431.0	266.7	277.2	173.7	156.2	421.1	1686	1917	1035	525	419.5	268.3
MEAN	13.9	8.89	8.94	5.60	5.58	13.6	56.2	61.8	34.5	16.9	13.5	8.94
MAX	35	10	10	9.0	8.6	31	104	72	52	23	18	14
MIN	6.4	5.8	8.0	2.7	2.7	5.6	20	45	16	14	9.1	7.4
AC-FT	855	529	550	345	310	835	3340	3800	2050	1040	832	532

CAL YR 1989 TOTAL 8678.5 MEAN 23.8 MAX 156 MIN 5.8 AC-FT 17210
WTR YR 1990 TOTAL 7576.7 MEAN 20.8 MAX 104 MIN 2.7 AC-FT 15030

e Estimated

RIO GRANDE BASIN

08269000 RIO PUEBLO DE TAOS NEAR TAOS, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)
JAN 30...	1400	4.5	222	7.8	6.0	0.0	14.5	--	--	36	6.5
MAR 21...	1015	12	211	8.0	11.5	3.0	11.1	120	25	37	6.8
MAY 17...	1000	64	119	7.4	10.0	4.0	11.6	56	5	17	3.4
JUL 17...	1150	16	200	8.0	21.0	13.0	6.6	98	11	31	4.9
SEP 13...	1100	8.4	200	7.7	19.0	11.0	10.2	100	13	33	5.4

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	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)
JAN 30...	3.5	--	0.70	120	0	98	100	23	0.80	0.10
MAR 21...	3.6	0.1	0.60	116	0	95	95	22	<0.10	0.70
MAY 17...	2.1	0.1	0.60	63	0	52	55	9.3	1.2	<0.10
JUL 17...	2.7	0.1	0.70	105	0	86	84	15	0.80	<0.10
SEP 13...	3.0	0.1	0.70	112	0	92	98	17	2.0	<0.10

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, 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 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)
JAN 30...	7.1	--	2	<1	<10	<1	<1.0	<1	<5	3
MAR 21...	7.0	--	<1	<1	<10	<1	<1.0	2	<5	3
MAY 17...	7.6	72	<1	<1	<10	<1	2.0	2	<1	3
JUL 17...	7.2	114	<1	<1	<10	<1	<1.0	1	<1	1
SEP 13...	7.0	123	<1	<1	<10	<1	<1.0	<1	<1	1

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	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)
JAN 30...	<10	8	2	<10	<0.10	<0.1	<1	<1	30	10
MAR 21...	<10	15	1	<10	0.10	0.2	<1	<1	120	74
MAY 17...	2	52	1	<1	<0.10	<0.1	<1	<1	240	7
JUL 17...	3	21	1	2	<0.10	<0.1	<1	<1	<10	11
SEP 13...	2	11	<1	1	<0.10	<0.1	<1	<1	10	10

RIO GRANDE BASIN

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.

WATER-DISCHARGE RECORDS

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.--Water-discharge records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of water temperature were made the year.

AVERAGE DISCHARGE.--51 years (water years 1911-15, 1934-51, 1963-90), 21.9 ft³/s, 15,870 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 11	2000	*84	*1.63	No other peak greater than base discharge.			
Minimum daily, 3.0 ft ³ /s, Feb. 6, 16.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	13	e7.4	e7.0	e3.6	e6.4	16	26	63	27	21	19
2	9.4	13	e8.0	e7.5	e3.8	e7.0	15	24	61	26	21	19
3	10	13	e8.3	e7.7	e3.5	e7.0	15	23	60	26	21	18
4	30	12	e8.5	e7.5	e3.4	e6.5	14	22	64	25	20	17
5	38	12	e8.6	e7.7	e3.3	e7.0	14	22	71	24	20	17
6	34	12	e8.7	e7.6	e3.0	e5.5	15	24	73	23	21	17
7	30	11	e8.9	e7.5	e3.4	e5.8	16	29	67	23	21	18
8	26	11	e9.0	e7.7	e3.4	e7.0	20	37	65	23	20	18
9	24	11	e8.8	e7.5	e3.7	e7.5	22	41	67	22	20	16
10	23	11	e8.8	e7.6	e4.0	e6.8	20	43	72	21	20	16
11	22	11	e8.0	7.7	e4.2	e7.0	21	45	77	27	19	15
12	20	10	e7.0	e7.4	e4.5	e6.5	23	41	80	25	19	15
13	20	10	e8.0	e7.4	e4.9	e5.5	22	39	74	25	19	15
14	19	10	e9.0	e7.0	e5.0	e5.0	23	43	66	26	20	14
15	19	9.7	e8.0	e6.5	5.4	4.9	28	50	e57	25	22	14
16	19	11	e7.9	e6.1	e3.0	e6.0	32	51	e54	26	21	15
17	18	10	e7.8	e6.0	e4.0	e7.0	36	47	52	25	21	15
18	18	9.7	e7.7	e5.8	e5.0	7.7	32	49	49	23	21	15
19	17	9.9	e7.7	e5.5	e5.2	8.1	29	53	49	23	20	16
20	16	9.9	e7.7	e5.4	e5.0	8.9	27	51	46	27	21	16
21	16	9.5	e7.5	e4.0	e5.3	10	28	51	44	24	20	15
22	16	9.3	e7.4	e4.8	e5.5	13	34	56	42	26	25	14
23	15	9.6	e7.4	e4.0	e6.0	15	38	64	39	25	25	14
24	15	10	e7.7	e4.0	e6.0	15	38	74	38	25	24	14
25	14	9.0	e7.6	e3.7	e6.3	16	33	69	36	24	23	13
26	14	8.9	e7.2	e4.6	e6.5	19	28	69	35	24	22	13
27	13	8.2	e7.2	e3.9	e7.0	20	26	68	32	23	22	13
28	13	e7.0	e7.0	e3.6	e6.0	19	26	72	30	23	22	14
29	13	e6.5	e6.9	e3.5	---	18	29	74	29	22	21	18
30	13	e6.0	e6.7	e3.5	---	16	28	64	28	22	20	14
31	13	---	e7.2	e3.8	---	15	---	64	---	22	19	---
TOTAL	576.8	304.2	243.6	183.5	129.9	309.1	748	1485	1620	752	651	467
MEAN	18.6	10.1	7.86	5.92	4.64	9.97	24.9	47.9	54.0	24.3	21.0	15.6
MAX	38	13	9.0	7.7	7.0	20	38	74	80	27	25	19
MIN	9.4	6.0	6.7	3.5	3.0	4.9	14	22	28	21	19	13
AC-FT	1140	603	483	364	258	613	1480	2950	3210	1490	1290	926

CAL YR 1989 TOTAL 6530.7 MEAN 17.9 MAX 79 MIN 6.0 AC-FT 12950
WTR YR 1990 TOTAL 7470.1 MEAN 20.5 MAX 80 MIN 3.0 AC-FT 14820

e Estimated

RIO GRANDE BASIN

08271000 RIO LUCERO NEAR ARROYO SECO, NM --- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 07...	1345	12	101	7.8	10.0	2.0	11.5	54	6	19	1.6
JAN 31...	0930	5.0	110	7.8	-3.0	0.0	15.3	--	--	18	1.6
MAR 20...	0900	8.3	96	7.8	6.0	0.5	12.6	52	6	18	1.7
MAY 17...	0745	46	60	7.1	3.0	2.5	10.8	29	2	10	0.97
JUL 25...	1030	25	100	7.6	18.0	8.0	10.5	51	4	18	1.4
SEP 13...	1330	15	110	7.6	25.5	9.5	9.0	59	9	21	1.5

DATE	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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	ALKA-LINITY LAB (MG/L AS CAC03) (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 07...	1.6	0.1	0.60	59	0	48	48	7.0	0.30	0.10
JAN 31...	1.6	--	0.60	62	0	51	50	8.0	0.20	0.10
MAR 20...	1.9	0.1	0.70	56	0	46	44	6.9	<0.10	<0.10
MAY 17...	1.4	0.1	0.60	33	0	27	29	4.5	0.30	<0.10
JUL 25...	1.4	0.1	0.50	57	0	47	48	6.2	0.90	<0.10
SEP 13...	1.5	0.1	0.60	60	0	49	53	7.1	1.1	0.10

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, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 07...	6.7	66	<1	<1	<10	<1	<1.0	<1	<1	4
JAN 31...	6.7	--	3	<1	<10	<1	<1.0	<1	<5	5
MAR 20...	7.8	--	<1	<1	<10	<1	<1.0	3	<5	4
MAY 17...	7.7	42	<1	<1	<10	<1	<1.0	2	1	3
JUL 25...	6.4	63	<1	<1	<10	<1	1.0	1	2	2
SEP 13...	5.9	68	<1	<1	<10	2	<1.0	<1	2	2

DATE	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)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 07...	2	6	1	<1	<0.10	<0.1	<1	<1	10	8
JAN 31...	<10	10	2	<10	<0.10	<0.1	<1	<1	20	5
MAR 20...	<10	87	1	<10	<0.10	0.1	<1	<1	<10	13
MAY 17...	1	64	2	<1	<0.10	<0.1	<1	<1	100	27
JUL 25...	2	16	1	1	<0.10	<0.1	<1	<1	10	15
SEP 13...	1	8	1	1	<0.10	<0.1	<1	<1	<10	11

RIO GRANDE BASIN

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 as 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 7,240 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.--Records good except for estimated daily discharges, which are fair. Minor diversions for irrigation above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years (water years 1953-1982, 1986-90) 19.9 ft³/s, 14,420 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 and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	0915	*60	*1.68				

Minimum discharge, 2.5 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	5.1	5.3	e4.4	4.6	5.6	11	40	49	10	11	7.1
2	4.0	5.1	4.7	e4.3	4.4	5.6	11	40	46	9.8	10	6.9
3	4.1	5.1	4.7	e4.4	e4.6	5.6	11	38	43	12	11	6.8
4	11	5.0	5.3	e4.3	e5.0	5.6	11	35	40	12	11	6.8
5	23	5.0	5.5	e4.0	e4.9	6.1	11	32	38	11	11	6.7
6	19	5.2	5.5	e4.3	e4.0	6.2	11	30	37	11	12	6.6
7	13	5.2	5.6	e4.4	e4.6	5.8	11	33	36	10	12	7.6
8	10	5.5	4.6	e4.7	e5.0	5.6	19	39	34	9.8	11	9.3
9	8.9	5.6	5.6	5.1	e4.4	6.3	20	44	33	11	10	7.6
10	7.7	5.4	5.8	4.7	e4.6	6.7	18	46	34	11	9.7	7.0
11	7.3	5.5	5.4	4.5	4.9	6.7	18	48	33	14	9.0	6.7
12	6.9	5.5	4.3	4.5	4.6	6.7	21	48	29	12	9.5	6.5
13	6.7	5.8	5.2	4.5	4.6	6.7	23	49	27	13	9.6	6.5
14	6.5	6.0	5.8	4.4	4.9	6.3	24	51	25	15	9.7	6.3
15	6.3	5.7	6.0	4.3	4.2	6.1	30	53	23	14	11	5.9
16	6.3	5.4	5.8	4.4	e3.8	6.1	32	54	22	13	11	6.0
17	6.3	5.4	5.5	4.5	e4.0	6.5	37	53	20	12	11	7.2
18	6.3	5.5	5.5	4.6	e4.1	7.0	36	52	18	12	11	6.9
19	6.3	5.6	5.4	4.7	e4.3	6.8	34	54	17	12	9.7	7.0
20	6.2	5.5	5.3	5.3	e4.5	7.0	32	53	16	13	12	6.7
21	6.2	5.4	5.6	4.7	e4.6	7.2	33	51	15	13	13	7.0
22	6.1	5.5	5.2	5.6	e4.7	7.9	37	51	14	13	11	6.0
23	6.1	5.6	5.9	5.2	5.0	8.7	42	52	13	13	11	5.7
24	5.9	5.6	5.8	5.2	5.2	9.6	42	56	12	13	9.6	5.7
25	5.8	5.6	5.6	5.1	5.3	11	40	58	12	12	8.9	5.3
26	5.7	5.6	5.6	5.6	5.4	13	36	58	12	11	8.5	5.3
27	5.8	5.5	5.6	e5.2	5.5	14	34	57	11	11	8.2	5.1
28	5.7	4.8	5.4	e5.4	5.5	14	34	55	11	10	8.2	5.7
29	5.6	3.6	5.2	5.5	---	14	40	57	11	11	8.3	15
30	5.5	4.8	4.9	5.3	---	13	41	55	10	11	7.8	11
31	5.2	---	4.5	5.0	---	12	---	52	---	11	7.6	---
TOTAL	233.4	160.1	166.1	148.1	131.2	249.4	800	1494	741	366.6	314.3	209.9
MEAN	7.53	5.34	5.36	4.78	4.69	8.05	26.7	48.2	24.7	11.8	10.1	7.00
MAX	23	6.0	6.0	5.6	5.5	14	42	58	49	15	13	15
MIN	4.0	3.6	4.3	4.0	3.8	5.6	11	30	10	9.8	7.6	5.1
AC-FT	463	318	329	294	260	495	1590	2960	1470	727	623	416

CAL YR 1989 TOTAL 5129.1 MEAN 14.1 MAX 72 MIN 3.4 AC-FT 10170
WTR YR 1990 TOTAL 5014.1 MEAN 13.7 MAX 58 MIN 3.6 AC-FT 9950

e Estimated

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 6,650 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.--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.--33 years, 60.3 ft³/s, 43,690 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, Aug. 1, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 13	1915	482	7.17	Sept. 29	0030	264	6.73
Aug. 17	2300	*518	*7.23				

Minimum discharge, 2.0 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	24	e23	e28	39	56	94	60	16	11	12
2	14	24	29	e25	e28	38	53	94	60	16	13	13
3	14	24	29	e27	e29	36	52	104	54	17	15	13
4	36	24	30	e24	e30	37	53	89	50	17	16	13
5	69	26	31	e24	e30	40	54	83	46	19	17	13
6	58	25	31	e22	e28	43	57	71	42	19	15	12
7	37	24	31	e20	31	43	55	70	40	21	17	15
8	30	24	30	e23	31	46	73	75	38	22	19	14
9	27	24	32	23	32	46	78	86	36	25	18	14
10	25	23	30	e25	32	43	79	89	43	23	17	13
11	25	24	29	e27	34	43	80	91	50	27	18	13
12	23	24	e27	29	34	41	90	91	46	28	16	12
13	23	24	e26	28	36	39	93	81	42	37	17	12
14	23	23	e25	29	33	36	90	79	39	17	18	12
15	23	21	e28	29	e29	35	90	81	33	16	19	12
16	21	21	e29	29	e24	35	102	82	32	15	20	14
17	22	21	e30	29	e25	36	119	75	30	16	31	15
18	23	22	e27	28	e28	37	131	75	29	17	27	15
19	25	23	e30	29	e28	36	134	79	27	16	15	15
20	25	23	e29	e27	33	36	117	72	25	18	15	17
21	26	23	e30	e29	34	36	110	69	23	19	16	18
22	24	23	e29	e28	33	35	124	67	22	18	17	16
23	24	24	e23	e30	34	38	144	70	19	20	17	16
24	25	24	e28	e29	36	40	149	88	18	20	14	18
25	25	24	e30	e28	36	45	149	88	17	15	14	18
26	25	24	e30	e25	35	50	134	85	17	20	13	16
27	25	24	e28	e29	36	57	113	75	16	14	14	16
28	23	24	e29	e30	37	60	95	71	17	18	16	18
29	23	32	e29	e25	---	69	92	77	18	19	14	41
30	23	25	e26	e20	---	73	96	77	17	16	14	23
31	23	---	e28	e28	---	64	---	63	---	19	12	---
TOTAL	823	714	887	821	884	1352	2862	2491	1006	600	515	469
MEAN	26.5	23.8	28.6	26.5	31.6	43.6	95.4	80.4	33.5	19.4	16.6	15.6
MAX	69	32	32	30	37	73	149	104	60	37	31	41
MIN	14	21	23	20	24	35	52	63	16	14	11	12
AC-FT	1630	1420	1760	1630	1750	2680	5680	4940	2000	1190	1020	930

CAL YR 1989 TOTAL 13572.4 MEAN 37.2 MAX 148 MIN 5.4 AC-FT 26920
WTR YR 1990 TOTAL 13424 MEAN 36.8 MAX 149 MIN 11 AC-FT 26630

e Estimated

RIO GRANDE BASIN

08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD 1986 to current year.--Water years 1981, 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
NOV 08...	1400	22	500	8.5	10.5	9.0	10.6	<10	230	33
JAN 30...	1100	20	500	8.5	3.0	0.0	12.5	37	--	--
MAR 20...	1230	36	410	8.4	15.0	9.0	10.6	11	210	32
MAY 16...	1230	88	300	8.2	18.5	12.0	9.8	27	130	15
JUL 26...	0845	20	510	8.1	20.5	17.5	8.2	15	250	32
SEP 14...	0900	12	500	8.2	19.5	13.0	10.3	12	--	--

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 WATER DIS IT FIELD HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD CACO3 (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
NOV 08...	67	15	25	0.7	1.5	217	11	196	192
JAN 30...	--	--	--	--	--	--	--	--	--
MAR 20...	63	13	20	0.6	1.3	204	7	179	182
MAY 16...	40	8.4	10	0.4	1.1	146	0	120	121
JUL 26...	74	16	22	0.6	1.6	266	0	218	223
SEP 14...	--	--	--	--	--	--	--	--	--

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, 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)
NOV 08...	66	9.3	0.40	16	321	0.600	0.540	0.290	0.31
JAN 30...	--	--	--	--	--	0.400	0.340	0.270	1.4
MAR 20...	51	9.1	0.40	12	279	0.300	0.300	0.180	0.72
MAY 16...	30	5.8	0.30	11	179	0.100	0.100	0.050	0.25
JUL 26...	49	6.3	0.60	20	321	0.100	0.100	0.170	0.73
SEP 14...	--	--	--	--	--	0.300	0.300	0.070	--

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)
NOV 08...	1.2	0.270	0.210	2.3	60	8	47	2.8	96
JAN 30...	2.1	0.220	0.060	7.6	--	--	520	28	55
MAR 20...	1.2	0.190	0.190	2.8	40	18	35	3.4	88
MAY 16...	0.40	0.110	0.050	4.7	30	20	20	4.7	92
JUL 26...	1.0	0.150	0.110	4.0	60	11	74	4.0	59
SEP 14...	--	0.480	0.150	2.1	--	--	--	--	--

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 567, 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.--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.--65 years, 756 ft³/s, 547,700 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 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 11	0630	*2,200	*5.67	July 20	2000	1,610	5.22

Minimum discharge, 211 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	275	273	381	395	511	395	484	653	407	395	305
2	229	272	287	374	395	526	364	493	617	372	383	298
3	231	278	287	385	390	559	334	566	528	394	379	285
4	297	298	267	385	388	582	342	713	493	391	368	286
5	427	322	282	362	401	594	336	908	477	398	369	286
6	409	307	295	344	406	614	352	1190	474	388	366	278
7	338	302	321	344	406	622	362	1250	564	372	378	271
8	313	297	323	344	406	610	376	1380	772	395	361	286
9	319	295	328	347	404	596	384	1740	692	411	345	290
10	325	295	338	347	403	574	380	2020	572	580	334	286
11	301	295	337	353	415	564	372	2080	604	529	333	286
12	295	295	320	362	423	568	381	1360	637	425	308	273
13	282	290	248	362	431	581	395	1070	771	406	324	259
14	280	286	335	370	444	576	389	843	874	489	316	252
15	278	285	342	374	434	559	380	726	943	481	321	240
16	275	282	368	385	397	552	408	635	719	456	335	235
17	278	280	366	385	395	527	445	670	556	462	353	248
18	286	267	364	376	426	515	474	663	539	480	410	252
19	294	268	358	390	439	508	472	597	561	478	399	260
20	293	276	353	398	445	516	454	569	557	594	405	254
21	291	287	370	391	444	525	469	534	526	476	412	254
22	300	287	364	390	441	531	524	529	516	446	416	239
23	300	278	380	401	456	536	579	490	573	435	379	233
24	301	273	375	390	450	545	601	504	531	412	372	234
25	300	271	386	371	448	576	590	619	454	514	403	256
26	300	268	375	381	458	609	563	803	414	451	405	271
27	299	268	379	389	471	631	563	1090	376	389	373	280
28	297	255	384	382	504	607	515	1020	424	392	356	280
29	296	240	386	378	---	578	493	791	419	413	347	355
30	282	247	394	386	---	480	487	667	431	396	331	297
31	282	---	382	400	---	432	---	577	---	403	312	---
TOTAL	9222	8439	10567	11627	11915	17304	13179	27581	17267	13635	11288	8129
MEAN	297	281	341	375	426	558	439	890	576	440	364	271
MAX	427	322	394	401	504	631	601	2080	943	594	416	355
MIN	224	240	248	344	388	432	334	484	376	372	308	233
AC-FT	18290	16740	20960	23060	23630	34320	26140	54710	34250	27050	22390	16120

CAL YR 1989 TOTAL 207410 MEAN 568 MAX 2390 MIN 220 AC-FT 411400
WTR YR 1990 TOTAL 160153 MEAN 439 MAX 2080 MIN 224 AC-FT 317700

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
NOV 08...	0845	295	322	8.3	2.5	7.0	3.8	11.2	<10	110	0	31	
MAR 08...	0800	612	260	7.9	-2.0	4.0	6.0	10.8	22	88	0	26	
MAY 18...	0845	678	301	7.8	14.5	13.5	15	9.1	29	99	0	30	
AUG 30...	1340	316	280	8.3	30.0	20.0	20	9.1	21	97	0	29	
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 WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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)
NOV 08...	7.0	26	1	3.3	131	4	113	112	39	7.7	0.60	27	
MAR 08...	5.7	19	0.9	3.1	111	0	91	92	34	4.6	0.30	24	
MAY 18...	5.9	22	1	3.3	121	0	99	100	45	8.2	1.4	25	
AUG 30...	5.9	22	1	3.5	117	5	104	102	36	6.9	0.60	28	
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)	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
NOV 08...	211	0.200	0.180	0.010	0.19	0.40	0.040	0.020	1.9	<0.010	1	2	
MAR 08...	172	0.200	0.200	0.030	0.47	0.70	0.060	0.030	2.2	<0.010	--	--	
MAY 18...	200	0.200	<0.100	0.020	0.88	1.1	0.090	0.030	4.9	<0.010	--	--	
AUG 30...	195	0.200	0.200	0.020	0.38	0.60	0.160	0.030	3.5	<0.010	3	2	
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)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
NOV 08...	60	<1	<1.0	1	3	4	2	24	3	<1	0.20	0.2	
MAR 08...	40	--	--	--	--	--	--	25	--	--	--	--	
MAY 18...	50	--	--	--	--	--	--	36	--	--	--	--	
AUG 30...	40	1	2.0	3	2	5	3	13	13	1	0.10	0.1	

WATER-QUALITY RECORDS

	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	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 08...	10	<1	<1	30	7	<10	82	480	2	1	9	10
MAR 08...	10	--	--	--	--	--	--	--	--	--	--	--
MAY 18...	10	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	9	<1	<1	80	11	--	--	--	--	--	--	--
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 AS ZN) (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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SED- SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)		
NOV 08...	20	9700	20	590	0.01	110	50	40	94	K1	K5	
MAR 08...	--	--	--	--	--	--	40	66	80	K5	K25	
MAY 18...	--	--	--	--	--	--	140	256	99	110	45	
AUG 30...	--	--	--	--	--	--	--	--	--	K16	380	

RIO GRANDE BASIN

08279000 EMBUDO CREEK AT DIXON, NM

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, Hydrologic Unit 13020101, on right bank 750 ft upstream from State Highway 68, 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.--Water-discharge records good. Diversions upstream from station for irrigation of about 6,600 acres, a small part of which are downstream from gage.

AVERAGE DISCHARGE.--59 years (water years 1924-25, 1927-55, 1963-90), 80.9 ft³/s, 58,610 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 discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 5	1615	*1,030	*4.50	No other peak greater than base discharge.			
Minimum discharge, 11 ft ³ /s, Dec. 12.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	35	e21	28	28	32	73	177	216	19	41	36
2	16	32	e21	29	29	34	74	168	186	18	38	34
3	17	34	e22	30	27	35	75	166	174	21	37	29
4	50	36	26	e25	25	37	71	153	164	26	34	25
5	139	38	30	e24	27	42	77	139	164	68	35	23
6	114	37	32	e23	28	44	82	127	160	64	39	22
7	84	37	32	e24	27	37	84	138	152	53	51	22
8	73	36	25	30	28	34	139	148	140	58	42	42
9	68	37	27	30	26	40	161	166	140	64	38	35
10	64	37	29	30	25	46	142	165	186	59	33	34
11	55	36	28	30	28	48	142	171	208	62	32	31
12	e53	35	27	30	29	45	153	169	183	80	31	31
13	51	34	26	30	32	43	156	168	158	69	36	31
14	48	35	23	31	32	34	155	164	134	73	38	27
15	46	34	e22	29	24	36	171	168	120	70	44	25
16	45	30	e21	29	e16	36	184	175	111	65	44	26
17	46	31	e21	27	e18	36	213	170	88	58	42	42
18	49	33	e20	30	e19	40	199	172	72	54	56	41
19	49	33	e20	28	e20	40	198	179	63	71	55	48
20	47	34	e21	30	e21	43	175	169	52	89	76	45
21	46	34	e20	27	e22	48	173	156	44	105	94	48
22	46	31	e19	30	e24	58	179	149	38	93	81	44
23	45	30	e18	31	27	63	210	158	35	89	75	43
24	44	30	e21	25	29	66	209	207	30	85	64	43
25	42	31	e22	e22	31	72	208	305	29	67	60	38
26	43	30	e25	e24	31	74	179	285	23	66	57	37
27	39	29	e26	e25	33	75	164	228	22	64	53	36
28	38	22	28	e22	33	72	151	216	21	57	53	42
29	37	20	29	e24	---	74	166	299	20	55	53	101
30	35	21	30	e25	---	71	184	271	20	55	48	69
31	34	---	27	30	---	71	---	237	---	47	42	---
TOTAL	1579	972	759	852	739	1526	4547	5763	3153	1924	1522	1150
MEAN	50.9	32.4	24.5	27.5	26.4	49.2	152	186	105	62.1	49.1	38.3
MAX	139	38	32	31	33	75	213	305	216	105	94	101
MIN	16	20	18	22	16	32	71	127	20	18	31	22
AC-FT	3130	1930	1510	1690	1470	3030	9020	11430	6250	3820	3020	2280

CAL YR 1989 TOTAL 20422.3 MEAN 56.0 MAX 281 MIN 5.4 AC-FT 40510
WTR YR 1990 TOTAL 24486 MEAN 67.1 MAX 305 MIN 16 AC-FT 48570

e Estimated

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

[illegible]

RIO GRANDE BASIN

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.--Records good except for estimated daily discharges, which are fair. 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 and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1890-1930), 1,238 ft³/s, 896,900 acre-ft/yr. 60 years (water years 1931-90), 823 ft³/s, 596,300 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 11	0845	*2,480	*6.01	No other peak greater than base discharge.			

Minimum discharge, 224 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239	316	316	e428	439	552	494	671	833	436	421	328
2	242	314	313	e422	447	563	467	660	840	397	409	323
3	254	316	312	e432	438	596	434	719	718	397	400	305
4	395	336	296	e433	432	627	430	834	671	412	389	300
5	633	365	328	e407	447	644	433	975	640	461	387	302
6	562	355	343	e390	453	669	448	1300	640	461	391	293
7	455	346	368	e390	453	656	461	1380	653	424	415	284
8	418	340	365	e390	454	648	530	1490	860	451	396	313
9	405	336	361	e392	447	646	560	1860	875	469	374	318
10	406	337	380	e393	449	633	534	2220	763	561	359	311
11	373	337	362	e399	461	620	520	2420	789	643	355	308
12	356	336	362	405	471	617	533	1800	807	529	335	300
13	339	334	318	405	479	620	552	1320	892	463	347	283
14	332	330	e382	415	492	604	553	1090	954	544	350	272
15	326	326	e388	418	484	586	555	932	1090	559	357	257
16	322	315	e412	419	436	579	591	836	880	517	370	250
17	323	315	e411	419	440	561	651	814	677	509	383	287
18	336	306	e410	420	463	552	683	865	590	516	464	282
19	345	309	e404	425	489	545	688	791	607	543	460	302
20	345	318	e399	439	493	555	648	745	603	580	489	293
21	340	331	e416	431	496	569	645	698	578	700	546	303
22	344	338	e410	428	487	589	691	680	526	617	501	280
23	347	325	e430	447	495	608	774	666	592	545	480	272
24	347	318	e421	431	497	621	807	687	569	516	441	273
25	346	316	e433	413	494	650	803	842	495	527	457	274
26	343	310	e421	419	501	683	759	1030	440	549	466	296
27	339	310	e425	434	519	703	732	1280	402	442	429	303
28	339	292	e431	420	540	700	690	1310	412	411	407	307
29	328	256	e435	419	---	672	666	1120	444	446	393	491
30	320	270	e446	425	---	588	681	970	433	434	371	378
31	325	---	e431	444	---	532	---	825	---	430	347	---
TOTAL	11124	9653	11929	12952	13196	18988	18013	33830	20273	15489	12689	9088
MEAN	359	322	385	418	471	613	600	1091	676	500	409	303
MAX	633	365	446	447	540	703	807	2420	1090	700	546	491
MIN	239	256	296	390	432	532	430	660	402	397	335	250
AC-FT	22060	19150	23660	25690	26170	37660	35730	67100	40210	30720	25170	18030

CAL YR 1989 TOTAL 223259 MEAN 612 MAX 2500 MIN 226 AC-FT 442800
WTR YR 1990 TOTAL 187224 MEAN 513 MAX 2420 MIN 239 AC-FT 371400

e Estimated

RIO GRANDE BASIN

93

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.--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.--35 years, 346 ft³/s, 250,700 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, 6.46 ft, May 14, 1984; minimum, 4.0 ft/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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 8	2330	*2,400	*4.68	No other peak greater than base discharge.			
Minimum discharge, 6.1 ft ³ /s, Nov. 29.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	41	e35	e26	e34	e54	101	578	474	40	57	37
2	19	38	e38	e30	e35	e55	101	557	365	41	57	36
3	21	39	e40	e33	e36	e56	105	535	352	40	54	34
4	65	42	e42	e33	e37	e57	112	572	386	39	49	34
5	104	44	47	e33	e37	e60	130	576	400	43	52	38
6	110	46	48	e32	e38	68	134	792	396	50	61	40
7	112	47	51	e32	e40	67	157	1420	362	49	57	40
8	95	45	e35	e32	e40	69	198	1800	326	53	50	56
9	83	39	e32	e32	e40	70	216	1690	323	65	43	53
10	77	46	e30	e31	e41	82	191	1510	428	79	39	46
11	73	52	e29	e33	e44	87	200	1580	540	76	37	37
12	70	53	e29	e36	e48	85	238	1150	423	82	38	32
13	68	53	e29	e38	e45	75	250	1430	313	142	45	27
14	67	53	e28	e39	e39	65	266	1620	258	222	59	24
15	64	50	e28	e39	e35	63	427	1420	217	203	77	23
16	65	43	e28	e38	e33	61	565	1210	210	144	104	25
17	66	50	e28	e37	e35	66	670	1210	181	126	86	43
18	65	61	e29	e37	e38	74	575	1270	159	105	62	64
19	62	49	e28	e37	e41	78	538	1150	156	89	45	112
20	60	57	e28	e37	e44	79	531	899	136	87	38	105
21	60	60	e28	e36	e46	84	649	926	115	94	62	140
22	62	56	e27	e35	e48	93	915	999	90	82	67	103
23	62	52	e27	e32	e49	107	1140	949	80	75	94	82
24	59	51	e26	e32	e50	104	986	994	69	89	67	76
25	50	55	e25	e32	e51	107	746	881	54	99	57	67
26	43	e49	e25	e32	e52	114	628	771	46	88	51	61
27	43	e46	e24	e32	e53	122	584	696	43	70	44	55
28	45	e33	e24	e33	e53	124	551	655	44	58	42	56
29	45	e25	e23	e34	---	120	983	700	43	53	43	175
30	40	e30	e24	e34	---	118	671	610	41	57	42	164
31	38	---	e25	e34	---	108	---	513	---	57	38	---
TOTAL	1911	1405	960	1051	1182	2572	13558	31663	7030	2597	1717	1885
MEAN	61.6	46.8	31.0	33.9	42.2	83.0	452	1021	234	83.8	55.4	62.8
MAX	112	61	51	39	53	124	1140	1800	540	222	104	175
MIN	18	25	23	26	33	54	101	513	41	39	37	23
AC-FT	3790	2790	1900	2080	2340	5100	26890	62800	13940	5150	3410	3740

CAL YR 1989 TOTAL 90360 MEAN 248 MAX 2240 MIN 18 AC-FT 179200
WTR YR 1990 TOTAL 67531 MEAN 185 MAX 1800 MIN 18 AC-FT 133900

e Estimated

RIO GRANDE BASIN

08284100 RIO CHAMA NEAR LA PUENTE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974, 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
NOV 21...	1115	64	220	8.0	12.0	3.0	10.6	--	100	7
JAN 24...	1000	32	210	7.6	0.0	0.0	11.8	<10	--	--
MAR 21...	1330	77	215	7.8	17.0	7.0	11.2	19	98	39
MAY 24...	1100	950	115	8.1	14.0	10.0	10.3	23	--	--
JUL 19...	0830	92	260	8.1	17.0	16.5	8.5	23	130	18
AUG 21...	0800	70	160	8.1	15.0	15.0	8.6	27	--	--

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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)
NOV 21...	31	6.4	9.3	0.4	1.7	118	0	97	100
JAN 24...	--	--	--	--	--	--	--	--	--
MAR 21...	29	6.2	9.9	0.4	1.8	72	0	59	79
MAY 24...	--	--	--	--	--	73	0	60	--
JUL 19...	40	7.7	11	0.4	2.0	138	0	113	120
AUG 21...	--	--	--	--	--	--	--	--	--

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, 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)
NOV 21...	26	2.1	0.10	19	154	<0.100	<0.100	<0.010	--
JAN 24...	--	--	--	--	--	0.200	0.180	0.040	--
MAR 21...	34	2.7	0.30	17	136	<0.100	<0.100	<0.010	--
MAY 24...	--	--	--	--	--	<0.100	<0.100	0.030	0.27
JUL 19...	29	1.8	<0.10	18	188	2.70	2.40	0.080	0.22
AUG 21...	--	--	--	--	--	<0.100	<0.100	0.060	0.34

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 21...	--	0.020	0.010	1.8	<10	27	21	3.6	99
JAN 24...	--	0.050	0.030	1.9	--	--	14	1.2	96
MAR 21...	--	0.030	0.020	2.6	<10	29	26	5.4	93
MAY 24...	--	0.050	0.010	6.4	--	--	301	772	75
JUL 19...	3.0	0.040	0.040	4.8	20	54	51	13	97
AUG 21...	--	0.130	0.030	4.7	--	--	703	133	51

RIO GRANDE BASIN

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.--20 years, 128 ft³/s, 92,740 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 daily discharge, 986 ft³/s, June 11; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.00	.00	.00	.00	.00	9.6	143	421	34	40	5.0
2	.71	.00	.00	.00	.00	.00	12	122	346	25	38	4.0
3	.70	.00	.00	.00	.00	.00	17	103	481	21	26	3.5
4	320	.00	.00	.00	.00	.00	14	127	685	38	11	5.0
5	212	.00	.00	.00	.00	.00	18	126	816	22	9.1	20
6	87	.00	.00	.00	.00	.00	16	195	814	53	12	54
7	64	.00	.00	.00	.00	.00	57	345	732	80	11	71
8	28	.00	.00	.00	.00	.00	67	393	721	61	7.0	43
9	25	.00	.00	.00	.00	.00	83	378	938	73	5.5	36
10	19	.00	.00	.00	.00	.00	74	384	792	81	4.0	22
11	16	.00	.00	.00	.00	.00	101	381	986	81	12	16
12	12	.00	.00	.00	.00	.00	113	249	730	101	5.5	12
13	1.3	.00	.00	.00	.00	.00	94	329	582	74	23	8.1
14	1.44	.00	.00	.00	.00	.00	103	443	469	184	23	5.0
15	2.3	.00	.00	.00	.00	.00	221	405	361	124	44	3.0
16	2.2	.00	.00	.00	.00	.00	278	361	260	110	108	2.0
17	4.2	.00	.00	.00	.00	.00	265	443	236	99	85	71
18	2.0	.00	.00	.00	.00	.00	209	475	220	65	55	47
19	1.1	.00	.00	.00	.00	.00	209	413	228	84	28	159
20	.89	.00	.00	.00	.00	.00	216	376	201	100	30	131
21	.65	.00	.00	.00	.00	.00	310	477	166	81	117	133
22	.57	.00	.00	.00	.00	.00	401	612	148	56	190	77
23	.27	.00	.00	.00	.00	.00	380	678	134	51	99	111
24	.00	.00	.00	.00	.00	.00	310	766	120	94	61	85
25	.00	.00	.00	.00	.00	.00	239	644	100	137	42	57
26	.00	.00	.00	.00	.00	.00	215	569	82	73	26	42
27	.00	.00	.00	.00	.00	.00	200	538	72	43	20	32
28	.00	.00	.00	.00	.00	.00	215	645	63	22	16	336
29	.00	.00	.00	.00	.00	.00	324	777	55	15	25	506
30	.00	.00	.00	.00	.00	.00	211	407	35	21	13	254
31	.00	.00	.00	.00	.00	.00	---	379	---	43	8.1	---
TOTAL	801.01	0.00	0.00	0.00	0.00	0.00	4981.6	12683	11994	2146	1194.2	2350.6
MEAN	25.8	.000	.000	.000	.000	.000	166	409	400	69.2	38.5	78.4
MAX	320	.00	.00	.00	.00	.00	401	777	986	184	190	506
MIN	.00	.00	.00	.00	.00	.00	9.6	103	35	15	4.0	2.0
AC-FT	1590	.00	.00	.00	.00	.00	9880	25160	23790	4260	2370	4660

CAL YR 1989 TOTAL 25271.59 MEAN 69.2 MAX 569 MIN .00 AC-FT 50130
WTR YR 1990 TOTAL 36150.41 MEAN 99.0 MAX 986 MIN .00 AC-FT 71700

RIO GRANDE BASIN

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. 20 years (water years 1971-90), 142 ft³/s, 102,900 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 daily discharge, 951 ft³/s, June 11, minimum daily, 0.01 ft³/s, Jan. 29-31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.12	.09	.02	.02	2.2	1.0	181	424	33	49	5.1
2	.13	.12	.09	.02	.02	2.1	8.1	154	337	25	38	3.0
3	.13	.11	.08	.02	.02	1.6	15	136	435	20	28	2.2
4	248	.11	.08	.02	.02	2.0	14	159	699	34	17	1.9
5	290	.38	.06	.02	.02	2.5	20	156	832	22	13	9.2
6	99	.67	.06	.02	.02	2.0	19	200	824	38	10	26
7	84	1.4	.07	.02	.02	1.9	56	357	737	87	7.4	83
8	35	1.6	.07	.02	.02	1.80	74	407	711	55	6.9	52
9	26	1.9	.06	.02	.02	1.1	52	395	710	76	5.2	47
10	19	1.8	.07	.02	.02	1.4	94	390	763	90	4.1	27
11	16	1.0	.02	.02	.02	1.9	113	417	951	61	6.2	20
12	13	.49	.02	.02	.02	2.9	132	284	728	132	4.2	16
13	6.9	.30	.02	.02	.02	1.9	113	329	595	78	13	11
14	1.4	.29	.02	.02	.02	1.1	103	443	482	188	19	7.8
15	.43	.29	.02	.02	.02	.67	224	413	398	152	35	5.0
16	.29	.11	.06	.02	.07	.49	147	360	294	129	109	4.0
17	1.6	.11	.02	.02	.07	.40	305	442	248	112	103	71
18	2.3	.10	.05	.02	.03	.40	236	474	252	77	73	70
19	1.3	.10	.03	.02	.03	.76	254	412	251	97	34	155
20	.63	.10	.06	.02	.03	1.8	243	375	239	97	25	131
21	.40	.10	.02	.02	.03	1.6	341	477	194	98	149	150
22	.34	.10	.02	.02	.04	1.2	393	611	170	63	193	90
23	.32	.10	.02	.02	.04	1.4	406	677	157	53	121	115
24	.27	.10	.02	.02	.05	1.4	333	765	137	72	71	102
25	.23	.10	.02	.03	.07	1.2	291	643	95	166	51	62
26	.20	.10	.04	.02	.15	1.1	262	569	74	89	33	48
27	.20	.10	.03	.02	.24	1.1	240	537	93	54	24	37
28	.18	.07	.02	.02	.24	1.2	227	644	76	31	27	333
29	.13	.06	.03	.01	---	2.1	335	766	71	22	19	504
30	.12	.07	.04	.01	---	1.5	253	419	42	21	15	252
31	.12	---	.05	.01	---	1.3	---	379	---	49	10	---
TOTAL	847.81	12.00	1.36	0.60	1.39	45.02	5304.1	12971	12019	2321	1313.0	2440.2
MEAN	27.3	.40	.044	.019	.050	1.45	177	418	401	74.9	42.4	81.3
MAX	290	1.9	.09	.03	.24	2.9	406	766	951	188	193	504
MIN	.12	.06	.02	.01	.02	.40	1.0	136	42	20	4.1	1.9
AC-FT	1680	24	2.7	1.2	2.8	89	10520	25730	23840	4600	2600	4840

CAL YR 1989 TOTAL 28082.20 MEAN 76.9 MAX 543 MIN .02 AC-FT 55700
WTR YR 1990 TOTAL 37276.48 MEAN 102 MAX 951 MIN .01 AC-FT 73940

RIO GRANDE BASIN

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 subsequent to 1973. 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 daily discharge, 0.16 ft³/s, Oct. 5, no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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
2	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	.00	.00	.05	.00	.00	.00	.00
4	.02	.00	.00	---	---	.00	.00	.03	.00	.00	.00	.00
5	.16	.00	.00	---	---	.00	.00	.03	.00	.00	.00	.00
6	.08	.00	.00	---	---	.00	.00	.01	.00	.00	.00	.00
7	.06	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
8	.06	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
9	.06	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
10	.05	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	---	---	.00	.04	.00	.00	.00	.00	.00
20	.00	.00	.00	---	---	.00	.10	.00	.00	.00	.00	.04
21	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.08
22	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.05
23	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.03
24	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.02
25	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	---	---	.00	.07	.00	.00	.00	.00	.00
27	.00	.00	.00	---	---	.00	.02	.00	.00	.00	.00	.00
28	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.01
31	.00	---	.00	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.49	0.00	0.00	---	---	0.00	0.23	0.12	0.00	0.00	0.00	0.23
MEAN	.016	.000	.000	---	---	.000	.008	.004	.000	.000	.000	.008
MAX	.16	.00	.00	---	---	.00	.10	.05	.00	.00	.00	.08
MIN	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
AC-FT	1.0	.00	.00	---	---	.00	.5	.2	.00	.00	.00	.5

RIO GRANDE BASIN

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, 377,700 acre-ft, Sept. 30, elevation, 7,182.02 ft; minimum, 319,500 acre-ft, Apr. 17-19, elevation, 7,171.33 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 (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374100	373700	371800	370400	370000	362800	332500	325800	348500	369600	372600	374700
2	374000	373600	371700	370400	369900	361900	331500	326300	349100	369600	372700	374600
3	374100	373500	371700	370400	369900	361000	330400	326600	350000	369500	372600	374500
4	374700	373400	371600	370400	369900	360200	329500	327000	351300	369500	372600	374400
5	375200	373400	371600	370300	369900	359400	328400	327200	352900	369600	372600	374400
6	375300	373300	371600	370300	369900	358500	327500	327500	354500	369600	372500	374200
7	375400	373200	371500	370300	369800	357600	326600	328100	355800	369800	372500	374400
8	375400	373100	371500	370300	369800	356700	325900	328800	357200	370100	372500	374400
9	375400	373000	371400	370300	369800	355800	325000	329400	358700	370300	372500	374500
10	375400	373000	371300	370200	369800	354800	324100	330100	360400	370400	372400	374400
11	375400	373000	371200	370200	369700	354000	323400	330700	362400	370600	372400	374400
12	375300	373000	371100	370200	369600	353000	322500	321200	363700	370700	372400	374300
13	375300	372900	371100	370400	369200	352000	321600	331600	364900	371000	372500	374300
14	375100	372800	371000	370400	368800	351000	320900	332500	365700	371500	372500	374200
15	375100	372700	371000	370300	368300	349900	320200	333200	366500	371800	372800	374100
16	375000	372600	371000	370300	367900	348900	319700	333800	366600	372100	373000	374200
17	374900	372500	371000	370300	367500	347900	319500	334500	367100	372300	373300	374500
18	374700	372500	371000	370300	367100	346800	319500	335400	367600	372400	373400	374700
19	374700	372500	370900	370300	366600	345800	319500	336100	368000	372500	373400	375000
20	374600	372500	370800	370300	366300	344700	320000	336700	368300	372700	373700	375000
21	374600	372400	370800	370300	366000	343700	320600	337600	368500	372700	374000	375500
22	374500	372400	370700	370300	365600	342700	321400	338900	368800	372700	374600	375700
23	374500	372300	370700	370300	365200	341600	322000	340100	369000	372800	374800	375800
24	374400	372300	370700	370200	364900	340500	322700	341500	369200	372900	374900	375900
25	374300	372200	370600	370100	364500	339600	323300	342800	369400	373000	374900	376100
26	374200	372100	370600	370100	364100	338400	323800	343700	369500	373200	374800	376100
27	374200	372000	370600	370000	363700	337400	324100	344500	369500	373200	375000	375900
28	374100	372000	370600	369900	363400	336300	324400	345500	369600	373100	374900	376300
29	374000	371900	370600	369900	---	335500	325000	346500	369700	373100	374800	377300
30	373900	371900	370500	370000	---	334500	325600	347200	369600	372800	374800	377700
31	373700	---	370400	370000	---	333500	---	347800	---	372600	374700	---
MAX	375400	373700	371800	370400	370000	362800	332500	347800	369700	373200	375000	377700
MIN	373700	371900	370400	369900	363400	333500	319500	321200	348500	369500	372400	374100
(†)	7181.33	7181.00	7180.75	7180.67	7179.49	7174.00	7172.50	7176.67	7180.60	7181.13	7181.51	7182.02
(††)	-600	-1800	-1500	-400	-6600	-29900	-7900	+22200	+21800	+3000	+2100	+3000

CAL YR 1989 MAX 398700 MIN 365300 (††) +1000
WTR YR 1990 MAX 377700 MIN 319500 (††) +3400

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

RIO GRANDE BASIN

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). Outlet conduits are 14-in. and 120-in. in diameter.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--19 years, 117 ft³/s, 84,770 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, 543 ft³/s, Mar. 29; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	325	536	.00	.00	.00	.00	10
2	.00	.00	.00	.00	.00	435	540	.00	.00	.00	.00	10
3	.00	.00	.00	.00	.00	495	542	.00	.00	.00	.00	10
4	.00	.00	.00	.00	.00	495	541	.00	.00	.00	.00	3.9
5	.00	.00	.00	.00	.00	495	541	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	495	542	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	499	541	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	498	541	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	497	541	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	497	540	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	497	539	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	122	509	540	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	201	525	540	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	201	525	539	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	201	525	539	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	200	533	537	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	200	532	398	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	200	532	311	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	200	538	201	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	200	542	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	203	542	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	199	541	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	199	540	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	199	540	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	199	541	.00	31	.00	.00	.00	41
26	.00	.00	.00	.00	199	541	.00	102	.00	.00	.00	64
27	.00	.00	.00	.00	200	542	.00	103	.00	.00	.00	64
28	.00	.00	.00	.00	201	542	.00	103	.00	.00	.00	61
29	.00	.00	.00	.00	---	543	.00	103	.00	.00	.00	58
30	2.0	.00	.00	.00	---	539	.00	43	.00	185	6.2	58
31	2.0	---	.00	.00	---	536	---	.00	---	128	10	---
TOTAL	4.00	0.00	0.00	0.00	3324.00	15936	9549.00	485.00	0.00	313.00	16.20	379.90
MEAN	.13	.000	.000	.000	119	514	318	15.6	.000	10.1	.52	12.7
MAX	2.0	.00	.00	.00	203	543	542	103	.00	185	10	64
MIN	.00	.00	.00	.00	.00	325	.00	.00	.00	.00	.00	.00
AC-FT	7.9	.00	.00	.00	6590	31610	18940	962	.00	621	32	754

CAL YR 1989 TOTAL 19869.00 MEAN 54.4 MAX 417 MIN .00 AC-FT 39410
WTR YR 1990 TOTAL 30007.10 MEAN 82.2 MAX 543 MIN .00 AC-FT 59520

RIO GRANDE BASIN

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 186,250 acre-ft between gage heights 6,759.0 ft and 6,902.0 ft, top of spillway gate. Dead storage, 1,480 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, 179,800 acre-ft, May 24, elevation, 6,899.99 ft minimum, 85,680 acre-ft, Feb. 12, elevation, 6,862.81 ft.

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

(Based on survey by U.S. Bureau of Reclamation in 1984)

6,860	80,510	6,885	135,900
6,865	89,870	6,895	164,400
6,875	111,000	6,900	179,800

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107170	104280	98890	92890	87440	88880	116800	151100	178800	161900	142900	128600
2	106900	104080	98770	92710	87270	89500	117800	151800	178800	160400	142400	128100
3	106790	103860	98560	92560	87100	90360	118700	152500	178800	159000	142000	127700
4	106990	103670	98330	92360	86910	91070	119700	153300	178900	157500	141800	127300
5	107730	103520	98160	92160	86720	91880	120800	153900	179100	156200	141500	126700
6	107780	103340	98100	91890	86550	92710	121800	155000	179300	155200	141200	126300
7	107750	103170	97790	91780	86360	93540	122900	157400	179400	154500	141000	125300
8	107660	103000	98620	91580	86200	94340	124200	159400	179300	154000	140700	123500
9	107530	102820	97410	91400	86020	95170	125200	162100	179200	153700	140400	122200
10	107310	102670	97250	91230	85850	96030	126200	164300	179400	153400	139400	121300
11	107190	102570	97020	91050	85700	96920	127300	166700	179800	153100	137600	120900
12	107060	102330	96810	90870	85680	97830	128500	168400	179600	152900	136700	120300
13	106930	102090	98530	90750	85850	98790	129800	170400	179300	152200	136400	119200
14	106820	101940	96400	90600	86070	99690	131100	172800	179100	150900	136100	117200
15	106660	101730	96220	90420	86220	100600	132600	174600	178400	150200	135900	115500
16	106590	101510	96030	90240	86390	101400	134300	175500	176800	150200	135800	114600
17	106620	101340	95830	90090	86530	102300	136200	176800	175900	150200	135500	114100
18	106590	101170	95640	89870	86700	103300	137600	177800	175700	150100	135400	113700
19	106480	100980	95420	89830	86870	104200	138700	177800	174800	150100	135100	113500
20	106330	100810	95220	89560	87080	105100	139500	177400	174100	149900	134900	113200
21	106220	100700	95010	89390	87230	106000	140400	177500	173600	149800	134800	112900
22	106080	100560	94850	89210	87400	107000	141800	178400	173000	149500	134900	112600
23	105950	100390	94630	89060	87570	107900	143500	179300	172100	149200	134700	112200
24	105820	100220	94440	88860	87710	108900	144900	179800	171400	148700	133700	111800
25	105640	100030	94240	88690	87880	109900	146000	179500	170400	148200	132200	111500
26	105460	99860	94040	88520	88070	110800	146800	179000	169500	147800	131100	111300
27	105240	99670	93860	88320	88250	111900	147500	178400	168300	146700	130700	111300
28	105050	99460	93660	88150	88480	112900	148000	178100	167100	145000	130300	111200
29	104830	99230	93500	87940	---	113900	149400	178600	165500	143900	129900	111400
30	104630	99040	93320	87770	---	114900	150400	178900	163600	143700	129500	111500
31	104480	---	93090	87590	---	116000	---	178900	---	143400	129000	---
MAX	107780	104280	98890	92890	88480	116000	150400	179800	179800	161900	142900	128600
MIN	104480	99040	93090	87590	85680	88880	116800	151100	163600	143400	129000	111200
(†)	6872.07	6869.53	6866.63	6863.82	6864.28	6877.10	6890.25	6899.69	6894.75	6887.78	6882.37	6875.20
(††)	-2980	-5440	-5950	-5500	+890	+27520	+34400	+28500	-15300	-20200	-14400	-17500
CAL YR 1989	MAX 176070	MIN 93090	(††) -71630									
WTR YR 1990	MAX 179800	MIN 85680	(††) +4040									

(†) 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.--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. 20 years (water years 1971-90), 462 ft³/s, 334,700 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 daily discharge, 1,180 ft³/s, Sept. 16; minimum daily, 47 ft³/s, Oct. 17.

REVISIONS.--Revised monthly and yearly totals of discharge for the water year 1989, superseding those published in the report for 1989 are given below.

	TOTAL	MEAN	AC-FT
October 1988	2,564	82.7	5,090
Wtr Yr 1989	138,801	380	275,300
Cal Yr 1988	113,898	311	225,900

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	120	116	115	118	153	116	166	387	954	304	248
2	153	118	116	114	118	153	116	166	305	825	304	248
3	154	118	116	115	118	156	113	166	307	822	228	248
4	156	118	116	113	118	159	110	166	254	821	171	248
5	153	118	116	113	118	159	110	168	216	824	170	248
6	149	120	116	111	118	133	110	164	220	595	173	248
7	149	121	116	110	118	113	110	154	258	418	170	531
8	149	121	113	111	122	117	110	153	315	423	182	915
9	149	121	113	115	123	118	110	160	352	316	201	767
10	148	122	113	116	118	118	110	163	371	203	501	514
11	146	121	113	116	122	118	110	163	375	203	924	258
12	146	121	113	116	134	118	110	162	448	203	586	326
13	143	122	114	116	150	117	110	159	452	510	215	635
14	137	121	116	116	153	116	110	159	305	962	215	1160
15	135	121	116	116	150	116	110	288	557	587	193	1160
16	96	120	116	116	149	116	110	527	1060	116	194	1180
17	47	119	116	116	149	116	110	446	655	116	253	577
18	67	117	116	116	151	118	110	569	256	114	197	404
19	114	116	114	116	153	119	110	1050	551	114	196	337
20	125	116	113	117	153	118	111	1050	526	116	207	304
21	124	117	114	118	153	118	113	770	315	116	203	281
22	124	119	114	116	154	118	113	434	376	116	207	272
23	124	116	113	116	154	118	147	345	477	228	196	271
24	124	116	113	118	157	118	161	600	474	311	621	269
25	123	117	114	116	153	118	155	993	513	305	912	266
26	124	116	113	116	153	118	158	1080	599	298	594	207
27	124	116	115	116	153	117	164	1100	642	551	253	163
28	124	116	113	116	153	116	159	796	719	896	253	162
29	124	116	113	116	---	116	164	456	919	604	253	159
30	122	116	113	116	---	116	168	452	1080	304	250	160
31	121	---	113	116	---	116	---	461	---	304	248	---
TOTAL	4027	3556	3546	3574	3883	3840	3718	13686	14284	13275	9574	12766
MEAN	130	119	114	115	139	124	124	441	476	428	309	426
MAX	156	122	116	118	157	159	168	1100	1080	962	924	1180
MIN	47	116	113	110	118	113	110	153	216	114	170	159
AC-FT	7990	7050	7030	7090	7700	7620	7370	27150	28330	26330	18990	25320

CAL YR 1989 TOTAL 141922 MEAN 389 MAX 2130 MIN 47 AC-FT 281500
WTR YR 1990 TOTAL 89729 MEAN 246 MAX 1180 MIN 47 AC-FT 178000

RIO GRANDE BASIN

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 6,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by El Vado Reservoir (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. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 358 ft³/s, 259,400 acre-ft/yr, prior to release of transmountain water. 20 years (water years 1971-90), 489 ft³/s, 354,300 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 2, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,480 ft³/s, Sept. 14, gage height, 5.81 ft; minimum discharge, 55 ft³/s, parts of Oct. 18, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	131	133	105	87	159	112	202	463	982	294	247
2	142	131	133	102	89	158	111	213	310	772	291	246
3	143	131	132	100	91	157	111	268	333	771	283	245
4	160	131	132	98	94	159	112	227	305	768	178	239
5	176	131	131	93	98	160	111	224	235	770	215	240
6	152	131	131	90	98	161	116	205	233	715	266	239
7	145	131	131	89	110	117	116	201	229	400	256	267
8	144	131	132	88	110	114	124	189	273	398	187	861
9	144	131	132	88	110	134	123	200	308	661	208	827
10	144	131	131	93	110	129	122	207	325	294	225	575
11	143	131	128	94	113	122	119	204	320	304	865	316
12	142	131	120	95	118	116	118	211	329	221	840	187
13	142	131	114	96	152	115	119	202	478	319	257	497
14	134	131	110	98	160	111	120	203	341	1110	244	906
15	133	131	110	99	158	112	120	208	250	974	267	835
16	131	131	120	99	152	110	121	508	968	171	241	753
17	89	131	108	101	158	109	123	553	912	136	316	296
18	58	131	105	102	157	108	137	355	239	123	228	264
19	77	131	104	105	155	109	151	1010	348	118	206	339
20	118	132	103	105	159	109	140	1030	636	117	206	298
21	127	133	99	101	154	109	136	949	309	115	282	318
22	129	133	99	97	154	109	136	449	295	118	243	258
23	129	133	99	95	154	109	137	428	440	119	223	254
24	128	133	98	94	156	109	199	371	442	310	326	250
25	130	133	96	90	164	108	201	946	445	311	887	249
26	131	133	97	89	162	108	203	1070	543	280	824	245
27	131	133	96	96	162	109	196	1070	557	305	286	157
28	131	133	96	85	159	112	192	982	624	855	262	155
29	131	133	98	86	---	115	188	481	768	805	265	161
30	131	133	103	86	---	116	195	474	1010	311	255	153
31	131	---	109	87	---	114	---	474	---	306	250	---
TOTAL	4088	3951	3530	2946	3744	3787	4209	14314	13268	13959	10176	10877
MEAN	132	132	114	95.0	134	122	140	462	442	450	328	363
MAX	176	133	133	105	164	161	203	1070	1010	1110	887	906
MIN	58	131	96	85	87	108	111	189	229	115	178	153
AC-FT	8110	7840	7000	5840	7430	7510	8350	28390	26320	27690	20180	21570

CAL YR 1989 TOTAL 144808 MEAN 397 MAX 2270 MIN 58 AC-FT 287200
WTR YR 1990 TOTAL 88849 MEAN 243 MAX 1110 MIN 58 AC-FT 176200

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, 1,201,000 acre-ft between elevations 6,060 ft, invert of outlet tunnel, and 6,350 ft, crest of spillway, based on capacity table from survey July & Dec. 1984. 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. U.S. Army Corps of Engineers satellite telemeter at station.

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, 176,090 acre-ft, July 29, elevation, 6,216.24 ft; minimum, 156,660 acre-ft, Sept. 28-30, elevation, 6,211.22 ft.

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

(Based on survey by U.S. Army Corps of Engineers in 1984)

6,200	116,840	6,240	282,540
6,220	191,310	6,250	337,190
6,230	234,830	6,260	395,760

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156740	158220	162150	163100	167420	172730	174150	173480	172850	172300	175700	168740
2	156850	158330	162300	163260	167580	172810	174070	173560	172620	172460	175540	167890
3	157190	158410	162450	163490	167700	172970	174070	173720	172620	172340	175300	167080
4	157570	158480	162610	163570	167810	173050	173990	173800	172620	171710	174630	166150
5	157690	158560	162760	163680	167970	173320	174070	173800	172540	171280	174270	165070
6	157690	158670	162910	163760	168120	173440	174070	173760	172500	171400	174150	163990
7	157690	158790	162950	163870	168360	173480	174230	173720	172300	171400	173840	162910
8	157720	158860	162950	164260	168470	173480	174390	173560	172100	171480	173250	162490
9	157720	158940	162950	164300	168590	173600	174470	173400	171910	171870	172770	162220
10	157760	159020	163070	164410	168670	173640	174510	173320	171830	171950	172030	161570
11	157760	159090	163030	164570	168820	173680	174430	173250	171750	171950	172420	161000
12	157800	159240	163100	164720	168980	173680	174270	173170	171630	171790	172970	160080
13	157800	159400	163030	164910	169170	173840	174030	173130	171670	172220	172690	159400
14	157840	159550	163030	165030	169440	173880	173840	173050	171560	174110	172180	158860
15	157840	159550	163070	165180	169600	173880	173720	172930	171440	175700	172030	159020
16	157880	159700	163070	165340	169680	173880	173600	172580	172730	175740	172030	159020
17	157910	159850	163100	165410	169870	173840	173480	171590	174070	175660	172030	158980
18	157910	159930	163100	165640	170070	173840	173520	170850	173840	175460	172070	158710
19	157880	160080	163030	165760	170380	173840	173520	171440	173560	175460	171710	158600
20	157840	160310	162950	165840	170770	173840	173320	172140	173960	175220	171320	158480
21	157880	160540	162870	165990	170970	173840	173090	172770	173720	175020	171160	158450
22	157910	160690	162840	166190	171160	173840	172890	172420	173320	174900	171050	158180
23	157910	160880	162800	166340	171320	173840	172850	172260	173250	174870	170850	157880
24	157910	161040	162800	166420	171560	173880	173010	171870	173210	175140	170500	157570
25	157950	161150	162800	166490	171790	173920	173280	172420	173170	174980	171120	157460
26	157950	161300	162760	166650	172070	173920	173360	172850	173010	174830	171990	157270
27	157950	161460	162720	166800	172340	174030	173440	173280	173250	174590	171990	156930
28	158030	161530	162640	166800	172580	174110	173480	173920	172850	175300	171520	156660
29	158030	161720	162680	167000	---	174230	173320	173880	172420	176090	171010	156660
30	158100	161920	162870	167080	---	174270	173400	173720	172260	175980	170460	156660
31	158180	---	163030	167230	---	174230	---	173280	---	175860	169600	---
MAX	158180	161920	163100	167230	172580	174270	174510	173920	174070	176090	175700	168740
MIN	156740	158220	162150	163100	167420	172730	172850	170850	171440	171280	169600	156660
(†)	6218.50	6218.01	6218.73	6219.58	6220.79	6218.81	6220.64	6217.40	6216.60	6213.94	6211.35	6211.20
(††)	+1590	+3740	+1110	+4200	+5350	+1650	-830	-120	-1020	+3600	-6260	-12940
CAL YR 1989	MAX 198830	MIN 154140	(††) -23080									
WTR YR 1990	MAX 176090	MIN 156660	(††) +70									

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

RIO GRANDE BASIN

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.--Records good. Flow controlled by El Vado Reservoir (station 08285000) 46.4 mi upstream and Abiquiu Reservoir (station 08286900) 0.8 mi upstream since February 1963. 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 satellite 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. 20 years (water years 1971-90), 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. 7, 1966, Jan. 28, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,170 ft³/s, June 30; minimum daily, 29 ft³/s, Oct. 1-3.

REVISIONS.--Revised monthly and yearly totals of discharge for the water year 1989, superseding those published in the report for 1989 are given below.

	TOTAL		MEAN		AC-FT	
October 1988	3,120		101		6,190	
November 1988	3,921		131		277,780	
December 1988	1,809		58.4		3,590	
Wtr Yr 1989	158,096		433		313,600	
Cal Yr 1988	125,286		342		248,500	

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	63	33	55	52	94	160	197	752	1020	434	739
2	29	59	33	55	52	105	165	230	477	822	390	739
3	29	59	33	55	51	117	146	244	322	854	407	739
4	41	59	34	56	50	149	133	268	268	1130	481	813
5	150	60	34	57	51	113	116	253	246	1050	475	876
6	225	60	71	59	51	102	113	262	217	634	462	876
7	185	60	110	57	51	107	106	236	318	422	458	995
8	189	60	110	58	51	101	104	236	374	421	437	1130
9	185	60	110	54	50	108	100	231	447	456	437	1150
10	150	61	110	55	51	101	130	206	437	398	535	1020
11	80	61	110	55	52	103	216	204	439	366	575	744
12	98	62	110	55	51	101	256	203	433	333	576	749
13	98	52	108	56	52	78	304	201	423	204	568	902
14	63	44	121	55	52	60	306	208	405	202	477	981
15	63	45	133	55	51	87	308	244	268	200	316	981
16	62	45	133	55	51	102	303	686	202	200	225	904
17	64	39	133	54	52	103	284	1070	210	200	218	555
18	66	32	133	54	50	107	236	864	345	200	312	480
19	67	32	134	53	50	107	245	695	445	187	394	450
20	86	32	139	53	53	110	306	715	428	193	394	450
21	104	33	142	52	57	104	324	738	440	194	304	444
22	105	33	139	52	57	95	326	732	479	195	292	440
23	108	33	139	52	56	94	230	588	475	188	327	440
24	104	33	139	52	51	95	213	557	478	281	371	428
25	67	33	136	51	52	92	288	743	474	346	401	331
26	63	32	153	50	52	89	288	981	645	346	404	353
27	61	33	162	50	51	91	236	979	498	393	463	350
28	61	34	158	50	60	73	254	751	951	455	518	339
29	62	33	97	51	---	105	247	589	1050	455	544	229
30	61	33	55	52	---	134	192	636	1170	455	619	130
31	59	---	55	52	---	164	---	795	---	450	787	---
TOTAL	2814	1375	3307	1670	1460	3191	6635	15542	14116	13250	13601	19757
MEAN	90.8	45.8	107	53.9	52.1	103	221	501	471	427	439	659
MAX	225	63	162	59	60	164	326	1070	1170	1130	787	1150
MIN	29	32	33	50	50	60	100	197	202	187	218	130
AC-FT	5580	2730	6560	3310	2900	6330	13160	30830	28000	26280	26980	39190

CAL YR 1989	TOTAL	156742	MEAN	429	MAX	1970	MIN	28	AC-FT	310900
WTR YR 1990	TOTAL	96718	MEAN	265	MAX	1170	MIN	29	AC-FT	191800

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 554, 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.--Records good. Diversions upstream from station for irrigation of about 3,500 acres (1962 determination). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--58 years, 68.8 ft³/s, 49,850 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
AUG. 5	1700	*575	*4.96				

Minimum discharge, 4.6 ft³/s, Aug. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	13	15	17	13	17	22	120	22	6.4	5.5	5.9
2	6.5	13	14	18	13	16	21	118	20	6.3	5.7	5.7
3	6.5	11	14	18	13	17	22	127	19	6.1	5.8	5.7
4	7.8	11	14	18	13	17	22	154	15	6.1	5.5	5.7
5	55	12	15	20	13	18	22	122	13	6.4	62	5.5
6	16	13	15	17	13	18	22	163	11	6.0	18	5.4
7	15	13	15	17	12	18	22	277	8.7	5.8	9.3	5.5
8	13	13	14	16	12	17	22	327	8.5	5.8	9.5	5.9
9	13	12	14	16	12	18	22	282	8.2	6.0	9.0	5.8
10	12	13	15	16	13	19	22	210	8.9	5.9	8.8	6.0
11	12	13	14	16	13	19	23	241	17	5.9	8.5	5.9
12	11	13	14	16	13	19	26	158	16	5.7	8.1	6.2
13	12	14	14	16	14	18	27	165	12	5.9	7.6	6.1
14	12	14	15	16	15	17	44	164	9.8	6.1	7.4	6.3
15	12	14	15	15	13	18	152	152	9.6	7.3	7.3	6.3
16	12	13	15	15	13	18	181	127	11	8.5	7.4	6.6
17	12	13	15	15	13	18	209	107	9.9	7.7	7.9	6.7
18	12	13	15	15	14	19	138	97	8.6	7.1	9.5	7.0
19	12	13	15	15	14	18	140	97	8.6	6.9	7.5	7.2
20	12	15	15	15	14	20	150	68	8.0	7.5	7.5	7.6
21	12	15	15	15	14	20	171	61	7.4	7.7	7.3	7.5
22	11	15	15	15	15	21	259	61	6.9	13	7.7	7.8
23	12	14	16	14	15	22	328	54	7.1	15	7.5	7.9
24	12	13	16	14	15	21	237	51	6.8	13	7.2	8.3
25	12	14	16	14	16	23	175	53	6.7	9.9	6.8	8.3
26	12	14	16	14	16	23	133	39	6.6	8.0	6.5	8.7
27	12	14	16	13	16	24	145	28	6.7	7.8	6.6	8.9
28	12	13	17	13	17	25	143	27	6.5	7.8	6.4	9.5
29	12	13	17	13	---	25	241	29	6.5	7.6	6.3	11
30	12	14	18	13	---	24	152	30	6.7	7.4	6.1	13
31	13	---	17	13	---	22	---	26	---	6.6	6.1	---
TOTAL	402.3	398	471	478	387	609	3293	3735	312.7	233.2	292.3	213.9
MEAN	13.0	13.3	15.2	15.4	13.8	19.6	110	120	10.4	7.52	9.43	7.13
MAX	55	15	18	20	17	25	328	327	22	15	62	13
MIN	6.5	11	14	13	12	16	21	26	6.5	5.7	5.5	5.4
AC-FT	798	789	934	948	768	1210	6530	7410	620	463	580	424

CAL YR 1989 TOTAL 18844.4 MEAN 51.6 MAX 614 MIN 4.7 AC-FT 37380
WTR YR 1990 TOTAL 10825.4 MEAN 29.7 MAX 328 MIN 5.4 AC-FT 21470

RIO GRANDE BASIN

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.

WATER-DISCHARGE RECORDS

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. 1, 1963, at site 200 ft downstream, present datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. 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) 74.9 mi upstream since January 1935 and Abiquiu Reservoir (station 08286900), 29.3 mi upstream since February 1963. 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 and U.S. Army Corps of Engineers 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. 20 years (water years 1971-90), 565 ft³/s, 409,300 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, 2,470 ft³/s, Aug. 5, gage height, 5.69 ft; minimum discharge, 22 ft³/s, Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	75	64	86	93	115	201	320	598	969	466	669
2	40	78	62	93	92	142	198	400	432	821	425	663
3	37	78	60	86	85	141	202	352	289	741	355	624
4	67	73	59	83	84	143	166	428	196	935	451	620
5	138	71	57	e85	88	178	152	428	166	1050	689	673
6	266	68	57	e86	87	159	140	419	118	790	561	687
7	180	65	97	e86	84	150	134	495	169	407	512	705
8	148	68	119	e88	83	148	137	476	176	387	502	918
9	128	70	119	e89	80	148	135	496	278	413	442	876
10	116	70	120	e90	82	150	128	373	319	350	493	847
11	96	70	122	e93	85	150	200	392	319	297	559	659
12	68	73	123	e93	85	149	250	309	326	381	542	637
13	77	79	128	e93	88	152	331	299	320	177	534	663
14	82	65	134	e92	90	121	356	296	315	286	536	719
15	78	50	139	e92	90	119	422	292	269	182	392	751
16	69	58	139	94	74	141	475	438	158	162	280	878
17	68	59	141	92	94	150	507	954	152	161	253	679
18	74	55	141	92	97	153	432	852	148	148	240	558
19	66	51	142	91	90	152	382	627	326	149	344	489
20	69	50	141	93	98	152	448	608	324	189	365	552
21	95	51	141	90	94	155	529	587	315	152	355	459
22	101	49	177	89	91	144	587	616	344	140	223	431
23	102	49	151	99	92	144	662	489	361	200	304	427
24	105	47	149	92	94	146	410	495	355	234	317	420
25	96	46	141	86	95	147	518	494	350	335	353	350
26	79	48	144	94	95	149	552	712	361	318	362	336
27	78	49	169	97	98	153	457	715	526	314	384	336
28	75	47	165	77	106	154	476	666	590	377	455	352
29	75	48	161	90	---	149	662	501	784	407	480	579
30	74	59	102	87	---	169	495	478	1050	408	500	205
31	76	---	85	98	---	199	---	558	---	415	700	---
TOTAL	2865	1819	3749	2796	2514	4622	10744	15565	10434	12295	13374	17762
MEAN	92.4	60.6	121	90.2	89.8	149	358	502	348	397	431	592
MAX	266	79	177	99	106	199	662	954	1050	1050	700	918
MIN	37	46	57	77	74	115	128	292	118	140	223	205
AC-FT	5680	3610	7440	5550	4990	9170	21310	30870	20700	24390	26530	35230

CAL YR 1989 TOTAL 176266 MEAN 483 MAX 2450 MIN 35 AC-FT 349600
WTR YR 1990 TOTAL 98539 MEAN 270 MAX 1050 MIN 37 AC-FT 195500

e Estimated

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	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)
JAN 30...	1100	31	500	8.0	3.5	0.0	14.5	210	39	60	14	45
MAR 01...	1015	115	540	8.2	5.0	5.0	14.8	180	34	54	12	39
MAY 23...	1430	489	405	8.0	22.0	17.5	8.8	170	56	52	10	22
AUG 21...	1100	360	350	8.0	23.5	18.0	8.7	170	78	51	9.8	20

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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 CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)
JAN 30...	1	3.0	206	0	169	166	110	18	0.40	19	371	80
MAR 01...	1	2.8	183	0	150	151	97	15	0.30	18	328	70
MAY 23...	0.7	2.4	140	0	115	105	94	6.8	0.30	14	270	30
AUG 21...	0.7	2.1	109	0	89	109	110	5.5	0.20	15	267	30

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	SEDI- MENT, SUS- PENDE (T/DAY) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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)	DDE, TOTAL (UG/L) (39365)
JAN 30...	12	80	6.7	80	K35	42	--	--	--	--	--
MAR 01...	27	243	75	39	K37	42	<0.1	<0.010	<0.1	<0.010	<0.010
MAY 23...	20	24	32	25	<43	120	--	--	--	--	--
AUG 21...	3	376	365	30	300	320	<0.1	<0.010	<0.1	<0.010	<0.010

DATE	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)
JAN 30...	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	<0.010	--	<0.010	<0.010	<0.010	--	<0.010	<0.010	<0.010	--	<0.01
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)
JAN 30...	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	--	--	--	<1	--	--	--	--	<0.1	<0.10	<0.01
MAY 23...	--	--	--	--	--	<0.01	<0.01	<0.01	--	--	--
AUG 21...	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<0.1	<0.10	<0.01

RIO GRANDE BASIN

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 503, 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.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years, 30.9 ft³/s, 22,390 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 05	0100	148	2.82	July 18	2115	220	2.87
Feb. 26	1145	145	2.66	July 19	1900	*590	*3.74
Apr. 08	1715	233	2.91	Sept. 28	2330	138	2.57
May 15	2345	145	2.68				

Minimum discharge, 3.2 ft³/s, Nov. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	12	e11	e8.6	e9.6	10	35	60	72	22	15	17
2	5.6	12	e11	e8.4	e10	10	35	61	64	19	14	16
3	6.2	12	e11	e8.9	e10	10	38	60	63	22	13	16
4	50	12	e11	e8.5	e11	11	37	57	69	24	21	15
5	84	12	e11	e8.0	e11	11	38	54	85	31	18	17
6	69	11	e11	e7.9	8.9	12	38	51	88	23	21	20
7	36	11	e11	e8.2	8.9	11	39	63	86	20	21	27
8	27	11	e9.6	e8.6	9.0	11	179	79	81	24	19	28
9	23	11	e9.8	e9.0	8.6	13	166	94	80	30	16	22
10	21	12	e10	e9.4	8.2	16	122	87	89	24	16	18
11	19	12	e10	e9.8	8.2	19	113	89	92	31	14	17
12	18	12	e9.0	e10	8.5	18	102	90	84	26	12	17
13	17	12	e8.3	e11	9.0	17	93	97	73	22	14	15
14	16	12	e8.8	e11	8.9	15	85	107	66	26	16	14
15	15	7.8	e9.4	e11	7.9	15	100	121	62	20	23	12
16	15	9.3	e9.8	e10	e8.1	14	107	124	53	22	20	16
17	16	14	e8.8	e10	e8.1	14	117	88	51	20	21	25
18	15	13	e9.8	e9.6	e8.2	13	97	58	45	26	24	20
19	14	13	e9.9	e8.7	e8.5	13	84	60	44	40	18	24
20	14	13	e11	e7.8	8.9	15	77	58	40	33	28	22
21	14	12	e10	e8.2	9.2	17	81	56	37	25	33	23
22	14	12	e8.9	e8.6	9.5	22	112	61	36	24	29	24
23	13	10	e8.0	e8.9	10	26	131	69	31	20	28	29
24	13	11	e8.7	e9.0	10	26	110	88	27	23	26	23
25	13	12	e9.5	e8.9	10	32	92	89	24	20	23	22
26	13	11	e9.1	e8.5	26	34	70	84	26	19	18	21
27	13	8.2	e8.4	e8.0	11	36	61	80	23	16	18	20
28	13	8.2	e9.2	e8.4	10	31	57	84	26	14	17	25
29	12	12	e9.9	e9.0	---	31	64	97	21	15	20	52
30	12	13	e9.8	e9.2	---	30	64	84	24	19	18	29
31	12	---	e9.2	e9.5	---	29	---	77	---	18	17	---
TOTAL	627.7	343.5	301.9	280.6	275.2	582	2544	2427	1662	718	611	646
MEAN	20.2	11.4	9.74	9.05	9.83	18.8	84.8	78.3	55.4	23.2	19.7	21.5
MAX	84	14	11	11	26	36	179	124	92	40	33	52
MIN	4.9	7.8	8.0	7.8	7.9	10	35	51	21	14	12	12
AC-FT	1250	681	599	557	546	1150 /	5050	4810	3300	1420	1210	1280

CAL YR 1989 TOTAL 8528.5 MEAN 23.4 MAX 90 MIN 4.9 AC-FT 16920
WTR YR 1990 TOTAL 11018.9 MEAN 30.2 MAX 179 MIN 4.9 AC-FT 21860

e Estimated

08291600 RIO GRANDE AT SANTA CLARA. NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°03'41", long 106°04'34", Rio Arriba County, Hydrologic Unit 13020101, in Santa Clara Indian Reservation, at Santa Clara Pueblo, 1.0 mi south of Espanola.

PERIOD OF RECORD.--Water years 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED AS CA (MG/L) (00915)
NOV 22...	0945	400	--	401	8.2	11.0	5.0	11.2	150	12	45
MAR 01...	1130	720	295	--	7.8	7.0	5.5	11.8	120	3	35
MAY 23...	1000	1200	340	--	8.0	17.5	15.0	8.8	140	35	43
AUG 21...	1430	900	340	--	8.0	30.0	21.0	7.9	130	11	40

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 WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	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 22...	8.4	27	1	3.3	165	0	135	138	51	8.5	0.60
MAR 01...	6.9	24	1	3.0	138	0	113	112	42	--	0.50
MAY 23...	7.8	19	0.7	2.4	127	0	104	106	60	6.5	0.30
AUG 21...	7.1	19	0.7	2.6	144	0	118	111	58	6.9	0.44

DATE	SILICA, DIS- SOLVED (MG/L STO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, 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)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
NOV 22...	22	247	2	1	50	<1	<1.0	1	1	3	1
MAR 01...	24	--	--	--	40	--	--	--	--	--	--
MAY 23...	17	219	--	--	30	--	--	--	--	--	--
AUG 21...	19	224	--	--	30	--	--	--	--	--	--

[illegible]

RIO GRANDE BASIN

08291600 RIO GRANDE AT SANTA CLARA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI 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)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- AZINON, TOTAL (UG/L) (39570)
NOV 22...	61	K19	31	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01
MAR 01...	83	K30	26	--	--	--	--	--	--	--
MAY 23...	99	K110	41	--	--	--	--	--	--	--
AUG 21...	85	1700	490	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	0.01

DATE	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)	METHYL PARA- THION, TOTAL (UG/L) (39600)
NOV 22...	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01
MAR 01...	--	--	--	--	--	--	--	--	--	--
MAY 23...	--	--	--	--	--	--	--	--	--	--
AUG 21...	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01

DATE	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...	<0.01	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01
MAR 01...	--	--	--	--	--	--	--	--	--	--
MAY 23...	--	--	--	--	<0.01	<0.01	<0.01	--	--	--
AUG 21...	<0.01	<0.01	<1	<0.01	<0.01	<0.01	<0.01	<0.1	<0.10	<0.01

RIO GRANDE BASIN

08292000 SANTA CLARA CREEK NEAR ESPANOLA, NM

LOCATION.--Lat 35°58'40", long 106°10'20", in SW¼SW¼ sec.11, T.20 N., R.7 E., Rio Arriba County, Hydrologic Unit 13020101, in 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, October 1950 to September 1961 (annual maximum only), April 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.--Records poor. Several observations of water temperature were made during year. Two small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--12 years (1937-1941, 1950, 1985-1990) 4.49 ft³/s, 3,250 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 measurement, gage height, 5.65 ft; no flow Aug. 8-13, 1984, and Mar. 9, 1990, both times 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)
July 09	1645	*108	*3.10	July 30	1615	24	2.27
July 22	1600	19	2.19				

No flow part of Mar. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	.99	3.0	e3.8	e3.4	4.2	3.7	4.3	1.2	1.6	3.2	2.7
2	3.3	.95	3.9	e3.9	e3.5	3.9	3.2	4.5	1.6	1.6	3.2	2.6
3	3.4	1.0	e4.2	e3.9	e3.5	3.9	3.0	4.7	1.8	2.4	3.3	2.6
4	3.6	1.0	e4.0	e3.8	e3.5	3.9	3.9	4.9	1.3	2.0	3.1	2.5
5	5.3	1.1	4.1	e3.8	e3.5	2.3	3.7	5.9	1.5	2.2	3.6	3.2
6	6.4	1.1	4.7	e3.5	e3.5	.30	1.4	6.0	1.2	2.0	3.4	3.1
7	2.5	.76	3.1	e3.3	e3.6	e.20	1.2	5.3	1.5	2.1	3.6	2.8
8	1.6	.35	4.8	e3.4	e3.9	1.4	1.3	5.1	1.6	2.4	3.3	3.3
9	1.6	.23	4.5	e3.5	e3.9	e.10	.50	4.5	1.7	9.0	3.0	2.8
10	1.4	.09	4.4	e3.5	e4.0	1.1	.94	4.0	1.8	4.5	2.9	2.6
11	1.3	.02	e3.9	e3.8	4.1	2.8	3.1	6.4	1.4	3.4	2.9	2.6
12	1.8	.00	e3.6	e4.0	4.3	2.1	4.1	5.5	1.2	2.8	3.0	2.4
13	2.3	.00	e3.4	e4.3	4.5	2.1	4.1	3.4	1.3	3.5	3.0	2.5
14	2.3	.09	e3.2	e4.2	4.9	3.1	4.0	4.8	1.5	2.5	3.2	2.5
15	2.2	.33	e3.1	4.0	5.2	3.2	4.0	3.3	2.1	3.1	4.6	2.5
16	2.2	.77	e3.5	3.9	5.6	2.7	3.9	4.3	1.9	3.0	4.7	3.0
17	2.2	.52	e3.9	3.7	5.2	2.5	4.0	5.2	1.7	3.1	3.4	4.0
18	2.1	.89	e4.2	e3.7	5.9	.95	4.6	3.2	.91	3.0	3.2	3.0
19	2.1	.73	e4.2	e3.6	5.9	1.2	4.3	4.6	1.4	3.0	3.2	2.8
20	2.0	.93	e4.0	e3.6	4.9	.87	4.0	3.7	1.8	4.5	3.1	2.2
21	1.9	.62	e3.9	e3.5	5.0	.87	4.3	3.1	1.8	3.7	3.2	2.1
22	1.8	.66	e3.8	e3.5	5.0	.91	4.3	3.4	1.9	4.3	3.0	2.1
23	1.8	1.2	e3.8	e3.5	4.7	.84	4.1	4.3	1.5	3.6	3.0	2.3
24	1.7	1.2	e3.8	e3.5	4.4	.53	4.6	3.6	1.5	3.6	2.9	2.2
25	1.7	.88	e3.9	e3.6	4.3	.26	4.5	2.8	1.7	3.6	2.8	2.2
26	1.6	.83	e3.9	e3.6	4.2	.51	4.5	2.3	1.8	3.6	2.8	2.2
27	1.6	.84	e3.9	e3.5	4.3	.76	4.4	1.6	1.7	3.4	2.7	2.2
28	1.6	.65	e3.9	e3.5	4.3	.99	4.1	1.6	1.8	3.3	3.0	2.5
29	1.6	.78	e3.9	e3.4	---	1.5	4.4	1.6	1.7	3.3	2.7	4.3
30	1.3	1.6	e3.8	e3.4	---	3.8	4.3	1.5	1.7	4.4	2.6	2.9
31	1.0	---	e3.8	e3.4	---	3.7	---	1.5	---	3.5	2.7	---
TOTAL	70.5	21.11	120.1	113.6	123.0	57.49	106.44	120.9	47.51	102.0	98.3	80.7
MEAN	2.27	.70	3.87	3.66	4.39	1.85	3.55	3.90	1.58	3.29	3.17	2.69
MAX	6.4	1.6	4.8	4.3	5.9	4.2	4.6	6.4	2.1	9.0	4.7	4.3
MIN	1.0	.00	3.0	3.3	3.4	.10	.50	1.5	.91	1.6	2.6	2.1
AC-FT	140	42	238	225	244	114	211	240	94	202	195	160

CAL YR 1989 TOTAL 1070.51 MEAN 2.93 MAX 10 MIN .00 AC-FT 2120
WTR YR 1990 TOTAL 1061.65 MEAN 2.91 MAX 9.0 MIN .00 AC-FT 2110

e Estimated

RIO GRANDE BASIN

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, on Nambé Indian Reservation, 300 ft upstream from Nambé Falls, 2.6 mi. upstream from Rio En Medio, 4.4 mi southeast of Nambé Pueblo, and 5.4 mi southeast of Nambé.

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, 6,826.69 ft; minimum, 925 acre-ft, Nov. 13, elevation 6,802.70 ft.

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

(Based on survey by Bureau of Reclamation in 1976)

6,801	870	6,820	1,660
6,810	1,201	6,825	1,930
6,815	1,420	6,830	2,230

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	995	984	1100	1240	1370	1620	1940	2030	1660	1500	1160
2	1040	984	988	1100	1240	1370	1640	1950	2030	1650	1500	1140
3	1050	973	993	1110	1250	1380	1650	1940	2030	1640	1500	1110
4	1080	962	997	1110	1250	1390	1650	1940	2030	1630	1490	1090
5	1120	953	1000	1120	1260	1390	1670	1930	2030	1630	1480	1080
6	1150	950	1010	1120	1260	1400	1680	1920	2030	1600	1470	1070
7	1160	953	1010	1130	1270	1400	1700	1920	2030	1570	1460	1060
8	1180	956	1020	1130	1270	1410	1720	1920	2030	1550	1450	1050
9	1190	953	1020	1140	1270	1420	1750	1920	2030	1540	1440	1040
10	1190	946	1020	1140	1280	1430	1780	1910	2030	1510	1410	1020
11	1180	937	1030	1140	1280	1430	1800	1900	2030	1490	1360	1010
12	1180	930	1030	1150	1290	1440	1830	1900	2030	1470	1320	992
13	1170	925	1040	1150	1290	1440	1860	1900	2030	1460	1280	978
14	1160	927	1040	1160	1300	1450	1880	1890	2030	1450	1250	967
15	1150	929	1050	1160	1300	1460	1920	1900	2030	1430	1240	961
16	1140	930	1050	1170	1310	1460	1950	1900	2030	1420	1220	965
17	1130	932	1060	1170	1310	1470	1990	1900	2020	1410	1210	989
18	1120	934	1060	1180	1310	1470	2010	1890	2020	1410	1210	997
19	1120	936	1070	1180	1320	1480	2010	1880	2020	1410	1210	978
20	1110	941	1070	1180	1330	1490	2000	1870	2020	1410	1220	1030
21	1100	946	1070	1190	1330	1490	1990	1870	2020	1420	1230	1050
22	1090	951	1070	1190	1330	1500	1990	1880	2000	1420	1240	1070
23	1080	957	1080	1200	1340	1510	1990	1910	1960	1430	1240	1090
24	1080	962	1070	1200	1340	1520	1990	1940	1920	1430	1250	1110
25	1070	967	1070	1210	1350	1530	1990	1970	1880	1450	1250	1130
26	1060	972	1070	1210	1350	1540	1980	2000	1840	1450	1250	1140
27	1050	974	1080	1220	1360	1560	1970	2020	1780	1460	1250	1160
28	1040	974	1080	1220	1370	1570	1960	2020	1720	1470	1240	1190
29	1030	975	1080	1230	---	1590	1950	2030	1680	1470	1240	1230
30	1020	978	1090	1230	---	1600	1950	2030	1670	1480	1220	1260
31	1010	---	1090	1230	---	1610	---	2030	---	1490	1190	---
MAX	1190	995	1090	1230	1370	1610	2010	2030	2030	1660	1500	1260
MIN	1010	925	984	1100	1240	1370	1620	1870	1670	1410	1190	961
(†)	6805.02	6804.23	6807.34	6810.78	6813.75	6818.98	6825.25	6826.69	6820.19	6816.52	6809.69	6811.35
(††)	-30	-32	+112	+140	+140	+240	+340	+80	-360	-180	-300	+70

CAL YR 1989 MAX 2020 MIN 884 (††) -750
WTR YR 1990 MAX 2030 MIN 925 (††) +220

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

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM

(National stream-quality accounting network, surveillance network, and radiochemical network station)

LOCATION.--Lat 35°52'29", long 106°08'30", in SW/4 sec.18, T.19 N., R.8 E., Santa Fe County, Hydrologic Unit 13020101, on San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft downstream from bridge on State Highway 502, 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.--Water-discharge 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 and U.S. Army Corps of Engineers satellite 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 11	1200	*4,260	*6.02				
Minimum discharge, 273 ft ³ /s, Oct. 1, 3.							

REVISIONS.--Revised monthly and yearly totals of discharge for the water year 1989, superseding those published in the report for 1989 are given below.

	TOTAL	MEAN	AC-FT
October 1988	16,173	522	32,080
November 1988	24,315	810	48,230
December 1989	23,312	752	46,240
Wtr Yr 1989	424,695	1,164	842,400
Cal Yr 1988	371,298	1,014	736,500

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	525	426	510	589	729	835	992	1570	1490	1050	1080
2	325	497	447	510	593	775	817	1000	1450	1180	1070	1010
3	305	484	443	559	585	811	808	1160	1090	1220	860	969
4	449	517	420	541	568	855	752	1290	937	e1400	871	921
5	946	530	431	532	579	913	723	1440	855	e1600	947	1180
6	1120	534	454	501	588	944	735	1810	791	1320	1380	1250
7	826	525	504	550	596	907	735	2020	790	887	1080	1180
8	701	520	553	602	590	910	799	2100	963	812	1010	1640
9	657	516	550	622	596	907	898	2440	1210	1010	871	1700
10	636	512	548	593	588	908	913	2720	1190	1050	875	1740
11	610	503	586	539	596	902	910	2980	1280	1190	959	1200
12	554	515	559	523	614	886	961	2420	1300	1130	943	998
13	514	506	476	522	631	894	1050	1730	1320	870	925	1020
14	516	494	550	532	652	851	1070	1510	1370	962	941	1270
15	497	478	585	536	662	795	1100	1290	1490	939	842	1260
16	491	471	622	541	550	817	1150	1220	1200	819	770	1570
17	491	465	638	540	560	827	1210	1820	922	736	750	1340
18	508	468	629	551	601	807	1280	1920	740	791	750	860
19	514	441	616	549	635	795	1220	1450	870	1000	894	827
20	516	441	627	564	656	795	1210	1400	891	1230	906	902
21	524	454	643	564	659	818	1190	1330	860	1290	1040	933
22	532	469	638	550	642	836	1270	1350	834	1210	767	804
23	542	463	669	590	641	841	1490	1240	891	1120	912	769
24	546	451	669	575	660	869	1330	1170	898	1060	824	756
25	546	448	658	527	654	947	1360	1280	840	1160	846	690
26	521	443	648	540	653	980	1410	1860	754	1280	836	644
27	522	437	669	583	680	1020	1250	2170	947	1000	816	678
28	525	420	685	536	708	1040	1150	2310	849	969	868	695
29	532	382	674	536	---	1010	1120	1850	1170	992	910	1130
30	505	365	634	550	---	978	1120	1670	1420	1080	894	920
31	525	---	574	589	---	863	---	1530	---	1090	1090	---
TOTAL	17301	14274	17825	17057	17326	27230	31866	52472	31692	33887	28497	31936
MEAN	558	476	575	550	619	878	1062	1693	1056	1093	919	1065
MAX	1120	534	685	622	708	1040	1490	2980	1570	1600	1380	1740
MIN	305	365	420	501	550	729	723	992	740	736	750	644
AC-FT	34320	28310	35360	33830	34370	54010	63210	104100	62860	67210	56520	63350
CAL YR 1989	TOTAL 410295	MEAN 1124	MAX 4070	MIN 298	AC-FT 813800							
WTR YR 1990	TOTAL 321363	MEAN 880	MAX 2980	MIN 305	AC-FT 637400							
e Estimated												

RIO GRANDE BASIN

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 TEMPERATURE: October 1948 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1947 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,310 microsiemens, Aug. 5, 1963; minimum daily, 88 microsiemens, May 12, 1984.

WATER TEMPERATURE: Maximum, 31.0°C, Aug. 4, 5, 1954; minimum, 0.0°C on many days during winter periods each year.

SEDIMENT CONCENTRATION: Maximum daily mean, 43,500 mg/L, Aug. 21, 1955; minimum daily mean, 11 mg/L, July 27, 1963 and Feb. 7, 1974.

SEDIMENT LOAD: Maximum daily, 366,000 tons, Aug. 23, 1961; minimum daily, 3 tons, July 27, 1963.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 609 microsiemens, Oct. 1, minimum daily, 191 microsiemens, May 10.

WATER TEMPERATURE: Maximum daily, 28.0°C, June 23; minimum daily, 0.0°C, Jan. 5, 6.

SEDIMENT CONCENTRATION: Maximum daily mean, 38,900 mg/L, May 26; minimum daily mean, 46 mg/L, Nov. 26.

SEDIMENT LOAD: Maximum daily, 195,000 tons, May 26; minimum daily, 55 tons, Nov. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT 31...	1200	505	400	8.3	13.5	5.0	0.20	12.5	150	44
JAN 23...	1130	592	335	8.2	2.0	2.5	10	12.0	130	38
MAR 14...	1200	866	318	8.3	10.0	7.0	28	11.2	120	36
MAY 30...	1030	1720	265	8.0	19.5	9.0	25	9.8	110	34
JUL 19...	1345	930	290	8.1	29.0	24.0	250	7.3	130	44
AUG 22...	1200	740	330	8.1	21.0	20.0	96	8.0	130	41

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 WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 31...	8.5	28	1	3.2	173	0	142	141	52
JAN 23...	7.7	28	1	3.3	156	0	128	125	46
MAR 14...	6.7	22	0.9	2.9	134	0	110	111	41
MAY 30...	6.0	14	0.6	2.0	104	0	85	88	43
JUL 19...	5.9	22	0.8	3.9	126	0	103	116	42
AUG 22...	7.3	20	0.8	2.8	124	0	102	110	54

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, 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)
OCT 31...	8.1	0.50	22	247	252	<0.010	<0.100	0.040	<0.010
JAN 23...	8.2	0.50	27	241	237	<0.010	0.220	0.030	<0.010
MAR 14...	9.6	0.40	23	221	208	<0.010	0.160	0.020	<0.010
MAY 30...	5.4	0.20	16	177	173	<0.010	0.100	0.040	0.050
JUL 19...	4.5	0.40	36	303	225	<0.010	<0.100	0.150	<0.010
AUG 22...	6.6	0.60	19	214	213	<0.010	0.100	0.060	<0.010

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	CYANIDE TOTAL (MG/L AS CN) (00720)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI 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)
OCT 31...	0.86	0.060	0.010	<0.010	K55	25	--	16	23
JAN 23...	0.27	0.100	0.040	--	K14	K21	50	81	--
MAR 14...	0.58	0.090	0.020	--	K2	K3	40	30	--
MAY 30...	0.26	0.120	0.040	<0.010	K140	K100	20	46	3
JUL 19...	1.7	0.460	0.100	--	150	740	40	1300	78
AUG 22...	0.74	0.220	0.080	<0.010	440	370	--	30	4

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)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
OCT 31...	1200	20	2	71	<0.5	1.0	1	<3	<1	<1	26
MAY 30...	1030	50	1	48	<0.5	<1.0	2	<3	3	<1	13
JUL 19...	1345	1900	2	110	<0.5	<1.0	2	<3	32	2	26
AUG 22...	1200	60	2	85	<0.5	<1.0	<1	<3	5	<1	16

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)	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)
OCT 31...	0.1	<10	1	<1	<1.0	350	<6	<3	<10	<10	200
MAY 30...	<0.1	<10	<1	<1	<1.0	250	<6	<3	--	--	--
JUL 19...	0.4	<10	3	<1	<1.0	440	10	61	--	--	--
AUG 22...	--	<10	<1	<1	<1.0	330	<6	5	--	--	--

DATE	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)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
OCT 31...	2	1	20	<5	2	1000	<10	88	<0.01	5

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT							
31...	1200	505	400	5.0	105	143	67
JAN							
23...	1130	592	335	2.5	1200	1920	19
MAR							
14...	1200	866	318	7.0	281	657	33
MAY							
30...	1030	1720	265	9.0	1150	5340	85
JUL							
19...	1345	930	290	24.0	1980	4970	66
AUG							
22...	1200	740	330	20.0	500	999	53

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	609	392	429	414	344	312	362	299	302	368	369	393
2	480	390	414	408	341	326	346	292	301	358	378	392
3	467	395	418	402	352	317	350	299	314	359	367	399
4	447	395	434	402	341	301	356	314	315	362	375	405
5	380	389	432	412	342	304	360	322	300	356	---	408
6	383	390	426	432	333	296	352	320	313	352	396	400
7	393	394	388	437	331	301	351	287	311	356	358	401
8	409	401	409	427	336	293	348	239	308	352	374	411
9	436	396	410	415	334	309	341	222	325	337	374	408
10	433	380	416	370	335	319	340	191	291	355	385	399
11	490	373	407	362	335	313	343	218	282	340	383	405
12	505	379	405	364	333	316	340	206	284	315	385	405
13	503	388	399	372	340	318	341	218	290	324	386	401
14	496	392	394	365	372	315	353	244	298	318	388	402
15	499	397	383	358	335	316	355	252	287	335	378	403
16	444	398	373	363	329	325	341	375	274	319	364	397
17	467	407	387	361	338	319	324	337	262	340	382	379
18	471	403	383	358	327	311	314	322	274	318	386	390
19	455	---	429	351	326	318	317	323	300	329	385	389
20	423	---	448	341	329	341	322	322	317	409	372	393
21	433	404	445	341	325	348	323	316	346	315	366	392
22	414	409	451	345	324	345	325	327	336	311	355	391
23	407	405	444	344	324	334	315	329	334	332	---	399
24	395	406	422	350	325	333	304	333	331	343	367	403
25	396	403	424	359	331	317	294	325	344	354	366	402
26	412	403	417	348	330	321	306	316	340	350	363	400
27	399	410	424	368	323	320	325	326	355	366	368	392
28	399	413	422	354	319	304	320	298	340	374	377	394
29	393	419	416	358	---	297	336	258	362	377	374	362
30	397	433	420	347	---	344	326	256	362	383	380	359
31	394	---	421	364	---	338	---	277	---	376	380	---
MEAN	440	399	416	374	334	318	334	289	313	348	375	396
WTR YR 1990		MEAN	361	MAX	609	MIN	191					

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	8.5	5.0	2.0	5.0	10.0	8.5	10.5	14.0	23.5	18.0	24.0
2	19.0	8.5	3.5	2.0	5.0	10.5	11.5	10.0	12.5	24.0	19.0	19.0
3	19.0	9.0	2.0	3.0	5.0	6.5	14.0	9.0	14.0	23.5	18.0	19.5
4	16.5	5.0	5.5	2.0	4.5	7.5	15.0	10.0	16.0	21.0	19.0	18.0
5	13.5	9.5	6.0	.0	4.0	12.0	14.0	12.5	17.0	20.5	18.5	19.0
6	15.0	10.0	5.0	.0	5.5	8.0	13.5	14.0	18.5	22.5	15.0	18.0
7	12.0	10.0	6.0	1.5	6.0	8.0	10.0	13.0	16.0	23.0	16.0	19.0
8	12.0	9.5	5.0	1.0	4.0	10.5	11.0	14.0	16.0	21.0	19.0	17.0
9	12.0	10.0	4.5	4.0	3.0	8.0	14.0	12.5	19.0	18.0	19.0	17.0
10	17.0	8.0	5.5	4.0	3.5	8.0	16.0	11.0	18.0	19.0	18.0	17.5
11	17.0	9.0	2.5	5.0	4.0	8.5	16.0	12.0	17.5	20.0	19.0	16.5
12	18.0	6.0	2.0	4.0	6.0	10.0	16.0	11.5	17.0	20.0	18.0	18.0
13	17.0	11.0	1.0	3.0	10.0	7.0	15.0	13.0	17.0	19.0	17.0	18.5
14	12.0	10.0	2.0	3.0	7.0	7.5	11.0	12.5	17.0	19.0	19.0	18.0
15	12.0	8.0	3.0	4.0	4.0	8.5	12.0	13.5	17.0	16.0	19.0	16.0
16	15.0	8.0	3.0	5.0	5.0	10.0	17.0	13.5	16.0	19.5	19.0	17.5
17	13.0	8.0	1.0	5.0	2.0	9.0	12.0	12.0	16.0	19.0	19.0	16.5
18	12.0	9.0	4.5	3.5	6.0	7.0	12.0	13.5	17.0	20.0	19.0	16.0
19	13.5	---	4.0	3.0	5.0	7.5	14.0	12.0	19.0	20.0	19.0	16.0
20	8.0	---	3.5	3.0	5.0	13.0	16.5	12.0	16.0	20.0	20.0	16.5
21	8.0	8.0	3.0	3.0	7.0	8.0	12.0	12.5	19.0	20.0	18.5	20.0
22	11.0	10.0	1.0	2.5	6.0	8.5	13.0	15.0	25.0	19.0	19.0	17.5
23	15.0	5.0	1.0	5.0	6.0	9.0	12.0	15.0	28.0	18.0	16.0	17.0
24	15.0	5.5	3.0	3.5	10.0	8.5	12.0	16.0	24.5	19.0	17.0	20.0
25	14.0	6.0	1.0	4.0	7.5	14.0	10.0	13.5	22.5	18.0	17.0	22.0
26	11.0	6.0	3.0	5.0	7.5	9.0	10.5	14.0	25.0	21.0	17.0	22.0
27	12.0	5.5	2.5	2.0	7.0	11.0	11.0	14.0	23.5	20.0	19.0	21.0
28	7.0	4.5	1.0	1.0	8.0	9.0	11.5	15.0	20.0	20.0	19.0	15.0
29	6.5	4.0	2.0	3.5	---	10.0	12.0	16.0	22.5	17.0	19.0	18.0
30	9.5	2.5	3.0	4.5	---	7.0	10.0	12.0	22.0	18.0	19.0	18.5
31	9.0	---	2.0	1.0	---	9.0	---	13.0	---	17.0	19.0	---
MEAN	13.0	7.5	3.0	3.0	5.5	9.0	13.0	15.5	19.0	20.0	18.5	18.5
WTR YR 1990		MEAN	12.0	MAX	28.0	MIN	.0					

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE. NEAR SAN ILDEFONSO. NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1780	1470	125	177	121	139	102	140	147	234	273	537
2	1510	1330	116	156	109	132	94	129	123	197	423	885
3	2040	1680	111	145	90	108	119	180	137	216	1060	2320
4	696	844	153	214	74	84	124	181	121	186	510	1180
5	654	1670	161	230	85	99	133	191	112	175	702	1730
6	136	411	152	219	95	116	138	187	120	191	795	2030
7	142	317	143	203	135	184	182	270	135	217	536	1310
8	123	233	119	167	180	269	101	164	153	244	499	1230
9	358	635	131	183	358	532	228	383	118	190	499	1220
10	355	610	185	256	149	220	275	440	120	191	523	1280
11	424	698	133	181	119	188	237	345	108	174	551	1340
12	343	513	128	178	182	275	193	273	90	149	1160	2770
13	296	411	105	143	273	351	110	155	168	286	450	1090
14	274	382	107	143	273	405	114	164	245	431	270	620
15	237	318	152	196	338	534	127	184	242	433	310	665
16	135	179	80	102	257	432	141	206	160	238	292	644
17	233	309	87	109	240	413	133	194	69	104	248	554
18	230	315	79	100	210	357	99	147	118	191	245	534
19	206	286	66	79	187	311	144	213	160	274	218	468
20	194	270	73	87	226	383	93	142	159	282	171	367
21	245	347	67	82	251	436	91	139	145	258	216	477
22	253	363	110	139	273	470	105	156	153	265	187	422
23	258	378	94	118	311	562	127	202	157	272	230	522
24	195	287	94	114	409	739	140	217	153	273	240	563
25	191	282	70	85	246	437	156	222	150	265	326	834
26	171	241	46	55	171	299	134	195	148	261	380	1010
27	168	237	53	63	171	309	120	189	160	294	431	1190
28	168	238	57	65	172	318	122	177	209	400	465	1310
29	150	215	64	66	198	360	135	195	---	---	384	1050
30	138	188	84	83	204	349	158	235	---	---	361	953
31	125	177	---	---	149	231	172	274	---	---	262	610
TOTAL	---	15834	---	4138	---	10042	---	6489	---	6891	---	31715

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	240	541	316	846	608	2580	439	1770	3230	9160	937	2730
2	185	408	352	950	582	2280	541	1720	6200	17900	844	2300
3	167	364	475	1490	429	1260	243	800	2060	4780	791	2070
4	144	292	475	1650	334	845	196	741	1570	3690	750	1870
5	115	224	1230	4780	264	609	634	2740	8460	21600	978	3120
6	143	284	1180	5770	231	493	599	2130	14500	54000	1440	4860
7	143	284	1630	8890	309	659	623	1490	2220	6470	1370	4360
8	185	399	1550	8790	488	1270	218	478	1320	3600	2160	9560
9	233	565	1930	12700	650	2120	767	2090	1030	2420	1550	7110
10	243	599	2300	16900	423	1360	1830	5190	1060	2500	1450	6810
11	827	2030	2320	18700	1030	3560	1890	6070	1120	2900	1130	3660
12	481	1250	1630	10700	760	2670	921	2810	1020	2600	915	2470
13	355	1010	1070	5000	441	1570	2250	5290	903	2260	1010	2780
14	1070	3090	887	3620	503	1860	1520	3950	954	2420	1100	3770
15	446	1320	667	2320	445	1790	4090	10400	816	1860	1100	3740
16	594	1840	597	1970	200	648	5150	11400	1240	2580	2920	12400
17	752	2460	1510	7420	419	1040	866	1720	1570	3180	5010	18100
18	578	2000	1030	5340	374	747	1080	2310	989	2000	2490	5780
19	491	1620	615	2410	469	1100	1670	4510	1240	2990	2170	4850
20	451	1470	557	2110	240	577	6110	26900	971	2380	2010	4900
21	471	1510	489	1760	362	841	15300	53300	1030	2890	2830	7130
22	472	1620	552	2010	512	1150	7970	26000	882	1830	1290	2800
23	715	2880	408	1370	203	488	6550	19800	651	1600	975	2020
24	584	2100	388	1230	427	1040	2060	5900	625	1390	1070	2180
25	630	2310	510	1760	2880	6530	2080	6510	571	1300	833	1550
26	711	2710	38900	195000	2800	5700	3380	11700	549	1240	670	1160
27	527	1780	26300	154000	259	662	2450	6610	593	1310	809	1480
28	427	1330	2230	13900	668	1530	1140	2980	591	1390	1590	2980
29	378	1140	776	3880	793	2510	2200	5890	767	1880	3790	11600
30	352	1060	893	4030	781	2990	2890	8430	817	1970	3540	8790
31	---	---	662	2730	---	---	2150	6330	1070	3150	---	---
TOTAL	---	40490	---	504026	---	52479	---	247959	---	171240	---	148930
TOTAL LOAD FOR YEAR: 1240233 TONS.												

RIO GRANDE BASIN

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 7,790 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.--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. In 1989, modifications to the dam and spillway increased capacity to 2,813 acre-ft. No dead storage. Water is for municipal use of City of Santa Fe. Equipment out of service during year because of dam construction. Frequent outside staff readings were made for daily contents.

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 YEAR.--Maximum contents observed, 2,100 acre-ft; May 29, gage height, 89.00 ft; minimum, 469 acre-ft, Nov. 13, gage height, 53.10.

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

(Based on survey by Public Service Co. of New Mexico in 1947)

52	441	80	1,550
60	668	90	2,160
70	1,050		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e533	e533	e503	550	e582	e642	e978	e1650	e2080	e1820	e1730	e1860
2	536	e528	e504	e547	583	e648	984	e1650	e2090	1800	1720	e1850
3	e536	e523	e503	e548	e587	e655	993	e1660	e2090	e1780	e1720	e1860
4	e536	e518	503	e549	e590	e657	e1000	1670	2090	e1770	e1720	1850
5	e536	e512	e503	e551	591	e668	e1010	e1680	e2080	1760	e1730	e1820
6	e536	508	e505	e553	e593	e670	1030	e1680	e2070	e1740	1740	e1780
7	e535	502	510	e558	e596	e678	e1050	1680	e2060	e1740	1740	e1750
8	e555	e494	e512	559	e596	e683	e1070	e1680	2060	e1720	e1750	e1720
9	591	e488	e514	e557	600	688	1080	e1660	e2070	1710	e1740	e1700
10	e594	e482	e515	e556	e600	e698	e1110	1650	e2060	e1680	e1740	1670
11	e600	e476	519	e560	e604	e708	e1140	e1680	2060	1690	e1740	1630
12	e603	e474	e518	563	606	722	e1160	e1720	2040	e1680	e1750	e1590
13	e605	469	e518	e562	e609	e723	e1180	1910	e2040	e1660	1760	e1550
14	e605	e472	521	e575	e610	e736	e1220	e1910	e2030	e1660	e1760	e1520
15	e603	e480	e522	578	e610	755	e1240	e1920	e2020	e1670	e1760	e1500
16	600	e489	e523	e583	612	e755	1250	e1940	e2020	1670	e1770	e1460
17	e599	499	e524	e586	e613	e763	e1170	e1950	e2000	e1660	e1780	1450
18	e594	e499	527	e593	e614	e767	e1190	e1970	1990	e1670	e1780	e1440
19	589	e488	e528	597	615	e776	1320	e2000	e1980	e1670	e1780	e1420
20	e587	476	e531	e596	e618	e783	1350	e2030	1980	e1680	1830	1410
21	e583	e474	532	e589	e619	788	e1380	2060	e1970	e1680	e1840	e1410
22	e582	e474	e532	589	e623	801	e1400	e2070	e1950	e1680	e1850	e1410
23	576	e475	e535	e588	623	815	1420	e2070	e1940	1670	e1860	e1410
24	e571	e478	e538	e585	e628	e840	e1430	e2070	e1920	e1670	e1880	1410
25	e567	e482	e539	e582	e630	e850	e1470	2070	1900	e1670	e1900	e1420
26	e561	e487	539	582	633	872	1500	e2080	1890	e1670	e1910	e1430
27	e556	492	e540	e582	634	892	1520	e2080	1870	e1680	1930	e1430
28	e552	e500	541	e582	639	e910	e1540	e2080	e1860	e1700	e1930	e1440
29	e547	503	e542	582	---	929	e1580	2100	e1860	e1720	e1910	e1450
30	547	e504	e546	e582	---	939	1640	e2090	e1820	1740	e1890	e1450
31	e539	---	e545	e582	---	e957	---	e2080	---	e1740	e1870	---
MAX	605	533	546	597	639	957	1640	2100	2090	1820	1930	1860
MIN	533	469	503	547	582	642	978	1650	1820	1660	1720	1410
(†)	---	---	---	---	59.08	---	80.60	---	---	---	---	---
(††)	-51	-35	+41	+37	+57	+318	+683	+440	-260	-80	+130	-420

CAL YR 1989 MAX 1520 MIN 469 (††) -605
WTR YR 1990 MAX 2100 MIN 469 (††) +860

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

e Estimated

RIO GRANDE BASIN

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 7,720 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1312 for history of changes prior to Oct. 1, 1947.

REMARKS.--Records good. Flow regulated by McClure Reservoir (station 08315500), completed in 1926, raised in 1935, 1947 and again in 1989. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--77 years, 8.04 ft³/s, 5,820 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, 32 ft³/s, Sept. 7, gage height, 2.30 ft; minimum daily, 0.39 ft³/s Jan. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	5.2	.43	e.52	.48	.69	.73	.79	20	11	3.1	13
2	3.7	5.1	.42	e.53	.48	.73	.73	.90	20	11	3.2	13
3	5.1	4.9	.51	e.54	.48	.73	.81	.91	20	11	3.2	13
4	5.0	4.9	.48	.54	.48	.83	.76	.87	20	11	3.3	18
5	5.2	4.9	.48	.54	.48	.96	.73	.82	20	11	3.3	22
6	5.2	4.9	.45	.54	.48	.99	.73	.82	20	11	3.3	22
7	5.2	4.9	.45	.54	.48	.82	.75	.82	20	10	3.3	23
8	5.2	4.9	.48	.54	.48	.91	.91	.82	20	10	3.3	22
9	5.2	4.9	.48	.54	.48	.90	.96	.82	20	10	3.3	21
10	4.9	4.9	.48	.54	.48	.91	.99	.82	20	10	3.3	21
11	4.8	4.9	.48	.54	.52	.90	.91	.82	16	10	3.3	21
12	4.6	4.6	e.48	.54	.50	.82	.91	.82	12	10	3.3	21
13	4.6	4.6	e.48	.54	.48	.90	.91	.82	13	10	3.3	21
14	4.6	2.4	e.48	.54	.48	.91	.92	.82	13	10	3.4	20
15	4.6	.55	e.48	.54	.60	.91	.99	.82	12	10	3.4	20
16	4.6	.54	e.49	.54	.60	.87	.99	.82	12	10	3.3	20
17	4.6	.54	e.49	.54	.66	.82	.99	.82	12	10	3.3	20
18	4.6	.54	e.49	.50	.71	.82	1.0	5.9	12	10	3.3	13
19	4.8	.54	e.49	.41	.73	.82	1.1	12	12	10	3.3	4.6
20	4.9	.54	e.49	.42	.73	.90	1.1	12	12	7.0	3.4	4.6
21	4.9	.54	e.50	.40	.75	.84	1.2	13	12	2.9	3.3	4.6
22	4.9	.54	e.50	.39	.82	.82	1.2	16	12	3.0	4.9	4.6
23	4.9	.54	e.50	.42	.78	.82	1.1	19	12	2.9	6.0	4.7
24	4.9	.54	e.50	.42	.73	.82	1.1	19	12	2.9	5.9	4.6
25	4.9	.54	e.50	.46	.75	.81	1.2	19	12	2.9	5.7	4.6
26	4.9	.54	e.50	.48	.71	.73	1.4	19	12	2.9	5.7	4.6
27	4.9	.54	e.50	.48	.67	.81	1.0	19	11	2.9	5.8	4.6
28	4.9	.54	e.51	.48	.68	.82	.73	19	11	3.1	9.7	4.8
29	5.2	.52	e.51	.48	---	.82	.73	19	11	3.1	13	4.7
30	5.2	.48	e.51	.48	---	.78	.73	20	11	3.2	13	4.7
31	5.2	---	e.52	.48	---	.73	---	20	---	3.3	13	---
TOTAL	149.1	74.57	15.06	15.45	16.70	25.94	28.31	246.03	442	236.1	151.9	399.7
MEAN	4.81	2.49	.49	.50	.60	.84	.94	7.94	14.7	7.62	4.90	13.3
MAX	5.2	5.2	.52	.54	.82	.99	1.4	20	20	11	13	23
MIN	2.9	.48	.42	.39	.48	.69	.73	.79	11	2.9	3.1	4.6
AC-FT	296	148	30	31	33	51	56	488	877	468	301	793

CAL YR 1989 TOTAL 1679.23 MEAN 4.60 MAX 9.9 MIN .18 AC-FT 3330
WTR YR 1990 TOTAL 1800.86 MEAN 4.93 MAX 23 MIN .39 AC-FT 3570

e Estimated

RIO GRANDE BASIN

123

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.--Reservoir is formed by earthfill dam. No contents 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. Equipment out of service during year because of dam construction. Frequent outside staff readings were obtained for daily contents.

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, 591 acre-ft, Sept. 30, gage height, minimum, 74 acre-ft, Oct. 1, gage height, unknown.

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

(Based on survey by Public Service Co. of New Mexico in 1943)

133	74	150	279
135	89	160	491
140	139	170	776

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e74	e321	e321	310	e297	e309	e351	e303	e324	e419	443	273
2	77	e326	e321	e307	301	e311	353	e300	e340	419	430	279
3	e82	e332	e321	e306	e302	e310	e354	e293	e360	e416	419	288
4	e91	e336	325	e306	e302	e311	e356	278	393	e416	406	288
5	e100	e343	e323	e306	302	313	e358	e280	e407	e414	395	320
6	e107	348	e319	e306	e302	e314	359	e282	e409	e412	396	333
7	e114	353	317	e305	e302	e315	e360	285	e422	e407	391	359
8	e121	e359	e318	306	e303	e318	e362	e284	437	e406	371	380
9	132	e363	e315	e305	304	318	365	e283	e448	405	355	415
10	e141	e366	e315	e306	e304	e320	e363	283	e478	e416	337	414
11	e150	e368	315	e304	e306	e323	e361	e270	494	428	320	423
12	e157	e370	e314	306	308	325	359	e250	e496	e453	310	438
13	e165	369	e314	e304	e305	e325	e357	e238	e497	e463	311	450
14	e170	e368	312	e304	e305	325	e354	214	e498	474	311	479
15	e179	e365	e312	304	e305	e326	e344	e200	e499	488	308	505
16	187	e364	e312	e299	306	326	342	e195	e500	496	303	523
17	e197	361	e311	e298	e306	e327	e339	e185	e503	514	297	547
18	e206	e359	308	e297	e307	e327	e331	e170	507	521	291	550
19	213	e356	e309	294	308	327	323	e157	e500	529	296	552
20	e224	352	e309	e294	e307	e328	318	e155	e498	537	300	558
21	e232	e349	309	e295	e307	330	397	157	e496	535	285	565
22	e241	e344	e308	292	e308	331	300	e163	e490	539	276	566
23	250	e339	e306	e291	310	331	298	e170	e479	536	275	570
24	e259	e336	e306	e292	e308	e337	303	e198	e468	527	269	577
25	e271	e332	e306	e295	e308	e339	299	202	456	520	264	580
26	e279	e329	306	294	308	342	302	e233	446	513	264	583
27	e285	327	e306	e295	307	342	303	e260	438	504	260	587
28	e294	e325	306	e296	309	e342	287	e274	e440	489	258	590
29	e304	323	e305	298	---	342	292	288	e428	477	266	590
30	308	e321	e305	e297	---	346	300	e305	e430	467	271	591
31	e314	---	e305	e298	---	e348	---	e318	---	457	272	---
MAX	314	370	325	310	310	348	397	318	507	539	443	591
MIN	74	321	305	291	297	309	287	155	324	405	258	273
(†)	---	---	---	---	151.56	---	150.08	---	---	158.56	149.56	---
(††)	+205	+7	-16	-7	+11	+39	-48	+18	+112	+27	-185	+319

CAL YR 1989 MAX 512 MIN 74 (††) + 75

WTR YR 1990 MAX 591 MIN 74 (††) +482

(†) GAGE HEIGHT, IN FEET, AT END OF MONTH

(††) CHANGE IN CONTENTS, IN ACRE-FEET

e Estimated

RIO GRANDE BASIN

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 and concrete control. Elevation of gage is 5,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. 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.--20 years, 9.61 ft³/s, 6,960 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 22	1245	696	3.49	Sept. 28	2045	*1,480	*4.55
Aug. 15	0815	1,330	4.37				

Minimum daily, 2.0 ft³/s, July 8.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

Date	Discharge	Date	Discharge	Date	Discharge
Mar. 28	0	Aug. 6	1.0	Sept. 7	1.0
July 5	2.1	Aug. 16	0	Sept. 18	0

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	9.1	9.2	e8.6	e8.4	8.7	e7.4	e5.0	e4.0	3.4	21	3.3
2	4.8	8.9	9.1	e8.7	e8.2	8.3	e7.3	e4.9	e4.8	2.7	6.2	3.2
3	e4.4	9.4	8.6	e8.9	e8.1	7.7	e7.0	e5.1	e4.2	3.5	6.0	2.9
4	e4.0	10	8.7	e8.9	e8.0	8.7	e6.8	e4.9	e4.0	3.4	5.6	3.1
5	e5.8	11	8.5	e8.7	e8.1	12	e6.3	e5.0	e3.7	3.3	5.7	2.1
6	e4.2	9.8	9.0	e8.7	e8.1	12	e6.0	e4.9	e3.5	3.4	6.0	2.8
7	e5.2	8.5	9.1	e8.9	e8.0	12	e6.4	e5.0	e3.3	2.8	6.0	3.6
8	e4.2	8.0	9.1	e9.0	e7.9	11	e6.2	e5.0	e3.8	2.0	5.2	5.6
9	e6.6	7.5	9.4	e8.6	e7.9	8.0	e6.3	e5.2	e3.9	3.1	4.2	5.7
10	e5.2	8.1	9.8	e8.3	e7.8	8.1	e6.0	e5.0	e3.9	3.4	4.1	4.8
11	e4.9	8.3	e9.8	e8.1	7.3	8.2	e5.8	e4.9	4.0	6.7	4.4	4.4
12	e4.7	8.3	e9.9	e8.1	7.3	8.0	e6.0	e5.2	4.6	5.3	9.5	4.2
13	e4.2	8.5	e10	e8.2	7.3	7.4	e6.2	e5.0	4.2	5.0	7.4	4.2
14	e5.1	7.3	e10	e8.2	6.0	7.4	e6.0	e4.7	3.7	7.3	6.3	3.9
15	e5.1	8.1	e10	e8.4	6.8	7.4	e5.8	e5.0	3.5	5.8	112	4.1
16	e5.0	8.1	e10	e8.5	7.1	7.5	e6.4	e5.2	2.9	4.6	8.1	12
17	e4.9	7.8	e9.8	e8.4	7.4	7.3	e6.2	e5.6	5.1	3.7	9.1	21
18	e4.4	7.7	e9.7	e8.5	7.0	7.3	e5.9	e5.4	2.9	3.4	8.0	7.7
19	e5.3	8.2	e9.5	e8.5	6.7	7.2	e5.8	e4.7	4.0	5.6	6.2	7.4
20	e6.8	8.3	e9.4	e8.6	7.0	7.3	e5.7	e5.0	2.8	16	6.4	9.1
21	9.3	8.1	e9.4	e8.7	7.0	7.3	e5.6	e5.4	4.1	8.0	6.8	8.9
22	9.4	8.3	e9.6	e8.7	7.1	7.6	e5.8	e5.2	3.7	62	7.0	7.5
23	9.3	8.5	e9.4	e8.7	6.9	7.8	e5.6	e5.5	3.5	10	7.1	7.2
24	9.4	7.9	e9.1	e8.7	9.7	7.6	e5.8	e4.5	3.1	9.8	5.7	7.5
25	9.8	9.1	e9.0	e8.7	8.6	7.7	e5.8	e4.7	5.0	9.4	5.4	6.2
26	10	8.9	e9.0	e8.5	7.1	7.7	e5.8	e4.5	4.5	9.0	3.6	5.8
27	10	8.1	e9.1	e8.3	7.3	7.4	e5.6	e4.3	4.6	7.4	3.5	6.2
28	10	8.6	e9.0	e8.3	8.8	7.8	e5.8	e4.9	3.5	6.2	3.8	165
29	10	9.1	e8.9	e8.4	---	e7.8	e5.4	e3.9	4.0	6.8	9.5	225
30	10	9.1	e8.8	e8.4	---	e7.5	e5.2	e4.1	3.4	6.1	3.8	22
31	8.9	---	e8.6	e8.6	---	e7.4	---	e4.2	---	17	3.1	---
TOTAL	206.3	256.6	288.5	264.8	212.9	255.1	181.9	151.9	116.2	246.1	306.7	576.4
MEAN	6.65	8.55	9.31	8.54	7.60	8.23	6.06	4.90	3.87	7.94	9.89	19.2
MAX	10	11	10	9.0	9.7	12	7.4	5.6	5.1	62	112	225
MIN	4.0	7.3	8.5	8.1	6.0	7.2	5.2	3.9	2.8	2.0	3.1	2.1
AC-FT	409	509	572	525	422	506	361	301	230	488	608	1140

CAL YR 1989 TOTAL 2825.7 MEAN 7.74 MAX 80 MIN 1.6 AC-FT 5600
WTR YR 1990 TOTAL 3063.4 MEAN 8.39 MAX 225 MIN 2.0 AC-FT 6080

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 21...	1102	6.3	630	8.6	19.0	7.0	11.2	37	160	53
FEB 28...	1115	8.3	600	8.8	8.0	6.5	11.0	--	--	52
JUL 11...	1030	7.4	365	8.4	24.5	20.0	7.2	160	80	26
SEP 18...	0930	7.1	565	8.9	15.0	15.5	8.0	35	130	42

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)
NOV 21...	7.6	79	3	9.9	219	43	39	0.80	27	413
FEB 28...	8.4	76	--	8.5	231	40	41	0.70	26	--
JUL 11...	3.7	44	2	6.6	145	28	23	0.60	15	240
SEP 18...	5.6	76	3	9.4	197	44	43	0.50	23	379

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	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, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 21...	--	--	--	--	2.40	2.40	1.90	--	1.6
FEB 28...	--	--	--	--	--	--	--	--	--
JUL 11...	--	--	--	--	1.30	1.20	0.430	--	1.5
SEP 18...	1.36	1.38	0.140	0.120	1.50	1.50	1.10	0.920	0.50

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)
NOV 21...	5.9	4.70	3.80	7.9	200	40	--	--	--
FEB 28...	--	--	--	--	170	83	--	--	--
JUL 11...	3.2	3.40	0.270	39	140	160	232	4.6	84
SEP 18...	3.1	3.40	3.20	7.5	200	34	--	--	--

RIO GRANDE BASIN

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, 1988, 502,330 acre-ft between elevations 5,247.0 ft and 5,450.0 ft, crest of service spillway. Dead storage 560 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. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 301,000 acre-ft, July 3, 1986, elevation, 5,417.32 ft; no storage prior to Nov. 12, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 61,030 acre-ft, Dec. 6, elevation, 5,275.49 ft; minimum, 48,900 acre-ft, Dec. 20, elevation, 5,272.51 ft.

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

(Based on survey by Corps of Engineers in 1988)

5,325	42,250	5,385	166,390
5,345	68,010	5,395	201,410
5,355	86,140	5,405	241,230
5,365	108,740	5,415	286,210
5,375	135,480	5,435	395,540

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50520	52460	60220	50900	51040	50950	50610	50350	49950	49380	50340	49900
2	50490	52810	60360	50780	51080	50990	50750	50410	50140	49400	50100	49880
3	50570	53300	60560	50780	50950	50980	50640	50590	50000	49090	50040	49890
4	50920	53780	60790	50700	50790	51020	50610	50630	49870	49070	50060	49770
5	51490	54300	60910	50490	50820	51140	50590	50730	49750	49550	50150	49700
6	51400	54790	61030	50560	50970	50990	50630	50770	49750	50180	50620	49850
7	51130	55280	60610	50630	51040	50880	50740	50490	49770	50270	50350	49710
8	51320	55650	59730	50750	51040	50930	50920	50460	49790	50270	50180	49620
9	51130	55930	58330	50720	51080	50880	50870	50790	50200	50560	50030	49570
10	50890	56270	57030	50590	51090	50730	50630	50940	50670	50850	49900	49910
11	50720	56570	55710	50560	51090	50610	50560	50790	50920	50700	49980	50250
12	50620	56880	54460	50560	51100	50620	50700	50320	50510	50590	50180	49960
13	50680	57110	53170	50580	51090	50720	50590	49710	49910	50350	50200	49530
14	50740	57380	51520	50660	51020	50800	50570	50040	49780	50680	50140	49380
15	50870	57510	50700	50690	50980	50740	50840	50170	49960	51120	50170	49380
16	50770	57800	50540	50680	50950	50730	50940	50020	49890	50630	50290	49400
17	50660	58010	50340	50570	50850	50750	50670	50380	49590	50130	50340	50060
18	50620	58220	49940	50560	50830	50730	50510	50510	49710	50090	50180	50030
19	50770	58390	49300	50570	50920	50700	50490	50380	49640	50420	50240	49830
20	50720	58530	48900	50470	51050	50670	50490	50510	49730	50470	50260	49690
21	50610	58730	49100	50380	51070	50640	50510	50150	49770	50680	50140	49660
22	50460	58940	49170	50450	51210	50690	50570	50120	49760	50480	49910	49390
23	50530	59150	49460	50560	51100	50780	50730	50290	49760	50100	49810	49280
24	50590	59370	50010	50610	50930	50790	50540	50200	49840	50040	49720	49370
25	50570	59580	50590	50560	50790	50940	50360	50040	49820	50300	49660	49530
26	50830	59660	50720	50590	50800	50880	50530	50240	49530	50370	49630	49510
27	51120	59740	50450	50630	51270	50790	50340	50400	49450	50300	49560	49550
28	51420	59970	50410	50660	51080	50870	50320	50300	48930	50360	49600	49670
29	51700	60050	50610	50630	---	50790	50430	49840	49000	50350	49750	52000
30	51950	60090	50850	50700	---	50740	50510	49840	49060	50320	49880	51210
31	52190	---	50940	50850	---	50520	---	49820	---	50140	49900	---
MAX	52190	60090	61030	50900	51270	51140	50940	50940	50920	51120	50620	52000
MIN	50460	52460	48900	50380	50790	50520	50320	49710	48930	49070	49560	49280
(†)	5333.90	5339.81	5332.92	5332.85	5333.03	5332.58	5332.57	5332.00	5331.35	5332.27	5332.07	5333.13
(††)	+1500	+7900	-9150	-90	+230	-560	-10	-690	-760	+1080	-240	+1310

CAL YR 1989 MAX 61030 MIN 47860
WTR YR 1990 MAX 61030 MIN 48900

(†) 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 Site A which is located 500 ft upstream from the Outlet Tower (Riser). Samples are collected 5 feet from the bottom of the lake.

08317300 - COCHITI LAKE AT SITE A (LAT 35°38'11" LONG 106°19'05")

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SAMPLING DEPTH (FEET) (000003)	RESERVOIR DEPTH (FEET) (72025)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS TOTAL (MG/L) AS CACO3 (00900)	HARDNESS NONCARBONATE DISSOLVED (MG/L) AS CACO3 (00904)	CALCIUM DISSOLVED (MG/L) AS CA (00915)
AUG												
09...	1130	1.00	81.0	--	--	--	25.0	5.7	--	--	--	--
09...	1131	5.00	81.0	335	8.1	--	24.5	5.7	--	--	--	--
09...	1132	10.0	81.0	--	--	--	24.5	5.7	--	--	--	--
09...	1133	15.0	81.0	--	--	--	24.0	5.7	--	--	--	--
09...	1134	20.0	81.0	--	--	--	24.0	5.5	--	--	--	--
09...	1135	25.0	81.0	--	--	--	24.0	5.5	--	--	--	--
09...	1136	30.0	81.0	--	--	--	24.0	5.5	--	--	--	--
09...	1137	35.0	81.0	--	--	--	23.5	5.3	--	--	--	--
09...	1138	40.0	81.0	--	--	--	23.5	4.7	--	--	--	--
09...	1139	45.0	81.0	--	--	--	22.5	4.1	--	--	--	--
09...	1140	50.0	81.0	335	8.0	--	22.5	3.6	--	--	--	--
09...	1141	55.0	81.0	--	--	--	23.0	3.3	--	--	--	--
09...	1142	60.0	81.0	--	--	--	23.0	3.1	--	--	--	--
09...	1143	65.0	81.0	--	--	--	23.0	2.4	--	--	--	--
09...	1144	70.0	81.0	--	--	--	22.5	2.1	--	--	--	--
09...	1145	76.0	81.0	340	7.7	28.0	22.5	1.7	20	130	12	42
09...	1146	80.0	81.0	--	--	--	22.0	1.2	--	--	--	--

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 WATER DIS-IT (MG/L AS HCO3 (00453)	CARBONATE WATER DIS-IT (MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT (MG/L AS CACO3 (39086)	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)
AUG											
09...	7.1	21	0.8	3.1	149	0	122	120	56	6.9	0.40

DATE	SILICA, DISSOLVED (MG/L) AS SiO2 (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) AS CD (70301)	NITROGEN, NO2+NO3 (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 (MG/L) AS C (00680)	ARSENIC TOTAL (UG/L) AS AS (01002)	ARSENIC DISSOLVED (UG/L) AS AS (01000)
AUG											
09...	19	229	<0.100	<0.100	0.060	0.84	0.070	0.040	3.2	3	3

DATE	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)	MERCURY TOTAL RECOVERABLE (UG/L) AS HG (71900)
AUG											
09...	30	<1	<1.0	<1	<1	7	2	6	2	<1	<0.10

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

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)
AUG 09...	0.2	<1	<1	<10	9	6.0	270	670	35	<1	10

DATE	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- PENDE (MG/L) (80154)	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)
AUG 09...	20	20	10000	30	670	0.03	50	449	94	K8	43

RIO GRANDE BASIN

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.

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.--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. U.S. Army Corps of Engineers satellite telemeter at station.

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 daily discharge, 2,610 ft³/s, May 13; minimum daily, 62 ft³/s, Oct. 3, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	332	379	603	511	718	597	880	1200	1050	884	702
2	106	285	380	600	572	675	587	773	1140	1040	975	674
3	62	218	380	601	624	722	655	841	1050	1040	788	633
4	62	248	381	619	620	724	571	999	868	1050	709	673
5	377	251	387	521	530	768	513	1110	740	1050	701	722
6	890	253	481	417	498	895	492	1310	637	948	737	750
7	770	260	725	438	551	863	492	1700	580	827	778	844
8	435	303	1110	489	583	796	518	1660	679	670	719	955
9	526	328	1270	610	583	830	702	1680	741	709	639	1030
10	526	333	1280	686	578	856	759	2110	732	845	602	870
11	492	334	1270	649	583	861	649	2450	873	1010	565	718
12	362	334	1280	625	598	713	664	2590	1180	1070	542	803
13	309	336	1260	576	616	616	800	2610	1260	894	610	857
14	292	341	1240	540	648	640	759	1380	1110	653	648	839
15	262	341	1020	564	645	636	652	1130	1050	652	589	817
16	316	345	807	594	611	616	786	1130	1060	884	496	817
17	302	352	807	616	608	617	983	1200	862	831	508	751
18	279	354	878	571	605	620	1010	1600	582	619	573	630
19	271	354	977	595	591	616	938	1330	661	667	530	693
20	322	356	847	608	591	619	910	1160	655	812	596	641
21	360	360	579	608	660	621	912	1310	642	912	695	706
22	360	360	504	545	579	596	910	1120	649	1010	695	691
23	281	360	480	531	676	596	997	1030	646	1030	624	619
24	318	365	473	562	731	629	1150	1030	645	763	603	513
25	294	367	473	573	723	630	1070	1100	675	703	574	458
26	169	367	677	557	652	758	1030	1300	704	843	567	458
27	144	369	815	550	461	769	1050	1600	748	804	575	458
28	146	373	713	550	781	745	917	1910	815	685	560	477
29	148	373	616	550	---	817	812	1760	931	718	542	836
30	148	373	586	533	---	787	873	1430	1060	810	560	1330
31	190	---	601	515	---	768	---	1280	---	844	631	---
TOTAL	9680	9925	23676	17596	17009	22117	23758	44513	25175	26443	19815	21965
MEAN	312	331	764	568	607	713	792	1436	839	853	639	732
MAX	890	373	1280	686	781	895	1150	2610	1260	1070	975	1330
MIN	62	218	379	417	461	596	492	773	580	619	496	458
AC-FT	19200	19690	46960	34900	33740	43870	47120	88290	49930	52450	39300	43570
(†)	8500	0	0	0	0	4780	7610	8470	7890	7050	7740	7760
(††)	3950	0	0	0	0	3570	4380	4620	4750	4730	4540	3880
CAL YR 1989	TOTAL 380688	MEAN 1043	MAX 3830	MIN 62	AC-FT 755100	(†) 66390	(††) 33830					
WTR YR 1990	TOTAL 261672	MEAN 717	MAX 2610	MIN 62	AC-FT 519000	(†) 59800	(††) 34420					

(†) DIVERSION, IN ACRE-FEET, BY COCHITI EASTSIDE MAIN CANAL AT HEAD
(††) DIVERSION, IN ACRE-FEET, BY SILI MAIN CANAL AT HEAD

RIO GRANDE BASIN

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., Santa 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, based on capacity table effective January 1972, 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. U.S. Army Corps of Engineers satellite telemeter at station.

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

RIO GRANDE BASIN

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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.--Records fair except for estimated daily discharges, which are 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. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--20 years, 6.09 ft³/s, 4,410 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, 1,070 ft³/s, July 23, gage height, 5.53 ft; no flow many days.

REVISIONS.--Revised figures of monthly and yearly discharge for the water year 1989, superseding those published in the report for 1989 are given below.

	MONTH	TOTAL	MEAN	MAX	MIN	AC-FT
	October	76.4	2.46	11.	1.1	152
	November	41.25	1.37	2.1	.58	82
	December	93.22	3.01	8.5	.68	185
	Cal Year 1988	2438.82	6.66	215	.00	4840
	Wtr Year 1989	1882.80	5.16	251	.00	3730

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.80	e1.0	e.00	e.50	e1.0	e.50	.00	.00	2.7	.90
2	.00	.00	e.50	e1.0	e.05	e.00	e1.0	e.50	.00	.00	.33	.85
3	.00	.00	e.32	e1.8	e.00	e.00	e.80	1.0	.00	.00	.32	.76
4	.00	.00	e.29	e1.5	e.00	e.00	e.60	.50	.00	.00	4.3	.69
5	4.3	.00	e.14	e2.0	e.00	e.00	e.60	.49	.00	.00	6.9	.58
6	16	.00	.00	e1.0	e.00	e.00	e.50	.47	.00	.00	4.7	.49
7	.00	.00	.00	e.70	e.00	e.00	e.60	.43	.00	.00	2.0	2.0
8	.00	.00	.00	e1.2	e.00	e.00	e2.2	.36	.00	.50	e1.0	7.4
9	.00	.00	.00	e1.6	e.00	e.00	e1.0	.00	.00	28	e.00	5.6
10	.00	.00	.00	e1.5	e.00	e.00	e.80	.00	.00	45	e.00	4.7
11	.00	.00	.00	e1.5	e.00	e.00	e.80	.00	.00	96	e.00	3.3
12	.00	.00	.00	e1.1	e.00	e.00	e.80	.00	.00	8.0	e.00	2.8
13	.00	.00	.00	e.80	e.00	e.00	e.60	.00	.00	1.4	72	3.5
14	.00	.00	e.36	e.50	e.00	e.00	e.60	.00	.00	.42	52	5.9
15	.00	.00	e1.2	e.50	e.30	e.00	e.60	.00	.00	9.7	18	3.5
16	.00	.00	e.81	e.60	e.40	e.00	e.50	.00	.00	1.2	5.2	34
17	.00	.00	e1.2	e.60	e.00	e.00	e.50	.00	.00	.43	4.2	59
18	.00	.00	1.9	e.50	e.00	e.00	e3.0	.00	.00	6.7	3.2	42
19	.00	.00	2.4	e.70	e.00	e.00	e1.0	.00	.00	11	2.7	43
20	.00	.00	2.0	e1.2	e.00	e.00	e1.0	.00	.00	33	2.3	49
21	.00	.00	1.9	e1.2	e.00	e.00	e.80	.00	.00	3.1	2.1	45
22	.00	.00	e.80	e.80	e.00	e.00	e.80	.00	.00	28	1.1	40
23	.00	.00	e.76	e.80	e.00	e.00	e.80	.00	.00	368	2.2	36
24	.00	.00	e.60	e.70	e.00	e.00	e.60	.00	.00	18	2.6	35
25	.00	.00	e1.5	e.60	e.00	e.00	e.60	.00	.00	3.9	2.4	33
26	.00	.00	1.9	e.60	e.00	e.00	e.60	.00	.00	1.2	2.1	33
27	.00	.00	1.7	e.50	e1.8	e.00	e.50	.00	.00	.53	2.0	36
28	.00	.00	1.9	e.20	e1.6	e.00	e.50	.00	.00	.42	1.1	62
29	.00	.00	e.73	e.10	---	e4.0	e.50	.00	.00	.39	1.0	195
30	.00	.00	e1.0	e.05	---	e2.0	e.50	.00	.00	.36	.92	42
31	.00	---	e.50	e.00	---	e1.0	---	.00	---	4.9	.94	---
TOTAL	20.30	0.00	25.21	26.85	4.15	7.50	24.70	4.25	0.00	670.15	200.31	826.97
MEAN	.65	.000	.81	.87	.15	.24	.82	.14	.000	21.6	6.46	27.6
MAX	16	.00	2.4	2.0	1.8	4.0	3.0	1.0	.00	368	72	195
MIN	.00	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.49
AC-FT	40	.00	50	53	8.2	15	49	8.4	.00	1330	397	1640

CAL YR 1989	TOTAL 1717.44	MEAN 4.71	MAX 251	MIN .00	AC-FT 3410
WTR YR 1990	TOTAL 1810.39	MEAN 4.96	MAX 368	MIN .00	AC-FT 3590

e Estimated

RIO GRANDE BASIN

08319000 RIO GRANDE AT SAN FELIPE, NM
(Surveillance network station)

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼ 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.--Water-discharge records good except for estimated daily discharges, which are fair. 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. 17 years (water years 1974-90), 1,535 ft³/s, 1,112,000 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, 6,800 ft³/s, at 0300 hours Sept. 29, gage height, 6.63 ft; minimum daily, 236 ft³/s, Oct. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	438	400	610	597	843	834	1050	1280	984	722	e770
2	320	409	400	603	626	786	675	985	1220	979	850	e750
3	244	311	400	598	705	854	784	963	1200	968	748	e730
4	236	328	400	605	719	852	729	1120	990	981	625	e740
5	351	333	405	576	678	868	660	1200	895	995	646	e780
6	931	333	405	440	597	956	635	1300	771	958	699	e840
7	990	328	518	442	644	1010	632	1560	689	850	882	e990
8	557	337	763	485	669	910	647	1590	730	697	846	1050
9	665	395	1190	575	674	934	780	1560	849	678	774	1140
10	673	400	1250	693	676	962	902	1800	861	824	723	1110
11	670	405	1280	679	680	964	855	2120	922	1030	699	884
12	559	400	1280	642	685	912	780	2230	1200	1020	646	921
13	461	405	1270	625	710	791	896	1920	1300	1030	767	1000
14	451	405	1250	558	722	769	976	1330	1220	1050	801	1000
15	412	405	1100	595	748	787	806	1230	1100	750	798	971
16	440	400	878	609	703	754	869	1220	1140	799	780	984
17	476	400	865	647	704	753	1050	1230	1050	912	654	963
18	458	400	903	621	701	753	1140	1480	653	681	748	811
19	413	400	1010	636	673	753	1070	1480	721	581	722	871
20	461	405	936	652	675	738	1050	1160	707	697	775	797
21	525	405	658	654	699	738	1040	1370	705	766	948	850
22	536	405	564	568	699	744	1050	1240	697	888	e900	873
23	499	405	519	590	730	701	1090	1130	693	1180	e800	818
24	455	400	510	615	814	732	1220	1130	695	790	e750	732
25	536	400	503	637	810	746	1200	1150	697	598	e710	644
26	382	400	607	618	759	768	1160	1270	719	719	e680	634
27	326	405	819	622	547	939	1210	1480	724	744	e660	632
28	323	400	741	620	801	858	1100	1710	794	597	e660	1190
29	319	405	648	621	---	887	975	1770	849	608	e650	3000
30	322	405	599	617	---	944	990	1460	985	650	e660	1530
31	328	---	602	595	---	893	---	1340	---	734	e680	---
TOTAL	14635	11667	23673	18648	19445	25899	27805	43578	27056	25738	23003	29005
MEAN	472	389	764	602	694	835	927	1406	902	830	742	967
MAX	990	438	1280	693	814	1010	1220	2230	1300	1180	948	3000
MIN	236	311	400	440	547	701	632	963	653	581	625	632
AC-FT	29030	23140	46960	36990	38570	51370	55150	86440	53670	51050	45630	57530
(†)	4280	0	0	0	0	2440	3680	3740	3240	3160	3500	3210

CAL YR 1989 TOTAL 410557 MEAN 1125 MAX 4010 MIN 236 AC-FT 814300
WTR YR 1990 TOTAL 290152 MEAN 795 MAX 3000 MIN 236 AC-FT 575500

(†) MONTHLY DIVERSIONS, IN ACRE-FEET, OF COCHITI EASTSIDE CANAL; RECORDS OF THE FLOW FURNISHED BY MIDDLE RIO GRANDE CONSERVANCY DISTRICT.

e Estimated

RIO GRANDE BASIN

08319000 RIO GRANDE AT SAN FELIPE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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)
MAR 01...	--	--	--	--	--	--	86	207	34	32	22
JUN 28...	--	--	--	--	--	--	35	77	79	K29	K92
JUL 31...	<0.10	<0.1	<1	<1	30	20	323	652	70	K66	K120
SEP 07...	--	--	--	--	--	--	105	258	80	K150	100

RIO GRANDE BASIN

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 September 1990 (discontinued).

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.--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.--28 years (water years 1950, 1959-76, 1982-90), 33.2 ft³/s, 24,050 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.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 22	2300	*317	*2.79	Apr. 8	2345	107	1.99

Minimum daily discharge, 3.0 ft³/s, Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	15	10	13	17	42	44	19	15	20	17
2	16	14	14	11	12	18	37	50	18	14	18	17
3	18	15	12	12	13	17	49	59	17	18	18	17
4	34	16	13	e6.0	13	21	67	88	17	19	19	17
5	48	16	15	e3.0	14	26	71	95	16	19	18	23
6	41	16	15	e7.0	14	23	65	72	15	23	22	22
7	29	16	14	11	14	17	63	58	15	19	22	22
8	23	15	11	11	15	20	87	50	15	16	20	30
9	21	15	14	12	15	25	92	44	16	23	17	26
10	20	16	14	12	14	26	60	40	21	22	16	22
11	19	16	12	12	15	28	54	40	27	30	16	20
12	19	16	e8.0	12	15	26	51	39	24	34	18	19
13	18	16	18	12	15	24	46	36	20	26	21	19
14	18	15	12	13	15	20	43	34	18	37	30	18
15	17	14	13	13	e18	22	43	32	17	32	43	18
16	17	12	14	13	e12	22	43	30	17	31	48	22
17	17	14	12	11	e13	24	42	30	16	34	35	34
18	15	14	11	13	e16	27	49	29	16	25	27	29
19	17	15	11	13	e17	32	56	28	15	20	23	29
20	17	15	11	13	e18	45	67	27	14	24	22	29
21	17	16	11	12	e18	75	50	25	14	24	23	27
22	17	15	12	12	e17	181	48	25	13	19	31	24
23	17	14	11	13	e17	216	47	24	13	31	28	28
24	17	14	11	12	e17	179	45	23	13	29	23	30
25	16	15	10	11	e19	160	52	23	13	24	20	26
26	16	15	10	11	e19	121	82	22	14	20	19	23
27	16	14	10	11	17	90	68	21	15	17	19	23
28	16	8.4	11	11	16	65	49	21	14	17	19	28
29	16	17	11	12	---	54	41	22	15	18	19	62
30	14	15	12	12	---	38	40	22	15	20	18	48
31	14	---	11	12	---	35	---	21	---	21	17	---
TOTAL	616	443.4	379.0	349.0	431	1694	1649	1174	492	721	709	769
MEAN	19.9	14.8	12.2	11.3	15.4	54.6	55.0	37.9	16.4	23.3	22.9	25.6
MAX	48	17	18	13	19	216	92	95	27	37	48	62
MIN	14	8.4	8.0	3.0	12	17	37	21	13	14	16	17
AC-FT	1220	879	752	692	855	3360	3270	2330	976	1430	1410	1530

CAL YR 1989 TOTAL 10647.6 MEAN 29.2 MAX 310 MIN 8.0 AC-FT 21120
WTR YR 1990 TOTAL 9426.4 MEAN 25.8 MAX 216 MIN 3.0 AC-FT 18700

e Estimated

RIO GRANDE BASIN

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.--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 Fierco basin for irrigation of about 300 acres in vicinity of Cuba. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years (water years 1939-42, 1950, 1959-76, 1982-90), 46.4 ft³/s, 33,620 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.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*) :

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 11	0300	198	4.92	Sept. 28	1800	*642	*5.95

Minimum daily, 4.8 ft³/s, Jan. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	8.2	7.4	12	6.1	8.7	27	103	e27	7.9	14	7.5
2	6.3	8.4	7.1	14	6.6	9.4	26	95	e21	9.5	14	7.0
3	6.6	8.8	7.6	6.5	5.8	10	27	89	e17	8.3	13	6.8
4	11	8.7	7.7	12	6.5	13	31	98	e16	8.5	12	6.9
5	38	8.7	7.3	e13	6.7	20	38	92	e15	12	12	8.0
6	27	8.9	7.3	e14	6.6	16	41	91	e11	14	12	7.7
7	17	8.9	7.3	e15	7.0	10	44	95	e9.0	17	13	19
8	13	8.7	7.0	9.2	6.9	12	72	106	e8.0	15	12	16
9	11	8.5	7.4	5.9	6.2	15	81	131	e8.0	13	11	14
10	10	8.5	6.5	5.8	6.8	15	67	130	e11	16	11	11
11	10	8.6	7.3	5.8	6.9	15	68	143	e35	14	9.9	9.9
12	9.8	8.7	e8.0	5.6	7.0	15	70	109	e24	18	9.4	9.3
13	9.7	8.5	e10	5.3	7.3	14	70	116	e17	19	9.9	8.6
14	9.5	8.5	e12	5.4	7.5	12	73	125	e20	30	11	8.0
15	9.2	8.1	7.6	5.5	6.3	12	84	130	e14	44	16	7.7
16	9.2	7.6	6.6	5.4	8.6	12	101	112	e12	31	38	8.4
17	9.1	7.9	5.9	5.4	12	12	99	95	e10	25	30	12
18	8.8	7.4	6.3	6.9	10	13	90	87	e10	20	21	12
19	8.6	7.5	5.6	5.8	8.0	16	81	80	e9.5	17	16	12
20	8.6	7.8	7.0	5.7	8.2	24	81	67	e9.5	15	14	15
21	8.6	8.0	6.0	5.9	8.2	31	85	59	e9.0	13	13	20
22	8.9	8.1	9.0	7.2	8.1	41	101	58	e9.0	12	19	17
23	8.9	7.5	e12	6.3	7.8	40	115	64	e8.8	11	15	16
24	8.9	7.5	e14	4.8	8.2	37	122	69	e8.8	11	12	14
25	8.7	7.6	5.8	6.9	8.6	41	107	e59	e8.8	12	11	13
26	8.7	7.6	6.6	9.2	8.9	42	101	e45	e8.6	11	9.7	11
27	8.6	7.3	6.9	5.8	9.1	43	94	e40	e8.6	9.9	9.2	10
28	8.6	5.5	6.4	6.4	8.7	40	94	e36	e8.6	9.3	9.2	30
29	8.4	9.4	6.0	9.9	---	38	112	e39	8.6	9.6	8.9	18
30	8.4	8.0	6.1	8.1	---	29	120	e46	8.0	11	8.4	18
31	8.1	---	5.9	6.7	---	25	---	e35	---	14	7.9	---
TOTAL	333.6	243.4	233.6	241.4	214.6	681.1	2322	2644	390.8	478.0	422.5	373.8
MEAN	10.8	8.11	7.54	7.79	7.66	22.0	77.4	85.3	13.0	15.4	13.6	12.5
MAX	38	9.4	14	15	12	43	122	143	35	44	38	30
MIN	6.3	5.5	5.6	4.8	5.8	8.7	26	35	8.0	7.9	7.9	6.8
AC-FT	662	483	463	479	426	1350	4610	5240	775	948	838	741

CAL YR 1989 TOTAL 9439.6 MEAN 25.9 MAX 160 MIN 5.5 AC-FT 18720
WTR YR 1990 TOTAL 8578.8 MEAN 23.5 MAX 143 MIN 4.8 AC-FT 17020

e Estimated

RIO GRANDE BASIN

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.--Water-discharge records good. Diversion for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--42 years (water years 1937-40, 1950, 1954-90), 76.1 ft³/s, 55,130 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.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 13	1900	1,280	6.93	Sept. 28	1900	*2,980	*8.76
Sept. 7	2130	1,720	7.55				

Minimum daily, 14 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	34	26	22	29	31	73	157	48	15	31	17
2	23	29	25	24	30	30	73	153	40	17	23	20
3	23	30	23	28	26	31	78	158	37	17	23	19
4	52	31	25	21	27	33	104	200	35	23	26	24
5	98	29	27	23	27	44	117	205	34	36	25	33
6	85	30	27	27	28	42	117	181	28	30	84	31
7	64	29	27	26	28	29	114	167	26	32	36	251
8	46	27	19	29	30	25	150	168	26	30	29	91
9	38	25	25	30	25	38	182	184	25	35	24	44
10	36	26	27	31	27	39	135	177	34	80	20	36
11	37	26	18	29	30	39	122	187	66	41	21	31
12	35	26	16	27	30	38	121	158	51	50	21	28
13	35	26	21	29	27	36	114	161	40	177	21	25
14	35	26	24	30	29	29	110	163	40	124	26	24
15	37	24	26	29	26	31	116	161	33	85	168	24
16	40	22	27	27	22	30	128	146	31	68	78	38
17	34	23	24	23	26	34	122	130	29	66	65	42
18	36	23	23	28	26	36	119	115	27	50	50	40
19	35	25	22	29	25	40	121	102	23	39	38	38
20	37	24	23	30	27	57	128	90	21	38	33	41
21	34	23	21	27	25	78	117	79	19	35	34	45
22	36	23	20	29	25	193	121	75	18	25	61	41
23	35	24	23	31	25	259	131	79	15	30	46	43
24	35	24	25	27	26	216	133	82	18	35	37	41
25	34	25	23	25	28	205	126	85	17	33	29	38
26	40	24	22	29	28	173	146	70	18	29	25	31
27	33	25	22	28	29	137	186	63	18	25	23	32
28	35	15	24	22	29	108	157	59	17	23	25	517
29	31	14	24	29	---	95	163	63	15	22	25	86
30	28	25	24	28	---	74	175	70	16	29	22	72
31	30	---	24	31	---	65	---	59	---	33	21	---
TOTAL	1219	757	727	848	760	2315	3799	3947	865	1372	1190	1843
MEAN	39.3	25.2	23.5	27.4	27.1	74.7	127	127	28.8	44.3	38.4	61.4
MAX	98	34	27	31	30	259	186	205	66	177	168	517
MIN	22	14	16	21	22	25	73	59	15	15	20	17
AC-FT	2420	1500	1440	1680	1510	4590	7540	7830	1720	2720	2360	3660

CAL YR 1989 TOTAL 20649 MEAN 56.6 MAX 422 MIN 12 AC-FT 40960
WTR YR 1990 TOTAL 19642 MEAN 53.8 MAX 517 MIN 14 AC-FT 38960

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 08...	1100	27	500	8.0	16.0	8.5	9.6	13	120	42	4.7
FEB 27...	1227	30	495	8.6	6.0	5.5	10.9	--	--	41	5.0
MAY 25...	1200	89	265	8.1	23.5	16.0	8.4	--	90	31	3.0
AUG 02...	1240	31	510	8.0	31.0	24.0	8.2	16	140	46	5.1

DATE	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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 08...	56	2	9.0	163	8.0	44	1.0	44	307	<0.100	<0.100
FEB 27...	54	--	9.0	152	15	65	1.0	40	--	--	--
MAY 25...	22	1	3.6	96	8.5	23	0.40	5.7	155	--	--
AUG 02...	54	2	8.1	167	11	72	1.3	40	338	--	--

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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)
NOV 08...	<0.010	0.030	0.010	1.5	34	29	410	<1	<1.0	2	<1
FEB 27...	--	--	--	--	--	--	550	--	--	--	--
MAY 25...	--	--	--	--	--	--	200	--	--	--	--
AUG 02...	--	--	--	3.2	--	--	560	--	--	--	--

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)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 08...	3	1	64	1	1	<0.10	0.1	<1	<1	<10	<3
FEB 27...	--	--	57	--	--	--	--	--	--	--	--
MAY 25...	--	--	96	--	--	--	--	--	--	--	--
AUG 02...	--	--	69	--	--	--	--	--	--	--	--

RIO GRANDE BASIN

08324000 JEMEZ RIVER NEAR JEMEZ, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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 NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 08...	4.1	2.4	10	2.8	9.2	2.2	1.8	1.7	58	4.2	43
AUG 02...	--	--	--	--	--	--	--	--	85	7.1	67

RIO GRANDE BASIN

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 ft/s by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,110 acre-ft, June 1, 1987, elevation, 5,220.24 ft; no storage most of time prior to March 1979.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 23,330 acre-ft, Oct. 6-9, elevation, 5,192.08 ft; minimum contents, 17,480 acre-ft, Sept. 27, elevation, 5,187.00 ft.

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

5,170	4,200	5,190	20,840	5,210	50,620
5,175	6,980	5,195	27,060	5,215	60,480
5,180	10,730	5,200	34,100	5,220	71,550
5,185	15,400	5,205	41,860	5,225	83,720

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23060	22500	23060	22350	22410	22040	21710	21290	20310	19060	18820	17970
2	23040	22520	23070	22340	22410	22020	21670	21360	20210	19020	18770	17940
3	23010	22530	23090	22340	22340	22010	21650	21350	20100	18980	18750	17890
4	23110	22530	23110	22320	22260	22000	21680	21260	20040	18950	18840	17860
5	23230	22530	23130	22290	22240	21990	21790	21230	20020	18930	18930	17850
6	23330	22530	23150	22250	22230	21950	21890	21190	20000	18910	19050	17840
7	23330	22530	23150	22230	22220	21920	22000	21150	19980	18910	18810	17810
8	23330	22540	23120	22240	22200	21880	22110	21080	19940	18910	18520	18310
9	23330	22580	23090	22340	22200	21880	22080	21150	19900	18920	18430	18350
10	23270	22620	23050	22320	22220	21930	21920	21150	19850	18950	18400	18210
11	23150	22670	22960	22260	22230	21980	21670	21040	19820	19060	18400	17890
12	23040	22720	22740	22290	22240	21990	21550	20900	19810	19110	18400	17680
13	22950	22740	22550	22320	22220	21950	21510	20760	19790	19530	18410	17630
14	22920	22760	22350	22360	22200	21890	21460	20730	19780	20180	18480	17610
15	22870	22780	22250	22400	22170	21870	21420	20900	19750	20840	18570	17590
16	22820	22800	22300	22380	22180	21860	21380	21260	19710	20920	18570	17550
17	22780	22820	22350	22350	22220	21860	21440	21520	19680	20230	18540	17600
18	22750	22830	22400	22320	22240	21860	21540	21420	19630	19430	18540	17620
19	22740	22840	22420	22320	22260	21870	21500	21170	19590	19160	18540	17620
20	22720	22850	22420	22340	22310	21880	21390	20920	19530	19160	18350	17620
21	22690	22870	22400	22350	22310	21880	21310	20750	19470	19150	18250	17630
22	22670	22880	22400	22310	22200	21900	21230	20700	19420	19140	18250	17630
23	22660	22920	22430	22250	22110	22170	21280	20690	19390	19120	18300	17650
24	22650	22950	22470	22220	22080	22220	21410	20680	19350	19100	18210	17680
25	22650	22960	22490	22170	22060	22260	21460	20660	19310	19050	18210	17640
26	22620	22980	22480	22200	22050	22140	21280	20610	19270	18920	18190	17550
27	22590	22990	22440	22230	22040	21930	21190	20560	19240	18850	18150	17480
28	22550	23000	22380	22240	22050	21800	21240	20520	19200	18810	18170	17760
29	22520	23020	22350	22250	---	21750	21280	20470	19150	18760	18120	18220
30	22490	23050	22350	22290	---	21740	21290	20440	19110	18730	18060	18680
31	22490	---	22350	22340	---	21730	---	20400	---	18790	18000	---
MAX	23330	23050	23150	22400	22410	22260	22110	21520	20310	20920	19050	18680
MIN	22490	22500	22250	22170	22040	21730	21190	20400	19110	18730	18000	17480
(†)	5191.39	5191.85	5191.27	5191.26	5191.02	5190.75	5190.38	5189.62	5188.48	5188.20	5187.48	5188.10
(††)	-600	+560	-700	-10	-290	-320	-440	-890	-1290	-320	-790	+680

CAL YR 1989 MAX 32460 MIN 22250
WTR YR 1990 MAX 23330 MIN 17480

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

RIO GRANDE BASIN

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.

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.--Records good. 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. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--48 years (water years 1937, 1944-90), 61.2 ft³/s, 44,340 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, 422 ft³/s, July 18; minimum daily, 0.07 ft³/s, Sept. 30.

REVISIONS.--Revised figures of monthly and yearly discharge for the water year 1989, superseding those published in the report for 1989 are given below.

	MONTH	TOTAL	MEAN	MAX	MIN	AC-FT
	October	1045.4	33.7	80.	3.6	2070
	November	83.45	2.78	8.4	.80	166
	December	408.02	13.2	86.	.60	809
	Cal Yr 1988	22357.31	61.1	477	.15	44270
	Wtr Yr 1989	17323.49	47.5	339	.45	34360

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.6	1.9	32	1.7	36	72	124	41	2.1	21	3.0
2	2.6	3.4	1.9	32	37	41	70	131	41	2.1	44	3.1
3	2.6	3.3	1.9	32	75	41	50	196	41	2.1	36	3.4
4	2.6	3.2	1.7	32	75	41	33	231	18	2.1	9.2	3.2
5	35	3.2	1.5	24	51	41	32	209	7.8	2.0	9.5	3.0
6	54	3.2	11	6.5	33	51	48	209	5.9	1.9	62	2.8
7	38	3.2	20	5.7	33	63	58	210	4.9	1.9	154	2.8
8	38	3.2	38	4.9	33	55	58	143	6.3	1.9	151	2.1
9	37	3.2	49	7.8	23	32	149	64	5.6	3.0	44	.72
10	55	3.2	49	51	2.3	17	221	118	5.1	2.2	3.6	88
11	70	3.2	72	58	2.0	16	222	156	4.2	1.9	2.2	169
12	70	3.2	97	23	1.8	48	160	156	3.7	16	1.8	110
13	48	3.2	96	3.6	29	80	123	159	3.7	16	1.7	4.9
14	24	3.2	97	3.4	52	62	123	102	4.4	12	19	4.4
15	24	3.2	43	3.2	21	19	122	33	4.5	5.7	99	3.9
16	24	3.2	1.2	21	2.0	18	113	16	4.4	112	182	4.0
17	15	3.2	1.0	36	1.7	18	84	17	4.1	375	131	3.5
18	5.7	3.2	1.0	36	1.9	18	101	113	4.2	422	36	2.9
19	5.3	3.2	10	36	1.9	19	159	179	4.0	175	36	32
20	5.2	3.1	22	35	1.9	19	175	179	3.9	3.1	120	36
21	5.2	3.0	22	34	32	49	154	140	4.0	2.8	68	9.7
22	4.8	3.0	13	53	90	75	154	76	4.0	2.8	3.1	8.7
23	4.8	3.0	2.5	52	74	117	98	51	3.7	2.6	36	7.3
24	4.4	3.0	1.7	34	31	181	92	41	3.6	2.6	68	5.3
25	4.2	3.0	1.5	19	30	183	167	41	3.7	33	5.9	30
26	3.8	2.8	23	4.3	30	238	259	41	3.0	38	5.4	53
27	3.8	2.7	42	2.7	30	260	171	41	2.4	9.6	5.1	26
28	4.0	2.5	70	2.2	30	199	100	41	2.4	2.8	4.9	4.4
29	4.0	2.4	54	1.8	---	134	100	42	2.2	2.6	12	.83
30	3.6	2.1	33	1.7	---	75	98	41	2.1	2.5	24	.07
31	3.6	---	32	1.7	---	73	---	41	---	2.2	14	---
TOTAL	604.8	92.1	910.8	689.5	826.2	2319	3566	3341	248.8	1261.5	1409.4	628.02
MEAN	19.5	3.07	29.4	22.2	29.5	74.8	119	108	8.29	40.7	45.5	20.9
MAX	70	3.6	97	58	90	260	259	231	41	422	182	169
MIN	2.6	2.1	1.0	1.7	1.7	16	32	16	2.1	1.9	1.7	.07
AC-FT	1200	183	1810	1370	1640	4600	7070	6630	493	2500	2800	1250

CAL YR 1989	TOTAL 17394.32	MEAN 47.7	MAX 339	MIN .65	AC-FT 34500
WTR YR 1990	TOTAL 15897.12	MEAN 43.6	MAX 422	MIN .07	AC-FT 31530

RIO GRANDE BASIN

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 Barelás 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.--Records good except for estimated daily discharges, which are fair. Recording rain gage at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft³/s, Jul. 14, 1990, gage height, 4.50 ft, from rating curve developed by step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s, at 1810 hours July 14, gage height, 4.50 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	4.6	e.00	.00	7.0	13	.00
2	.00	.00	.00	---	---	---	6.3	e9.0	.03	e.00	5.0	.00
3	.00	.00	.00	---	---	---	8.4	e.00	.50	e.00	e1.0	.00
4	19	.00	.00	---	---	---	6.2	e8.0	2.2	e.00	18	.00
5	13	.00	.00	---	---	---	5.0	e3.0	7.5	4.0	e2.0	.00
6	.00	.00	---	---	---	---	4.1	e.00	e1.0	4.0	e.00	.27
7	.00	.00	---	---	---	---	4.6	e.00	e2.0	e1.0	e.00	3.4
8	.00	.00	---	---	---	---	4.8	e.00	e.50	e.00	e.00	4.7
9	.00	.00	---	---	---	---	4.5	e.00	e.00	e.00	.00	.00
10	.00	.00	---	---	---	---	3.9	e.00	e.00	e.00	.00	.00
11	e.00	.00	---	---	---	---	3.6	e.00	e.00	e.00	.00	.00
12	e.00	.00	---	---	---	---	1.7	.00	e.00	e.00	.00	.00
13	e.00	.00	---	---	---	---	.00	.00	e.00	21	1.8	.00
14	e.00	.00	---	---	---	---	.00	.00	e.00	81	1.5	.00
15	e.00	.00	---	---	---	---	.00	.00	e.00	19	.00	.00
16	e.00	.00	---	---	---	.00	2.4	.00	e.00	e1.0	.00	.00
17	e.00	.00	---	---	---	.00	4.6	.00	e.00	e.00	.03	.00
18	e.00	.00	---	---	---	.00	18	.00	e.00	e.00	.00	.00
19	e.00	.00	---	---	---	.00	5.0	.00	e.00	e.00	.00	.00
20	e.00	.00	---	---	---	2.0	4.9	.00	e.00	e.00	.31	.00
21	e.00	.00	---	---	---	5.4	8.2	.00	.03	e.00	.00	.31
22	e.00	.00	---	---	---	5.5	.51	.00	.08	e.00	.00	2.9
23	e.00	.00	---	---	---	5.2	3.5	.02	.61	e.00	.00	.00
24	e.00	.00	---	---	---	2.6	5.2	.00	.10	e.00	.00	.00
25	e.00	.00	---	---	---	.00	22	.02	.07	e.00	.00	.00
26	e.00	.00	---	---	---	1.7	e2.0	.00	.55	e.00	.00	.00
27	e.00	.00	---	---	---	4.8	e1.0	.00	.06	e.00	1.5	.00
28	e.00	.00	---	---	---	4.4	e.00	.00	.03	e.00	.00	.00
29	e.00	.00	---	---	---	4.5	e.00	.00	.00	e.00	.00	.00
30	e.00	.00	---	---	---	5.2	e.00	.02	1.1	e.00	.00	.00
31	e.00	---	---	---	---	4.1	---	.02	---	7.6	.00	---
TOTAL	32.00	0.00	---	---	---	---	135.01	20.08	16.36	145.60	44.14	11.58
MEAN	1.03	.000	---	---	---	---	4.50	.65	.55	4.70	1.42	.39
MAX	19	.00	---	---	---	---	22	9.0	7.5	81	18	4.7
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	63	.00	---	---	---	---	268	40	32	289	88	23

e Estimated

RIO GRANDE BASIN

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.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft³/s, July 9, 1988, gage height, 12.10 ft, from floodmarks from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,650 ft³/s, at 1850 hours July 14, gage height, 9.63 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.38	3.3	---	---	---	.00	.00	.00	.00	6.9	.00
2	.00	.00	.00	---	---	---	7.1	68	.00	.00	.00	.00
3	.08	.00	.00	---	---	---	.00	8.7	.00	.00	.00	.00
4	97	.00	9.00	---	---	---	.00	12	.00	.00	15	.00
5	91	.00	---	---	---	---	14	.33	.00	32	1.7	.00
6	.30	.00	---	---	---	---	.39	.00	.00	.00	.85	2.4
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	13
8	.00	.00	---	---	---	---	.00	.00	.00	.02	.00	35
9	.00	.00	---	---	---	---	.44	.00	2.1	12	.00	.00
10	.00	.00	---	---	---	---	.00	.00	20	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	10	.00	.00	.00
12	.00	.00	---	---	---	---	1.3	.00	.00	.00	92	.00
13	.00	1.2	---	---	---	---	.91	.00	.00	182	18	.00
14	.00	.00	---	---	---	---	.00	.00	.00	280	95	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	16	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.79	.00	---	---	---	.00	1.6	.00	.00	.00	.97	.00
18	.00	.00	---	---	---	.00	87	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	1.7	.00	.00	.00	.00	.50
20	.00	.00	---	---	---	.00	.00	.00	.00	7.3	62	4.1
21	.00	.00	---	---	---	.00	9.6	.00	.00	3.3	.12	18
22	.00	.00	---	---	---	.00	.45	.00	.00	.00	5.0	88
23	.00	.00	---	---	---	.54	.00	.00	.00	.00	.02	.00
24	.00	.00	---	---	---	.00	15	.00	.00	.78	2.3	.00
25	.00	.00	---	---	---	.00	89	.00	.00	4.1	.00	.00
26	.00	.00	---	---	---	.00	9.0	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	11	.00	.00	.00	.00	136	.00
28	.00	.13	---	---	---	.00	.00	.00	.00	.00	11	38
29	.00	.00	---	---	---	16	.00	.00	.00	.00	.00	6.4
30	.00	.00	---	---	---	7.4	.00	.00	.00	1.4	1.1	.00
31	.00	---	---	---	---	.00	---	.00	---	42	.00	---
TOTAL	189.17	1.71	---	---	---	---	237.49	89.03	32.10	580.90	447.96	205.40
MEAN	6.10	.057	---	---	---	---	7.92	2.87	1.07	18.7	14.5	6.85
MAX	97	1.2	---	---	---	---	89	68	20	280	136	88
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	375	3.4	---	---	---	---	471	177	64	1150	889	407

e Estimated

RIO GRANDE BASIN

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 in water years 1969-89).

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.--Records good. Floodway channel intercepts 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.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 18	Unknown	*8,450	*8.70	Aug. 20	1400	1,900	3.35
July 14	1945	5,800	6.93	Aug. 27	2130	3,620	5.10
Aug. 12	1800	2,500	4.00	Sept. 22	1415	2,800	4.30
Aug. 14	1530	2,130	3.60				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	94	.00
2	.00	.00	.00	.00	.00	.00	e14	e135	.00	.00	.00	.00
3	130	.00	.00	.00	.00	.00	e.00	e15	.00	.00	.00	.00
4	33	.00	.00	.00	.00	.00	e.00	e24	.00	.00	24	4.5
5	.00	.00	.00	.00	.00	.00	e28	e.60	1.1	60	.00	.00
6	.00	.00	.00	.00	.00	.00	e.80	e.00	e.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	19
8	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	106
9	.00	.00	.00	.00	.00	.00	e.80	e.00	e.74	24	.00	.00
10	.00	.00	.00	.00	.00	.00	e.00	e.00	e53	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	e.00	e.00	e13	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	e3.0	e.00	.00	.00	146	.00
13	.00	.00	.00	.00	.00	.00	e2.0	e.00	.00	532	50	.00
14	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	961	252	.00
15	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	61	10	.00
16	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	e.00	e3.0	.00	.00	.00	10	2.8
18	.00	.00	.00	.00	.00	e.00	e170	1.2	.35	.00	.00	.00
19	.00	.00	.00	.00	.00	e.00	e3.0	1.1	.00	.00	2.9	.00
20	.00	.00	.00	.00	54	e.00	e.00	.00	.00	1.8	146	6.8
21	.00	.00	.00	.00	.00	e.00	e18	.00	.00	7.1	4.8	53
22	.00	.00	.00	.00	.00	e.00	e1.0	.00	.00	.00	29	229
23	.00	.00	.00	.00	.00	e1.0	e.00	.00	.00	.00	4.5	6.0
24	.00	.00	.00	.00	.00	e.00	e30	.00	.00	14	.00	.00
25	.00	.00	.00	.00	.00	e.00	181	1.6	.00	22	.00	.00
26	.00	.00	.00	.00	.00	e.00	e18	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	e20	e.00	.00	.00	.00	248	.00
28	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	66	80
29	.00	.00	.00	.00	---	e30	e.00	.00	.00	.00	.00	24
30	.00	.00	.00	.00	---	e14	e.00	.00	.00	1.1	5.6	2.1
31	.00	---	.00	.00	---	e.00	16	30	15	6	.00	---
TOTAL	163.00	0.00	0.00	0.00	54.00	65.00	472.60	178.50	68.19	1685.60	1092.80	533.20
MEAN	5.26	.000	.000	.000	1.93	2.10	15.8	5.76	2.27	54.4	35.3	17.8
MAX	130	.00	.00	.00	54	30	181	135	53	961	252	229
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	323	.00	.00	.00	107	129	937	354	135	3340	2170	1060

WTR YR 1990 TOTAL 4312.89 MEAN 11.8 MAX 961 MIN .00 AC-FT 8550

e Estimated

RIO GRANDE BASIN

08329928 RIO GRANDE NEAR ALAMEDA NM

LOCATION.--Lat 35°10'54", long 106°39'20", Bernalillo County, Hydrologic Unit 13020203, on downstream side of Paseo del Norte bridge in Albuquerque, and at mile 1.532.0.

DRAINAGE AREA.--17,263 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--March 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,990 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300), 48 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). Diversions upstream from station for irrigation of about 714,000 acres, several hundred of which are downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,830 ft³/s, Sept. 29, 1990, gage height 6.08 ft; minimum, 14 ft³/s, Sept. 28, 29, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,830 ft³/s, Sept. 29, gage height, 6.02 ft; minimum daily, 26 ft³/s, Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	201	e182	597	592	824	749	727	1040	670	478	309
2	35	232	176	614	604	714	591	868	939	665	465	365
3	26	214	176	622	706	616	549	743	864	635	496	335
4	69	154	176	602	693	593	517	877	751	636	389	298
5	208	153	174	605	e655	575	447	1000	583	734	347	347
6	426	148	277	450	e660	643	443	1150	396	748	353	389
7	911	130	435	410	e620	784	426	1540	318	619	494	444
8	748	120	667	412	e635	770	425	1940	260	498	604	573
9	509	139	1110	437	e645	751	429	1580	296	392	508	608
10	480	165	1240	589	e640	730	696	1690	371	418	401	690
11	e575	165	1300	710	e635	740	728	2470	401	602	370	702
12	e573	163	1180	661	e640	675	618	2750	527	756	405	637
13	e512	159	1550	627	e645	607	575	2730	835	1160	366	580
14	e360	159	e1550	573	e680	570	701	1630	1000	1490	554	565
15	e340	157	e1570	526	e700	541	612	1040	832	1800	461	524
16	e440	165	e1270	534	e680	486	546	898	822	940	535	502
17	e350	164	e1080	697	e650	460	618	845	800	1410	448	550
18	e360	166	e1040	666	e640	467	976	1020	611	1220	359	459
19	e350	165	e1090	609	e640	483	948	1920	376	893	349	393
20	e340	163	e1160	608	e630	526	894	1130	377	562	389	415
21	e170	166	e1050	602	e643	501	786	1060	350	619	460	379
22	e260	168	e855	577	e640	572	803	1040	338	651	404	523
23	e280	171	e777	551	635	585	777	824	337	1070	640	434
24	e235	e160	e735	521	689	647	837	716	314	873	469	412
25	e190	e159	e668	549	705	693	1260	703	331	528	344	355
26	e260	e160	e655	526	677	753	1080	760	344	507	299	345
27	e200	e165	e760	572	604	1030	1120	993	348	549	360	296
28	e160	e180	e860	579	471	861	914	1400	362	442	488	226
29	e140	e182	e870	560	---	840	716	1870	433	356	309	2950
30	e145	e187	627	581	---	873	668	1500	570	355	283	1460
31	e151	---	604	615	---	768	---	1210	---	381	278	---
TOTAL	9833	4980	25864	17782	18054	20678	21449	40624	16126	23179	13105	17065
MEAN	317	166	834	574	645	667	715	1310	538	748	423	569
MAX	911	232	1570	710	706	1030	1260	2750	1040	1800	640	2950
MIN	26	120	174	410	471	460	425	703	260	355	278	226
AC-FT	19500	9880	51300	35270	35810	41010	42540	80580	31990	45980	25990	33850

WTR YR 1990 TOTAL 228739 MEAN 627 MAX 2950 MIN 26 AC-FT 453700

e Estimated

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'21", Long 106°40'48", Bernalillo County, Hydrologic Unit 13020203, in Atrisco Grant, on downstream side 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.--Records good except for estimated daily discharges, which are 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, and U.S. Army Corps of Engineers satellite 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. 17 years (water years 1974-90), 1,400 ft³/s, 1,014,000 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, 5,610 ft³/s, at 1715 hours Sept. 29, gage height, 5.76 ft; minimum daily, 39 ft³/s, Oct. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	153	162	653	580	789	592	796	853	522	462	276
2	46	211	169	657	586	766	507	952	756	550	434	314
3	44	195	164	667	645	744	438	952	695	550	535	296
4	39	126	165	662	696	800	458	957	611	573	479	272
5	199	109	204	655	713	763	416	1080	460	661	404	314
6	344	110	356	585	657	792	403	1170	336	801	406	363
7	815	95	500	522	618	891	382	1420	244	694	506	410
8	815	91	688	525	631	839	379	1830	200	568	595	521
9	570	100	1120	549	636	772	370	1480	205	460	507	623
10	e576	133	1350	634	632	777	514	1560	291	449	386	721
11	e576	141	1450	744	636	826	591	2220	348	590	335	703
12	e576	143	1510	719	640	756	546	2420	439	750	299	612
13	e513	143	1530	686	643	682	481	2420	711	803	403	571
14	e358	145	1530	648	675	636	540	1670	749	1320	485	554
15	e340	138	1560	605	695	635	563	1040	659	1960	553	548
16	e442	143	1250	619	670	614	490	891	618	723	580	514
17	e349	142	1060	661	640	559	539	808	626	1030	511	548
18	e448	148	1020	693	636	502	804	953	534	988	396	566
19	e354	151	1070	673	635	489	997	1820	314	696	374	477
20	e336	151	1140	678	636	483	874	1250	309	523	371	516
21	e171	154	1030	685	633	481	779	938	301	548	447	506
22	e256	153	815	694	691	492	791	957	269	566	431	508
23	e276	154	727	681	708	490	784	789	280	879	583	655
24	231	159	682	644	739	508	794	676	263	849	436	521
25	186	159	618	642	774	542	1310	644	270	577	351	466
26	255	156	594	635	767	565	1180	657	270	485	284	407
27	180	155	709	615	723	706	1270	816	283	495	275	406
28	155	157	838	598	621	732	1060	1120	293	429	518	374
29	139	162	811	592	---	678	916	1530	349	328	321	2110
30	139	167	715	599	---	675	806	1300	412	323	255	1870
31	141	---	667	598	---	617	---	998	---	342	255	---
TOTAL	9915	4344	26204	19818	18556	20601	20574	38114	12948	21032	13177	17542
MEAN	320	145	845	639	663	665	686	1229	432	678	425	585
MAX	815	211	1560	744	774	891	1310	2420	853	1960	595	2110
MIN	39	91	162	522	580	481	370	644	200	323	255	272
AC-FT	19670	8620	51980	39310	36810	40860	40810	75600	25680	41720	26140	34790
(†)	9320	8990	2530	877	960	9640	15610	16390	14280	15440	15510	15810

CAL YR 1989 TOTAL 331853 MEAN 909 MAX 3710 MIN 39 AC-FT 658200 (†) 123700
WTR YR 1990 TOTAL 222825 MEAN 610 MAX 2420 MIN 39 AC-FT 442000 (†) 125400

(†) 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.

e Estimated

RIO GRANDE BASIN

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 TEMPERATURE: October 1969 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1969 to September 1969 (partial-record station), October 1969 to current year.

REMARKS.--Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total load data were not available at time of publication and will be available at Albuquerque District Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,840 microsiemens, Oct. 12, 1974; minimum daily, 115 microsiemens,

Aug. 14, 1980.

WATER TEMPERATURE: Maximum daily, 34.0°C, July 12, 1970; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 45,500 mg/L, July 21, 1971; minimum daily mean, no flow on many days in 1971, 1972, and 1977.

SEDIMENT LOAD: 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, 654 microsiemens, Apr. 29; minimum daily, 262 microsiemens, July 21.

WATER TEMPERATURE: Maximum daily, 21.0°C, July 4; minimum daily, 5.0°C, Dec. 23.

SEDIMENT CONCENTRATION: Maximum daily mean, 11,000 mg/L, Sept. 29; minimum daily mean, 15 mg/L, Feb. 16.

SEDIMENT LOAD: Maximum daily, 62,700 tons, Sept. 29; minimum daily, 5.1 tons, Oct. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

				DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)			
		DATE	TIME	779	410	8.0	17.0	7.0	10.7			
		MAR 02...	0915									
		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (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. FALL DIAM. % FINER THAN .062 MM (70342)	
DATE	TIME											
MAR 02...	0915	779	273	1.3	2.18	410	7.0	50	105	172	72	
APR 03...	1130	415	--	--	--	--	10.5	45	50	--	61	
MAY 08...	1015	1950	310	2.3	2.77	--	16.5	142	748	1150	74	
DATE		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)	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)
MAR 02...	92	100	--	0	4	18	73	96	99	100	--	--
APR 03...	72	96	100	0	1	25	89	98	100	--	--	--
MAY 08...	91	100	--	9	18	28	66	93	98	99	100	100

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	455	440	465	434	411	444	461	362	372	386	371
2	448	466	448	462	433	415	446	459	380	381	390	376
3	446	435	436	464	441	420	460	448	383	383	404	347
4	446	442	440	464	441	426	468	450	389	385	403	342
5	451	449	437	467	483	429	443	472	389	390	416	345
6	358	455	432	478	486	446	447	469	---	386	412	398
7	355	456	437	456	481	445	464	450	367	388	395	383
8	443	455	441	454	422	445	465	440	386	389	391	363
9	443	454	474	453	434	443	458	408	382	397	617	388
10	437	447	475	458	440	425	454	409	383	482	615	392
11	446	446	466	478	433	429	570	422	381	478	536	395
12	454	442	482	479	432	421	578	429	385	475	404	398
13	457	439	476	463	434	419	580	398	385	468	402	500
14	455	440	475	460	434	462	579	407	374	394	386	506
15	450	437	446	454	457	473	495	395	374	392	383	518
16	464	440	447	451	455	442	453	405	387	410	426	539
17	465	438	447	450	436	427	472	353	381	421	431	410
18	457	440	441	436	432	409	471	351	353	557	581	414
19	465	439	418	458	434	404	507	407	357	567	581	416
20	445	438	427	460	421	414	496	403	386	651	446	417
21	441	430	422	455	424	412	469	457	380	262	451	414
22	446	434	451	462	435	408	485	452	378	---	502	420
23	452	437	451	480	435	409	427	376	376	---	499	455
24	457	444	419	486	450	475	428	389	385	352	413	455
25	461	450	436	486	456	471	409	382	384	426	384	410
26	451	434	433	462	416	534	416	393	374	457	435	412
27	428	434	441	463	415	538	510	387	376	436	435	429
28	438	440	424	420	416	556	511	380	392	410	263	428
29	427	440	447	436	---	565	654	358	388	404	268	406
30	441	444	459	434	---	485	461	352	374	404	358	563
31	447	---	458	450	---	476	---	364	---	397	351	---
MEAN	443	443	446	459	440	449	484	411	379	425	431	420
WTR YR 1990		MEAN	436	MAX	654	MIN	262					

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	13.0	12.0	9.0	9.0	11.0	14.0	12.0	17.0	20.0	16.0	15.0
2	15.0	12.0	12.0	10.0	11.0	10.0	13.0	15.0	16.0	19.0	19.0	16.0
3	16.0	11.0	11.0	9.0	10.0	10.0	11.0	12.0	14.0	19.0	17.0	16.0
4	14.0	12.0	11.0	8.0	10.0	12.0	13.0	14.0	17.0	21.0	15.0	15.0
5	15.0	13.0	12.0	9.0	9.0	11.0	14.0	14.0	18.0	18.0	16.0	17.0
6	14.0	12.0	11.0	9.0	11.0	10.0	12.0	15.0	17.0	17.0	18.0	15.0
7	15.0	13.0	12.0	10.0	10.0	12.0	13.0	14.0	19.0	18.0	19.0	15.0
8	14.0	12.0	11.0	8.0	11.0	11.0	11.0	15.0	18.0	17.0	18.0	16.0
9	13.0	11.0	11.0	9.0	10.0	11.0	13.0	15.0	18.0	18.0	16.0	17.0
10	14.0	11.0	12.0	9.0	10.0	12.0	15.0	14.0	18.0	17.0	19.0	16.0
11	13.0	12.0	9.0	8.0	13.0	13.0	13.0	15.0	17.0	19.0	18.0	14.0
12	14.0	13.0	10.0	9.0	10.0	12.0	13.0	14.0	19.0	18.0	19.0	17.0
13	14.0	12.0	11.0	10.0	10.0	11.0	12.0	15.0	18.0	20.0	18.0	18.0
14	15.0	11.0	8.0	9.0	11.0	12.0	13.0	15.0	19.0	10.0	17.0	15.0
15	13.0	11.0	9.0	11.0	11.0	14.0	13.0	16.0	20.0	17.0	18.0	10.0
16	14.0	12.0	8.0	8.0	12.0	12.0	14.0	17.0	18.0	19.0	18.0	16.0
17	15.0	13.0	9.0	9.0	11.0	11.0	12.0	18.0	19.0	17.0	16.0	15.0
18	13.0	11.0	8.0	8.0	13.0	11.0	11.0	14.0	17.0	18.0	17.0	17.0
19	14.0	11.0	7.0	9.0	11.0	12.0	10.0	15.0	19.0	20.0	18.0	16.0
20	15.0	12.0	9.0	9.0	7.0	13.0	13.0	14.0	18.0	16.0	15.0	15.0
21	12.0	12.0	9.0	9.0	11.0	14.0	14.0	13.0	20.0	20.0	17.0	16.0
22	13.0	11.0	7.0	10.0	16.0	11.0	12.0	13.0	17.0	---	16.0	14.0
23	14.0	12.0	5.0	9.0	10.0	10.0	13.0	14.0	20.0	---	15.0	16.0
24	14.0	13.0	7.0	8.0	10.0	12.0	14.0	16.0	18.0	18.0	15.0	15.0
25	12.0	11.0	8.0	9.0	11.0	13.0	13.0	17.0	18.0	20.0	16.0	15.0
26	13.0	12.0	8.0	9.0	10.0	12.0	12.0	14.0	20.0	19.0	18.0	14.0
27	12.0	11.0	9.0	10.0	12.0	11.0	13.0	15.0	18.0	16.0	16.0	15.0
28	12.0	11.0	9.0	9.0	10.0	12.0	14.0	16.0	19.0	20.0	15.0	17.0
29	13.0	12.0	10.0	9.0	---	13.0	12.0	16.0	20.0	17.0	16.0	16.0
30	13.0	10.0	8.0	10.0	---	13.0	13.0	17.0	18.0	16.0	15.0	17.0
31	12.0	---	9.0	9.0	---	12.0	---	16.0	---	17.0	16.0	---
MEAN	13.5	12.0	9.5	9.0	13.0	11.5	13.0	15.0	18.0	18.0	17.0	15.5
WTR YR 1990		MEAN	13.5	MAX	21.0	MIN	5.0					

RIO GRANDE BASIN

08330540 TRAMWAY FLOODWAY CHANNEL AT ALBUQUERQUE, NM

LOCATION.--Lat 35°04'43", long 106°29'51", Bernalillo County, Hydrologic Unit 13020203, on left bank 300 ft downstream from Copper Boulevard Bridge, near corner of Tramway and Copper Boulevards NE in Albuquerque.

DRAINAGE AREA.--1.60 mi².

PERIOD OF RECORD.--July 1987 to current year (no winter record).

GAGE.--Water-stage recorder and concrete-lined channel. Elevation of gage is 5,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s, July 9, 1988, gage height, 7.62 ft, from floodmarks, from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 202 ft³/s, at 2200 hours Aug. 12, gage height 1.45 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.00	.00	.00	---	---	---	.00	2.0	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	1.5	.00	.00	.00	.00
4	32	.00	.00	---	---	---	.00	1.0	.00	.00	2.4	.00
5	.00	.00	---	---	---	---	.00	.94	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	7.0	.00
13	.00	.00	---	---	---	---	.00	.00	.00	3.2	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	1.6	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.53	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	4.7	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	21	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
MEAN	1.03	.000	---	---	---	---	.053	.18	.000	.10	.47	.000
MAX	32	.00	---	---	---	---	1.6	2.0	.00	3.2	7.0	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	63	.00	---	---	---	---	3.2	11	.00	6.3	29	.00

RIO GRANDE BASIN

08330580 TIJERAS ARROYO AT MONTESSA PARK NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°01'19", long 106°35'40", Bernalillo County, Hydrologic Unit 13020203, on left bank 3.1 mi upstream from highway bridge on Interstate 25, and 3 mi south of Albuquerque.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--August 1987 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s, July 9, 1988, gage height, 4.60 ft, from slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 650 ft³/s, at 1900 hours July 14, gage height, unknown; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.00	.00	.00	---	---	---	.00	1.80	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	2.70	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	3.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	2.50	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	e65.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	e1.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	1.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	2.40	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	28.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	3.20	.00	.00	2.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	27.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.50	.00	---
TOTAL	0.00	0.00	---	---	---	---	3.20	1.80	2.40	73.70	31.00	28.00
MEAN	.000	.000	---	---	---	---	.11	.058	.080	2.38	1.00	.93
MAX	.00	.00	---	---	---	---	3.2	1.8	2.4	65	27	28
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	6.3	3.6	4.8	146	61	56

RIO GRANDE BASIN

08330600 TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'09", long 106°38'57", in SW¼SW¼ sec.17, T.9 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 800 ft upstream from bridge on Broadway Boulevard SE, 0.2 mi downstream from bridge on Interstate Highway 25, and 3 mi south of Albuquerque.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--October 1951 to September 1968 (annual maximum only), August 1974 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 10, 1988, at site 1,700 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,930 ft³/s, July 9, 1988, gage height, 9.6 ft, from floodmarks, from slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 992 ft³/s, at 2030 hours July 14, gage height, 6.70 ft from floodmarks; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.59	e.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	2.70	.00
13	.00	.00	---	---	---	---	.00	.00	.00	2.30	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	66.00	1.40	e.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	e.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.19	e.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	1.20	e.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e30.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	e.00
24	.00	.00	---	---	---	.00	.47	.00	.00	.00	.00	e.00
25	.00	.00	---	---	---	.00	.00	.00	.00	1.90	e.00	e.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	e.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	e.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	e30.00	e.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	e.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	e.00
31	.00	---	---	---	---	.00	---	.00	---	.28	e.00	---
TOTAL	0.00	0.00	---	---	---	---	0.47	0.00	0.00	70.48	36.08	30.00
MEAN	.000	.000	---	---	---	---	.016	.000	.000	2.27	1.16	1.00
MAX	.00	.00	---	---	---	---	.47	.00	.00	66	30	30
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.9	.00	.00	140	72	60

e Estimated

RIO GRANDE BASIN

08330775 SOUTH DIVERSION CHANNEL ABOVE TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'09", Long 106°39'02", Bernalillo County, Hydrologic Unit 13020203, on right bank 600 ft upstream from confluence with Tijeras Arroyo, and 2.5 mi south of Albuquerque.

PERIOD OF RECORD.--June 1988 to current year (no winter record).

GAGE.--Water stage recorder and concrete control. Elevation of gage is 4,930 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s, July 14, 1990, gage height, 6.30 ft from floodmarks, from rating curve extended above 30 cfs on basis of step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,960 ft³/s, at 2000 hours July 14, gage height, 6.30 ft from floodmarks, from rating curve extended above 30 cfs on basis of step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.04	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	13	.00	.00	.00	.00
3	.19	.00	.00	---	---	---	.44	3.5	.00	.00	.00	.00
4	.47	.00	.00	---	---	---	.03	1.1	.00	.00	.00	.00
5	17	.00	.00	---	---	---	4.5	.65	.00	.00	.00	.00
6	4.7	.00	---	---	---	---	2.1	.00	.00	.72	.00	.00
7	1.2	.00	---	---	---	---	.28	.00	.00	.00	.00	.00
8	.20	.00	---	---	---	---	.00	.00	.00	.00	.00	2.2
9	3.1	.00	---	---	---	---	.00	.00	.00	.80	.00	.00
10	1.6	.00	---	---	---	---	.12	.00	.39	.00	.00	.00
11	e.04	.00	---	---	---	---	.12	.00	1.9	.59	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.41	.50	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	9.3	3.1	.00
14	.00	.00	---	---	---	---	.00	.00	.00	189	.53	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	---	.26	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	3.5	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	.00	61	.00	.00	.00	.00
19	.00	.00	---	---	---	---	.00	2.1	.00	.08	.00	.00
20	.13	.00	---	---	---	---	.00	2.8	.00	.00	.00	.00
21	e.00	.00	---	---	---	.00	5.0	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	1.2	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.08
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	8.3	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	1.4	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	1.9	.00	.00	.00	.00	2.3	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.20
30	.00	.00	---	---	---	1.0	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	1.4	---	.00	---	.00	.00	---
TOTAL	28.63	0.00	---	---	---	---	93.19	18.25	2.78	200.91	5.93	2.48
MEAN	.92	.000	---	---	---	---	3.11	.59	.093	6.48	.19	.083
MAX	17	.00	---	---	---	---	61	13	1.9	189	3.1	2.2
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	57	.00	---	---	---	---	185	36	5.5	399	12	4.9

e Estimated

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
MAY 30...	1135	E1080	370	8.0	28.0	17.0	6.8	27	120	6	39
JUN 29...	1230	331	458	8.2	30.0	27.5	6.4	25	140	2	44
JUL 31...	1501	E362	463	8.0	28.0	29.5	5.5	21	150	10	47
SEP 05...	1000	336	510	7.7	25.0	20.0	--	28	150	0	49

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 WATER FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
MAY 30...	6.7	28	1	4.6	145	0	119	110	54	6.4	0.40
JUN 29...	7.8	41	1	5.4	171	0	140	137	58	21	0.60
JUL 31...	7.4	42	2	5.7	168	0	138	132	72	20	0.70
SEP 05...	7.9	48	2	6.5	198	0	162	133	66	30	0.60

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	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, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
MAY 30...	20	234	--	--	--	--	0.500	0.600	0.930	--	1.4
JUN 29...	24	292	--	--	--	--	2.40	0.700	2.00	--	1.1
JUL 31...	25	316	--	--	--	--	0.900	2.30	1.70	--	1.2
SEP 05...	27	345	0.680	0.710	0.420	0.390	1.10	1.10	2.60	2.00	0.70

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)	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)
MAY 30...	2.8	0.550	0.370	6.6	--	--	70	--	--	--	--
JUN 29...	5.5	1.20	0.930	2.0	--	--	110	--	--	--	--
JUL 31...	3.8	1.30	0.980	5.1	6	5	110	<1	1.0	4	<1
SEP 05...	4.4	1.70	1.60	6.0	--	--	130	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

[illegible]

DATE	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)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)
MAY 30...	277	808	51	<10	<10	--	--	--	--	--	--
JUN 29...	65	58	76	200	170	--	--	--	--	--	--
JUL 31...	128	125	94	350	110	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010
SEP 05...	128	116	85	K240	K260	--	--	--	--	--	--

[illegible][illegible]

RIO GRANDE BASIN

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.--Records good. Conveyance channel is 1 of 4 channels (stations 08332010, 08332030, and 08332050) carrying flow in valley cross section. Original design and plan were 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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.0	5.1	5.4	5.3	4.8	4.5	4.5	2.6	.00	4.3	.76
2	.00	2.5	4.8	5.3	5.2	4.0	4.5	4.8	2.2	.00	3.1	.63
3	.00	3.1	5.0	5.4	5.0	4.0	4.5	4.9	2.1	.00	2.2	.52
4	.00	3.2	4.9	5.3	5.0	4.2	4.4	5.0	2.0	.00	1.2	.79
5	.00	3.0	5.0	5.3	5.3	4.1	4.3	4.9	1.8	.00	1.1	1.2
6	.00	3.1	5.2	5.3	5.3	4.2	4.4	7.2	1.4	.73	6.7	.92
7	.00	4.2	4.9	5.3	5.3	4.1	4.5	4.7	1.3	.17	2.1	.66
8	.00	4.1	5.0	5.3	5.3	8.5	4.5	4.2	1.2	.36	1.6	1.5
9	.00	4.7	5.2	5.1	4.9	18	4.3	6.8	1.1	.91	1.3	1.3
10	.00	4.5	5.3	5.0	4.8	22	5.7	6.9	1.8	1.2	1.2	.83
11	.00	4.5	5.6	5.2	5.0	22	15	6.0	1.5	1.7	1.1	.62
12	1.4	4.5	5.9	5.2	4.7	27	13	6.0	1.1	1.6	1.6	.54
13	1.8	4.4	6.2	5.3	4.7	30	5.3	6.1	.95	1.4	1.9	.78
14	1.6	4.9	6.2	5.3	4.2	21	4.4	6.0	.82	3.1	1.9	1.8
15	1.5	4.3	6.4	5.4	4.5	7.6	3.8	5.1	.95	3.0	1.8	1.3
16	1.9	6.1	6.5	5.2	4.5	6.6	3.8	4.6	.71	2.2	1.8	1.1
17	2.1	4.9	6.5	5.3	4.6	5.9	3.7	4.1	.62	2.4	4.2	1.7
18	1.8	4.9	6.2	5.3	4.7	5.6	3.8	3.8	1.1	2.9	6.3	1.2
19	1.9	4.8	5.5	5.6	4.8	5.5	3.8	4.0	.86	1.9	8.1	1.2
20	2.0	5.2	5.6	5.1	4.6	5.1	4.0	4.6	.76	1.6	2.4	1.8
21	2.0	4.7	5.8	5.3	4.5	4.7	5.1	4.3	.98	1.4	2.4	1.5
22	1.9	4.6	5.9	5.3	4.5	4.2	4.1	3.4	2.4	1.4	2.0	1.7
23	1.8	4.6	5.9	5.3	4.2	4.4	5.0	3.1	.13	1.2	2.1	4.8
24	1.7	4.9	5.6	5.2	4.5	5.3	4.2	3.0	.00	1.0	1.9	2.0
25	2.7	4.9	5.3	5.1	4.6	5.0	4.5	2.9	.00	1.0	3.0	2.0
26	3.4	5.5	5.3	5.2	4.5	4.5	4.8	3.2	.00	1.1	2.8	2.0
27	2.7	4.8	5.3	5.1	4.6	4.1	4.9	3.6	.00	.86	1.8	1.8
28	4.7	4.6	5.3	5.0	4.6	5.9	6.2	2.7	.00	.44	1.6	1.8
29	3.4	6.7	5.5	5.3	---	4.2	6.0	2.7	.00	2.0	1.3	4.2
30	2.4	4.9	5.4	5.2	---	4.2	4.8	3.8	.00	.81	.92	4.0
31	2.0	---	5.7	5.3	---	4.4	---	3.1	---	.97	.87	---
TOTAL	44.70	133.1	172.0	162.9	133.7	265.1	155.8	140.0	30.38	37.35	76.59	46.95
MEAN	1.44	4.44	5.55	5.25	4.77	8.55	5.19	4.52	1.01	1.20	2.47	1.56
MAX	4.7	6.7	6.5	5.6	5.3	30	15	7.2	2.6	3.1	8.1	4.8
MIN	.00	2.0	4.8	5.0	4.2	4.0	3.7	2.7	.00	.00	.87	.52
AC-FT	89	264	341	323	265	526	309	278	60	74	152	93

CAL YR 1989 TOTAL 1243.43 MEAN 3.41 MAX 29 MIN .00 AC-FT 2470
WTR YR 1990 TOTAL 1398.57 MEAN 3.83 MAX 30 MIN .00 AC-FT 2770

RIO GRANDE BASIN

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 records prior to October 1964.

GAGE.--Water-stage recorder. Datum of gage is 4,722.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are 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. 17 years (water years 1974-90), 1,384 ft³/s, 1,003,000 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, 1,780 ft³/s, July 16; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	17	e267	725	681	611	518	787	914	.00	99	17
2	.00	16	e273	704	663	557	507	735	638	.00	111	6.1
3	.00	6.8	e275	706	668	674	626	1030	504	.00	184	e.00
4	.00	49	e283	705	717	550	497	1050	433	.00	106	e.00
5	.00	121	e290	675	828	597	420	768	336	.00	158	e.00
6	.00	118	e308	659	808	595	418	868	224	5.7	219	e.00
7	17	115	332	652	769	596	419	940	94	53	236	.00
8	35	134	379	525	680	724	391	959	64	242	226	.00
9	405	128	494	520	701	805	332	1190	35	349	378	.00
10	371	121	794	539	717	617	281	1090	20	243	378	6.1
11	286	178	1080	620	705	632	279	999	15	186	262	8.2
12	266	202	1160	802	694	711	296	1400	14	178	144	60
13	299	198	1210	805	692	624	390	1690	40	246	164	102
14	254	203	1250	725	690	563	272	1750	31	500	198	63
15	129	198	1260	693	723	488	169	1280	71	1170	306	25
16	97	189	1280	606	749	449	299	714	207	1780	283	49
17	85	194	1160	647	753	396	275	459	205	465	398	54
18	72	193	907	707	696	307	195	432	221	360	445	45
19	65	183	852	750	679	232	299	508	195	631	359	78
20	66	207	858	742	692	217	900	1030	161	287	203	102
21	60	e232	1000	741	687	232	768	1160	27	156	327	90
22	44	e236	998	753	676	182	646	546	4.7	62	133	236
23	30	e238	759	767	679	161	591	640	.00	123	286	294
24	32	e246	640	751	767	154	590	575	.00	91	322	495
25	48	e241	595	675	713	149	694	393	.00	535	445	438
26	42	e238	555	687	792	202	1450	269	42	316	226	366
27	28	e245	534	731	798	243	1350	262	33	126	152	217
28	17	e251	564	691	769	295	1250	346	.00	60	96	152
29	13	e254	936	668	---	583	1110	682	.00	30	93	105
30	9.5	e262	919	656	---	504	942	1140	.00	146	58	1030
31	14	---	829	661	---	562	---	1240	---	79	49	---
TOTAL	2784.50	5213.8	23041	21288	20186	14212	17174	26932	4528.70	8419.70	7044	4038.40
MEAN	89.8	174	743	687	721	458	572	869	151	272	227	135
MAX	405	262	1280	805	828	805	1450	1750	914	1780	445	1030
MIN	.00	6.8	267	520	663	149	169	262	.00	.00	49	.00
AC-FT	5520	10340	45700	42220	40040	28190	34060	53420	8980	16700	13970	8010
(†)	18970	19630	72500	50650	46780	38870	45190	64180	18020	30080	22610	

CAL YR 1989 TOTAL 275678.30 MEAN 755 MAX 3880 MIN .00 AC-FT 546800
WTR YR 1990 TOTAL 154862.10 MEAN 424 MAX 1780 MIN .00 AC-FT 307200

(†) 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.

e Estimated

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	578	541	542	536	576	573	402	---	545	511
2	---	---	576	547	540	538	549	579	414	---	584	518
3	---	602	576	542	536	522	599	516	438	---	535	512
4	---	574	568	540	535	521	596	501	458	---	544	---
5	---	548	572	542	544	506	605	500	475	---	532	---
6	---	550	572	543	542	506	597	534	491	---	521	---
7	---	550	581	542	538	509	607	525	554	552	550	---
8	---	541	581	562	545	501	617	530	604	493	562	---
9	---	542	509	558	540	494	630	512	638	521	535	487
10	---	542	516	556	554	501	652	507	616	555	578	508
11	548	575	520	565	542	509	678	472	665	572	585	470
12	531	542	506	548	540	487	655	446	741	611	590	467
13	547	561	513	560	530	487	664	467	621	505	539	435
14	544	572	523	543	525	498	703	433	674	518	498	494
15	559	570	514	544	544	537	741	442	554	444	---	513
16	580	567	513	541	540	539	677	500	481	327	---	489
17	588	558	518	541	537	535	662	495	520	378	446	484
18	---	559	525	540	---	532	683	455	477	494	456	512
19	---	570	519	542	---	548	674	451	430	509	484	493
20	---	563	520	553	---	547	565	419	403	555	499	494
21	---	562	529	554	---	544	576	421	503	586	210	375
22	---	582	534	537	---	618	613	442	508	611	542	527
23	---	589	555	536	---	620	634	467	---	760	490	565
24	---	590	562	552	---	624	613	447	---	595	471	539
25	---	588	560	550	---	662	605	479	---	475	427	501
26	---	586	557	548	---	629	518	492	---	---	475	520
27	---	582	549	550	---	656	549	469	---	---	486	544
28	---	583	548	550	518	639	591	465	---	---	494	580
29	---	576	525	549	---	669	603	395	---	---	498	584
30	---	579	520	542	---	651	581	399	---	---	473	642
31	---	---	537	542	---	617	---	398	---	567	453	---
MEAN	557	568	541	547	538	557	620	475	530	531	504	511
WTR YR 1990		MEAN	540	MAX	760	MIN	210					

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	11.0	8.0	8.0	13.0	15.0	17.0	25.0	---	30.0	32.0
2	---	---	13.0	13.0	8.0	14.0	11.0	13.0	25.0	---	28.0	31.0
3	---	16.0	12.0	9.0	9.0	15.0	18.0	20.0	28.0	---	32.0	30.0
4	---	15.0	13.0	9.0	9.5	13.0	20.0	20.0	30.0	---	30.0	---
5	---	16.0	14.0	8.0	10.0	12.0	17.0	22.0	29.0	---	29.0	---
6	---	15.0	12.0	7.0	11.0	13.0	21.0	22.0	30.0	---	24.0	---
7	---	14.0	11.0	8.0	11.0	14.0	20.0	25.0	30.0	27.0	30.0	---
8	---	14.0	11.0	9.0	10.0	15.0	21.0	26.0	30.0	26.0	32.0	---
9	---	16.0	11.0	10.0	11.0	14.0	20.0	23.0	28.0	29.0	32.0	30.0
10	---	13.0	10.0	12.0	12.0	11.0	22.0	20.0	26.0	28.0	33.0	30.0
11	16.0	16.0	8.0	12.0	12.0	13.0	22.0	21.0	26.0	29.0	34.0	31.0
12	16.0	15.0	8.0	11.0	11.0	14.0	20.0	25.0	30.0	29.0	30.0	31.0
13	17.0	14.0	8.0	10.0	9.0	11.0	25.0	24.0	26.0	30.0	25.0	31.0
14	17.0	17.0	7.0	10.0	9.0	12.0	25.0	24.0	28.0	25.0	28.0	30.0
15	17.0	13.0	9.0	10.0	8.0	12.0	26.0	23.0	27.0	30.0	---	28.0
16	18.0	14.0	13.0	10.0	8.0	13.0	24.0	25.0	29.0	30.0	---	24.0
17	13.0	13.0	12.0	10.0	10.0	13.0	16.0	23.0	29.0	32.0	26.0	26.0
18	---	10.0	11.0	9.0	---	14.0	15.0	20.0	26.0	17.0	30.0	27.0
19	---	17.0	10.0	9.0	---	14.0	19.0	24.0	29.0	28.0	28.0	29.0
20	---	16.0	8.0	8.0	---	14.0	23.0	24.0	30.0	32.0	26.0	28.0
21	---	17.0	8.0	8.0	---	13.0	24.0	25.0	30.0	30.0	30.0	28.0
22	---	17.0	8.0	15.0	---	14.0	24.0	25.0	29.0	30.0	25.0	22.0
23	---	15.0	9.0	9.0	---	14.0	22.0	27.0	---	30.0	30.0	20.0
24	---	15.0	9.0	8.0	---	14.0	18.0	29.0	---	27.0	29.0	22.0
25	---	17.0	11.0	9.0	---	15.0	17.0	23.0	---	31.0	30.0	25.0
26	---	16.0	11.0	10.0	---	14.0	21.0	28.0	---	---	30.0	26.0
27	---	17.0	11.0	10.0	12.0	14.0	22.0	26.0	---	---	32.0	26.0
28	---	13.0	10.0	9.0	12.0	15.0	24.0	25.0	---	---	33.0	26.0
29	---	12.0	8.5	8.0	---	14.0	22.0	24.0	---	---	32.0	22.0
30	---	10.0	8.5	9.0	---	15.0	20.0	25.0	---	---	33.0	19.0
31	---	---	8.0	9.0	---	16.0	---	25.0	---	31.0	32.0	---
MEAN	16.5	15.0	10.0	9.5	10.0	13.5	20.5	23.5	28.0	28.5	30.0	27.0
WTR YR 1990		MEAN	19.0	MAX	34.0	MIN	7.0					

WATER-QUALITY RECORDS

DAY	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS
	CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)	
OCTOBER												
1	0	.00	137	6.3	119	86	150	294	134	246	1350	2230
2	0	.00	122	5.3	109	80	155	295	107	192	3310	4980
3	0	.00	88	1.6	93	69	159	303	107	193	695	1260
4	0	.00	103	14	104	79	190	362	100	194	178	264
5	0	.00	89	29	103	81	188	343	132	295	128	206
NOVEMBER												
6	0	.00	76	24	96	80	187	333	137	299	145	233
7	235	11	123	38	94	84	181	319	129	268	200	322
8	435	41	141	51	119	122	120	170	133	244	212	414
9	1120	1220	136	47	467	623	139	195	125	237	205	446
10	834	835	172	56	651	1400	163	237	125	242	198	330
DECEMBER												
11	384	297	78	37	630	1840	151	253	149	284	164	280
12	335	241	150	82	568	1780	174	377	560	1050	128	246
13	330	266	122	65	520	1700	133	289	509	951	135	227
14	287	197	129	71	538	1820	149	292	167	311	133	202
15	183	64	144	77	488	1660	109	204	152	297	114	150
JANUARY												
16	140	37	133	68	434	1500	104	170	223	451	170	206
17	134	31	150	79	251	786	205	358	145	295	128	137
18	126	24	125	65	220	539	133	254	141	265	98	81
19	117	21	123	61	242	557	139	281	156	286	97	61
20	116	21	134	75	241	558	133	266	166	310	99	58
FEBRUARY												
21	117	19	152	95	230	621	130	260	179	332	131	82
22	104	12	133	85	182	490	117	238	188	343	117	57
23	89	7.2	114	73	143	293	129	267	197	361	165	72
24	110	9.5	115	76	139	240	141	286	286	592	92	38
25	113	15	99	64	137	220	136	248	223	429	86	35
MARCH												
26	85	9.6	103	66	142	213	510	946	216	462	98	53
27	91	6.9	120	79	164	236	578	1140	186	401	85	56
28	74	3.4	90	61	155	236	177	330	201	417	141	112
29	113	4.0	100	69	196	495	115	207	---	---	124	195
30	76	1.9	99	70	196	486	131	232	---	---	115	156
31	105	4.0	---	---	158	354	157	280	---	---	108	164
TOTAL	---	3398.50	---	1690.2	---	19328	---	10029	---	10247	---	13353
DAY	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS
	CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)	
APRIL												
1	103	144	331	703	170	420	0	.00	132	35	74	3.4
2	120	164	217	431	116	200	0	.00	308	92	60	.99
3												

RIO GRANDE BASIN

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.

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.--Records good. 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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	125	54	81	93	31	62	36	37	58	113	97
2	74	107	53	81	93	30	63	51	37	58	134	91
3	68	99	53	89	93	30	54	50	32	55	136	83
4	80	98	53	89	93	30	53	51	38	59	126	94
5	108	100	53	88	94	38	58	57	41	71	136	94
6	123	99	52	88	94	39	61	58	32	109	131	84
7	125	97	52	88	95	37	62	49	30	122	138	92
8	108	97	52	88	96	35	58	53	24	131	138	109
9	132	96	53	84	95	35	55	48	22	116	137	123
10	120	94	54	80	95	43	49	53	21	111	142	136
11	111	76	55	81	96	37	39	53	24	112	140	118
12	113	72	57	84	95	40	40	50	22	104	123	136
13	113	71	75	86	75	41	45	56	25	104	130	130
14	121	68	91	87	62	49	41	52	22	104	135	105
15	149	68	83	87	62	53	38	52	31	118	145	107
16	142	72	61	87	62	58	32	45	38	110	137	113
17	131	85	61	87	62	58	31	44	36	111	138	128
18	125	83	60	88	61	53	39	37	71	124	146	125
19	147	81	60	88	61	51	40	46	108	117	144	124
20	145	67	75	89	61	46	39	35	127	111	138	136
21	147	57	79	89	61	43	39	43	129	125	125	130
22	141	56	62	90	60	42	42	39	133	116	138	122
23	152	56	62	90	60	41	32	41	129	127	134	137
24	147	56	62	90	60	50	45	46	112	120	125	133
25	136	55	64	90	59	52	58	43	87	105	132	123
26	143	55	64	91	59	53	50	50	70	105	144	133
27	144	55	67	92	55	49	48	49	67	99	133	138
28	138	54	69	91	34	58	55	54	67	98	123	141
29	135	54	78	92	---	53	50	44	67	112	111	146
30	132	54	82	92	---	56	45	39	65	127	128	153
31	109	---	82	92	---	60	---	37	---	105	110	---
TOTAL	3827	2307	1978	2719	2086	1391	1423	1461	1744	3244	4110	3581
MEAN	123	76.9	63.8	87.7	74.5	44.9	47.4	47.1	58.1	105	133	119
MAX	152	125	91	92	96	60	63	58	133	131	146	153
MIN	68	54	52	80	34	30	31	35	21	55	110	83
AC-FT	7590	4580	3920	5390	4140	2760	2820	2900	3460	6430	8150	7100

CAL YR 1989 TOTAL 31473 MEAN 86.2 MAX 152 MIN 38 AC-FT 62430
WTR YR 1990 TOTAL 29871 MEAN 81.8 MAX 153 MIN 21 AC-FT 59250

RIO GRANDE BASIN

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.--Water-discharge records poor. Diversions for irrigation of about 3,700 acres upstream from station in past years, but present diversion negligible. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE.--39 years, 13.3 ft³/s, 9,640 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.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 12	0330	*571	*3.42				
No flow at times.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	2.4	3.2	14	1.8	e.00	9.2	e.00
2	.00	.00	.00	.00	.00	1.7	2.2	12	.92	e.00	6.9	e.00
3	.00	.00	.00	.00	.00	1.5	1.5	48	.30	e.00	1.2	e.00
4	2.6	.00	.00	.00	.00	1.7	1.7	40	e.10	e.00	.51	e.00
5	17	.00	.00	.00	.00	1.3	1.4	42	e.00	e.00	.22	e.00
6	16	.00	.00	.00	.00	1.7	3.6	22	e.00	e.00	9.1	e.00
7	e2.0	.00	.00	.00	.00	2.2	4.8	11	e.00	1.1	13	.15
8	e.00	.00	.00	.00	.00	e2.0	4.5	8.7	e.00	.20	2.1	33
9	e.00	.00	.00	.00	e1.3	3.8	5.3	11	e.00	2.0	.51	12
10	.00	.00	.00	.00	e3.2	6.3	3.4	22	e.00	.00	1.4	.51
11	.00	.00	.00	.00	e2.5	5.3	2.5	18	e.00	.00	.56	.07
12	.00	.00	.00	.00	e.85	4.5	1.4	23	e.00	97	.20	e.05
13	.00	.00	.00	.00	e.72	3.2	.72	13	e.00	17	.26	e.02
14	.00	.00	.00	.00	e.33	2.5	.36	20	e.00	7.6	6.6	.01
15	.00	.00	.00	.00	e.20	3.0	e.10	24	e.00	131	57	.00
16	.00	.00	.00	.00	e.22	1.4	e.00	23	e.00	6.9	80	.03
17	.00	.00	.00	.00	e.24	1.2	e.00	19	e.00	2.4	36	.09
18	.00	.00	.25	.00	e.09	1.1	.04	13	e.00	.72	10	1.4
19	.00	.00	.00	.00	e.15	.72	2.2	9.1	e.00	.34	1.0	8.4
20	.00	.00	.00	.00	e.39	.61	3.8	8.7	e.00	.26	e.10	181
21	.00	.00	.00	.00	e.22	.56	2.8	4.5	e.00	.14	e.01	166
22	.00	.00	.00	.00	e.20	e.00	1.6	3.2	e.00	.04	4.7	15
23	.00	.00	.00	.00	e.12	e.00	.78	2.0	e.00	.04	14	43
24	.00	.00	.00	.00	e.10	e.00	4.5	1.6	e.00	.01	e1.0	6.3
25	.00	.00	.00	.00	e.06	e.00	23	1.8	e.00	.14	e.50	2.5
26	.00	.00	.00	.00	2.7	e.00	48	6.0	e.00	.04	e.10	.78
27	.00	.00	.00	.00	4.3	e.00	8.7	4.8	e.00	.00	2.0	.00
28	.00	.00	.00	.00	4.0	e.00	7.3	3.8	e.00	.00	1.8	.00
29	.00	.00	.00	.00	---	e.60	6.3	2.0	e.00	30	e.10	.00
30	.00	.00	.00	.00	---	2.5	6.0	.92	e.00	3.4	e.01	1.8
31	.00	---	.00	.00	---	5.0	---	2.0	---	3.9	e.00	---
TOTAL	37.60	0.00	0.25	0.00	21.89	56.79	151.70	434.12	3.12	304.23	260.08	472.11
MEAN	1.21	.000	.008	.000	.78	1.83	5.06	14.0	.10	9.81	8.39	15.7
MAX	17	.00	.25	.00	4.3	6.3	48	48	1.8	131	80	181
MIN	.00	.00	.00	.00	.00	.00	.00	.92	.00	.00	.00	.00
AC-FT	75	.00	.5	.00	43	113	301	861	6.2	603	516	936

CAL YR 1989 TOTAL 1440.28 MEAN 3.95 MAX 263 MIN .00 AC-FT 2860
WTR YR 1990 TOTAL 1741.89 MEAN 4.77 MAX 181 MIN .00 AC-FT 3460

e Estimated

RIO GRANDE BASIN

08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-56 (published as "below Cabezón"), 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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 214,000 mg/L, Aug. 28, 1988; 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, 139,000 mg/L, Sept. 21; minimum daily mean, no flow on many days.

SEDIMENT LOADS: Maximum daily, 62,300 tons, Sept. 21; minimum daily, 0 ton on many days.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	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)
APR 27...	1030	22	1410	21800	1290	5
MAY 01...	1030	12	1260	10500	340	84
AUG 15...	2045	57	1640	157000	24200	83
16...	0045	51	1680	126000	17400	91
SEP 08...	0130	33	1250	78100	6960	94

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17800	154	34700	1310	21300	104	0	.00	38000	944	0	.0
2	13700	81	27500	891	17300	43	0	.00	43800	816	0	.0
3	11200	45	44300	5740	14000	11	0	.00	29800	97	0	.0
4	9330	43	62100	6710	11700	3.2	0	.00	25900	36	0	.0
5	9150	35	53500	6070	0	.00	0	.00	26400	16	0	.0
6	15500	151	34300	2040	0	.00	0	.00	49500	1220	0	.0
7	17600	228	29000	861	0	.00	9040	27	61900	2170	38700	16
8	18300	222	24600	578	0	.00	13000	7.0	56500	320	56800	5060
9	17600	252	36500	1080	0	.00	47700	258	45700	63	55900	1810
10	16200	149	31000	1840	0	.00	0	.00	40900	155	43000	59
11	13400	90	22100	1070	0	.00	0	.00	30400	46	27800	5.3
12	11700	44	30100	1870	0	.00	82700	21700	20800	11	22400	3.0
13	10300	20	22900	804	0	.00	56000	2570	21700	15	19800	1.1
14	9610	9.3	28800	1560	0	.00	51200	1050	39100	697	17700	.5
15	8360	2.3	36500	2370	0	.00	86900	30700	83300	12800	0	.0
16	0	.00	27900	1730	0	.00	63800	1190	108000	23300	3400	.3
17	0	.00	24800	1270	0	.00	37900	246	75500	7340	32100	7.8
18	5940	.64	13200	463	0	.00	21500	42	57100	1540	36500	138
19	20800	124	20800	511	0	.00	14700	13	39300	106	59300	1340
20	23500	241	20200	474	0	.00	12600	8.8	31000	8.4	96400	47100
21	18600	141	18400	224	0	.00	12100	4.6	23500	.63	139000	62300
22	14600	63	17000	147	0	.00	9450	1.0	33100	420	59400	2410
23	10500	22	14400	78	0	.00	8780	.95	58500	2210	69500	8070
24	20200	245	11800	51	0	.00	7470	.20	41500	112	51200	871
25	28300	1760	15000	73	0	.00	11100	4.2	32500	44	37200	251
26	32700	4240	25300	410	0	.00	8470	.91	26600	7.2	27400	58
27	27900	655	23100	299	0	.00	0	.00	30100	163	0	.0
28	28000	552	23100	237	0	.00	0	.00	39600	192	0	.0
29	28400	483	19500	105	0	.00	14200	1150	31400	8.5	0	.0
30	30000	486	27200	68	0	.00	37100	341	24300	.66	37700	183
31	---	---	21700	117	---	---	27500	290	0	.00	---	---
TOTAL	---	10538.24	---	41051	---	161.20	---	59604.66	---	54858.39	---	129684.0
TOTAL LOAD FOR YEAR: 304516.67 TONS.												

RIO GRANDE BASIN

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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1927 to December 1950 (monthend contents only, published in WSP 1732), April 1958 to current year (monthend contents only).

GAGE.--Water-stage recorder. Datum of gage is 7,345.57 ft above 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.--Lake 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, 3,650 acre-ft, Oct. 1, elevation, 7,366.3 ft; minimum, 2,470 acre-ft, Sept. 30, elevation, 7,362.2 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

		Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.	30	7,366.3	3,650	-----
Oct.	31	7,366.0	3,550	- 100
Nov.	30	7,365.5	3,400	- 150
Dec.	31	7,365.2	3,300	- 100
CAL YR 1989				- 350
Jan.	31	7,365.2	3,300	0
Feb.	28	7,365.1	3,270	- 30
Mar.	31	7,365.0	3,240	- 30
Apr.	30	7,364.6	3,120	- 120
May	31	7,364.0	2,950	- 170
June	30	7,363.2	2,730	- 220
July	31	7,362.8	2,630	- 100
Aug.	31	7,362.5	2,550	- 80
Sept.	30	7,362.2	2,470	- 80
WTR YR 1990				-1,180

RIO GRANDE BASIN

08341400 BLUEWATER LAKE NEAR BLUEWATER, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected in Bluewater Lake impounded by Bluewater Dam on Bluewater Creek.

PERIOD OF RECORD.--Water years 1966-69, 1987 to current year.

REMARKS.--Samples for chemical analyses are collected 300 ft upstream from Bluewater Dam near Shore.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 15...	1330	750	8.4	10.5	9.0	12.8	350	180	100	24
MAR 21...	1030	740	7.8	14.5	8.5	9.0	410	240	120	27
JUN 06...	1530	915	9.0	29.5	23.0	6.9	480	300	140	31
JUL 18...	1400	1000	8.5	19.5	21.5	7.2	450	320	130	31
SEP 27...	0845	900	8.8	12.0	16.0	6.8	490	350	140	33

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY 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 15...	15	0.3	2.7	183	14	174	160	240	7.7	0.40
MAR 21...	15	0.3	2.5	203	0	166	165	270	6.3	0.30
JUN 06...	17	0.3	2.9	210	2	176	171	310	9.1	0.30
JUL 18...	17	0.3	3.1	143	12	137	137	340	8.2	0.50
SEP 27...	19	0.4	3.4	150	6	133	122	410	12	0.40

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, 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, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 15...	15	509	3	3	70	<1	<1.0	3	2	3
MAR 21...	14	555	--	--	60	--	--	--	--	--
JUN 06...	11	627	--	--	70	--	--	--	--	--
JUL 18...	10	622	--	--	90	--	--	--	--	--
SEP 27...	17	715	--	--	70	--	--	--	--	--

DATE	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 15...	3	6	1	<1	<0.10	0.1	<1	<1	20	9
MAR 21...	--	11	--	--	--	--	--	--	--	--
JUN 06...	--	23	--	--	--	--	--	--	--	--
JUL 18...	--	4	--	--	--	--	--	--	--	--
SEP 27...	--	8	--	--	--	--	--	--	--	--

RIO GRANDE BASIN

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.--Records good except for estimated daily discharges, which are poor. Flow slightly regulated by Bluewater Lake (station 08341400) 24 mi upstream. Diversions and ground-water withdrawals for irrigation of about 4,500 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--49 years (water years 1913, 1915-20, 1922, 1924, 1925, 1950-66, 1968-90), 2.85 ft³/s, 2,060 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 most of time.

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.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 20	2300	*49.0	*2.35				
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	2.3
9	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.01
10	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	6.8	2.9
21	.00	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	2.3	5.0
22	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.35
23	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	4.3
24	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.22
25	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.01
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.23
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.10	15.32
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.29	.51
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.8	5.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	18	30

CAL YR 1989 TOTAL 0.97 MEAN .003 MAX .71 MIN .00 AC-FT 1.9
WTR YR 1990 TOTAL 24.42 MEAN .067 MAX 6.8 MIN .00 AC-FT 48

e Estimated

RIO GRANDE BASIN

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 Avenues, 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.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--29 years, 0.116 ft³/s, 84 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 240 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 most of time.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 175 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 20	1530	*235	*1.86	No other peak greater than base discharge			
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	e2.9	.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	e14	e3.7
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1.5	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.20	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1.8
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	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.60	5.50
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.60	.18
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	3.7
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	37	11

CAL YR 1989 TOTAL 5.60 MEAN .015 MAX 5.6 MIN .00 AC-FT 11
WTR YR 1990 TOTAL 24.10 MEAN .066 MAX 14 MIN .00 AC-FT 48

e Estimated

RIO GRANDE BASIN

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.--Records good except for estimated daily discharges, which are 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.--54 years, 6.67 ft³/s, 4,830 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.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 13	1500	*20	*1.88				

Minimum daily discharge, 2.2 ft³/s, Oct. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.7	4.3	4.8	5.3	5.7	6.2	4.8	4.4	5.2	3.1	2.5
2	2.5	2.8	4.6	4.8	5.2	5.7	5.8	5.2	4.1	5.0	2.9	2.5
3	2.5	2.9	4.7	5.0	4.9	5.6	5.6	6.9	4.3	5.0	2.9	2.5
4	2.5	3.2	4.9	4.7	5.0	5.8	5.4	9.3	4.5	5.0	3.0	2.4
5	2.5	3.3	5.1	4.5	5.0	6.1	5.3	7.5	4.8	4.6	2.8	2.4
6	2.5	3.5	5.0	4.4	5.0	6.2	5.3	5.9	4.8	4.4	2.6	2.3
7	2.6	3.8	4.8	4.4	5.2	6.5	5.5	5.4	4.9	4.4	2.7	2.3
8	2.5	3.8	4.6	4.5	5.3	6.3	5.3	5.1	5.0	4.4	2.7	2.3
9	2.4	4.0	4.6	4.9	5.4	6.1	4.9	4.9	5.3	4.0	2.7	2.3
10	2.5	4.1	4.8	5.2	5.6	5.9	5.1	5.0	5.5	3.9	2.7	2.5
11	2.4	4.1	4.3	5.5	6.1	6.1	4.9	5.0	5.5	4.0	2.7	2.6
12	2.3	4.3	4.1	5.4	6.5	6.7	4.6	4.6	5.7	4.2	2.8	2.5
13	2.3	4.5	4.1	5.4	7.3	5.8	4.6	4.7	5.7	4.2	4.0	2.4
14	2.4	4.6	4.1	5.5	6.5	5.3	4.6	4.9	5.5	4.2	3.1	2.3
15	2.3	4.8	4.2	5.5	5.1	5.2	4.8	5.0	5.4	4.1	3.7	2.3
16	2.3	4.7	4.7	5.2	4.8	5.1	4.8	4.9	5.4	4.3	3.5	2.6
17	2.2	4.7	5.0	5.3	5.2	5.3	4.8	5.1	5.4	3.8	3.8	2.7
18	2.2	4.8	4.9	5.7	5.7	5.3	5.1	5.2	5.3	3.4	3.8	2.6
19	2.4	4.8	4.9	4.3	5.3	5.3	6.3	5.3	5.0	3.2	3.3	2.6
20	2.3	4.8	4.9	4.0	5.0	5.3	6.4	4.9	5.2	2.9	3.4	3.1
21	2.4	4.8	4.7	3.9	5.2	5.3	5.3	4.9	5.3	3.1	3.5	4.2
22	2.5	4.9	4.5	4.0	5.1	5.4	5.3	5.0	5.4	3.1	5.6	8.8
23	2.4	4.9	4.5	4.3	5.4	5.5	5.3	5.1	5.3	3.0	5.0	11
24	2.5	4.8	4.8	4.7	5.3	5.4	5.4	5.0	5.4	3.2	4.8	e7.2
25	2.4	4.7	4.9	5.1	5.4	5.3	7.3	4.7	5.4	3.4	4.6	e5.1
26	2.4	4.7	4.7	4.7	5.4	5.4	10	4.7	5.6	3.5	3.7	e4.8
27	2.5	4.6	4.6	4.9	5.6	5.5	6.6	4.7	5.3	3.6	3.2	e4.1
28	2.5	4.3	4.8	4.9	5.6	5.4	5.2	4.6	5.4	3.7	3.0	3.6
29	2.5	4.2	5.1	4.7	---	5.4	5.0	4.4	5.5	3.6	2.8	3.4
30	2.6	4.1	5.2	4.8	---	5.6	4.9	4.4	5.5	3.3	2.6	3.6
31	2.6	---	5.1	5.1	---	7.9	---	4.4	---	3.2	2.5	---
TOTAL	75.4	126.2	145.5	150.1	152.4	177.4	165.6	161.5	155.8	120.9	103.5	105.5
MEAN	2.43	4.21	4.69	4.84	5.44	5.72	5.52	5.21	5.19	3.90	3.34	3.52
MAX	2.6	4.9	5.2	5.7	7.3	7.9	10	9.3	5.7	5.2	5.6	11
MIN	2.2	2.7	4.1	3.9	4.8	5.1	4.6	4.4	4.1	2.9	2.5	2.3
AC-FT	150	250	289	298	302	352	328	320	309	240	205	209

CAL YR 1989 TOTAL 1919.5 MEAN 5.26 MAX 13 MIN 2.2 AC-FT 3810
WTR YR 1990 TOTAL 1639.8 MEAN 4.49 MAX 11 MIN 2.2 AC-FT 3250

e Estimated

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980-82, 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 16...	0900	4.3	1280	9.1	4.0	10.0	8.7	17	360	110	81	38
JAN 03...	1400	5.0	1300	8.0	0.0	11.0	8.6	26	--	--	--	--
MAR 23...	1030	5.7	1680	8.2	19.0	14.0	9.8	28	450	210	97	51
JUN 08...	1100	4.9	1480	8.5	28.5	17.5	12.4	26	410	150	89	45
JUL 19...	0815	3.4	1330	8.0	20.5	15.5	7.7	17	400	170	88	44
SEP 27...	1330	3.9	1320	8.3	27.0	17.5	9.2	21	--	--	--	--

DATE	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 DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (90410)	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)
NOV 16...	130	3	6.2	243	32	253	222	300	110	0.80	30	857
JAN 03...	--	--	--	299	0	245	--	--	--	--	--	--
MAR 23...	180	4	8.2	293	0	240	230	430	170	0.60	28	1120
JUN 08...	160	3	7.0	273	18	254	236	330	130	0.20	27	953
JUL 19...	160	3	7.6	283	0	232	227	320	120	0.60	29	917

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	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, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	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)
NOV 16...	--	--	--	--	1.60	1.60	0.550	--	0.35	2.5	0.680	0.620
JAN 03...	--	--	--	--	1.20	1.30	1.50	--	0.50	3.2	1.00	0.890
MAR 23...	--	--	--	--	1.60	1.70	1.30	--	2.5	5.4	0.990	1.10
JUN 08...	--	--	--	--	2.00	2.10	0.470	--	0.93	3.4	1.40	0.980
JUL 19...	--	--	--	--	1.20	1.20	0.040	--	0.66	1.9	1.10	0.950
SEP 27...	0.690	0.690	0.010	0.010	0.700	0.700	<0.010	0.040	--	1.1	1.00	0.970

[illegible]

RIO GRANDE BASIN

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)
NOV 16...	<1	0.60	3.8	3	3	40	5	<10	270	460	3	<1
JUL 19...	<1	<0.10	<0.1	3	3	<10	3	--	--	--	--	--
DATE	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (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)	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)
NOV 16...	20	10	20	9800	10	180	0.02	40	4.8	1.2	8.7	2.6
DATE	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 NATURAL DIS- SOLVED (UG/L AS U) (22703)	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 KF AGAR (COLS./ UM-MF 100 ML) (31625)	STREP- TOCOCCI FECAL, 0.7 PER (COLS./ 100 ML) (31673)	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)
NOV 16...	7.8	2.1	0.12	5.4	204	2.4	58	K9	26	--	--	--
JAN 03...	--	--	--	--	177	2.4	98	48	45	--	--	--
MAR 23...	--	--	--	--	143	2.2	93	46	67	--	--	--
JUN 08...	--	--	--	--	7	0.09	81	41	47	--	--	--
JUL 19...	--	--	--	--	319	2.9	69	K18	47	--	--	--
SEP 27...	--	--	--	--	244	2.6	66	100	K67	<0.1	<0.010	<0.1
DATE	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)	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)
SEP 27...	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01
DATE	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	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)
MAR 23...	--	--	--	--	--	--	<0.01	<0.01	<0.01	--	--	--
SEP 27...	<0.01	<0.01	<0.01	<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 SW¼ sec. 2, T.10 N., R.5 W., Cibola County, Hydrologic Unit 13020207, in Pagate Purchase Grant, near right bank on downstream end of bridge abutment of former Atchison, Topeka and Santa Fe Railway Co. bridge, 1.4 mi downstream from Rio Moquino, 4.2 mi upstream from Pagate Reservoir, 5.0 mi southeast of Pagate, and 26 mi east of Grants.

DRAINAGE AREA.--107 mi².

WATER-DISCHARGE RECORDS

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.--Water-discharge records fair except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 2.78 ft³/s, 2,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s, Aug. 5, 1988, gage height, 23.0 ft, from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurements at gage heights 8.60 ft and 23.0 ft and contracted-opening measurement at gage height 10.19 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 350 ft³/s, July 14, 1990; no flow on Oct. 1-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.12	.52	.66	.76	.56	1.5	2.0	e.60	e.50	e.70	.35
2	.00	.14	.45	.91	.72	.60	1.6	6.3	e.60	e.50	e1.1	.35
3	.00	.14	.43	.68	.61	.61	1.6	5.1	e.70	e.50	e.60	.33
4	.05	.14	.48	1.2	.68	.59	1.6	3.5	e.60	e.40	e.50	.33
5	.31	.15	.50	1.4	.89	.65	1.5	3.0	e.50	e.40	e.50	.35
6	.09	.15	.47	1.4	1.1	.74	1.7	2.6	e.40	e.60	e4.0	.56
7	.07	.15	.42	1.4	1.2	1.1	1.7	2.3	e.50	e.70	e8.0	.52
8	.07	.16	.48	1.6	.96	1.2	1.7	2.0	e.60	e.80	e3.0	5.6
9	.05	.17	.56	1.2	.88	1.1	1.6	1.8	e.70	e.90	e1.0	.54
10	.04	.18	.47	.62	1.0	.96	1.4	1.8	e1.7	e1.0	e1.0	.45
11	.04	.19	.56	.63	.90	.93	1.3	1.7	e1.2	e1.0	e.50	.43
12	.04	.21	.95	.74	.83	.81	1.3	1.5	e1.0	e4.0	e.50	.40
13	.03	.22	1.6	.56	.57	.83	1.2	1.3	e.90	e15	e.90	.38
14	.04	.22	1.3	.51	.51	1.2	1.1	1.2	e.90	e350	e1.0	.36
15	.04	.23	1.1	.53	.52	1.1	1.1	1.1	e1.0	e20	e3.0	.35
16	.05	.22	1.2	.56	.78	1.3	1.0	1.0	e1.0	e10	e2.0	.41
17	.04	.24	.96	.67	.91	1.1	1.1	1.0	e.90	e3.0	10	.45
18	.05	.25	.70	1.2	.90	.90	3.0	.71	e.80	e1.0	2.6	.39
19	.07	.26	.66	2.5	1.2	.91	2.5	.67	e.80	e.40	1.2	3.5
20	.09	.27	.75	.83	1.9	.94	2.5	.58	e.80	e.40	.99	1.6
21	.09	.27	1.2	.60	1.4	.90	2.4	e.60	e.60	e.50	1.5	5.3
22	.08	.28	.81	.68	1.4	.95	2.4	e.70	e.60	e.50	.65	9.1
23	.08	.31	.82	.69	.87	.96	2.4	e.60	e.50	e1.5	.70	7.9
24	.09	.38	.84	.70	.77	.98	2.5	e.50	e.50	e1.0	.71	3.2
25	.09	.33	1.4	.77	.78	.95	4.4	e.50	e.50	e.90	.50	1.9
26	.10	.34	1.3	.81	.77	.98	2.1	e.40	e.70	e.80	.45	1.4
27	.10	.33	2.1	.83	.64	1.1	2.0	e.50	e.70	e.70	.46	1.0
28	.11	.34	1.1	.84	.60	1.2	2.0	e.60	e.70	e.80	.44	1.4
29	.12	.45	.93	.86	---	1.8	1.9	e.60	e.60	e.70	.40	11
30	.12	.83	.51	.89	---	2.4	1.9	e.70	e.60	e.60	.37	4.5
31	.12	---	.54	.92	---	1.6	---	e.50	---	e.60	.36	---
TOTAL	2.27	7.67	26.11	28.39	25.05	31.95	56.0	47.36	22.20	419.70	49.63	64.35
MEAN	.073	.26	.84	.92	.89	1.03	1.87	1.53	.74	13.5	1.60	2.14
MAX	.31	.83	2.1	2.5	1.9	2.4	4.4	6.3	1.7	350	10	11
MIN	.00	.12	.42	.51	.51	.56	1.0	.40	.40	.40	.36	.33
AC-FT	4.5	15	52	56	50	63	111	94	44	832	98	128

CAL YR 1989 TOTAL 346.47 MEAN .95 MAX 7.4 MIN .00 AC-FT 687
WTR YR 1990 TOTAL 780.68 MEAN 2.14 MAX 350 MIN .00 AC-FT 1550

e Estimated

RIO GRANDE BASIN

08349800 RIO PAQUATE BELOW JACKPILE MINE NEAR LAGUNA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 16...	1100	0.21	3400	8.1	11.0	6.0	10.6	1400	1100	230
JAN 03...	1200	1.4	2300	8.0	0.0	0.0	11.8	1000	710	180
JUN 07...	1130	0.51	2550	8.5	28.5	23.0	7.2	1000	790	170
JUL 19...	1100	0.38	3300	8.1	28.0	27.0	7.4	1500	1300	290
SEP 28...	1000	0.76	2050	9.1	17.0	16.0	7.8	920	640	170

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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV 16...	210	320	4	9.0	401	0	329	237	2000	31
JAN 03...	140	200	3	8.0	390	0	320	260	1200	24
JUN 07...	150	210	3	9.4	207	48	250	239	1200	23
JUL 19...	200	280	3	11	351	0	288	248	2000	24
SEP 28...	120	180	3	8.3	281	30	280	211	970	20

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)	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)
NOV 16...	0.60	15	3010	4	4	180	<1	<1.0	<1	1
JAN 03...	0.60	22	1970	1	<1	120	<1	2.0	5	2
JUN 07...	0.30	20	1930	1	1	160	<1	<1.0	3	1
JUL 19...	0.40	18	3000	1	1	210	<1	<1.0	3	2
SEP 28...	0.40	21	1660	2	1	130	<1	<1.0	2	1

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)
NOV 16...	2	1	20	1	<1	<0.10	<0.1	4	4	20
JAN 03...	3	5	50	2	1	<5.0	<0.1	4	4	20
JUN 07...	1	5	20	1	<1	<0.10	<0.1	6	5	10
JUL 19...	2	2	20	1	<1	<0.10	0.1	8	9	<10
SEP 28...	3	1	10	2	<1	1.1	<0.1	6	5	20

WATER-QUALITY RECORDS

[illegible]

RIO GRANDE BASIN

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.--Records good. 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.--46 years, 11.6 ft³/s, 8,400 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 that 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.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 14	0530	*1,360	*6.03	No other peak greater than base discharge			
No flow for many days.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.67	3.2	8.9	18	7.7	8.5	.53	.00	.00	.00	1.5
2	.00	.76	8.2	9.3	17	7.6	10	.46	.00	.00	3.9	.36
3	.00	.84	9.9	7.5	11	7.5	9.6	3.9	.00	.00	.63	.26
4	.00	.69	7.2	5.8	9.8	7.3	8.5	8.0	.00	.00	.00	.08
5	.00	.90	9.6	8.1	8.3	7.3	8.1	4.1	.00	.00	.00	6.3
6	.00	1.9	11	9.1	7.8	6.8	7.9	4.1	.00	122	66	7.9
7	.00	2.7	10	3.4	11	6.5	8.1	2.1	.00	28	63	9.7
8	.00	2.3	6.7	5.0	14	6.2	8.4	1.2	.00	40	5.8	3.2
9	.00	1.9	5.1	4.4	17	7.5	8.4	.52	.00	52	4.0	38
10	.00	1.8	11	7.8	8.9	7.5	6.8	.16	5.2	31	1.8	68
11	.00	1.9	6.7	15	10	7.8	6.4	.03	3.3	30	.86	22
12	.04	2.0	2.7	12	10	7.4	4.7	.08	.12	52	.47	7.8
13	.27	2.0	4.1	12	9.9	7.6	4.3	.00	.00	52	.16	2.6
14	.35	1.8	3.9	11	9.8	7.6	3.6	.00	.00	513	44	.79
15	.28	1.8	6.8	12	8.2	7.0	4.4	.00	.00	77	162	.55
16	.24	2.0	7.8	11	3.9	6.7	3.8	.00	.00	25	43	.52
17	.20	1.9	6.4	7.3	7.9	6.3	4.7	.00	.00	12	32	.48
18	.23	1.9	7.0	6.3	9.1	6.6	6.0	.00	.00	7.6	65	5.5
19	.04	2.3	6.8	2.5	9.0	6.5	11	.00	.00	5.9	27	1.5
20	.00	3.0	6.4	12	7.2	6.4	8.4	.00	.00	4.6	21	46
21	.00	3.0	5.8	7.8	7.8	6.6	8.6	.00	.00	12	15	327
22	.13	4.6	3.9	9.0	7.9	6.5	8.7	.00	.00	1.6	48	66
23	.31	5.5	6.4	10	8.3	5.8	7.3	.00	.00	.17	38	151
24	.21	5.5	6.0	6.4	7.5	6.4	3.9	.00	.00	.54	25	125
25	.00	5.4	3.7	9.7	7.4	6.8	7.5	.00	.00	.27	49	64
26	.00	5.3	5.0	11	7.4	6.1	8.7	.00	.00	5.2	44	39
27	.00	3.5	7.9	10	7.6	6.8	17	.00	.00	5.9	16	15
28	.00	2.1	6.4	10	7.7	7.1	11	.00	.00	.87	9.5	9.1
29	.00	1.2	6.7	10	---	4.7	6.5	.00	.00	.03	7.8	20
30	.03	.88	11	11	---	8.3	1.8	.00	.00	.00	6.5	310
31	.27	---	6.6	12	---	9.0	---	.00	---	.00	5.4	---
TOTAL	2.60	72.04	209.9	277.3	269.4	215.9	222.6	25.18	8.62	1078.68	804.82	1349.14
MEAN	.084	2.40	6.77	8.95	9.62	6.96	7.42	.81	.29	34.8	26.0	45.0
MAX	.35	5.5	11	15	18	9.0	17	8.0	5.2	513	162	327
MIN	.00	.67	2.7	2.5	3.9	4.7	1.8	.00	.00	.00	.00	.08
AC-FT	5.2	143	416	550	534	428	442	50	17	2140	1600	2680

CAL YR 1989 TOTAL 2036.63 MEAN 5.58 MAX 230 MIN .00 AC-FT 4040
WTR YR 1990 TOTAL 4536.18 MEAN 12.4 MAX 513 MIN .00 AC-FT 9000

RIO GRANDE BASIN

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.--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.--50 years (water years 1941-90), 44.1 ft³/s, 31,950 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 most of time.

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 measurement, from reports of New Mexico State Engineer).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*) :

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 15	2200	*1,100	9.50				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	e.00	9.2	.00	e8.0	.00	.00	45	e.00
2	.00	.00	.00	e.00	e8.7	11	1.7	e3.0	.00	.00	16	e.00
3	.00	.00	.00	e.00	4.9	12	2.6	e.10	.00	.00	55	e.00
4	.00	.00	.00	e.00	6.7	13	2.1	e.00	.00	.00	15	e.00
5	1.5	.00	.00	.00	5.3	9.7	2.4	56	.00	1.7	e4.0	e.00
6	1.3	.00	.00	.00	6.7	7.7	2.5	79	.00	1.5	e20	e.00
7	6.2	.00	.00	.00	5.1	5.6	1.9	55	.00	10	278	e.00
8	70	.00	.00	.00	7.2	4.0	1.6	e26	.00	28	155	e81
9	23	.00	.00	.00	8.0	3.8	1.3	e5.0	.00	8.4	e35	e300
10	9.7	.00	.00	.00	8.7	3.4	e.00	e2.0	.00	15	e.50	e180
11	4.5	.00	.00	.00	10	3.7	e.00	e1.0	.00	26	e.00	e35
12	2.9	.00	.00	.00	1.0	6.5	e.00	e.50	.00	109	e.00	e40
13	2.1	.00	.00	.00	13	5.1	e.00	e.10	12	e90	e.00	e52
14	1.4	.00	.00	.00	26	4.1	e.00	e.05	.00	e40	e.10	e21
15	.10	.00	e.00	.00	24	3.2	e.00	.00	.00	e300	e.00	e85
16	.05	.00	e.00	.00	e20	3.4	e.00	.00	.00	e640	308	e140
17	e.01	.00	e.00	.00	e17	3.0	e.00	.00	.00	e90	197	e110
18	e.00	.00	e.00	.81	e14	2.6	e.00	.00	.00	e30	368	e150
19	e.00	.00	e.00	.60	e12	2.3	e.00	.00	.00	e15	288	e200
20	.00	.00	e.00	.99	e10	1.6	e.00	.00	.00	8.4	e140	e230
21	.00	.00	e.00	1.9	8.4	1.5	e.00	.00	.00	7.7	e40	e280
22	.00	.00	e.00	e.00	8.9	.00	e.00	.00	.00	4.8	e110	e500
23	.00	.00	e.00	.00	6.7	.00	e.00	.00	.00	2.2	e65	e670
24	.00	.00	e.00	.00	6.7	.00	e.00	.00	.00	e.00	e240	e540
25	.00	.00	e.00	e.00	9.4	.00	e.00	.00	.00	e.00	e190	e370
26	.00	.00	e.00	e.00	12	.00	25	.00	.00	e.00	e30	e210
27	.00	.00	e.00	e.00	13	.00	64	.00	.00	e.00	e.00	e210
28	.00	.00	e.00	e.00	9.9	.00	87	.00	.00	e.00	e.00	e160
29	.00	.00	e.00	e.00	---	.00	31	.00	.00	e.00	e.00	e360
30	.00	.00	e.00	e.00	---	.00	16	.00	.00	e.00	e.00	e200
31	.00	---	e.00	e.00	---	.00	---	.00	---	e.00	e.00	---
TOTAL	122.76	0.00	0.00	4.30	283.30	116.40	239.10	235.75	12.00	1427.70	2599.60	5124.00
MEAN	3.96	.000	.000	.14	10.1	3.75	7.97	7.60	.40	46.1	83.9	171
MAX	70	.00	.00	1.9	26	13	87	79	12	640	368	670
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	243	.00	.00	8.5	562	231	474	468	24	2830	5160	10160

CAL YR 1989 TOTAL 3794.99 MEAN 10.4 MAX 623 MIN .00 AC-FT 7530
WTR YR 1990 TOTAL 10164.91 MEAN 27.8 MAX 670 MIN .00 AC-FT 20160

e Estimated

RIO GRANDE BASIN

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 TEMPERATURE: October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1947 to current year.

REMARKS.--Samples are collected when flow is observed on this ephemeral stream. Daily Specific Conductance and Temperature values can be obtained from the New Mexico District office in Albuquerque, NM.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 11,400 microsiemens, June 10, 1968; minimum daily, 238 microsiemens, July 30, 1969.

WATER TEMPERATURE: Maximum daily, 32.0°C, July 29, 1977; minimum daily, 0.0°C, Dec. 30, 1971, Mar. 3, 1985.

SEDIMENT CONCENTRATION: Maximum daily mean, 267,000 mg/L, July 26, 1957; minimum daily mean, no flow on many days of each year.

SEDIMENT LOAD: 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, undetermined; minimum daily, undetermined.

WATER TEMPERATURE: Maximum daily, undetermined; minimum daily, undetermined.

SEDIMENT CONCENTRATION: Maximum daily mean, 129,000 mg/L, Aug. 1; minimum daily mean, no flow on many days.

SEDIMENT LOAD: Maximum daily, 197,000 tons, Sept. 23; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
JUL 16...	1215	518	1400	7.9	31.0	21.0	5.8	300	88	19	200

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINEITY 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)
JUL 16...	5	6.2	199	520	28	0.80	9.8	991	140	5

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (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)
JUL 16...	1215	518	1400	21.0	67	94	42

RIO GRANDE BASIN

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 (U.S. Bureau of Reclamation bench mark). Prior to Mar. 8, 1958, at site 300 ft upstream (in old channel) at datum 0.42 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are 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% reaching the regular gaging station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 286 ft³/s, April 20, 1989; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	131	.00	.00	.00	53	198	223	257	e73	187	170
2	116	17	.00	.00	.00	97	155	232	258	e72	160	180
3	116	8.8	.00	.00	.00	102	138	208	265	75	170	167
4	131	5.9	.00	.00	.00	99	175	202	271	81	159	147
5	124	.00	.00	.00	.00	112	166	203	261	89	173	147
6	101	.00	.00	.00	.00	135	185	200	246	187	171	153
7	107	.00	.00	.00	.00	109	172	214	223	232	154	160
8	98	.00	.00	.00	.00	128	179	209	172	269	169	187
9	104	.00	.00	.00	.00	152	173	218	141	255	181	226
10	113	.00	.00	.00	.00	159	185	213	126	247	210	187
11	100	.00	.00	.00	.00	188	192	197	125	224	225	184
12	97	.00	.00	.00	.00	174	201	211	96	168	224	200
13	146	.00	.00	.00	.00	181	226	219	110	170	203	211
14	161	.00	.00	.00	.00	161	219	219	132	103	196	194
15	149	.00	.00	.00	.00	160	230	227	120	114	177	184
16	178	.00	.00	.00	.00	162	225	237	171	135	156	204
17	148	.00	.00	.00	.00	190	247	246	250	132	118	202
18	129	.00	.00	.00	.00	177	233	235	254	130	126	174
19	157	.00	.00	.00	.00	178	231	235	254	190	126	170
20	160	.00	.00	.00	.00	225	240	245	246	198	131	178
21	134	.00	.00	.00	.00	192	236	238	236	219	148	168
22	139	.00	.00	.00	.00	217	241	239	229	228	179	158
23	146	.00	.00	.00	.00	202	239	266	199	224	174	154
24	160	.00	.00	.00	.00	216	240	257	189	199	144	155
25	186	.00	.00	.00	.00	233	241	268	139	224	126	153
26	200	.00	.00	.00	.00	239	255	254	122	195	130	150
27	178	.00	.00	.00	.00	206	242	246	120	207	154	167
28	129	.00	.00	.00	.00	224	233	250	114	201	144	178
29	123	.00	.00	.00	---	231	232	267	e82	219	168	197
30	134	.00	.00	.00	---	212	238	277	e78	237	176	172
31	151	---	.00	.00	---	215	---	265	---	196	187	---
TOTAL	4231	162.70	0.00	0.00	0.00	5329	6367	7220	5486	5493	5146	5277
MEAN	136	5.42	.000	.000	.000	172	212	233	183	177	166	176
MAX	200	131	.00	.00	.00	239	255	277	271	269	225	226
MIN	97	.00	.00	.00	.00	53	138	197	78	72	118	147
AC-FT	8390	323	.00	.00	.00	10570	12630	14320	10880	10900	10210	10470

CAL YR 1989 TOTAL 39708.70 MEAN 109 MAX 286 MIN .00 AC-FT 78760
WTR YR 1990 TOTAL 44711.70 MEAN 122 MAX 277 MIN .00 AC-FT 88690

e Estimated

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM
(Surveillance network station)

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.

WATER-DISCHARGE RECORDS

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.--Water-discharge records good. Conveyance channel, constructed in 1958, is 1 of 3 channels (stations 08354500, 08354900) carrying flow in valley cross section. Original design and plan were 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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.51	.80	.00	.00	68	.87
2	.00	.00	.00	.00	.00	.00	.78	.80	.00	.00	66	.07
3	.00	.00	.00	.00	.00	.00	.78	.78	.00	.00	66	.02
4	.00	.00	.00	.00	.00	.00	.78	.78	.00	.00	67	.00
5	.00	.00	.00	.00	.00	.00	.79	.79	.00	.00	69	.00
6	.00	.00	.00	.00	.00	.00	.76	.75	.00	.00	69	.12
7	.00	.00	.00	.00	.00	.00	.76	.74	.00	.00	69	.30
8	.00	.00	.00	.00	.00	.00	.75	.72	.00	.00	72	.30
9	.00	.00	.00	.00	.00	.00	.72	.66	.00	181	74	.32
10	.00	.00	.00	.00	.00	.36	.67	.73	.00	261	76	.33
11	.00	.00	.00	.00	.00	.77	.60	.74	.00	127	76	.33
12	.00	.00	.00	.00	.00	.76	.77	.67	.00	122	78	.35
13	.00	.00	.00	.00	.00	.76	.77	.72	.00	101	75	.33
14	.00	.00	.00	.00	.00	.76	.78	.83	.00	2.5	83	.32
15	.00	.00	.00	.00	.00	.76	.75	.83	.00	40	89	.31
16	.00	.00	.00	.00	.00	.75	.68	.79	.00	94	90	.32
17	.00	.00	.00	.00	.00	.75	.62	.68	73	68	70	.28
18	.00	.00	.00	.00	.00	.73	.79	.33	11	60	65	.29
19	.00	.00	.00	.00	.00	.66	.79	.07	112	111	60	.38
20	.00	.00	.00	.00	.00	.49	.79	.05	121	145	50	.78
21	.00	.00	.00	.00	.00	.47	.84	.03	25	72	45	.69
22	.00	.00	.00	.00	.00	.32	.85	.02	.25	67	38	.77
23	.00	.00	.00	.00	.00	.19	.84	.00	.21	84	27	.46
24	.00	.00	.00	.00	.00	.08	.84	.00	.18	155	17	.30
25	.00	.00	.00	.00	.00	.05	.84	.00	.13	80	.48	.24
26	.00	.00	.00	.00	.00	.03	.84	.00	.00	138	.27	.23
27	.00	.00	.00	.00	.00	.00	.88	.00	.00	102	3.0	.47
28	.00	.00	.00	.00	.00	.00	.86	.00	.00	51	3.8	.59
29	.00	.00	.00	.00	---	.00	.84	.00	.00	25	3.5	.58
30	.00	.00	.00	.00	---	.00	.83	.00	.00	39	2.9	.47
31	.00	---	.00	.00	---	.11	---	.00	---	66	2.5	---
TOTAL	0.00	0.00	0.00	0.00	0.00	8.80	23.10	13.31	342.77	2191.50	1575.45	10.82
MEAN	.000	.000	.000	.000	.000	.28	.77	.43	11.4	70.7	50.8	.36
MAX	.00	.00	.00	.00	.00	.77	.88	.83	121	261	90	.87
MIN	.00	.00	.00	.00	.00	.00	.51	.00	.00	.00	.27	.00
AC-FT	.00	.00	.00	.00	.00	17	46	26	680	4350	3120	21

CAL YR 1989 TOTAL 69265.06 MEAN 190 MAX 1720 MIN .00 AC-FT 137400
WTR YR 1990 TOTAL 4165.75 MEAN 11.4 MAX 261 MIN .00 AC-FT 8260

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 100 ft downstream from discharge station.

PERIOD OF RECORD.--Water years 1959 to 1985, 1989 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1985, October 1988 to September 1989.

WATER TEMPERATURE: May 1959 to September 1985, October 1988 to September 1989.

SUSPENDED SEDIMENT DISCHARGE: January 1959 to September 1985, October 1988 to current year.

REMARKS.--There was no flow or very little flow in the Conveyance Channel for the period 1986 to 1989 water years due to construction work on the channel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,840 microsiemens, Oct. 8, 1964; minimum daily, 136 microsiemens, June 19, 1967.

WATER TEMPERATURE: Maximum daily, 36.0°C, July 13, 1970, Aug. 13, 1978; minimum, 0.0°C on several days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 141,000 mg/L, Aug. 10, 1959; minimum daily mean, no flow on many days of most years.

SEDIMENT LOAD: Maximum daily, 528,000 tons Aug. 28 1972; minimum daily, 0 ton on many days during most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, undetermined, minimum daily, undetermined.

WATER TEMPERATURE: Maximum daily, undetermined, minimum daily, undetermined.

SEDIMENT CONCENTRATION: Maximum daily mean, 1,750 mg/L, Aug. 23; minimum daily mean, no flow for many days.

SEDIMENT LOAD: Maximum daily, 581 tons, July 10; minimum daily, 0 ton many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

[illegible]

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
2	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
3	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
4	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
5	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
6	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
7	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
8	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
9	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
10	0	.00	0	.00	0	.00	0	.00	0	.00	81	.08
11	0	.00	0	.00	0	.00	0	.00	0	.00	93	.19
12	0	.00	0	.00	0	.00	0	.00	0	.00	81	.17
13	0	.00	0	.00	0	.00	0	.00	0	.00	74	.15
14	0	.00	0	.00	0	.00	0	.00	0	.00	72	.15
15	0	.00	0	.00	0	.00	0	.00	0	.00	71	.15
16	0	.00	0	.00	0	.00	0	.00	0	.00	70	.14
17	0	.00	0	.00	0	.00	0	.00	0	.00	68	.14
18	0	.00	0	.00	0	.00	0	.00	0	.00	65	.13
19	0	.00	0	.00	0	.00	0	.00	0	.00	58	.10
20	0	.00	0	.00	0	.00	0	.00	0	.00	46	.06
21	0	.00	0	.00	0	.00	0	.00	0	.00	42	.05
22	0	.00	0	.00	0	.00	0	.00	0	.00	34	.03
23	0	.00	0	.00	0	.00	0	.00	0	.00	32	.02
24	0	.00	0	.00	0	.00	0	.00	0	.00	32	.01
25	0	.00	0	.00	0	.00	0	.00	0	.00	27	.00
26	0	.00	0	.00	0	.00	0	.00	0	.00	26	.00
27	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
28	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
29	0	.00	0	.00	0	.00	0	.00	---	---	0	.00
30	0	.00	0	.00	0	.00	0	.00	---	---	0	.00
31	0	.00	---	---	0	.00	0	.00	---	---	42	.01
TOTAL	---	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---	1.58

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	82	.11	66	.14	0	.00	0	.00	653	120	141	.33
2	85	.18	68	.15	0	.00	0	.00	498	89	126	.02
3	76	.16	70	.15	0	.00	0	.00	573	102	59	.00
4	76	.16	71	.15	0	.00	0	.00	707	128	0	.00
5	71	.15	70	.15	0	.00	0	.00	882	164	0	.00
6	65	.13	66	.13	0	.00	0	.00	843	157	116	.04
7	59	.12	66	.13	0	.00	0	.00	736	137	109	.09
8	56	.11	64	.12	0	.00	0	.00	537	104	74	.06
9	54	.10	63	.11	0	.00	693	339	1010	202	61	.05
10	54	.10	56	.11	0	.00	824	581	898	184	59	.05
11	49	.08	67	.13	0	.00	1200	411	606	124	51	.05
12	63	.13	61	.11	0	.00	1290	425	314	66	44	.04
13	61	.13	64	.12	0	.00	978	267	224	45	42	.04
14	63	.13	74	.17	0	.00	691	4.7	865	194	45	.04
15	62	.13	71	.16	0	.00	620	67	1250	300	49	.04
16	61	.11	71	.15	0	.00	593	151	368	89	66	.06
17	54	.09	67	.12	261	51	558	102	901	170	61	.05
18	68	.15	49	.04	186	5.5	429	69	1000	175	48	.04
19	65	.14	32	.01	411	124	668	200	660	107	93	.10
20	66	.14	26	.00	279	91	691	271	419	57	262	.55
21	65	.15	24	.00	204	14	537	104	332	40	255	.48
22	68	.16	20	.00	80	.05	585	106	1600	164	269	.56
23	69	.16	0	.00	42	.02	490	111	1750	128	174	.22
24	69	.16	0	.00	40	.02	568	238	1030	47	127	.10
25	69	.16	0	.00	49	.02	495	107	466	.60	88	.06
26	64	.15	0	.00	0	.00	748	279	251	.18	63	.04
27	65	.15	0	.00	0	.00	600	165	171	1.4	85	.11
28	66	.15	0	.00	0	.00	562	77	124	1.3	81	.13
29	62	.14	0	.00	0	.00	519	35	88	.83	74	.12
30	63	.14	0	.00	0	.00	626	66	63	.49	74	.09
31	---	---	0	.00	---	---	748	133	55	.37	---	---
TOTAL	---	4.07	---	2.35	---	285.61	---	4308.70	---	3098.17	---	3.56
TOTAL LOAD FOR YEAR:			7704.04	TONS.								

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM
(Surveillance network station)

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). WRD 1969: 1967.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft above National Geodetic Vertical Datum of 1929. 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. Aug. 19, 1965, to Aug. 15, 1967, at same site at datum 1.89 ft higher. Datum on Aug. 21, 1987, was lowered 2.00 ft. Floodway is bypassed by Socorro main canal north and since Oct. 1958 by conveyance channel.

REMARKS.--Water-discharge records fair. 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. U.S. Bureau of Reclamation satellite telemeter at station.

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. 17 years (water years 1974-90), 1,424 ft³/s, 1,032,000 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, 2,490 ft³/s, July 16; no flow on July 7, 23, 24, and 28, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	133	839	875	698	554	710	762	717	16	193	38
2	3.7	217	890	797	711	608	789	648	537	15	110	17
3	4.7	172	809	856	723	863	797	898	371	16	189	14
4	6.1	173	774	868	749	720	678	1250	250	15	217	9.6
5	68	266	767	865	823	685	446	857	159	12	117	116
6	120	283	749	819	818	748	472	990	109	1.1	191	32
7	101	302	634	864	826	697	484	1020	28	.00	447	10
8	148	336	602	795	767	695	479	1020	20	11	277	512
9	249	350	664	779	796	860	348	1190	18	159	231	355
10	335	384	773	751	822	751	314	1360	16	98	261	280
11	310	390	948	802	816	666	169	992	15	164	164	113
12	298	421	912	893	826	754	240	1380	13	481	51	92
13	266	415	899	961	852	767	339	2100	13	477	72	186
14	285	427	937	979	846	676	293	2340	13	1410	134	114
15	236	459	958	919	776	555	108	1760	12	1860	199	102
16	211	510	986	932	708	460	101	795	15	2490	504	181
17	170	535	998	878	733	448	189	375	29	1100	599	174
18	164	556	860	863	695	346	100	378	26	338	879	251
19	121	574	833	884	776	249	64	339	38	463	685	317
20	142	588	857	869	768	214	608	486	34	177	380	372
21	193	629	1010	814	809	210	691	1370	22	82	397	417
22	178	632	1060	827	774	279	436	448	19	23	275	781
23	123	626	924	820	758	216	470	343	16	.00	397	1030
24	123	645	832	812	832	191	440	366	15	.00	891	1100
25	97	653	806	787	795	192	498	260	15	162	632	862
26	97	659	804	755	843	225	1310	113	14	243	350	638
27	132	658	816	781	813	345	1200	97	15	1.5	233	481
28	137	656	840	762	751	305	1160	104	16	.00	235	368
29	134	694	1010	733	---	539	1070	241	15	.00	122	473
30	114	711	1060	691	---	675	853	682	15	57	124	1270
31	101	---	1040	683	---	626	---	1200	---	183	78	---
TOTAL	4670.9	14054	26891	25714	21904	16119	15856	26164	2595	10054.60	9634	10705.6
MEAN	151	468	867	829	782	520	529	844	86.5	324	311	357
MAX	335	711	1060	979	852	863	1310	2340	717	2490	891	1270
MIN	3.4	133	602	683	695	191	64	97	12	.00	51	9.6
AC-FT	9260	27880	53340	51000	43450	31970	31450	51900	5150	19940	19110	21230
(†)	17650	28200	53340	51000	43450	42560	44130	66250	16710	35190	32440	31720

CAL YR 1989	TOTAL	234489.9	MEAN	642	MAX	3490	MIN	1.6	AC-FT	465100	(†)	MEAN	941	AC-FT	681300
WTR YR 1990	TOTAL	184362.10	MEAN	505	MAX	2490	MIN	.00	AC-FT	365700	(†)	MEAN	639	AC-FT	426600

(†) COMBINED FLOW, IN ACRE-FEET, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL, AND SOCORRO MAIN CANAL NORTH.

RIO GRANDE BASIN

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 TEMPERATURE: October 1947 to August 1956, January 1959 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1946 to June 1956, January 1959 to current year.

REMARKS.--Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total-load data were not available at time of publication and will be available at Albuquerque District Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,700 microsiemens, July 14, 1940; minimum daily, 236 microsiemens, May 17, 1942.

WATER TEMPERATURE: (1947-56, 1959-62, 1964-90): Maximum daily, 34.5°C, July 13, 1971; minimum daily, 0.0°C on many days during winter months of most years.

SEDIMENT CONCENTRATION: Maximum daily mean, 223,000 mg/L, Aug. 11, 1946; minimum daily mean, no flow on many days of most years.

SEDIMENT LOAD: 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, 1,610 microsiemens, Aug. 21; minimum daily, 423 microsiemens, May 14.

WATER TEMPERATURE: Maximum daily, 32.5°C, July 30; minimum daily, 3.0°C, Dec. 12-14.

SEDIMENT CONCENTRATION: Maximum daily mean, 56,500 mg/L, July 12; minimum daily mean, no flow on July 2, 23, 24, 28, 29.

SEDIMENT LOAD: Maximum daily, 192,000 tons, July 15; minimum daily, 0 ton on July 7, 23, 24, 28, 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
OCT 19...	1100	107	715	8.5	10.5	12.0	9.2	15	200	63	
MAR 29...	1606	463	585	8.5	13.0	14.0	9.2	24	190	59	
MAY 30...	1500	846	493	8.7	28.5	21.0	8.6	25	150	48	
SEP 06...	1300	5.9	780	8.3	32.0	26.0	6.0	28	240	75	
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 WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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 19...	11	60	2	5.6	209	11	189	178	120	31	
MAR 29...	11	64	2	<0.10	205	6	178	174	110	39	
MAY 30...	8.5	44	2	5.5	156	10	144	142	80	20	
SEP 06...	14	82	2	5.8	249	0	204	209	150	63	
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, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	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, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 19...	0.60	27	437	--	--	--	0.900	0.900	0.020	--	
MAR 29...	0.70	25	--	--	--	--	0.800	0.900	0.040	--	
MAY 30...	0.50	21	318	--	--	--	0.600	0.600	0.060	--	
SEP 06...	0.50	26	541	0.260	0.040	<0.010	0.300	0.300	0.050	0.070	

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)	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)
OCT 19...	0.68	1.6	0.530	0.350	3.6	67	120	140	11
MAR 29...	0.46	1.3	0.380	0.390	2.9	360	1600	180	<3
MAY 30...	0.74	1.4	0.370	0.250	<4.9	K29	K20	110	6
SEP 06...	0.25	0.60	0.190	0.140	5.3	K220	K450	160	11

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)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
OCT 19...	1100	6	6	<1	<1.0	3	2	6	2	4

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)
OCT 19...	<1	<0.10	<0.1	<1	<1	20	10	<10	<10	82

DATE	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)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
OCT 19...	5	<1	5	<5	2	2000	<10	93	<0.01	8

DATE	TIME	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
29...	1606	<0.01	<0.01	<0.01

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (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. FALL DIAM. % FINER THAN .062 MM (70342)
OCT												
19...	1100	107	90.0	0.77	1.56	715	12.0	208	60	100	--	72
NOV												
15...	0810	452	122	1.3	2.84	--	7.0	536	654	981	--	70
JAN												
04...	1552	877	168	1.5	3.44	--	3.5	205	485	737	--	74
FEB												
02...	0835	716	145	2.1	2.30	--	4.5	549	1060	1560	--	26
MAR												
07...	1300	609	180	1.6	2.08	--	11.0	229	377	579	--	89
APR												
04...	1045	728	220	1.6	2.01	--	14.5	112	220	346	--	56
MAY												
02...	1115	721	197	1.8	2.08	--	9.5	636	1240	1810	--	40
30...	1500	846	--	--	--	493	21.0	275	628	--	34	--

[illegible]

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	806	695	656	678	638	574	583	599	505	851	841	767
2	830	780	659	679	645	564	586	573	543	881	945	804
3	789	785	657	706	628	567	598	604	545	893	1070	788
4	789	790	665	719	641	587	547	578	551	905	774	798
5	707	796	640	724	641	588	601	649	549	904	898	798
6	877	769	643	741	652	576	575	601	642	1390	568	822
7	871	736	659	711	655	550	576	559	641	1100	726	816
8	858	741	666	697	652	533	575	501	830	1160	988	841
9	866	717	611	684	688	518	576	596	805	743	638	1340
10	590	713	600	690	669	519	590	486	783	---	607	1270
11	595	648	575	705	680	525	640	490	854	---	756	770
12	590	688	537	734	673	527	648	484	780	1160	710	1070
13	593	636	593	718	669	508	619	429	744	1060	613	693
14	606	715	604	721	664	475	630	423	1100	1130	652	629
15	623	729	603	719	656	548	641	434	856	1140	656	625
16	637	759	605	739	620	544	628	471	713	672	754	638
17	636	752	---	722	615	561	625	532	699	748	768	985
18	676	723	---	698	614	576	635	566	692	585	818	939
19	690	729	584	701	602	598	694	565	659	574	830	980
20	691	722	601	669	623	598	563	546	696	662	761	793
21	692	723	677	636	622	599	562	520	708	678	1610	962
22	693	730	656	639	620	595	567	539	750	953	1590	986
23	715	741	683	674	619	640	562	610	781	917	789	979
24	723	729	694	679	615	635	571	510	788	568	689	864
25	687	717	695	673	637	642	605	585	795	557	675	772
26	718	713	761	666	640	666	615	647	814	566	673	677
27	729	708	776	669	627	677	531	647	848	722	672	644
28	744	741	789	628	623	662	514	638	849	813	687	646
29	741	747	713	626	---	650	588	643	837	659	679	643
30	737	674	672	635	---	643	547	514	834	611	639	645
31	736	---	662	632	---	624	---	515	---	1080	659	---
MEAN	717	728	653	687	640	583	593	550	740	851	798	833
WTR YR 1990		MEAN	697	MAX	1610	MIN	423					

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	12.0	12.0	5.0	8.0	9.0	10.0	14.5	18.0	28.0	28.0	28.0
2	19.0	12.0	10.0	5.0	7.0	10.0	8.0	15.0	18.5	27.0	23.0	28.0
3	19.0	13.0	11.0	7.0	8.0	11.0	9.0	17.0	17.0	27.0	27.0	27.0
4	18.0	12.0	10.0	6.0	7.0	11.0	10.0	18.0	18.0	26.0	29.0	23.0
5	16.0	14.0	10.0	4.0	6.0	10.0	11.0	17.0	15.0	19.0	23.0	22.0
6	16.0	16.0	10.0	5.0	8.0	7.0	11.0	21.0	18.0	25.0	26.0	24.0
7	16.0	14.0	10.0	6.0	9.0	8.0	10.0	21.0	25.0	26.0	28.0	26.0
8	17.0	15.0	10.0	7.0	8.0	9.0	8.0	24.0	18.0	25.0	30.0	28.0
9	19.0	13.0	10.0	7.0	9.0	9.0	10.0	27.0	26.0	24.0	29.0	29.0
10	19.0	12.5	10.0	8.0	8.0	8.0	12.0	25.0	25.0	---	29.0	27.0
11	20.0	12.0	10.0	8.5	7.0	8.0	14.0	24.0	19.0	---	28.0	25.0
12	20.0	13.0	3.0	9.0	7.0	7.0	13.0	15.0	17.0	24.0	27.0	28.5
13	20.0	12.0	3.0	8.0	9.0	7.0	14.0	14.0	28.0	23.0	28.0	22.0
14	21.0	12.0	3.0	7.0	8.0	7.0	15.0	18.0	23.0	24.0	27.0	27.0
15	21.0	11.0	5.0	7.0	6.0	8.0	18.0	15.0	20.0	25.0	25.0	28.0
16	21.0	12.0	6.0	6.0	5.0	6.0	17.0	15.0	24.0	28.0	26.0	25.0
17	17.0	11.0	---	8.0	7.0	7.0	14.0	18.5	27.0	29.0	25.0	28.0
18	16.0	11.0	---	7.0	8.0	8.0	13.0	18.0	28.0	28.0	25.0	30.0
19	16.0	12.0	7.0	4.0	9.0	8.0	12.0	17.0	27.0	26.0	24.0	27.0
20	15.0	10.0	5.0	6.0	6.0	7.0	12.0	18.0	28.0	27.0	24.0	25.0
21	15.0	12.0	5.0	5.0	6.0	17.0	12.0	18.0	26.0	29.0	26.0	20.0
22	18.0	12.0	4.0	6.0	7.0	10.0	14.0	20.0	29.0	29.0	22.0	18.0
23	18.0	12.0	5.0	8.0	8.0	11.0	19.5	21.0	23.5	29.0	24.0	15.0
24	16.0	11.0	6.0	7.0	8.0	11.5	17.5	20.0	20.0	27.0	24.0	16.0
25	20.0	11.5	7.5	8.0	9.0	10.0	14.0	24.0	27.0	28.0	24.0	14.0
26	19.0	12.0	8.0	8.0	7.0	8.0	19.5	24.0	26.0	30.0	29.0	13.0
27	19.0	11.5	6.0	7.0	8.0	10.0	20.0	16.0	27.0	29.0	27.0	15.0
28	15.0	10.0	7.0	7.0	8.0	10.5	13.0	14.0	29.0	30.5	26.0	18.0
29	20.0	10.0	6.5	7.0	---	8.0	19.5	12.0	29.5	31.0	28.0	16.0
30	15.0	10.0	7.0	9.0	---	9.0	17.5	17.0	29.0	32.5	28.0	17.0
31	13.0	---	5.0	8.0	---	9.0	---	17.0	---	27.0	27.0	---
MEAN	18.0	12.0	7.5	7.0	7.5	9.0	13.5	18.5	23.5	26.5	26.5	23.0
WTR YR 1990		MEAN	16.0	MAX	32.5	MIN	3.0					

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
OCTOBER												
1	175	1.6	2610	937	595	1350	949	2240	168	317	449	672
2	310	3.1	1660	973	503	1210	396	852	214	411	268	440
3	185	2.3	713	331	490	1070	308	712	219	428	481	1120
4	141	2.3	1080	504	347	725	215	504	337	682	317	616
5	2560	470	1180	847	552	1140	333	778	353	784	771	1430
NOVEMBER												
6	13700	4440	1210	925	516	1040	354	783	291	643	370	747
7	13500	3680	617	503	382	654	214	499	224	500	262	493
8	13100	5230	610	553	310	504	337	723	257	532	159	298
9	13500	9080	505	477	627	1120	214	450	219	471	203	471
10	8900	8050	335	347	1660	3460	401	813	218	484	248	503
DECEMBER												
11	2750	2300	279	294	2170	5550	303	656	206	454	193	347
12	544	438	521	592	1480	3640	271	653	233	520	221	450
13	852	612	552	619	823	2000	312	810	274	630	215	445
14	686	528	497	573	1120	2830	199	526	293	669	118	215
15	471	300	439	544	618	1600	165	409	368	771	120	180
JANUARY												
16	372	212	321	442	1360	3620	150	377	355	679	175	217
17	226	104	468	676	1100	2960	141	334	512	1010	272	329
18	239	106	280	420	592	1370	219	510	325	610	122	114
19	176	57	259	401	493	1110	236	563	206	432	103	69
20	180	69	515	818	615	1420	401	941	225	467	141	81
FEBRUARY												
21	663	345	482	819	355	968	283	622	142	310	94	53
22	479	230	435	742	701	2010	241	538	193	403	91	69
23	171	57	408	690	479	1200	260	576	227	465	66	38
24	221	73	397	691	262	589	274	601	278	624	52	27
25	124	32	311	548	420	914	244	518	256	550	56	29
MARCH												
26	120	31	493	877	280	608	216	440	187	426	81	49
27	149	53	475	844	274	604	264	557	221	485	83	77
28	168	62	317	561	279	633	314	646	312	633	96	79
29	147	53	941	1760	542	1480	319	631	---	---	111	162
30	113	35	720	1380	243	695	307	573	---	---	84	153
31	115	31	---	---	498	1400	247	455	---	---	68	115
TOTAL	---	36687.3	---	20688	---	49474	---	20290	---	15390	---	10088

DAY	MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)
APRIL												
1	63	121	786	1620	148	287	176	7.6	5330	2780	1530	157
2	97	207	576	1010	103	149	268	11	3630	1080	1280	59
3	64	138	532	1290	100	100	1050	45	10200	5210	1300	49
4	62	113	976	3290	86	58	999	40	7790	4560	1370	36
5	79	95	4750	11000	76	33	916	30	1780	562	2330	730
MAY												
6	90	115	5560	14900	54	16	3260	9.7	2290	1180	1290	111
7	78	102	3650	10100	51	3.9	0	0	13400	16200	943	25
8	93	120	901	2480	50	2.7	2190	65	13200	9870	44200	61100
9	68	64	911	2930	48	2.3	12000	5150	1680	1050	54400	52100
10	78	66	519	1910	82	3.5	8150	2160	1110	782	36500	27600
JUNE												
11	80	37	368	986	93	3.8	9650	4270	570	252	10600	3230
12	69	45	362	1350	99	3.5	56500	73400	248	34	10600	2630
13	70	64	392	2220	82	2.9	38300	49300	277	54	2630	1320
14	50	40	446	2820	225	7.9	48900	186000	5160	1870	568	175
15	55	16	788	3740	165	5.3	38300	192000	7570	4070	347	96
JULY												
16	76	21	680	1460	90	3.6	21200	143000	7550	10300	4370	2140
17	54	28	393	398	131	10	15200	45100	8790	14200	9630	4520
18	41	11	1170	1190	94	6.6	7940	7250	14100	33500	7410	5020
19	59	10	1450	1330	133	14	3700	4630	13500	25000	18600	15900
20	74	121	371	487	78	7.2	833	398	12900	13200	17200	17300
AUGUST												
21	82	153	333	1230	82	4.9	521	115	19800	21200	25000	28100
22	76	89	188	227	85	4.4	1000	62	21800	16200	24100	50800
23	85	108	114	106	107	4.6	0	0	28200	30200	38600	107000
24	552	656	117	116	110	4.5	0	0	25700	61800	31800	94400
25	1750	2350	101	71	110	4.5	5890	2580	10300	17600	21800	50700
SEPTEMBER												
26	1830	6470	61	19	148	5.6	7860	5160	2070	1960	9250	15900
27	874	2830	56	15	229	9.3	20700	84	734	462	2860	3710
28	547	1710	123	35	107	4.6	0	0	415	263	9050	8990
29	1240	3580	132	86	127	5.1	0	0	433	143	1540	1970
30	642	1480	90	166	149	6.0	18500	2850	381	128	14600	50100
31	---	---	79	256	---	---	21500	10600	453	95	---	---
TOTAL	---	20960	---	68838	---	773.7	---	734317.3	---	295805	---	605968
TOTAL LOAD FOR YEAR: 1879279.3 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.--Water-discharge records good except for estimated daily discharges, which are fair. Original design and plan were 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. U.S. Bureau of Reclamation satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD (SINCE 1954).--Maximum daily discharge, 2,200 ft³/s, May 14, 1966; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	222	168	193	181	206	358	412	343	e75	222	186
2	122	169	165	192	183	284	373	444	301	e70	290	199
3	97	130	165	197	189	322	460	538	309	69	325	215
4	80	136	165	198	190	302	409	517	375	16	291	177
5	103	140	168	193	195	292	450	507	320	19	225	169
6	196	138	169	181	202	260	443	505	300	16	242	207
7	230	140	167	185	202	270	439	512	282	4.8	260	170
8	204	147	169	191	202	255	421	498	295	25	227	185
9	196	143	167	206	200	267	420	428	278	44	206	187
10	194	90	166	206	207	258	408	438	202	222	162	172
11	213	99	166	208	205	284	369	417	201	324	208	178
12	194	106	173	198	195	322	318	386	186	447	188	214
13	194	135	190	191	199	313	307	369	189	345	220	164
14	180	203	196	193	211	337	280	393	122	323	235	177
15	180	190	204	194	240	342	324	415	121	251	268	181
16	150	170	210	191	223	325	372	357	120	231	274	192
17	140	165	217	187	217	312	247	347	114	334	229	195
18	136	160	226	191	231	309	232	365	256	241	205	200
19	135	158	213	198	238	299	336	345	313	215	217	173
20	154	157	206	e198	239	304	368	315	336	218	254	151
21	180	159	201	e200	228	286	354	366	314	306	192	169
22	189	155	201	205	217	248	390	380	191	376	202	193
23	168	157	202	196	207	321	423	340	159	390	273	200
24	172	159	200	190	199	321	445	332	125	347	294	193
25	184	157	193	202	200	329	439	346	167	295	338	195
26	167	159	187	208	203	340	430	306	147	255	257	257
27	194	162	185	206	202	339	464	292	e100	279	223	243
28	187	166	182	199	208	285	463	352	e90	246	193	272
29	175	170	179	193	---	298	452	279	e85	231	215	282
30	169	170	185	181	---	329	493	241	e80	194	218	282
31	141	---	191	179	---	365	---	292	---	214	212	---
TOTAL	5131	4612	5776	6050	5813	9324	11687	12034	6421	6622.8	7365	5978
MEAN	166	154	186	195	208	301	390	388	214	214	238	199
MAX	230	222	226	208	240	365	493	538	375	447	338	282
MIN	80	90	165	179	181	206	232	241	80	4.8	162	151
AC-FT	10180	9150	11460	12000	11530	18490	23180	23870	12740	13140	14610	11860

CAL YR 1989 TOTAL 86924 MEAN 238 MAX 589 MIN 24 AC-FT 172400
 WTR YR 1990 TOTAL 86813.8 MEAN 238 MAX 538 MIN 4.8 AC-FT 172200

e Estimated

RIO GRANDE BASIN

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 TEMPERATURE: March 1954 to current year.

SUSPENDED-SEDIMENT DISCHARGE: 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. Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total-load data were not available at time of publication and will be available at Albuquerque District Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,860 microsiemens, Oct. 25, 1956; minimum daily, 298 microsiemens, May 25, 1984.

WATER TEMPERATURE: Maximum daily, 38.0°C, June 26, 1989; minimum daily, 0.0°C on many days during December and January of most years.

SEDIMENT CONCENTRATION: Maximum daily mean, 144,000 mg/L, Sept. 19, 1971; minimum daily mean, no flow on many days during most years.

SEDIMENT LOAD: 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, undetermined, minimum daily, undetermined.

WATER TEMPERATURE: Maximum daily, undetermined, minimum daily, undetermined.

SEDIMENT CONCENTRATION: Maximum daily mean, 61,400 mg/L, July 11; minimum daily mean, 72 mg/L, Feb. 1.

SEDIMENT LOAD: Maximum daily, 56,700 tons, July 12; minimum daily, 35 tons, Jan. 31, Feb. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
18...	1000	153	1100	8.5	8.5	12.0	66	9.0	260	77
MAR										
06...	1130	253	950	8.1	13.0	11.0	--	9.4	--	--
15...	1115	342	920	8.3	13.0	10.0	70	9.2	230	69
MAY										
31...	1133	321	875	8.8	28.0	18.0	51	9.4	240	73
JUL										
20...	1500	284	905	8.2	34.0	23.5	1100	7.0	250	75

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 WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT									
18...	15	130	4	6.7	240	7	209	200	190
MAR									
15...	13	110	3	5.7	218	4	185	186	160
MAY									
31...	14	110	3	5.6	214	17	203	197	170
JUL									
20...	14	100	3	6.0	244	0	200	196	200

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 CONSTITUENTS, 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)
OCT									
18...	100	0.50	31	672	680	--	<0.010	0.350	0.020
MAR									
15...	81	0.50	22	606	575	0.290	0.010	0.300	0.040
MAY									
31...	80	0.50	21	550	597	--	<0.010	<0.100	0.030
JUL									
20...	77	0.50	24	538	620	--	<0.010	0.500	<0.010

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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 ORTHOPHOSPHATE 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- TOCOCOCCI 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)	
OCT 18...	0.020	0.38	0.250	0.120	<0.010	K71	280	880	150	
MAR 15...	0.020	0.36	0.300	0.110	<0.010	K120	410	4	7	
MAY 31...	<0.010	1.4	0.270	0.041	<0.010	520	420	13	<1	
JUL 20...	0.010	--	0.250	0.090	<0.010	300	270	13	<1	
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)
OCT 18...	1000	870	5	95	<0.5	<1.0	1	<3	2	1
MAR 15...	1115	20	6	74	<0.5	<1.0	<5	<3	<10	<10
MAY 31...	1133	<10	7	70	<0.5	<1.0	1	<3	1	<1
JUL 20...	1500	10	5	83	<0.5	2.0	<1	<3	1	<1
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)
OCT 18...	110	0.1	<4	3	<1	<1.0	860	7	14	<10
MAR 15...	96	<0.1	10	<10	<1	<1.0	790	<6	38	--
MAY 31...	110	<0.1	<7	1	<1	<1.0	800	<6	8	--
JUL 20...	89	<0.1	<10	<1	<1	<1.0	870	<6	<3	--
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)
OCT 18...	<10	130	1	<1	6	<5	3	4000	<10	510
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 YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 18...	<0.01	10	2.7	3.2	8.0	5.8	7.2	4.7	0.11	2.1

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	STREAM WIDTH (FT) (000004)	STREAM DEPTH, MEAN (FT) (000064)	STREAM VELOC- ITY, MEAN (F/S) (000055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE WATER (DEG C) (000010)	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)
OCT											
18...	1000	153	49.0	1.6	1.93	1100	12.0	--	--	--	--
NOV											
14...	1132	198	50.0	1.8	2.16	--	12.5	230	123	247	--
JAN											
04...	1045	198	50.0	1.9	2.04	--	8.0	147	79	165	--
FEB											
01...	1450	179	50.0	1.8	1.96	--	11.5	111	54	117	--
MAR											
06...	1130	253	54.0	2.3	2.09	950	11.0	294	201	385	--
15...	1115	342	54.0	2.5	2.13	920	10.0	347	320	588	--
APR											
05...	1600	447	52.0	3.3	2.60	--	16.5	216	261	488	--
MAY											
03...	1530	571	58.0	3.7	2.68	--	11.0	--	--	--	--
31...	1133	321	--	--	--	875	18.0	293	254	--	68
JUL											
20...	1500	284	--	--	--	905	23.5	52	40	--	86

[illegible]

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		977	991		916		810			919		925
2		996	1030		925		812			905		929
3		985	1020		932		818			897		926
4		1020	1020		980		810			892		928
5		986	1010		993		807			895		1130
6		988	1010		1100		815			909		940
7		991	1020		966		697			874		934
8		990	1010		859		691			1340		934
9		984	1040		929		677			1390		961
10		1020	1000		917		676			1440		974
11		1000	1100		1070		684			1420		978
12		1010	1100		1000		542			1430		968
13		1000	1090		1130		593			1450		975
14		968	1100		1120		552			1440		952
15		976	1080		873		584			1430		953
16		986	1060		853		555			1420		1000
17		951	1060		864		512			818		774
18		946	1070		850		662			814		640
19		938	1070		---		898			794		559
20		940	1130		---		888			797		565
21		995	1040		---		928			823		726
22		1040	1040		---		---			787		559
23		1020	---		---		1030			873		567
24		1040	---		---		935			817		553
25		1040	---		---		917			827		560
26		1040	---		---		915			851		942
27		1050	---		---		911			832		967
28		1050	---		---		904			725		960
29		1080	---		---		647			848		926
30		1070	---		---		630			789		968
31		---	---		---		---			844		---
MEAN		1000	1050		960		755			1010		856
WTR YR 1990	MEAN		933	MAX	1450	MIN		512				

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		28.0	16.0		24.0		20.0			32.0		33.0
2		26.0	15.0		26.0		19.0			31.0		32.0
3		28.0	15.0		22.0		17.0			31.0		32.0
4		27.0	16.0		24.0		17.0			34.0		32.0
5		29.0	16.0		23.0		18.0			30.0		31.0
6		28.0	15.0		24.0		17.0			32.0		34.0
7		28.0	15.0		24.0		18.0			34.0		33.0
8		27.0	15.0		24.0		17.0			31.0		32.0
9		25.0	16.0		24.0		18.0			31.0		32.0
10		27.0	18.0		24.0		17.0			32.0		30.0
11		27.0	17.0		24.0		18.0			31.0		32.0
12		28.0	16.0		24.0		18.0			34.0		30.0
13		26.0	19.0		23.0		17.0			31.0		30.0
14		24.0	18.0		23.0		18.0			31.0		30.0
15		28.0	17.0		22.0		18.0			31.0		29.0
16		28.0	18.0		23.0		18.0			29.0		30.0
17		27.0	17.0		24.0		17.5			32.0		34.0
18		27.0	18.0		24.0		21.0			31.0		32.0
19		26.0	18.0		---		18.0			18.0		31.0
20		28.0	18.0		---		18.0			34.0		30.0
21		27.0	17.0		---		17.5			31.0		28.0
22		23.0	17.0		---		---			32.0		29.0
23		27.0	---		---		18.5			30.0		31.0
24		22.0	---		---		18.0			31.0		33.0
25		22.0	---		---		19.0			33.0		32.0
26		17.0	---		---		17.0			31.0		32.0
27		16.0	---		---		19.0			34.0		32.0
28		17.0	---		---		18.0			32.0		31.0
29		19.5	---		---		18.0			32.0		21.0
30		19.0	---		---		17.0			32.0		30.0
31		---	---		---		---			34.0		---
MEAN		25.0	16.5		23.5		18.0			31.5		31.0
WTR YR 1990	MEAN		25.0	MAX	34.0	MIN		15.0				

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.--Water-discharge records good. 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). U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--26 years (water years 1965-90), 722 ft³/s, 523,100 acre-ft/yr. Total flow of river.--95 years (water years 1895-1990), 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, 2,360 ft³/s, July 13; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	321	539	480	570	126	478	275	.00	.00	2.1
2	.00	.00	241	531	464	357	238	373	225	.00	.00	.00
3	.00	26	223	546	429	261	334	368	166	.00	.00	.00
4	.00	32	220	546	399	507	385	471	54	.00	25	.00
5	.00	22	188	605	395	359	318	735	26	.00	44	.00
6	.00	43	116	551	414	308	141	523	3.4	.00	26	29
7	.00	71	86	568	508	392	143	605	.00	.00	11	16
8	.00	69	178	561	524	363	138	649	.00	.00	117	1.4
9	.00	73	152	433	418	355	108	667	.00	.00	127	544
10	47	94	248	374	379	534	79	755	.00	.00	71	453
11	85	106	236	352	389	532	36	818	.00	.00	67	153
12	46	102	373	379	382	408	12	613	.00	.00	23	58
13	29	123	370	534	380	481	.00	765	.00	2360	2.6	31
14	24	144	373	622	345	523	.00	1150	.00	2190	.35	52
15	23	148	377	590	402	460	.00	1200	.00	1090	.00	23
16	18	146	395	622	428	364	.00	945	.00	538	17	6.8
17	4.1	150	443	509	428	247	.00	523	.00	332	312	33
18	7.6	158	424	520	445	160	.00	226	.00	270	322	67
19	3.1	158	340	634	398	120	.00	133	.00	145	647	88
20	1.9	147	297	624	438	65	.00	112	.00	161	412	159
21	1.5	136	323	594	422	7.7	.00	172	.00	51	201	200
22	1.3	135	430	570	419	4.1	107	655	.00	10	212	392
23	.00	130	417	617	409	1.8	171	246	.00	.58	175	1580
24	.00	164	318	597	391	.00	143	72	.00	.00	477	1060
25	.00	304	259	568	469	.00	125	107	.00	.00	1090	966
26	.00	207	242	518	436	.00	164	60	.00	.00	392	445
27	.00	195	221	489	457	.00	725	18	.00	.00	165	214
28	.00	174	233	507	473	.00	735	2.8	.00	.00	79	82
29	.00	182	297	469	---	.00	667	.00	.00	.00	162	29
30	.00	302	563	464	---	.00	613	.00	.00	.00	30	27
31	.00	---	579	466	---	92	---	.00	---	.00	12	---
TOTAL	291.50	3741.00	9483	16499	11921	7471.60	5508.00	13441.80	749.40	7147.58	5218.95	6711.30
MEAN	9.40	125	306	532	426	241	184	434	25.0	231	168	224
MAX	85	304	579	634	524	570	735	1200	275	2360	1090	1580
MIN	.00	.00	86	352	345	.00	.00	.00	.00	.00	.00	.00
AC-FT	578	7420	18810	32730	23650	14820	10930	26660	1490	14180	10350	13310
(†)	10750	16570	30270	44730	35180	33310	34110	50530	14230	27320	24960	25170

CAL YR 1989 TOTAL 206415.00 MEAN 566 MAX 3100 MIN .00 AC-FT 409400 (†) MEAN 804 AC-FT 581800
WTR YR 1990 TOTAL 88184.13 MEAN 242 MAX 2360 MIN .00 AC-FT 174900 (†) MEAN 479 AC-FT 347100

(†) COMBINED FLOW, IN ACRE-FEET, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY AND CONVEYANCE CHANNEL.

RIO GRANDE BASIN

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 TEMPERATURE: January 1949 to current year.

SUSPENDED-SEDIMENT DISCHARGE: 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. Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total-load data were not available at time of publication and will be available at Albuquerque District Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,730 microsiemens, Apr. 8, 1953; minimum daily, 277 microsiemens, June 12, 1983.

WATER TEMPERATURE: Maximum daily, 37.0°C, July 22, 27, Aug. 7; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 135,000 mg/L, July 23, 1977; minimum daily mean, no flow on many days each year.

SEDIMENT LOAD: 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, undetermined, minimum daily, undetermined.

WATER TEMPERATURE: Maximum daily, undetermined, minimum daily, undetermined.

SEDIMENT CONCENTRATION: Maximum daily mean, 72,600 mg/L, July 13; minimum daily mean, no flow on many days.

SEDIMENT LOAD: Maximum daily, 463,000 tons, July 13; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	STREAM WIDTH (FT) (000004)	STREAM DEPTH, MEAN (FT) (000064)	STREAM VELOC- ITY, MEAN (F/S) (000055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE WATER (DEG C) (000010)	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. FALL DIAM. % FINER THAN .002 MM (70337)
OCT												
18...	1340	0.0	25.0	1.2	0.32	--	13.0	--	--	--	--	--
NOV												
14...	1406	146	120	0.74	1.61	--	11.0	--	--	--	--	--
DEC												
11...	1500	171	--	--	--	658	6.0	181	84	--	64	--
JAN												
04...	1245	548	--	--	--	--	25.0	2360	3490	4700	--	21
FEB												
01...	1642	472	110	1.4	2.99	--	6.0	--	--	--	--	--
APR												
05...	1330	275	122	1.2	1.86	--	17.0	451	335	548	--	--
MAY												
03...	1415	450	124	1.4	2.62	--	12.5	--	--	--	--	--

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 .031 MM (70341)	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. 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											
18...	--	--	--	--	--	--	0	5	76	100	--
NOV											
14...	--	--	--	--	--	--	0	1	21	99	100
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	26	42	--	55	79	100	1	13	83	100	--
FEB											
01...	--	--	--	--	--	--	1	11	74	97	100
APR											
05...	--	--	--	90	98	100	--	--	--	--	--
MAY											
03...	--	--	17	--	--	--	17	53	94	100	--

RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	620		646		479					---
2		---	622		623		513					---
3		---	618		652		546					---
4		---	621		621		496					---
5		---	631		613		488					---
6		---	625		618		796					---
7		---	626		644		801					---
8		---	620		640		---					---
9		---	628		621		---					---
10		---	621		1010		---					---
11		---	1350		674		---					---
12		---	1420		670		---					---
13		722	703		591		---					---
14		711	650		597		---					---
15		718	653		594		---					---
16		718	650		591		---					---
17		716	662		560		---					---
18		719	646		561		---					698
19		---	654		---		---					680
20		---	652		---		---					672
21		---	625		---		---					675
22		---	632		---		728					673
23		---	---		---		741					669
24		---	---		---		746					665
25		---	---		---		643					678
26		---	---		---		679					669
27		---	---		---		737					646
28		---	---		---		744					650
29		---	---		---		654					648
30		---	---		---		636					655
31		---	---		---		---					---
MEAN		717	706		640		652					668

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1989
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	16.0		24.0		19.0					---
2		---	16.0		24.0		18.0					---
3		---	16.0		21.0		18.5					---
4		---	14.0		23.0		19.0					---
5		---	16.0		23.0		18.0					---
6		---	14.0		23.0		18.0					---
7		---	15.0		22.0		17.0					---
8		---	16.0		22.0		---					---
9		---	16.0		23.0		---					---
10		---	18.0		24.0		---					---
11		---	17.0		22.0		---					---
12		---	16.0		23.0		---					---
13		25.0	17.0		24.0		---					---
14		26.0	17.0		23.0		---					---
15		25.0	16.0		22.0		---					---
16		26.0	16.0		24.0		---					---
17		26.0	16.0		23.0		---					---
18		26.0	17.0		24.0		---					30.0
19		---	19.0		---		---					33.0
20		---	17.0		---		---					29.0
21		---	18.0		---		---					29.0
22		---	14.0		---		18.0					30.0
23		---	---		---		19.5					30.0
24		---	---		---		18.0					31.0
25		---	---		---		19.0					30.0
26		---	---		---		19.0					32.0
27		---	---		---		18.0					32.0
28		---	---		---		19.0					31.0
29		---	---		---		17.0					32.0
30		---	---		---		17.0					31.0
31		---	---		---		---					---
MEAN		25.5	16.0		23.0		18.5					31.0

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	0	.00	0	.00	1930	1670	352	512	1400	1810	351	540
2	0	.00	0	.00	1570	1020	298	427	1490	1870	330	318
3	0	.00	1700	119	1530	921	285	420	1310	1520	307	216
4	0	.00	1180	102	2640	1570	256	377	1630	1760	483	661
5	0	.00	1170	69	1940	985	245	400	1670	1780	355	344
6	0	.00	1350	157	1420	445	231	344	1930	2160	270	225
7	0	.00	1550	297	1790	416	226	347	1210	1660	251	266
8	0	.00	1410	263	1840	884	270	409	1300	1840	276	271
9	0	.00	1410	278	1640	673	250	292	1240	1400	236	226
10	2230	283	1490	378	1760	1180	262	265	1270	1300	457	659
11	1850	425	1440	412	1430	911	267	254	910	956	504	724
12	1140	142	1360	375	1290	1300	267	273	1260	1300	468	516
13	861	67	1280	425	1190	1190	435	627	2420	2480	461	599
14	647	42	1250	486	1190	1200	508	853	1400	1300	467	659
15	546	34	1250	499	1190	1210	497	792	1870	2030	442	549
16	510	25	1250	493	1350	1440	484	813	1280	1480	419	412
17	480	5.3	1150	466	1530	1830	489	672	877	1010	355	237
18	710	15	914	390	1320	1510	492	691	808	971	331	143
19	490	4.1	858	366	1120	1030	628	1080	769	826	364	118
20	430	2.2	798	317	1270	1020	611	1030	634	750	328	58
21	410	1.7	701	257	789	688	627	1010	534	608	207	4.3
22	360	1.3	717	261	510	592	585	900	497	562	211	2.3
23	0	.00	695	244	469	528	586	976	469	518	307	1.5
24	0	.00	982	435	420	361	604	974	436	460	0	.00
25	0	.00	2610	2140	341	238	640	982	454	575	0	.00
26	0	.00	2430	1360	316	206	642	898	419	493	0	.00
27	0	.00	2330	1230	230	137	733	968	362	447	0	.00
28	0	.00	2250	1060	173	109	836	1140	303	387	0	.00
29	0	.00	2160	1060	160	128	857	1090	---	---	0	.00
30	0	.00	2060	1680	405	616	882	1100	---	---	0	.00
31	0	.00	---	---	353	552	930	1170	---	---	992	246
TOTAL	---	1047.60	---	15619.00	---	26560	---	22086	---	34253	---	7995.10

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)					
	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS						
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	992	337	1480	1910	5130	3810	0	.0	0	.00	2260	13												
2	875	562	1390	1400	4070	2470	0	.0	0	.00	0	.0								.0				
3	1000	902	2290	2280	3770	1690	0	.0	0	.00	0	.0								.0				
4	828	861	2590	3290	3110	453	0	.0	4280	289	0	.0								.0				
5	751	645	2410	4780	2770	194	0	.0	6560	779	0	.0								.0				
6	766	292	2310	3260	1730	16	0	.0	4910	345	10	.8												
7	773	298	2260	3690	0	.00	0	.0	3890	116	5610	242												
8	440	164	2270	3980	0	.00	0	.0	7070	2230	2600	9.8												
9	461	134	2260	4070	0	.00	0	.0	6740	2310	13800	20300												
10	703	150	2250	4590	0	.00	0	.0	4770	914	6970	8530												
11	443	43	2190	4840	0	.00	0	.0	4050	733	5390	2230												
12	385	12	2250	3720	0	.00	0	.0	3310	206	4590	719												
13	0	.00	2210	4560	0	.00	72600	463000	2210	16	4700	393												
14	0	.00	2260	7020	0	.00	53500	316000	1890	1.8	5260	739												
15	0	.00	2340	7580	0	.00	50900	150000	0	.00	4500	279												
16	0	.00	2460	6280	0	.00	34000	49400	1960	90	4480	82												
17	0	.00	1960	2770	0	.00	14400	12900	6920	5830	4420	394												
18	0	.00	1960	1200	0	.00	2930	2140	5270	4580	6200	1120												
19	0	.00	2040	733	0	.00	1800	705	7360	12900	7130	1690												
20	0	.00	3000	907	0	.00	2380	1030	6590	7330	7130	3060												
21	0	.00	3300	1530	0	.00	2830	390	3760	2040	7630	4120												
22	2650	766	6330	11200	0	.00	2150	58	3380	1930	8600	9100												
23	4460	2060	4710	3130	0	.00	1310	2.1	3030	1430	6780	28900												
24	5740	2220	2840	552	0	.00	0	.0	5760	7420	6340	18100												
25	7190	2430	3470	1000	0	.00	0	.0	9770	28800	4970	13000												
26	7370	3260	2920	473	0	.00	0	.0	4790	5070	7060	8480												
27	5850	11500	2410	117	0	.00	0	.0	3190	1420	3730	2160												
28	3560	7060	1480	11	0	.00	0	.0	2730	582	2010	445												
29	3720	6700	0	.00	0	.00	0	.0	5950	2600	1770	139												
30	1640	2710	0	.00	0	.00	0	.0	3210	260	2140	156												
31	---	---	0	.00	---	---	0	.0	3220	104	---	---												
TOTAL	---	43106.00	---	90873.00	---	8633.00	---	995625.1	---	90325.80	---	124401.6												
TOTAL LOAD FOR YEAR: 1460525.20 TONS.																								

RIO GRANDE BASIN

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, 2,065,000 acre-ft, survey of 1988 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 contents, 1,738,600 acre-ft, Feb. 28, gage height, 4,397.53 ft; minimum contents, 1,249,100 acre-ft, Sept. 24, gage height, 4,380.32 ft.

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

4,380	1,241.2	4,390	1,509.1
4,400	1,819.7	4,410	2,177.0

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1642700	1640600	1643900	1676900	1711400	1736700	1649800	1591900	1530500	1425500	1340900	1300400
2	1642400	1639300	1643900	1677500	1712000	1736700	1646100	1590700	1527800	1422500	1337700	1296800
3	1642400	1639000	1643900	1678800	1712600	1733800	1642700	1589800	1525200	1417300	1335300	1335300
4	1642400	1639000	1644300	1680700	1713600	1733100	1639600	1588300	1522900	1414800	1333500	1289900
5	1642100	1639000	1644900	1681000	1714500	1732800	1636600	1587400	1519700	1412600	1331400	1285800
6	1642700	1639300	1645800	1681900	1715500	1730200	1635000	1586200	1516300	1408800	1329600	1284500
7	1642700	1639300	1646700	1682900	1716800	1727300	1633500	1586500	1512000	1404700	1325900	1282500
8	1642700	1639600	1646100	1683500	1718400	1724500	1631600	1584700	1509400	1400600	1322800	1280200
9	1642700	1639900	1647000	1686600	1719700	1721900	1630100	1584100	1505700	1396300	1322200	1278200
10	1642700	1639900	1648300	1687300	1720600	1719700	1628900	1582900	1501900	1393000	1321700	1276100
11	1642700	1639900	1649500	1688500	1721900	1717100	1626800	1580500	1498500	1389800	1320900	1272800
12	1643300	1639900	1649500	1689200	1722900	1713600	1626400	1579300	1494800	1387600	1320200	1270500
13	1643900	1639900	1649500	1691100	1724500	1710400	1625800	1578100	1490200	1382500	1319100	1268000
14	1643900	1639900	1649800	1692000	1724500	1707500	1625200	1577200	1486000	1379000	1316800	1265500
15	1643600	1640300	1649800	1693000	1725400	1704700	1624600	1576600	1482600	1375500	1316200	1263000
16	1643300	1640300	1652000	1693900	1725400	1702100	1623700	1576600	1478900	1371700	1315200	1260200
17	1644300	1640300	1654200	1694500	1726100	1699000	1621600	1576900	1475200	1370400	1315200	1257700
18	1644300	1640600	1656600	1695500	1727000	1695800	1618800	1576900	1471500	1370100	1314400	1255200
19	1641800	1641200	1659100	1697400	1728000	1693900	1616400	1575800	1468700	1368800	1313900	1253400
20	1641800	1641800	1661300	1698300	1728900	1690700	1613600	1573400	1465900	1366600	1313600	1251100
21	1641800	1642100	1663200	1699600	1730200	1687900	1610300	1569500	1461400	1365000	1314200	1249900
22	1642100	1643000	1665000	1700500	1732200	1685400	1607300	1567100	1459200	1362900	1313400	1249600
23	1642400	1643000	1666000	1701800	1733100	1681900	1604300	1564800	1455300	1360200	1314700	1249400
24	1642700	1643000	1667200	1702800	1734400	1679100	1599700	1562700	1451300	1451300	1314400	1249100
25	1642700	1643600	1668100	1703700	1735700	1676300	1597600	1558300	1447400	1355400	1314200	1249400
26	1642700	1643900	1669400	1705000	1737000	1673100	1596400	1554100	1443800	1353800	1313900	1250400
27	1641800	1643900	1670600	1705900	1736700	1668100	1594900	1550000	1440500	1351700	1313600	1251900
28	1641500	1643900	1671600	1706900	1738600	1663800	1593700	1545900	1436000	1349600	1312300	1253400
29	1640900	1643900	1672200	1707900	---	1660100	1592500	1541800	1432200	1346400	1308700	1253900
30	1640900	1643900	1673800	1708800	---	1656300	1592500	1538000	1428900	1344300	1306100	1254400
31	1639600	---	1675300	1709400	---	1653200	---	1534200	---	1342700	1303500	---
MAX	1644300	1643900	1675300	1709400	1738600	1736700	1649800	1591900	1530500	1451300	1340900	1335300
MIN	1639600	1639000	1643900	1676900	1711400	1653200	1592500	1534200	1428900	1342700	1303500	1249100
(†)	4394.39	4394.53	4395.54	4396.62	4397.53	4394.83	4392.84	4390.89	4387.15	4383.96	4382.46	4380.53
(††)	-3100	+4300	+31400	+34100	+29200	-85400	-60700	-58300	-105300	-86200	-39200	-49100
CAL YR 1989	MAX 2040200	MIN 1639000	(††)	-359400								
WTR YR 1990	MAX 1738600	MIN 1249100	(††)	-388300								

(†) ELEVATION, IN FEET, AT END OF MONTH.

(††) CHANGE IN CONTENTS, IN ACRE-Feet.

RIO GRANDE BASIN

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.--Records good. Flow regulated by Elephant Butte Reservoir (station 08360500). Diversion for irrigation of about 800,000 acres upstream from station. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--75 years, 994 ft³/s, 720,200 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, 2,370 ft³/s, May 22; minimum daily, 8.4 ft³/s, Oct. 1, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	12	14	14	15	652	2090	1340	2120	1380	1390	1900
2	10	12	14	15	14	1040	2090	1350	2100	1830	1390	1920
3	12	11	15	15	15	1250	2100	1400	2080	1830	1380	1920
4	12	13	15	15	15	1250	2110	1430	2070	1430	1390	1920
5	24	13	14	15	15	1260	2010	1450	2060	1830	1380	1930
6	11	13	14	14	15	1680	1550	1460	2060	2050	1380	1720
7	11	14	13	14	15	1900	1360	1470	2040	2040	1380	1530
8	12	14	13	14	15	1910	1360	1480	2040	2040	915	1540
9	11	13	13	14	15	1910	1370	1480	2050	2030	681	1550
10	11	13	13	14	15	1910	1370	1510	2040	2030	683	1550
11	12	13	13	14	15	1910	836	1510	2040	2020	683	1560
12	37	13	12	14	16	1920	582	1520	2050	2030	683	1570
13	11	13	12	13	14	1920	592	1530	2040	2030	678	1580
14	9.5	15	13	13	15	1920	598	1540	2040	2020	674	1440
15	9.0	18	12	13	14	1920	604	1540	2040	2020	675	1440
16	8.4	18	13	12	14	1930	1140	1530	2050	1610	670	1440
17	11	20	13	12	14	1930	1470	1520	2050	1410	672	1440
18	16	19	13	12	14	1930	1480	1520	2060	1410	673	1430
19	14	20	13	12	14	1930	1490	1510	2070	1400	676	1440
20	9.5	22	12	11	14	1940	1940	1510	2080	1400	688	1040
21	14	23	12	11	14	1940	2170	2040	2090	1400	695	702
22	12	9.1	13	11	14	1940	2160	2370	2090	1390	710	701
23	9.4	9.6	13	13	16	1950	2190	2330	2110	1380	696	703
24	9.5	10	13	14	15	1940	1630	2310	2120	1370	695	700
25	9.4	11	13	14	15	1800	1270	2290	2120	1370	692	697
26	11	12	14	14	428	2010	1260	2260	2130	1370	694	193
27	9.9	12	14	14	651	2080	1270	2230	2130	1370	1140	16
28	10	12	14	14	651	2080	1290	2210	2130	1380	1370	16
29	10	13	14	14	---	2080	1310	2180	1880	1380	1450	17
30	10	14	14	14	---	2090	1330	2160	1360	1380	1480	17
31	9.6	---	14	15	---	2090	---	2140	---	1380	1620	---
TOTAL	374.6	424.7	412	418	2097	56012	44022	54120	61340	51010	29983	35622
MEAN	12.1	14.2	13.3	13.5	74.9	1807	1467	1746	2045	1645	967	1187
MAX	37	23	15	15	651	2090	2190	2370	2130	2050	1620	1930
MIN	8.4	9.1	12	11	14	652	582	1340	1360	1370	670	16
AC-FT	743	842	817	829	4160	111100	87320	107300	121700	101200	59470	70660

CAL YR 1989 TOTAL 358593.4 MEAN 982 MAX 3190 MIN 8.0 AC-FT 711300
WTR YR 1990 TOTAL 335835.3 MEAN 920 MAX 2370 MIN 8.4 AC-FT 666100

08362000 CABALLO RESERVOIR NEAR ARREY, NM

LOCATION.--Lat 32°53'47", long 107°17'30", in SE/4SW/4 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 1983 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 contents, 347,000 acre-ft, Mar. 4, 1942, gage height, 4,182.06 ft; minimum contents, 118 acre-ft, Oct. 14, 1938, gage height, 4,108.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 73,000 acre-ft, Feb. 11, 12, gage height, 4,150.24 ft; minimum contents, 21,300 acre-ft, Sept. 4, gage height, 4,135.05 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 (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63000	66200	67800	70100	72600	60700	57600	65600	63500	41800	35600	22200
2	63100	66200	67800	70200	72600	60700	58300	65300	63600	40100	35400	21900
3	63100	66200	67800	70200	72700	59700	59700	65000	63700	38900	35300	21600
4	63300	66200	67900	70400	72800	59400	61600	65100	63900	38700	35200	21300
5	63500	66200	67900	70600	72900	59200	59300	65300	64000	38600	35100	21700
6	63700	66300	67900	70600	72900	58100	65600	65600	63300	38500	34900	22900
7	63800	66300	67900	70600	72700	58000	66200	65800	62400	39100	34500	24100
8	63900	66400	68000	70600	72700	59400	66900	66100	61700	39500	35500	24800
9	64000	65900	68200	70800	72800	61600	67600	65700	60800	40200	36100	25400
10	64100	65900	68300	70800	72900	62900	68100	65000	59900	41100	36100	26100
11	64100	66000	68400	70900	73000	64100	68100	65100	59100	41700	35000	27000
12	64200	66000	68500	71000	73000	65600	67100	64500	58400	42300	33900	27900
13	64200	66100	68500	71100	72400	66200	65800	63900	57500	42800	32800	28600
14	64300	66200	68500	71200	71900	66500	64700	63300	57000	43700	32800	29400
15	64400	66400	68500	71300	71900	65600	63700	63000	56500	44100	33000	30000
16	64500	66500	68500	71400	71800	64400	62600	62000	55900	44600	33000	30800
17	64800	66500	68500	71400	71400	63200	62000	61200	55300	44700	33000	31500
18	64800	66600	68600	71500	71100	62100	61200	59900	54800	43900	32400	32400
19	64600	66700	68700	71800	70700	61000	60100	59900	54200	42800	31900	32900
20	64700	66700	68700	71800	70300	60300	59100	59400	53000	42300	31400	33600
21	64800	66800	68800	71900	70000	59200	60100	59000	51600	41300	32300	34100
22	65000	66800	69000	71900	69700	58400	61200	59400	50200	40400	30800	36800
23	65100	67000	69100	72000	69400	57500	62200	59700	49800	40000	29900	39700
24	65100	67000	69200	72100	67500	57000	63400	59900	49400	39500	29400	42800
25	65200	67100	69200	72200	65600	56400	63900	60100	49300	38800	28300	45700
26	65200	67100	69200	72200	63700	55800	64200	60700	48500	38100	27200	46200
27	65300	67200	69300	72200	62400	55200	64600	61300	47600	37400	26100	46300
28	65400	67600	69400	72300	62400	55000	64900	61900	46500	36900	25500	44500
29	65500	67800	69600	72400	---	55400	64900	62600	45500	36300	24500	43600
30	65600	67800	69700	72400	---	55200	65300	63000	43600	35800	23600	42700
31	65700	---	69900	72400	---	56900	---	63200	---	35600	22500	---
MAX	65700	67800	69900	72400	73000	66500	68100	66100	64000	44700	36100	46300
MIN	63000	65900	67800	70100	62400	55000	57600	59000	43600	35600	22500	21300
(†)	4148.71	4149.16	4149.60	4150.12	4147.97	4146.70	4148.62	4148.15	4143.16	4140.63	4135.57	4142.89
(††)	+2700	+2100	+2100	+2500	-10000	-5500	+8400	-2100	+19600	-8000	-13100	+20200

CAL YR 1989 MAX 183300 MIN 63000 (††) -28400
WTR YR 1990 MAX 73000 MIN 21300 (††) +18900

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

RIO GRANDE BASIN

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, 2,065,000 acre-ft, 1988 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 downstream. See monthly table below for record of ditch. U.S. Bureau of Reclamation satellite telemeter at station.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--52 years, 904 ft³/s, 654,900 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 discharge, 2,530 ft³/s, Mar. 19; minimum daily, 2.0 ft³/s, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.0	2.0	2.00	2.00	1020	1580	1320	1820	2410	1420	1930
2	4.0	2.0	2.0	2.00	3.00	1090	1380	1490	1850	2310	1420	1880
3	4.0	2.0	2.0	2.00	3.00	1200	1150	1360	1850	2330	1360	1880
4	4.0	2.0	2.0	2.00	3.00	1200	1030	1250	1850	1930	1390	1810
5	4.0	2.0	2.0	2.00	3.00	1620	981	1180	2030	1870	1500	1640
6	4.0	2.0	2.0	2.00	3.00	1700	987	1180	2340	1770	1500	1550
7	4.0	2.0	2.0	2.00	2.00	1300	990	1180	2260	1730	1070	1360
8	4.0	2.0	2.0	2.00	2.00	859	990	1420	2250	1740	783	1200
9	4.0	2.0	2.0	2.00	2.00	806	1010	1590	2310	1660	783	1200
10	4.0	2.0	2.0	2.00	2.00	1460	1150	1590	2300	1670	1060	1130
11	4.0	2.0	2.0	2.00	3.00	1080	1300	1510	2280	1720	1300	1060
12	4.0	2.0	2.0	2.00	184	1190	1370	1430	2270	1720	1290	1090
13	4.0	2.0	2.0	2.00	258	1760	1270	1430	2250	1690	1110	1100
14	3.0	2.0	2.0	2.00	175	2050	1190	1430	2240	1760	745	1050
15	3.0	2.0	2.0	2.00	175	2340	1180	1580	2260	1780	766	1000
16	3.0	2.0	2.0	2.00	202	2450	1220	1710	2260	1590	766	1000
17	3.0	2.0	2.0	2.00	210	2450	1530	1710	2260	1680	798	883
18	3.0	2.0	2.0	2.00	215	2450	1770	1580	2260	1830	875	985
19	3.0	2.0	2.0	2.00	223	2530	1800	1460	2330	1770	875	1040
20	2.0	2.0	2.0	2.00	223	2510	1500	1450	2510	1760	979	1010
21	2.0	2.0	2.0	2.00	223	2490	1230	1450	2510	1850	1230	955
22	2.0	2.0	2.0	2.00	223	2460	1230	1670	2300	1800	1520	858
23	2.0	2.0	2.0	2.00	701	2410	1230	1780	2190	1740	1120	638
24	2.0	2.0	2.0	2.00	1020	2150	1230	1780	2180	1700	1190	538
25	2.0	2.0	2.0	2.00	1020	2150	1190	1690	2180	1720	1280	620
26	2.0	2.0	2.0	2.00	1020	2190	1150	1580	2310	1720	1270	859
27	2.0	2.0	2.0	2.00	1020	2120	1150	1580	2440	1720	1260	800
28	2.0	2.0	2.0	2.00	1020	2030	1150	1580	2470	1720	1630	663
29	2.0	2.0	2.0	2.00	---	2020	1150	1650	2410	1600	1940	600
30	2.0	2.0	2.0	2.00	---	1150	1150	1740	2380	1460	1990	454
31	2.0	---	2.0	2.00	---	1580	---	1800	---	1450	2030	---
TOTAL	94.0	60.0	62.0	62.00	8140.00	55815	37238	47150	67150	55200	38250	32783
MEAN	3.03	2.00	2.00	2.00	291	1800	1241	1521	2238	1781	1234	1093
MAX	4.0	2.0	2.0	2.0	1020	2530	1800	1800	2510	2410	2030	1930
MIN	2.0	2.0	2.0	2.0	2.0	806	981	1180	1820	1450	745	454
AC-FT	186	119	123	123	16150	110700	73860	93520	133200	109500	75870	65030
(†)	0	0	0	0	11	14	65	126	137	42	14	103

CAL YR 1989 TOTAL 371069.0 MEAN 1017 MAX 2820 MIN 2.0 AC-FT 736000
WTR YR 1990 TOTAL 342004.00 MEAN 937 MAX 2530 MIN 2.0 AC-FT 678400

(†) DIVERSION, IN ACRE-FEET, BY BONITA DITCH; DIVERTS DIRECTLY FROM CABALLO DAM AND THIS DIVERSION IS NOT INCLUDED IN THE RIVER RECORDS.

RIO GRANDE BASIN

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.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV												
08...	1030	84	1650	8.5	14.5	13.0	12	9.8	420	160	120	28
JAN												
10...	1440	98	2100	8.5	25.0	8.5	12	--	420	150	120	29
23...	1245	68	2410	9.4	12.0	11.0	4.0	12.0	420	150	120	29
MAR												
20...	1145	938	990	8.5	20.5	14.0	84	9.4	220	58	67	14
MAY												
24...	1010	600	1080	8.8	30.5	23.0	32	8.0	250	65	73	16
JUL												
10...	0920	1030	890	8.3	26.0	25.5	110	6.2	220	50	63	14
SEP												
18...	0855	548	1350	8.6	23.0	20.5	55	6.9	280	82	83	18

DATE	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 DIS IT FIELD HCO3 (MG/L AS 00453)	CAR- BONATE WATER DIS IT FIELD CO3 (MG/L AS 00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (MG/L AS 39086)	ALKA- LINITY LAB AS CACO3 (MG/L 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)
NOV												
08...	290	6	10	260	24	268	265	460	230	0.80	27	1340
JAN												
10...	290	6	9.5	295	17	270	266	470	230	0.60	25	1400
23...	310	7	10	276	24	266	264	500	250	0.80	25	1440
MAR												
20...	110	3	7.3	193	5	166	163	170	110	0.60	11	616
MAY												
24...	130	4	7.3	200	12	184	186	230	100	0.30	10	696
JUL												
10...	100	3	7.5	174	14	167	166	180	75	0.50	10	555
SEP												
18...	150	4	8.5	220	12	200	208	240	110	0.60	17	774

DATE	SOLIDS, SUM OF CONSTITUENTS, 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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
NOV												
08...	1320	0.790	0.040	0.830	0.100	0.110	0.30	0.310	0.250	<10	4	<100
JAN												
10...	1340	0.760	0.060	0.820	0.160	0.160	0.84	0.360	0.320	<10	4	100
23...	1410	0.790	0.060	0.850	0.110	0.130	0.59	0.290	0.260	--	--	--
MAR												
20...	592	0.390	0.010	0.400	0.080	0.060	0.82	0.280	0.080	--	--	--
MAY												
24...	678	--	<0.010	<0.100	0.030	<0.010	--	0.160	0.050	<10	3	64
JUL												
10...	553	--	<0.010	0.600	0.040	0.010	1.3	0.370	0.070	<10	3	70
SEP												
18...	750	--	<0.010	0.200	0.020	<0.010	0.48	0.090	0.060	<10	3	88

RIO GRANDE BASIN

08364000 RIO GRANDE AT EL PASO, TX -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
NOV 08...	<10	<1.0	2	<1	2	20	<1	190	30	1.1	14
JAN 10...	<10	<1.0	<1	1	2	10	<1	40	80	0.1	11
JAN 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	0.7	<1.0	<1	<3	6	5	1	100	6	<0.1	<10
JUL 10...	<0.5	<1.0	2	<3	4	9	1	84	2	<0.1	<10
SEP 18...	<0.5	1.0	<1	<3	1	<3	<1	120	5	<0.1	10

DATE	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, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 08...	2	<1	<1.0	1700	4	20	138	31	53	400	460
JAN 10...	2	<1	<1.0	1800	2	20	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	118	22	90	160	530
MAR 20...	--	--	--	--	--	--	274	694	93	52	380
MAY 24...	7	<1	<1.0	920	<6	13	388	629	38	73	K71
JUL 10...	3	<1	<1.0	800	<6	6	289	804	69	K79	1600
SEP 18...	<1	<1	<1.0	1100	<6	9	333	493	57	250	620

RIO GRANDE BASIN

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.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 07...	1145	227	3200	8.0	24.5	14.5	38	8.1	600	350	170	42
JAN 24...	1215	90	4400	9.0	17.5	11.5	31	11.2	750	450	200	60
MAR 21...	1230	101	6200	8.4	28.0	21.0	4.5	17.4	850	580	210	78
MAY 25...	1145	109	3700	9.6	31.5	26.0	55	16.1	650	410	180	48
JUL 11...	1215	44	5000	8.6	32.0	30.5	63	13.8	850	600	210	77
SEP 19...	1100	260	3150	8.4	26.0	23.5	120	7.8	570	350	160	41

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY 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)
NOV 07...	520	9	11	305	0	250	241	590	600	0.80	28	2180
JAN 24...	620	10	11	317	24	300	244	710	890	0.80	27	2800
MAR 21...	980	15	7.0	249	34	260	237	960	1300	0.70	19	4060
MAY 25...	560	10	12	195	48	240	237	620	700	0.30	16	2330
JUL 11...	870	13	13	215	42	246	209	940	1300	0.50	21	3550
SEP 19...	420	8	11	183	44	224	234	480	530	0.80	23	1920

DATE	SOLIDS, SUM OF CONSTITUENTS, 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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
NOV 07...	2130	2.10	0.200	2.30	0.980	1.10	1.0	1.30	0.860	30	7	<100
JAN 24...	2710	0.700	0.140	0.840	2.00	2.00	1.6	1.10	0.750	--	--	--
MAR 21...	3710	0.260	0.040	0.300	0.090	0.080	1.0	0.250	0.140	--	--	--
MAY 25...	2290	0.340	0.160	0.500	0.030	<0.010	1.3	0.850	0.400	<10	8	<100
JUL 11...	3590	0.230	0.070	0.300	0.030	0.020	0.97	0.280	0.080	10	7	<100
SEP 19...	1810	1.36	0.140	1.50	0.020	0.010	0.88	0.400	0.330	10	6	200

RIO GRANDE BASIN

08370500 RIO GRANDE BELOW OLD FORT QUITMAN, TX -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
NOV 07...	<10	1.0	2	1	2	30	<1	200	40	0.2	13
JAN 24...	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	<10	<1.0	<1	1	3	40	<1	200	10	<0.1	12
JUL 11...	<10	<1.0	2	2	3	40	<1	270	110	0.2	12
SEP 19...	<10	<1.0	<1	1	1	20	<1	190	30	<0.1	10

DATE	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, DIS- 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 07...	7	<1	<1.0	3100	12	20	517	317	48	87	K44
JAN 24...	--	--	--	--	--	--	351	85	96	K32	K43
MAR 21...	--	--	--	--	--	--	427	116	86	K11	K26
MAY 25...	4	<1	<1.0	3100	24	<10	362	107	72	100	200
JUL 11...	4	<1	<1.0	4500	38	20	192	23	82	K160	540
SEP 19...	2	<1	<1.0	2500	21	<10	602	423	57	K230	460

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, NM
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in SW¼NE¼ 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.--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.--27 years, 31.5 ft³/s, 22,820 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2115	*195	*2.50	Aug. 20	1500	101	2.04
June 28	0930	103	2.05				

Minimum daily, 1.2 ft³/s, Dec. 1, 2, 3, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e8.1	e1.2	e8.9	e5.4	e5.2	e12	56	96	17	40	29
2	10	e7.5	e1.2	e9.6	e5.0	e5.5	13	52	87	15	44	27
3	11	e7.0	e1.2	e11	e4.9	e5.9	12	44	79	16	44	24
4	29	e6.6	e1.4	e12	e4.8	e5.4	12	42	76	20	44	23
5	47	e6.2	e1.6	e8.5	e4.6	e6.4	12	38	72	27	49	23
6	52	e5.9	e1.8	e7.4	e5.2	e8.1	13	40	68	19	69	24
7	40	e5.6	e1.7	e6.5	e4.4	e6.5	17	49	62	16	78	28
8	33	e5.4	e1.6	e7.4	e4.1	e6.9	20	61	58	19	68	36
9	30	e5.1	e1.5	e8.3	e3.9	e7.4	23	75	56	19	61	27
10	27	e4.6	e1.5	e8.8	e4.1	e8.1	22	74	55	18	52	25
11	25	e4.9	e1.5	e8.7	e4.2	e9.5	24	76	55	24	50	23
12	23	e4.2	e1.4	e8.6	e4.4	e9.0	26	75	51	30	59	22
13	22	e3.9	e1.3	e8.4	e4.5	e8.6	26	82	46	33	53	21
14	20	e3.5	e1.2	e8.2	e4.6	e8.1	30	96	42	30	54	20
15	20	e3.0	e1.5	e8.9	e4.9	e9.8	36	114	38	28	61	19
16	20	e2.9	e1.7	e10	e4.4	e11	39	120	35	28	58	23
17	19	e2.8	e2.0	e12	e4.0	e11	42	118	32	30	58	25
18	18	e2.7	e2.2	e13	e3.6	e10	37	124	30	28	56	22
19	17	e2.7	e2.4	e13	e3.3	e9.7	38	133	29	33	56	26
20	16	e2.5	e2.8	e10	e3.0	e8.9	43	120	26	36	72	22
21	16	e2.3	e3.1	e8.8	e3.2	e9.6	44	117	24	33	70	22
22	15	e2.1	e3.3	e7.5	e3.4	e10	55	125	22	34	56	22
23	14	e1.9	e3.6	e6.8	e3.9	e12	64	139	21	34	54	42
24	13	e1.7	e4.0	e6.3	e4.7	e15	62	162	20	37	52	41
25	13	e1.6	e4.4	e6.1	e4.8	e16	54	163	19	32	47	37
26	13	e1.5	e5.0	e5.9	e5.6	e18	49	147	18	30	43	34
27	11	e1.4	e5.7	e5.6	e6.4	e18	51	134	18	28	42	32
28	11	e1.3	e6.1	e5.4	e5.1	e15	53	126	18	29	38	32
29	9.9	e1.3	e6.6	e5.1	---	e14	64	129	20	33	35	50
30	9.1	e1.3	e7.3	e5.2	---	e14	61	113	19	40	33	44
31	14	---	e8.0	e5.3	---	e13	---	105	---	36	31	---
TOTAL	629.0	111.5	89.8	257.2	124.4	315.6	1054	3049	1292	852	1627	845
MEAN	20.3	3.72	2.90	8.30	4.44	10.2	35.1	98.4	43.1	27.5	52.5	28.2
MAX	52	8.1	8.0	13	6.4	18	64	163	96	40	78	50
MIN	9.1	1.3	1.2	5.1	3.0	5.2	12	38	18	15	31	19
AC-FT	1250	221	178	510	247	626	2090	6050	2560	1690	3230	1680

CAL YR 1989 TOTAL 7218.2 MEAN 19.8 MAX 167 MIN 1.2 AC-FT 14320
WTR YR 1990 TOTAL 10246.5 MEAN 28.1 MAX 163 MIN 1.2 AC-FT 20320

e Estimated

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT 30...	1115	4.9	98	--	7.6	6.5	0.0	0.20	10.8	50	6
MAR 27...	1200	15	110	--	7.6	9.0	4.0	2.6	11.0	45	0
MAY 22...	1100	112	--	60	7.5	18.0	6.0	2.5	10.8	29	4
AUG 23...	1200	55	90	--	7.6	20.0	10.0	1.9	10.2	38	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 WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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 30...	17	1.9	1.4	0.1	0.50	54	0	44	45	7.0	0.60
MAR 27...	15	1.8	1.5	0.1	0.60	165	0	135	43	8.1	0.70
MAY 22...	9.8	1.1	0.80	0.1	0.50	31	0	25	25	3.8	0.90
AUG 23...	13	1.4	1.1	0.1	0.50	51	0	42	37	5.0	0.90
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)	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 30...	0.20	6.4	59	62	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	20
MAR 27...	0.20	6.5	74	116	<0.010	<0.100	<0.010	<0.010	0.010	0.010	80
MAY 22...	<0.10	5.1	20	37	<0.010	<0.100	<0.010	<0.010	0.010	<0.010	80
AUG 23...	<0.10	6.1	50	53	<0.010	<0.100	<0.010	0.020	0.010	<0.010	60
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)
OCT 30...	<1	24	<0.5	<1.0	1	<3	<1	15	1	<4	1
MAR 27...	<1	23	<0.5	<1.0	<5	<3	<10	54	<10	<4	<1
MAY 22...	<1	14	<0.5	<1.0	<1	<3	<1	87	<1	<4	2
AUG 23...	<1	22	<0.5	<1.0	<1	<3	3	36	<1	<4	1

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	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)
OCT 30...	<0.1	<10	<1	<1	<1.0	37	<6	5	1.8	<0.4	2.7
MAR 27...	<0.1	<10	<10	<1	<1.0	37	<6	8	--	--	--
MAY 22...	--	<10	1	<1	<1.0	21	<6	3	--	--	--
AUG 23...	<0.1	<10	<1	<1	<1.0	32	<6	3	--	--	--

DATE	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 NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, DIS- CHARGE, 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 30...	<0.4	2.2	<0.4	0.16	0.06	6	0.08	96	48	20
MAR 27...	--	--	--	--	--	9	0.36	97	K19	21
MAY 22...	--	--	--	--	--	95	29	95	K7	16
AUG 23...	--	--	--	--	--	7	1.0	85	3	77

RIO GRANDE BASIN

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 Irwins Ranch" 1926-29, and as "at Irwins 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.--Records good except for estimated daily discharges, 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.--71 years, 99.4 ft³/s, 72,020 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2300	*427	*3.04	Aug. 20	1430	340	2.86

Minimum daily, 8.1 ft³/s, Dec. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e36	e10	e31	e22	27	37	139	246	67	88	76
2	33	e34	e11	e32	e20	27	35	128	227	62	89	73
3	35	e33	e12	e40	e19	25	35	115	210	65	91	70
4	104	e32	e14	e30	e19	25	34	110	206	68	96	67
5	187	e31	e16	e27	e20	28	36	105	206	92	106	69
6	172	e30	e15	e24	e18	30	39	107	200	75	124	74
7	122	e29	e14	e30	e18	26	46	130	189	74	133	89
8	100	e28	e12	e34	e17	28	55	159	176	80	113	115
9	91	e26	e12	e38	e18	30	63	183	172	90	102	83
10	84	e25	e12	e38	e19	33	61	180	186	88	94	75
11	79	e24	e11	e36	e20	33	65	186	183	116	94	70
12	74	e22	e9.0	e36	e21	29	71	181	165	113	108	66
13	70	e21	e8.1	e35	e23	27	71	194	148	102	113	63
14	67	e18	e9.2	e40	e20	28	78	218	137	100	110	60
15	65	e17	e10	e44	e19	30	94	251	127	90	134	57
16	65	e17	e11	e48	e18	30	103	261	120	89	126	66
17	66	e16	e12	e49	e16	31	113	253	111	91	112	83
18	63	e16	e12	e50	e18	26	105	265	103	84	105	69
19	60	e16	e13	e45	e16	24	104	282	101	103	103	78
20	58	e15	e14	e34	e15	27	112	254	95	108	190	68
21	59	e15	e14	e27	e15	29	113	247	92	94	169	69
22	56	e14	e15	e26	e18	36	139	261	88	92	139	71
23	55	e14	e16	e26	e20	42	156	293	84	90	126	100
24	54	e13	e17	e25	e25	43	150	350	80	95	115	98
25	53	e13	e18	e25	e34	51	132	358	76	85	106	87
26	54	e12	e20	e24	e36	55	121	328	74	78	99	81
27	48	e11	e24	e23	e25	54	125	310	71	71	103	78
28	49	e11	e25	e22	23	48	127	301	78	73	100	79
29	45	e11	e26	e22	---	47	153	324	70	81	93	134
30	39	e10	e27	e22	---	40	154	279	72	101	84	112
31	e40	---	e28	e24	---	35	---	261	---	86	80	---
TOTAL	2181	610	467.3	1007	572	1044	2727	7013	4093	2703	3445	2380
MEAN	70.4	20.3	15.1	32.5	20.4	33.7	90.9	226	136	87.2	111	79.3
MAX	187	36	28	50	36	55	156	358	246	116	190	134
MIN	33	10	8.1	22	15	24	34	105	70	62	80	57
AC-FT	4330	1210	927	2000	1130	2070	5410	13910	8120	5360	6830	4720

CAL YR 1989 TOTAL 23718.3 MEAN 65.0 MAX 263 MIN 8.1 AC-FT 47050
WTR YR 1990 TOTAL 28242.3 MEAN 77.4 MAX 358 MIN 8.1 AC-FT 56020

e Estimated

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM

LOCATION.--Lat 35°40'20", long 105°27'58", in NW¼SE¼ sec.28, T.17 N., R.14 E., San Miguel County, Hydrologic Unit 13060001, in Santa Fe National Forest, on right bank 2.3 mi upstream from Blue Canyon, and 5.1 mi southwest of El Porvenir.

DRAINAGE AREA.--5.42 mi².

PERIOD OF RECORD.--September 1987 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 8,060 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15 ft³/s Sept. 23, 1990, gage height, 2.17 ft; minimum discharge recorded, 0.06 ft³/s, July 8, 9, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s, Sept. 23, gage height, 2.17 ft; minimum discharge recorded, 0.23 ft³/s, July 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	---	---	---	---	---	e2.0	3.0	1.1	.33	3.2	1.3
2	.59	---	---	---	---	---	e2.1	3.0	1.1	.33	e1.6	1.3
3	.62	---	---	---	---	---	e2.2	2.9	1.0	.44	e1.2	1.2
4	1.3	---	---	---	---	---	e2.3	2.9	.98	.70	e.80	1.2
5	2.6	---	---	---	---	---	e2.5	2.9	.92	.88	e1.1	1.2
6	3.2	---	---	---	---	---	2.6	3.4	.88	.56	e1.6	1.3
7	2.2	---	---	---	---	---	2.6	4.0	.83	.47	e1.5	1.5
8	1.9	---	---	---	---	---	3.2	3.9	.80	.47	e1.3	1.6
9	1.7	---	---	---	---	---	3.6	3.6	.78	.57	e1.1	1.4
10	1.4	---	---	---	---	---	3.4	3.3	.80	.46	e1.0	1.4
11	1.3	---	---	---	---	---	3.1	3.2	.77	.57	e.90	1.2
12	1.2	---	---	---	---	---	3.1	3.1	.72	.62	e.80	1.1
13	1.1	---	---	---	---	---	3.1	3.0	.68	.59	e.80	1.1
14	1.0	---	---	---	---	---	3.2	2.8	.65	1.3	e1.0	1.1
15	1.0	---	---	---	---	---	3.5	2.7	.62	1.1	e.90	1.0
16	1.0	---	---	---	---	---	3.6	2.6	.60	.92	e.80	4.4
17	1.0	---	---	---	---	---	3.7	2.5	.57	.81	e.80	4.6
18	1.0	---	---	---	---	---	3.7	2.4	.54	.68	e.80	2.9
19	1.0	---	---	---	---	---	3.8	2.2	.53	1.4	e.80	2.5
20	e1.0	---	---	---	---	---	3.7	2.1	.50	1.8	e1.3	2.8
21	e1.0	---	---	---	---	---	3.7	2.0	.48	1.4	e2.5	3.5
22	e1.0	---	---	---	---	---	3.9	1.8	.47	1.7	e3.0	3.3
23	e1.0	---	---	---	---	---	4.0	1.7	.45	2.2	e2.6	13
24	e1.0	---	---	---	---	---	3.9	1.6	.39	1.5	e2.1	7.8
25	e1.0	---	---	---	---	---	3.9	1.5	.40	1.2	e1.9	5.4
26	e1.0	---	---	---	---	---	3.7	1.4	.40	.99	e1.6	4.1
27	e1.0	---	---	---	---	---	3.4	1.4	.41	.85	e1.6	3.6
28	e1.0	---	---	---	---	---	3.3	1.4	.46	.78	e1.4	3.6
29	e1.0	---	---	---	---	---	3.2	1.3	.39	.79	e1.3	9.9
30	e1.0	---	---	---	---	---	3.1	1.3	.38	.83	1.4	6.0
31	e1.0	---	---	---	---	---	---	1.2	---	1.8	1.4	---
TOTAL	37.71	---	---	---	---	---	97.1	76.1	19.60	29.04	44.10	96.3
MEAN	1.22	---	---	---	---	---	3.24	2.45	.65	.94	1.42	3.21
MAX	3.2	---	---	---	---	---	4.0	4.0	1.1	2.2	3.2	13
MIN	.59	---	---	---	---	---	2.0	1.2	.38	.33	.80	1.0
AC-FT	75	---	---	---	---	---	193	151	39	58	87	191

e Estimated

RIO GRANDE BASIN

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.--Records fair except for 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 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.--76 years (1910-15, 1915-24, 1926-90), 128 ft³/s, 92,740 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, from slope-area measurement of peak flow; 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 19	1815	*3,550	*7.93	No other peak greater than base discharge.			

Minimum discharge, 0.03 ft³/s, Feb. 11, 25, result of freezeup.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989							
Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 6	29	Jan. 25	0	Apr. 18	0	Aug. 6	0
Nov. 17	28.9	Feb. 15	0	May 16	0.05	Sept. 12	0
Dec. 15	0	Mar. 21	0.93	June 19	4.67		

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	9.8	4.6	e6.0	5.4	5.8	74	149	178	1.7	130	e25
2	5.3	8.0	4.5	e7.0	4.5	5.2	72	142	165	2.5	75	e20
3	5.0	9.7	5.6	e7.0	5.8	13	73	157	149	2.0	61	e15
4	4.7	7.7	3.7	e6.0	5.4	33	69	140	142	2.5	137	e10
5	4.9	8.8	5.6	e6.0	4.9	34	70	142	131	6.7	127	e10
6	132	6.8	5.6	e6.0	4.6	33	68	172	123	9.5	321	e10
7	180	6.2	4.5	e6.5	4.5	37	71	164	121	9.3	148	e10
8	122	5.1	5.7	e7.0	4.5	37	73	173	102	6.8	137	e10
9	86	4.1	5.8	e8.0	4.5	35	85	182	90	15	119	e25
10	69	7.8	5.9	e8.0	2.4	33	108	202	85	24	105	e40
11	59	9.4	2.4	e9.0	1.0	40	119	201	104	75	92	e20
12	49	6.4	2.6	e8.5	1.1	45	117	199	102	51	62	e15
13	40	6.0	e4.0	e10	1.3	46	115	185	83	67	194	9.3
14	35	5.0	e8.0	e10	1.4	45	120	179	67	272	222	9.0
15	32	3.8	e8.0	e10	1.5	45	119	189	56	140	243	10
16	33	4.1	e7.0	e9.5	2.0	33	130	220	42	67	296	44
17	31	3.9	e6.0	e9.0	2.6	33	138	217	34	47	146	254
18	31	3.0	e5.0	e9.0	3.8	27	165	209	39	44	126	47
19	30	3.5	e4.0	e8.5	2.7	37	176	208	29	425	108	36
20	26	2.8	e5.0	e7.0	3.9	38	144	223	22	429	195	72
21	24	3.4	e3.5	e7.0	4.7	36	121	204	14	361	220	215
22	22	3.3	e3.0	e7.0	6.4	37	120	189	9.7	225	285	58
23	22	2.7	e4.5	e7.5	6.1	42	141	190	7.7	121	211	43
24	19	4.8	e6.0	e8.0	5.4	55	162	211	6.9	213	170	72
25	18	4.8	e8.0	e7.0	4.8	69	172	254	6.3	138	118	96
26	15	5.2	e10	e9.0	4.9	75	159	259	3.9	121	89	71
27	12	3.6	e9.0	e8.5	6.7	82	136	238	3.8	114	108	59
28	12	2.1	e9.0	e6.0	6.4	88	125	227	3.4	109	153	53
29	9.4	3.3	e8.5	e6.5	---	89	117	223	3.2	110	67	701
30	13	5.4	e8.0	e6.5	---	88	144	237	2.1	109	54	210
31	11	---	e7.5	5.7	---	82	---	204	---	109	e35	---
TOTAL	1158.4	160.5	180.5	236.7	113.2	1398.0	3503	6089	1925.0	3427.0	4554	2269.3
MEAN	37.4	5.35	5.82	7.64	4.04	45.1	117	196	64.2	111	147	75.6
MAX	180	9.8	10	10	6.7	89	176	259	178	429	321	701
MIN	4.7	2.1	2.4	5.7	1.0	5.2	68	140	2.1	1.7	35	9.0
AC-FT	2300	318	358	469	225	2770	6950	12080	3820	6800	9030	4500

CAL YR 1989 TOTAL 19003.1 MEAN 52.1 MAX 1370 MIN 2.1 AC-FT 37690
WTR YR 1990 TOTAL 25014.6 MEAN 68.5 MAX 701 MIN 1.0 AC-FT 49620

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 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 21, 1934, at different datum.

REMARKS.--Records good except for estimated daily discharges, 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.--74 years, 19.4 ft³/s, 14,060 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 13	2130	*310	*2.98	Aug. 15	0100	247	2.76

Minimum discharge, 1.7 ft³/s, Jan. 27, 28, but may have been less because of ice effect.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.8	e5.3	e6.0	e3.4	8.2	15	30	20	4.5	73	17
2	8.1	7.6	e5.9	e6.0	e3.5	8.2	16	31	18	3.9	97	15
3	8.0	7.9	e6.3	e5.7	e3.6	8.2	20	30	16	3.8	82	14
4	12	8.4	e7.5	e5.3	e3.5	8.5	19	32	15	4.8	67	13
5	27	7.8	e6.9	e5.2	e3.7	10	20	37	13	9.4	63	12
6	51	7.4	e6.4	e5.3	e3.8	12	20	37	12	7.3	94	12
7	37	7.1	e6.0	e5.6	e3.7	11	21	44	11	5.8	101	15
8	29	7.1	e5.5	e5.8	e3.6	11	23	52	11	5.9	79	21
9	23	6.8	e5.3	e6.6	e3.5	11	27	54	9.3	7.1	60	15
10	20	7.0	e5.0	e6.6	e3.6	12	27	52	9.7	6.8	49	14
11	18	7.0	e4.8	e6.4	e3.7	13	26	48	9.8	12	42	12
12	17	6.9	e4.8	e6.1	e4.0	13	24	43	9.2	14	37	11
13	18	6.6	e4.7	e5.8	e4.3	12	24	40	8.2	40	33	9.9
14	17	6.6	e4.8	e5.3	e4.7	11	25	40	7.7	79	38	9.6
15	16	6.6	e4.6	e4.8	e4.8	10	28	41	6.2	47	71	9.3
16	15	5.7	e4.6	e3.7	e4.9	9.1	30	41	6.5	36	35	20
17	14	5.9	e4.6	e3.2	e4.8	9.4	32	39	6.1	38	30	28
18	13	6.0	e4.7	e2.9	e4.5	9.5	34	37	6.1	27	31	19
19	11	5.8	e5.1	e2.5	e4.5	9.6	36	37	6.0	54	35	21
20	11	6.1	e5.7	e2.3	e4.7	9.9	35	36	5.8	53	44	23
21	11	6.2	e5.6	e2.2	e5.6	11	32	33	5.5	47	70	26
22	10	5.9	e5.0	e2.9	e6.0	13	38	31	5.1	52	90	31
23	10	5.4	e5.6	e3.3	e6.0	16	44	30	5.5	79	83	167
24	9.9	5.3	e6.8	e3.6	e6.4	18	41	32	5.0	61	61	93
25	9.3	6.1	e7.4	e3.9	e6.8	19	39	34	4.6	45	49	60
26	9.0	5.4	e7.6	e4.2	e7.2	21	35	32	5.1	34	40	46
27	8.0	5.3	e7.4	e4.4	e7.4	20	32	30	4.7	27	34	39
28	9.2	4.4	e7.4	e4.0	8.0	20	30	28	5.4	21	31	35
29	8.3	e4.5	e7.6	e3.8	---	20	31	27	5.1	19	26	122
30	7.7	e4.9	e7.0	e3.6	---	18	31	26	4.9	19	22	78
31	7.1	---	e6.3	e3.5	---	17	---	22	---	28	19	---
TOTAL	473.2	191.5	182.2	140.5	134.2	399.6	855	1126	257.5	891.3	1686	1007.8
MEAN	15.3	6.38	5.88	4.53	4.79	12.9	28.5	36.3	8.58	28.8	54.4	33.6
MAX	51	8.4	7.6	6.6	8.0	21	44	54	20	79	101	167
MIN	7.1	4.4	4.6	2.2	3.4	8.2	15	22	4.6	3.8	19	9.3
AC-FT	939	380	361	279	266	793	1700	2230	511	1770	3340	2000

CAL YR 1989 TOTAL 4440.7 MEAN 12.2 MAX 96 MIN 2.0 AC-FT 8810
WTR YR 1990 TOTAL 7344.8 MEAN 20.1 MAX 167 MIN 2.2 AC-FT 14570

e Estimated

RIO GRANDE BASIN

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 4,940 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. 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.--39 years, 17.2 ft³/s, 12,460 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 20	2000	3,110	9.86	Aug. 12	2400	1,860	7.95
July 24	0245	*11,300	*17.79	Sept. 20	2345	2,270	8.62
Aug. 6	0130	2,040	8.25				

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.8	6.4	7.3	7.6	10	8.3	4.4	1.9	.00	13	8.3
2	2.6	5.3	6.8	7.3	e7.0	12	8.2	4.4	1.2	.00	11	7.7
3	2.0	6.5	7.1	e6.5	e7.0	9.7	8.1	5.4	.77	.00	9.6	6.3
4	1.9	7.1	7.8	e5.5	e6.5	10	7.7	6.0	.30	.00	8.5	5.2
5	1.9	6.7	8.7	e5.5	e6.5	9.8	8.3	16	.09	.00	74	4.8
6	2.5	6.6	9.0	e5.5	e6.5	7.5	7.5	13	.01	.00	509	4.6
7	5.3	6.4	8.9	e5.8	e6.5	7.3	7.9	9.7	.00	.00	128	35
8	18	6.5	7.9	6.6	e6.0	7.0	8.3	7.8	.00	.00	51	82
9	14	6.3	7.5	e6.0	e6.0	6.6	8.9	7.1	.00	.00	28	20
10	11	6.1	6.9	e5.5	e6.0	6.7	9.3	6.3	.00	.00	19	8.9
11	7.2	6.3	7.0	e6.5	6.7	6.4	8.9	7.1	.00	.00	15	5.7
12	7.3	6.1	8.8	e6.0	7.3	5.6	7.1	5.8	.00	.00	96	5.7
13	7.6	6.1	8.3	e6.0	6.7	4.8	6.2	4.5	.00	.00	279	12
14	7.8	6.1	7.3	e6.0	6.2	4.4	5.8	3.5	.00	8.0	82	7.3
15	7.2	5.6	6.9	e6.0	6.0	4.5	5.3	2.4	.00	60	229	5.5
16	5.8	5.0	8.1	e6.0	e4.5	4.6	4.6	1.9	.00	20	178	6.7
17	5.3	5.1	7.1	e6.2	e4.5	4.6	3.9	1.0	.00	9.8	59	224
18	5.4	4.4	7.8	e6.5	e4.8	4.2	4.3	1.0	.00	6.0	35	89
19	5.9	4.6	7.7	e6.0	e4.8	4.8	5.2	1.3	.00	22	25	36
20	7.2	5.0	8.4	e5.5	e5.0	4.9	5.8	1.1	.00	653	89	98
21	7.3	5.2	8.3	e5.0	e4.8	5.3	7.2	.84	.00	415	79	178
22	7.1	5.0	6.4	e5.0	e5.0	5.0	7.7	.63	.00	157	56	26
23	6.5	5.1	7.4	e5.5	e5.0	4.0	6.1	.36	.00	20	106	23
24	5.6	5.1	8.8	e7.0	e6.0	3.7	7.0	.19	.00	1560	77	16
25	5.2	5.1	9.3	e5.0	7.1	3.7	10	.06	.00	92	44	13
26	4.8	5.1	8.3	e5.5	7.1	4.2	9.2	.00	.00	43	26	11
27	4.5	4.9	8.4	e6.0	8.7	5.1	5.4	.00	.00	31	19	8.3
28	5.2	5.2	8.3	e4.5	9.7	4.3	3.6	.63	.00	198	17	7.0
29	5.3	5.0	9.1	e5.0	---	4.0	2.7	2.1	.00	39	15	31
30	4.6	5.7	8.1	5.5	---	4.6	2.2	1.9	.00	22	11	48
31	4.5	---	7.3	e5.5	---	6.9	---	2.7	---	18	9.4	---
TOTAL	190.2	168.0	244.1	181.7	175.5	186.2	200.7	119.11	4.27	3373.80	2397.5	1034.0
MEAN	6.14	5.60	7.87	5.86	6.27	6.01	6.69	3.84	.14	109	77.3	34.5
MAX	18	7.1	9.3	7.3	9.7	12	10	16	1.9	1560	509	224
MIN	1.9	4.4	6.4	4.5	4.5	3.7	2.2	.00	.00	.00	8.5	4.6
AC-FT	377	333	484	360	348	369	398	236	8.5	6690	4760	2050

CAL YR 1989 TOTAL 5126.64 MEAN 14.0 MAX 636 MIN .00 AC-FT 10170
WTR YR 1990 TOTAL 8275.08 MEAN 22.7 MAX 1560 MIN .00 AC-FT 16410

e Estimated

RIO GRANDE BASIN

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, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation for about 11,800 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--14 years, 83.0 ft³/s, 60,130 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 20	2045	3,180	8.60	July 24	0445	*10,700	*11.30

Minimum discharge, no flow, Feb. 7-12, Mar. 10, 12-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.5	1.9	.46	.16	.12	11	68	127	6.0	10	10
2	3.0	2.5	1.9	.42	.16	.11	6.8	79	97	5.3	42	13
3	3.0	2.5	1.8	.38	.14	.11	3.7	95	78	4.9	9.4	7.6
4	3.0	2.5	1.5	.36	.13	.10	1.1	111	50	4.8	1.7	7.1
5	3.1	2.5	1.5	.37	.13	.12	4.3	88	39	4.4	85	11
6	3.0	2.5	1.5	.33	.05	.09	3.0	99	26	4.5	708	7.1
7	66	2.4	1.5	.31	.00	.04	2.3	102	22	5.7	338	5.2
8	109	2.3	1.5	.28	.00	.03	1.3	88	26	4.7	121	73
9	60	2.3	1.5	.28	.00	.01	.87	95	6.7	6.0	79	8.0
10	36	2.3	1.4	.27	.00	.00	5.2	115	3.3	4.9	50	3.4
11	26	2.3	1.4	.25	.00	.03	25	149	3.5	4.8	29	3.1
12	18	2.3	1.4	.25	.00	.00	37	150	3.5	15	40	3.6
13	16	2.3	1.3	.22	.12	.00	34	141	3.9	26	381	4.3
14	11	2.3	1.1	.21	.16	.00	33	106	4.0	161	233	5.2
15	7.4	2.3	1.1	.21	.22	.00	32	95	4.4	251	293	3.8
16	4.0	2.3	1.0	.18	.43	.00	30	111	4.0	149	551	43
17	3.4	2.3	.94	.16	.32	.00	41	144	4.2	108	190	316
18	3.3	2.5	.92	.18	.35	.00	56	132	4.7	79	106	190
19	3.0	2.5	.88	.19	.36	.00	89	119	4.3	367	68	67
20	3.0	2.5	.74	.16	.39	.00	95	151	4.7	1610	163	358
21	3.0	2.5	.72	.16	.23	.00	68	140	4.1	981	209	859
22	3.0	2.3	.67	.16	.27	.00	59	122	4.3	1150	264	203
23	3.0	2.1	.65	.16	.26	.00	47	102	3.9	337	438	130
24	3.0	2.1	.65	.12	.23	.00	60	108	3.6	1970	235	109
25	3.0	2.0	.58	.11	.21	.00	82	144	3.3	305	150	144
26	3.0	1.9	.58	.13	.21	.00	101	230	2.9	78	73	134
27	3.0	1.9	.57	.13	.23	.00	91	212	3.5	30	36	102
28	2.7	1.9	.49	.13	.16	.00	64	190	6.8	122	152	84
29	2.5	1.9	.46	.16	---	1.2	54	175	7.5	28	58	440
30	2.5	1.9	.49	.20	---	7.7	45	183	6.8	e12	25	485
31	2.5	---	.47	.17	---	13	---	186	---	e8.0	11	---
TOTAL	415.4	68.4	33.11	7.10	4.92	22.66	1182.57	4030	562.9	7843.0	5149.1	3829.4
MEAN	13.4	2.28	1.07	.23	.18	.73	39.4	130	18.8	253	166	128
MAX	109	2.5	1.9	.46	.43	13	101	230	127	1970	708	859
MIN	2.5	1.9	.46	.11	.00	.00	.87	68	2.9	4.4	1.7	3.1
AC-FT	824	136	66	14	9.8	45	2350	7990	1120	15560	10210	7600

CAL YR 1989 TOTAL 10049.61 MEAN 27.5 MAX 1260 MIN .46 AC-FT 19930
WTR YR 1990 TOTAL 23148.56 MEAN 63.4 MAX 1970 MIN .00 AC-FT 45920

e Estimated

RIO GRANDE BASIN

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 mi southeast of Colonias, 9.1 mi 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.--Water-discharge 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 temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 105 ft³/s, 76,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s, July 24, 1990, gage height, 17.70 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 greater than base discharge of 3,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 20	2300	3,180	10.68	July 24	unknown	*12,300	*17.70

Minimum discharge, 9.8 ft³/s, Feb. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	23	19	17	13	16	37	85	145	e27	29	32
2	21	23	19	17	13	16	33	103	120	e22	64	28
3	21	22	19	17	14	16	29	117	108	e22	40	25
4	21	22	19	17	13	17	25	132	90	e22	24	22
5	22	22	19	17	13	17	25	110	78	e20	97	22
6	23	22	19	17	12	17	26	112	63	e20	554	21
7	58	22	18	17	12	18	27	119	58	e20	365	24
8	109	22	18	17	12	18	25	99	47	e20	175	71
9	79	22	18	17	12	18	25	108	33	e20	121	34
10	46	22	18	18	12	19	29	124	28	e20	91	25
11	33	21	19	18	11	19	47	145	22	e20	74	25
12	29	21	17	18	11	19	60	130	e21	e26	81	27
13	27	21	16	18	11	19	61	128	e20	e60	330	28
14	25	20	16	17	11	19	60	108	e20	e150	243	28
15	23	20	17	17	12	19	61	98	e20	e260	317	28
16	20	20	17	17	12	20	62	112	e20	e160	457	43
17	22	19	17	17	12	18	69	143	e20	e110	235	287
18	23	19	16	19	12	18	84	142	e20	e80	160	219
19	22	19	17	18	13	18	114	132	e20	e400	126	92
20	22	19	16	17	14	19	113	142	e20	e1500	175	302
21	26	19	16	16	13	18	90	146	e20	e1000	248	549
22	28	20	17	15	13	19	81	132	e19	e1200	303	142
23	23	20	17	15	13	19	72	115	e18	e350	415	91
24	24	20	16	15	14	20	77	120	e17	e2100	276	68
25	23	19	16	15	14	20	100	150	e16	e600	193	84
26	23	19	17	15	14	19	120	207	e15	e200	125	91
27	23	19	16	14	16	19	114	203	e14	74	90	66
28	23	19	16	14	16	19	90	186	e27	132	144	53
29	23	19	17	13	---	21	74	172	e40	72	104	290
30	23	19	17	14	---	31	62	177	e31	33	59	317
31	23	---	17	14	---	38	---	184	---	28	46	---
TOTAL	929	614	536	507	358	603	1892	4181	1190	8768	5761	3134
MEAN	30.0	20.5	17.3	16.4	12.8	19.5	63.1	135	39.7	283	186	104
MAX	109	23	19	19	16	38	120	207	145	2100	554	549
MIN	20	19	16	13	11	16	25	85	14	20	24	21
AC-FT	1840	1220	1060	1010	710	1200	3750	8290	2360	17390	11430	6220

CAL YR 1989 TOTAL 18519 MEAN 50.7 MAX 1880 MIN 16 AC-FT 36730
WTR YR 1990 TOTAL 28473 MEAN 78.0 MAX 2100 MIN 11 AC-FT 56480

e Estimated

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT 24...	0955	23	895	--	7.9	13.5	11.0	0.60	8.9	<10	530
JAN 17...	0945	17	910	--	7.9	5.5	7.5	0.30	10.2	--	600
MAR 13...	1115	18	--	1000	8.1	9.5	12.0	1.4	9.2	--	570
MAY 15...	1050	95	340	--	7.7	22.0	15.0	81	8.4	--	190
AUG 01...	1020	24	825	--	7.8	24.0	21.0	14	7.0	11	480
SEP 18...	1200	198	425	--	7.7	24.0	20.0	2500	7.3	210	180

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB AS CACO3) (90410)
OCT 24...	410	180	20	10	0.2	1.2	156	0	128	123
JAN 17...	460	200	24	10	0.2	1.1	166	0	136	93
MAR 13...	430	190	22	11	0.2	1.2	164	0	134	109
MAY 15...	97	64	8.0	5.7	0.2	0.80	118	0	97	100
AUG 01...	340	160	19	11	0.2	1.8	171	0	140	149
SEP 18...	72	57	7.8	20	0.7	2.3	126	0	103	120

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)
OCT 24...	370	4.8	0.30	11	675	676	--	<0.010	<0.100	0.040
JAN 17...	430	7.0	<0.10	12	755	767	--	<0.010	0.200	<0.010
MAR 13...	470	6.2	0.20	11	782	800	1.69	0.010	1.70	0.010
MAY 15...	93	4.4	1.7	8.9	255	245	--	<0.010	<0.100	0.030
AUG 01...	330	6.6	0.30	12	681	628	--	<0.010	0.200	0.010
SEP 18...	100	12	0.40	7.2	268	270	--	<0.010	0.100	0.020

RIO GRANDE BASIN

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)
OCT 24...	<0.010	--	<0.010	<0.010	0.5	<10	<1	100	<0.5	<1.0
JAN 17...	0.010	--	<0.010	<0.010	--	--	--	--	--	--
MAR 13...	0.040	--	<0.010	<0.010	--	--	--	--	--	--
MAY 15...	0.010	0.57	0.120	0.010	--	30	1	76	<0.5	<1.0
AUG 01...	<0.010	0.49	0.050	0.020	1.2	10	1	160	<0.5	<1.0
SEP 18...	0.030	0.78	0.050	0.040	63	90	1	170	<0.5	<1.0
DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT 24...	1	<3	1	7	<1	18	41	<0.1	<10	1
JAN 17...	--	--	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--	--	--
MAY 15...	<1	<3	1	24	1	9	3	<0.1	<10	3
AUG 01...	2	<3	2	5	2	18	120	0.2	<10	1
SEP 18...	<1	<3	1	66	1	10	4	<0.1	<10	<1
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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 24...	1	<1.0	1600	<6	13	47	2.9	71	<1	30
JAN 17...	--	--	--	--	--	46	2.1	82	<1	<1
MAR 13...	--	--	--	--	--	48	2.3	84	<1	K6
MAY 15...	<1	<1.0	460	<6	<3	1650	424	11	<10	K110
AUG 01...	<1	<1.0	1500	<6	9	1010	66	98	<1	K71
SEP 18...	<1	<1.0	430	<6	11	7380	3950	88	<33	2900

RIO GRANDE BASIN

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 northeast of Santa Rosa Dam, and 10.4 mi 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 4,770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No known diversions or ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 1.47 ft³/s, 1,070 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 21	0430	228	4.09	Sept. 21	0030	*243	*4.15
July 24	2030	116	3.53				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.46	e.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	e.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	e.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	e.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	e.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	e.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	e.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.46	e.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	e.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	e.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	e.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	e.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	58	e.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	e.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.46	e.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.09	e.06
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.08
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.01
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.2	e.00	7.1
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	32	e.00	63.0
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	24	e1.1	1.2
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.01	e4.3	.24
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	e33	e.00	.14
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	e4.2	e.00	.05
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.24	e.00	.01
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	e9.1	e.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	e12	e.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	e5.5	e.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	e4.4	e.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	e2.9	e.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	131.55	105.10	71.89
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	4.24	3.39	2.40
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	33	58	63
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	261	208	143

CAL YR 1989 TOTAL 389.69 MEAN 1.07 MAX 320 MIN .00 AC-FT 773
WTR YR 1990 TOTAL 308.54 MEAN .85 MAX 63 MIN .00 AC-FT 612

e Estimated

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, at site 195 ft upstream at datum 2.36 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow completely regulated by Santa Rosa Lake (08382810) 0.2 mi upstream since April 1980. Diversions and ground-water withdrawals for irrigation of about 12,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--10 years, 98.4 ft³/s, 71,290 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, 1,170 ft³/s, May 26; minimum daily, 0.01 ft³/s, Oct. 1-4, 7-18, 28-31, Nov. 1, 2, 8, 16, Feb. 4, Apr. 17, and Aug. 14-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.01	e.01	.08	.10	.04	.09	.08	.21	968	1.8	1000	1.6
2	e.01	.01	.07	.10	.05	.10	.08	.21	795	1.8	998	1.6
3	e.01	.02	.04	.12	.05	.08	.08	.09	779	1.8	987	1.6
4	e.01	.04	.06	.11	.01	.10	.04	e.02	766	1.8	969	1.6
5	.03	.05	.05	.12	.02	.13	.06	e.02	536	1.9	949	1.6
6	.04	e.03	.04	.10	.02	.09	.05	e.02	227	1.8	962	1.7
7	e.01	.02	.04	.12	.02	.08	.04	e.02	2.6	1.8	976	1.8
8	e.01	.01	.04	.13	.02	.08	.04	e.02	2.6	1.8	972	1.8
9	e.01	.02	.04	.10	.04	.06	.03	e.02	2.4	1.8	776	1.8
10	e.01	.02	.05	.09	.03	.08	.02	e.02	2.4	1.8	230	1.8
11	e.01	.03	e.05	.08	.03	.10	.03	e.02	2.6	1.8	2.4	1.8
12	e.01	.04	e.05	.05	.04	.07	.02	e.02	2.6	1.8	2.6	1.8
13	e.01	.04	e.05	.06	.04	.04	.03	e.02	2.2	1.8	1.3	1.9
14	e.01	.04	.05	.06	.02	.04	e.03	e.02	1.6	1.8	.01	2.0
15	e.01	.03	.04	.06	.05	.04	e.04	e.02	1.5	1.8	.01	2.0
16	e.01	e.01	e.05	.07	.06	.04	.04	e.02	1.1	1.8	e.01	2.1
17	e.01	.02	.06	.06	.07	.04	.01	e.02	1.1	1.8	e.01	2.5
18	e.01	.02	e.07	.10	.08	.04	.02	e.02	1.0	1.8	e.01	2.4
19	.02	.05	e.10	.11	.07	.04	.06	e.02	1.0	1.8	e.01	2.4
20	.04	.08	.11	.05	.15	.04	.04	.04	1.0	1.0	1.2	2.6
21	.04	.08	e.11	e.04	.10	.04	.04	477	1.0	.38	1.3	2.5
22	.04	.07	e.11	.03	.08	.04	.04	973	1.0	.02	1.3	1.4
23	.04	.06	e.11	.04	.09	.04	.04	965	1.0	5.9	1.3	.86
24	.04	.06	.11	.03	.08	.04	.04	1010	1.0	2.3	1.4	.54
25	.04	.08	.14	e.02	.09	.04	.04	1120	1.1	.56	1.6	.31
26	.02	.05	.14	.02	.10	.04	.42	1170	1.3	.14	1.6	.18
27	.02	.05	.15	e.02	.12	.04	1.5	1150	1.3	.17	1.6	.21
28	.01	.05	.15	e.02	.08	.04	.22	1140	1.5	.16	1.6	.21
29	e.01	.07	.13	e.02	---	.11	.21	1130	1.8	.09	1.6	.22
30	e.01	.08	.13	.03	---	.08	.21	1110	1.8	.03	1.6	.26
31	e.01	---	.10	.04	---	.08	---	1090	---	507	1.6	---
TOTAL	0.57	1.24	2.52	2.10	1.65	1.97	3.60	11335.87	4109.5	552.05	8843.06	45.09
MEAN	.018	.041	.081	.068	.059	.064	.12	366	137	17.8	285	1.50
MAX	.04	.08	.15	.13	.15	.13	1.5	1170	968	507	1000	2.6
MIN	.01	.01	.04	.02	.01	.04	.01	.02	1.0	.02	.01	.18
AC-FT	1.1	2.5	5.0	4.2	3.3	3.9	7.1	22480	8150	1090	17540	89

CAL YR 1989 TOTAL 42516.50 MEAN 116 MAX 1050 MIN .00 AC-FT 84330
WTR YR 1990 TOTAL 24899.22 MEAN 68.2 MAX 1170 MIN .01 AC-FT 49390

RIO GRANDE BASIN

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 Interstate Highway 40, 0.6 mi upstream from bridge on Parker Street 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.--Water-discharge records good. Flow regulated by Santa Rosa Lake (station 08382810) 8.8 mi upstream since April 1980. Diversions for irrigation of about 12,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. National Weather Service telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1906, 1913, 1914, 1928-79), 135 ft³/s, 97,810 acre-ft/yr, prior to completion of Santa Rosa Dam. 11 years (water years 1980-90), 99.2 ft³/s, 71,870 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, 1,230 ft³/s, May 25, gage height, 2.72 ft; minimum, 2.9 ft³/s, part of each day June 21-23, 26, 27, July 2, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.1	5.1	5.1	5.1	6.5	5.4	4.5	1000	3.5	1010	5.8
2	5.1	5.1	5.5	5.1	5.4	6.5	5.8	5.7	797	3.2	1010	6.3
3	5.1	5.1	4.9	5.0	6.2	6.0	5.3	5.7	782	3.1	998	6.5
4	5.1	5.2	4.5	5.8	5.5	5.8	4.6	5.2	756	3.4	977	6.5
5	5.8	5.2	4.5	5.3	5.1	5.8	4.8	5.8	579	3.4	960	6.5
6	6.1	5.3	4.5	5.1	5.1	5.5	5.1	5.8	313	3.4	979	6.5
7	5.1	4.9	4.9	5.1	5.1	5.8	5.1	5.2	23	3.4	991	6.5
8	4.4	5.1	5.1	4.9	5.2	5.8	4.9	5.3	14	3.4	986	7.1
9	3.9	5.1	4.7	4.5	5.1	5.8	4.7	5.7	12	4.1	848	7.3
10	3.9	5.3	4.7	4.5	5.4	5.8	5.1	5.3	9.6	4.7	343	8.1
11	3.9	5.1	5.1	4.5	5.8	6.2	4.5	5.0	8.0	4.2	24	7.8
12	4.5	5.1	5.1	4.5	5.6	5.6	4.8	4.9	7.6	4.5	17	6.8
13	4.5	5.1	4.8	4.5	5.4	5.4	5.2	4.9	6.8	3.9	16	6.3
14	4.5	5.2	4.6	4.5	5.4	5.5	5.1	5.0	6.0	3.9	14	5.8
15	4.5	5.8	5.6	4.8	5.2	5.1	5.1	4.7	5.2	3.9	8.0	5.8
16	4.5	5.8	5.8	5.1	5.5	5.1	5.4	4.9	4.3	4.1	6.2	7.7
17	4.5	5.8	5.8	5.1	5.1	5.1	5.4	5.1	4.2	5.1	5.5	8.5
18	4.5	5.6	5.8	5.8	5.2	5.1	5.7	5.0	3.8	4.3	4.9	6.9
19	4.5	4.8	5.8	6.2	5.4	5.1	5.8	4.9	3.9	3.9	4.2	6.5
20	4.5	4.5	4.8	5.1	7.2	5.2	5.5	5.0	3.6	4.6	4.1	6.6
21	4.5	4.8	4.5	5.1	6.5	4.9	5.6	312	3.2	8.8	4.2	11
22	4.5	5.1	4.5	4.5	6.0	5.5	5.2	978	3.2	9.4	6.2	8.2
23	4.5	5.1	4.5	4.8	5.8	5.1	5.2	963	3.1	5.3	8.0	6.7
24	4.5	5.1	4.5	5.1	5.8	5.1	5.1	1000	3.4	5.8	7.0	5.7
25	4.5	5.2	4.5	5.1	5.8	5.1	5.3	1120	3.4	9.3	6.5	4.9
26	4.3	5.2	4.9	4.4	6.2	5.1	5.3	1180	3.3	6.5	6.5	4.5
27	4.3	5.1	5.1	5.1	6.9	5.4	5.1	1170	3.1	4.5	6.5	4.3
28	4.5	5.1	4.9	4.7	6.7	5.5	5.3	1150	3.4	34	6.5	3.9
29	4.5	5.1	4.5	4.4	---	6.5	5.0	1120	3.4	13	6.5	3.9
30	4.5	5.1	4.9	4.5	---	5.8	4.5	1110	3.4	14	6.6	3.9
31	5.0	---	5.1	4.5	---	5.7	---	1090	---	439	6.2	---
TOTAL	143.6	155.1	153.5	152.7	158.7	172.4	154.9	11296.6	4371.9	668.1	9276.6	192.8
MEAN	4.63	5.17	4.95	4.93	5.67	5.56	5.16	364	146	21.6	299	6.43
MAX	6.1	5.8	5.8	6.2	7.2	6.5	5.8	1180	1000	439	1010	11
MIN	3.9	4.5	4.5	4.4	5.1	4.9	4.5	4.5	3.1	3.1	4.1	3.9
AC-FT	285	308	304	303	315	342	307	22410	8670	1330	18400	382

CAL YR 1989 TOTAL 44301.7 MEAN 121 MAX 1040 MIN 3.3 AC-FT 87870
WTR YR 1990 TOTAL 26896.9 MEAN 73.7 MAX 1180 MIN 3.1 AC-FT 53350

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1905-07, 1959 to current year.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
OCT 26...	1110	4.8	2520	7.8	18.0	16.0	8.0	1800	610	70	51
JAN 18...	1130	5.6	2510	7.4	1.0	6.0	--	--	--	--	--
MAR 14...	1300	5.1	2650	7.9	7.0	11.5	9.5	1700	550	70	50
MAY 16...	0900	5.1	2560	8.3	21.0	14.5	7.4	1600	540	70	57
AUG 01...	1635	1020	352	7.4	29.5	20.5	7.6	180	58	8.2	10
SEP 18...	0850	6.9	1900	7.5	17.0	19.0	6.5	--	--	--	--

[illegible]

RIO GRANDE BASIN

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.--Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) 37.7 mi upstream since April 1980. Diversions for irrigation of about 12,500 acres, 1959 determination, upstream from station. Discharge represents inflow to Lake Sumner. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1939-79), 209 ft³/s, 151,400 acre-ft/yr, prior to completion of Santa Rosa Dam. 11 years (water years 1980-90), 186 ft³/s, 134,800 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, 37 ft³/s, Aug. 3, 4, 1987.

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, 1,450 ft³/s, at 1445 hours Aug. 2, gage height, 3.69 ft; minimum, 49 ft³/s, Jun. 22, Jul. 12, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	82	92	e90	80	86	83	60	1140	55	980	55
2	71	84	94	e91	79	85	82	68	863	54	1080	55
3	72	82	92	e91	81	83	89	81	842	53	1070	52
4	72	79	93	e90	78	84	86	72	839	53	1080	53
5	74	80	94	e89	77	84	85	71	807	59	1080	55
6	82	80	95	e87	76	82	86	69	505	61	1130	56
7	78	80	95	e85	76	82	86	65	227	56	1080	57
8	78	81	95	e88	76	82	85	60	96	57	1080	60
9	79	82	95	e85	75	84	85	58	90	61	1080	56
10	76	82	91	e84	73	84	84	61	80	65	821	59
11	73	85	e91	e84	74	90	80	66	75	68	253	56
12	73	85	e94	84	74	86	84	65	73	74	154	56
13	75	85	e96	84	74	85	85	62	66	75	291	55
14	75	86	e96	85	73	84	84	59	65	76	155	57
15	72	86	90	84	75	87	82	58	63	119	125	59
16	72	88	e90	85	75	87	83	56	61	90	130	88
17	73	89	e90	86	77	87	80	59	59	197	151	106
18	77	89	e91	95	76	84	91	59	62	77	83	70
19	80	91	e89	103	77	85	98	56	62	71	79	67
20	76	90	e89	92	87	85	86	57	64	85	78	66
21	75	90	90	88	81	86	84	58	61	273	112	79
22	76	89	88	87	84	86	78	852	57	467	148	73
23	78	89	90	91	82	85	78	1070	64	114	157	73
24	80	89	92	91	80	87	75	1030	63	98	88	71
25	79	89	e94	86	80	80	66	1110	60	93	72	68
26	82	89	e89	84	80	86	64	1200	55	91	68	67
27	82	88	e89	82	81	88	63	1180	54	89	68	64
28	82	90	e89	81	85	89	64	1170	57	393	65	65
29	81	90	e89	81	---	96	60	1170	55	144	63	80
30	83	92	e89	81	---	97	63	1150	54	99	56	113
31	83	---	e88	80	---	92	---	1150	---	370	56	---
TOTAL	2379	2581	2839	2694	2186	2668	2399	12402	6719	3737	12933	1991
MEAN	76.7	86.0	91.6	86.9	78.1	86.1	80.0	400	224	121	417	66.4
MAX	83	92	96	103	87	97	98	1200	1140	467	1130	113
MIN	70	79	88	80	73	80	60	56	54	53	56	52
AC-FT	4720	5120	5630	5340	4340	5290	4760	24600	13330	7410	25650	3950

CAL YR 1989 TOTAL 72363 MEAN 198 MAX 1150 MIN 55 AC-FT 143500
WTR YR 1990 TOTAL 55528 MEAN 152 MAX 1200 MIN 52 AC-FT 110100

e Estimated

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 23...	1350	79	2900	8.0	25.0	18.0	7.9	<10	1700	1600	580	71
MAR 15...	1055	87	2890	8.2	10.0	6.0	10.7	18	1700	1500	550	68
MAY 16...	1530	59	2820	8.5	27.0	25.0	8.5	24	1700	1600	570	73
SEP 17...	1540	99	2650	7.8	31.0	26.5	6.4	62	1500	1400	510	57

DATE	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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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 23...	100	1	2.2	120	0	98	93	1700	140	0.60	14
MAR 15...	100	1	1.9	156	0	128	99	1400	150	0.10	14
MAY 16...	110	1	2.3	76	24	102	79	1500	150	0.80	14
SEP 17...	86	1	3.5	134	0	110	112	1300	120	0.60	14

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)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT 23...	2670	<0.100	<0.100	0.150	--	0.020	0.010	0.6	<1	<1	120
MAR 15...	2360	<0.100	<0.100	0.030	0.27	<0.010	<0.010	0.8	--	--	120
MAY 16...	2480	<0.100	<0.100	0.020	0.68	<0.010	<0.010	1.1	--	--	120
SEP 17...	2160	<0.100	0.100	0.030	0.27	0.030	<0.010	11	3	<1	120

DATE	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)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT 23...	<1	<1.0	<1	3	4	<1	40	1	<1	<0.10	<0.1
MAR 15...	--	--	--	--	--	--	30	--	--	--	--
MAY 16...	--	--	--	--	--	--	40	--	--	--	--
SEP 17...	<1	<1.0	23	2	20	2	30	9	1	<0.10	0.1

RIO GRANDE BASIN

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)
OCT 23...	<1	<1	30	20	<10	<10	80	4	<1	3	<5
MAR 15...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	<1	<1	80	10	--	--	--	--	--	--	--
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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 23...	4	2800	10	570	<0.01	8	219	47	84	<1	K6
MAR 15...	--	--	--	--	--	--	228	53	90	480	K7
MAY 16...	--	--	--	--	--	--	289	46	94	<10	K4
SEP 17...	--	--	--	--	--	--	1140	305	98	<3	990

RIO GRANDE BASIN

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 (monthend elevations and contents), October 1965 to current year. Monthend 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.--Water-stage recorder. 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. Oct. 1, 1988 to current year, water-stage recorder above elevation 4,238.00 ft, nonrecording gage below.

REMARKS.--Lake is formed by earthfill dam; completed and storage began in August 1937. Capacity, 94,700 acre-ft, from capacity table dated January 1989, between elevation 4,200.0 ft, sill of outlet gate, and elevation 4,275.0 ft, normal operating level. Capacity by original survey was 132,200 acre-feet. No dead storage. Reservoir is used to store water for irrigation. U.S. Bureau of Reclamation satellite telemeter at station.

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, Dec. 23, 24, 1941, elevation, 4,275.00 ft; maximum elevation, 4,276.10 ft June 3, Sept. 8, 1958; no storage, July 28 to Aug. 2, 1951, elevation, 4,200.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 32,200 acre-ft, Mar. 12, elevation, 4,253.20 ft; minimum, 5,350 acre-ft, Aug. 12, elevation, 4,236.50 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15860	14270	18890	23740	27630	30350	30960	30150	25980	9520	8310	9190
2	15860	14380	19170	23900	27630	30550	30960	30150	26160	9360	8170	9050
3	15740	14600	19310	24070	27470	30550	30960	30150	25450	9360	8560	8900
4	15740	14830	19450	24240	27470	30960	30960	29950	24750	9280	8490	8900
5	15740	14940	19730	24240	27470	31160	30960	29760	24580	9280	8350	8790
6	15740	15050	19870	24410	27470	31370	30960	29760	23410	9210	8480	8670
7	15630	15170	20010	24580	27260	31370	30960	29560	22280	9210	8700	8630
8	15630	15400	20160	24750	27260	31370	31160	29560	20300	9210	8620	8570
9	15630	15510	20300	24930	27470	31570	31370	29560	18080	9130	8430	8470
10	15630	15630	20600	25100	27470	31780	31570	29160	15860	9130	8330	8430
11	15630	15860	20600	25280	27630	31990	31570	29160	13730	9130	7400	8360
12	15510	15980	20600	25450	27630	32200	31570	29160	12000	9210	5350	8280
13	15400	16220	20600	25630	27820	31990	31570	29160	11900	9210	5580	8240
14	15400	16340	20740	25810	28010	31990	31570	28970	11810	9210	5910	8150
15	15280	16340	21040	25810	28010	31780	31570	28770	11520	9210	6250	8100
16	15280	16460	21190	25980	28200	31570	31570	28580	11520	9210	6600	8100
17	15170	16580	21350	26340	28390	31570	31370	28390	11520	9360	6910	8100
18	15050	16820	21350	26160	28580	31570	31370	28390	11520	9600	7280	7990
19	15050	16950	21500	26160	28770	31570	31370	28390	11520	9600	7500	7990
20	15050	17070	21650	26340	28970	31570	31160	28200	11520	9600	7640	7900
21	14040	17320	21650	26520	29160	31570	31160	27820	11520	9600	7940	7900
22	14830	17570	21650	26710	29360	31160	31160	26790	11520	9770	8180	7900
23	14710	17570	21650	26890	29360	31160	31160	25810	10440	10620	8570	7840
24	14710	17820	22280	27070	29750	31160	30960	25630	10530	10790	8920	7730
25	14600	17950	22440	27260	29750	31160	30960	25450	10440	10880	9110	7730
26	14490	18080	22760	27630	29950	31160	30960	25630	10350	10880	9280	7670
27	14490	18360	22920	27630	30150	30960	30750	25630	10180	10880	9340	7620
28	14490	18490	23080	27630	30150	30960	30750	25630	10100	10880	9310	7570
29	14380	18620	23240	27820	---	30750	30550	25810	9850	11430	9280	7520
30	14380	18760	23410	27820	---	30960	30350	25980	9680	7350	9240	7530
31	14160	---	23570	27630	---	30960	---	25980	---	7710	9190	---
MAX	15860	18760	23570	27820	30150	32200	31570	30150	26160	11430	9340	9190
MIN	14040	14270	18890	23740	27260	30350	30350	25450	9680	7350	5350	7520
(†)	-1700	+4600	+4810	+4060	+2520	+810	-610	-4370	-16300	+2080	+1480	-1660

CAL YR 1989 MAX 36120 MIN 12890 (†) -3880

WTR YR 1990 MAX 32200 MIN 5350 (†) *-2830

(†) CHANGE IN CONTENTS, IN ACRE-FEET

* COMPUTED ON BASIS OF REVISED CAPACITY TABLE PUT INTO USE JULY 30, 1990.

08384000 LAKE SUMNER NEAR FORT SUMNER, NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4243.20	4241.80	4245.50	4248.70	4250.90	4252.30	4252.60	4252.20	4250.00	4236.80	4240.96	4241.99
2	4243.20	4241.90	4245.70	4248.80	4250.90	4252.40	4252.60	4252.20	4250.10	4236.60	4240.78	4241.83
3	4243.10	4242.10	4245.80	4248.90	4250.80	4252.40	4252.60	4252.20	4249.70	4236.60	4241.26	4241.66
4	4243.10	4242.30	4245.90	4249.00	4250.80	4252.60	4252.60	4252.10	4249.30	4236.50	4241.18	4241.66
5	4243.10	4242.40	4246.10	4249.00	4250.80	4252.70	4252.60	4252.00	4249.20	4236.50	4241.02	4241.53
6	4243.10	4242.50	4246.20	4249.10	4250.80	4252.80	4252.60	4252.00	4248.50	4236.40	4241.17	4241.39
7	4243.00	4242.60	4246.30	4249.20	4250.70	4252.80	4252.60	4251.90	4247.80	4236.40	4241.43	4241.35
8	4243.00	4242.80	4246.40	4249.30	4250.70	4252.80	4252.70	4251.90	4246.50	4236.40	4241.33	4241.28
9	4243.00	4242.90	4246.50	4249.40	4250.80	4252.90	4252.80	4251.90	4245.00	4236.30	4241.11	4241.16
10	4243.00	4243.00	4246.70	4249.50	4250.80	4253.00	4252.90	4251.70	4243.20	4236.30	4240.98	4241.10
11	4243.00	4243.20	4246.70	4249.60	4250.90	4253.10	4252.90	4251.70	4241.30	4236.30	4239.75	4241.02
12	4242.90	4243.30	4246.70	4249.70	4250.90	4253.20	4252.90	4251.70	4239.60	4236.40	4236.50	4240.92
13	4242.80	4243.50	4246.70	4249.80	4251.00	4253.10	4252.90	4251.70	4239.50	4236.40	4236.90	4240.87
14	4242.80	4243.60	4246.80	4249.90	4251.10	4253.10	4252.90	4251.60	4239.40	4236.40	4237.47	4240.76
15	4242.70	4243.60	4247.00	4249.90	4251.10	4253.00	4252.90	4251.50	4239.10	4236.40	4238.01	4240.69
16	4242.70	4243.70	4247.10	4250.00	4251.20	4252.90	4252.90	4251.40	4239.10	4236.40	4238.56	4240.69
17	4242.60	4243.80	4247.20	4250.20	4251.30	4252.90	4252.80	4251.30	4239.10	4236.60	4239.03	4240.69
18	4242.50	4244.00	4247.20	4250.10	4251.40	4252.90	4252.80	4251.30	4239.10	4236.90	4239.58	4240.55
19	4242.50	4244.10	4247.30	4250.10	4251.50	4252.90	4252.80	4251.30	4239.10	4236.90	4239.88	4240.55
20	4242.50	4244.20	4247.40	4250.20	4251.60	4252.90	4252.70	4251.20	4239.10	4236.90	4240.08	4240.43
21	4242.40	4244.40	4247.40	4250.30	4251.70	4252.90	4252.70	4251.00	4239.10	4236.90	4240.48	4240.43
22	4242.30	4244.60	4247.40	4250.40	4251.80	4252.70	4252.70	4250.40	4239.10	4237.10	4240.79	4240.43
23	4242.20	4244.60	4247.40	4250.50	4251.80	4252.70	4252.70	4249.90	4237.90	4238.10	4241.27	4240.35
24	4242.20	4244.80	4247.80	4250.60	4252.00	4252.70	4252.60	4249.80	4238.00	4238.30	4241.68	4240.20
25	4242.10	4244.90	4247.90	4250.70	4252.00	4252.70	4252.60	4249.70	4237.90	4238.40	4241.90	4240.20
26	4242.00	4245.00	4248.10	4250.90	4252.10	4252.70	4252.60	4249.80	4237.80	4238.40	4242.08	4240.13
27	4242.00	4245.10	4248.20	4250.90	4252.20	4252.60	4252.50	4249.80	4237.60	4238.40	4242.15	4240.06
28	4242.00	4245.20	4248.30	4250.90	4252.20	4252.60	4252.50	4249.80	4237.50	4238.40	4242.12	4239.99
29	4241.90	4245.30	4248.40	4251.00	---	4252.50	4252.40	4249.90	4237.20	4239.00	4242.09	4239.91
30	4241.90	4245.40	4248.50	4251.00	---	4252.60	4252.30	4250.00	4237.00	4239.68	4242.04	4239.93
31	4241.70	---	4248.60	4250.90	---	4252.60	---	4250.00	---	4240.18	4241.99	---
MEAN	4242.60	4243.69	4247.07	4249.95	4251.28	4252.77	4252.69	4251.12	4241.76	4237.20	4240.50	4240.79
MAX	4243.20	4245.40	4248.60	4251.00	4252.20	4253.20	4252.90	4252.20	4250.10	4240.18	4242.15	4241.99
MIN	4241.70	4241.80	4245.50	4248.70	4250.70	4252.30	4252.30	4249.70	4237.00	4236.30	4236.50	4239.91
CAL YR 1989	MEAN	4247.34	MAX	4255.00	MIN	4240.50						
WTR YR 1990	MEAN	4245.92	MAX	4253.20	MIN	4236.30						

RIO GRANDE BASIN

08384500 PECOS RIVER BELOW SUMNER DAM, NM

(National stream-quality accounting network station)

LOCATION.--Lat 34°36'15", long 104°23'14", 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.

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 4,142.99 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.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Sumner (station 08384000) 0.3 mi upstream, since August 1937 and Santa Rosa Lake (station 08382810) 55.5 mi upstream, since April 1980. Diversions for irrigation of about 12,500 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--23 years (1913-25, 1927-36), 236 ft³/s, 171,000 acre-ft/yr, prior to completion of Sumner Dam. 54 years (water years 1937-90), 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, 1,170 ft³/s, May 26; minimum daily, 0.01 ft³/s, Mar. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	.28	.24	.11	99	.20	81	97	1100	97	587	95
2	76	.29	.31	.11	99	.23	81	98	1100	68	896	95
3	76	.36	.19	.10	99	.29	80	97	1100	55	958	95
4	76	.20	.19	.10	99	.29	80	98	1110	55	987	96
5	76	.20	.19	.04	99	.33	80	98	1090	55	986	95
6	76	.26	.21	.03	99	.29	23	98	1090	55	985	95
7	76	.31	.18	.03	81	.30	.11	98	1090	55	986	95
8	75	.48	.13	.04	68	.11	.11	99	1100	55	984	95
9	75	.54	.12	.07	40	.03	.11	99	1090	55	970	95
10	76	.57	.12	.03	.05	.01	.11	99	1070	55	995	90
11	87	.47	.11	.04	.02	66	72	99	915	55	1010	88
12	96	.42	.11	.07	.03	100	98	98	91	55	355	88
13	96	.39	.15	.07	.03	100	98	99	97	55	96	87
14	95	.39	.17	.10	.03	100	98	95	96	55	82	87
15	96	.50	.16	.11	.13	100	98	97	97	55	.29	87
16	96	.50	.19	67	.03	100	98	96	97	70	.29	87
17	96	.47	.16	102	.07	100	97	96	96	75	.20	87
18	96	.39	.19	83	.11	100	97	96	97	76	.20	87
19	96	.39	.18	.13	.14	100	97	96	97	76	.20	87
20	96	.39	.19	.03	.23	99	97	96	97	76	.29	87
21	96	.41	.19	.03	.13	99	98	727	97	76	.39	87
22	96	.35	.16	.03	.14	99	99	1060	97	76	.29	87
23	96	.39	.16	.03	.19	99	98	1060	97	76	.29	88
24	96	.30	.22	.04	.19	99	97	1080	97	76	.20	86
25	96	.29	.23	.03	.20	99	97	1080	96	76	.12	85
26	96	.29	.21	.03	.20	86	97	1170	97	76	19	86
27	96	.27	.20	.03	.29	81	98	1160	97	68	77	86
28	96	.26	.12	37	.20	81	99	1140	96	.29	77	86
29	96	.29	.11	103	---	81	98	1130	97	.11	77	86
30	96	.29	.11	102	---	81	98	1130	97	.20	77	87
31	61	---	.11	100	---	81	---	1130	---	.29	87	---
TOTAL	2729	10.94	5.31	595.43	785.41	1953.08	2354.44	13816	13688	1777.89	11293.76	2682
MEAN	88.0	.36	.17	19.2	28.1	63.0	78.5	446	456	57.4	364	89.4
MAX	96	.57	.31	103	99	100	99	1170	1110	97	1010	96
MIN	61	.20	.11	.03	.02	.01	.11	95	91	.11	.12	85
AC-FT	5410	22	11	1180	1560	3870	4670	27400	27150	3530	22400	5320

CAL YR 1989 TOTAL 69013.05 MEAN 189 MAX 1080 MIN .04 AC-FT 136900
WTR YR 1990 TOTAL 51691.26 MEAN 142 MAX 1170 MIN .01 AC-FT 102500

RIO GRANDE BASIN

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.--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 temperature were made during the year.

AVERAGE DISCHARGE.--39 years (water years 1940-42, 1955-90), 50.3 ft³/s, 36,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 174 ft³/s, July 22, 1941; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	29	.00	.00	86	.00	74	95	109	96	.02	e93
2	71	.21	.00	.00	87	.00	74	99	108	93	.01	e93
3	73	.13	.00	.00	88	.00	79	101	108	58	.06	e93
4	74	.02	.00	.00	88	.00	79	102	108	53	.06	e93
5	76	.00	.00	.00	88	.00	75	102	107	53	.11	e93
6	76	.00	.00	.00	89	.00	52	102	106	52	.00	e93
7	76	.00	.00	.00	87	.00	.02	99	104	51	.03	e93
8	78	.00	.00	.00	57	.00	.00	101	103	51	.00	e93
9	79	.00	.00	.00	56	.00	.00	99	102	53	71	e93
10	78	.00	.00	.00	20	.12	.00	99	101	53	96	e91
11	76	.00	.00	.00	3.3	.82	.00	100	101	57	96	e86
12	93	.00	.00	.00	1.1	65	.58	96	101	78	98	e86
13	95	.00	.00	.00	.00	87	67	86	105	63	100	e86
14	96	.00	.00	.00	.00	92	91	84	103	58	100	e86
15	95	.00	.00	.00	.00	94	92	99	102	57	69	e86
16	96	.00	.00	.00	.00	95	95	103	101	57	15	e86
17	97	.00	.00	70	.00	95	96	103	100	87	.00	e86
18	98	.00	.00	93	.00	95	97	103	99	76	.00	84
19	98	.00	.00	48	.00	95	100	101	97	77	.00	85
20	97	.00	.00	.06	.00	95	98	100	94	78	.00	84
21	95	.00	.00	.00	.00	95	97	99	100	78	.00	85
22	95	.00	.00	.00	.00	95	98	112	100	80	.00	86
23	94	.00	.00	.00	.00	96	97	113	99	78	.00	88
24	93	.00	.00	.00	.00	96	96	112	98	72	.00	85
25	91	.00	.00	.00	.00	95	95	110	98	72	.00	84
26	86	.00	.00	.00	.00	93	95	113	96	71	.00	86
27	86	.00	.00	.00	.00	78	95	114	96	75	e15	87
28	93	.00	.00	.00	.00	75	95	114	96	64	e75	85
29	91	.00	.00	36	---	78	94	113	96	12	e75	85
30	89	.00	.00	77	---	77	96	111	96	2.5	e75	86
31	86	---	.00	83	---	75	---	111	---	.00	e85	---
TOTAL	2698	29.36	0.00	407.06	750.40	1766.94	2127.60	3196	3034	1905.50	970.29	2640
MEAN	87.0	.98	.000	13.1	26.8	57.0	70.9	103	101	61.5	31.3	88.0
MAX	98	29	.00	93	89	96	100	114	109	96	100	93
MIN	71	.00	.00	.00	.00	.00	.00	84	94	.00	.00	84
AC-FT	5350	58	.00	807	1490	3500	4220	6340	6020	3780	1920	5240

CAL YR 1989 TOTAL 21288.24 MEAN 58.3 MAX 114 MIN .00 AC-FT 42230
WTR YR 1990 TOTAL 19525.15 MEAN 53.5 MAX 114 MIN .00 AC-FT 38730

a Estimated

RIO GRANDE BASIN

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 3,510 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.--Water-discharge records good. Flow regulated by Lake Sumner (station 08384000) 117 mi upstream since August 1937 and Santa Rosa Lake (station 08382810) 172 mi upstream since April 1980. Diversions for irrigation of about 20,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years (water years 1938-90), 177 ft³/s, 128,200 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, from slope-area measurement, 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 15	1445	*1,680	*5.93				

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	44	7.5	16	11	16	23	8.8	934	.00	35	54
2	13	47	8.2	14	10	15	25	10	891	.00	22	50
3	11	56	10	10	9.6	13	35	15	830	.00	18	38
4	10	56	12	11	16	12	53	15	895	.00	466	44
5	12	40	11	8.9	19	11	45	16	886	.00	750	43
6	10	30	10	9.3	23	9.1	33	21	976	.00	798	47
7	9.5	24	9.5	8.6	32	7.9	28	19	938	.00	1000	54
8	9.0	20	8.6	8.8	36	7.1	29	16	935	.00	821	57
9	10	18	8.3	7.5	53	6.6	30	13	957	.00	873	54
10	8.0	16	7.8	7.1	55	6.6	42	12	934	.00	887	226
11	6.3	16	7.3	7.6	43	10	27	11	964	.00	882	126
12	5.0	15	4.5	7.5	41	10	20	11	906	.00	1040	70
13	4.8	14	3.3	7.1	47	9.1	18	11	861	.00	1020	52
14	5.9	13	4.1	6.7	38	7.6	16	7.3	339	.00	668	48
15	3.9	12	5.0	6.4	27	7.0	15	4.8	173	.00	948	44
16	4.9	11	4.0	6.1	22	6.0	25	2.6	102	.00	554	44
17	4.3	11	3.8	5.8	19	4.5	27	1.2	71	.00	361	75
18	8.5	10	3.8	10	15	4.8	21	1.5	51	.00	193	86
19	16	10	3.9	14	16	4.8	19	.50	36	.00	124	88
20	16	10	4.2	13	19	5.3	20	.00	27	.00	95	110
21	18	11	4.7	12	27	7.1	22	.00	21	.00	716	66
22	22	10	4.7	25	29	7.5	33	.00	18	.00	401	68
23	24	9.6	4.7	44	24	9.5	31	.00	15	.00	252	84
24	28	9.8	4.8	30	21	12	20	303	14	.00	154	99
25	27	9.6	4.7	22	17	13	14	509	12	.00	102	72
26	31	8.5	4.9	19	15	16	14	606	9.2	.00	80	64
27	43	7.8	5.6	16	14	18	14	641	5.7	.00	64	73
28	43	7.4	8.4	14	16	21	14	854	2.5	.00	53	65
29	37	7.3	12	13	---	25	11	841	.62	.00	45	76
30	41	7.3	16	11	---	26	8.9	880	.00	188	39	237
31	46	---	18	9.6	---	27	---	880	---	90	41	---
TOTAL	544.1	561.3	225.3	401.0	714.6	355.5	732.9	5710.70	12804.02	278.00	13502	2314
MEAN	17.6	18.7	7.27	12.9	25.5	11.5	24.4	184	427	8.97	436	77.1
MAX	46	56	18	44	55	27	53	880	976	188	1040	237
MIN	3.9	7.3	3.3	5.8	9.6	4.5	8.9	.00	.00	.00	18	38
AC-FT	1080	1110	447	795	1420	705	1450	11330	25400	551	26780	4590

CAL YR 1989 TOTAL 52040.20 MEAN 143 MAX 1270 MIN .00 AC-FT 103200
WTR YR 1990 TOTAL 38143.42 MEAN 105 MAX 1040 MIN .00 AC-FT 75660

RIO GRANDE BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
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OCT	27...	1100	43	3110	8.1	18.5	12.0	9.5	23	--	--	490	94
MAR	19...	1500	4.8	5000	8.1	17.0	20.0	8.9	57	1900	1800	540	140
MAY	09...	1130	15	4050	8.0	22.0	19.0	8.6	59	2000	--	580	130
SEP	12...	0810	72	1880	8.0	19.0	20.5	7.7	27	810	740	250	46

DATE	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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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)
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OCT	27...	190	--	4.1	93	0	76	77	1600	240	0.60	12	--
MAR	19...	510	5	5.0	113	0	93	67	1900	800	<0.10	6.5	3960
MAY	09...	320	3	4.2	--	--	--	68	1800	410	0.60	8.0	3290
SEP	12...	130	2	4.2	85	0	70	67	690	150	0.30	9.3	1320

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 ORTH, 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)
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OCT	27...	0.100	<0.100	0.130	0.37	0.60	0.080	0.010	2.7	<1	<1	250
MAR	19...	<0.100	<0.100	0.040	0.36	--	<0.010	<0.010	2.3	--	--	390
MAY	09...	<0.100	<0.100	0.020	0.38	--	0.040	<0.010	2.3	--	--	310
SEP	12...	0.100	0.100	<0.010	--	0.30	<0.010	<0.010	3.7	1	<1	170

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)
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OCT	27...	1	<1.0	4	3	4	1	20	3	<1	<0.10	<0.1
MAR	19...	--	--	--	--	--	--	40	--	--	--	--
MAY	09...	--	--	--	--	--	--	40	--	--	--	--
SEP	12...	<1	<1.0	4	3	5	1	3	2	1	<0.10	<0.1

RIO GRANDE BASIN

08386000 PECOS RIVER NEAR ACME, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)
OCT 27...	1	1	20	10	<10	<10	81	<1	<1	9	<5
MAR 19...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
SEP 12...	<1	<1	120	6	--	--	--	--	--	--	--
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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 27...	10	9600	30	310	<0.01	100	593	69	83	--	--
MAR 19...	--	--	--	--	--	--	451	5.9	90	--	--
MAY 09...	--	--	--	--	--	--	513	20	99	--	--
SEP 12...	--	--	--	--	--	--	223	43	97	<10	350

RIO GRANDE BASIN

08387000 RIO RUIDOSO AT HOLLYWOOD, NM

LOCATION.--Lat 33°19'36", long 105°37'38", in SE¼SE¼NE¼ sec.25, T.11 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, on center pier on downstream side of bridge on Blooming Dale Road in Ruidoso Downs, 0.1 mi north of U.S. Highway 70, 0.7 mi downstream from Gavilan Canyon, 1.7 mi downstream from Carrizo Creek, and at mile 24.4.

DRAINAGE AREA.--120 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 6,420 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 14, 1953 to Mar. 28, 1985, at site 0.95 mi downstream at different datum.

REMARKS.--Water-discharge 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 returns a portion of this water as effluent from sewage disposal plant downstream from the gage. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years (1954-81), 14.9 ft³/s, 10,800 acre-ft/yr, for period when sewage disposal plant effluent was discharged upstream from gage. 8 years (water years 1982-90), 31.6 ft³/s, 22,890 acre-ft/yr, since disposal plant effluent is discharged downstream.

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, datum then in use, June 17, 1965; minimum discharge, 0.30 ft³/s, Jan. 1, 1962 and 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 4	1200	259	3.07	Aug. 23	1030	102	2.44
July 19	1545	194	2.65	Sept. 5	1800	148	2.63
Aug. 14	(unknown)	*634	*a3.98	Sept. 24	0145	117	2.51

(a) from floodmarks Minimum discharge, 7.3 ft³/s, June 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	11	9.8	9.0	7.7	10	18	21	14	8.0	e17	24
2	14	11	10	9.3	8.1	10	24	25	13	8.2	e16	23
3	14	11	9.5	9.2	8.1	10	18	24	12	9.0	e22	22
4	13	11	9.8	8.4	8.0	10	18	21	11	22	e41	22
5	14	10	9.7	8.3	8.0	12	19	19	11	9.9	e38	55
6	14	9.8	9.7	8.1	8.0	12	19	18	10	8.6	e35	45
7	14	9.9	9.4	8.3	8.0	11	20	19	9.9	9.6	e32	48
8	13	10	9.2	8.3	9.3	11	21	21	10	12	e29	53
9	13	10	9.4	8.2	8.3	12	24	24	11	15	e26	52
10	12	9.8	9.5	8.1	8.1	14	25	26	12	22	e23	48
11	12	9.8	9.1	8.1	8.1	20	25	27	13	31	e21	44
12	12	9.9	8.4	8.1	8.1	14	26	26	11	33	e18	41
13	12	9.9	9.1	8.8	8.3	13	25	25	9.8	29	e17	38
14	12	9.8	9.3	9.0	8.8	12	26	25	8.2	52	e200	34
15	11	9.7	9.4	8.9	8.9	11	28	25	8.0	54	e130	32
16	11	9.8	9.0	8.9	8.5	11	27	26	8.0	51	e74	33
17	11	9.6	9.1	8.8	8.3	11	27	26	7.8	61	e43	33
18	11	9.3	9.0	8.3	8.2	11	29	24	7.8	69	e24	31
19	11	9.8	8.7	8.3	8.1	11	26	23	7.7	103	e27	43
20	11	10	8.6	8.0	8.1	12	24	21	7.6	e120	e40	40
21	11	10	8.6	7.9	8.0	14	24	20	8.0	e104	e58	47
22	11	10	8.2	8.1	8.1	16	26	19	8.2	e80	e80	53
23	11	10	8.8	8.9	8.3	18	28	18	8.1	e58	e110	90
24	11	9.8	9.1	8.1	8.4	20	28	18	8.0	e39	73	109
25	11	10	9.0	7.8	8.7	22	27	18	8.2	e30	55	84
26	11	10	9.1	7.9	9.1	25	23	19	8.7	e40	46	65
27	12	10	8.8	7.7	11	26	20	19	8.5	e33	40	52
28	12	10	8.5	7.7	11	23	19	19	8.9	e26	36	44
29	11	9.7	8.6	7.8	---	23	19	17	9.5	e23	32	40
30	12	9.8	9.0	7.8	---	20	20	16	9.8	e21	28	54
31	12	---	8.9	7.8	---	18	---	15	---	e19	26	---
TOTAL	374	300.4	282.3	257.9	237.6	463	703	664	288.7	1200.3	1457	1399
MEAN	12.1	10.0	9.11	8.32	8.49	14.9	23.4	21.4	9.62	38.7	47.0	46.6
MAX	14	11	10	9.3	11	26	29	27	14	120	200	109
MIN	11	9.3	8.2	7.7	7.7	10	18	15	7.6	8.0	16	22
AC-FT	742	596	560	512	471	918	1390	1320	573	2380	2890	2770

CAL YR 1989 TOTAL 6152.4 MEAN 16.9 MAX 67 MIN 7.0 AC-FT 12200
WTR YR 1990 TOTAL 7627.2 MEAN 20.9 MAX 200 MIN 7.6 AC-FT 15130

e Estimated

RIO GRANDE BASIN

08387000 RIO RUIDOSO AT HOLLYWOOD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-67, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (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)	
NOV 08...	1600	10	1240	8.1	17.5	11.0	10.4	<10	680	190	49	56	
MAR 20...	1015	12	1140	8.1	15.5	8.0	12.8	13	570	160	42	50	
MAY 07...	1245	19	810	8.3	20.0	13.0	11.5	24	360	100	26	35	
SEP 11...	0755	44	480	7.8	12.0	11.0	7.0	13	210	62	13	20	
DATE		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)	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)
NOV 08...	0.9	1.8	157	490	66	0.30	14	961	0.100	<0.100	0.060	0.14	
MAR 20...	0.9	1.3	113	410	71	<0.10	12	814	<0.100	<0.100	<0.010	--	
MAY 07...	0.8	1.0	107	250	41	0.10	11	528	<0.100	<0.100	<0.010	--	
SEP 11...	0.6	0.90	89	130	22	0.20	12	314	0.200	0.200	0.010	0.19	
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)	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)
NOV 08...	0.30	0.030	0.010	1.5	40	19	<10	28	310	3	1	6	
MAR 20...	--	<0.010	<0.010	2.0	20	<3	--	--	--	--	--	--	
MAY 07...	--	0.020	<0.010	1.9	20	5	--	--	--	--	--	--	
SEP 11...	0.40	0.030	0.030	3.2	20	24	--	--	--	--	--	--	
DATE		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, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (T/DAY) (80155)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (70331)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 08...	10	10	9800	30	250	0.02	50	210	5.7	56	<1	65	
MAR 20...	--	--	--	--	--	--	--	128	4.3	73	K6	K21	
MAY 07...	--	--	--	--	--	--	--	124	6.3	36	73	50	
SEP 11...	--	--	--	--	--	--	--	149	18	63	<3	390	

RIO GRANDE BASIN

08387600 EAGLE CREEK BELOW SOUTH FORK, NEAR ALTO, NM

LOCATION.--Lat 33°23'33", long 105°43'16", in SE¼SW¼ sec.31, T.10 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, in Lincoln National Forest on right bank, 100 ft upstream from culvert under State Road 532, 400 ft downstream from South Fork, and 2.5 mi west of Alto. Mouth at Rio Ruidoso mile 11.3.

DRAINAGE AREA.--8.14 mi².

PERIOD OF RECORD.--August 1969 to December 1980, April 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. August 26, 1969 to December 31, 1980, at site 360 ft downstream at datum 6.0 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversions for irrigation upstream from station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years (water years 1970-80, 1989-90), 2.96 ft³/s, 2,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 206 ft³/s, Dec. 19, 1978, gage height, 3.79 ft, from rating curve extended above 21 ft³/s, site and datum then in use; minimum, no flow at times in 1989, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge 25 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 19	1630	48	5.69	Sept. 23	1930	*64	*5.81
July 26	1445	52	5.72				

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.28	.22	e.23	.20	.54	1.2	1.2	.20	.00	3.9	2.2
2	.40	.27	.24	e.23	e.23	.58	1.5	1.3	.17	.00	3.5	2.1
3	.37	.27	.24	e.23	e.25	.52	2.2	1.5	.15	.00	3.4	1.9
4	.37	.28	.24	e.23	e.26	.55	2.1	1.4	.14	.00	3.3	1.8
5	.41	.28	.24	e.23	e.27	1.1	1.7	1.4	.11	.00	3.0	3.4
6	.42	.26	.24	e.23	.28	.93	1.6	1.3	.09	.00	4.8	2.7
7	.42	.24	.24	e.24	.30	.69	1.4	1.2	.08	.00	4.4	3.1
8	.44	.24	.24	e.24	.38	.62	1.4	1.1	.07	.00	3.8	8.0
9	.44	.24	.24	e.24	.37	.63	1.7	.98	.07	.14	3.3	7.9
10	.37	.24	.24	e.24	.33	.82	1.9	.90	.08	.75	2.9	5.8
11	.33	.24	.21	e.23	.37	1.7	2.1	.86	.13	2.3	2.7	4.5
12	.31	.23	.21	.22	.42	1.3	2.0	.98	.09	3.4	2.6	3.7
13	.28	.23	.21	.21	.49	1.1	1.9	1.5	.06	4.3	2.7	3.1
14	.27	.21	.21	.21	.50	.89	2.0	1.4	.04	7.9	2.4	2.8
15	.24	.20	.21	.21	e.42	.76	2.1	1.3	.02	6.7	2.1	3.0
16	.24	.21	.21	.21	e.46	.71	2.2	1.2	.01	4.1	1.9	3.1
17	.24	.22	.21	.19	e.46	.67	2.2	1.2	.00	3.2	1.7	3.5
18	.24	.22	.21	.20	e.42	.64	2.7	1.1	.00	3.2	1.5	3.6
19	.24	.22	.21	e.21	.36	.64	2.4	1.1	.00	16	1.4	8.4
20	.24	.21	.21	.21	.38	.66	2.0	1.0	.00	29	3.3	8.1
21	.23	.23	.21	.20	.37	.66	1.8	.98	.00	13	4.1	8.6
22	.22	.22	.21	e.21	.33	.68	1.8	.91	.00	7.3	5.4	15
23	.21	.19	e.21	e.21	.34	.71	2.1	.78	.00	4.6	13	49
24	.21	.20	e.21	e.21	.36	.74	2.3	.67	.00	3.4	11	44
25	.21	.17	e.22	e.21	.39	.75	2.1	.54	.00	4.0	6.7	24
26	.23	.17	e.22	e.21	.42	.70	1.8	.46	.00	13	4.9	15
27	.21	.17	e.22	e.21	.54	.69	1.5	.40	.00	15	4.0	10
28	.21	.17	e.22	e.21	.55	.68	1.3	.35	.00	11	3.4	7.7
29	.21	.21	e.23	e.21	---	.75	1.2	.30	.00	7.9	3.0	6.6
30	.21	.21	e.23	e.21	---	.87	1.2	.26	.00	6.0	2.6	11
31	.24	---	e.23	.21	---	1.2	---	.24	---	4.3	2.4	---
TOTAL	9.08	6.73	6.89	6.74	10.45	24.48	55.4	29.81	1.51	170.49	119.1	273.6
MEAN	.29	.22	.22	.22	.37	.79	1.85	.96	.050	5.50	3.84	9.12
MAX	.44	.28	.24	.24	.55	1.7	2.7	1.5	.20	29	13	49
MIN	.21	.17	.21	.19	.20	.52	1.2	.24	.00	.00	1.4	1.8
AC-FT	18	13	14	13	21	49	110	59	3.0	338	236	543

CAL YR 1989 TOTAL 597.72 MEAN 1.64 MAX 17 MIN .00 AC-FT 1190
WTR YR 1990 TOTAL 714.28 MEAN 1.96 MAX 49 MIN .00 AC-FT 1420

e Estimated

RIO GRANDE BASIN

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 40 ft downstream from bridge on Mossman Road at Diamond A Ranch farm, 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 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.--Records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals upstream from station for irrigation above and below station of about 6,500 acres, 1959 determination. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--51 years (water years 1940-90), 25.3 ft³/s, 18,330 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 (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 15	0430	*2,560	*a22.40	No other peak greater than base discharge.			

(a) from floodmarks No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	.00	21	23	30	.00	.00	.00	.00	.00	7.7	15
2	6.2	.00	22	24	30	.00	.00	.00	.00	.00	7.2	13
3	4.4	.00	24	25	29	.00	.00	.00	.00	.00	16	11
4	3.3	.00	23	26	28	.00	.00	.00	.00	.00	35	5.6
5	3.7	.00	26	26	26	.00	.00	.00	.00	.00	e45	2.8
6	2.9	.46	25	27	19	.00	.00	.00	.00	.00	e38	50
7	2.4	.01	25	27	18	.00	.00	.00	.00	.00	e34	51
8	2.4	.00	25	27	7.3	.00	.00	.00	.00	.00	e30	52
9	3.1	.00	26	26	7.4	.00	.00	.00	.00	.00	26	53
10	3.4	.00	26	24	2.2	.00	.00	.00	.00	.00	21	50
11	.00	.00	24	22	.21	.00	.00	.00	.32	13	16	45
12	.00	.00	31	23	.03	.00	.00	.00	1.6	.03	12	35
13	.00	.00	31	24	.00	.00	.00	.00	.00	.00	9.3	31
14	.00	.00	33	25	.00	.00	.00	.00	.00	.00	11	27
15	.00	.00	32	24	.00	.00	.00	.00	.00	.00	e456	24
16	.00	.00	31	24	.00	.23	.00	.00	.00	.00	e71	23
17	.00	.00	e33	25	.00	3.8	.00	.00	.00	.00	e29	34
18	.00	.00	36	31	.00	3.2	.00	.00	.00	.00	53	27
19	.00	.00	35	37	.00	1.9	.00	.00	.00	.00	21	23
20	.00	.00	33	32	.00	.34	.00	.00	.00	.00	23	37
21	.00	.00	32	31	.00	.00	.00	.00	.00	31	35	36
22	.00	1.0	32	31	.00	.00	.62	.00	.00	153	96	43
23	.11	5.6	e42	31	.00	.00	1.7	.00	.00	84	44	55
24	.13	3.8	e42	31	.00	.00	1.2	.00	.00	41	100	111
25	.44	4.4	33	30	.00	.00	1.5	.00	.00	27	82	161
26	.00	3.4	30	30	.00	.00	.13	.00	.00	15	66	124
27	.00	4.8	29	31	.00	.00	.00	.00	.00	46	52	102
28	.00	3.2	28	31	.00	.00	.00	.00	.00	25	40	82
29	.00	3.2	24	31	---	.00	.00	.00	.00	23	35	68
30	.00	14	22	30	---	.00	.00	.00	.00	21	27	75
31	.00	---	23	30	---	.00	---	.00	---	16	19	---
TOTAL	40.48	43.87	899	859	197.14	9.47	5.15	0.00	1.92	495.03	1557.2	1466.4
MEAN	1.31	1.46	29.0	27.7	7.04	.31	.17	.000	.064	16.0	50.2	48.9
MAX	8.0	14	42	37	30	3.8	1.7	.00	1.6	153	456	161
MIN	.00	.00	21	22	.00	.00	.00	.00	.00	.00	7.2	2.8
AC-FT	80	87	1780	1700	391	19	10	.00	3.8	982	3090	2910

CAL YR 1989 TOTAL 6521.25 MEAN 17.9 MAX 173 MIN .00 AC-FT 12930
WTR YR 1990 TOTAL 5574.66 MEAN 15.3 MAX 456 MIN .00 AC-FT 11060

e Estimated

RIO GRANDE BASIN

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 monthend 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, from capacity table dated August 1971, between elevations 3,957.0 ft, sill of outlet gate, and 3,980.0. Capacity of Rocky Arroyo Reservoir, 13,410 acre-ft, from capacity table dated August 1971, 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, 1990. U.S. Army Corps of Engineers satellite telemeters at stations.

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

EXTREMES FOR PERIOD OF RECORD.--Rio Hondo Reservoir: Maximum contents, 1,260 acre-ft, July 29, 1965, elevation, 3,985.7 ft; no storage most of time. Rocky Arroyo Reservoir: Maximum contents, 6,090 acre-ft, June 18, 1965, elevation, 3,970.7 ft; no storage most of time.

EXTREMES FOR CURRENT YEAR.--Maximum contents, Rio Hondo Res., 416 acre-ft, Aug. 15, elevation, 3,983.00 ft; Rocky Arroyo Res., no storage during year; no contents both reservoirs most of time.

CONTENTS, IN ACRE-FEET, AND ELEVATION, IN FEET, WATER YEAR, OCTOBER 1989 TO SEPTEMBER 1990.

NO CONTENTS AT 2400 HOURS DURING YEAR EXCEPT:

RIO HONDO RESERVOIR

DATE	ELEVATION	CONTENTS	DATE	ELEVATION	CONTENTS
Aug. 15	3983.00	416	Aug. 16	3967.00	1
18	3967.00	1			

ROCKY ARROYO RESERVOIR

No contents at 2400 hours during year.

RIO GRANDE BASIN

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.--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 0.1 mi upstream; flow from reservoir can also be discharged into Rocky Arroyo through Rocky Dam (see REMARKS for station 08390600). Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--27 years, 15.6 ft³/s, 11,300 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 daily discharge, 184 ft³/s, Aug. 16; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	11	16	23	.00	.00	.00	.00	.00	e.00	8.1
2	.00	.00	12	18	22	.00	.00	.00	.00	.00	.00	7.5
3	.00	.00	15	18	22	.00	.00	.00	.00	.00	9.0	7.2
4	.00	.00	15	20	23	.00	.00	.00	.00	.00	15	e2.3
5	.00	.00	14	21	22	.00	.00	.00	.00	.00	23	e.00
6	.00	.00	13	21	16	.00	.00	.00	.00	.00	20	e19
7	.00	.00	14	21	13	.00	.00	.00	.00	.00	13	32
8	.00	.00	15	20	5.8	.00	.00	.00	.00	.00	12	37
9	.00	.00	17	18	2.1	.00	.00	.00	.00	.00	5.7	36
10	.00	.00	16	17	.63	.00	.00	.00	.00	.00	.51	37
11	.00	.00	14	16	.00	.00	.00	.00	.00	.00	.00	35
12	.00	.00	18	16	.00	.00	.00	.00	.00	.00	.00	26
13	.00	.00	21	17	.00	.00	.00	.00	.00	.00	.00	22
14	.00	.00	24	18	.00	.00	.00	.00	.00	.00	.00	19
15	.00	.00	23	19	.00	.00	.00	.00	.00	.00	152	17
16	.00	.00	e22	18	.00	.00	.00	.00	.00	.00	184	15
17	.00	.00	e23	19	.00	.00	.00	.00	.00	.00	81	23
18	.00	.00	e24	22	.00	.00	.00	.00	.00	.00	35	19
19	.00	.00	e23	28	.00	.00	.00	.00	.00	.00	9.0	15
20	.00	.00	e22	25	.00	.00	.00	.00	.00	.00	2.1	24
21	.00	.00	e21	23	.00	.00	.00	.00	.00	.00	15	26
22	.00	.00	e20	24	.00	.00	.00	.00	.00	56	50	30
23	.00	.00	22	22	.00	.00	.00	.00	.00	59	21	39
24	.00	.00	23	23	.00	.00	.00	.00	.00	30	66	67
25	.00	.00	23	24	.00	.00	.00	.00	.00	26	67	128
26	.00	.00	22	25	.00	.00	.00	.00	.00	24	57	103
27	.00	.00	22	25	.00	.00	.00	.00	.00	e23	46	78
28	.00	.00	17	25	.00	.00	.00	.00	.00	e11	33	63
29	.00	.00	17	25	---	.00	.00	.00	.00	e7.0	27	54
30	.00	1.8	16	25	---	.00	.00	.00	.00	e4.7	21	55
31	.00	---	17	24	---	.00	---	.00	---	e1.1	13	---
TOTAL	0.00	1.80	576	653	149.53	0.00	0.00	0.00	0.00	241.80	977.31	1044.10
MEAN	.000	.060	18.6	21.1	5.34	.000	.000	.000	.000	7.80	31.5	34.8
MAX	.00	1.8	24	28	23	.00	.00	.00	.00	59	184	128
MIN	.00	.00	11	16	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	3.6	1140	1300	297	.00	.00	.00	.00	480	1940	2070

CAL YR 1989 TOTAL 4619.33 MEAN 12.7 MAX 107 MIN .00 AC-FT 9160
WTR YR 1990 TOTAL 3643.54 MEAN 9.98 MAX 184 MIN .00 AC-FT 7230

e Estimated

RIO GRANDE BASIN

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 bridge on Sunset Ave. 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.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Two Rivers Reservoir (station 08390600) 21.7 mi upstream. Diversions and ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--9 years, 23.3 ft³/s, 16,880 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 360 ft³/s; maximum gage height, 7.5 ft, May 3, 1981, from floodmarks; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 158 ft³/s, Aug. 15, gage height, 4.16 ft from floodmarks; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	9.4	15	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.16	8.7	14	.00	.00	.00	.00	.00	.23	.00
3	.00	.00	3.4	11	14	.00	.00	.00	.00	.00	.02	.00
4	.00	.00	3.5	11	15	.00	.00	.00	.00	.00	2.7	.00
5	.00	.00	3.3	13	14	.00	.00	.00	.00	.00	6.4	.00
6	.00	.00	2.8	14	11	.00	.00	.00	.00	.00	3.1	.00
7	.00	.00	3.1	15	6.8	.00	.00	.00	.00	.00	2.2	23
8	.00	.00	3.5	14	3.5	.00	.00	.00	.00	.00	.31	22
9	.00	.00	5.5	12	.15	.00	.00	.00	.00	.00	.01	21
10	.00	.00	5.4	9.8	.00	.00	.00	.00	.00	.00	.00	21
11	.00	.00	3.4	7.1	.00	.00	.00	.00	.00	.00	.00	18
12	.00	.00	3.7	7.3	.00	.00	.00	.00	.00	.00	.00	11
13	.00	.00	9.3	7.5	.00	.00	.00	.00	.00	.00	.00	5.4
14	.00	.00	14	8.2	.00	.00	.00	.00	.00	.00	.00	2.5
15	.00	.00	14	9.8	.00	.00	.00	.00	.00	.00	e67	.32
16	.00	.00	9.1	9.6	.00	.00	.00	.00	.00	.00	e138	.12
17	.00	.00	8.4	9.8	.00	.00	.00	.00	.00	.00	e77	e6.6
18	.00	.00	12	13	.00	.00	.00	.00	.00	.00	e10	e2.2
19	.00	.00	11	17	.00	.00	.00	.00	.00	.00	e2.2	e.10
20	.00	.00	13	17	.00	.00	.00	.00	.00	.00	e.00	e4.3
21	.00	.00	12	15	.00	.00	.00	.00	.00	.00	e.00	11
22	.00	.00	e10	13	.00	.00	.00	.00	.00	e52	e24	8.7
23	.00	.00	e8.0	13	.00	.00	.00	.00	.00	e56	12	18
24	.00	.00	e11	13	.00	.00	.00	.00	.00	e27	39	39
25	.00	.00	e13	14	.00	.00	.00	.00	.00	e22	48	33
26	.00	.00	e12	15	.00	.00	.00	.00	.00	e20	38	13
27	.00	.00	e11	16	.00	.00	.00	.00	.00	e14	29	7.7
28	.00	.00	e11	16	.00	.00	.00	.00	.00	e7.8	17	5.2
29	.00	.00	10	17	---	.00	.00	.00	.00	e3.8	11	5.0
30	.00	.00	7.2	16	---	.00	.00	.00	.00	e.60	7.0	3.6
31	.00	---	10	16	---	.00	---	.00	---	e.00	2.3	---
TOTAL	0.00	0.00	243.76	388.2	93.45	0.00	0.00	0.00	0.00	203.20	536.47	281.74
MEAN	.000	.000	7.86	12.5	3.34	.000	.000	.000	.000	6.54	17.3	9.39
MAX	.00	.00	14	17	15	.00	.00	.00	.00	56	138	39
MIN	.00	.00	.00	7.1	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	483	770	185	.00	.00	.00	.00	402	1060	559

CAL YR 1989 TOTAL 3033.61 MEAN 8.31 MAX 91 MIN .00 AC-FT 6020
WTR YR 1990 TOTAL 1746.42 MEAN 4.78 MAX 138 MIN .00 AC-FT 3460

e Estimated

RIO GRANDE BASIN

08394100 PECOS RIVER NEAR HAGERMAN, NM

LOCATION.--Lat 33°10'08", long 104°18'24", in SE/4SW/4SE/4 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 July 1990 (discontinued). 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.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Sumner (station 08384000) 157 mi upstream, and by Two Rivers Reservoir (station 08390600) 55 mi upstream. Diversions and ground-water withdrawals for irrigation of about 80,000 acres upstream from station. Several observations of water temperature 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, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1989 to July 1990, 973 cfs, June 8; minimum recorded, 9.2 cfs, May 18, but may have been less during period of no gage-height record June 21 to July 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	57	30	43	42	46	47	24	837	e12	---	---
2	30	58	32	43	41	48	48	24	877	e10	---	---
3	27	57	33	44	41	46	48	24	912	e8.6	---	---
4	24	60	35	42	39	43	53	26	920	e7.2	---	---
5	21	66	37	41	40	40	62	28	923	e6.9	---	---
6	19	61	39	39	72	36	66	30	940	e6.5	---	---
7	21	51	38	38	79	34	58	31	911	e6.2	---	---
8	20	46	37	37	79	32	52	36	942	e6.1	---	---
9	20	40	37	38	81	30	48	32	922	e5.9	---	---
10	20	38	36	38	84	31	51	29	916	e5.8	---	---
11	25	36	34	38	96	35	54	28	920	e5.7	---	---
12	24	36	32	37	89	38	54	27	889	e5.5	---	---
13	23	34	30	37	82	36	46	24	900	---	---	---
14	20	35	30	37	80	35	41	22	597	---	---	---
15	19	34	30	36	81	34	36	24	277	---	---	---
16	20	32	31	36	70	33	34	21	207	---	---	---
17	19	32	31	35	63	31	29	14	155	---	---	---
18	21	32	33	37	47	30	43	12	126	---	---	---
19	21	33	30	44	42	26	45	11	101	---	---	---
20	23	33	30	50	39	25	40	13	81	---	---	---
21	31	34	30	49	39	25	38	13	e52	---	---	---
22	32	34	30	47	45	24	41	12	e36	---	---	---
23	36	33	26	47	52	25	53	14	e25	---	---	---
24	40	33	32	66	52	25	52	13	e22	---	---	---
25	42	33	34	69	48	26	45	387	e20	---	---	---
26	42	34	31	59	45	30	36	601	e18	---	---	---
27	43	32	31	53	44	31	30	651	e17	---	---	---
28	50	30	32	49	47	35	28	783	e16	---	---	---
29	55	30	33	46	---	39	27	872	e15	---	---	---
30	52	30	37	44	---	43	25	928	e14	---	---	---
31	51	---	40	42	---	46	---	888	---	---	---	---
TOTAL	925	1194	1021	1361	1659	1058	1330	5642	13588	---	---	---
MEAN	29.8	39.8	32.9	43.9	59.2	34.1	44.3	182	453	---	---	---
MAX	55	66	40	69	96	48	66	928	942	---	---	---
MIN	19	30	26	35	39	24	25	11	14	---	---	---
AC-FT	1830	2370	2030	2700	3290	2100	2640	11190	26950	---	---	---

e Estimated

RIO GRANDE BASIN

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 13060007, on left bank 400 ft upstream from bridge on Yuma Road, 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.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Sumner (station 08384000) 180 mi upstream, since August 1937, and by Two Rivers Reservoir (station 08390600) 77 mi upstream, since July 1963. Diversions and ground-water withdrawals for irrigation of about 124,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years, 224 ft³/s, 162,300 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, 1954, 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, 1,170 ft³/s, at 2200 hours Aug. 16, gage height, 5.47 ft; minimum recorded, 2.6 ft³/s, part of each day July 19-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	47	34	53	37	46	43	9.9	705	4.3	52	40
2	20	48	32	56	37	47	48	8.3	720	3.8	28	31
3	10	53	36	58	42	51	43	9.5	748	5.1	14	40
4	7.4	53	37	49	39	49	41	9.9	750	4.7	12	30
5	8.0	58	39	46	38	44	46	12	753	5.3	237	26
6	8.4	64	42	45	39	47	48	19	765	6.1	618	22
7	10	57	43	44	61	49	56	25	774	5.6	713	33
8	12	48	42	43	63	47	53	16	797	4.9	865	37
9	17	48	42	45	72	47	44	14	795	4.5	822	35
10	15	44	42	43	80	45	42	15	802	4.1	782	50
11	12	43	39	42	72	46	44	14	785	3.8	797	118
12	17	38	32	42	81	48	44	11	771	3.9	751	117
13	16	38	36	40	71	48	39	14	781	3.5	846	86
14	14	38	28	40	65	40	31	14	678	3.5	937	53
15	10	38	28	43	74	47	33	17	270	4.0	641	32
16	12	36	32	40	79	45	39	15	163	4.7	843	21
17	11	37	37	40	74	41	34	17	120	5.1	709	40
18	13	40	34	42	67	41	32	9.1	88	3.4	366	37
19	15	39	31	43	53	41	34	6.8	66	2.9	231	45
20	20	39	28	50	46	35	36	6.4	47	2.8	175	57
21	24	39	27	55	39	28	32	7.0	32	4.3	136	55
22	32	39	e35	55	43	26	35	7.9	19	4.8	573	95
23	33	38	e47	54	40	25	42	6.7	11	4.3	369	70
24	35	38	e57	55	47	27	38	15	7.3	3.8	240	54
25	38	38	49	70	48	26	29	110	14	5.7	192	62
26	46	38	48	71	47	27	23	443	11	5.0	159	111
27	47	38	46	63	49	30	17	524	4.8	6.0	132	132
28	43	36	44	59	51	30	13	569	5.8	5.9	99	110
29	50	35	43	54	---	29	9.9	719	6.1	5.2	75	111
30	55	35	45	41	---	36	14	726	5.6	5.3	51	196
31	52	---	49	40	---	38	---	744	---	4.7	38	---
TOTAL	723.8	1280	1204	1521	1554	1226	1082.9	4134.5	11494.6	141.0	12503	1946
MEAN	23.3	42.7	38.8	49.1	55.5	39.5	36.1	133	383	4.55	403	64.9
MAX	55	64	57	71	81	51	56	744	802	6.1	937	196
MIN	7.4	35	27	40	37	25	9.9	6.4	4.8	2.8	12	21
AC-FT	1440	2540	2390	3020	3080	2430	2150	8200	22800	280	24800	3860

CAL YR 1989 TOTAL 54122.4 MEAN 148 MAX 1230 MIN 5.2 AC-FT 107400
WTR YR 1990 TOTAL 38810.8 MEAN 106 MAX 937 MIN 2.8 AC-FT 76980

e Estimated

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	51	37	50	41	47	46	20	712	6.8	7.3	33
2	22	47	36	54	38	43	51	16	704	5.9	37	34
3	21	50	34	58	37	47	54	14	740	5.2	25	30
4	13	53	37	57	41	50	47	15	757	4.9	15	39
5	10	53	39	50	40	46	46	14	744	5.2	47	33
6	9.4	60	41	48	39	43	48	16	738	4.9	569	30
7	10	61	42	47	45	46	55	23	758	5.1	699	29
8	12	56	44	46	62	46	59	28	750	5.0	806	34
9	13	48	44	46	63	46	53	20	742	5.1	822	37
10	18	48	44	47	71	46	48	17	742	4.4	824	38
11	17	46	43	45	72	45	45	19	742	4.0	814	52
12	14	44	37	45	73	45	50	17	760	4.5	758	105
13	18	41	37	45	77	47	47	14	748	4.2	808	83
14	19	41	38	43	67	46	41	17	711	3.6	876	60
15	16	40	32	44	65	41	36	17	364	3.8	760	48
16	13	39	30	44	73	47	41	19	131	4.0	638	33
17	14	38	28	41	76	46	43	18	103	3.7	824	32
18	14	39	39	42	71	43	38	21	74	4.0	457	45
19	15	41	41	43	61	43	37	13	e54	3.6	211	37
20	17	40	33	44	49	43	42	9.1	e38	3.0	167	46
21	22	41	30	50	44	35	40	7.9	e27	3.6	135	53
22	26	41	21	54	38	30	37	7.4	e19	4.5	452	63
23	32	41	29	55	41	28	42	9.0	e14	4.0	410	72
24	33	40	41	54	40	29	47	6.6	e9.8	3.3	202	56
25	36	40	45	53	48	30	42	12	e8.0	2.9	164	52
26	40	40	60	72	47	29	34	327	e16	2.6	124	68
27	46	40	49	67	47	30	27	495	e12	3.8	90	107
28	45	39	48	61	46	34	22	518	7.8	5.5	76	96
29	43	38	46	58	---	35	18	657	7.0	5.6	65	94
30	50	37	45	51	---	36	16	700	7.2	4.3	52	134
31	54	---	47	42	---	42	---	740	---	4.6	39	---
TOTAL	736.4	1333	1217	1556	1512	1264	1252	3827.0	11239.8	135.6	11973.3	1673
MEAN	23.8	44.4	39.3	50.2	54.0	40.8	41.7	123	375	4.37	386	55.8
MAX	54	61	60	72	77	50	59	740	760	6.8	876	134
MIN	9.4	37	21	41	37	28	16	6.6	7.0	2.6	7.3	29
AC-FT	1460	2640	2410	3090	3000	2510	2480	7590	22290	269	23750	3320
CAL YR 1989	TOTAL 54187.5	MEAN 148	MAX 1070	MIN 5.5	AC-FT 107500							
WTR YR 1990	TOTAL 37719.1	MEAN 103	MAX 876	MIN 2.6	AC-FT 74820							

RIO GRANDE BASIN

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 TEMPERATURE: April 1949 to current year.

SUSPENDED-SEDIMENT DISCHARGE: January 1949 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 28,800 microsiemens, June 24, 1977; minimum daily, 111 microsiemens, Aug. 31, 1982.

WATER TEMPERATURE: 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 CONCENTRATION: 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 LOAD: 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, 21,900 microsiemens, July 29; minimum daily, 1250 microsiemens, Aug. 13.

WATER TEMPERATURE: Maximum daily, 36.0°C, July 9; minimum daily, 0.0°C, Dec. 18.

SEDIMENT CONCENTRATION: Maximum daily mean, 12,200 mg/L, Aug. 17; minimum daily mean, 9 mg/L, Oct. 17.

SEDIMENT LOAD: Maximum daily, 27,100 tons, Aug. 17; minimum daily, .34 tons, Oct. 17.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (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)	
NOV 01...	1140	52	6250	8.1	9.5	10.5	10.3	71	2200	590	170	760	
MAR 06...	1515	44	10100	8.4	20.0	18.0	11.2	160	2700	650	250	1500	
APR 30...	1345	14	13900	8.3	20.0	22.0	12.2	200	2900	700	290	2000	
SEP 04...	0930	41	6900	7.9	25.0	22.5	6.2	60	1800	470	150	900	
DATE		SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA-LINITY LAB AS (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 01...	7	7.0	159	0	130	121	2000	1300	0.80	12	4920	0.500	
MAR 06...	13	11	111	10	107	110	2200	2800	1.0	5.1	7480	<0.100	
APR 30...	16	19	111	10	107	69	2500	4000	1.0	4.8	9580	<0.100	
SEP 04...	9	10	144	0	118	112	1600	1500	0.60	16	4720	<0.100	
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)	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)	
NOV 01...		<0.100	0.160	0.54	1.2	0.040	0.010	3.9	<1	K18	430	40	
MAR 06...		<0.100	0.040	0.76	--	0.020	<0.010	3.8	<1	K4	550	50	
APR 30...		<0.100	0.030	0.67	--	0.040	<0.010	4.7	K1400	<1	900	70	
SEP 04...		<0.100	0.040	0.66	--	0.040	<0.010	5.5	<10	K32	510	40	

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
NOV 01...	1140	<1	<1	<1	<1.0	1	4	4	1	1
SEP 04...	0930	2	2	<1	<1.0	2	2	3	1	<1

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)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)
NOV 01...	<1	<0.10	<0.1	2	2	30	20	<10	<10	<1
SEP 04...	<1	0.10	<0.1	1	1	30	20	--	--	--

DATE	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)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
NOV 01...	<1	2	<5	2	1600	<10	260	<0.01	5

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 01...	1140	52	6250	10.5	319	45	87
MAR 06...	1515	44	10100	18.0	348	41	94
APR 30...	1345	14	13900	22.0	732	28	85
SEP 04...	0930	41	6900	22.5	341	37	88

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8970	5750	7520	---	6330	8430	9760	16000	2500	8260	15800	---
2	9160	5930	7520	---	6540	8810	9350	14000	2510	9250	16600	---
3	9170	6030	7500	---	6670	9320	8770	14000	2540	9510	6030	5980
4	9570	6190	7510	---	6690	9420	8880	15900	2470	9370	5310	6200
5	9420	5890	7410	---	6730	9870	8980	18000	2480	11400	5730	6550
6	14500	5870	7490	7280	6860	11200	8880	17000	2500	12700	2950	7010
7	16400	5610	7550	7530	6970	11300	9050	13100	2100	13300	2460	7310
8	15300	5640	7460	7220	6510	11100	8560	12300	2010	12800	1880	7950
9	14100	7220	7180	7350	5620	11000	8000	12600	1880	16300	1760	7420
10	12300	7330	7040	7580	5120	11000	8170	13500	1850	16500	1600	7340
11	12300	7490	7170	7020	5040	11200	8670	14800	1800	16300	1410	7000
12	12900	7520	---	7290	5050	11200	8940	15200	1710	16200	1310	5400
13	12000	7680	---	6600	4870	11400	8860	13400	1630	16000	1250	4570
14	12000	7720	---	6560	4810	11800	8890	13700	1620	15300	1260	4570
15	12200	7810	---	6820	4940	12100	9100	13600	1630	15200	1260	4750
16	12500	7830	---	6850	4870	11800	9540	12900	2140	15600	1720	5790
17	13200	7940	---	6670	4860	11900	9540	12500	2270	16300	1670	6660
18	13500	8030	7000	6530	5050	11800	9770	12000	2430	16800	1720	7180
19	13300	8030	7410	6520	5090	11900	9980	13900	2770	18100	1740	7550
20	13200	7330	7640	6640	5620	11900	12300	14800	3110	17700	2270	7950
21	13300	7310	8370	6440	6130	12100	11500	16800	3490	17200	2540	7150
22	13000	7370	8040	6520	6310	12400	11000	18500	4110	15500	2800	6630
23	11600	7460	8070	6600	6480	13400	11500	18400	4240	16500	2610	5600
24	11000	7310	---	6700	6540	13200	11500	17400	4960	16500	1970	5500
25	10300	7440	---	6600	6520	13100	11400	17300	5510	16800	2050	5860
26	7310	7420	---	6360	5980	12900	12700	4560	5490	17700	2120	5690
27	6700	7470	---	5630	5840	12900	14100	3740	7250	18900	3860	4870
28	6340	7460	---	5150	5870	12800	15400	3220	---	19000	4470	3120
29	6240	7440	---	5350	---	11900	15000	3140	8100	21900	4620	3010
30	5820	7500	---	---	---	11900	15700	2960	7800	19200	4770	2830
31	5700	---	---	---	---	9470	---	2690	---	17400	5060	---
MEAN	11100	7100	7520	6660	5850	11400	10500	12600	3270	15500	3630	5980
WTR YR 1990	MEAN	8570	MAX	21900	MIN	1250						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	12.0	8.0	---	8.0	7.5	21.0	16.0	20.0	31.0	25.0	---
2	25.0	9.5	7.0	---	11.0	15.0	17.0	11.5	23.5	30.0	24.0	---
3	16.5	7.0	8.0	---	11.5	13.0	21.0	23.0	24.0	24.0	31.0	25.5
4	23.0	13.0	6.0	---	10.0	11.0	16.0	24.0	24.5	27.0	25.0	23.5
5	18.0	15.0	5.0	---	5.0	12.5	16.5	23.0	24.0	23.5	22.0	29.0
6	16.0	12.0	5.0	6.5	12.5	16.0	14.0	14.0	25.0	23.0	22.5	23.5
7	17.0	12.0	9.5	3.0	9.0	10.0	18.0	20.0	23.5	31.5	21.5	24.0
8	15.5	17.0	9.5	9.0	9.5	17.5	22.0	21.5	24.0	26.0	23.0	23.0
9	24.0	10.0	6.0	6.0	10.0	10.0	19.0	17.5	25.5	36.0	25.0	29.0
10	15.0	17.0	5.0	11.0	13.0	18.5	17.5	20.0	24.5	28.0	26.5	22.5
11	17.0	10.0	6.0	5.0	9.0	15.0	23.0	19.5	26.0	27.0	24.0	22.0
12	14.0	15.0	---	9.5	10.0	13.0	17.0	26.0	25.0	29.0	25.0	24.0
13	15.0	10.0	---	10.0	11.0	10.0	17.0	9.0	25.0	29.5	25.0	22.5
14	22.0	14.0	---	5.0	14.0	8.5	17.5	24.0	26.5	25.0	25.0	24.5
15	13.0	6.5	---	9.0	10.0	13.5	25.0	25.0	24.5	26.0	25.0	23.0
16	21.0	14.0	---	11.0	6.0	8.0	23.0	18.0	28.0	23.0	25.0	28.0
17	19.0	5.5	---	7.5	5.0	10.0	17.0	23.5	25.0	22.0	25.0	29.0
18	15.0	12.0	0	8.5	12.0	17.0	14.0	21.5	27.5	23.0	25.0	26.5
19	18.0	6.0	4.0	3.5	6.0	12.0	14.0	19.5	25.0	21.0	24.0	24.0
20	9.0	12.0	6.5	9.0	12.0	18.0	25.5	28.0	24.0	23.0	27.5	28.0
21	18.0	13.0	2.0	9.0	13.0	21.0	20.0	29.5	24.5	22.0	27.0	23.0
22	22.0	16.0	7.0	8.0	13.0	14.0	27.0	21.5	29.5	25.0	25.0	24.0
23	14.5	14.0	7.0	10.0	15.0	15.0	19.0	30.0	25.0	27.5	24.0	21.5
24	13.0	8.0	---	9.5	9.5	10.0	17.0	28.0	27.5	30.0	26.0	24.0
25	21.0	12.0	---	6.0	15.0	10.0	15.5	31.5	25.0	24.0	28.0	19.0
26	20.0	9.0	---	5.5	16.0	13.0	20.0	25.0	25.0	24.0	25.0	20.0
27	19.5	14.5	---	6.5	13.0	11.0	26.0	25.0	32.0	23.0	31.0	20.0
28	19.0	7.0	---	4.0	8.5	13.0	20.0	25.0	31.5	23.0	24.0	24.0
29	13.5	8.0	---	9.0	---	14.0	25.0	24.0	32.0	23.5	23.0	22.0
30	10.0	7.0	---	---	---	19.0	24.0	22.0	24.5	28.0	31.5	21.0
31	14.0	---	---	---	---	15.0	---	23.0	---	23.5	25.0	---
MEAN	17.0	11.5	6.0	7.5	10.5	13.5	19.5	22.0	25.5	26.0	24.5	24.0
WTR YR 1990	MEAN	18.0	MAX	36.0	MIN	0						

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

[illegible]

RIO GRANDE BASIN

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.--Records good. Diversions and ground-water withdrawals for irrigation of about 3,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 5.78 ft³/s, 4,190 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 36,000 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 (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 21	0915	*0.32	*0.53				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.11	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.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	.01	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.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	.01
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.01
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.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	.08
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.01
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.19
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.007	.006
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.08
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.5	.4

CAL YR 1989 TOTAL 0.45 MEAN .001 MAX .16 MIN .00 AC-FT .9
WTR YR 1990 TOTAL 0.42 MEAN .001 MAX .11 MIN .00 AC-FT .8

RIO GRANDE BASIN

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 Datum 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.--Records fair except for estimated daily discharges, which are poor. Considerable flow regulation 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 ft/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 temperature were made during the year.

AVERAGE DISCHARGE.--40 years, 156 ft³/s, 113,000 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, 841 ft³/s, Aug. 17; no flow, July 3 to Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	47	34	46	43	45	37	10	730	1.1	.00	36
2	23	40	33	51	40	44	40	15	719	.18	18	35
3	16	42	32	54	38	42	46	11	730	.00	28	28
4	12	47	34	56	43	48	43	8.3	746	.00	15	34
5	6.3	48	36	51	43	47	41	5.7	708	.00	7.7	29
6	2.5	51	38	45	41	41	44	9.1	698	.00	485	23
7	3.0	57	40	45	41	41	45	12	731	.00	686	20
8	3.7	54	41	44	60	45	55	20	730	.00	765	25
9	6.3	46	41	44	65	44	51	20	730	.00	834	29
10	6.9	43	41	46	70	44	45	11	721	.00	768	28
11	9.9	41	41	44	79	43	42	12	717	.00	785	39
12	8.6	41	40	43	72	42	44	12	730	.00	730	93
13	7.3	36	33	44	80	40	43	9.7	714	.00	750	88
14	11	35	41	43	72	45	40	8.1	695	.00	829	68
15	9.9	35	32	41	64	37	33	10	433	.00	778	50
16	7.6	35	29	43	70	42	33	10	228	.00	569	33
17	4.3	35	20	40	79	44	41	12	e105	.00	841	20
18	5.9	35	41	40	74	40	33	14	e70	.00	434	39
19	6.0	35	42	43	70	36	34	11	e54	.00	267	33
20	7.8	36	34	42	55	38	33	5.4	e36	.00	194	36
21	10	36	32	49	45	35	39	2.4	e27	.00	147	48
22	15	36	16	56	40	26	37	2.0	e17	.00	341	48
23	21	37	20	58	40	26	37	2.0	e10	.00	405	74
24	25	36	39	56	40	22	41	2.4	e7.4	.00	231	61
25	27	37	54	54	44	23	39	1.5	e6.0	.00	182	48
26	31	37	64	68	49	24	35	270	e13	.00	145	53
27	36	37	53	74	45	24	28	533	e9.8	.00	118	96
28	41	36	47	66	45	28	22	555	6.2	.00	95	99
29	37	36	44	62	---	28	16	681	2.4	.00	78	91
30	41	35	42	59	---	30	12	735	.75	.00	66	126
31	48	---	43	46	---	34	---	760	---	.00	48	---
TOTAL	513.0	1202	1177	1553	1547	1148	1129	3770.6	11124.55	1.28	11639.70	1530
MEAN	16.5	40.1	38.0	50.1	55.2	37.0	37.6	122	371	.041	375	51.0
MAX	48	57	64	74	80	48	55	760	746	1.1	841	126
MIN	2.5	35	16	40	38	22	12	1.5	.75	.00	.00	20
AC-FT	1020	2380	2330	3080	3070	2280	2240	7480	22070	2.5	23090	3030

CAL YR 1989 TOTAL 51401.17 MEAN 141 MAX 1120 MIN .00 AC-FT 102000
WTR YR 1990 TOTAL 36335.13 MEAN 99.5 MAX 841 MIN .00 AC-FT 72070

e Estimated

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.

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WDR NM-68-1: 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.--Records excellent. No surface diversions upstream from station.

AVERAGE DISCHARGE.--39 years, 4.10 ft³/s, 2,970 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.--No flow during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

[illegible]

CAL YR 1989	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00
WTR YR 1990	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00

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 (monthend gage heights and contents), October 1965 to current year. Monthend 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, from capacity table dated August 1964, 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, 1989, 1990.

EXTREMES FOR CURRENT YEAR.--No storage reported for the entire year.

CONTENTS, IN ACRE-FEET, AND ELEVATION, IN FEET, WATER YEAR, OCTOBER 1989 TO SEPTEMBER 1990.

Note: No contents at 0800 hours, each day, all year.

RIO GRANDE BASIN

08401150 NORTH SEVEN RIVERS NEAR LAKEWOOD, NM

LOCATION.--Lat 32°38'58", long 104°23'48", in NE¼SE¼NE¼ sec.20, T.19 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on upstream side of pier of bridge on U.S. Highway 285, 1.6 mi north of Seven Rivers, 4.4 mi upstream from mouth, and 2.7 mi southwest of Lakewood. Mouth at Pecos River mile 480.9.

DRAINAGE AREA.--329 mi², approximately.

PERIOD OF RECORD.--August 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records excellent. No surface diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--No flow during period August 1989 to September 1990.

EXTREMES FOR CURRENT YEAR.--No flow during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	.00	.00	.00	.00

WTR YR 1990 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00

RIO GRANDE BASIN

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 3,280 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.--Records excellent. No surface diversions upstream from station, ground-water withdrawals for 240 acres, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 4.50 ft³/s, 3,260 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.--No flow during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	.00	.00	.00	.00

CAL YR 1989 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1990 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00

RIO GRANDE BASIN

08401450 BRANTLEY LAKE NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'48", Long 104°22'43", in NE¼SE¼NE¼ sec.28, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, in control tower at Brantley Dam, 2.4 mi downstream from South Seven Rivers, 4.2 mi southeast of Seven Rivers, 6.0 mi south of Lakewood, 11.5 northwest of Carlsbad, and at mile 478.6.

DRAINAGE AREA.--17,650 mi², approximately (contributing area).

PERIOD OF RECORD.--August 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,202.5 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Lake is formed by a concrete and earthfill dam on Pecos River. Storage began August 31, 1988. Capacity, 966,360 acre-ft, from capacity table dated Aug. 24, 1981, between elevations 3,202.5 ft and 3,303.5 ft (stage at maximum flood). Dead storage 2,010 acre-ft. Lake was created primarily for irrigation storage and flood control.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 42,280 acre-ft, May 30, 31, June 13, 14, 18, 1989, elevation, 3,255.40 ft; minimum contents, 2,040 acre-ft, May 26, 1990, elevation, 3,224.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,270 acre-ft, Aug. 19, 24, elevation, 3,242.30 ft; minimum, 2,040 acre-ft, May 26, elevation, 3,224.60 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 07:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9980	5480	6590	7460	8700	9780	10400	5290	5000	7800	4000	11390
2	9880	5540	6590	7540	8790	9780	10400	5170	5610	7540	4000	10940
3	9570	5610	6590	7540	8790	9880	10400	5230	6290	7380	4040	10620
4	9280	5610	6590	7630	8890	9880	10510	4560	6970	7210	4080	10300
5	8890	5670	6590	7710	8890	9880	10510	4410	7800	7130	4040	10190
6	8510	5740	6660	7710	8890	9980	10190	4510	8240	6970	4170	10090
7	8240	5800	6660	7710	8890	9980	9980	4560	8700	6660	5000	9880
8	7970	5870	6740	7800	8890	9980	9670	4610	9280	6440	5940	9570
9	7710	5940	6740	7800	8890	9980	9370	4670	9880	6150	6970	9280
10	7460	5940	6820	7880	8980	10090	9280	4670	10620	5740	7970	9080
11	7290	5940	6820	7880	9080	10090	9180	4720	11280	5350	8890	8890
12	7050	6010	6820	7880	9080	10090	8610	4610	11730	5050	9780	8790
13	6820	6080	6890	7970	9180	10090	8150	4510	12210	4940	10620	8790
14	6590	6080	6890	7970	9280	10190	7800	4460	12580	4830	11390	8510
15	6360	6080	6970	8060	9280	10190	7380	4270	12950	4770	12090	8420
16	6220	6150	6970	8060	9370	10190	7380	3960	12830	4880	12830	8330
17	6080	6150	6970	8060	9370	10190	7380	3680	12450	4880	13470	8330
18	5940	6150	6970	8150	9470	10190	7290	3490	12090	4880	14140	8330
19	5800	6220	7050	8150	9570	10190	7290	3350	11730	4880	14270	8240
20	5670	6220	7130	8240	9570	10190	7050	3100	11390	4880	14140	8150
21	5540	6290	7130	8240	9570	10190	6740	2900	10830	4880	13870	8150
22	5480	6360	7130	8330	9570	10300	6510	2700	10510	4940	13730	8150
23	5350	6360	7130	8330	9670	10300	6220	2520	10190	4940	14000	8330
24	5290	6360	7130	8420	9670	10300	6290	2250	9880	4880	14270	8150
25	5230	6440	7130	8420	9670	10300	6360	2120	9670	4880	14140	8060
26	5290	6440	7210	8420	9670	10300	6220	2040	9370	4880	13870	7970
27	5350	6510	7210	8510	9670	10300	6010	2460	9080	4770	13600	7880
28	5350	6510	7290	8610	9780	10300	5870	2870	8790	4510	13080	7970
29	5350	6510	7380	8610	---	10300	5740	3240	8510	4220	12700	8150
30	5350	6590	7380	8700	---	10300	5540	3760	8150	3960	12330	8240
31	5350	---	7460	8700	---	10300	---	4360	---	3960	11850	---
MAX	9980	6590	7460	8700	9780	10300	10510	5290	12950	7800	14270	11390
MIN	5230	5480	6590	7460	8700	9780	5540	2040	5000	3960	4000	7880
(†)	-4740	+1240	+870	+1240	+1080	+520	-4760	-1180	+3790	-4190	+7890	-3610

CAL YR 1989 MAX 42280 MIN 5230 (†) -11590
WTR YR 1990 MAX 14270 MIN 2040 (†) -1850

(†) CHANGE IN CONTENTS, IN ACRE-FEET

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 07:00 VALUES

CAL YR 1989	MEAN 3244.24	MAX 3255.40	MIN 3232.90
WTR YR 1990	MEAN 3235.94	MAX 3242.30	MIN 3224.60

RIO GRANDE BASIN

08401500 PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM

(Formerly published as 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, 0.8 mi downstream from Brantley Dam, 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. Prior to October 1988, 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. Prior to October 1988, at site 0.2 mi downstream at same datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Flow completely regulated by Brantley Lake (station 08401450) 0.8 mi upstream since August 1988. Diversions and ground-water withdrawals for irrigation of about 173,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at 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, 0.29 ft³/s, Nov. 25, 26, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 395 ft³/s, Apr. 12; minimum daily, 16 ft³/s, May 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	20	21	22	22	21	20	161	163	218	24	343
2	165	19	20	21	22	19	20	87	104	160	24	325
3	221	18	20	20	22	19	20	300	84	136	24	273
4	272	18	20	21	23	19	32	336	87	106	25	176
5	288	18	20	21	22	19	153	18	184	84	24	132
6	264	18	22	20	22	18	196	17	243	147	23	176
7	236	23	20	20	22	18	224	17	247	188	24	201
8	204	21	20	20	22	19	247	16	214	223	24	200
9	185	21	20	21	22	20	178	17	126	279	25	236
10	183	21	19	21	22	19	139	17	87	296	26	175
11	220	21	19	20	22	18	326	57	187	292	27	124
12	203	21	20	20	22	19	395	70	249	212	26	124
13	182	21	20	21	22	18	349	79	314	131	54	205
14	181	21	20	21	22	18	346	111	355	100	114	219
15	181	20	20	21	20	19	e194	214	356	25	119	163
16	146	20	19	21	22	19	e89	278	322	20	134	110
17	127	21	20	21	22	19	e89	238	302	20	157	59
18	127	20	21	21	22	20	e89	186	236	20	183	44
19	126	21	21	21	22	19	e193	223	291	20	201	90
20	125	21	22	20	22	19	e250	240	350	20	233	80
21	125	21	22	20	22	19	250	235	321	20	201	26
22	125	21	22	21	22	20	248	230	234	20	201	25
23	96	21	21	21	22	20	112	236	194	20	203	87
24	80	21	22	21	22	19	27	236	193	20	203	136
25	64	21	22	21	22	19	73	166	191	20	269	135
26	40	21	22	21	22	19	197	61	190	61	304	110
27	40	21	22	21	22	19	159	195	195	181	335	65
28	62	21	21	21	22	19	135	205	198	234	352	42
29	69	21	22	20	---	19	172	212	232	247	350	26
30	41	21	22	21	---	19	192	202	253	136	346	24
31	30	---	22	22	---	20	---	198	---	38	344	---
TOTAL	4556	614	644	644	615	591	5114	4858	6702	3694	4599	4131
MEAN	147	20.5	20.8	20.8	22.0	19.1	170	157	223	119	148	138
MAX	288	23	22	22	23	21	395	336	356	296	352	343
MIN	30	18	19	20	20	18	20	16	84	20	23	24
AC-FT	9040	1220	1280	1280	1220	1170	10140	9640	13290	7330	9120	8190

CAL YR 1989 TOTAL 54067.0 MEAN 148 MAX 545 MIN 3.7 AC-FT 107200
WTR YR 1990 TOTAL 36762 MEAN 101 MAX 395 MIN 16 AC-FT 72920

e Estimated

RIO GRANDE BASIN

08401500 PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1962, 1978-79, 1981 to current year.

REMARKS.--This station prior to Brantley Dam was called Pecos River below Major Johnson Springs near Carlsbad, NM.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 02...	1415	19	--	4820	8.0	20.0	15.0	9.9	1600	460	120
JAN 08...	1420	21	7950	--	8.0	--	6.5	12.2	--	--	--
MAR 02...	1500	19	7010	--	8.3	20.5	13.0	12.2	2100	540	190
MAY 01...	1530	144	7400	--	7.9	17.5	16.0	13.5	2200	560	200
JUL 17...	1145	>20	2990	--	8.0	25.5	25.5	7.6	1400	430	80
SEP 06...	1045	201	2320	--	7.4	28.0	25.5	7.7	920	270	59

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY 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 02...	480	5	7.1	125	1500	850	0.60	12	3500	280	40
JAN 08...	--	--	--	--	--	--	--	--	--	--	--
MAR 02...	940	9	8.3	110	1700	1400	0.60	8.0	4850	390	40
MAY 01...	960	9	9.5	104	1800	1500	1.0	8.9	5100	440	40
JUL 17...	220	3	6.4	101	1200	310	0.50	11	2320	190	50
SEP 06...	200	3	5.0	87	820	300	0.30	11	1720	170	20

RIO GRANDE BASIN

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 mi², 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. Prior to February 1985, at site 60 ft downstream at same datum.

REMARKS.--Records good. Diversions for irrigation of 220 acres, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 7.72 ft³/s, 5,590 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 floodmarks, on downstream end of bridge pier, by slope-area measurement at site 5 mi upstream.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 30	0015	*472	*6.42				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	.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	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.20
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.21
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	59
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	131

CAL YR 1989 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1990 TOTAL 66.20 MEAN .18 MAX 59 MIN .00 AC-FT 131

RIO GRANDE BASIN

08402000 PECOS RIVER AT DAMSITE 3, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'40", long 104°19'58", 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.--Water-stage recorder. 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.--Records good except for estimated daily discharges, which are fair. Flow regulated by Brantley Lake (station 08401450) 4.8 mi upstream and other reservoirs and diversion dams. 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 temperature were made during the year. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--47 years (water years 1940, 1945-90), 160 ft³/s, 115,900 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 floodmark, from rating curve extended above 25,000 ft³/s on basis of slope-area measurement at gage height 19.53 ft; no flow, Dec. 21, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks that 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, 497 ft³/s, May 3, gage height, 2.82 ft; minimum, 13 ft³/s, Mar. 6, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	22	18	e21	19	22	20	166	167	218	23	336
2	162	19	18	e21	20	18	17	110	115	165	19	320
3	216	18	17	e19	20	17	17	238	87	137	19	272
4	267	18	18	e20	20	17	19	409	91	117	19	187
5	288	18	19	e20	20	17	120	33	156	89	20	130
6	269	17	20	e20	20	16	180	21	232	129	22	160
7	233	21	20	e19	20	17	200	20	236	184	20	190
8	207	21	18	19	20	18	230	19	213	208	20	188
9	184	21	19	18	19	19	184	20	141	267	22	218
10	181	21	19	18	19	19	129	20	89	291	23	188
11	206	21	18	18	19	17	269	47	156	285	23	122
12	207	21	19	18	20	18	397	74	236	234	25	122
13	177	21	19	17	20	17	334	87	286	134	34	178
14	175	20	18	18	20	19	333	100	360	114	97	216
15	176	19	19	18	18	18	220	196	362	44	127	165
16	155	18	19	18	20	19	89	273	322	20	119	117
17	127	18	19	18	20	18	88	244	296	18	149	71
18	126	18	21	19	20	19	87	184	241	17	168	29
19	126	18	20	18	21	17	157	211	260	17	191	84
20	124	18	22	18	21	17	239	234	342	17	221	88
21	125	17	e21	18	21	19	235	231	315	18	189	31
22	129	18	e20	18	21	19	250	224	238	22	188	25
23	108	17	e20	18	21	18	152	229	183	18	188	58
24	84	18	e21	19	21	18	28	230	183	17	188	129
25	75	18	e21	19	20	18	39	191	180	18	241	130
26	43	19	e21	18	21	17	184	55	180	38	292	114
27	41	19	e21	19	22	18	164	179	185	130	318	73
28	54	18	e21	18	22	18	133	199	191	210	343	44
29	79	17	e20	18	---	18	156	203	215	237	340	27
30	45	17	e21	19	---	19	186	198	244	159	340	24
31	36	---	e21	19	---	18	---	189	---	45	337	---
TOTAL	4585	566	608	578	565	559	4856	4834	6502	3617	4325	4036
MEAN	148	18.9	19.6	18.6	20.2	18.0	162	156	217	117	140	135
MAX	288	22	22	21	22	22	397	409	362	291	343	336
MIN	36	17	17	17	18	16	17	19	87	17	19	24
AC-FT	9090	1120	1210	1150	1120	1110	9630	9590	12900	7170	8580	8010

CAL YR 1989 TOTAL 52727.3 MEAN 144 MAX 568 MIN 3.3 AC-FT 104600
WTR YR 1990 TOTAL 35631 MEAN 97.6 MAX 409 MIN 16 AC-FT 70670

e Estimated

RIO GRANDE BASIN

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.--Records good except for estimated daily discharges, which are poor. 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 temperature were made during the year.

AVERAGE DISCHARGE.--51 years, 105 ft³/s, 76,070 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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	e.10	.00	.00	.00	.00	.00	125	116	152	.00	289
2	247	.00	.00	.00	.00	.00	136	98	116	127	.00	246
3	243	.00	.00	.00	.00	.00	182	30	117	134	.00	211
4	240	.00	.00	.00	.00	.00	210	.00	148	129	.00	196
5	229	.00	.00	.00	.00	.00	243	.00	210	169	.00	e198
6	232	.00	.00	.00	.00	.00	235	.00	223	173	.00	e190
7	186	.00	.00	.00	.00	.00	211	.00	185	191	.00	e168
8	141	.00	.00	.00	.00	.00	196	91	148	218	.00	e166
9	161	.00	.00	.00	.00	.00	165	182	137	256	.00	e148
10	180	.00	.00	.00	.00	.00	230	203	162	243	.00	e118
11	196	.00	.00	.00	.00	.00	290	150	183	194	.00	e155
12	189	.00	.00	.00	.00	.00	291	127	221	185	.00	e181
13	177	.00	.00	.00	.00	.00	267	119	265	137	93	e179
14	167	.00	.00	.00	.00	.00	202	126	269	115	146	e168
15	159	.00	.00	.00	.00	.00	152	166	262	73	143	e155
16	158	.00	.00	.00	.00	.00	159	189	215	40	172	e119
17	163	.00	.00	.00	.00	.00	177	186	203	.00	195	e89
18	151	.00	.00	.00	.00	.00	168	184	268	.00	191	e95
19	141	.00	.00	.00	.00	.00	162	199	284	.00	193	e89
20	155	.00	.00	.00	.00	.00	164	190	270	.00	194	e62
21	132	.00	.00	.00	.00	.00	148	208	233	.00	149	e.00
22	97	.00	.00	.00	.00	.00	149	211	189	.00	161	e32
23	86	.00	.00	.00	.00	.00	165	231	166	.00	201	e102
24	99	.00	.00	.00	.00	.00	194	204	147	.00	229	e76
25	125	.00	.00	.00	.00	.00	192	177	152	.00	217	e57
26	149	.00	.00	.00	.00	.00	172	181	184	108	222	e63
27	123	.00	.00	.00	.00	.00	167	159	221	160	309	e62
28	91	.00	.00	.00	.00	.00	153	137	220	175	311	e35
29	81	.00	.00	.00	.00	.00	129	130	191	143	309	e.00
30	55	.00	.00	.00	.00	.00	119	167	177	99	303	e.00
31	e19	---	.00	.00	---	.00	---	146	---	53	310	---
TOTAL	4714	0.10	0.00	0.00	0.00	0.00	5428.00	4316.00	5882	3274.00	4048.00	3649.00
MEAN	152	.003	.000	.000	.000	.000	181	139	196	106	131	122
MAX	247	.10	.00	.00	.00	.00	291	231	284	256	311	289
MIN	19	.00	.00	.00	.00	.00	.00	.00	116	.00	.00	.00
AC-FT	9350	.2	.00	.00	.00	.00	10770	8560	11670	6490	8030	7240

CAL YR 1989 TOTAL 47681.85 MEAN 131 MAX 365 MIN .00 AC-FT 94580

WTR YR 1990 TOTAL 31311.10 MEAN 85.8 MAX 311 MIN .00 AC-FT 62110

e Estimated

RIO GRANDE BASIN

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 (monthend gage heights and contents), October 1965 to current year. Monthend 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 the 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, 4,330 acre-ft, from capacity table put into use January 1, 1982, 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 is passing through reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,330 acre-ft, Apr. 2, May 5, 6, gage height, 18.00 ft; minimum, 616 acre-ft, Oct. 28 to Nov. 3, gage height, 15.30 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	616	1090	1680	1950	2180	2250	1150	1150	1030	1030	710
2	975	616	1090	1680	1950	2180	2330	1150	1210	1210	1030	811
3	811	616	1150	1680	2030	2250	1960	1150	1150	1210	1030	864
4	710	662	1150	1680	2030	2250	1540	1750	1090	1210	1090	975
5	811	662	1150	1680	2030	2250	1150	2330	919	1150	1090	864
6	919	662	1210	1750	2030	2250	1030	2330	864	919	1090	760
7	975	710	1210	1750	2030	2250	919	2250	864	919	1150	710
8	1030	710	1210	1750	2030	2250	919	2250	975	811	1150	760
9	1090	710	1280	1750	2030	2250	975	1960	1090	760	1150	811
10	1030	760	1280	1750	2030	2250	975	1610	975	760	1150	975
11	1030	760	1280	1750	2100	2250	710	1210	811	811	1150	975
12	1030	760	1340	1750	2100	2250	811	975	811	975	1210	919
13	1090	811	1340	1820	2100	2250	919	919	710	1030	1210	760
14	1090	811	1340	1820	2100	2250	1030	864	811	1030	975	811
15	1150	811	1410	1820	2100	2250	1340	811	864	1030	919	864
16	1210	864	1410	1820	2100	2250	1340	811	975	975	864	864
17	1210	919	1410	1820	2180	2250	1150	975	1150	919	811	864
18	1150	919	1410	1820	2180	2250	975	975	1210	919	710	864
19	1150	919	1410	1820	2180	2250	864	975	975	919	710	710
20	1090	975	1470	1820	2180	2250	919	1030	975	919	662	662
21	1030	975	1470	1890	2180	2250	1030	1030	1090	919	710	760
22	1090	975	1470	1890	2180	2250	1210	1030	1150	975	811	760
23	1150	975	1470	1890	2180	2250	1890	1030	1210	975	811	710
24	1150	1030	1540	1890	2180	2250	1680	975	1210	975	760	662
25	1090	1030	1540	1890	2180	2250	1280	1090	1210	975	662	710
26	975	1030	1540	1890	2180	2250	1090	975	1210	760	760	864
27	760	1030	1540	1890	2180	2250	1150	811	1210	760	760	919
28	616	1030	1610	1890	2180	2250	1090	811	1090	760	710	919
29	616	1090	1610	1950	---	2250	975	919	975	811	760	975
30	616	1090	1610	1950	---	2250	1030	1030	1030	975	710	975
31	616	---	1610	1950	---	2250	---	1090	---	1030	710	---
MAX	1210	1090	1610	1950	2180	2250	2330	2330	1210	1210	1210	975
MIN	616	616	1090	1680	1950	2180	710	811	710	760	662	662
(†)	-359	+474	+520	+340	+230	+70	-1220	+60	-60	0	-320	+265

CAL YR 1989 MAX 2710 MIN 63 (†) +1501
WTR YR 1990 MAX 2330 MIN 616 (†) 0

(†) CHANGE IN CONTENTS, IN ACRE-FEET

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.10	15.30	16.20	17.10	17.50	17.80	17.90	16.30	16.30	16.30	16.10	15.50
2	16.00	15.30	16.20	17.10	17.50	17.80	18.00	16.30	16.40	16.40	16.10	15.70
3	15.70	15.30	16.30	17.10	17.60	17.90	17.50	16.30	16.30	16.40	16.10	15.80
4	15.50	15.40	16.30	17.10	17.60	17.90	16.90	17.20	16.20	16.40	16.20	16.00
5	15.70	15.40	16.30	17.10	17.60	17.90	16.30	18.00	15.90	16.30	16.20	15.80
6	15.90	15.40	16.40	17.20	17.60	17.90	16.10	18.00	15.80	15.90	16.20	15.60
7	16.00	15.50	16.40	17.20	17.60	17.90	15.90	17.90	15.80	15.90	16.30	15.50
8	16.10	15.50	16.40	17.20	17.60	17.90	15.90	17.90	16.00	15.70	16.30	15.60
9	16.20	15.50	16.50	17.20	17.60	17.90	16.00	17.50	16.20	15.60	16.30	15.70
10	16.10	15.60	16.50	17.20	17.60	17.90	16.00	17.00	16.00	15.60	16.30	16.00
11	16.10	15.60	16.50	17.20	17.70	17.90	15.50	16.40	15.70	15.70	16.30	16.00
12	16.10	15.60	16.60	17.20	17.70	17.90	15.70	16.00	15.70	16.00	16.40	15.90
13	16.20	15.70	16.60	17.30	17.70	17.90	15.90	15.90	15.50	16.10	16.40	15.60
14	16.20	15.70	16.60	17.30	17.70	17.90	16.10	15.80	15.70	16.10	16.00	15.70
15	16.30	15.70	16.70	17.30	17.70	17.90	16.60	15.70	15.80	16.10	15.90	15.80
16	16.40	15.80	16.70	17.30	17.70	17.90	16.60	15.70	16.00	16.00	15.80	15.80
17	16.40	15.90	16.70	17.30	17.80	17.90	16.30	16.00	16.30	15.90	15.70	15.80
18	16.30	15.90	16.70	17.30	17.80	17.90	16.00	16.00	16.40	15.90	15.50	15.80
19	16.30	15.90	16.70	17.30	17.80	17.90	15.80	16.00	16.00	15.90	15.50	15.50
20	16.20	16.00	16.80	17.30	17.80	17.90	15.90	16.10	16.00	15.90	15.40	15.40
21	16.10	16.00	16.80	17.40	17.80	17.90	16.10	16.10	16.20	15.90	15.50	15.60
22	16.20	16.00	16.80	17.40	17.80	17.90	16.40	16.10	16.30	16.00	15.70	15.60
23	16.30	16.00	16.80	17.40	17.80	17.90	17.40	16.10	16.40	16.00	15.70	15.50
24	16.30	16.10	16.90	17.40	17.80	17.90	17.10	16.00	16.40	16.00	15.60	15.40
25	16.20	16.10	16.90	17.40	17.80	17.90	16.50	16.20	16.40	16.00	15.40	15.50
26	16.00	16.10	16.90	17.40	17.80	17.90	16.20	16.00	16.40	15.60	15.60	15.80
27	15.60	16.10	16.90	17.40	17.80	17.90	16.30	15.70	16.40	15.60	15.60	15.90
28	15.30	16.10	17.00	17.40	17.80	17.90	16.20	15.70	16.20	15.50	15.50	15.90
29	15.30	16.20	17.00	17.50	---	17.90	16.00	15.90	16.00	15.70	15.60	16.00
30	15.30	16.20	17.00	17.50	---	17.90	16.10	16.10	16.10	16.00	15.50	16.00
31	15.30	---	17.00	17.50	---	17.90	---	16.20	---	16.10	15.50	---
MEAN	15.99	15.76	16.65	17.29	17.70	17.89	16.37	16.39	16.09	15.95	15.88	15.72
MAX	16.40	16.20	17.00	17.50	17.80	17.90	18.00	18.00	16.40	16.40	16.40	16.00
MIN	15.30	15.30	16.20	17.10	17.50	17.80	15.50	15.70	15.50	15.50	15.40	15.40
CAL YR 1989	MEAN 15.73		MAX 18.50		MIN 12.00							
WTR YR 1990	MEAN 16.47		MAX 18.00		MIN 15.30							

RIO GRANDE BASIN

267

08404000 PECOS RIVER BELOW AVALON DAM, NM

LOCATION.--Lat 32°28'55", long 104°15'47", in SW/SE/NE 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.--Records good. Flow completely regulated by Lake Avalon (station 08403800) 0.9 mi upstream. 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). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 35.0 ft³/s, 25,360 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 daily discharge, 1.2 ft³/s, Apr. 23; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	1.57	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	1.2	.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	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.059	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	3.5	.00	.00	.00	.00	.00

CAL YR 1989 TOTAL 0.19 MEAN .001 MAX .19 MIN .00 AC-FT .4
WTR YR 1990 TOTAL 1.77 MEAN .005 MAX 1.2 MIN .00 AC-FT 3.5

RIO GRANDE BASIN

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 bridge on Canal Street 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.--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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 7.04 ft³/s, 5,100 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 discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 30	0345	*760	*4.31	No other peak greater than base discharge.			

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	e.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	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	e.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	e.00	.00	---	.00	.00	.00	.00	.00	.00	93
31	.00	---	e.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.10
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	93
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	184

CAL YR 1989 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1990 TOTAL 93.00 MEAN .25 MAX 93 MIN .00 AC-FT 184

e Estimated

RIO GRANDE BASIN

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.--Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by Lake Avalon (station 08403800) 8.1 mi upstream 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 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. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--20 years, 60.6 ft³/s, 43,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft³/s, Aug. 10, 1984, gage height, 15.22 ft, from floodmarks, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow; 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, 448 ft³/s, Sept. 30, gage height, 3.01 ft; no flow, July 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	17	18	17	14	17	19	8.9	3.3	11	16
2	17	15	18	19	17	16	14	16	6.9	2.2	12	e13
3	18	16	17	19	16	16	13	15	7.8	1.9	18	e11
4	17	18	19	17	16	16	14	13	9.4	2.0	14	e9.0
5	17	19	19	19	18	17	17	14	11	2.6	17	e8.3
6	17	19	19	16	16	17	11	12	8.9	2.6	19	7.6
7	16	19	21	17	17	16	13	13	7.7	2.4	e14	9.0
8	17	19	18	18	18	16	14	13	7.2	1.3	e13	8.9
9	16	19	20	17	18	16	15	12	6.9	.26	e12	9.4
10	17	19	21	17	17	17	15	12	7.0	.00	e12	11
11	17	19	20	18	17	18	17	14	7.1	.75	e12	9.8
12	17	20	17	17	16	16	15	14	7.2	6.5	e11	10
13	17	20	20	17	17	17	14	16	6.9	2.1	e11	10
14	17	19	20	19	17	15	13	14	5.8	5.8	23	11
15	18	18	20	18	19	15	13	14	5.3	27	15	12
16	18	18	18	18	14	15	14	13	6.0	6.5	14	13
17	17	19	19	16	16	16	13	13	3.7	6.4	20	11
18	20	19	21	20	16	18	11	16	3.2	6.9	15	12
19	21	19	18	16	16	15	13	14	3.1	7.3	14	12
20	18	20	20	15	16	16	15	13	4.5	7.6	15	13
21	18	21	20	15	15	15	15	12	2.3	10	16	14
22	18	18	18	16	15	15	20	10	3.3	17	17	12
23	16	17	18	16	15	16	32	9.4	2.2	8.0	18	14
24	19	19	19	19	16	15	16	9.5	2.6	8.7	20	19
25	21	20	18	13	16	15	14	8.2	3.5	9.5	22	16
26	21	20	18	17	16	15	14	7.6	3.9	11	22	16
27	20	20	19	17	17	17	14	6.9	2.8	12	20	15
28	21	17	19	16	15	19	14	6.8	3.1	10	16	15
29	22	16	20	18	---	19	13	9.2	2.7	11	16	16
30	18	17	21	15	---	17	16	7.1	3.0	17	16	79
31	18	---	19	17	---	16	---	8.9	---	12	15	---
TOTAL	560	559	591	530	459	501	449	375.6	163.9	221.61	490	433.0
MEAN	18.1	18.6	19.1	17.1	16.4	16.2	15.0	12.1	5.46	7.15	15.8	14.4
MAX	22	21	21	20	19	19	32	19	11	27	23	79
MIN	16	15	17	13	14	14	11	6.8	2.2	.00	11	7.6
AC-FT	1110	1110	1170	1050	910	994	891	745	325	440	972	859

CAL YR 1989 TOTAL 7514 MEAN 20.6 MAX 42 MIN 12 AC-FT 14900
WTR YR 1990 TOTAL 5333.11 MEAN 14.6 MAX 79 MIN .00 AC-FT 10580

e Estimated

RIO GRANDE BASIN

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--Replaces station 08405000 Pecos River at Carlsbad, New Mexico at which sample collection was discontinued after September, 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 07...	1020	17	3110	--	7.9	18.0	13.5	9.1	1200	300	100
JAN 09...	1030	18	2710	--	8.0	14.5	7.0	11.6	1000	260	92
MAR 08...	1215	16	2890	--	7.0	23.0	14.5	10.8	950	240	86
MAY 03...	1330	16	--	2670	8.0	20.5	19.0	9.6	970	240	90
JUL 18...	1220	7.2	3240	--	7.8	31.5	26.5	7.7	1100	260	110
SEP 06...	1325	7.6	--	3240	7.6	36.0	28.0	7.5	1100	270	99

DATE	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 07...	300	4	4.0	163	990	500	0.70	17	2310	220	30
JAN 09...	250	3	4.0	121	770	430	0.50	15	1890	190	80
MAR 08...	230	3	3.5	139	720	380	0.50	15	1760	170	20
MAY 03...	260	4	4.4	124	780	400	0.70	13	1860	170	30
JUL 18...	320	4	5.5	123	910	490	0.50	13	2180	230	30
SEP 06...	300	4	5.0	157	950	480	0.40	17	2220	220	30

RIO GRANDE BASIN

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 Cippolletti weir at site 0.3 mi downstream at different datum.

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--43 years (water years 1948-90), 13.1 ft³/s, 9,490 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 greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 17	0145	*2,520	*5.95	No other peak greater than base discharge.			

Minimum discharge, 6.9 ft³/s, part or all of each day, Jun. 27-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	11	13	13	14	11	12	11	13	8.6	11	12
2	8.9	11	13	13	14	11	13	12	12	8.5	11	12
3	8.8	11	13	12	14	12	13	12	12	8.5	16	12
4	8.8	11	13	12	13	12	13	12	12	8.5	22	13
5	9.1	11	13	12	14	12	13	12	12	8.4	12	13
6	9.0	11	13	12	14	12	12	12	12	8.5	18	13
7	8.8	12	13	12	14	11	13	12	12	8.5	17	13
8	9.1	11	13	12	14	11	13	12	12	8.5	15	13
9	9.2	11	13	12	14	11	13	12	12	8.5	14	12
10	9.3	11	13	13	14	11	12	12	12	8.6	13	12
11	9.2	11	12	13	14	11	12	12	12	8.5	12	12
12	9.2	11	11	13	14	11	12	11	12	9.5	13	12
13	9.2	11	12	13	14	11	13	11	11	9.5	13	12
14	9.2	11	13	13	14	11	13	11	11	9.3	13	12
15	9.3	11	13	14	14	11	13	11	11	10	13	12
16	9.2	12	13	14	14	11	13	11	11	10	13	18
17	9.4	13	13	14	14	11	12	10	11	10	12	507
18	9.5	12	13	14	15	11	13	9.5	11	9.5	18	47
19	9.7	12	13	15	15	11	13	9.1	9.8	9.5	17	19
20	9.9	13	13	15	15	11	12	8.4	8.7	9.5	13	14
21	10	13	13	15	15	11	11	7.8	8.5	9.5	17	13
22	10	13	13	15	15	11	11	7.8	8.1	9.5	22	21
23	10	13	13	15	12	11	11	7.8	7.8	9.5	15	16
24	10	13	13	13	11	11	10	7.8	7.8	9.4	16	13
25	10	13	13	12	11	11	9.9	7.8	7.5	8.4	13	12
26	10	13	13	12	11	11	9.9	7.8	7.5	7.7	11	12
27	10	13	13	14	11	11	10	7.5	7.1	7.5	11	11
28	11	13	13	15	12	11	9.9	7.5	6.9	7.5	10	11
29	11	13	13	14	---	11	9.8	90	6.9	7.5	10	13
30	11	13	14	14	---	11	9.7	45	7.7	9.0	10	42
31	11	---	13	14	---	11	---	17	---	14	11	---
TOTAL	297.7	358	400	414	380	345	355.2	436.8	305.3	279.9	432	954
MEAN	9.60	11.9	12.9	13.4	13.6	11.1	11.8	14.1	10.2	9.03	13.9	31.8
MAX	11	13	14	15	15	12	13	90	13	14	22	507
MIN	8.8	11	11	12	11	11	9.7	7.5	6.9	7.5	10	11
AC-FT	590	710	793	821	754	684	705	866	606	555	857	1890

CAL YR 1989 TOTAL 4619.6 MEAN 12.7 MAX 118 MIN 7.8 AC-FT 9160
WTR YR 1990 TOTAL 4957.9 MEAN 13.6 MAX 507 MIN 6.9 AC-FT 9830

RIO GRANDE BASIN

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.--Water-discharge 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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years (water years 1921-36), 274 ft³/s, 198,500 acre-ft/yr, prior to completion of Lake Summer. 54 years (water years 1938-90), 165 ft³/s, 119,500 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, 960 ft³/s, at 0830 hours Sept. 17, gage height, 7.17 ft; minimum, 8.1 ft³/s, Jun. 22, 24, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	55	59	72	53	47	39	e18	14	10	33	18
2	40	57	62	62	54	38	39	e19	13	10	28	17
3	40	57	65	57	55	32	42	20	14	10	28	17
4	41	55	71	60	53	31	41	26	15	9.9	26	16
5	39	57	72	58	50	32	29	24	15	9.5	32	17
6	38	57	74	57	50	32	26	21	15	9.5	54	17
7	38	61	75	58	53	33	25	20	14	9.7	36	17
8	37	65	74	57	54	32	26	20	13	9.3	37	18
9	38	65	74	57	58	31	23	19	13	9.3	33	23
10	39	65	73	57	57	32	20	16	12	9.0	31	22
11	40	66	73	57	53	33	20	15	12	9.0	30	22
12	39	64	70	56	53	33	19	15	12	17	30	23
13	39	64	69	54	53	32	19	14	11	14	30	24
14	39	66	70	47	53	31	18	14	11	11	30	24
15	37	67	72	53	52	34	19	14	11	13	30	24
16	37	66	71	55	53	33	26	14	10	12	33	58
17	40	68	70	55	49	33	32	15	9.9	12	33	366
18	39	69	72	55	41	34	28	15	9.6	11	28	67
19	36	71	71	61	48	38	23	14	9.3	11	25	31
20	35	71	64	62	50	43	25	13	9.1	11	26	26
21	38	68	62	57	53	43	26	13	9.0	11	25	27
22	41	60	64	55	61	44	24	13	9.0	13	24	32
23	41	58	67	56	61	44	27	13	9.0	12	23	34
24	44	57	67	56	59	43	29	12	8.4	12	22	33
25	47	57	68	55	57	42	35	12	8.5	13	20	33
26	47	60	68	55	52	42	28	12	9.0	13	19	30
27	51	61	65	51	47	43	24	12	9.0	13	18	30
28	57	59	69	53	48	44	25	12	9.2	13	18	32
29	57	58	71	53	---	45	e20	20	9.8	12	19	43
30	57	58	70	54	---	45	e19	21	10	16	19	67
31	56	---	71	54	---	40	---	20	---	23	19	---
TOTAL	1307	1862	2143	1749	1480	1159	796	506	333.8	368.2	859	1208
MEAN	42.2	62.1	69.1	56.4	52.9	37.4	26.5	16.3	11.1	11.9	27.7	40.3
MAX	57	71	75	72	61	47	42	26	15	23	54	366
MIN	35	55	59	47	41	31	18	12	8.4	9.0	18	16
AC-FT	2590	3690	4250	3470	2940	2300	1580	1000	662	730	1700	2400

CAL YR 1989 TOTAL 17741 MEAN 48.6 MAX 99 MIN 23 AC-FT 35190
WTR YR 1990 TOTAL 13771.0 MEAN 37.7 MAX 366 MIN 8.4 AC-FT 27310

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
NOV 06...	1215	56	7000	8.0	27.5	14.5	10	2200	540	210	850
DEC 27...	1330	63	5400	8.3	14.5	5.5	13.4	1800	460	170	680
MAR 05...	1315	32	7000	8.6	27.0	15.0	--	2000	470	200	880
MAY 02...	1400	19	8000	8.3	15.0	17.5	11.4	2200	500	220	990
JUL 16...	1250	12	9750	8.3	27.0	27.0	11.6	2400	600	230	1300
AUG 31...	1130	19	9800	8.0	32.0	28.5	7.3	2300	550	230	1200

DATE	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...	8	14	156	2000	1500	0.80	12	5220	450	50
DEC 27...	7	11	192	1600	1200	<0.10	16	4250	380	30
MAR 05...	9	17	126	1600	1400	0.60	2.8	4650	450	40
MAY 02...	9	18	126	1600	1600	1.1	4.3	5010	520	50
JUL 16...	11	29	137	2000	2300	0.20	15	6560	630	40
AUG 31...	11	29	138	2000	2200	0.50	16	6310	630	40

RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM

LOCATION.--Lat 32°11'19", long 103°58'43", in SW/4SW/4NW/4 sec.27, T.24 S., R.29 E., Eddy County, Hydrologic Unit 13060011, on right bank 550 ft upstream from Pierce Canyon Crossing, 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 (levels by U.S. Bureau of Reclamation). July 1938 to Sept. 1941, at datum 1.19 ft higher.

REMARKS.--Water-discharge records good except those above 300 ft³/s, which are fair. 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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years (water years 1939-41, 1952-90), 131 ft³/s, 94,910 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, 0.54 ft³/s, May 30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 727 ft³/s, at 1330 hours Sept. 17, gage height, 4.36 ft³/s; minimum, 1.8 ft³/s, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	57	64	67	50	52	41	18	13	5.6	43	6.7
2	37	57	67	65	50	51	40	18	13	5.7	39	7.3
3	37	58	70	59	51	43	42	19	12	4.9	38	8.9
4	38	58	71	57	50	38	45	20	12	4.8	41	9.6
5	39	58	72	57	49	35	39	22	13	4.6	43	12
6	40	59	73	55	47	35	29	21	15	4.3	53	12
7	41	59	74	55	49	36	25	20	15	4.1	55	12
8	44	65	74	55	50	37	24	19	15	4.1	46	14
9	44	67	73	55	53	38	23	18	14	4.0	43	16
10	41	66	73	55	56	37	20	17	13	4.0	39	19
11	40	66	71	54	55	37	18	15	13	4.4	36	20
12	40	67	70	53	52	37	18	14	12	10	35	27
13	40	64	69	53	52	36	18	13	11	15	34	25
14	41	65	69	51	51	35	18	14	7.9	16	33	25
15	41	67	70	48	52	34	17	14	6.2	16	34	25
16	41	67	70	51	51	34	19	14	5.4	15	34	40
17	42	67	69	52	52	33	25	14	4.5	14	37	394
18	41	68	67	53	47	35	28	15	3.8	13	36	142
19	38	69	68	55	46	38	27	15	3.4	12	30	56
20	34	70	68	59	50	43	24	15	3.6	12	27	35
21	35	70	66	58	52	45	25	14	3.1	12	27	31
22	38	67	64	54	58	45	25	13	3.1	14	26	36
23	41	63	64	53	63	45	21	11	2.5	14	24	37
24	42	64	65	53	62	42	18	9.4	2.5	14	23	39
25	44	64	65	52	61	42	23	7.7	2.3	14	20	36
26	45	61	66	50	59	44	28	6.1	2.5	14	18	34
27	49	63	65	49	55	44	25	4.5	3.1	15	17	32
28	55	67	64	48	52	46	22	3.5	3.8	15	16	34
29	58	65	67	49	---	46	21	8.4	5.1	19	16	51
30	58	64	68	49	---	47	19	6.2	5.8	24	17	90
31	58	---	66	49	---	44	---	8.4	---	27	14	---
TOTAL	1317	1922	2122	1673	1475	1254	767	427.2	239.6	355.5	994	1326.5
MEAN	42.5	64.1	68.5	54.0	52.7	40.5	25.6	13.8	7.99	11.5	32.1	44.2
MAX	58	70	74	67	63	52	45	22	15	27	55	394
MIN	34	57	64	48	46	33	17	3.5	2.3	4.0	14	6.7
AC-FT	2610	3810	4210	3320	2930	2490	1520	847	475	705	1970	2630

CAL YR 1989 TOTAL 17841 MEAN 48.9 MAX 101 MIN 23 AC-FT 35390
WTR YR 1990 TOTAL 13872.8 MEAN 38.0 MAX 394 MIN 2.3 AC-FT 27520

RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 0.2 mi downstream from streamflow gaging station.

PERIOD OF RECORD.--Water years 1938-41, 1952 to current year.

REMARKS.--No significant inflow between streamflow gaging station and sampling cross-section.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
NOV 06...	1350	60	10100	8.2	28.0	15.0	10.2	2400	550	240	1500
DEC 27...	1530	64	8100	8.4	15.5	5.5	13.8	1900	450	180	1200
MAR 05...	1430	34	9500	8.1	27.0	18.0	9.8	2000	450	210	1400
MAY 03...	1045	19	15100	8.4	15.0	17.5	8.2	2600	550	290	2500
JUL 16...	1515	15	24500	8.6	30.0	30.0	8.9	3200	700	360	4600
AUG 31...	1230	16	23000	8.0	34.5	28.0	7.4	2700	570	310	3600

DATE	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...	13	27	158	2100	2500	0.80	10	7020	580	60
DEC 27...	12	36	122	1500	2200	0.70	4.2	5640	560	40
MAR 05...	14	23	170	1600	1900	0.60	14	5700	480	50
MAY 03...	21	95	134	2100	4400	1.0	3.5	10000	840	70
JUL 16...	35	170	77	2700	7500	0.60	0.40	16100	1400	150
AUG 31...	30	130	87	2300	6000	0.50	13	13000	1200	80

RIO GRANDE BASIN

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.--Water-discharge records good. 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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 160 ft³/s, 115,920 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, 964 ft³/s, at 0445 hours Sept. 17, gage height, 6.58 ft; minimum, 1.3 ft³/s, June 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	56	61	69	51	49	44	21	6.0	1.7	40	16
2	34	54	61	70	51	49	41	21	5.7	1.8	49	9.4
3	35	56	66	65	52	46	42	20	5.7	2.0	42	8.7
4	35	57	66	59	52	37	44	19	5.7	2.2	44	11
5	37	56	68	59	51	33	45	20	5.6	2.4	53	11
6	36	57	69	58	50	32	35	22	5.6	2.6	65	12
7	38	57	70	56	48	33	28	22	5.6	2.7	67	13
8	39	60	70	57	50	34	25	21	5.6	2.9	55	13
9	45	65	70	56	52	36	24	22	5.6	2.9	51	15
10	41	65	70	56	55	35	23	21	5.6	2.9	47	18
11	38	65	69	56	56	35	22	21	5.6	2.8	42	23
12	37	66	69	55	54	35	21	19	5.6	4.5	40	27
13	38	63	67	54	52	35	20	17	5.3	14	39	31
14	37	62	66	54	51	34	20	14	5.3	13	39	31
15	39	63	66	50	51	32	19	13	5.1	17	38	30
16	38	65	67	51	50	32	19	12	5.1	14	38	33
17	38	65	67	53	51	32	18	12	4.6	13	50	546
18	39	66	67	55	48	32	26	12	4.6	12	49	327
19	37	67	67	55	44	34	29	11	4.2	11	39	95
20	34	68	68	59	45	39	27	11	3.9	10	33	53
21	32	68	67	61	48	43	25	11	3.5	26	32	54
22	34	68	66	58	51	45	26	11	3.3	89	31	53
23	37	61	64	55	57	45	26	11	2.9	12	30	43
24	40	60	66	55	60	43	22	11	2.6	13	28	45
25	41	62	66	53	58	41	20	11	2.5	13	27	44
26	44	59	67	53	58	43	25	10	2.1	12	24	41
27	44	58	68	52	55	44	27	9.3	1.7	13	21	37
28	50	61	66	49	50	46	23	8.2	1.5	14	20	36
29	55	62	68	50	---	47	22	7.3	1.4	43	19	39
30	55	61	72	51	---	48	21	6.7	1.5	130	20	155
31	56	---	70	51	---	48	---	6.3	---	31	21	---
TOTAL	1237	1853	2084	1735	1451	1217	809	453.8	129.0	571.9	1193	1870.1
MEAN	39.9	61.8	67.2	56.0	51.8	39.3	27.0	14.6	4.30	18.4	38.5	62.3
MAX	56	68	72	70	60	49	45	22	6.0	130	67	546
MIN	32	54	61	49	44	32	18	6.3	1.4	1.7	19	8.7
AC-FT	2450	3680	4130	3440	2880	2410	1600	900	256	1130	2370	3710

CAL YR 1989 TOTAL 17711 MEAN 48.5 MAX 100 MIN 20 AC-FT 35130
WTR YR 1990 TOTAL 14603.8 MEAN 40.0 MAX 546 MIN 1.4 AC-FT 28970

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
OCT 31...	1400	56	11300	7.9	14.5	14.0	4.7	9.4	2400	2300	570	240	
DEC 28...	1430	66	8500	8.2	19.5	6.0	0.20	14.7	2000	1800	470	200	
FEB 28...	1315	50	9000	7.9	8.0	11.0	1.5	8.6	1900	1800	450	200	
APR 26...	1300	26	17400	8.4	25.0	21.5	21	10.4	2500	2400	560	270	
JUN 28...	1430	1.5	31300	8.0	42.0	28.5	4.6	7.8	4000	3900	860	440	
AUG 30...	0950	21	17600	8.1	26.0	26.5	9.2	5.3	2800	2700	580	320	
DATE		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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
OCT 31...	1700	15	45	188	0	154	153	2200	2900	0.90	13	8280	
DEC 28...	1200	12	34	198	0	162	178	2200	1600	0.70	13	6210	
FEB 28...	1400	14	4.0	164	0	134	127	1700	2500	<0.10	5.6	6890	
APR 26...	2900	25	92	110	19	122	137	2300	4800	1.3	5.0	12100	
JUN 28...	5500	38	230	110	0	90	96	3100	10000	1.0	9.3	17400	
AUG 30...	2900	24	100	139	0	114	105	2200	4700	2.9	6.4	12300	
DATE		SOLIDS, SUM OF CONSTITUENTS, 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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
OCT 31...	7770	0.330	0.060	0.390	0.160	<0.010	0.84	0.050	0.020	30	<1	<100	
DEC 28...	5820	1.96	0.040	2.00	0.040	0.030	1.4	0.050	<0.010	--	--	--	
FEB 28...	6340	0.560	0.040	0.600	0.350	0.380	0.65	<0.010	0.020	--	--	--	
APR 26...	11000	0.220	0.080	0.300	0.040	0.010	1.5	0.080	<0.010	80	1	<100	
JUN 28...	20200	--	<0.010	<0.100	0.060	0.080	1.6	0.040	<0.010	<10	2	200	
AUG 30...	10900	--	0.010	<0.100	0.070	0.050	1.0	0.030	0.040	340	2	<100	

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
OCT 31...	<10	<2.0	3	<2	1	60	<2	90	20	<0.1	2
DEC 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 28...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	<10	11	<2	<1	2	60	31	100	30	0.2	4
JUN 28...	<10	<1.0	5	4	8	130	<4	220	60	0.1	2
AUG 30...	<10	3.0	7	<1	3	350	<2	110	130	0.1	1

DATE	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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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...	<2	2	<2.0	8900	<25	30	1000	151	96	<1	36
DEC 28...	--	--	--	--	--	--	825	146	93	<1	K1
FEB 28...	--	--	--	--	--	--	646	87	95	<1	K5
APR 26...	11	2	<1.0	9400	24	<10	1660	115	97	>320	320
JUN 28...	<4	<1	<4.0	13000	85	30	115	0.46	69	K1	<1
AUG 30...	<2	<1	<2.0	8700	15	30	251	14	93	<3	K100

RIO GRANDE BASIN

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.--Records good. One small upstream diversion. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years (water years 1938-90), 12.4 ft³/s, 8,980 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 17	0215	*1,070	*6.44				

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.9	2.5	2.5	2.7	2.5	2.7	1.4	.12	.00	4.8	.84
2	.84	2.1	2.5	2.4	2.7	2.5	2.8	1.6	.03	.00	5.3	.82
3	.85	2.2	2.5	2.5	2.5	2.5	3.0	1.8	.00	.00	2.6	.84
4	.86	2.3	2.4	2.4	2.3	2.6	3.1	1.9	.00	.00	2.8	3.2
5	.87	2.3	2.5	2.3	2.4	2.7	2.8	1.8	.00	.00	5.3	1.4
6	.90	2.3	2.5	2.3	2.5	2.7	2.7	1.6	.00	.00	176	1.3
7	.92	2.3	2.3	2.3	2.5	2.4	2.8	1.5	.00	.00	31	1.1
8	.99	2.3	2.3	2.4	2.6	2.4	3.1	1.5	.00	.00	11	1.1
9	1.1	2.4	2.3	2.4	2.7	2.6	3.2	1.5	.00	.00	4.4	1.1
10	1.1	2.4	2.3	2.4	2.6	2.7	3.1	1.3	.00	.00	2.4	1.0
11	1.0	2.5	2.1	2.5	2.5	2.6	3.2	1.3	.00	.00	1.8	.89
12	.93	2.4	2.2	2.3	2.4	2.5	3.5	1.2	.00	.00	1.5	.81
13	.89	2.5	2.3	2.5	2.4	2.5	3.4	1.3	.00	.00	1.4	.81
14	.89	2.2	2.4	2.6	2.4	2.4	3.4	1.3	.00	.00	1.5	37
15	.95	2.3	2.4	2.7	2.2	2.2	3.4	1.1	.00	.00	1.4	8.0
16	1.0	2.4	2.5	2.7	2.1	2.3	3.2	.91	.00	13	1.2	6.2
17	1.1	2.5	2.5	2.7	2.1	2.5	3.3	.83	.00	7.1	58	208
18	1.2	2.6	2.5	2.7	2.2	2.6	3.5	.98	.00	2.5	12	9.3
19	1.3	2.5	2.6	2.8	2.3	2.3	3.5	.92	.00	1.4	2.9	7.8
20	1.5	2.6	2.5	2.5	2.2	2.3	3.4	.87	.00	.92	1.7	27
21	1.6	2.7	2.5	2.5	2.2	2.5	3.1	.68	.00	1.2	1.4	38
22	1.7	2.6	2.4	2.5	2.2	2.7	2.8	.56	.00	80	1.3	124
23	1.6	2.5	2.1	2.6	2.1	2.5	3.0	.54	.00	5.9	1.4	53
24	1.6	2.5	2.5	2.7	2.0	2.3	2.4	.47	e.00	2.3	3.4	26
25	1.6	2.7	2.7	2.5	2.0	2.3	1.9	.43	e.00	1.8	1.5	13
26	1.6	2.6	2.7	2.5	2.2	2.3	1.7	.33	e.00	1.8	1.2	7.8
27	1.7	2.5	2.7	2.5	2.7	2.4	1.7	.24	e.00	2.7	1.1	4.6
28	1.8	2.3	2.7	2.5	2.6	2.6	1.6	.21	.00	1.8	1.0	3.5
29	1.7	2.3	2.7	2.5	---	2.5	1.6	.12	.00	3.3	.96	3.3
30	1.6	2.3	2.9	2.5	---	2.4	1.5	.03	.00	59	.92	3.0
31	1.7	---	2.7	2.6	---	2.6	---	.05	---	3.8	.90	---
TOTAL	38.32	72.0	76.7	77.8	66.3	76.9	84.4	30.27	0.15	188.52	344.08	594.71
MEAN	1.24	2.40	2.47	2.51	2.37	2.48	2.81	.98	.005	6.08	11.1	19.8
MAX	1.8	2.7	2.9	2.8	2.7	2.7	3.5	1.9	.12	80	176	208
MIN	.84	1.9	2.1	2.3	2.0	2.2	1.5	.03	.00	.00	.90	.81
AC-FT	76	143	152	154	132	153	167	60	.3	374	682	1180

CAL YR 1989 TOTAL 950.46 MEAN 2.60 MAX 71 MIN .00 AC-FT 1890
WTR YR 1990 TOTAL 1650.15 MEAN 4.52 MAX 208 MIN .00 AC-FT 3270

e Estimated

RIO GRANDE BASIN

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.--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 to Grandfalls. The uncontrolled emergency spillway, 790 ft wide, is a cut through natural ground located to the right of right end of dam. 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 and aerial photography, survey of 1986. 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 emergency spillway	2,845.0	324,000
Top of gates (top of conservation pool)	2,842.0	289,700
Crest of service spillway and bottom of tainter gates	2,827.0	155,700
Lowest gated outlet (invert)	2,764.0	2,800

COOPERATION.--Gage-height records and capacity curve were furnished by Red Bluff Water Power and Control District.

EXTREMES (AT 0800) 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 (AT 0800) FOR CURRENT YEAR.--Maximum contents observed, 102,700 acre-ft, Mar. 17-19, gage height, 2,818.2 ft; minimum observed, 58,330 acre-ft, Sept. 12-16, gage height, 2,807.8 ft.

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

2,807.0	55,650	2,810.0	66,220	2,816.0	91,830
2,808.0	59,010	2,812.0	74,090	2,818.0	101,700
2,809.0	62,530	2,814.0	82,630	2,819.0	106,900

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97180	94740	96190	97680	100700	101700	94740	87610	80020	64370	60060	60410
2	97180	94740	96190	98180	100700	101700	94250	87610	80020	64000	60060	60060
3	97180	94740	96190	98180	100700	101700	93770	87610	79580	63630	60410	59710
4	97180	94740	96190	98180	100700	101700	93280	87610	79580	63260	60410	59710
5	96680	94740	96190	98180	100700	101700	92800	87610	79150	62900	60770	59710
6	96680	94740	96680	98180	100700	101700	92310	87150	79150	62530	61120	59360
7	96680	94740	96680	98680	100700	101700	91830	87150	78710	62180	61470	59360
8	96680	94740	96680	98680	100700	102200	91360	86690	78280	61820	61820	59010
9	96680	94740	96680	98680	100700	102200	90890	86690	77860	61820	61820	59010
10	96680	95220	96680	98680	100700	102200	89950	86240	77440	61820	61820	59010
11	99680	95220	96680	98680	100700	102200	89950	85790	77020	61120	61820	58670
12	96680	95220	96680	99180	101200	102200	89950	85790	76600	61120	61820	58330
13	96190	95220	96680	99180	101200	102200	90420	85340	76180	60770	61820	58330
14	96190	95220	96680	99180	101200	102200	89950	85340	75770	60410	62180	58330
15	96190	95220	96680	99180	101200	102200	89950	85340	75350	60060	62180	58330
16	96190	95710	96680	99180	101200	102200	89490	84890	74510	59710	62180	58330
17	96190	95710	97180	99180	101200	102700	89490	84440	73690	59710	62180	59010
18	96190	95710	97180	99180	101200	102700	89020	84440	72880	59360	62180	60410
19	96190	95710	97180	99680	101200	102700	89020	84440	72080	58670	62180	60770
20	95710	95710	97180	99680	101200	102200	89020	83980	71280	58670	62530	60770
21	95710	95710	97180	99680	101200	101700	88550	83530	70470	58670	62180	61120
22	95710	95710	97180	99680	101200	100700	88550	83530	69680	59010	62180	63260
23	95710	95710	97180	99680	101200	100200	88550	82630	68530	59360	62820	63260
24	95710	95710	97180	99680	101200	99680	88550	82190	67760	59010	61820	63260
25	95220	95710	97180	100200	101200	98680	88550	81760	66990	59010	61470	63630
26	95220	95710	97680	100200	101700	98180	88550	81760	66220	59010	61470	64000
27	95220	96190	97680	100200	101700	97680	88550	81320	65480	58670	61120	64000
28	95220	96190	97680	100200	101700	97180	88080	81320	65110	58330	61120	64000
29	95220	96190	97680	100700	---	96680	88080	80890	64740	58330	60770	64000
30	95220	96190	97680	100700	---	95710	88080	80450	64740	59360	60770	64370
31	94740	---	97680	100700	---	95220	---	80450	---	59710	60410	---
MAX	99680	96190	97680	100700	101700	102700	94740	87610	80020	64370	62820	64370
MIN	94740	94740	96190	97680	100700	95220	88080	80450	64740	58330	60060	58330
(†)	2816.6	2816.9	2817.2	2817.8	2818.0	2816.7	2815.2	2813.5	2809.6	2808.2	2808.4	2809.5
(†)	-2460	+1450	+1490	+3020	+1000	-6480	-7140	-7630	-15710	-5030	+700	+3960

CAL YR 1989 MAX 186200 MIN 94740 (†) -82420
WTR YR 1990 MAX 102700 MIN 58330 (†) -32830

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

MIMBRES RIVER BASIN

08477110 MIMBRES RIVER AT MIMBRES, NM

LOCATION.--Lat 32°51'17", long 107°58'23", in NW¼SW¼ sec.3, T.17 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.

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.--Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years, 19.5 ft³/s, 14,130 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 20	1600	*405	*4.34	Aug. 22	1715	236	4.24

Minimum discharge, .23 ft³/s, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	9.4	6.1	5.9	e4.2	1.8	1.9	3.1	1.9	1.3	13	6.9
2	12	8.6	5.9	5.9	e4.2	1.9	2.1	3.3	2.1	1.3	10	6.6
3	12	8.8	6.1	5.9	e4.1	1.8	2.5	3.0	2.6	.94	13	6.6
4	12	8.7	6.3	5.9	e4.1	1.9	3.1	2.5	6.3	1.2	9.4	6.0
5	12	8.4	6.4	6.1	e4.0	2.2	2.6	2.5	17	1.6	6.4	3.6
6	9.4	8.4	6.4	6.1	e3.9	2.1	2.3	1.8	15	1.4	5.3	3.7
7	8.3	8.5	6.2	6.1	e3.8	3.1	2.2	1.7	14	1.9	5.0	14
8	8.0	8.5	6.1	5.9	e3.7	2.7	2.6	1.7	15	2.4	4.7	23
9	8.0	8.2	6.1	5.9	e3.6	2.3	3.1	1.5	15	1.8	4.3	15
10	8.2	8.2	6.1	5.9	e3.5	2.7	2.9	2.0	14	2.0	4.0	7.7
11	8.3	8.2	6.1	5.9	e3.4	2.5	2.6	2.1	13	2.4	3.4	6.7
12	8.0	7.7	6.1	5.7	e3.3	2.2	3.1	2.1	13	2.4	2.8	5.2
13	8.1	7.9	6.0	5.8	e3.2	2.2	2.6	2.4	9.0	2.2	4.1	5.0
14	8.1	8.1	5.9	5.9	e3.1	2.2	2.5	2.3	4.2	2.8	5.3	4.9
15	8.1	8.1	5.9	5.9	e3.0	2.2	2.2	1.8	3.6	3.6	4.4	3.9
16	8.2	7.7	5.9	5.9	e2.9	2.2	2.5	1.6	3.5	4.0	3.7	1.1
17	8.8	7.4	5.6	5.7	e2.8	2.2	2.5	1.5	3.5	4.2	3.4	1.4
18	9.0	7.6	5.6	5.7	e2.7	2.2	2.6	1.3	3.2	4.6	3.3	1.4
19	8.6	7.6	5.8	5.6	e2.6	2.0	2.7	1.4	2.7	4.5	3.2	1.8
20	9.7	7.9	5.9	e5.5	e2.5	2.1	2.4	1.9	2.7	4.0	3.5	2.0
21	10	8.0	5.6	e5.5	2.6	2.6	1.6	2.0	2.1	36	4.5	2.2
22	9.9	8.8	5.6	e5.3	2.9	2.4	1.4	1.7	.93	19	26	2.8
23	9.9	8.0	5.6	e5.1	2.5	2.5	1.4	1.7	.75	15	21	64
24	9.2	7.8	5.5	e5.0	1.8	2.0	1.5	1.4	.56	11	13	63
25	8.8	7.6	5.4	e4.9	2.6	1.8	1.8	1.7	.52	12	11	29
26	8.9	7.8	5.4	e4.8	2.3	1.9	1.9	1.4	.56	19	9.7	16
27	9.1	8.3	5.5	e4.7	2.1	1.8	1.7	1.0	.98	9.8	9.5	11
28	9.3	7.8	5.6	e4.6	1.7	1.8	2.2	.93	1.0	6.4	9.2	8.5
29	9.5	6.7	5.8	e4.5	---	1.9	2.7	1.2	1.6	6.0	8.7	8.1
30	9.1	6.7	6.1	e4.4	---	2.0	3.0	1.2	1.5	5.5	7.5	8.7
31	9.6	---	5.9	e4.3	---	1.9	---	1.3	---	5.7	7.1	---
TOTAL	285.3	241.4	182.5	170.3	87.1	67.1	70.2	57.03	171.80	231.94	239.4	339.8
MEAN	9.20	8.05	5.89	5.49	3.11	2.16	2.34	1.84	5.73	7.48	7.72	11.3
MAX	12	9.4	6.4	6.1	4.2	3.1	3.1	3.3	17	40	26	64
MIN	7.2	6.7	5.4	4.3	1.7	1.8	1.4	.93	.52	.94	2.8	1.1
AC-FT	566	479	362	338	173	133	139	113	341	460	475	674

CAL YR 1989 TOTAL 3395.8 MEAN 9.30 MAX 151 MIN 1.7 AC-FT 6740
WTR YR 1990 TOTAL 2143.87 MEAN 5.87 MAX 64 MIN .52 AC-FT 4250

e Estimated

TULAROSA VALLEY BASIN

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 13044503, on right bank 45 ft downstream from bridge on old U.S. Highway 70, 2.6 mi west of Bent, 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.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--42 years (1949-90), 12.0 ft³/s, 8,690 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; maximum gage height, 5.60 ft, Aug. 8, 1988, discharge not determined; 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 11	1415	2,470	4.08	Sept. 4	1930	575	3.20
July 25	1545	2,230	3.98	Sept. 8	1730	2,090	3.92
Aug. 26	1630	850	3.36	Sept. 10	1700	*2,910	*4.26

Minimum discharge, 8.3 ft³/s, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	20	22	22	21	18	18	18	15	20	37
2	18	19	20	22	23	21	20	23	18	15	20	37
3	18	19	21	23	23	20	18	23	17	16	20	37
4	19	19	22	24	22	18	21	22	17	16	20	50
5	19	19	22	24	23	19	22	22	17	16	20	42
6	19	19	22	24	22	17	22	22	17	15	20	40
7	19	20	22	23	23	19	21	21	17	15	20	72
8	19	20	22	23	23	19	21	21	16	15	20	e118
9	19	19	22	23	23	20	20	21	16	17	20	e29
10	19	18	22	23	23	20	21	21	15	16	20	e124
11	19	18	21	23	22	23	21	21	16	70	20	26
12	19	18	21	22	22	20	21	20	15	20	19	22
13	19	18	21	22	22	20	21	17	16	19	19	22
14	19	18	21	22	23	20	20	18	16	19	20	21
15	18	18	21	22	22	20	18	18	16	19	20	22
16	19	19	21	22	22	20	18	21	16	19	30	21
17	19	19	22	22	22	19	19	20	15	20	30	22
18	19	20	22	23	21	16	22	20	15	20	30	22
19	19	20	22	23	21	16	22	20	14	20	29	29
20	19	20	22	23	21	16	22	20	15	21	30	e30
21	20	20	22	23	22	19	23	19	15	20	31	e28
22	20	20	22	23	22	19	23	19	15	19	32	e26
23	20	20	22	24	22	20	23	19	14	19	32	e28
24	20	19	22	23	21	19	22	19	12	19	32	e26
25	20	19	22	22	20	19	22	18	13	52	32	e25
26	20	19	22	22	21	20	22	18	13	19	46	e24
27	19	19	22	22	22	19	22	16	15	22	38	e23
28	19	19	22	22	22	20	21	16	15	21	37	e23
29	18	19	22	22	---	21	18	16	15	21	37	e27
30	19	20	22	22	---	21	18	17	15	21	37	e26
31	19	---	23	22	---	21	---	18	---	21	37	---
TOTAL	588	573	672	702	617	602	622	604	464	657	838	1079
MEAN	19.0	19.1	21.7	22.6	22.0	19.4	20.7	19.5	15.5	21.2	27.0	36.0
MAX	20	20	23	24	23	23	23	23	18	70	46	124
MIN	16	18	20	22	20	16	18	16	12	15	19	21
AC-FT	1170	1140	1330	1390	1220	1190	1230	1200	920	1300	1660	2140

CAL YR 1989 TOTAL 7752 MEAN 21.2 MAX 103 MIN 12 AC-FT 15380
WTR YR 1990 TOTAL 8018 MEAN 22.0 MAX 124 MIN 12 AC-FT 15900

e Estimated

TULAROSA VALLEY BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 09...	1330	19	1310	8.0	23.0	9.5	16	9.3	17	700	470	190
JAN 11...	1615	24	1110	7.8	11.5	4.5	7.6	9.2	--	590	380	150
MAR 20...	1430	15	1300	8.2	22.5	14.5	3.1	8.8	--	700	480	190
MAY 08...	0930	21	1240	8.0	20.0	11.0	2.5	9.8	22	700	480	190
JUL 20...	0915	18	1320	8.0	21.5	15.0	70	7.8	23	720	470	200
SEP 10...	1155	22	1510	7.9	27.0	17.0	200	11.4	24	890	660	260

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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINTY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINTY 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)
NOV 09...	55	44	0.7	1.1	286	0	234	195	470	58	0.40	14
JAN 11...	52	42	0.8	1.2	249	0	204	118	440	64	0.20	14
MAR 20...	54	43	0.7	1.1	261	0	214	166	480	65	0.20	14
MAY 08...	54	43	0.7	0.90	273	0	224	181	480	59	0.60	14
JUL 20...	52	44	0.7	1.7	300	0	246	201	460	58	0.40	16
SEP 10...	58	50	0.7	1.8	278	0	228	198	660	72	0.20	15

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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)
NOV 09...	1010	975	--	<0.010	<0.100	0.040	0.020	0.16	0.040	0.010	1.7	10
JAN 11...	900	889	0.590	0.010	0.600	0.020	0.030	--	0.030	0.010	--	--
MAR 20...	980	977	--	<0.010	0.400	0.020	0.020	0.18	0.010	<0.010	--	--
MAY 08...	964	980	--	<0.010	0.400	0.010	0.020	0.59	0.020	<0.010	2.1	<10
JUL 20...	1030	985	--	<0.010	0.500	0.050	0.050	0.55	0.040	<0.010	5.2	460
SEP 10...	1240	1260	--	<0.010	0.700	0.030	0.040	0.37	0.020	<0.010	5.7	20

TULAROSA VALLEY BASIN

08481500 TULAROSA CREEK NEAR BENT, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)
NOV 09...	<1	26	<0.5	<1.0	2	<3	2	10	1	18	22	<0.1
JAN 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 08...	<1	23	<0.5	<1.0	<1	<3	<1	9	<1	20	15	<0.1
JUL 20...	<1	32	<0.5	<1.0	2	<3	4	530	3	24	69	0.2
SEP 10...	<1	35	<0.5	2.0	1	<3	1	16	2	24	43	<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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 09...	<10	1	1	<1.0	2200	<6	16	267	14	67	<1	33
JAN 11...	--	--	--	--	--	--	--	111	7.2	74	<1	<1
MAR 20...	--	--	--	--	--	--	--	217	8.6	66	49	K11
MAY 08...	<10	9	1	<1.0	2200	<6	6	123	7.1	70	K140	360
JUL 20...	<10	2	1	<1.0	2300	<6	15	339	17	86	K2	930
SEP 10...	<10	3	1	<1.0	2700	<6	84	442	26	76	<10	350

COLORADO RIVER BASIN

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.--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.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. High-water 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. 20 years (water years 1971-90), 636 ft³/s, 460,800 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; maximum gage height, 9.29 ft, Jan. 15, 1987 (backwater from ice); 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	0600	2,800	4.63	June 11	0600	*3,420	*4.91

Minimum daily, 42 ft³/s, Nov. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	114	e75	e65	e70	e150	269	770	1260	395	231	166
2	114	114	90	e70	e70	e150	285	985	1120	373	228	151
3	110	112	90	e70	e70	e160	296	843	1220	363	227	148
4	348	114	90	e70	e70	e150	312	830	1530	360	210	192
5	734	120	e90	e70	e70	e160	316	789	1920	358	200	179
6	342	120	e100	e70	e70	e170	316	796	2220	476	206	202
7	270	120	e110	e70	e75	157	303	947	2050	637	206	300
8	239	116	e95	e75	e75	151	366	1050	1990	500	203	291
9	221	110	e80	e80	e75	154	497	1070	1900	508	182	258
10	203	108	e80	e80	e75	181	429	1050	2010	535	179	225
11	193	116	e85	e85	e75	227	374	1060	2800	445	160	207
12	186	116	e70	e85	e80	207	375	957	1910	461	151	196
13	179	116	e50	e85	e85	161	370	891	1630	393	169	164
14	175	120	e46	e85	e90	136	360	1050	1400	489	263	151
15	172	114	e55	e85	e95	125	426	1160	1220	574	269	154
16	169	99	e65	e90	e80	118	515	1080	1040	434	407	154
17	169	96	e65	e90	e80	122	571	1120	996	383	428	192
18	166	104	e70	e80	e80	130	731	1230	966	360	328	283
19	154	e100	e70	e80	e85	136	932	1220	965	355	274	425
20	151	e110	e70	e80	e90	157	832	1140	926	326	382	418
21	151	116	e65	e80	e90	185	840	1200	842	420	414	434
22	151	112	e65	e80	e85	216	869	1440	762	301	451	369
23	147	106	e65	e70	e85	280	919	1610	729	277	423	537
24	145	e95	e65	e65	e90	305	832	1960	689	285	314	417
25	143	e90	e65	e65	e100	303	840	1880	637	390	270	351
26	140	e100	e65	e60	e110	312	758	1720	577	331	242	345
27	140	e90	e65	e60	e120	316	654	1490	529	286	228	330
28	130	e60	e65	e65	e140	308	613	1640	498	254	217	438
29	130	e42	e65	e65	---	288	698	1790	456	242	198	877
30	120	e60	e65	e70	---	281	692	1430	417	238	196	633
31	112	---	e65	e70	---	261	---	1290	---	231	186	---
TOTAL	5920	3110	2261	2315	2380	6157	16590	37488	37209	11980	8042	9187
MEAN	191	104	72.9	74.7	85.0	199	553	1209	1240	386	259	306
MAX	734	120	110	90	140	316	932	1960	2800	637	451	877
MIN	110	42	46	60	70	118	269	770	417	231	151	148
AC-FT	11740	6170	4480	4590	4720	12210	32910	74360	73800	23760	15950	18220

CAL YR 1989	TOTAL	176299	MEAN	483	MAX	1760	MIN	42	AC-FT	349700
WTR YR 1990	TOTAL	142639	MEAN	391	MAX	2800	MIN	42	AC-FT	282900

e Estimated

SAN JUAN RIVER BASIN

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, 4.6 mi northeast of Arboles Post Office, and 2.5 mi upstream from Navajo Reservoir.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99, 1910-27 at a site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Elevation of gage is 6,147.52 ft above National Geodetic Vertical Datum of 1929, from Colorado State Highway Department bench mark.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 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.--28 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	0500	1,620	3.07	June 11	0900	*2,180	*3.63
June 6	0500	1,920	3.37				

Minimum daily, 19 ft³/s, Nov. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	67	e40	e30	e30	e60	174	e800	887	227	e150	105
2	69	65	e40	e30	e30	e65	167	e880	785	203	e180	100
3	69	64	e38	e28	e30	e65	181	e760	909	e200	174	100
4	220	65	e38	e28	e30	e65	188	e700	1250	216	e150	115
5	456	67	e44	e30	e30	e70	205	e700	1530	206	e140	156
6	263	67	e48	e30	e30	e65	212	e720	1660	677	e140	187
7	210	65	e42	e32	e30	61	241	e800	1520	913	e140	167
8	185	62	e34	e32	e30	58	296	e920	1510	751	e120	154
9	167	59	e36	e34	e30	56	392	e950	1430	762	e110	151
10	154	60	e36	e36	e30	60	331	924	1650	693	e105	136
11	151	65	e30	e36	e32	81	315	908	2030	633	e100	123
12	148	61	e20	e36	e36	85	335	799	1690	526	e100	95
13	142	60	e22	e36	e38	77	335	770	1380	455	e160	85
14	133	59	e24	e38	e38	62	335	889	1190	476	e150	80
15	128	e55	e26	e38	e34	56	419	962	1020	454	210	75
16	125	e46	e28	e36	e32	57	498	870	781	396	344	85
17	125	e48	e30	e34	e34	57	559	891	721	360	349	140
18	115	e50	e30	e32	e34	59	572	970	672	315	330	139
19	105	e50	e30	e32	e36	60	669	941	685	306	276	212
20	101	53	e28	e34	e36	65	712	862	639	288	243	213
21	103	e50	e26	e32	e34	79	747	915	562	281	356	249
22	103	e48	e26	e30	e34	95	782	1090	495	228	326	220
23	101	e44	e28	e28	e36	128	852	1280	454	206	280	234
24	97	e42	e28	e26	e40	190	784	1550	427	283	247	261
25	95	49	e28	e24	e44	212	749	1400	401	274	220	224
26	91	e46	e28	e26	e50	230	679	1300	376	251	196	206
27	91	e38	e28	e26	e55	242	692	1140	346	210	178	188
28	81	e28	e28	e28	e60	220	665	1220	311	183	167	247
29	75	e19	e28	e28	---	202	822	1280	280	167	148	761
30	71	e30	e28	e28	---	192	763	1010	247	170	136	610
31	62	---	e28	e28	---	171	---	849	---	160	125	---
TOTAL	4111	1582	968	966	1003	3245	14671	30050	27838	11470	6050	5818
MEAN	133	52.7	31.2	31.2	35.8	105	489	969	928	370	195	194
MAX	456	67	48	38	60	242	852	1550	2030	913	356	761
MIN	62	19	20	24	30	56	167	700	247	160	100	75
AC-FT	8150	3140	1920	1920	1990	6440	29100	59600	55220	22750	12000	11540

CAL YR 1989	TOTAL	119178	MEAN	327	MAX	1500	MIN	19	AC-FT	236400
WTR YR 1990	TOTAL	107772	MEAN	295	MAX	2030	MIN	19	AC-FT	213800

e Estimated

SAN JUAN RIVER BASIN

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 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--510 mi², approximately.

PERIOD OF RECORD.--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 6,143.59 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--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.--40 years, 236 ft³/s, 171,000 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 flood on Oct. 5, 1911, has not yet been exceeded.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft³/s, at 1300 hours June 14, gage height, 5.90 ft; minimum daily, 19 ft³/s, May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	49	e44	e37	e40	e74	59	130	140	125	145	155
2	87	49	42	35	40	e76	56	304	133	130	147	158
3	97	48	43	35	36	e78	57	234	110	151	150	158
4	186	49	44	38	36	e86	56	171	110	164	140	188
5	208	51	48	38	37	e90	57	123	110	217	148	209
6	113	51	46	36	38	91	57	83	108	566	289	192
7	110	50	43	36	37	79	55	76	107	423	158	209
8	108	45	42	38	39	69	69	65	99	311	140	206
9	105	45	45	39	38	69	93	56	110	291	149	209
10	107	39	43	41	39	69	79	41	203	308	145	191
11	115	47	37	40	42	121	65	51	506	322	147	185
12	130	48	33	40	45	110	61	41	892	348	152	199
13	120	46	33	40	48	105	58	40	1100	292	176	174
14	103	48	33	42	48	76	55	28	1220	273	212	179
15	97	41	36	42	44	69	53	26	653	255	216	151
16	79	36	37	40	43	60	57	19	248	252	337	196
17	69	36	38	38	45	58	62	42	210	248	301	382
18	62	39	37	36	46	55	79	27	183	241	225	234
19	59	40	34	39	46	53	135	34	156	238	177	266
20	60	40	34	39	45	57	137	38	167	209	179	252
21	56	43	33	37	45	56	120	36	226	185	245	312
22	59	38	34	35	46	58	113	60	208	170	199	288
23	59	39	34	34	50	59	110	62	180	150	192	275
24	53	40	35	34	54	59	125	90	173	188	173	295
25	53	42	36	33	58	55	178	95	164	206	167	279
26	53	40	33	33	64	53	133	112	145	174	161	238
27	52	32	33	34	70	56	115	110	150	157	138	214
28	49	32	34	34	e72	57	103	110	135	150	128	278
29	50	e36	33	34	---	62	101	137	130	143	140	439
30	50	e42	34	35	---	65	107	155	120	142	142	267
31	49	---	e37	e35	---	65	---	143	---	138	147	---
TOTAL	2747	1281	1168	1147	1291	2190	2605	2739	8196	7167	5565	6978
MEAN	88.6	42.7	37.7	37.0	46.1	70.6	86.8	88.4	273	231	180	233
MAX	208	51	48	42	72	121	178	304	1220	566	337	439
MIN	49	32	33	33	36	53	53	19	99	125	128	151
AC-FT	5450	2540	2320	2280	2560	4340	5170	5430	16260	14220	11040	13840
CAL YR 1989 TOTAL	62285											
WTR YR 1990 TOTAL	43074											
MEAN	171											
MEAN	118											
MAX	698											
MAX	1220											
MIN	32											
MIN	19											
AC-FT	123500											
AC-FT	85440											

e Estimated

SAN JUAN RIVER BASIN

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.--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.--Records good except those for flows above 100 ft³/s, which are fair, and those 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.--40 years, 31.9 ft³/s, 23,110 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 discharge, 575 ft³/s, at 2300 hours July 5, gage height, 2.90 ft; minimum daily, 2.0 ft³/s, Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	7.4	e3.7	e2.9	e2.8	e5.3	3.9	3.9	47	45	58	55
2	29	6.9	e3.8	e2.7	e2.8	e5.5	3.5	7.4	43	50	62	58
3	25	6.5	e3.6	e2.7	e2.7	e5.6	3.3	19	45	59	60	59
4	65	6.1	e3.9	e2.6	e2.6	e5.7	3.5	5.7	47	64	55	65
5	54	6.5	e4.2	e2.6	e2.7	5.7	3.5	4.0	45	154	57	66
6	47	6.5	e3.9	e2.5	e2.7	5.9	4.3	19	43	186	76	63
7	43	6.1	e3.6	e2.6	e2.8	6.7	3.5	4.8	42	172	64	61
8	42	6.1	e3.6	e2.6	e2.9	6.1	4.8	4.8	45	97	61	58
9	42	5.7	e3.8	e2.7	e2.9	5.7	4.7	4.4	47	84	64	58
10	39	6.5	e3.6	e2.9	e2.8	5.6	4.4	4.4	63	74	61	55
11	34	6.1	e3.2	e2.9	e3.0	20	3.3	4.4	65	67	61	52
12	36	6.1	e2.9	e2.8	e3.1	16	3.0	6.0	57	64	64	50
13	13	6.1	e2.7	e2.6	e3.4	15	2.8	6.1	45	60	69	50
14	7.4	5.7	e2.8	e2.7	e3.2	7.2	2.7	7.3	47	84	79	49
15	6.9	e5.8	e2.9	e2.7	e3.0	5.2	2.7	9.9	47	64	72	49
16	8.2	e5.2	e2.9	e2.8	e3.1	4.9	2.7	12	47	62	151	48
17	6.9	e5.3	e3.0	e2.5	e3.4	4.4	2.7	13	47	57	97	70
18	6.5	e5.5	e3.1	e2.4	e3.5	4.4	4.5	21	47	54	70	54
19	6.5	e5.5	e3.2	e2.5	e3.5	4.4	14	22	52	59	60	68
20	6.9	e5.4	e3.1	e2.7	e3.3	4.4	7.5	34	50	57	69	60
21	6.9	e5.1	e3.0	e2.6	e3.4	4.4	4.4	37	54	53	62	67
22	6.9	e4.9	e2.8	e2.4	e3.5	3.9	3.3	39	54	55	59	52
23	6.9	e4.6	e2.8	e2.3	e3.8	3.9	3.0	40	54	57	55	53
24	6.9	e4.9	e2.9	e2.2	e4.2	3.5	4.3	40	54	58	49	51
25	6.5	e5.3	e2.9	e2.0	e4.6	3.5	5.2	36	54	57	51	42
26	6.7	e5.2	e2.8	e2.2	e4.9	3.5	4.4	36	49	54	51	41
27	6.9	e4.5	e2.7	e2.4	e5.0	3.5	2.8	39	52	53	50	41
28	6.9	e3.8	e2.7	e2.6	e5.3	3.5	2.7	37	50	54	50	58
29	6.9	e3.0	e2.8	e2.6	---	4.3	2.3	43	49	58	53	83
30	7.4	e3.3	e2.7	e2.7	---	4.8	2.7	45	47	57	53	44
31	7.3	---	e2.8	e2.8	---	4.4	---	42	---	59	51	---
TOTAL	599.3	165.6	98.4	80.2	94.9	186.9	120.4	647.1	1488	2228	1994	1680
MEAN	19.3	5.52	3.17	2.59	3.39	6.03	4.01	20.9	49.6	71.9	64.3	56.0
MAX	65	7.4	4.2	2.9	5.3	20	14	45	65	186	151	83
MIN	4.8	3.0	2.7	2.0	2.6	3.5	2.3	3.9	42	45	49	41
AC-FT	1190	328	195	159	188	371	239	1280	2950	4420	3960	3330
CAL YR 1989 TOTAL	11804.2											
WTR YR 1990 TOTAL	9382.8											
MEAN 32.3												
MAX 253												
MIN 2.2												
AC-FT 23410												
MIN 2.0												
AC-FT 18610												

e Estimated

SAN JUAN RIVER BASIN

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.--3,230 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 contents, 1,731,000 acre-ft, July 2-4, 1973, elevation, 6,087.25 ft; minimum contents after June 1964 (initial filling period), 234,300 acre-ft, Mar. 10, 11, 1965, elevation, 5,906.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,379,100 acre-ft, July 17, elevation, 6,062.74 ft; minimum contents, 1,177,500 acre-ft, Apr. 6, 7, elevation, 6,046.14 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 (ACRE-FEET), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1309000	1285700	1257600	1230100	1206700	1188700	1179300	1204000	1290900	1366600	1371000	1359700
2	1307600	1285100	1256800	1229100	1206000	1188400	1179100	1208100	1292700	1365500	1370600	1359100
3	1306300	1284100	1255700	1228200	1205300	1188200	1178900	1210700	1295300	1365500	1369600	1358500
4	1307400	1283200	1254600	1227400	1204600	1188000	1178100	1213000	1299100	1364700	1368800	1357900
5	1308500	1282400	1253900	1226500	1204000	1187800	1177900	1215200	1304200	1366000	1368100	1357300
6	1308600	1281400	1252800	1225700	1203100	1187400	1177500	1217200	1309600	1367800	1367300	1356800
7	1308400	1280700	1251800	1224900	1202300	1187400	1177500	1219600	1316100	1369700	1366300	1356800
8	1308100	1279600	1250900	1224200	1201500	1187000	1177900	1221300	1320200	1369700	1365200	1356800
9	1307000	1278600	1249900	1223600	1200700	1186700	1178300	1224000	1324700	1374000	1364100	1356600
10	1306300	1277800	1248900	1222900	1199900	1186400	1178200	1226100	1331200	1374600	1362900	1356100
11	1305200	1276800	1247800	1222100	1199200	1186300	1178200	1228100	1339800	1376100	1361800	1355300
12	1304500	1276200	1246800	1221400	1198400	1186200	1177900	1229500	1348800	1377100	1361500	1354500
13	1303900	1275400	1245700	1220700	1197700	1185900	1178000	1231200	1353900	1377100	1360600	1353600
14	1303000	1274300	1244700	1220000	1197200	1185500	1178100	1233500	1358900	1377600	1360100	1352800
15	1302200	1273200	1243900	1219300	1196500	1185100	1178200	1235500	1361900	1378500	1360200	1352000
16	1301100	1272100	1243100	1218600	1195900	1184700	1178300	1237400	1363000	1378900	1362000	1351500
17	1300000	1271200	1242100	1217900	1195200	1184300	1179600	1239600	1364800	1379100	1363400	1351500
18	1299200	1270300	1241200	1217700	1194400	1183900	1181600	1241400	1365600	1378900	1363800	1351800
19	1298200	1269300	1240500	1217000	1193700	1183300	1183700	1243700	1366800	1378900	1364100	1352000
20	1297400	1268600	1239600	1216100	1193300	1182600	1185500	1246200	1367800	1378900	1364200	1352800
21	1296600	1267500	1238900	1215300	1192600	1182000	1187400	1248700	1368300	1378900	1365100	1353400
22	1295900	1266700	1238100	1214500	1191900	1181600	1189100	1252000	1369100	1378100	1365600	1354100
23	1294900	1265700	1237100	1213700	1191300	1181200	1191200	1256400	1369300	1377200	1365600	1354700
24	1293900	1264700	1236300	1212900	1190800	1180900	1193500	1262100	1369700	1376800	1365500	1355100
25	1292700	1263600	1235400	1212100	1190400	1180200	1195500	1266700	1369900	1376600	1364800	1355100
26	1291500	1262600	1234400	1211300	1189800	1180100	1196700	1270800	1369700	1376500	1364500	1354700
27	1290500	1261800	1233700	1210400	1189400	1180200	1198100	1274800	1369300	1375700	1363700	1354600
28	1289500	1260800	1233000	1209600	1188900	1180100	1199000	1278800	1369000	1374800	1362900	1356900
29	1288500	1259700	1232300	1208900	---	1180000	1200100	1283300	1368200	1373900	1362100	1358900
30	1287700	1258600	1231600	1208100	---	1179800	1201500	1286500	1367300	1373100	1361400	1361000
31	1286700	---	1230900	1207400	---	1179300	---	1289000	---	1372300	1360200	---
MAX	1309000	1285700	1257600	1230100	1206700	1188700	1201500	1289000	1369900	1379100	1371000	1361000
MIN	1286700	1258600	1230900	1207400	1188900	1179300	1177500	1204000	1290900	1364700	1360100	1351500
(†)	6055.41	6053.09	6050.76	6048.75	6047.14	6046.30	6048.24	6055.60	6061.83	6062.22	6061.28	6061.34
(††)	-23300	-28100	-27700	-23500	-18500	-9600	+22200	+87500	+78300	+5000	-12100	+800

CAL YR 1989 MAX 1406200 MIN 1118800 (††) +80600
WTR YR 1990 MAX 1379100 MIN 1177500 (††) +51000

(†) ELEVATION, IN FEET, AT END OF MONTH.

(††) CHANGE IN CONTENTS, IN ACRE-FEET.

SAN JUAN RIVER BASIN

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'05", long 107°41'51", in NW¼NE¼ 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.--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. High-water 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 U.S. Bureau of Reclamation. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--7 years (water years 1956-62), 1,304 ft³/s, 944,700 acre-ft/yr, prior to closure of Navajo Dam. 28 years (water years 1963-90), 1,202 ft³/s, 870,800 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, 643 ft³/s, July 6; minimum daily, 463 ft³/s, July 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	619	614	622	517	503	523	506	554	504	544	516	489
2	617	610	624	517	503	511	506	565	511	548	503	488
3	620	613	618	520	511	516	508	566	511	548	498	488
4	632	619	617	496	511	512	511	563	517	543	518	491
5	630	619	619	499	514	523	516	553	517	613	509	495
6	619	624	624	500	517	521	517	556	512	643	511	494
7	617	621	621	500	517	523	521	554	511	548	511	501
8	617	619	618	500	501	523	529	556	514	554	508	523
9	624	617	617	498	515	523	521	558	520	556	512	518
10	619	617	620	507	514	526	523	553	522	535	506	518
11	617	619	617	514	512	527	526	550	524	509	496	530
12	612	621	618	512	511	523	527	553	521	510	501	559
13	610	622	606	511	511	523	522	552	525	499	482	576
14	612	621	556	511	528	516	519	547	537	492	496	573
15	617	627	497	509	526	517	518	545	536	480	496	579
16	617	624	504	506	510	521	526	547	529	481	499	586
17	614	621	501	501	523	529	532	542	529	477	496	582
18	611	619	503	506	523	529	539	545	531	479	495	576
19	612	625	504	510	524	529	531	548	533	483	497	578
20	609	625	500	516	527	528	536	556	531	478	493	578
21	617	625	500	517	523	526	532	550	533	474	491	577
22	625	625	509	517	525	523	531	531	533	469	503	582
23	624	625	523	513	523	521	530	490	531	471	490	585
24	624	630	523	513	512	523	536	510	535	472	492	581
25	621	630	523	511	511	523	537	504	541	466	492	575
26	624	630	523	502	511	523	537	496	538	463	491	574
27	621	627	523	507	511	523	535	500	544	467	491	572
28	612	624	520	514	519	523	541	500	543	481	492	580
29	612	618	517	508	---	518	547	497	541	479	490	580
30	610	617	520	506	---	506	547	506	542	493	492	581
31	613	---	519	508	---	510	---	501	---	519	491	---
TOTAL	19148	18648	17306	15766	14436	16162	15807	16648	15816	15774	15458	16509
MEAN	618	622	558	509	516	521	527	537	527	509	499	550
MAX	632	630	624	520	528	529	547	566	544	643	518	586
MIN	609	610	497	496	501	506	506	490	504	463	482	488
AC-FT	37980	36990	34330	31270	28630	32060	31350	33020	31370	31290	30660	32750
(†)	10000	0	0	0	0	3400	14400	17500	32500	30900	26500	12100

CAL YR 1989 TOTAL 230885 MEAN 633 MAX 682 MIN 497 AC-FT 458000
WTR YR 1990 TOTAL 197478 MEAN 541 MAX 643 MIN 463 AC-FT 391700

(†) DISCHARGE, IN ACRE-FT, THROUGH NAVAJO INDIAN IRRIGATION TUNNEL.

SAN JUAN RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV 29...	1300	618	212	--	9.1	5.5	5.5	1.4	12.0
JAN 16...	1330	508	280	--	8.0	5.0	5.5	4.0	11.9
MAR 05...	1600	518	260	--	8.8	7.0	6.5	3.3	10.8
MAY 24...	1515	511	--	275	8.6	27.0	10.0	1.8	12.2
JUL 09...	1700	548	270	--	8.8	20.0	11.5	2.0	10.6
AUG 09...	1034	511	270	--	8.2	30.0	8.0	1.0	12.0

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARE DISSOLV FLD. AS CACO3 (MG/L) (00904)	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
NOV 29...	110	19	32	6.8	16	0.7	1.5	72	18
JAN 16...	100	13	31	6.3	15	0.6	1.9	110	0
MAR 05...	110	24	32	6.4	15	0.6	1.8	88	6
MAY 24...	110	21	32	6.3	15	0.6	1.7	93	5
JUL 09...	110	25	33	6.8	15	0.6	1.8	92	6
AUG 09...	110	14	32	6.2	15	0.6	1.7	112	0

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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 29...	89	82	55	2.3	0.20	10	175	177
JAN 16...	90	83	49	2.3	0.20	11	173	171
MAR 05...	82	84	44	1.9	0.20	10	176	161
MAY 24...	84	86	46	3.2	0.20	10	163	165
JUL 09...	85	87	49	1.4	<0.10	10	176	168
AUG 09...	92	88	52	3.4	0.20	10	167	176

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.

WATER-DISCHARGE RECORDS

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.--Water-discharge 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. Satellite telemeter at station.

AVERAGE DISCHARGE.--57 years, 916 ft³/s, 663,600 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	1000	*4,800	*8.19	No other peak greater than base discharge.			

Minimum daily, 144 ft³/s, March 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	260	217	e190	e186	224	195	643	1620	936	389	342
2	233	294	216	e187	e188	212	197	831	1460	913	396	325
3	247	247	197	e175	e179	189	212	676	1560	946	393	322
4	344	255	207	e194	e179	176	225	700	2590	1060	363	333
5	522	261	211	e207	e188	180	231	847	3730	963	324	332
6	451	250	209	e212	e176	191	244	1020	3980	1420	321	443
7	404	260	216	e220	e181	173	225	1190	3730	1910	305	453
8	384	259	207	e206	e184	158	269	1290	3700	1550	316	472
9	363	250	202	e211	e178	157	268	1290	3550	1370	289	470
10	347	243	192	e242	e180	161	258	1250	3750	1270	290	411
11	340	250	e188	e226	179	186	244	1240	4200	1110	280	399
12	336	246	e193	e195	179	185	269	1160	3850	1020	257	372
13	328	233	e186	e187	177	178	294	1050	3130	911	264	346
14	329	240	e206	e193	176	158	314	1200	2780	852	285	313
15	331	247	e227	e188	170	149	336	1410	2430	848	351	301
16	337	239	e193	e180	e176	146	412	1410	1870	788	817	310
17	346	223	e188	e177	e186	144	479	1340	1730	730	864	585
18	360	228	e193	e173	181	144	535	1400	1710	668	790	457
19	357	227	e192	e184	182	145	538	1480	1790	669	680	556
20	345	240	e208	e192	192	146	477	1440	1660	649	669	586
21	319	251	e207	e196	180	149	469	1550	1560	619	843	619
22	353	252	e210	e164	173	155	595	1990	1490	566	799	591
23	309	229	e205	e162	182	166	654	2380	1430	529	690	556
24	299	236	e192	e162	176	179	666	2940	1420	494	629	583
25	289	229	e192	e166	178	181	634	2730	1350	495	541	587
26	298	240	e189	e174	182	186	588	2470	1270	489	496	551
27	292	241	e189	e188	189	194	607	2270	1170	458	443	549
28	279	229	e200	e186	220	206	558	2360	1140	443	400	604
29	269	234	e184	e200	---	213	575	2500	1100	401	381	1060
30	255	212	e185	e181	---	213	651	1960	1000	393	383	1010
31	246	---	e184	e178	---	198	---	1560	---	370	376	---
TOTAL	10148	7305	6185	5896	5097	5442	12219	47577	67750	25840	14624	14838
MEAN	327	243	200	190	182	176	407	1535	2258	834	472	495
MAX	522	294	227	242	220	224	666	2940	4200	1910	864	1060
MIN	233	212	184	162	170	144	195	643	1000	370	257	301
AC-FT	20130	14490	12270	11690	10110	10790	24240	94370	134400	51250	29010	29430

CAL YR 1989 TOTAL 241000 MEAN 660 MAX 2320 MIN 184 AC-FT 478000
WTR YR 1990 TOTAL 222921 MEAN 611 MAX 4200 MIN 144 AC-FT 442200

e Estimated

COLORADO RIVER BASIN

SAN JUAN RIVER BASIN

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM -- Continued

RIOD OF RECORD.--Water years 1943, 1945, 1958-59, 1969-73, 1975, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (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)	
NOV 29...	1500	219	615	8.7	7.0	1.0	12.8	22	270	84	15	32	
MAR 08...	0932	164	690	8.5	7.0	4.5	12.6	19	--	92	17	38	
MAY 24...	1015	3300	265	8.0	18.0	10.0	10.1	59	80	26	3.6	3.1	
AUG 09...	1305	289	520	8.8	30.0	19.0	11.8	<10	230	73	12	27	
DATE		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)	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)
NOV 29...	0.8	3.5	172	130	26	0.40	8.8	405	0.300	0.350	0.050	0.25	
MAR 08...	--	3.2	156	170	28	0.50	6.9	--	0.200	0.100	0.060	0.54	
MAY 24...	0.2	1.3	69	32	1.7	0.10	4.6	115	0.200	0.200	0.070	2.1	
AUG 09...	0.8	3.7	131	110	24	0.40	8.1	337	0.100	0.100	<0.010	--	
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)	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)
NOV 29...	0.60	0.040	0.030	1.4	90	9	<10	96	360		4	1	3
MAR 08...	0.80	0.060	<0.010	2.0	90	7	--	--	--	--	--	--	--
MAY 24...	2.4	0.540	<0.010	7.2	20	32	--	--	--	--	--	--	--
AUG 09...	0.30	0.030	<0.010	2.1	70	5	--	--	--	--	--	--	--
DATE		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, DIS-SUS-PENDE (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDE (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN 0.062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 29...	<5	40	17000	50	690	0.02	350	55	33		75	110	K28
MAR 08...	--	--	--	--	--	--	--	86	38		74	K12	K12
MAY 24...	--	--	--	--	--	--	--	985	8780		40	200	270
AUG 09...	--	--	--	--	--	--	--	128	100		75	K11	K14

SAN JUAN RIVER BASIN

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.--Water-discharge records good. Diversions for irrigation of about 30,000 acres upstream from station.

AVERAGE DISCHARGE.--79 years, 920 ft³/s, 666,500 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	1545	*4,560	*7.81	No other peak greater than base discharge.			
Minimum discharge, 40 ft ³ /s, Aug. 12.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	255	250	218	191	251	169	500	1410	611	153	184
2	99	308	252	209	205	237	147	671	1380	592	163	146
3	132	286	235	189	186	204	116	651	1250	612	189	137
4	203	255	242	226	175	185	120	562	2030	705	179	172
5	452	279	229	253	202	178	114	630	3320	679	152	181
6	452	257	250	263	178	202	148	748	3820	796	147	209
7	374	258	250	269	191	202	147	929	3530	1640	101	289
8	332	263	247	241	194	185	121	1090	3380	1370	93	336
9	311	273	226	251	183	165	131	1130	3270	1170	108	324
10	288	265	232	313	191	171	131	1060	3330	1060	86	300
11	270	266	204	281	187	183	120	998	3900	911	82	243
12	249	255	215	221	210	209	97	954	3720	806	68	237
13	244	233	210	213	206	199	86	802	2950	734	94	203
14	237	233	250	218	208	178	73	785	2560	681	143	181
15	245	240	289	210	202	160	80	965	2240	657	189	154
16	249	234	215	191	180	155	94	1060	1760	619	486	184
17	258	207	204	186	190	144	184	966	1470	571	883	400
18	288	208	234	185	206	143	284	941	1380	522	787	440
19	308	224	212	206	216	151	380	1030	1430	480	653	546
20	296	234	255	223	217	165	342	1060	1370	484	558	563
21	271	257	253	230	225	164	278	1080	1260	418	827	601
22	258	271	259	176	209	160	304	1430	1170	356	805	584
23	276	269	248	163	200	163	410	1970	1100	311	662	572
24	285	253	217	163	201	166	469	2550	1080	252	566	591
25	285	258	217	170	207	172	516	2800	1030	249	481	607
26	272	254	212	176	195	178	446	2450	942	247	404	583
27	255	271	216	204	205	183	435	2290	865	224	353	567
28	248	280	236	201	235	195	408	2220	752	202	260	607
29	234	259	205	228	---	194	355	2420	727	204	214	920
30	227	248	209	195	---	189	469	2080	690	174	213	1140
31	245	---	206	189	---	186	---	1500	---	179	213	---
TOTAL	8252	7653	7179	6661	5595	5617	7174	40322	59116	18516	10312	12201
MEAN	266	255	232	215	200	181	239	1301	1971	597	333	407
MAX	452	308	289	313	235	251	516	2800	3900	1640	883	1140
MIN	99	207	204	163	175	143	73	500	690	174	68	137
AC-FT	16370	15180	14240	13210	11100	11140	14230	79980	117300	36730	20450	24200

CAL YR 1989 TOTAL 201386 MEAN 552 MAX 2190 MIN 98 AC-FT 399400
WTR YR 1990 TOTAL 188598 MEAN 517 MAX 3900 MIN 68 AC-FT 374100

SAN JUAN RIVER BASIN
09364500 ANIMAS RIVER AT FARMINGTON,
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO

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)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTO- COCCUS FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 01...	0.050	0.16	0.010	0.010	K17	K12
MAR 06...	0.040	0.27	0.070	0.040	67	M100
MAY 23...	0.040	1.3	0.360	<0.010	210	510
JUL 05...	--	--	--	--	--	--
AUG 06...	--	--	--	--	--	--
10...	<0.010	--	<0.010	0.010	K51	K32

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)	COBA DIS- SOLVE (UG/L AS CO) (01035)
DEC 01...	0915	<10	<1	76	<0.5	1.0	1	<3
MAR 06...	0900	10	<1	81	<0.5	<1.0	<5	<3
MAY 23...	1250	60	<1	55	<0.5	<1.0	<1	<3
JUL 05...	1200	30	--	59	--	--	--	--
AUG 06...	1500	<10	--	87	--	--	--	--
10...	0946	<10	<1	80	<0.5	<1.0	4	<3

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)
DEC 01...	57	--	<10	<10	<1	<1.0	1400	<6	15
MAR 06...	62	<0.1	<10	<10	<1	1.0	1400	<6	<3
MAY 23...	14	<0.1	<10	1	<1	<1.0	410	<6	16
JUL 05...	32	--	--	--	<1	--	680	--	4
AUG 06...	55	--	--	--	<1	--	1500	--	6
10...	59	<0.1	<10	<1	<1	<1.0	1500	<6	<3

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 01...	0915	254	790	1.0	68	47
MAR 06...	0900	200	700	6.0	115	62
MAY 23...	1250	1890	261	12.0	1360	6940

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	586	657	---	670	666	644	---	294	471	680	610
2	711	641	776	---	666	674	673	484	293	---	680	610
3	708	654	686	---	657	689	691	486	296	---	712	628
4	633	---	717	---	649	719	694	597	242	500	660	636
5	589	654	701	---	615	---	688	559	227	456	711	621
6	700	657	693	---	625	712	676	525	215	319	642	623
7	675	645	664	---	639	740	682	371	215	312	711	600
8	587	659	651	683	640	730	680	383	209	353	568	---
9	566	689	662	677	648	728	698	374	208	480	683	---
10	614	656	765	677	642	709	683	415	214	467	557	---
11	611	704	740	676	624	800	687	393	208	505	634	561
12	445	684	741	641	---	717	733	404	---	---	709	593
13	649	676	706	623	690	718	690	406	257	---	690	586
14	---	685	698	614	713	703	673	434	274	519	---	669
15	603	701	---	660	---	700	519	375	261	514	687	---
16	585	---	---	655	672	687	548	---	293	529	491	---
17	577	312	679	630	729	---	518	---	---	500	473	614
18	560	676	---	614	715	672	513	367	318	537	---	605
19	558	682	617	624	665	705	---	358	312	522	469	636
20	555	648	618	616	658	727	498	364	293	467	478	587
21	598	649	638	606	669	731	495	364	305	487	585	543
22	592	621	---	636	670	686	519	309	320	506	586	528
23	605	621	---	634	688	686	---	296	340	528	---	521
24	611	625	---	661	---	694	498	282	359	530	512	524
25	---	632	---	647	680	695	527	256	385	586	511	531
26	---	643	---	647	670	647	544	253	391	592	522	---
27	---	675	---	---	671	680	556	---	428	514	534	---
28	672	706	---	---	659	650	541	---	417	529	659	---
29	605	---	---	650	---	628	465	256	407	556	642	---
30	644	---	---	649	---	632	470	268	466	555	581	498
31	641	---	---	648	---	617	---	244	---	612	580	---
MEAN	611	645	689	644	665	695	600	378	302	498	605	587
WTR YR 1990	MEAN	572	MAX	800	MIN	208						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.0	5.0	---	2.0	11.0	12.0	---	16.0	28.0	28.0	27.0
2	20.0	7.0	4.0	---	5.0	12.0	14.0	15.0	16.0	---	27.0	25.0
3	19.0	7.0	4.0	---	3.0	12.0	15.0	16.0	17.0	---	27.0	25.0
4	16.5	---	4.0	---	3.0	11.0	15.0	16.0	18.0	28.0	27.0	25.0
5	18.0	9.0	4.0	---	3.0	---	17.0	11.0	19.0	16.0	27.0	20.0
6	21.0	10.0	4.0	---	4.0	9.0	17.0	13.0	18.0	22.0	29.0	20.0
7	17.0	10.0	5.0	---	6.0	0	16.0	12.5	18.0	22.0	29.0	19.0
8	19.0	10.0	5.0	2.0	5.0	10.0	15.0	14.0	17.0	21.0	19.0	---
9	19.0	10.0	4.0	2.0	4.0	7.0	16.0	14.0	15.0	22.0	30.0	---
10	18.5	10.0	3.5	3.0	4.0	11.0	16.0	14.0	13.0	23.0	25.0	---
11	18.0	11.0	3.0	3.0	3.5	12.0	19.0	15.0	18.0	27.0	29.0	25.0
12	18.0	11.0	3.0	4.0	---	12.0	19.0	15.0	---	---	25.0	25.0
13	19.0	10.0	2.0	4.5	4.0	18.0	19.0	14.0	18.0	---	24.0	25.0
14	---	9.0	2.0	5.0	5.0	8.0	20.0	19.0	17.0	26.0	---	26.0
15	17.0	6.0	---	5.0	---	10.0	20.0	19.0	17.0	26.0	23.0	---
16	16.5	---	---	5.0	3.0	11.0	20.5	13.0	20.0	27.0	23.0	---
17	15.0	7.0	3.0	5.0	4.0	---	16.0	---	---	27.0	24.0	22.0
18	15.0	9.0	---	5.0	5.0	14.0	13.0	17.0	19.0	27.0	---	20.0
19	14.0	10.0	3.0	4.0	5.0	15.0	---	16.0	21.0	28.0	23.0	20.0
20	14.0	10.0	2.0	3.0	0	15.0	13.0	20.0	15.0	28.0	22.0	17.5
21	14.0	8.0	2.0	8.0	0	16.0	13.0	20.0	16.0	26.0	22.0	17.5
22	14.5	4.0	---	2.0	5.0	16.0	13.0	18.0	16.0	27.0	20.0	16.5
23	15.0	4.5	---	2.0	5.0	16.0	---	17.0	16.0	28.0	---	18.0
24	15.0	8.0	---	2.0	---	17.0	12.0	16.5	16.0	28.0	24.0	22.0
25	---	4.0	---	2.0	8.0	14.0	15.0	14.0	23.0	27.0	25.0	24.0
26	---	4.0	---	2.0	8.0	14.0	17.0	16.0	25.0	27.0	26.0	---
27	---	4.0	---	---	9.5	16.0	16.0	---	28.0	28.0	26.0	---
28	8.0	4.5	---	---	10.0	13.0	18.0	---	28.0	19.0	26.0	---
29	7.0	---	---	1.5	---	12.0	13.0	14.0	27.0	25.0	26.0	---
30	7.0	---	---	2.0	---	8.0	13.0	18.0	27.0	25.0	27.0	20.0
31	7.0	---	---	2.0	---	8.5	---	17.0	---	26.0	27.0	---
MEAN	15.5	8.0	3.5	3.5	4.5	12.0	16.0	15.5	19.0	25.5	25.5	22.0
WTR YR 1990	MEAN	14.5	MAX	30.0	MIN	0						

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.--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 and U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--78 years (water years 1913-90), 2,356 ft³/s, 1,707,000 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 10	1745	*5,690	*4.63				

Minimum daily, 328 ft³/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	615	856	884	729	742	831	642	797	1690	722	361	411
2	614	904	925	734	774	837	630	1320	1710	703	360	405
3	622	916	912	729	739	709	604	1260	1510	748	355	402
4	649	943	895	713	737	665	575	954	2350	944	356	417
5	884	932	901	706	765	656	561	1060	3560	873	367	462
6	1110	894	907	709	746	722	567	1230	4170	1880	363	500
7	1020	908	920	696	752	707	572	1390	4240	2280	379	536
8	982	896	914	700	759	680	563	1530	4070	2050	378	578
9	923	896	895	695	729	660	587	1570	3890	1700	337	613
10	910	922	890	725	741	653	581	1550	4020	1850	335	601
11	907	925	909	743	739	673	540	1450	4670	1360	329	574
12	808	890	855	761	776	689	544	1280	4440	1210	328	573
13	772	849	831	766	790	705	510	1100	3640	1110	353	564
14	747	827	811	770	792	690	507	1110	3200	978	488	547
15	751	822	772	756	780	623	492	1330	2840	1050	553	539
16	814	822	716	729	739	630	495	1440	2340	880	958	916
17	821	816	704	714	738	637	506	1350	1950	782	1570	1060
18	842	825	728	714	777	654	552	1340	1820	679	1200	909
19	908	833	687	739	786	666	633	1450	1850	613	930	970
20	874	848	705	771	810	639	651	1460	1800	616	780	1020
21	873	881	716	796	817	628	615	1500	1630	578	1390	1160
22	874	896	727	737	789	616	585	1980	1510	557	1280	1210
23	889	898	750	703	784	619	611	2430	1400	532	1020	1170
24	876	880	739	702	768	610	651	3050	1350	497	871	1120
25	909	893	734	695	748	630	758	3290	1320	445	725	1090
26	878	890	720	699	749	636	759	2850	1150	435	631	1060
27	876	886	704	701	704	660	700	2700	1040	400	594	1020
28	862	903	732	700	777	667	684	2590	905	364	522	1250
29	827	881	727	722	---	658	638	2810	887	363	467	2160
30	814	867	733	725	---	664	671	2480	829	350	422	1770
31	833	---	725	728	---	650	---	1840	---	358	407	---
TOTAL	26084	26399	24768	22507	21347	20764	17984	53491	71781	27907	19409	25607
MEAN	841	880	799	726	762	670	599	1726	2393	900	626	854
MAX	1110	943	925	796	817	837	759	3290	4670	2280	1570	2160
MIN	614	816	687	695	704	610	492	797	829	350	328	402
AC-FT	51740	52360	49130	44640	42340	41190	35670	106100	142400	55350	38500	50790

CAL YR 1989 TOTAL 395058 MEAN 1082 MAX 2410 MIN 517 AC-FT 783600
WTR YR 1990 TOTAL 358048 MEAN 981 MAX 4670 MIN 328 AC-FT 710200

SAN JUAN RIVER BASIN

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.--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.--70 years, 36.0 ft³/s, 26,080 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, 1,100 ft³/s, at 1945 hours Sept. 28, gage height, 5.70 ft; minimum daily, 0.78 ft³/s, July 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.6	e1.6	e6.0	e6.0	12	4.2	29	38	8.9	2.0	1.9
2	3.9	5.4	e2.0	e5.5	e5.0	11	4.8	43	39	4.4	1.5	1.8
3	3.7	5.9	e1.8	e5.0	e5.0	11	4.4	23	36	2.3	1.4	1.7
4	9.0	4.6	e1.8	e2.0	e5.0	11	4.5	22	49	.78	1.4	5.5
5	7.7	4.4	e2.0	e2.5	e6.0	12	5.5	17	53	27	1.4	3.1
6	5.9	3.5	e2.0	e3.0	e8.0	13	5.7	20	52	43	1.4	7.6
7	4.9	2.3	e1.8	e3.0	e7.0	12	5.8	26	58	62	1.1	5.9
8	4.2	2.5	e3.0	e3.5	7.9	12	7.0	39	67	17	.89	4.5
9	3.6	1.6	e5.0	e4.0	e8.0	12	7.1	50	67	8.5	.89	4.2
10	3.5	1.1	e4.5	e5.0	e8.0	13	6.3	48	77	12	1.1	3.8
11	4.1	1.2	e4.0	e6.0	8.4	15	5.9	54	89	16	1.9	3.5
12	3.6	1.7	e3.0	e6.0	8.0	14	5.6	44	63	15	2.2	2.8
13	4.4	1.8	e3.5	e5.5	8.3	14	5.1	42	50	16	2.4	2.7
14	3.3	2.3	e3.5	e5.0	8.3	12	5.2	54	42	25	4.0	2.3
15	3.2	e2.0	e4.0	e5.0	e8.0	12	5.2	56	33	18	5.0	2.2
16	3.8	e2.0	e4.0	e3.0	e6.0	12	4.5	47	29	20	22	2.7
17	2.6	e2.0	e4.0	e2.0	e4.0	12	8.0	47	27	18	6.5	6.2
18	2.7	e2.0	e5.0	e4.0	e6.0	11	21	52	20	17	2.2	10
19	2.9	e2.0	e4.5	e6.0	7.5	11	27	50	20	12	2.7	9.9
20	3.7	e2.0	e5.0	e6.0	8.8	9.1	24	53	18	9.8	4.4	8.6
21	4.1	2.0	e5.0	e5.5	8.9	8.0	16	53	16	8.4	4.5	5.4
22	6.4	1.5	e5.0	e4.0	e7.0	8.3	14	63	15	8.7	3.5	4.2
23	4.6	e1.80	e5.0	e4.5	e8.0	5.7	22	68	13	7.0	3.9	3.8
24	2.6	e1.4	e5.0	e5.0	9.1	3.4	30	77	11	5.4	5.4	3.7
25	2.7	1.7	e5.0	e5.0	9.4	2.1	25	69	14	4.7	6.0	3.2
26	3.5	1.6	e5.0	e5.5	9.5	2.9	18	76	14	3.1	5.8	3.1
27	4.2	e1.4	e6.0	e6.0	9.9	5.8	17	69	13	1.9	5.4	3.3
28	4.2	e1.5	e6.0	e6.0	11	5.3	15	76	11	1.1	4.7	135
29	4.4	e1.6	e5.5	e6.0	---	4.8	16	72	11	1.4	4.2	16
30	5.2	e1.6	e5.0	e6.0	---	4.1	23	61	9.5	1.6	3.4	6.7
31	5.7	---	e5.0	e6.0	---	4.5	---	44	---	2.3	2.4	---
TOTAL	132.4	70.00	123.5	147.5	212.0	296.0	362.8	1544	1054.5	398.28	115.58	275.3
MEAN	4.27	2.33	3.98	4.76	7.57	9.55	12.1	49.8	35.2	12.8	3.73	9.18
MAX	9.0	5.9	6.0	6.0	11	15	30	77	89	62	22	135
MIN	2.6	.80	1.6	2.0	4.0	2.1	4.2	17	9.5	.78	.89	1.7
AC-FT	263	139	245	293	421	587	720	3060	2090	790	229	546

CAL YR 1989 TOTAL 7550.60 MEAN 20.7 MAX 98 MIN .80 AC-FT 14980
WTR YR 1990 TOTAL 4731.86 MEAN 13.0 MAX 135 MIN .78 AC-FT 9390

e Estimated

SAN JUAN RIVER BASIN

09367500 LA PLATA RIVER NEAR FARMINGTON, NM

LOCATION.--Lat 36°44'23", 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.--Records poor. Diversions for irrigation of about 24,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years, 29.0 ft³/s, 21,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,770 ft³/s, Aug. 21, 1990, gage height, 13.6 ft, from floodmarks from rating curve extended on basis of slope-area measurement of peak flow; no flow for long periods in some years. Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911 and September 10, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,770 ft³/s, Aug. 21, gage height, 13.6 ft, from floodmarks from rating curve extended or explained above; minimum daily, 0.14 ft³/s, Aug. 5, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.26	.37	e3.4	e2.9	1.1	e.76	2.5	.35	e.20	.16	e.48
2	.26	.26	.32	e3.4	e2.3	1.0	e.77	3.2	.35	.30	.16	e.50
3	.27	.26	.31	e2.8	e1.8	.94	e.77	1.4	.34	.86	.16	e.96
4	2.4	.26	.33	e1.0	e1.8	.90	e.80	.72	.33	e.31	.15	e.52
5	5.0	.26	.37	e1.0	e2.5	.90	e.84	.65	.30	.29	.14	e.46
6	1.5	.26	.52	e1.0	e3.7	.92	e.84	.63	.29	96	.19	e.46
7	.67	.27	1.0	e1.0	e3.7	1.3	e.82	.61	.26	17	.16	e.48
8	.25	.28	1.1	e1.2	e4.5	.95	e1.0	.55	.25	6.8	.14	e.48
9	.23	.26	1.4	e1.6	e4.6	.88	e.95	.48	.25	2.1	e.18	e.51
10	.23	.30	2.0	e2.6	4.1	2.7	e.90	.49	16	1.1	e.16	e.52
11	.23	.27	1.6	e3.5	5.2	1.8	.84	.46	31	.41	e.16	e.55
12	.23	.27	e1.6	e3.5	5.1	1.5	.75	.44	1.0	.38	e.17	e.58
13	.23	.28	e2.0	e3.0	2.8	e1.6	.72	.45	e.65	.51	e24	e.56
14	.23	.28	e2.0	e2.5	1.9	e1.0	.72	.43	e.32	2.6	e43	e.56
15	.27	.26	e2.4	e2.4	1.5	e.95	.76	.43	e.30	.66	e38	e.55
16	.29	.26	e2.4	e2.9	3.2	e.97	.77	.40	e.30	.25	e75	e13
17	.26	.29	e2.4	e3.6	5.5	e.98	.76	.39	e.30	.22	e34	e16
18	.26	.29	e2.5	e4.3	5.4	e.86	.91	.37	e.28	.84	e9.5	e18
19	.26	.27	e2.8	e4.9	3.9	e.90	1.0	.37	e.28	.28	e3.2	e21
20	.26	.27	e3.3	e4.6	3.7	e.84	.84	.35	e.29	.21	e2.1	e7.8
21	.29	.28	e3.3	e3.9	4.9	e.80	.80	.35	e.25	.20	e850	e8.2
22	.28	.26	e3.2	e2.5	4.9	e.83	.80	.34	e.25	.20	e45	e2.1
23	.28	.27	e3.2	e2.1	4.2	e.80	.83	.34	e.22	.20	e6.5	e6.4
24	.27	.31	e3.2	e2.1	3.5	e.78	1.1	.33	e.22	.20	e3.2	e1.5
25	.28	.30	e3.1	e2.1	2.2	e.78	.95	.31	e.22	.19	e3.0	e.68
26	.29	.29	e3.1	e2.6	1.5	e.82	.80	.31	e.19	.19	e2.6	e.65
27	.29	.26	e3.9	e3.0	1.5	e.83	.75	.33	e.20	.18	e2.8	e.65
28	.29	.26	e3.9	e3.0	1.2	e.82	.81	.34	e.19	.17	e1.9	e159
29	.26	.30	e3.5	e3.0	---	e.82	.83	.35	e.20	.16	e1.2	e45
30	.26	.36	e3.0	e2.9	---	e.80	1.1	.36	e.20	.16	e.86	e3.6
31	.26	---	e2.9	e2.9	---	e.79	---	.36	---	.16	e.55	---
TOTAL	16.64	8.30	67.02	84.3	94.0	31.86	25.29	19.04	55.58	133.33	1148.34	311.75
MEAN	.54	.28	2.16	2.72	3.36	1.03	.84	.61	1.85	4.30	37.0	10.4
MAX	5.0	.36	3.9	4.9	5.5	2.7	1.1	3.2	31	96	850	159
MIN	.23	.26	.31	1.0	1.2	.78	.72	.31	.19	.16	.14	.46
AC-FT	33	16	133	167	186	63	50	38	110	264	2280	618

CAL YR 1989 TOTAL 4595.29 MEAN 12.6 MAX 157 MIN .00 AC-FT 9110
WTR YR 1990 TOTAL 1995.45 MEAN 5.47 MAX 850 MIN .14 AC-FT 3960

e Estimated

SAN JUAN RIVER BASIN

09367540 SAN JUAN RIVER NEAR FRUITLAND, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°44'25", long 108°24'09", in NW¼ 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 approximately 11 miles upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
DEC 01...	1206	893	600	8.7	6.0	3.5	--	12.3	210	80
JAN 18...	1030	713	600	7.9	1.0	1.5	8.0	11.7	230	87
MAR 06...	1400	744	600	8.5	6.0	7.0	26	10.4	--	--
MAY 23...	1145	E2200	325	8.2	27.0	14.5	130	8.2	140	50
JUL 11...	1115	E1330	465	8.3	30.0	22.0	1800	6.8	170	65
AUG 08...	1603	376	990	8.0	32.5	24.5	6700	5.8	260	110
08...	1700	376	950	8.2	--	25.0	--	--	250	--

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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB AS CACO3 (90410)
DEC 01...	66	11	40	1	2.3	145	7	131	128
JAN 18...	71	12	45	1	2.6	170	0	139	129
MAR 06...	65	11	47	--	2.9	139	7	126	123
MAY 23...	44	6.1	15	0.6	1.4	104	0	85	84
JUL 11...	56	7.2	38	1	2.6	128	0	105	109
AUG 08...	86	12	120	3	3.7	194	0	159	181
08...	80	11	120	3	3.7	--	--	--	180

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	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)
DEC 01...	150	12	0.30	--	--	8.7	404	369	--
JAN 18...	170	14	0.30	--	--	9.1	418	408	--
MAR 06...	150	11	0.50	--	--	8.6	412	--	--
MAY 23...	77	6.6	0.30	--	--	6.0	204	208	--
JUL 11...	130	9.4	0.50	--	--	7.9	317	315	--
AUG 08...	360	14	0.50	--	--	9.4	688	701	--
08...	330	12	0.20	0.030	0.005	10	674	679	0.600

09367540 SAN JUAN RIVER NEAR FRUITLAND, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AUG	--	--	--	--	--	--	--	--	--
08...									
08...	220	110	70	190	28	9	1	1000	4

SAN JUAN RIVER BASIN

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.

PERIOD OF RECORD.--September 1974 to May 1990 (discontinued).

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.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--15 years (water years 1974-89), 1.48 ft³/s, 1,070 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.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 1	2245	*.50	*4.26				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.03	---	---	---	---
2	.00	.00	.00	.00	.00	.00	.00	.09	---	---	---	---
3	.00	.00	.00	.00	.00	.00	.00	.04	---	---	---	---
4	.00	.00	.00	.00	.00	.00	.00	.03	---	---	---	---
5	.13	.00	.00	.00	.00	.00	.00	.01	---	---	---	---
6	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
7	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
8	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
9	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
10	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
11	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
12	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
13	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
14	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
15	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
17	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
18	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
19	.00	.00	.00	.00	.00	.00	.01	---	---	---	---	---
20	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
21	.00	.00	.00	.00	.01	.00	.00	---	---	---	---	---
22	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
23	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
24	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
25	.00	.00	.00	.00	.00	.00	.03	---	---	---	---	---
26	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
27	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
28	.00	.00	.00	.00	.01	.00	.00	---	---	---	---	---
29	.00	.00	.00	.00	---	.00	.00	---	---	---	---	---
30	.00	.00	.00	.00	---	.00	.00	---	---	---	---	---
31	.00	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	0.13	0.00	0.00	0.00	0.02	0.00	0.04	---	---	---	---	---
MEAN	.004	.000	.000	.000	.001	.000	.001	---	---	---	---	---
MAX	.13	.00	.00	.00	.01	.00	.03	---	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
AC-FT	.3	.00	.00	.00	.04	.00	.08	---	---	---	---	---

CAL YR 1989 TOTAL 6.35 MEAN .017 MAX 1.7 MIN .00 AC-FT 13

SAN JUAN RIVER BASIN

09367680 CHACO WASH AT CHACO CULTURE NATIONAL MONUMENT, 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 May 1990 (discontinued). Published as "at Chaco Canyon National Monument" prior 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.--Records fair.

AVERAGE DISCHARGE.--13 years (water years 1976-89), 4.30 ft³/s, 3,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft³/s, Sept. 2, 1988, gage height, 8.55 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
April 18	0230	*17	*1.70				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
2	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
3	.00	.00	.00	.00	.00	.00	.01	.60	---	---	---	---
4	.00	.00	.00	.00	.00	.00	.00	.33	---	---	---	---
5	.32	.00	.00	.00	.00	.00	.16	.31	---	---	---	---
6	.81	.00	.00	.00	.00	.00	2.0	.01	---	---	---	---
7	.04	.00	.00	.00	.00	.00	.53	.00	---	---	---	---
8	.00	.00	.00	.00	.00	.00	.16	.00	---	---	---	---
9	.00	.00	.00	.00	.00	.00	.10	.00	---	---	---	---
10	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
11	.00	.00	.00	.00	.00	.04	.00	---	---	---	---	---
12	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
13	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
14	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
15	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
17	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
18	.00	.00	.00	.00	.00	.00	1.2	---	---	---	---	---
19	.00	.00	.00	.00	.00	.00	1.4	---	---	---	---	---
20	.00	.00	.00	.00	.00	.00	1.1	---	---	---	---	---
21	.00	.00	.00	.00	.00	.00	.14	---	---	---	---	---
22	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
23	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
24	.00	.00	.00	.00	.00	.00	.02	---	---	---	---	---
25	.00	.00	.00	.00	.00	.00	.07	---	---	---	---	---
26	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
27	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
28	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
29	.00	.00	.00	.00	---	.00	.00	---	---	---	---	---
30	.00	.00	.00	.00	---	.00	.00	---	---	---	---	---
31	.00	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	1.17	0.00	0.00	0.00	0.00	0.04	6.89	---	---	---	---	---
MEAN	.038	.000	.000	.000	.000	.001	.23	---	---	---	---	---
MAX	.81	.00	.00	.00	.00	.04	2.0	---	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
AC-FT	2.3	.00	.00	.00	.00	.08	14	---	---	---	---	---

CAL YR 1989 TOTAL 16.50 MEAN .045 MAX 9.9 MIN .00 AC-FT 33

SAN JUAN RIVER BASIN

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.

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.--Records fair except for estimated daily discharges, which are poor. Base flow is mostly wastewater from Four Corners Power Plant.

AVERAGE DISCHARGE.--14 years (water years 1977-90), 48.0 ft³/s, 34,780 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 2	2104	3,050	7.62	Aug. 20	2202	*3,910	*8.67
July 15	0630	1,570	6.30	Sept. 19	0423	1,280	6.19
Aug. 15	1051	2,530	7.22	Sept. 28	2044	2,120	7.04
Aug. 16	0521	2,800	7.55	Sept. 29	2230	1,870	6.71
				Sept. 30	1824	2,480	7.26

Minimum daily, 2.1 ft³/s, June 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	7.6	5.3	11	6.8	4.1	5.8	4.3	4.6	3.4	e3.7	4.1
2	5.6	11	5.5	12	6.4	4.8	6.0	627	4.6	3.9	e4.0	3.3
3	6.0	6.1	5.4	11	7.9	5.0	6.0	2060	5.0	4.2	e3.4	3.9
4	8.0	6.2	6.1	18	8.1	5.4	6.1	424	8.5	4.2	e4.0	4.1
5	12	25	6.3	14	6.0	5.6	6.2	74	7.6	3.9	e5.0	4.9
6	5.3	12	5.7	18	7.1	5.5	6.3	38	4.0	4.1	e5.3	3.7
7	3.6	5.3	5.8	17	6.0	5.7	5.7	23	3.5	4.0	4.6	4.0
8	4.8	5.0	5.6	16	5.6	5.8	6.8	15	4.1	4.1	3.9	4.1
9	4.1	5.0	5.8	15	6.8	5.6	6.9	8.0	15	11	3.7	4.1
10	5.1	5.0	5.8	14	7.3	5.6	11	12	11	5.1	22	4.0
11	7.4	5.0	11	13	6.1	5.4	6.2	13	9.6	3.9	14	4.3
12	11	5.0	28	14	5.6	6.0	6.9	5.4	20	16	8.0	4.3
13	6.5	4.9	27	5.6	5.6	6.4	5.3	7.1	10	16	6.0	4.1
14	7.3	4.6	35	5.6	5.3	6.5	4.8	6.4	e5.6	17	57	4.5
15	5.0	4.6	23	5.6	7.7	6.4	3.6	3.4	5.3	272	595	4.1
16	5.3	3.3	17	6.2	9.4	6.7	3.9	3.7	e2.7	163	1020	4.2
17	6.1	3.3	12	11	12	6.4	4.9	6.0	2.1	72	194	97
18	6.0	4.1	11	7.0	6.2	6.4	5.5	9.0	11	31	212	244
19	8.9	4.5	9.4	5.6	5.6	6.5	12	5.0	e4.6	21	45	315
20	9.3	4.6	9.9	5.3	6.3	6.4	7.9	7.1	e3.1	e9.0	480	106
21	7.7	4.6	11	8.8	5.6	5.8	57	5.0	e3.1	e6.7	610	61
22	5.9	4.8	76	4.6	5.9	5.7	24	4.3	3.4	8.0	e36	144
23	6.9	5.0	23	5.6	6.0	5.2	9.5	5.6	5.3	e3.1	20	88
24	5.2	4.7	12	8.2	5.6	4.8	7.2	5.3	4.3	e2.9	14	27
25	5.5	4.6	12	10	5.1	5.0	5.1	4.6	3.4	e3.7	4.7	e8.5
26	8.8	4.6	12	12	3.7	4.8	2.9	5.0	3.6	e2.4	3.8	e6.4
27	7.9	4.6	14	8.8	3.7	5.2	7.3	5.3	3.6	e3.1	5.1	e2.4
28	10	16	15	10	4.3	5.4	16	5.0	3.4	e3.1	4.3	269
29	6.1	6.7	15	12	---	5.3	6.0	5.0	3.6	e2.9	5.4	308
30	5.7	5.6	11	14	---	5.5	4.0	5.0	3.8	e2.9	4.5	954
31	5.3	---	22	9.1	---	5.6	---	4.6	---	e3.4	4.5	---
TOTAL	209.4	193.3	463.6	328.0	177.7	174.5	266.8	3406.1	179.4	711.0	3402.9	2696.0
MEAN	6.75	6.44	15.0	10.6	6.35	5.63	8.89	110	5.98	22.9	110	89.9
MAX	12	25	76	18	12	6.7	57	2060	20	272	1020	954
MIN	3.6	3.3	5.3	4.6	3.7	4.1	2.9	3.4	2.1	2.4	3.4	2.4
AC-FT	415	383	920	651	352	346	529	6760	356	1410	6750	5350

CAL YR 1989 TOTAL 10934.20 MEAN 30.0 MAX 1090 MIN .20 AC-FT 21690
WTR YR 1990 TOTAL 12208.7 MEAN 33.4 MAX 2060 MIN 2.1 AC-FT 24220

e Estimated

SAN JUAN RIVER BASIN

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.--Water-discharge records good 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 banks, though some of bypass flow is returned to river downstream from gage. Satellite telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1927-90), 2,200 ft³/s, 1,594,000 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.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 21	0930	*6,200	*6.58	No other peak greater than base discharge.			

Minimum daily, 109 ft³/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	812	825	727	756	852	668	987	1460	681	183	e398
2	480	859	874	723	799	868	647	1450	1540	655	154	e381
3	485	913	869	704	755	795	547	e2320	1370	681	144	e367
4	551	883	802	707	755	775	509	e1290	1590	809	e139	406
5	765	898	820	775	757	778	491	e1090	2780	947	e133	381
6	966	884	820	740	696	841	493	e1190	3480	1460	e123	386
7	975	954	852	728	714	810	542	e1290	3550	2050	128	526
8	908	941	857	777	696	675	507	e1480	3420	2120	133	469
9	853	960	822	729	696	661	596	1790	3290	1780	161	539
10	832	984	833	730	697	650	570	1680	3250	1720	154	541
11	869	999	933	687	705	693	479	1600	3870	1430	119	481
12	789	961	871	697	717	710	509	1450	3830	1260	109	440
13	711	923	846	702	727	717	411	1270	3170	1120	115	445
14	672	920	842	725	712	676	419	1170	2620	995	321	394
15	680	900	796	700	710	640	416	1140	2280	1060	1360	362
16	733	899	685	680	669	635	427	1340	2030	1110	1660	407
17	738	906	679	749	678	635	427	1310	1690	891	1880	e1090
18	728	898	704	753	788	650	487	1200	1600	710	1620	e1150
19	763	882	701	788	781	680	749	1220	1480	510	1130	1230
20	747	881	705	808	811	696	858	1290	1520	e445	1190	1220
21	735	824	748	834	820	719	793	1300	1420	e395	3600	1210
22	747	760	764	809	817	677	704	1490	1300	e367	1650	1270
23	735	881	728	748	830	689	831	2000	1200	e295	1370	1150
24	740	844	741	745	805	663	947	2480	1130	287	1090	1090
25	776	862	755	739	773	707	1090	3060	1130	263	955	1030
26	820	848	749	753	775	681	989	2520	1030	249	794	966
27	729	851	733	743	743	713	893	2410	933	241	682	930
28	763	860	787	757	831	735	911	2190	801	e214	553	1060
29	805	848	714	772	---	697	826	2380	724	e206	e454	2850
30	787	834	708	774	---	716	855	2370	695	e196	e433	2250
31	800	---	701	753	---	692	---	1720	---	192	e417	---
TOTAL	23153	26669	24264	23056	21013	22126	19591	51477	60183	25339	22954	25419
MEAN	747	889	783	744	750	714	653	1661	2006	817	740	847
MAX	975	999	933	834	831	868	1090	3060	3870	2120	3600	2850
MIN	471	760	679	680	669	635	411	987	695	192	109	362
AC-FT	45920	52900	48130	45730	41680	43890	38860	102100	119400	50260	45530	50420

CAL YR 1989 TOTAL 371964 MEAN 1019 MAX 2500 MIN 251 AC-FT 737800
WTR YR 1990 TOTAL 345244 MEAN 946 MAX 3870 MIN 109 AC-FT 684800

e Estimated

SAN JUAN RIVER BASIN

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 September 1986, October 1989 to current year.

WATER TEMPERATURE: December 1950 to September 1986, October 1989 to current year.

INSTRUMENTATION.--Water-temperature and specific-conductance monitor.

REMARKS.--Interruptions in record were due to probes silted, probes out of water, or malfunction of recording instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (water years, 1957-86, 1990) Maximum, 4,360 microsiemens July 31, 1959; minimum, 138 microsiemens, Nov. 1, 1981.

WATER TEMPERATURE: Maximum 34.0°C, July 20, 1968; minimum, 0.0°C on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,360 microsiemens, May 2; minimum daily, 222 microsiemens, June 9.

WATER TEMPERATURE: Maximum daily, 28.6°C, June 26; minimum daily, 0.0°C on several days during Jan. and Feb.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV												
30...	1200	835	610	8.5	6.5	2.0	17	12.2	230	100	70	
MAR												
07...	1301	849	620	8.5	12.0	7.5	25	11.6	220	97	68	
MAY												
22...	0945	1450	450	8.2	27.5	16.0	90	7.6	180	76	57	
AUG												
07...	1400	131	790	8.9	--	26.5	--	--	300	--	86	
08...	1332	131	800	8.6	32.0	25.5	6.9	11.5	290	130	84	
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 WATER DIS IT FIELD HCO3 (MG/L AS (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (MG/L AS (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS (39086)	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												
30...	14	46	1	2.3	144	7	130	129	180	15	0.30	
MAR												
07...	13	51	1	1.8	139	8	128	127	190	15	0.40	
MAY												
22...	9.8	30	1	1.7	111	10	107	102	120	10	0.30	
AUG												
07...	20	67	2	3.3	--	--	--	150	270	21	0.40	
08...	19	67	2	3.4	171	10	156	152	260	22	0.10	
DATE		BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	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)	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												
30...	--	--	8.5	419	416	--	<0.010	0.250	0.060	0.050	0.34	
MAR												
07...	--	--	8.0	461	426	0.290	0.010	0.300	0.030	0.030	0.27	
MAY												
22...	--	--	7.0	243	302	--	<0.010	0.200	0.040	0.020	0.86	
AUG												
07...	0.040	0.004	4.1	559	563	--	--	<0.100	--	--	--	
08...	--	--	4.6	567	556	--	<0.010	<0.100	0.040	0.040	1.2	

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE 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)	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)
NOV 30...	0.060	0.030	10	<1	63	<0.5	60	<1.0	<1	<3	1
MAR 07...	0.100	0.040	10	1	59	<0.5	60	3.0	<5	<3	<10
MAY 22...	0.410	0.030	30	1	64	<0.5	--	3.0	1	<3	2
AUG 07...	--	--	<10	--	76	--	80	--	--	--	--
AUG 08...	0.070	0.020	<10	1	74	<0.5	50	<1.0	<1	<3	3
DATE	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)	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)
NOV 30...	11	<1	35	8	<0.1	<10	<1	1	<1.0	920	<6
MAR 07...	9	<10	30	6	0.1	<10	<10	1	<1.0	900	<6
MAY 22...	57	<1	23	4	<0.1	<10	1	<1	<1.0	680	<6
AUG 07...	3	--	41	17	--	--	--	1	--	1200	--
AUG 08...	7	<1	40	19	<0.1	<10	<1	1	<1.0	1100	<6
DATE	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, DIS- SOLVED (MG/L AS ZN) (80154)	SEDI- MENT, DIS- SOLVED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN 0.62 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)	DDE, TOTAL (UG/L) (39365)
NOV 30...	12	172	388	49	K2	K52	--	--	--	--	--
MAR 07...	15	359	823	28	K5	K4	--	--	--	--	--
MAY 22...	18	1330	5210	36	530	970	--	--	--	--	--
AUG 07...	8	--	--	--	--	--	--	--	--	--	--
AUG 08...	6	1940	686	92	<26	K16	<0.1	<0.010	<0.1	<0.010	<0.010
DATE	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)
AUG 08...	<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)
MAY 22...	--	--	--	--	--	<0.01	<0.01	<0.01	--	--	--
AUG 08...	<0.01	<0.01	<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	721	668	706	596	572	586	658	596	630	---	---	---
2	725	666	692	603	580	590	643	596	620	---	---	---
3	708	661	687	---	---	---	643	596	621	---	---	---
4	714	670	694	---	---	---	635	596	617	698	654	678
5	722	663	697	---	---	---	658	588	626	698	660	678
6	728	677	704	---	---	---	643	588	622	734	672	695
7	734	659	701	---	---	---	650	603	625	712	656	678
8	723	669	699	---	---	---	674	603	634	674	654	662
9	712	651	693	---	---	---	674	596	627	670	658	664
10	716	649	688	---	---	---	674	596	631	674	646	659
11	713	654	688	---	---	---	666	596	643	690	634	667
12	711	659	684	---	---	---	---	---	---	686	662	673
13	709	640	680	---	---	---	---	---	---	676	660	668
14	699	654	678	---	---	---	---	---	---	686	662	670
15	688	640	671	627	588	618	---	---	---	690	674	682
16	689	651	668	627	603	619	---	---	---	690	674	682
17	687	611	651	627	603	619	---	---	---	672	658	664
18	643	603	626	627	596	619	---	---	---	668	650	660
19	643	596	621	627	603	619	---	---	---	658	642	652
20	635	588	619	674	603	625	---	---	---	670	648	660
21	643	603	627	643	611	627	---	---	---	678	650	663
22	643	611	625	650	619	634	---	---	---	670	646	655
23	713	635	667	643	611	623	---	---	---	662	636	648
24	650	572	607	627	603	621	---	---	---	664	632	648
25	580	509	545	---	---	---	---	---	---	686	638	659
26	533	478	503	---	---	---	---	---	---	700	638	664
27	533	478	506	---	---	---	---	---	---	692	646	666
28	541	509	523	---	---	---	---	---	---	712	668	685
29	541	509	528	---	---	---	---	---	---	684	640	662
30	580	517	549	---	---	---	---	---	---	670	648	658
31	580	549	567	---	---	---	---	---	---	682	642	661
MONTH	734	478	639	674	572	617	674	588	627	734	632	666

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	674	648	664	705	655	681	589	543	571	660	642	650
2	674	650	661	730	603	675	659	576	604	1360	638	704
3	670	654	661	777	706	735	731	615	660	1010	444	571
4	686	652	666	754	707	730	773	624	711	520	474	492
5	678	624	652	708	639	685	722	648	671	544	520	528
6	698	640	661	686	665	674	688	614	655	566	542	547
7	692	636	661	665	635	650	660	590	636	558	512	537
8	694	646	666	645	610	629	663	581	617	512	472	487
9	688	664	676	633	615	626	662	589	617	480	440	461
10	694	660	677	652	622	632	682	631	655	516	436	462
11	700	664	680	669	647	656	658	618	642	496	454	473
12	702	674	691	678	651	661	650	620	635	464	450	455
13	700	686	693	707	679	690	686	640	658	466	---	---
14	706	674	689	725	696	710	662	628	650	---	---	---
15	684	640	665	734	710	724	660	624	644	---	---	---
16	648	630	638	737	698	716	664	600	648	492	---	---
17	690	626	651	702	647	673	686	600	662	456	442	449
18	698	646	675	646	621	636	919	662	695	482	434	453
19	776	664	699	648	630	641	767	656	687	479	404	454
20	777	729	753	656	641	648	665	598	644	456	440	449
21	724	629	684	674	657	664	695	667	678	460	446	451
22	624	497	579	678	659	668	699	687	695	550	428	475
23	626	577	595	665	645	653	699	678	687	546	350	407
24	646	624	637	668	649	659	677	638	655	354	292	333
25	651	606	632	665	620	648	643	625	635	294	252	263
26	655	635	646	628	574	609	641	617	630	298	266	283
27	662	652	657	583	506	551	651	618	632	304	294	298
28	672	648	660	520	498	511	661	649	655	322	302	312
29	---	---	---	539	506	527	661	649	655	324	296	306
30	---	---	---	538	522	531	650	641	647	310	290	296
31	---	---	---	565	525	541	---	---	---	378	312	346
MONTH	777	497	663	777	498	646	919	543	651	1360	252	442

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	418	382	400	---	---	---	842	818	833	---	---	---
2	422	398	409	---	---	---	842	---	---	---	---	---
3	444	398	411	---	---	---	---	---	---	---	---	---
4	446	408	430	---	---	---	---	---	---	---	---	---
5	396	276	314	---	---	---	---	---	---	820	---	---
6	276	236	246	1350	---	---	808	---	---	784	756	768
7	244	222	232	1040	668	870	922	---	---	822	760	778
8	244	224	234	648	510	571	---	---	---	830	806	817
9	254	220	234	540	492	515	---	---	---	814	782	792
10	262	238	248	720	456	528	---	---	---	786	750	767
11	432	250	330	702	530	596	---	---	---	748	726	736
12	244	236	240	648	516	550	---	---	---	732	710	722
13	262	226	242	590	552	572	---	---	---	720	702	712
14	280	260	269	598	578	586	990	---	---	728	698	712
15	300	278	285	692	602	647	976	949	955	730	706	717
16	322	296	306	670	644	656	971	950	963	839	698	736
17	382	326	356	674	660	667	972	880	932	1150	831	1000
18	406	382	395	658	---	---	875	833	858	1230	886	1050
19	406	392	400	---	---	---	841	805	823	988	713	822
20	402	380	390	---	---	---	949	748	813	800	588	707
21	410	382	392	---	---	---	1280	981	1170	619	564	596
22	432	404	412	---	---	---	1130	847	994	611	564	590
23	444	414	432	---	---	---	832	650	722	611	572	593
24	468	400	436	---	---	---	670	642	655	596	556	578
25	468	428	443	---	---	---	714	654	671	627	541	585
26	448	---	---	---	---	---	682	660	674	635	596	620
27	---	---	---	---	---	---	698	670	685	611	478	554
28	---	---	---	---	---	---	694	---	---	972	454	540
29	---	---	---	---	---	---	---	---	---	1070	635	869
30	---	---	---	---	---	---	---	---	---	988	486	731
31	---	---	---	842	---	---	---	---	---	---	---	---
MONTH	468	220	339	1350	456	614	1280	642	839	1230	454	724
YEAR	1360	220	615									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.0	14.9	16.5	5.8	3.1	4.9	4.7	1.3	2.9	---	---	---
2	17.2	14.7	15.9	---	---	---	4.3	1.1	2.7	---	---	---
3	16.0	14.1	15.3	---	---	---	4.1	.5	2.2	---	---	---
4	15.6	14.5	15.0	---	---	---	3.7	.1	1.9	.1	.0	.0
5	15.2	13.7	14.6	---	---	---	4.3	.9	2.2	.0	.0	.0
6	14.9	13.1	14.1	---	---	---	4.7	1.5	2.8	.0	.0	.0
7	15.0	13.3	14.2	---	---	---	4.1	1.1	2.5	.0	.0	.0
8	15.0	12.7	14.1	---	---	---	3.9	.3	2.0	.0	.0	.0
9	14.9	12.5	13.6	---	---	---	3.5	.1	1.8	.5	.0	.1
10	14.7	12.1	13.5	---	---	---	3.7	.3	1.8	1.8	.0	.6
11	14.7	12.7	13.7	---	---	---	---	---	---	3.1	.0	1.4
12	14.7	12.1	13.3	---	---	---	---	---	---	3.6	.3	2.0
13	14.5	12.1	13.4	---	---	---	---	---	---	4.9	2.3	3.4
14	14.3	12.5	13.4	---	---	---	---	---	---	5.3	2.1	3.6
15	14.7	12.7	13.5	5.6	2.9	4.3	---	---	---	4.6	2.5	3.5
16	14.5	12.5	13.7	5.8	2.1	3.7	---	---	---	4.5	1.4	2.8
17	14.1	11.3	12.9	4.5	2.1	3.1	---	---	---	3.1	.7	1.9
18	12.9	8.0	10.5	4.7	.7	2.6	---	---	---	1.7	.4	1.0
19	12.7	7.6	10.1	5.2	1.3	3.1	---	---	---	2.6	.0	1.2
20	10.9	7.4	9.4	5.4	2.1	3.8	---	---	---	3.5	1.1	2.1
21	12.1	8.0	10.2	6.8	3.3	5.0	---	---	---	3.2	.3	1.7
22	13.7	10.0	11.8	6.8	3.3	4.9	---	---	---	2.5	.6	1.8
23	13.3	10.1	11.9	6.2	2.5	4.2	---	---	---	1.4	.0	.6
24	13.5	10.0	11.6	5.2	2.3	3.7	---	---	---	2.3	.0	.8
25	11.9	10.0	11.0	5.8	2.9	4.4	---	---	---	.9	.0	.2
26	11.1	8.2	9.9	---	---	---	---	---	---	1.1	.0	.3
27	10.7	7.0	9.1	---	---	---	---	---	---	1.5	.0	.4
28	9.6	6.8	8.3	---	---	---	---	---	---	.4	.0	.0
29	7.8	4.9	6.6	---	---	---	---	---	---	1.2	.0	.3
30	7.2	3.7	5.5	---	---	---	---	---	---	2.0	.0	.7
31	7.0	3.1	5.2	---	---	---	---	---	---	3.1	.9	1.8
MONTH	18.0	3.1	12.0	6.8	.7	4.0	4.7	.1	2.3	5.3	.0	1.1

SAN JUAN RIVER BASIN

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.--Water-discharge records fair except for estimated daily discharges, which are poor. Flow partly regulated by Navajo Reservoir (09355100). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 2,433 ft³/s, 1,763,000 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.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 21	1445	*5,450	*3.97				

Minimum daily, 139 ft³/s, Aug. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	493	882	834	714	777	804	728	815	1790	595	e200	335
2	493	938	848	753	804	867	682	1110	1750	582	e192	325
3	485	1020	857	720	804	802	595	2300	1760	552	e184	404
4	543	944	807	685	770	725	534	1610	1830	715	e173	545
5	788	1020	818	729	766	716	513	1150	2760	795	e173	487
6	1090	985	807	e714	731	732	497	1250	4000	1080	218	393
7	1100	994	820	e692	701	803	540	1370	4160	2010	154	505
8	1020	1080	828	e712	708	680	530	1530	3820	2640	155	581
9	e1010	968	818	e680	703	638	554	1660	3700	2050	139	546
10	e953	1020	791	e722	676	629	591	1640	3620	1750	208	579
11	e944	1010	899	e747	688	659	529	1570	4070	1620	187	546
12	e851	961	935	e750	681	687	471	1440	4300	1340	147	481
13	e760	921	863	e747	715	724	444	1260	3880	1140	e182	475
14	e708	940	847	e763	713	687	e430	1050	2980	1020	e369	451
15	e702	927	874	e749	709	646	e428	1030	2740	1200	e1390	420
16	e742	871	728	e731	679	607	e424	1190	2470	1090	1670	414
17	772	909	714	752	635	633	e424	1370	2160	905	1770	1100
18	691	942	712	772	720	636	460	1200	2010	797	1880	1450
19	719	908	778	813	780	638	561	1230	1810	555	1210	1990
20	758	957	679	850	822	713	832	1330	1800	e481	1080	1390
21	719	904	760	832	791	706	727	1380	1680	e440	3590	1390
22	736	859	810	858	788	701	642	1550	1490	e397	1830	1360
23	728	934	813	782	786	709	663	2020	1310	e360	1420	e1320
24	749	890	768	762	778	691	779	2570	1180	323	1010	e1260
25	749	903	799	748	750	683	948	3400	1150	289	910	e1210
26	812	870	778	787	744	709	959	2800	1050	277	749	e1150
27	822	856	758	810	721	707	781	2460	869	261	645	e1120
28	808	878	808	795	752	774	761	2370	792	240	583	e1250
29	826	850	757	776	---	727	709	2510	655	224	451	e2650
30	811	834	719	834	---	754	667	2760	604	e216	406	e2850
31	831	---	741	772	---	724	---	2320	---	e208	359	---
TOTAL	24213	27975	24768	23551	20692	21911	18403	53245	68190	26152	23634	28977
MEAN	781	932	799	760	739	707	613	1718	2273	844	762	966
MAX	1100	1080	935	858	822	867	959	3400	4300	2640	3590	2850
MIN	485	834	679	680	635	607	424	815	604	208	139	325
AC-FT	48030	55490	49130	46710	41040	43460	36500	105600	135300	51870	46880	57480

CAL YR 1989 TOTAL 402784 MEAN 1104 MAX 3080 MIN 280 AC-FT 798900
WTR YR 1990 TOTAL 361711 MEAN 991 MAX 4300 MIN 139 AC-FT 717500

e Estimated

SAN JUAN RIVER BASIN

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-81, 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 30...	1511	838	650	8.5	9.0	2.0	23	12.2	250
JAN 17...	1600	749	700	8.2	7.5	3.0	31	12.2	270
MAR 07...	1000	786	700	8.4	8.5	7.0	36	10.8	--
MAY 22...	1355	1550	481	8.3	32.0	19.0	84	7.8	190
JUL 10...	1630	1660	510	8.3	35.0	26.0	510	6.4	180
AUG 08...	1101	154	900	8.3	30.0	23.5	110	7.0	340

DATE	HARD- NESS NONCARE DISSOLV FLD. AS CACO3 (MG/L) (00904)	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 DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)
NOV 30...	120	75	16	49	1	2.3	144	10
JAN 17...	140	80	18	58	2	2.9	167	0
MAR 07...	--	75	17	58	--	2.9	129	19
MAY 22...	87	61	10	29	0.9	1.9	126	2
JUL 10...	78	57	10	32	1	2.9	118	5
AUG 08...	170	94	26	76	2	3.8	212	0

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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 CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
NOV 30...	134	132	200	15	0.30	8.7	451	447
JAN 17...	137	135	230	17	0.30	7.7	516	496
MAR 07...	138	129	210	14	0.50	7.2	504	--
MAY 22...	107	108	140	11	0.30	6.0	346	323
JUL 10...	105	107	140	10	0.40	7.8	335	323
AUG 08...	174	149	330	22	0.40	1.9	652	658

LITTLE COLORADO RIVER BASIN

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.

WATER-DISCHARGE RECORDS

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.--Water-discharge records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--21 years, 6.54 ft³/s, 4,740 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 10	1630	*290	*6.60	Aug. 20	2145	54	5.62
Aug. 16	1415	94	5.86				

Minimum daily, 0.01 ft³/s, Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.10	.06	.27	1.1	2.1	1.4	.00	.00	.00	.00	.00
2	e.00	.14	.12	.44	1.2	1.9	1.4	.00	.00	.00	.00	.00
3	e.00	.12	.20	.45	.99	1.7	1.4	.96	.00	.00	.00	.00
4	e.00	.11	.21	.40	.98	1.7	1.2	1.1	.00	.00	.00	.00
5	.00	.15	.21	.35	1.1	1.7	1.2	.68	.00	.00	.00	.00
6	.58	.18	.23	.33	1.2	1.7	1.2	.44	.00	.00	.00	2.6
7	.62	.17	.26	.35	1.5	1.9	1.2	.25	.00	.00	.00	.95
8	.32	.12	.23	.59	1.5	1.8	1.3	.11	.00	.00	.00	.59
9	.08	.12	.21	.68	1.6	1.5	1.3	.00	.00	.00	.00	.39
10	.00	.14	.22	.73	1.6	1.7	1.2	.00	.00	.00	.00	.00
11	.00	.16	.20	.84	1.7	3.0	1.1	.00	.00	.00	.00	.00
12	.00	.15	.10	1.1	1.8	2.5	.85	.00	.00	.00	.00	.00
13	.00	.15	.01	1.4	1.4	1.9	.67	.00	.00	.00	.00	.00
14	.00	.16	.01	1.3	1.2	1.7	.59	.00	.00	.00	.34	.00
15	.00	.16	.03	1.2	1.1	1.7	.56	.00	.00	.00	.08	.00
16	.00	.13	.10	1.0	1.0	1.5	.54	.00	.00	.00	.00	.00
17	.00	.12	.14	.95	1.1	1.5	.51	.00	.00	.00	1.5	.00
18	.00	.12	.21	1.0	1.7	1.4	.36	.00	.00	.00	5.7	.00
19	.00	.15	.24	1.1	1.5	1.3	.24	.00	.00	.00	1.5	.00
20	.03	.18	.21	1.3	1.1	1.3	.24	.00	.00	.00	.36	.00
21	.26	.20	.18	1.3	1.5	1.3	.15	.00	.00	.00	8.1	.00
22	.38	.18	.17	1.2	1.8	1.2	.14	.00	.00	.00	1.7	.00
23	.30	.07	.15	1.3	1.9	1.3	.11	.00	.00	.00	.47	1.0
24	.20	.12	.15	1.3	1.9	1.2	.07	.00	.00	.00	.06	.95
25	.17	.25	.14	1.2	1.9	1.2	.14	.00	.00	.00	.00	.27
26	.10	.29	.14	1.0	1.9	1.1	.21	.00	.00	.00	.00	.00
27	.03	.21	.16	.98	1.9	1.0	.12	.00	.00	.00	.00	.00
28	.02	.15	.19	1.0	2.0	1.1	.01	.00	.00	.00	.00	.02
29	.04	.02	.22	1.1	---	1.1	.00	.00	.00	.00	.00	.04
30	.09	.00	.25	1.2	---	1.3	.00	.00	.00	.00	.00	.00
31	.10	---	.25	1.2	---	1.4	---	.00	---	.00	.00	---
TOTAL	3.32	4.32	5.20	28.56	41.17	48.7	19.41	3.54	0.00	0.00	19.81	6.81
MEAN	.11	.14	.17	.92	1.47	1.57	.65	.11	.000	.000	.64	.23
MAX	.62	.29	.26	1.4	2.0	3.0	1.4	1.1	.00	.00	8.1	2.6
MIN	.00	.00	.01	.27	.98	1.0	.00	.00	.00	.00	.00	.00
AC-FT	6.6	8.6	10	57	82	97	38	7.0	.00	.00	39	14

CAL YR 1989 TOTAL 476.72 MEAN 1.31 MAX 105 MIN .00 AC-FT 946
WTR YR 1990 TOTAL 180.84 MEAN .50 MAX 8.1 MIN .00 AC-FT 359

e Estimated

LITTLE COLORADO RIVER BASIN
09386900 RIO NUTRIA NEAR RAMAH, NM -- Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978, 1980, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
NOV 14...	1130	0.13	550	7.7	12.0	4.5	11.8	300	35	80	24	
JAN 04...	1120	EO.11	580	7.9	-5.0	1.5	6.5	320	46	87	25	
MAR 19...	1200	0.23	445	7.7	12.5	6.0	9.2	250	55	66	20	
JUN 05...	1300	0.18	610	7.4	26.5	17.5	7.4	310	31	85	23	
JUL 17...	1100	0.15	600	7.5	28.5	18.0	7.0	300	34	84	22	
SEP 25...	1100	0.09	480	7.6	16.0	12.0	5.1	270	25	75	20	
DATE		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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) (90410)	ALKA-LINITY LAB DIS-SOLVED (MG/L AS CACO3) (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)	
NOV 14...	13	0.3	1.1	321	0	263	221	63	6.0	0.40	11	
JAN 04...	13	0.3	1.0	334	0	274	223	70	6.2	0.40	11	
MAR 19...	10	0.3	1.1	234	0	192	217	57	7.1	0.20	8.7	
JUN 05...	12	0.3	1.0	337	0	276	269	61	8.1	0.40	11	
JUL 17...	12	0.3	1.2	325	0	266	258	50	8.0	0.40	12	
SEP 25...	10	0.3	1.3	298	0	244	240	52	7.6	0.20	10	
DATE		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, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 14...	356	1	<1	40	<1	<1.0	1	1	4	2	16	
JAN 04...	378	2	<1	30	<1	<1.0	2	2	2	<10	19	
MAR 19...	285	1	<1	30	<1	<1.0	<1	<5	2	<10	9	
JUN 05...	367	1	1	40	<1	<1.0	2	1	2	1	16	
JUL 17...	349	1	1	60	<1	1.0	<1	<1	4	2	13	
SEP 25...	323	1	1	40	<1	<1.0	<1	<1	7	1	19	
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)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 14...	1	<1	<0.10	<0.1	<1	<1	<10	13	42	0.02	55	
JAN 04...	2	10	<0.10	<0.1	<1	<1	<10	<3	35	--	56	
MAR 19...	1	<10	<0.20	<0.1	<1	<1	<10	6	43	0.03	56	
JUN 05...	1	<1	<0.10	<0.1	<1	<1	30	7	20	0.01	66	
JUL 17...	1	<1	<0.10	0.1	<1	<1	<10	4	94	0.04	37	
SEP 25...	2	<1	<0.10	<0.1	<1	<1	20	11	96	0.02	79	

LITTLE COLORADO RIVER BASIN

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.--848 mi², of which 13 mi² is non-contributing.

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.--Water-discharge records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year. Satellite telemeter available at station.

AVERAGE DISCHARGE.--21 years, 12.5 ft³/s, 9,060 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 21	0300	*25	*3.33				

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.10	.06	.27	1.1	2.1	1.4	.00	.00	.00	.00	.00
2	e.00	.14	.12	.44	1.2	1.9	1.4	.00	.00	.00	.00	.00
3	e.00	.12	.20	.45	.99	1.7	1.4	.96	.00	.00	.00	.00
4	e.00	.11	.21	.40	.98	1.7	1.2	1.1	.00	.00	.00	.00
5	.00	.15	.21	.35	1.1	1.7	1.2	.68	.00	.00	.00	.00
6	.58	.18	.23	.33	1.2	1.7	1.2	.44	.00	.00	.00	2.6
7	.62	.17	.26	.35	1.5	1.9	1.2	.25	.00	.00	.00	.95
8	.32	.12	.23	.59	1.5	1.8	1.3	.11	.00	.00	.00	.59
9	.08	.12	.21	.68	1.6	1.5	1.3	.00	.00	.00	.00	.39
10	.00	.14	.22	.73	1.6	1.7	1.2	.00	.00	.00	.00	.00
11	.00	.16	.20	.84	1.7	3.0	1.1	.00	.00	.00	.00	.00
12	.00	.15	.10	1.1	1.8	2.5	.85	.00	.00	.00	.00	.00
13	.00	.15	.01	1.4	1.4	1.9	.67	.00	.00	.00	.00	.00
14	.00	.16	.01	1.3	1.2	1.7	.59	.00	.00	.00	.34	.00
15	.00	.16	.03	1.2	1.1	1.7	.56	.00	.00	.00	.08	.00
16	.00	.13	.10	1.0	1.0	1.5	.54	.00	.00	.00	.00	.00
17	.00	.12	.14	.95	1.1	1.5	.51	.00	.00	.00	1.5	.00
18	.00	.12	.21	1.0	1.7	1.4	.36	.00	.00	.00	5.7	.00
19	.00	.15	.24	1.1	1.5	1.3	.24	.00	.00	.00	1.5	.00
20	.03	.18	.21	1.3	1.1	1.3	.24	.00	.00	.00	.36	.00
21	.26	.20	.18	1.3	1.5	1.3	.15	.00	.00	.00	8.1	.00
22	.38	.18	.17	1.2	1.8	1.2	.14	.00	.00	.00	1.7	.00
23	.30	.07	.15	1.3	1.9	1.3	.11	.00	.00	.00	.47	1.0
24	.20	.12	.15	1.3	1.9	1.2	.07	.00	.00	.00	.06	.95
25	.17	.25	.14	1.2	1.9	1.2	.14	.00	.00	.00	.00	.27
26	.10	.29	.14	1.0	1.9	1.1	.21	.00	.00	.00	.00	.00
27	.03	.21	.16	.98	1.9	1.0	.12	.00	.00	.00	.00	.00
28	.02	.15	.19	1.0	2.0	1.1	.01	.00	.00	.00	.00	.02
29	.04	.02	.22	1.1	---	1.1	.00	.00	.00	.00	.00	.04
30	.09	.00	.25	1.2	---	1.3	.00	.00	.00	.00	.00	.00
31	.10	---	.25	1.2	---	1.4	---	.00	---	.00	.00	---
TOTAL	3.32	4.32	5.20	28.56	41.17	48.7	19.41	3.54	0.00	0.00	19.81	6.81
MEAN	.11	.14	.17	.92	1.47	1.57	.65	.11	.000	.000	.64	.23
MAX	.62	.29	.26	1.4	2.0	3.0	1.4	1.1	.00	.00	8.1	2.6
MIN	.00	.00	.01	.27	.98	1.0	.00	.00	.00	.00	.00	.00
AC-FT	6.6	8.6	10	57	82	97	38	7.0	.00	.00	39	14

CAL YR 1989 TOTAL 476.72 MEAN 1.31 MAX 105 MIN .00 AC-FT 946
WTR YR 1990 TOTAL 180.84 MEAN .50 MAX 8.1 MIN .00 AC-FT 359

e Estimated

LITTLE COLORADO RIVER BASIN

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 14...	1450	0.15	900	--	8.4	12.5	6.0	10.3	260	0	58	28
JAN 04...	1300	0.39	--	1250	8.1	2.5	0.5	10.5	380	0	93	35
MAR 19...	1530	1.3	730	--	8.2	23.0	12.5	9.7	280	16	72	24
SEP 25...	1315	0.29	365	--	8.1	19.0	14.0	6.4	100	0	30	6.5

DATE	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 DIS IT FIELD HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD CO3 (00452)	ALKA-LINITY WAT TOT IT FIELD CACO3 (39086)	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)
NOV 14...	100	3	4.5	367	12	321	282	130	29	0.40	12
JAN 04...	140	3	14	522	0	428	391	210	46	0.50	23
MAR 19...	80	2	4.4	320	0	262	265	160	20	0.20	14
SEP 25...	43	2	6.0	181	0	148	146	44	16	0.40	7.9

DATE	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, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 14...	554	1	1	120	<1	<1.0	<1	<1	4	3	14
JAN 04...	818	<1	<1	140	<1	<1.0	2	1	3	<10	24
MAR 19...	532	1	<1	90	<1	<1.0	1	<5	3	<10	10
SEP 25...	243	1	<1	280	<1	<1.0	5	<1	8	5	85

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)	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 14...	1	<1	<0.10	<0.1	<1	<1	<10	6	87	0.03	87
JAN 04...	2	<10	<1.0	<0.1	1	1	<10	5	160	0.17	43
MAR 19...	1	<10	1.4	<0.1	<1	<1	20	5	81	0.29	82
SEP 25...	7	<1	<0.10	<0.1	<1	<1	60	6	--	--	--

LITTLE COLORADO RIVER BASIN

09395381 FOSTER CANYON NEAR CONTINENTAL DIVIDE, NM

LOCATION.--Lat 35°28'46", long 108°21'59", in SW/4 sec.18, T.14 N., R.14 W., McKinley County, Hydrologic Unit 15020006, on left bank 250 ft upstream from Interstate Highway 40, 0.2 mi west of Coolidge, 10 mi east of Fort Wingate, and 22 mi east of Gallup.

DRAINAGE AREA.--16.8 mi².

PERIOD OF RECORD.--April 1987 to September 1990 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,090 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127 ft³/s, Aug. 31, 1988, gage height, 3.60 ft, from rating curve extended above 1.0 ft³/s on basis on step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82 ft³/s, Aug. 14, gage height, 3.34 ft, from rating curve extended above 1.0 ft³/s on basis of step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
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	e.00	e.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.5	e.00	e.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.10	e.00	e.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.11	e.00	e.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.01	e5.7	e.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e2.0	e.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	2.9	e.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.61	e.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.37	e.00	e.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.11	e.00	e.00	e.00
31	.00	---	.00	.00	---	.00	---	.00	---	e.00	e.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	5.09	11.21	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.004	.16	.36	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.11	4.5	5.7	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.2	10	22	.00

CAL YR 1989 TOTAL 81.81 MEAN .22 MAX 9.1 MIN .00 AC-FT 162
WTR YR 1990 TOTAL 16.41 MEAN .045 MAX 5.7 MIN .00 AC-FT 33

e Estimated

LITTLE COLORADO RIVER BASIN

09395390 SIXMILE CANYON NEAR FORT WINGATE, NM

LOCATION.--Lat 35°28'59", Long 108°27'25", in SE¼SE¼ sec.31 projected, T.15 N., R.15 W., McKinley County, Hydrologic Unit 15020006, on left bank 1,200 ft upstream from Interstate Highway 40, 1.5 mi west of Ciniza Refinery, 5.0 mi east of Fort Wingate, and 16 mi east of Gallup.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--April 1987 to September 1990 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 384 ft³/s, Aug. 6, 1988, gage height, 5.66 ft, from rating curve extended above 1.0 ft³/s on basis of step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 382 ft³/s, at 1045 hours July 11, gage height, 5.56 ft, from rating curve extended above 1.0 ft³/s on basis of step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.12	e.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	1.4	e.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	e2.5	e.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	9.5
5	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00	.00	e.10
6	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	e19	.00	e1.5
7	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.02
8	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.00
9	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.00
10	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.00
11	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e9.8	.00	e.00
12	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.00
13	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.00	e.00
14	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e2.8	.00	e.00
15	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	.15	e.00
16	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e1.6	e.00
17	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	e.00
18	.00	.00	.00	.00	.00	.00	.00	e.00	.00	e.00	e.00	e.00
19	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	e.00	e.00
20	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	e1.8	e.00
21	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	e.12	e.00
22	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	e.00	e.00
23	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.02	e.00	e.00
24	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.21	.00	e.00
25	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	e.00
26	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	e.00
27	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	e.00
28	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	e.00
29	.00	.00	.00	.00	---	.00	.00	e.00	.00	.00	.00	e.00
30	.00	.00	.00	.00	---	.00	.00	e.00	.00	.00	.00	e.00
31	.00	---	.00	.00	---	.00	---	e.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.02	0.00	31.83	3.67	11.12
MEAN	.000	.000	.000	.000	.000	.000	.000	.13	.000	1.03	.12	.37
MAX	.00	.00	.00	.00	.00	.00	.00	2.5	.00	19	1.8	9.5
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	8.0	.00	63	7.3	22

CAL YR 1989 TOTAL 9.41 MEAN .026 MAX 1.9 MIN .00 AC-FT 19
WTR YR 1990 TOTAL 50.64 MEAN .14 MAX 19 MIN .00 AC-FT 100

e Estimated

GILA RIVER BASIN

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.--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.--63 years (water years 1928-90), 149 ft³/s, 108,700 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 24	1500	*687	*2.17	No other peak greater than base discharge.			

Minimum daily discharge, 21 ft³/s, June 24, 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	69	69	68	70	72	99	72	40	24	78	67
2	83	70	69	66	78	74	95	78	39	24	111	66
3	82	71	69	73	76	77	92	84	37	24	99	62
4	83	72	69	73	73	80	89	84	37	22	102	62
5	93	71	69	69	70	85	85	85	35	26	89	83
6	107	72	68	66	68	85	86	84	32	32	93	77
7	176	72	69	65	68	90	83	78	32	36	88	104
8	181	71	68	65	66	94	83	74	32	37	79	131
9	159	72	68	66	68	97	84	72	32	40	71	147
10	141	72	68	68	69	104	85	71	30	39	65	140
11	125	72	66	68	67	132	87	70	36	40	59	121
12	115	71	65	69	66	147	88	70	35	44	65	105
13	106	71	63	69	67	149	86	69	34	44	87	95
14	99	72	62	68	67	147	85	68	33	48	90	85
15	93	71	63	69	74	140	81	66	32	44	104	79
16	90	71	65	68	72	132	80	63	29	55	158	74
17	86	71	66	68	70	123	81	60	29	61	133	72
18	84	70	66	68	67	117	87	59	29	53	127	78
19	81	70	67	66	67	113	88	58	29	66	105	75
20	79	71	65	66	68	110	87	56	29	77	100	70
21	82	71	66	65	68	110	83	55	26	103	110	69
22	83	71	66	64	67	111	80	53	23	121	197	71
23	78	71	65	67	68	114	77	52	23	122	209	100
24	75	70	65	69	67	118	75	50	21	143	140	600
25	72	71	66	69	67	119	83	49	22	149	111	527
26	71	70	66	67	69	120	81	47	21	109	92	344
27	69	69	66	65	69	122	81	46	22	94	80	254
28	69	68	67	65	71	118	79	45	22	111	76	197
29	68	69	70	64	---	113	75	43	22	102	78	157
30	68	69	72	64	---	110	73	42	22	91	74	142
31	69	---	70	66	---	105	---	40	---	79	70	---
TOTAL	2953	2121	2073	2083	1937	3428	2518	1943	885	2060	3140	4254
MEAN	95.3	70.7	66.9	67.2	69.2	111	83.9	62.7	29.5	66.5	101	142
MAX	181	72	72	73	78	149	99	85	40	149	209	600
MIN	68	68	62	64	66	72	73	40	21	22	59	62
AC-FT	5860	4210	4110	4130	3840	6800	4990	3850	1760	4090	6230	8440

CAL YR 1989 TOTAL 28388 MEAN 77.8 MAX 325 MIN 25 AC-FT 56310
WTR YR 1990 TOTAL 29395 MEAN 80.5 MAX 600 MIN 21 AC-FT 58300

GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, NM

(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", 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.--Water-discharge records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--23 years, 29.2 ft³/s, 21,160 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 400 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 5	1315	*609	*3.83	No other peak greater than base discharge.			
No flow at times.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.9	1.8	3.5	3.2	9.3	8.4	7.1	.60	.00	28	2.1
2	.68	1.9	1.9	3.0	3.7	8.5	7.5	12	.44	.00	37	4.0
3	.71	1.9	1.9	2.9	5.7	7.8	6.8	17	.28	.00	33	4.7
4	.99	1.9	1.9	2.8	9.8	7.9	6.3	20	.11	.00	28	4.3
5	187	1.9	2.0	2.9	6.8	9.7	7.1	18	.03	.00	33	4.3
6	84	1.8	2.1	3.0	6.9	11	9.2	18	.00	.00	15	10
7	32	1.7	2.1	3.5	5.9	9.9	11	19	.00	.00	9.0	31
8	20	1.7	1.8	3.0	7.6	8.6	14	18	.00	.00	6.9	24
9	15	1.7	1.8	2.7	7.5	8.3	16	16	.00	.01	4.6	22
10	11	1.7	2.0	3.2	6.6	18	14	13	.00	.69	3.1	15
11	8.8	1.5	1.7	3.4	7.2	66	14	11	.00	.48	2.0	9.6
12	7.4	1.5	1.7	3.3	9.3	45	15	9.0	.00	.34	1.5	7.1
13	6.1	1.4	1.7	3.3	9.9	38	16	7.6	.00	.12	10	5.4
14	5.2	1.5	1.7	3.2	10	25	16	6.5	.00	.10	85	4.4
15	4.6	1.5	1.8	2.8	8.1	20	16	5.8	.00	.17	76	4.1
16	4.2	1.5	1.8	2.6	8.0	16	16	5.4	.00	.18	77	4.0
17	3.9	1.5	1.9	2.1	7.2	15	13	4.7	.00	1.0	48	3.6
18	3.6	1.5	2.6	2.4	6.0	16	10	4.0	.00	7.8	26	2.8
19	3.4	1.5	1.9	2.5	5.3	20	8.0	3.5	.00	3.7	17	2.2
20	3.3	1.5	1.5	4.4	4.6	22	6.8	3.2	.00	9.0	13	2.3
21	3.8	1.5	1.7	8.0	4.6	21	5.9	3.0	.00	18	14	2.3
22	4.1	1.6	1.9	3.6	4.2	23	6.0	2.7	.00	19	28	3.2
23	3.8	1.5	1.8	4.1	4.1	26	6.9	2.2	.00	9.3	31	19
24	3.3	1.5	1.9	3.9	4.9	26	6.9	1.8	.00	22	17	21
25	2.9	1.5	1.8	3.5	6.6	27	10	1.5	.00	8.3	11	15
26	2.5	1.5	1.6	3.2	7.9	27	8.6	1.2	.00	4.6	7.8	10
27	2.3	1.5	1.8	2.5	9.0	24	6.6	1.1	.00	3.2	6.1	7.9
28	2.2	1.5	2.2	2.3	10	20	6.5	.91	.00	13	4.9	6.6
29	2.1	1.5	3.5	5.0	---	16	7.3	.81	.00	5.9	4.2	5.8
30	2.0	1.8	3.0	3.7	---	13	7.6	.74	.00	3.2	3.4	8.0
31	1.9	---	2.4	2.9	---	10	---	.69	---	4.6	2.6	---
TOTAL	433.78	48.4	61.2	103.2	190.6	615.0	303.4	235.45	1.46	134.69	683.1	265.7
MEAN	14.0	1.61	1.97	3.33	6.81	19.8	10.1	7.60	.049	4.34	22.0	8.86
MAX	187	1.9	3.5	8.0	10	66	16	20	.60	22	85	31
MIN	.68	1.4	1.5	2.1	3.2	7.8	5.9	.69	.00	.00	1.5	2.1
AC-FT	860	96	121	205	378	1220	602	467	2.9	267	1350	527
CAL YR 1989	TOTAL 2693.14	MEAN 7.38	MAX 187	MIN .00	AC-FT 5340							
WTR YR 1990	TOTAL 3075.98	MEAN 8.43	MAX 187	MIN .00	AC-FT 6100							

GILA RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT 25...	0900	2.9	100	7.8	12.0	10.0	0.10	11.2	41	0	12
JAN 18...	1230	2.3	89	7.5	3.5	2.5	0.30	11.7	37	0	11
APR 25...	1130	12	65	7.6	10.5	9.5	1.5	10.0	26	2	8.0
AUG 22...	1145	19	78	7.5	23.5	19.5	1.4	7.6	31	1	9.6
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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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 25...	2.6	6.4	0.4	0.70	60	0	49	40	11	2.1	0.40
JAN 18...	2.3	5.6	0.4	0.60	49	0	40	36	10	1.4	0.40
APR 25...	1.5	4.3	0.4	0.60	30	0	24	25	6.4	1.2	0.30
AUG 22...	1.8	5.2	0.4	0.60	37	0	30	32	7.6	1.3	0.30
DATE	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 25...	20	61	85	<0.010	<0.100	<0.010	<0.010	--	0.010	0.030	20
JAN 18...	18	69	74	<0.010	<0.100	0.010	0.010	--	0.010	0.010	<10
APR 25...	18	61	55	<0.010	<0.100	<0.010	<0.010	--	0.020	<0.010	30
AUG 22...	19	72	64	<0.010	<0.100	0.020	0.020	0.38	<0.010	<0.010	50
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)
OCT 25...	<1	10	<0.5	<1.0	<1	<3	<1	10	<1	<4	1
JAN 18...	<1	3	<0.5	<1.0	<1	<3	<10	6	<10	<4	<1
APR 25...	<1	6	<0.5	<1.0	<1	<3	2	27	1	<4	1
AUG 22...	<1	3	<0.5	1.0	<1	<3	2	23	3	<4	2

GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

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)	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)
OCT 25...	0.3	<10	<1	<1	<1.0	63	<6	<3	1.8	<0.4	3.9
JAN 18...	0.1	<10	<10	<1	<1.0	54	<6	<3	--	--	--
APR 25...	<0.1	<10	<1	<1	<1.0	38	<6	130	--	--	--
AUG 22...	<0.1	<10	1	<1	<1.0	44	<6	<3	--	--	--

DATE	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 NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (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 25...	<0.4	3.1	<0.4	0.16	0.09	7	0.05	97	K1	K4
JAN 18...	--	--	--	--	--	14	0.09	97	K1	<1
APR 25...	--	--	--	--	--	5	0.16	96	K2	15
AUG 22...	--	--	--	--	--	9	0.45	87	K8	61

GILA RIVER BASIN

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 W¼ 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. June 13, 1980 to Feb. 23, 1983 at site 1,300 ft downstream at same datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 5,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--74 years (water years 1906, 1909-10, 1913-55, 1963-90), 207 ft³/s, 150,000 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.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 23	0145	*1,360	*8.10				

Minimum daily discharge, 6.9 ft³/s, June 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	55	68	86	90	77	121	90	19	9.0	102	65
2	42	88	66	85	96	85	110	91	21	9.6	140	71
3	42	81	67	89	95	91	111	79	15	18	125	64
4	43	73	76	89	93	98	108	83	15	18	102	77
5	68	73	90	91	92	105	114	84	15	22	271	91
6	149	68	90	87	89	112	102	84	25	26	118	134
7	104	69	84	86	88	115	94	86	16	28	106	104
8	152	71	82	86	87	115	86	92	15	41	104	122
9	139	79	69	84	89	115	88	78	16	49	96	116
10	118	89	70	71	87	114	88	60	16	48	81	118
11	105	73	79	70	87	125	91	56	12	36	57	111
12	88	68	90	72	91	142	99	58	21	33	47	103
13	91	72	91	68	93	157	99	67	12	50	55	89
14	87	85	84	73	89	169	76	73	11	28	92	76
15	81	88	69	93	88	171	75	62	11	183	115	57
16	74	88	67	92	90	163	97	46	15	103	220	54
17	71	83	68	91	90	149	90	43	15	77	170	58
18	74	72	76	74	88	139	91	43	12	63	119	50
19	80	70	90	84	86	131	89	44	13	66	99	67
20	75	71	93	78	88	131	89	55	11	67	174	68
21	74	69	89	92	87	131	99	36	12	73	105	65
22	e75	77	89	90	83	122	89	36	8.1	119	222	50
23	e77	89	88	85	82	115	74	49	6.9	153	503	71
24	e80	86	87	84	88	129	74	43	14	119	206	126
25	e83	66	87	84	86	123	83	26	9.8	133	142	392
26	e80	64	87	85	85	124	106	30	14	124	132	349
27	e77	75	87	84	74	117	94	22	9.4	103	118	288
28	e75	89	85	78	75	120	77	21	8.0	103	112	224
29	e77	89	86	77	---	127	70	20	7.2	114	89	164
30	e80	84	87	81	---	128	76	34	7.3	139	89	143
31	e83	---	85	89	---	120	---	19	---	106	73	---
TOTAL	2589	2304	2526	2578	2456	3860	2760	1710	402.7	2260.6	4184	3567
MEAN	83.5	76.8	81.5	83.2	87.7	125	92.0	55.2	13.4	72.9	135	119
MAX	152	89	93	93	96	171	121	92	25	183	503	392
MIN	42	55	66	68	74	77	70	19	6.9	9.0	47	50
AC-FT	5140	4570	5010	5110	4870	7660	5470	3390	799	4480	8300	7080

CAL YR 1989 TOTAL 31438.5 MEAN 86.1 MAX 236 MIN 9.0 AC-FT 62360
WTR YR 1990 TOTAL 31197.3 MEAN 85.5 MAX 503 MIN 6.9 AC-FT 61880

e Estimated

GILA RIVER BASIN

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 1989 TO SEPTEMBER 1990

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
OCT													
31...	1145	84	372	8.6	16.0	11.5	15	10.0	12	130	0	39	
NOV													
29...	0930	90	359	8.0	8.0	6.0	15	10.4	13	130	0	38	
DEC													
20...	1130	92	330	8.6	11.0	7.0	18	10.8	20	130	0	38	
JAN													
17...	1200	91	350	8.2	14.0	5.5	12	11.7	14	130	0	38	
FEB													
21...	1100	88	358	8.4	10.0	9.0	9.4	10.8	19	130	0	38	
MAR													
15...	1000	175	338	8.2	9.0	7.0	54	10.5	19	110	0	33	
APR													
26...	1200	106	348	8.7	21.0	15.0	22	9.8	13	120	0	36	
MAY													
31...	1400	19	378	8.6	28.0	25.0	4.0	8.7	19	120	0	37	
JUN													
26...	0900	18	382	8.2	30.0	20.0	10	9.4	15	130	0	38	
JUL													
27...	1100	106	338	8.1	27.5	23.0	27	8.0	38	120	3	37	
AUG													
21...	1130	97	327	8.0	25.5	22.0	630	7.4	120	120	0	36	
SEP													
17...	1000	49	379	8.1	27.0	21.0	25	8.2	14	130	0	40	
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 WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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													
31...	7.7	32	1	2.1	132	29	156	139	31	12	2.0	33	
NOV													
29...	7.7	32	1	1.9	149	12	142	138	32	12	2.0	--	
DEC													
20...	7.8	32	1	1.8	151	10	140	137	32	12	2.1	34	
JAN													
17...	7.5	30	1	1.7	171	0	140	136	31	13	2.0	--	
FEB													
21...	7.7	32	1	1.7	164	0	134	134	34	12	2.0	34	
MAR													
15...	7.3	29	1	1.8	146	0	120	118	27	9.6	1.9	--	
APR													
26...	7.2	32	1	1.8	132	12	128	129	22	8.0	1.7	33	
MAY													
31...	7.9	34	1	2.4	145	13	141	139	37	11	2.1	--	
JUN													
26...	8.5	36	1	2.6	166	0	136	138	44	13	2.1	34	
JUL													
27...	6.9	32	1	2.7	144	0	118	131	28	13	2.1	--	
AUG													
21...	6.4	27	1	2.4	155	0	127	131	29	11	1.7	31	
SEP													
17...	7.8	33	1	2.4	185	0	152	149	35	15	2.0	--	

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NITRATE TOTAL (MG/L) AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N) (00615)	NITRO- GEN, DIS- SOLVED (MG/L) AS N) (00613)	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, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N) (00605)	NITRO- GEN, TOTAL (MG/L) AS N) (00600)
OCT 31...	214	253	35	--	--	<0.010	<0.100	<0.100	<0.010	0.010	--	--
NOV 29...	253	211	38	--	--	--	0.500	--	0.020	--	0.28	0.80
DEC 20...	247	246	40	--	--	<0.010	0.500	0.500	0.010	0.020	0.49	1.0
JAN 17...	247	207	36	--	--	--	0.500	--	0.030	--	0.27	0.80
FEB 21...	244	244	50	--	--	<0.010	0.500	0.470	0.020	<0.010	0.28	0.80
MAR 15...	225	181	121	--	--	--	0.300	--	0.080	--	0.42	0.80
APR 26...	241	219	20	--	--	<0.010	<0.100	<0.100	<0.010	<0.010	--	--
MAY 31...	252	216	1	--	--	--	<0.100	--	0.020	--	0.58	--
JUN 26...	257	260	<1	--	--	0.010	1.90	<0.100	0.010	<0.010	--	--
JUL 27...	241	193	461	--	--	--	0.500	--	0.200	--	0.80	1.5
AUG 21...	--	223	1770	--	--	<0.010	0.400	0.400	0.010	0.020	0.49	0.90
SEP 17...	260	226	64	0.380	0.020	--	0.400	--	<0.010	--	--	0.80

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 TOTAL (UG/L) AS AS) (01002)	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)	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)
OCT 31...	0.070	0.030	10	1	1	19	<0.5	50	<1	<1.0	3	<1
NOV 29...	0.100	--	--	1	2	25	--	50	<1	<1.0	3	1
DEC 20...	0.090	0.060	--	1	1	17	--	50	2	<1.0	1	2
JAN 17...	0.050	--	--	1	2	18	--	40	<1	2.0	<1	2
FEB 21...	0.080	0.040	--	1	1	<100	--	50	<1	<1.0	1	<1
MAR 15...	0.180	--	--	1	2	16	--	40	1	<1.0	4	<5
APR 26...	0.060	0.020	10	2	2	16	<0.5	50	<1	<1.0	<1	<1
MAY 31...	0.030	--	--	2	2	19	--	50	<1	<1.0	2	<1
JUN 26...	0.040	0.020	<10	2	2	20	<0.5	60	<1	<1.0	<1	1
JUL 27...	0.240	--	--	2	2	24	--	50	<1	<1.0	9	<1
AUG 21...	0.460	0.070	30	--	1	37	<0.5	390	2	<1.0	49	<1
SEP 17...	0.050	--	--	2	2	24	--	50	<1	<1.0	1	<1

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	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)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)
OCT 31...	<3	8	1	1800	<3	7	<1	26	50	3	<0.10	0.1
NOV 29...	--	9	2	1300	8	4	1	--	60	3	0.20	--
DEC 20...	--	24	1	1600	<3	8	5	--	60	4	<1.0	--
JAN 17...	--	5	<10	840	16	3	<10	--	40	3	<0.10	--
FEB 21...	--	9	2	740	<10	3	<1	--	50	<10	0.20	--
MAR 15...	--	34	<10	4300	25	8	<10	--	150	2	<0.10	--
APR 26...	<3	7	3	910	19	3	1	24	50	2	<0.10	<0.1
MAY 31...	--	5	3	270	13	2	1	--	20	6	<0.10	--
JUN 26...	<3	3	2	120	10	1	3	24	60	7	<0.10	<0.1
JUL 27...	--	110	8	10000	7	17	2	--	380	1	<0.10	--
AUG 21...	<3	190	5	61000	19	1	1	19	1900	4	0.10	<0.1
SEP 17...	--	12	2	1800	11	5	<1	--	60	5	<0.10	--

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	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, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	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)
OCT 31...	<10	<1	<1	<1	<1.0	170	<6	20	5	2.4	1.4
NOV 29...	--	--	<1	<1	1.0	--	--	30	5	--	--
DEC 20...	--	--	<1	<1	<1.0	--	--	20	<3	--	--
JAN 17...	--	--	<1	<1	<1.0	--	--	10	<3	--	--
FEB 21...	--	--	<1	<1	<1.0	--	--	<10	<10	--	--
MAR 15...	--	--	<1	<1	<1.0	--	--	40	5	--	--
APR 26...	<10	1	<1	<1	<1.0	150	<6	20	6	--	--
MAY 31...	--	--	<1	<1	<1.0	--	--	10	3	--	--
JUN 26...	<10	1	<1	<1	<1.0	180	6	<10	4	--	--
JUL 27...	--	--	<1	<1	<1.0	--	--	60	3	--	--
AUG 21...	<10	1	<2	<1	<1.0	170	<6	300	5	--	--
SEP 17...	--	--	<1	<1	<1.0	--	--	10	<3	--	--

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	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 NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSE. SIEVE DIAM. % FINER THAN (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 31...	3.2	2.4	3.0	1.9	0.11	1.6	113	26	64	34	31
NOV 29...	--	--	--	--	--	--	82	20	86	48	92
DEC 20...	--	--	--	--	--	--	--	--	--	K8	27
JAN 17...	--	--	--	--	--	--	57	14	91	K9	32
FEB 21...	--	--	--	--	--	--	92	22	51	K1	K9
MAR 15...	--	--	--	--	--	--	149	70	91	K44	140
APR 26...	--	--	--	--	--	--	68	19	87	K7	K24
MAY 31...	--	--	--	--	--	--	20	1.0	34	K10	96
JUN 26...	--	--	--	--	--	--	34	1.7	84	58	130
JUL 27...	--	--	--	--	--	--	1460	418	96	330	910
AUG 21...	--	--	--	--	--	--	1380	362	93	2100	3900
SEP 17...	--	--	--	--	--	--	124	16	85	K79	K93

GILA RIVER BASIN

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. WDR 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.--Records good. 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.--31 years, 27.8 ft³/s, 20,140 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, 0.78 ft³/s, June 6, 1990.

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 of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 11	1515	*731	*3.41	Aug. 22	1615	521	3.17
July 18	1815	627	3.24				

Minimum discharge, .78 ft³/s June 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.8	6.6	5.7	6.4	8.6	3.5	9.0	2.3	1.4	4.5	26
2	4.5	5.6	6.7	6.3	8.6	8.2	2.7	17	1.7	1.2	11	14
3	4.0	5.7	5.8	7.2	8.0	7.8	3.5	22	1.1	1.6	6.9	6.3
4	6.4	5.8	5.5	8.1	7.6	7.6	2.1	21	1.2	2.2	6.3	5.3
5	23	6.3	5.0	7.3	6.7	7.3	2.2	22	.86	2.9	3.0	7.0
6	16	7.7	4.5	4.2	5.3	6.9	2.9	11	1.0	4.2	2.4	14
7	10	7.1	5.8	5.4	5.7	6.0	4.8	15	.91	4.5	4.6	15
8	12	6.7	5.2	6.5	5.8	5.1	5.9	9.2	.92	11	2.8	11
9	16	5.3	5.7	8.2	7.6	6.3	4.6	11	1.0	11	2.0	8.7
10	14	6.7	5.8	8.3	5.7	7.1	4.4	11	2.0	11	1.6	7.0
11	11	6.0	5.0	9.3	7.4	9.3	4.9	9.0	2.6	69	2.9	6.5
12	9.6	6.0	3.6	7.2	6.2	7.1	4.2	7.3	2.8	16	3.8	3.3
13	7.9	6.1	3.9	9.8	6.7	6.3	3.6	7.0	1.6	7.6	4.9	2.9
14	7.4	6.2	3.5	7.7	7.7	4.2	3.4	5.2	1.3	12	13	1.9
15	9.2	5.9	4.5	8.2	6.4	4.5	3.4	4.9	1.5	20	11	1.8
16	8.3	6.0	6.1	8.3	7.1	5.0	3.9	3.3	1.5	10	14	6.0
17	5.9	6.2	6.0	8.2	6.9	3.1	2.9	2.4	1.9	6.8	13	10
18	4.9	6.1	5.4	7.1	6.5	4.6	3.4	2.9	1.5	25	7.4	6.0
19	3.9	4.4	4.9	7.4	5.7	3.2	3.9	2.2	1.4	5.5	6.3	5.8
20	5.2	4.7	6.5	7.9	5.8	2.5	6.1	1.6	1.2	4.4	6.7	4.3
21	9.4	7.4	5.1	8.0	6.5	3.4	4.6	1.8	.99	4.0	5.2	6.4
22	8.2	7.4	4.5	8.6	6.4	3.3	12	3.8	1.1	5.0	49	22
23	7.0	5.2	6.3	8.1	7.3	1.6	9.1	5.0	.94	4.9	11	52
24	7.0	6.1	7.3	8.5	6.9	1.2	9.8	2.4	.92	4.5	5.7	21
25	7.2	6.1	7.1	6.9	7.0	.98	7.7	2.5	.90	3.0	4.0	14
26	7.4	6.8	5.4	7.1	7.6	.96	7.8	4.3	.93	4.2	3.0	12
27	7.4	6.1	5.3	7.0	6.9	.98	11	3.5	1.1	3.1	13	11
28	7.7	5.1	6.2	7.6	8.0	1.7	5.4	4.6	1.4	3.8	8.8	9.5
29	7.8	5.2	8.2	6.8	---	1.8	3.8	2.7	1.5	3.8	8.5	8.6
30	6.2	6.1	7.9	7.3	---	2.6	9.8	2.1	1.5	4.1	9.4	14
31	6.1	---	5.7	7.9	---	3.8	---	1.8	---	2.2	26	---
TOTAL	264.4	181.8	175.0	232.1	190.4	143.02	157.3	228.5	41.57	269.9	271.7	333.3
MEAN	8.53	6.06	5.65	7.49	6.80	4.61	5.24	7.37	1.39	8.71	8.76	11.1
MAX	23	7.7	8.2	9.8	8.6	9.3	12	22	2.8	69	49	52
MIN	3.8	4.4	3.5	4.2	5.3	.96	2.1	1.6	.86	1.2	1.6	1.8
AC-FT	524	361	347	460	378	284	312	453	82	535	539	661

CAL YR 1989 TOTAL 3905.5 MEAN 10.7 MAX 144 MIN 1.8 AC-FT 7750
WTR YR 1990 TOTAL 2488.99 MEAN 6.82 MAX 69 MIN .86 AC-FT 4940

GILA RIVER BASIN

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.

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.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--24 years, 3.46 ft³/s, 2,500 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 (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 27	1800	*22	*1.77	No other peak greater than base discharge.			
Minimum discharge, 1.3 ft ³ /s, June 5.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.2	3.2	3.2	3.3	3.3	3.2	3.1	2.9	2.9	3.1	3.0
2	2.9	3.2	3.2	3.2	3.3	3.3	3.4	3.2	2.9	2.9	3.0	2.9
3	3.0	3.2	3.2	3.3	3.2	3.3	3.4	3.4	2.9	3.0	3.0	2.9
4	3.0	3.2	3.2	3.2	3.2	3.3	3.4	3.1	2.9	3.0	3.1	2.9
5	3.4	3.2	3.1	3.1	3.2	3.3	3.4	3.0	3.1	3.1	3.0	2.8
6	3.1	3.2	3.1	3.2	3.2	3.3	3.4	3.0	2.8	3.3	3.3	2.8
7	3.1	3.2	3.1	3.2	3.2	3.3	3.4	3.0	2.9	3.2	3.1	3.0
8	3.9	3.2	3.1	3.3	3.3	3.2	3.4	2.9	2.9	3.2	3.0	3.1
9	3.1	3.2	3.1	3.3	3.3	3.3	3.4	2.9	2.9	3.1	3.0	3.0
10	3.1	3.2	3.1	3.3	3.1	3.5	3.4	2.9	3.0	3.1	3.0	2.9
11	3.1	3.2	3.1	3.3	3.1	3.4	3.3	2.9	2.9	3.1	3.0	2.9
12	3.1	3.2	3.1	3.2	3.1	3.3	3.3	2.9	2.9	3.0	3.0	2.9
13	3.0	3.2	3.1	3.2	3.2	3.3	3.3	2.9	2.9	3.1	3.1	2.8
14	2.9	3.2	3.1	3.2	3.0	3.3	3.2	2.9	2.9	3.7	3.3	2.9
15	2.9	3.2	3.2	3.1	3.1	3.2	3.2	2.9	2.9	3.5	3.2	3.4
16	2.8	3.2	3.2	3.2	3.3	3.2	3.4	2.9	2.9	3.2	3.1	3.0
17	3.0	3.2	3.1	3.2	3.3	3.2	3.4	2.8	2.8	3.1	3.3	2.9
18	3.2	3.2	3.1	3.2	3.2	3.2	3.4	2.8	2.8	3.2	3.2	2.7
19	3.3	3.2	3.2	3.2	3.3	3.2	3.4	2.9	2.9	3.1	3.1	2.9
20	3.3	3.2	3.2	3.2	3.4	3.3	3.3	2.9	2.8	3.1	4.4	2.9
21	3.4	3.2	3.2	3.1	3.4	3.4	3.2	2.8	2.8	3.1	3.2	2.9
22	3.4	3.2	3.2	3.2	3.3	3.4	3.2	2.8	2.9	3.1	3.2	3.4
23	3.2	3.2	3.2	3.2	3.2	3.3	3.1	2.9	3.0	3.2	3.1	3.6
24	3.2	3.2	3.2	3.2	3.4	3.3	3.1	2.8	3.2	3.1	2.9	3.0
25	3.2	3.2	3.2	3.1	3.3	3.3	3.2	2.8	3.1	3.1	2.9	2.9
26	3.2	3.2	3.2	3.1	3.3	3.4	3.1	2.9	2.9	3.1	2.9	2.9
27	3.2	3.2	3.2	3.1	3.3	3.3	3.1	2.8	2.9	3.1	4.0	2.9
28	3.2	3.2	3.2	3.2	3.3	3.4	3.0	2.8	2.9	3.0	3.0	2.9
29	3.2	3.2	3.2	3.2	---	3.4	3.0	2.9	2.9	3.0	2.9	2.9
30	3.2	3.3	3.2	3.4	---	3.3	3.0	2.9	2.9	3.0	2.9	3.1
31	3.2	---	3.2	3.2	---	3.3	---	2.8	---	3.0	2.9	---
TOTAL	97.7	96.1	98.0	99.3	90.8	102.5	98.0	90.5	87.4	96.7	97.2	89.1
MEAN	3.15	3.20	3.16	3.20	3.24	3.31	3.27	2.92	2.91	3.12	3.14	2.97
MAX	3.9	3.3	3.2	3.4	3.4	3.5	3.4	3.4	3.2	3.7	4.4	3.6
MIN	2.8	3.2	3.1	3.1	3.0	3.2	3.0	2.8	2.8	2.9	2.9	2.7
AC-FT	194	191	194	197	180	203	194	180	173	192	193	177

CAL YR 1989 TOTAL 1124.9 MEAN 3.08 MAX 4.5 MIN 2.7 AC-FT 2230
WTR YR 1990 TOTAL 1143.3 MEAN 3.13 MAX 4.4 MIN 2.7 AC-FT 2270

GILA RIVER BASIN

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 and crest-stage gage. 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.--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.--63 years, 83.4 ft³/s, 60,420 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.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 24	0145	*310	*2.44				

Minimum discharge, 12 ft³/s, July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	28	29	34	36	29	27	30	32	19	31	23
2	23	28	28	34	37	27	27	33	33	17	24	23
3	25	28	26	37	37	30	27	33	31	18	22	28
4	26	27	27	35	36	32	22	32	32	19	22	33
5	61	27	27	35	36	34	23	31	30	22	21	31
6	49	30	26	33	36	33	24	32	25	26	22	35
7	27	30	26	33	35	31	26	31	22	26	21	34
8	26	28	e25	33	35	30	28	29	26	27	18	32
9	26	30	e25	33	35	28	28	24	24	23	15	35
10	27	30	e25	33	34	31	27	28	29	23	14	32
11	27	28	e25	33	34	33	27	29	26	20	16	28
12	27	29	e26	32	35	36	26	26	24	20	20	28
13	24	27	e26	33	35	36	25	27	30	19	22	28
14	24	29	e26	32	35	38	25	30	30	17	38	28
15	24	30	e27	33	36	38	25	32	27	16	86	24
16	23	29	e27	34	33	36	25	32	27	15	58	26
17	22	28	e27	34	33	32	26	30	25	20	63	27
18	21	27	e27	35	33	32	26	30	24	21	52	28
19	25	26	e27	34	32	32	26	30	28	17	32	30
20	27	27	28	34	32	27	25	26	25	17	26	28
21	28	27	29	32	32	27	24	30	20	17	23	32
22	27	27	29	33	33	28	24	27	19	19	24	33
23	25	27	29	35	34	23	27	25	21	31	53	34
24	25	28	31	35	34	21	31	28	20	96	64	32
25	27	27	31	34	32	21	32	28	20	39	35	37
26	28	27	32	35	32	26	33	32	18	30	28	36
27	28	27	32	35	30	26	31	32	20	24	25	35
28	28	27	33	34	30	23	30	27	22	19	25	32
29	28	27	36	35	---	24	30	31	22	16	23	30
30	27	29	35	34	---	23	30	33	25	53	25	36
31	27	---	35	35	---	26	---	33	---	34	22	---
TOTAL	856	839	882	1051	952	913	807	921	757	780	970	918
MEAN	27.6	28.0	28.5	33.9	34.0	29.5	26.9	29.7	25.2	25.2	31.3	30.6
MAX	61	30	36	37	37	38	33	33	33	96	86	37
MIN	21	26	25	32	30	21	22	24	18	15	14	23
AC-FT	1700	1660	1750	2080	1890	1810	1600	1830	1500	1550	1920	1820

CAL YR 1989 TOTAL 12966 MEAN 35.5 MAX 172 MIN 15 AC-FT 25720
WTR YR 1990 TOTAL 10646 MEAN 29.2 MAX 96 MIN 14 AC-FT 21120

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN - Continued							
07225000	Pajarito Creek at Newkirk.	Lat 35°04'20", long 104°14'50", Guadalupe County, Hydrologic Unit 11080006, downstream side of bridge on old U.S. Highway 66, 1 mi east of Newkirk.	55.0	1954-	08-14-90	5.98	1,970
07225300	Bluewater Creek near Tucumcari.	Lat 35°08'31", long 103°47'32", Quay County, Hydrologic Unit 11080006, in Tucumcari Metropolitan Park, 1,600 ft north of the park's southern boundary, and 4.8 mi southwest of Tucumcari.	15.2	1971-	09-17-90	5.89	229
07226200	Bueyeros Creek at Bueyeros.	Lat 35°58'10", long 103°41'05", in E1/2 sec.7, T.20 N., R.31 E., Harding County, Hydrologic Unit 11080007, on right upstream wingwall of culvert on State Road 102 at Bueyeros.	33.4	1957-	08-14-90	2.97	<100
07226300	Carrizo Creek near Roy.	Lat 36°02'58", long 103°57'48", Harding County, Hydrologic Unit 11080007, 800 ft downstream from State Highway 120, and 15 mi northeast of Roy.	a68	1954-	07-21-90	4.00	410
07227050	Plaza Larga Creek tributary near Ragland.	Lat 34°48'29", long 103°45'35", Quay County, Hydrologic Unit 11080008, at culvert on State Highway 209, 1.2 mi northwest of Ragland.	0.36	1952-	09-21-90	5.68	82
07227150	Arroyo del Puerto near Endee.	Lat 35°03'32", long 103°06'04", Quay County, Hydrologic Unit 11090101, at bridge on State Highway 93, 5.4 mi south of Endee.	a25	1961-	09-17-90	3.65	139
07227200	Tramperos Creek near Stead.	Lat 36°04'15", long 103°12'10", in NW1/4 sec.10, T.21 N., R.35 E., Union County, Hydrologic Unit 11090102, at bridge on State Highway 402, 2.1 mi south of Stead, and 26 mi south of Clayton.	a556	1966-73* 1974-	07-20-90	9.08	2,320
07227295	Sand Draw tributary near Clayton.	Lat 36°23'20", long 103°19'05", Union County, Hydrologic Unit 11090103, upstream from culvert on State Highway 56, 8 mi southwest of Clayton.	1.25	1952-	09-20-90	0.80	36
07227300	Sand Draw near Clayton.	Lat 36°20'30", long 103°11'30", Union County, Hydrologic Unit 11090103, on downstream side of bridge on State Highway 402, 7.5 mi south of Clayton.	a42	1953-	- -90	---	(k)
BRAZOS RIVER BASIN							
08079300	Blackwater Draw tributary near Floyd.	Lat 34°14'52", long 103°44'51", Roosevelt County, Hydrologic Unit 12050001, 0.5 mi downstream from section road, and 10 mi west of Floyd.	a10	1963-	09-17-90	0.65	13
08080600	Running Water Draw near Clovis.	Lat 34°31'55", long 103°12'05", Curry County, Hydrologic Unit 12050005, 0.25 mi upstream from State Highway 209, and 8 mi north of Clovis.	109	1953-56 1957-64* 1965-	07-22-90	2.69	9

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
RIO GRANDE BASIN							
08286650	Canjilon Creek above Abiquiu Reservoir.	Lat 36°18'55", long 106°29'05", Rio Arriba County, Hydrologic Unit 13020102, in Piedra Lumbre Grant, 300 ft upstream from bridge on U.S. Highway 84, 0.2 mi northwest of entrance to Ghost Ranch, and about 12 mi northwest of Abiquiu.	144	1965-	07-10-90	5.66	689
08293700	Arroyo Seco tributary near Pojoaque.	Lat 35°56'33", long 106°01'12", Santa Fe County, Hydrologic Unit 13020101, upstream from culvert on U.S. Highway 84-285, 3.5 mi north of Pojoaque.	0.72	1971-	09-20-90	6.82	135
08313350	Rito de los Frijoles in Bandelier National Monument.	Lat 35°46'35", long 106°16'06", Sandoval County, Hydrologic Unit 13020201, in Bandelier National Monument, downstream from Monument headquarters, 6.5 mi south of Los Alamos, and 18.5 mi northwest of Santa Fe.	18.1	1963-69* 1977-82* 1983-	03-23-90	2.15	8
08313400	Bland Canyon near Cochiti Pueblo.	Lat 35°42'11", long 106°24'56", Sandoval County, Hydrologic Unit 13020201, 200 ft south of Forest Service Road, 0.3 mi inside Santa Fe National Forest, and 7.5 mi north of Cochiti Pueblo.	7.57	1962-	09-22-90	1.53	12
08317500	Galisteo Creek at Canoncito.	Lat 35°33'02", long 105°49'20", Santa Fe County, Hydrologic Unit 13020201, upstream from railroad bridge, 0.2 mi upstream from Apache Canyon at Canoncito.	11.3	1955-56 1959-	09-03-90	3.26	940
08317600	San Cristobal Arroyo near Galisteo.	Lat 35°22'55", long 105°51'05", Santa Fe County, Hydrologic Unit 13020201, at bridge on U.S. Highway 285, 5.5 mi east of Galisteo.	116	1955-	07-09-90	4.29	470
08317720	Canada de la Cueva near Galisteo.	Lat 35°26'13", long 106°00'45", Santa Fe County, Hydrologic Unit 13020201, 6.4 mi east of Cerrillos, and 4.8 mi northwest of Galisteo.	1.81	1970-	- -90	---	(m)
08318900	San Pedro Creek near Golden.	Lat 35°13'45", long 106°18'00", Sandoval County, Hydrologic Unit 13020201, 1 mi downstream from bridge on State Highway 14, and 5.5 mi southwest of Golden.	45.2	1953-	09-29-90	2.12	1,200
08321900	Rio de las Vacas near Senorita.	Lat 35°59'35", long 106°47'45", Sandoval County, Hydrologic Unit 13020204, at bridge on side road, 0.1 mi south of State Highway 126, and 6.5 mi east of Senorita.	26.8	1957-	08-17-90	2.95	125
08330400	Juan Toro Canyon near Miera.	Lat 35°00'57", long 106°20'14", Bernalillo County, Hydrologic Unit 13020203, 150 ft east of State Highway 337, 1 mi southeast of Cedro, and 4.5 mi northwest of Miera.	1.57	1959-	09-22-90	0.95	16

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

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Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
RIO GRANDE BASIN - Continued							
08330500	Tijeras Arroyo at Albuquerque.	Lat 35°03'40", long 106°28'40", Bernalillo County, Hydrologic Unit 13020203, 300 ft south of old U.S. Highway 66, and 0.4 mi southeast of city limits of Albuquerque.	75.3	1943-48* 1958-	- -90	<1.83	<250
08331100	Belen Highline Canal tributary near Los Lunas.	Lat 34°49'20", long 106°49'10", Valencia County, Hydrologic Unit 13020203, upstream from culvert on Highway 6, 5.0 mi west of Los Lunas.	0.16	1952-53 1955-	09-22-90	4.17	125
08331650	Canada Montoso near Scholle.	Lat 34°23'11", long 106°28'37", Socorro County, Hydrologic Unit 13020203, 130 ft upstream from dip on abandoned highway, 500 ft upstream from bridge on U.S. Highway 60, and 3.6 mi southwest of Scholle.	a35	1961-	09-29-90	1.96	265
08341370	Pine Canyon near Thoreau.	Lat 35°18'34", long 108°10'14", McKinley County, Hydrologic Unit 13020207, about 1 mi southwest of the north end of Bluewater Lake, and about 7 mi southeast of Thoreau.	6.09	1969-	- -90	<1.16	<1.0
08348500	Encinal Creek near Casa Blanca.	Lat 35°08'35", long 107°27'55", Cibola County, Hydrologic Unit 13020207, 1.8 mi north of village of Encinal, and 6.8 mi north of Casa Blanca.	6.19	1937-39* 1959-	08-20-90	1.91	34
08353500	La Jencia Creek near Magdalena.	Lat 34°09'45", long 107°12'35", Socorro County, Hydrologic Unit 13020209, 3.5 mi northeast of Magdalena.	195	1957-	08-22-90	4.49	2,400
08358600	Chupadera Wash tributary at Bingham.	Lat 33°51'39", long 106°22'06", Socorro County, Hydrologic Unit 13020210, 75 ft upstream from culvert on U.S. Highway 380, and 0.1 mi west of Bingham.	1.29	1961-	09-19-73 08-03-74 09-11-75 05-02-78 10-02-83 10-17-85 07-23-89 05-02-90	1.36 1.31 1.28 1.30 1.10 1.35 1.20 1.70	h62 h56 h52 h55 h35 h90 h44 110
08359300	San Jose Arroyo near Monticello.	Lat 33°28'05", long 107°14'30", Sierra County, Hydrologic Unit 13020211, at head of box canyon just downstream from major tributary, 800 ft downstream from culvert on old U.S. Highway 85, and 13 mi northeast of Monticello.	26.9	1959-	- -90	---	(k)
08360000	Alamosa Creek near Monticello.	Lat 33°34'09", long 107°35'33", Socorro County, Hydrologic Unit 13020211, on left bank at Alamosa damsite and downstream from Old Fort Ojo Caliente, just downstream from Wildhorse Creek, 15 mi northwest of Monticello.	403	1931-42* 1956-58 1958-71 1973-	08-14-90	4.53	800
08361650	Percha Creek near Kingston.	Lat 32°55'05", long 107°38'55", Sierra County, Hydrologic Unit 13030101, at bridge on State Highway 152, 3.3 mi east of Kingston.	21.5	1953-	09-05-90	5.08	690
08361700	Percha Creek near Hillsboro.	Lat 32°54'55", long 107°36'05", Sierra County, Hydrologic Unit 13030101, 150 ft south of State Highway 152, and 2 mi west of Hillsboro.	35.4	1957-78 1980-	09-05-90	4.19	1,050
08363100	Rio Grande tributary near Radium Springs.	Lat 32°30'05", long 106°57'05", Dona Ana County, Hydrologic Unit 13030102, upstream from culvert on U.S. Highway 85, 120 ft upstream from mouth, and 1.4 mi west of Radium Springs.	0.40	1955-	07-18-90	4.21	55

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
RIO GRANDE BASIN - Continued							
08363200	Aleman Draw at Aleman.	Lat 33°00'00", long 107°00'20", Sierra County, Hydrologic Unit 13030103, on Santa Fe Railroad bridge, 140 ft upstream from dip on Engle-Rincon road, and 0.26 mi west of Aleman.	25.5	1959-	08-22-90	7.28	2,400
08379300	Tecolote Creek at Tecolote.	Lat 35°27'20", long 105°16'55", San Miguel County, Hydrologic Unit 13060001, on bridge on old U.S. Highway 85 at Tecolote.	122	1954-	07-14-90	4.70	277
08380300	Sandoval Canyon at Gallinas.	Lat 35°41'19", long 105°21'17", San Miguel County, Hydrologic Unit 13060001, about 500 ft upstream from culvert on State Highway 65, at north edge of Gallinas.	7.6	1957-1961-	09-17-90	1.64	78
08382900	Pecos River tributary near Pintada.	Lat 34°58'06", long 105°05'38", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, 1,500 ft south of Interstate Highway 40, and 6.8 mi north of Pintada.	16.0	1961-	- -90	<0.83	<20
08383370	Pecos River tributary near Puerto de Luna.	Lat 34°52'35", long 104°38'16", Guadalupe County, Hydrologic Unit 13060001, 25 ft upstream from culvert on State Highway 91, and 3.1 mi north of Puerto de Luna.	0.37	1961-	07-28-90	10.35	328
08385530	Alamosa Creek tributary near Jordan.	Lat 34°47'44", long 103°58'07", Quay County, Hydrologic Unit 13060004, 500 ft upstream from dip on State Highway 156, and 6.9 mi west of Jordan.	9.71	1962-	09-21-90	2.77	78
08385600	Yeso Creek near Fort Sumner.	Lat 34°16'32", long 104°17'28", De Baca County, Hydrologic Unit 13060003, at abandoned bridge 1 mi downstream from State Highway 20, and 14.5 mi south of Fort Sumner.	242	1937-	07-29-90	1.95	880
08385670	Aragon Creek tributary near Encinosa.	Lat 33°43'35", long 105°31'43", Lincoln County, Hydrologic Unit 13060005, 0.3 mi upstream from wooden bridge on dirt road, 1.2 mi north of State Highway 246, and 4.3 mi west of Encinosa.	6.07	1961-	- -90	<3.26	<230
08385900	Salt Creek tributary near Roswell.	Lat 33°32'22", long 104°31'08", Chavez County, Hydrologic Unit 13060005, at culvert on U.S. Highway 285, 4.7 mi north of junction of U.S. Highways 70 and 285, and 10 mi north of Roswell.	0.04	1952-	04-22-90	1.19	(+)
08389000	Rio Bonito near Fort Stanton.	Lat 33°31'05", long 105°29'10", Lincoln County, Hydrologic Unit 13060008, at bridge on U.S. Highway 380, 2.5 mi northeast of Fort Stanton.	a85	1955-	07-11-90	<3.80	<230
08389060	Rio Bonito tributary near Fort Stanton.	Lat 33°31'15", long 105°28'05", Lincoln County, Hydrologic Unit 13060008, at culvert on U.S. Highway 380, 150 ft upstream from mouth, and 3.5 mi northeast of Fort Stanton.	0.72	1955-	- -90	---	(k)

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
RIO GRANDE BASIN - Continued							
08390050	Rio Hondo tributary at Tinnie.	Lat 33°22'36", long 105°13'01", Lincoln County, Hydrologic Unit 13060008, upstream from culvert on U.S. Highway 70-380, 0.5 mi east of junction of U.S. Highway 70-380 and State Highway 368, and at Tinnie.	0.23	1971-	08-15-90	4.94	(+)
08390150	Gallo Canyon near Picacho.	Lat 33°17'23", long 105°10'49", Lincoln County, Hydrologic Unit 13060009, 500 ft east of road, 5 mi south of Arabela.	1.32	1962-	08-15-90	4.16	97
08393700	Pancho Canyon near Arabela.	Lat 33°30'36", long 105°11'38", Lincoln County, Hydrologic Unit 13060008, 200 ft downstream from dip on State Highway 368, and 5.6 mi south of Arabela.	16.7	1962-	09-30-90	0.61	(+)
08393900	Eight Mile Draw near Roswell.	Lat 33°24'05", long 104°37'54", Chavez County, Hydrologic Unit 13060008, 6.5 mi west of Roswell.	397	1941-1952-	07-13-90	14.08	355
08394300	Twin Butte Canyon tributary near Roswell.	Lat 33°10'34", long 104°51'30", Chavez County, Hydrologic Unit 13060009, about 0.1 mi upstream from mouth, and about 22 mi southwest of Roswell.	5.01	1968-	07-13-90	3.67	480
08397390	Curtis Canyon near Mayhill.	Lat 32°51'52", long 105°31'05", Otero County, Hydrologic Unit 13060010, 0.26 mi upstream from SCS dam, 0.4 mi west of State Highway 130, and 2.5 mi southwest of Mayhill.	10.3	1959-	09-16-90	---	(m)
08397400	Hyatt Canyon near Cloudcroft.	Lat 32°56'06", long 105°37'37", Otero County, Hydrologic Unit 13060010, 0.5 mi south of U.S. Highway 82, and 7 mi east of Cloudcroft.	3.08	1953-	09-16-90	1.52	(+)
08397600	Rio Penasco near Dunken.	Lat 33°52'55", long 105°10'40", Chavez County, Hydrologic Unit 13060010, on bridge on State Highway 24, 5 mi north of Dunken.	583	1952-56-1956-62* 1963-	09-16-90	9.47	1,760
08405050	Last Chance Canyon tributary near Carlsbad Caverns.	Lat 32°17'30", long 104°36'20", Eddy County, Hydrologic Unit 13060011, upstream from culvert on State Highway 137, 0.1 mi north of road to Sitting Bull Falls, and 12.5 mi northwest of Carlsbad Caverns.	0.2	1959-	- -90	---	(k)
08405100	Mosley Canyon near Whites City.	Lat 32°15'27", long 104°22'43", Eddy County, Hydrologic Unit 13060011, 600 ft downstream from dip on Dark Canyon Road, and 5.5 mi north of Whites City.	14.6	1959-	- -90	---	(k)
08436000	Antelope Draw near Jal.	Lat 32°09'18", long 103°21'51", Lea County, Hydrologic Unit 13070007, 0.4 mi south of State Highway 128, and 10.7 mi west of Jal.	a20	1963-	04-22-90	1.91	(+)
MIMBRES BASIN							
08477580	Silva Creek at Silver City.	Lat 32°46'41", long 108°16'41", Grant County, Hydrologic Unit 13030202, 190 ft upstream from Twelfth Street bridge in Silver City.	10.0	1958-	07-15-90	2.67	460

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
MIMBRES BASIN - Continued							
08477590	Pinos Altos Creek at Silver City.	Lat 32°46'52", long 108°16'04", Grant County, Hydrologic Unit 13030202, downstream from U.S. Highway 180 in Silver City.	4.63	1958-	- -90	<0.78	<50
08478000	Cameron Creek at Central.	Lat 32°47'38", long 108°08'58", Grant County, Hydrologic Unit 13030202, 0.5 mi upstream from culvert on U.S. Highway 180, at north edge of Central.	18.8	1954-	08-13-90	3.46	680
08478500	Mimbres River at Deming.	Lat 32°17'00", long 107°45'35", Luna County, Hydrologic Unit 13030202, culvert on U.S. Highway 180, at north end of Deming.	1,370	1954-79 1983-	08-13-90	5.09	380
08478600	Mimbres basin tributary near Florida.	Lat 32°21'30", long 107°37'30", Luna County, Hydrologic Unit 13030202, upstream from culvert on State Highway 26, and 5 mi southwest of Florida.	0.55	1959-	08-13-90	3.97	360
08478800	Seventysix Draw tributary near Waterloo.	Lat 31°56'34", long 107°44'38", Luna County, Hydrologic Unit 13030202, upstream from culvert on State Road 11, 3.9 mi southeast of Waterloo, and 7.9 mi north of Columbus.	0.2	1967-	08-13-90	3.49	66
PLAYAS BASIN							
08479300	Deer Creek tributary near Antelope Wells.	Lat 31°23'00", long 108°42'15", Hidalgo County, Hydrologic Unit 13030201, 0.1 mi downstream from dip on State Highway 81, 2.5 mi east of San Luis Pass, and 12 mi west of Antelope Wells.	4.3	1959-	08-13-90	0.89	10
TULAROSA BASIN							
08480150	White Oaks Canyon near Carrizozo.	Lat 33°43'51", long 105°50'11", Lincoln County, Hydrologic Unit 13050003, 100 ft upstream from culvert on U.S. Highway 54, 6 mi north of Carrizozo.	31	1959- 1961-	07-11-90	2.91	1,080
08480170	Nogal Creek tributary near Nogal.	Lat 33°34'54", long 105°41'10", Lincoln County, Hydrologic Unit 13050003, upstream from culvert on U.S. Highway 380, about 2.0 road mi west of Indian Divide, 7 mi northwest of Capitan, and 2 mi north of Nogal.	1.94	1968-	07-11-90	2.67	<15
08480200	Taylor Canyon tributary near Bingham.	Lat 33°48'11", long 106°12'00", Socorro County, Hydrologic Unit 13050003, 200 ft north of U.S. Highway 380, and 12 mi southeast of Bingham.	2.66	1961-	07-28-89 05-02-90	h1.63 1.37	h125 94
08480700	Indian Creek near Three Rivers.	Lat 33°22'10", long 105°53'25", Otero County, Hydrologic Unit 13050003, 150 ft upstream from diversion dam, and 12 mi east of Three Rivers.	6.8	1956-58* 1959-	09-05-90	4.28	280
ESTANCIA BASIN							
08488000	Estancia Valley tributary at Cedar Grove.	Lat 35°10'05", long 106°10'08", Santa Fe County, Hydrologic Unit 13050001, 50 ft upstream from culvert on State Highway 344, 0.1 mi south of Cedar Grove.	1.21	1955 1961-	07-10-90	7.25	(+)

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

							Annual Maximum	
Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Discharge (ft ³ /s)	
ESTANCIA BASIN - Continued								
08488100	Juan Tomas Canyon near Edgewood.	Lat 35°04'35", long 106°13'46", Santa Fe County, Hydrologic Unit 13050001, 140 ft upstream from culvert on Interstate Highway 40., 2.5 mi northwest of Edgewood.	a20	1962-	07-10-90	2.16	(+)	
08488200	Osita Draw near Clines Corners.	Lat 35°00'18", long 105°48'00", Torrance County, Hydrologic Unit 13050001, 100 ft upstream from culvert on Interstate Highway 40, 7.5 mi west of Clines Corners.	a10	1961-	- -90	---	(m)	
08488500	Canon de Torreon at Torreon.	Lat 34°43'20", long 106°17'50", Torrance County, Hydrologic Unit 13050001, at culvert on State Highway 55, in Torreon.	18.2	1954-	07-21-90	1.58	230	
08488600	Arroyo del Cuervo near Torreon.	Lat 34°41'35", long 106°18'27", Torrance County, Hydrologic Unit 13050001, in Town of Torreon Grant, about 0.3 mi upstream from culvert on State Highway 55, and 2 mi south of Torreon.	11.8	1969-	07-21-90	2.14	115	
08489000	Big Draw near Mountainair.	Lat 34°18'45", long 106°11'35", Torrance County, Hydrologic Unit 13050001, 0.25 mi upstream from culvert on State Highway 55, and 8.4 mi southeast of Mountainair.	4.06	1953-	09-29-90	<3.26	<10	
SALT BASIN								
08492500	Fleming Draw near Pinon.	Lat 32°31'01", long 105°20'42", Otero County, Hydrologic Unit 13050004, 0.2 mi upstream from dip in ranch road, and 7.5 mi south of Pinon.	16.6	1959-	- -90	---	(k)	
SAN AUGUSTIN PLAINS BASIN								
08500000	Swingle Canyon near Datil.	Lat 34°11'17", long 107°53'55", Catron County, Hydrologic Unit 13020208, 0.3 mi upstream from U.S. Highway 60, and 4.3 mi northwest of Datil.	6.35	1970-72 1976-	- -90	---	(k)	
SAN JUAN RIVER BASIN								
09346200	Rio Amargo at Dulce.	Lat 36°56'00", long 107°00'00", Rio Arriba County, Hydrologic Unit 14080101, under bridge on U.S. Highway 64, at Dulce.	168	1956-	07-14-90	6.09	1,000	
09350700	Ruben Canyon near Gobernador.	Lat 36°44'26", long 107°14'33", Rio Arriba County, Hydrologic Unit 14080101, in Carson National Forest, upstream from culvert on U.S. Highway 64, and 6.5 mi east of Gobernador.	5.06	1970-	08-17-88 02-05-89 07-14-90	5.89 4.03 3.71	380 34 18	
09350800	Vaqueros Canyon near Gobernador.	Lat 36°43'23", long 107°16'47", Rio Arriba County, Hydrologic Unit 14080101, 100 ft east of U.S. Highway 64, and 4.2 mi east of Gobernador.	60.5	1956-	- -90	<1.64	<17	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
SAN JUAN RIVER BASIN - Continued							
09355700	Gobernador Canyon near Gobernador.	Lat 36°41'05", long 107°25'10", San Juan County, Hydrologic Unit 14080101, 0.2 mi south of U.S. Highway 64, and 4 mi southwest of Gobernador.	19.8	1956-	05-02-90	2.62	281
09356400	Manzanares Canyon near Turley.	Lat 36°44'15", long 107°42'15", San Juan County, Hydrologic Unit 14080101, 600 ft upstream from culvert on U.S. Highway 64, and 4.2 mi east of Turley.	3.20	1956-	- -90	<1.48	<0.02
09356520	Burro Canyon near Lindrith.	Lat 36°16'21", long 107°14'46", Rio Arriba County, Hydrologic Unit 14080103, upstream from culvert on State Highway 537, 11.5 mi west of Lindrith.	9.11	1970-	- -90	---	(m)
09357230	West Draw near Farmington.	Lat 36°35'24", long 108°11'03", San Juan County, Hydrologic Unit 14080101, 15 ft upstream from culvert on State Highway 371, 11 mi south of Farmington.	0.32	1975-	10-24-90	3.46	37
09367400	La Plata River tributary near Farmington.	Lat 36°47'10", long 108°13'31", San Juan County, Hydrologic Unit 14080105, about 700 ft upstream from culvert on State Highway 170, and 4.1 mi northwest of Farmington.	1.03	1970-	08-21-90	4.33	270
09367550	Stevens Arroyo near Kirtland.	Lat 36°45'56", long 108°21'59", San Juan County, Hydrologic Unit 14080105, upstream from gravel road to Young's Lake, 0.6 mi north of El Paso Natural Gas, San Juan Plant, and 2.3 mi north of Kirtland.	4.52	1970-	08-21-90	14.25	1,000
09367900	Black Springs Wash near Mexican Springs.	Lat 35°45'40", long 108°49'00", McKinley County, Hydrologic Unit 14080106, 2.5 mi south of Mexican Springs, and 17 mi north of Gallup.	7.05	1954-78 1979-82* 1983-	07-13-90	2.60	430
09367920	Coyote Wash tributary near Naschitti.	Lat 36°05'56", long 108°41'48", San Juan County, Hydrologic Unit 14080106, on bridge on U.S. Highway 666, 2.4 mi north of Naschitti, and 39 mi north of Gallup.	12.0	1967-	07-13-90	2.57	(+)
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-	07-24-89 05-02-90	6.24 3.97	h1,310 600
09367980	Rattlesnake Arroyo near Shiprock.	Lat 36°46'14", long 108°43'32", San Juan County, Hydrologic Unit 14080105, upstream from bridge on U.S. Highway 64, 0.8 mi west of Shiprock.	---	1980-	10-24-90	6.07	2,800
09368020	Malpais Arroyo near Shiprock.	Lat 36°55'33", long 108°43'26", San Juan County, Hydrologic Unit 14080105, upstream from culvert on U.S. Highway 666, 8.3 mi north of Shiprock.	---	1980-	09-10-80 07-14-81 09-11-82 10-05-89 08-21-90	0.95 0.80 1.39 1.25 1.42	h40 h33 h75 h60 82
LITTLE COLORADO RIVER BASIN							
09386100	Largo Creek near Quemado.	Lat 34°19'25", long 108°31'40", Catron County, Hydrologic Unit 15020003, on downstream side of bridge on ranch road, 2.5 mi southwest of Quemado.	151	1954-	09-30-90	2.34	380

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)
LITTLE COLORADO RIVER BASIN - Continued							
09386200	Carrizo Wash near Salt Lake.	Lat 34°30'39", long 109°01'35", Catron County, Hydrologic Unit 15020003, on left downstream wingwall of bridge, 1.3 mi east of New Mexico-Arizona State line, and 15 mi west of Salt Lake.	af560	1957-	05-03-90	0.54	230
09387050	Galestena Canyon tributary near Black Rock.	Lat 34°58'45", long 108°40'00", McKinley County, Hydrologic Unit 15020004, 100 ft downstream from bridge on State Highway 36, and 10.5 mi southeast of Black Rock.	a19	1957-	03-10-90	1.10	24
09395400	Milk Ranch Canyon near Fort Wingate.	Lat 35°25'55", long 108°33'30", McKinley County, Hydrologic Unit 15020006, 0.5 mi downstream from culvert on secondary road between Fort Wingate and McGaffey, and 3 mi south of Fort Wingate.	14.0	1949-	- -90	<0.80	<1.0
09395500	Puerco River at Gallup.	Lat 35°31'45", long 108°44'41", McKinley County, Hydrologic Unit 15020006, near center of span on downstream side of Third St. bridge in Gallup.	558	1940-46* 1957-77 1977-82* 1983-	03-10-90	3.70	185
GILA RIVER BASIN							
09430300	Copperas Canyon near Pinos Altos.	Lat 33°04'42", long 108°12'14", Grant County, Hydrologic Unit 15040001, on east side of State Highway 15, and 15 mi north of Pinos Altos.	3.95	1963-	08-13-90	3.74	250
09430900	Duck Creek at Cliff.	Lat 32°58'03", long 108°36'36", Grant County, Hydrologic Unit 15040002, at Cliff 100 ft downstream from bridge on State Highway 211, and 0.6 mi upstream from mouth.	a228	1957-	07-21-90	5.21	2,550
09431130	Mangas Creek near Cliff.	Lat 32°51'39", long 108°34'01", Grant County, Hydrologic Unit 15040002, on right bank, about 0.5 mi upstream of U.S. Forest Service Road 806, in close proximity to Bill Evans Lake, 7 mi south of Cliff.	---	1986-	07-30-89 09-07-90	4.72 5.04	1,150 1,400
09438200	Animas Creek near Cloverdale.	Lat 31°34'15", long 108°52'30", Hidalgo County, Hydrologic Unit 15040003, near head of small box canyon, 0.1 mi west of State Highway 338, and 11 mi north of Cloverdale.	157	1959-	03-10-90	4.98	780
09442630	Mail Hollow near Luna.	Lat 33°47'38", long 108°56'59", Catron County, Hydrologic Unit 15040004, 1,000 ft upstream from culvert on U.S. Highway 180, 2.3 mi south of Luna.	4.20	1970-	08-14-90	2.78	51
09442660	Trout Creek at Luna.	Lat 33°50'50", long 108°59'38", Catron County, Hydrologic Unit 15040004, 500 ft downstream from bridge on Luna-Red Hill road, and 2.6 mi north of Luna.	31.9	1954-	- -90	<1.06	<1.5
09442695	Negro Canyon at Aragon.	Lat 33°52'47", long 108°33'08", Catron County, Hydrologic Unit 15040004, upstream from culvert on State Highway 12, at west edge of Aragon.	9.62	1958-	08-14-90	2.16	340

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Annual Maximum	
						Gage height (ft)	Discharge (ft ³ /s)

GILA RIVER BASIN - Continued

09455800	Steins Creek at Steins.	Lat 32°13'47", long 109°00'01", Hidalgo County, Hydrologic Unit 15040006, at culvert on Interstate Highway 10, and 0.9 mi west of Steins.	1.26	1959-	- -90	---	(k)
----------	-------------------------	---	------	-------	-------	-----	-----

- < 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.
- o Discharge for period of record revised.

Measurements of streamflow at points other than gaging stations are given in the following table.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
RIO GRANDE BASIN						
Santa Clara Creek above Turkey Creek	Rio Grande	Lat 35°58'53", long 106°23'53", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation 100 ft above confluence with Turkey Creek, 500 ft downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	5.98	1984 1986-87 1990-	05-04-84 06-14-84 07-26-84 04-08-86 05-16-86 06-19-86 07-15-86 08-19-86 09-12-86 10-02-86 05-28-87 09-19-90	4.86 0.81 0.76 1.52 1.02 0.90 1.32 0.76 0.86 0.91 2.66 1.01
Turkey Creek 08291900	Santa Clara Creek	Lat 35°58'53", long 106°23'57", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation, at mouth, 400 ft downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	3.28	1984-87 1990-	09-19-90	0.99
Santa Clara Creek below Turkey Creek 08291950	Rio Grande	Lat 35°58'43", long 106°23'37", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation, 700 ft below confluence with Turkey Creek, 0.3 mi downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	10.5	1984-87 1990-	05-04-84 06-14-84 07-26-84 09-14-84 10-18-84 07-22-85 09-24-85 10-21-85 04-08-86 05-16-86 06-19-86 07-15-86 08-19-86 09-12-86 10-02-86 05-28-87 07-08-87 08-20-87 10-21-87 09-19-90	7.61 2.27 1.99 1.69 1.99 2.76 2.07 2.58 2.56 3.57 2.46 3.07 2.01 2.64 2.39 6.05 2.37 2.15 1.81 2.02
Lea Lake Drain 08394018	Pecos River	Lat 33°18'56", long 104°19'56", in SW¼SW¼ 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-	10-13-89 01-10-90 04-10-90 08-08-90	7.90 5.54 3.74 3.14
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-	01-29-90 04-16-90 07-27-90	15.6 16.0 14.7
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-	02-01-90 04-16-90 07-27-90	1.79 0.79 0.23
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-	03-21-90 06-25-90 07-28-90 08-20-90 09-17-90	4.56 3.30 3.73 5.42 3.72

RIO GRANDE BASIN

Rio Grande Seepage Investigation

REACH.--The seepage investigation was conducted along a 62.4-mile reach on the Rio Grande downstream from Leasburg Dam near Radium Springs, New Mexico, to the Rio Grande at El Paso, Texas (08364000). The river has been channelized through much of this reach and the gradient is quite flat. About 71,000 acres are irrigated in the Mesilla Valley between Leasburg Dam and El Paso, with ground-water withdrawals used to supplement the surface-water supply.

PREVIOUS INVESTIGATIONS.--A seepage investigation of the reach between the gaging station "below Caballo Dam" (08362500) and a site 0.3 mi upstream from the gaging station "at El Paso" (08364000) was conducted by the U.S. Geological Survey on February 12-13, 1974. A seepage investigation of this same reach was conducted on January 5-6, 1988, and January 10-11, 1989.

DATE.--January 9-10, 1990.

WEATHER.--Weather was favorable for the seepage investigation. No measurable precipitation occurred after December 30, 1989 (0.57 inch). Air temperatures were lower than normal during the seepage investigation. Temperature extremes at Las Cruces, New Mexico, ranged from a low of -4 degrees Celsius on January 9 to a high of 20 degrees Celsius on January 10. Precipitation did not affect streamflow conditions.

STREAMFLOW.--The seepage investigation was conducted during a period of constant base flow. Discharge measurements indicate a net seepage loss of 32.5 cubic feet per second from river mile 1,312.3 to river mile 1,249.9. Indicated gains and losses throughout the reach are shown in the following table. Tributary flow recorded as inflow is considered a contribution and not a gain; no outflow (diversions) occurred during the investigation. Evaporation from the water surface of the river in January is considered negligible.

REMARKS.--The seepage investigation is rated good on the basis of steady streamflow conditions. Recorded river stage in the Rio Grande at the New Mexico 227 Bridge near Vado, New Mexico (site 17) showed no change in gage height during the seepage investigation. Indicated gains or losses may be significantly in error as affected by small inaccuracies in open-channel discharge measurements.

River mile	Stream	Location	Time	Water temp (°C)	Specific conduct- ance (uS/cm)	Discharge, in ft ³ /s		
						Main stream	Inflow	Gain or loss
January 9, 1990								
1,312.3	Rio Grande	Below Leasburg Dam near Radium Springs, NM Lat 32°28'41", long 106°55'10"	1100	6.5	1,480	37.8		--
1,310.2	Rio Grande	Near Leasburg, NM Lat 32°27'21", long 106°54'08"	1150	9.5	1,510	37.1		-0.7
*1,307.6	Selden Drain	Near Leasburg, NM Lat 32°25'38", long 106°52'50"	1220	--	--		1/ 0	--
1,306.3	Rio Grande	Near Hill, NM Lat 32°25'05", long 106°52'01"	1315	12.0	1,680	49.7		+12.6
1,302.7	Rio Grande	At Shalem Bridge near Dona Ana, NM Lat 32°22'34", long 106°51'16"	1415	12.0	1,640	42.9		-6.8
*1,301.2	Wasteway no. 5	Near Dona Ana, NM Lat 32°22'14", long 106°50'14"	1435	--	1,980		1/ 0.004	--
1,298.8	Rio Grande	Near Picacho, NM Lat 32°20'18", long 106°50'09"	1030	7.0	1,670	44.9		+2.0
1,295.6	Rio Grande	Below Picacho Bridge near Las Cruces, NM Lat 32°17'45", long 106°49'25"	1145	8.5	1,640	35.5		-9.4
*1,295.4	Wastewater inflow	City of Las Cruces, NM Lat 32°17'35", long 106°49'26"	1200	15.5	1,410		2/ 9.70	--
1,293.1	Rio Grande	At NM-359 Bridge near Mesilla, NM Lat 32°15'49", long 106°49'29"	1250	10.5	1,630	48.7		+3.5
*1,291.8	Picacho Drain	Above Mesilla Dam Lat 32°14'34", long 106°48'56"	1410	7.5	1,520		2.31	--
1,291.7	Rio Grande	Below Picacho Drain Lat 32°14'30", long 106°48'49"	1450	11.5	1,610	45.0		-6.0
1,289.5	Rio Grande	Below Mesilla Dam Lat 30°13'17", long 106°47'15"	1050	7.5	1,590	29.0		-16.0
1,287.3	Rio Grande	At NM-28 Bridge near San Pablo, NM Lat 32°12'24", long 106°45'32"	1225	9.5	1,560	29.9		+0.9
*1,283.6	Santo Tomas River Drain	Near San Miguel, NM Lat 32°10'16", long 106°43'11"	1255	--	--		0	--
1,282.7	Rio Grande	At NM-228 Bridge near San Miguel, NM Lat 32°09'43", long 106°42'58"	1440	12.5	1,570	29.3		-0.6
1,277.8	Rio Grande	At NM-227 Bridge near Vado, NM Lat 32°06'48", long 106°40'05"	1550	13.0	1,580	26.2		-3.1

RIO GRANDE BASIN
Rio Grande Seepage Investigation

River mile	Stream	Location	Time	Water temp (°C)	Specific conduct- ance (uS/cm)	Discharge, in ft ³ /s		Gain or loss
						Main stream	Inflow	
January 10, 1990								
1,277.8	Rio Grande	At NM-227 Bridge near Vado, NM Lat 32°06'48", long 106°40'05"	0945	5.0	1,580	26.2		--
*1,276.6	Del Rio Drain	Near Vado, NM Lat 32°06'09", long 106°39'27"	1030	9.5	1,320		27.4	--
1,273.8	Rio Grande	At NM-226 Bridge near Berino, NM Lat 32°03'56", long 106°39'45"	1150	10.0	1,450	54.9		+1.3
*1,271.6	La Mesa Drain	Near Chamberino, NM Lat 32°02'15", long 106°39'23"	1245	10.5	1,890		9.77	--
1,271.5	Rio Grande	Below La Mesa Drain near Chamberino, NM Lat 32°02'12", long 106°39'18"	1340	10.5	1,520	67.7		+3.0
1,268.5	Rio Grande	At NM-225 Bridge near Anthony, NM Lat 31°59'58", long 106°38'07"	1005	5.5	1,550	65.5		-2.2
1,268.5	Pipe inflow	At NM-225 Bridge near Anthony, NM Lat 31°59'58", long 106°38'07"	0920	13.0	1,330		0.05	--
*1,265.4	East Drain	Near Vinton, TX Lat 31°58'09", long 106°36'17"	1050	6.5	3,270		5.56	--
1,264.7	Rio Grande	At Vinton Bridge near Vinton, TX Lat 31°57'33", long 106°36'16"	1130	7.5	1,700	74.1		+3.0
1,261.6	Rio Grande	At TX-259 Bridge, Canutillo, TX Lat 31°54'54", long 106°36'06"	1300	9.5	1,680	66.8		-7.3
1,259.3	Rio Grande	At Borderland Bridge near Borderland, TX Lat 31°53'09", long 106°35'55"	1400	11.5	1,690	65.1		-1.7
1,256.2	Rio Grande	At TX-260 Bridge near Santa Teresa, NM Lat 31°50'46", long 106°36'18"	1035	6.5	1,670	53.3		-11.8
1,252.8	Rio Grande	Near Sunland Park, NM Lat 31°48'24", long 106°34'57"	1150	9.5	1,700	55.0		+1.7
*1,252.4	Wastewater inflow	Sunland Plant, City of Sunland Park, NM Lat 31°47'55", long 106°33'25"	1350	17.5	1,740		2/ 0.9	--
1,251.9	Rio Grande	At Sunland Park Bridge, Sunland Park, NM Lat 31°47'56", long 106°33'16"	1400	12.0	1,690	56.1		+0.2
*1,250.3	Montoya Drain	Near Sunland Park, NM Lat 31°48'10", long 106°32'47"	1510	14.5	2,550		36.6	--
*1,250.1	Keystone Reservoir outlet	Near El Paso, TX Lat 31°48'18", long 106°32'39"	1520	--	--		0	
1,249.9	Rio Grande	At Courchesne Bridge, El Paso, TX Lat 31°48'09", long 106°32'26"	1510	13.5	2,010	97.6		+4.9

* River mile at mouth of drain or point of discharge.

1/ Estimated discharge.

2/ Reported mean daily discharge.

RIO GRANDE BASIN

Rio Penasco Seepage Investigation

REACH.--The seepage investigation was conducted on the Rio Penasco from Cuevo Canyon to the Hope Diversion Dam, a distance of approximately 5 river miles.

DATE.--August 16, 1990.

WEATHER.--Weather was favorable for the seepage investigation. No measurable precipitation was recorded in the immediate area prior to the seepage investigation.

STREAMFLOW.--The measurements were made during a period of constant base flow in the Rio Penasco. All known sources of inflow and diversions were accounted for in the investigation.

REMARKS.--The results of this investigation are rated good. All of the flow in the Rio Penasco was diverted into the Hope Community Canal and the Teel Canal at the Hope Diversion Dam. A measurement was made on each of the diversions to determine the amount of flow that was diverted.

River mile	Stream	Location	Time	Water temp (°C)	Discharge, in ft ³ /s		
					Main stream	Inflow or outflow	Gain or loss
30.8	Rio Penasco	At road crossing 600 ft downstream from confluence of Rio Penasco and Cuevo Creek Canyon, lat 32°40'34", long 104°56'02"	0945	20.5	20.6	--	--
31.3	Rio Penasco	150 ft downstream from fence line Lat 32°49'22", long 104°55'49"	1040	21.0	19.5	--	-1.1
31.6	Rio Penasco	Upstream from large pool Lat 32°49'24", long 104°55'32"	1145	22.5	16.5	--	-3.0
31.7	Rio Penasco	Downstream from large pool Lat 32°49'22", long 104°55'24"	1220	22.5	16.5	--	0.0
32.5	Rio Penasco	Upstream end of Hope Retard Dam pool area Lat 32°49'18", long 104°54'42"	1310	23.0	15.6	--	-0.9
32.9	Rio Penasco	Upstream side of Hope Retard Dam Lat 32°49'27", long 104°54'22"	1405	23.5	15.9	--	+0.3
33.0	Rio Penasco	200 ft downstream from Hope Retard Dam Lat 32°49'29", long 104°54'13"	1500	24.5	15.0	--	-0.9
34.1	Rio Penasco	100 ft downstream from Cavhape Ranch Road Lat 32°49'42", long 104°53'17"	1545	23.5	13.7	--	-1.3
35.1	Rio Penasco	200 ft upstream from diversion dam pool Lat 32°49'40", long 104°52'17"	1655	24.5	13.0	--	-0.7
35.7	Rio Penasco	Downstream from diversion dam	1720	--	0.0	--	-13.0
--	Teel Canal	150 ft downstream from diversion dam Lat 32°49'35", long 104°51'42"	1735	24.0	--	3.31	--
--	Hope Community Canal	200 ft downstream from diversion dam Lat 32°49'39", long 104°51'40"	1810	24.0	--	10.5	--

RIO GRANDE BASIN

Hope Community Canal Seepage Investigation

REACH.--The seepage investigation was conducted in the Hope Community Canal from the Hope Diversion Dam to the county road intersection with the canal 0.5 mile southeast.

DATE.--August 28, 1990.

WEATHER.--Weather was favorable for the seepage investigation. No measurable precipitation occurred in the immediate area prior to the seepage investigation.

STREAMFLOW.--The seepage investigation was conducted during a period of constant release to the Hope Community Canal. No diversions were made from the canal during the seepage investigation.

REMARKS.--Results of the seepage investigation are rated good.

Canal mile	Stream	Location	Time	Water temp (°C)	Discharge, in ft ³ /s	
					Main stream canal	Gain or loss
0.0	Hope Canal	200 ft downstream from diversion dam Lat 32°49'39", long 104°51'40"	0935	22.0	15.0	--
3.0	Hope Canal	100 ft downstream from flume at Charley White Draw, lat 32°50'18", long 104°48'54"	1040	24.0	9.26	-5.74
4.2	Hope Canal	100 ft downstream from bridge at Flat Valley Road	1125	25.0	7.98	-1.28
4.3	Hope Canal	300 ft downstream from bridge at Flat Valley Road	1210	25.0	7.85	-0.13
9.4	Hope Canal	At county road intersection with Hope Canal 0.5 mi southeast of Hope, NM	1330	25.5	4.95	-2.90

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

08329860 GRANT LINE ARROYO AT VILLA DEL OSO, NM

[illegible]

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08329860 GRANT LINE ARROYO AT VILLA DEL OSO, NM -- Continued

DATE	1,3-DI- CHLORO- BENZENE (UG/L) (34566)	1,4-DI- CHLORO- BENZENE (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE (UG/L) (34704)	VINYL CHLO- RIDE (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE TOTAL (UG/L) (77651)	XYLENE TOTAL TOT REC (UG/L) (81551)
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

08329865 GRANT LINE ARROYO AT ALBUQUERQUE, NM

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
MAY 02...	1350	3.3	45	8.4	15.5	11.0	18	6.2	0.56	1.3	0.1	2.4
JUL 14...	0750	--	--	--	--	--	28	9.8	0.83	2.0	0.2	2.3
14...	1950	4.6	90	8.4	18.0	--	--	--	--	--	--	--

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 AS (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)
MAY 02...	22	1.4	1.0	0.10	1.6	29	0.200	0.200	0.160	0.14	0.50	0.190
JUL 14...	28	2.9	0.60	<0.10	3.9	42	0.500	0.500	0.180	0.62	1.3	0.560
14...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	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)	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)
MAY 02...	0.220	7.6	<1	<1	20	<1	<1.0	4	1	7	4	40
JUL 14...	0.190	8.6	1	1	30	<1	<1.0	8	2	14	3	40
14...	--	--	--	--	--	--	--	--	--	--	--	--

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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
MAY 02...	12	1	<0.10	<0.1	<1	<1	40	4	170	1.5	39	<0.20
JUL 14...	19	<1	<0.10	0.2	<1	<1	110	4	--	--	--	<0.20
14...	--	--	--	--	--	--	--	--	814	10	22	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08329865 GRANT LINE ARROYO AT ALBUQUERQUE, NM -- Continued

DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)
MAY 02...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	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)	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)	1,2- TRANS DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)
MAY 02...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WHOLE TOT REC (UG/L) (81551)
MAY 02...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
JUL 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
JUL 14...	--	--	--	--	--	--	--	--	--	--	--

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
OCT 05...	0900	1.0	850	8.1	13.0	14.0	380	110	25	47	1	6.1
MAR 30...	1415	1.0	900	8.4	10.0	14.0	380	110	25	44	1	3.1
MAY 03...	0945	1.4	950	8.5	9.5	12.0	410	120	27	45	1	4.6
AUG 14...	1015	0.50	800	8.1	19.5	18.0	360	110	21	44	1	7.6

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)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 05...	200	120	90	0.60	18	539	0.600	0.550	0.040	0.46	1.1	0.170
MAR 30...	179	130	98	0.20	15	536	0.800	0.800	0.010	0.29	1.1	0.040
MAY 03...	232	110	80	0.40	18	548	0.800	0.800	<0.010	--	1.2	0.280
AUG 14...	192	110	89	0.50	16	515	0.500	0.400	0.070	0.83	1.4	0.420

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM - Continued

DATE	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)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CR) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 05...	0.010	3.8	<1	<1	60	<1	<1.0	4	2	8	2	8
MAR 30...	<0.010	1.6	<1	<1	50	<1	<1.0	3	<5	4	<10	7
MAY 03...	0.020	4.6	<1	<1	80	<1	<1.0	4	2	13	2	9
AUG 14...	0.040	29	2	1	80	<1	<1.0	28	<1	14	4	7

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)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
OCT 05...	4	<1	<0.10	<0.1	1	1	20	4	--	--	--	<0.20
MAR 30...	1	<10	<0.10	<0.1	1	1	10	6	75	0.20	48	<0.20
MAY 03...	6	<1	<0.10	<0.1	1	1	30	<3	307	1.2	50	<0.20
AUG 14...	33	<1	<0.10	0.1	<1	<1	230	7	1560	2.1	58	<0.20

DATE	CARBON- TETRA- CHLORO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLORO- RIDE TOTAL (UG/L) (34418)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	METHYL- ENE CHLORO- 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)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,1,2,2- 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)	1,2- TRANSDI- CHLORO- ETHENE TOTAL (UG/L) (34546)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLORO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.8	<0.2	<0.2	<0.2
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08379940 GALLINAS CREEK AB BURRO CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
APR 10...	1015	1028	*9735	3.6	60	6.7	8.5	2.5	40	--	42
MAY 09...	0915	1028	*9735	7.4	59	7.7	9.0	3.0	40	--	45
JUN 20...	0945	1028	*9735	1.7	112	8.6	16.0	9.0	5	8.3	57
JUL 27...	0940	1028	*9735	2.6	130	7.9	20.0	9.5	--	8.6	--
AUG 29...	1530	1028	*9735	3.0	85	8.3	20.0	13.0	--	7.5	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	15	<3.0	<10	<1.0	31	38	--	8.1	<5.0	0.33	74
MAY 09...	15	<3.0	<10	2.0	32	39	--	11	<5.0	0.20	82
JUN 20...	21	1.1	<10	2.0	52	64	0	9.3	6.3	0.23	84
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	3	<0.040	<0.100	--	1.8	0.170	1300	<5	<100	<1	<5
MAY 09...	9	<0.040	0.100	0.24	0.34	0.030	1100	<5	<100	<1	<5
JUN 20...	<3	<0.040	<0.100	--	0.25	0.020	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	1200	<5	<50	<0.50	<50	<5	<1	<50	3	0.03
MAY 09...	<50	730	<5	<50	<0.50	<50	<5	<1	<50	10	0.20
JUN 20...	<50	60	<5	<50	<0.50	<50	<5	<1	<50	8	0.04
JUL 27...	--	--	--	--	--	--	--	--	--	4	0.03
AUG 29...	--	--	--	--	--	--	--	--	--	6	0.05

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380000 GALLINAS CREEK NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN; DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
APR 10...	1130	1028	*9735	12	100	6.9	10.5	5.5	30	--	62	18
MAY 09...	1030	1028	*9735	21	92	8.0	14.5	6.5	30	--	57	20
JUN 20...	1120	1028	*9735	3.1	130	9.1	21.0	15.5	5	7.7	58	22
JUL 27...	1110	1028	*9735	8.1	160	8.1	23.0	15.0	--	7.5	--	--
AUG 30...	0830	1028	*9735	9.3	135	8.0	17.0	12.0	--	8.2	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
APR 10...	4.2	<10	<1.0	49	60	--	9.5	<5.0	0.23	88	13
MAY 09...	<3.0	<10	2.0	47	57	--	12	<5.0	0.17	88	13
JUN 20...	1.1	<10	3.0	60	74	0	9.6	6.4	0.27	122	3
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA (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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
APR 10...	<0.040	0.100	0.48	0.58	0.130	1000	<5	<100	<1	<5	<50
MAY 09...	<0.040	0.100	0.02	<0.16	0.040	1200	<5	<100	<1	<5	<50
JUN 20...	<0.040	0.100	0.02	<0.16	0.020	<50	<5	<100	<1	<5	<50
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	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)
APR 10...	940	<5	<50	<0.50	<50	<5	<1	<50	<50	11	0.35
MAY 09...	1000	<5	<50	<0.50	<50	<5	<1	<50	--	16	0.92
JUN 20...	150	<5	<50	<0.50	<50	<5	<1	<50	--	6	0.05
JUL 27...	--	--	--	--	--	--	--	--	--	9	0.20
AUG 30...	--	--	--	--	--	--	--	--	--	13	0.33

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380075 PORVENIR CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)
APR 10...	1300	1028	*9735	12	90	6.7	10.5	5.0	30	--	55
MAY 09...	1115	1028	*9735	29	82	7.9	13.5	5.5	40	--	45
JUN 20...	1245	1028	*9735	2.4	140	9.0	24.0	17.5	5	7.2	70
JUL 27...	1330	1028	*9735	9.0	101	7.8	23.0	13.5	--	7.8	--
AUG 30...	0945	1028	*9735	7.4	128	8.0	22.0	12.0	--	8.2	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CAC03) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	20	<3.0	<10	<1.0	44	53	--	9.4	<5.0	0.23	80
MAY 09...	16	<3.0	<10	2.0	40	48	--	12	<5.0	0.18	82
JUN 20...	27	<1.0	<10	3.0	65	79	0	10	6.3	0.24	102
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	22	<0.040	<0.100	--	1.2	0.230	1200	<5	<100	<1	<5
MAY 09...	9	<0.040	0.100	0.09	<0.23	4.54	1200	<5	<100	<1	<5
JUN 20...	<3	<0.040	0.270	0.0	<0.14	0.010	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	960	<5	<50	<0.50	<50	<5	<1	<50	14	0.43
MAY 09...	<50	1000	<5	<50	<0.50	<50	<5	<1	<50	8	0.63
JUN 20...	<50	<50	<5	<50	<0.50	<50	<5	<1	<50	6	0.04
JUL 27...	--	--	--	--	--	--	--	--	--	7	0.17
AUG 30...	--	--	--	--	--	--	--	--	--	2	0.04

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380090 PORVENIR CANYON AT MOUTH NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
APR 10...	1345	1028	*9735	12	101	7.3	12.5	9.0	25	--	60
MAY 09...	1315	1028	*9735	32	82	7.9	18.0	10.0	40	--	50
JUN 20...	1415	1028	*9735	1.0	160	9.2	24.5	24.0	5	6.4	77
JUL 27...	1505	1028	*9735	10	108	8.0	20.5	17.0	--	7.8	--
AUG 30...	1200	1028	1028	8.6	135	8.2	24.0	16.0	--	7.5	--

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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAY WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET 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)
APR 10...	22	<3.0	<10	<1.0	48	58	--	10	<5.0	0.32	82
MAY 09...	17	<3.0	<10	2.0	42	51	--	12	<5.0	0.19	86
JUN 20...	28	1.7	<10	3.0	74	91	0	10	6.6	0.27	116
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
APR 10...	<3	<0.040	0.100	0.54	0.64	0.180	800	<5	<100	<1	<5
MAY 09...	8	<0.040	0.100	0.35	0.45	0.020	1200	<5	<100	<1	<5
JUN 20...	4	<0.040	<0.100	--	<0.14	0.010	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
APR 10...	<50	540	<5	<50	<0.50	<50	<5	<1	<50	64	2.1
MAY 09...	<50	850	<5	<50	<0.50	<50	<5	<1	<50	10	0.87
JUN 20...	<50	140	<5	<50	<0.50	<50	<5	<1	<50	3	0.01
JUL 27...	--	--	--	--	--	--	--	--	--	9	0.25
AUG 30...	--	--	--	--	--	--	--	--	--	4	0.09

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380500 GALLINAS CREEK NR MONTEZUMA, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
APR 10...	1500	1028	*9735	29	148	7.6	14.0	13.0	20	--	90
MAY 09...	1545	1028	*9735	53	130	8.3	20.0	14.5	30	--	75
JUN 20...	1600	1028	*9735	5.4	240	9.3	24.0	25.0	5	7.5	120
JUL 27...	1630	1028	*9735	24	178	8.8	18.0	20.5	--	7.4	--
AUG 30...	1400	1028	*9735	24	200	8.7	26.0	19.5	--	7.4	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	30	3.6	<10	<1.0	71	87	--	12	<5.0	0.30	106
MAY 09...	24	3.6	<10	2.0	60	73	--	13	<5.0	0.25	102
JUN 20...	38	5.4	<10	6.0	110	130	2	13	7.3	0.26	150
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	9	<0.040	<0.100	--	0.33	0.130	900	<5	<100	<1	<5
MAY 09...	23	<0.040	0.100	0.23	0.33	0.020	1300	<5	<100	<1	<5
JUN 20...	<3	<0.040	0.100	0.03	<0.17	0.010	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	830	<5	60	<0.50	<50	<5	<1	<50	752	59
MAY 09...	<50	1300	<5	60	<0.50	<50	<5	<1	<50	25	3.6
JUN 20...	<50	130	<5	<50	<0.50	<50	<5	<1	<50	9	0.13
JUL 27...	--	--	--	--	--	--	--	--	--	5	0.32
AUG 30...	--	--	--	--	--	--	--	--	--	9	0.58

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

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 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN

RIO GRANDE BELOW LEASBURG DAM, NM (322841106551010)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
JAN 09...	1040	38	1480	8.2	14.5	6.5	1.0	400	180	120	23
DATE		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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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)
JAN 09...	160	4	7.8	249	7	216	200	360	130	0.40	
DATE		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)
JAN 09...	18	984	951	<0.010	0.210	0.050	0.050	0.35	<0.010	<0.010	
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)
JAN 09...	<10	2	84	<0.5	2.0	1	<3	<10	8	<10	
DATE		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)
JAN 09...	120	46	0.1	<10	<10	<1	<1.0	1400	<6	25	

RIO GRANDE BELOW PICACHO BRIDGE NR LAS CRUCES, NM (321745106492510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
JAN 09...	1330	36	1650	8.3	19.5	12.0	0.20	430	200	130	24

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW PICACHO BRIDGE NR LAS CRUCES, NM (321745106492510) -- Continued

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 09...	190	4	11	263	7	228	207	380	170	0.50

DATE	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)
JAN 09...	19	1090	1060	<0.010	0.180	0.050	0.050	0.55	0.010	0.010

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)
JAN 09...	<10	2	90	<0.5	<1.0	1	<3	<10	5	<10

DATE	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)
JAN 09...	150	29	0.1	<10	<10	<1	<1.0	1500	<6	19

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JAN 09...	1520	29	1650	8.3	20.5	13.5	7.4	400	180	120	23

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 09...	180	4	12	249	10	220	210	350	170	0.60	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510) -- Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, 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)
JAN 09...	1080	1020	1.45	0.250	1.70	1.60	1.30	1.0	1.10	1.00

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)
JAN 09...	10	2	94	<0.5	<1.0	1	<3	<10	13	10

DATE	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)
JAN 09...	140	15	0.1	10	<10	<1	<1.0	1500	<6	36

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L) CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)
JAN 10...	0915	26	1680	8.3	5.0	4.0	2.7	400	180	120	24

DATE	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 DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	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)
JAN 10...	180	4	11	249	10	220	215	330	170	0.60	18

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, 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)
JAN 10...	1120	1000	2.32	0.280	2.60	1.00	0.920	1.0	1.40	1.10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510) -- Continued

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)
JAN 10...	<10	2	100	<0.5	<1.0	1	<3	<10	9	10

DATE	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)
JAN 10...	140	29	<0.1	<10	<10	<1	<1.0	1500	<6	10

RIO GRANDE AT TX 259 BRIDGE AT CANUTILLO, TX (315454106360610)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JAN 10...	1150	67	1780	8.4	16.0	9.0	4.7	400	150	120	24

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 10...	200	4	13	276	12	246	241	370	180	0.70	19

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)
JAN 10...	1140	1080	1.20	0.100	1.30	0.260	0.290	0.74	0.460	0.430

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)
JAN 10...	<10	2	76	<0.5	<1.0	<1	<3	<10	7	<10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE AT TX 259 BRIDGE AT CANUTILLO, TX (315454106360610) -- Continued

DATE	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)
JAN 10...	150	24	0.1	<10	<10	<1	<1.0	1500	<6	7

SAN JUAN RIVER BASIN

SAN JUAN RIVER AT DIVERSION, NM (364447107483910)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 26...	1300	260	310	8.4	11.0	10.0	110	33	6.5	18	0.7
JUL 30...	0900	190	--	--	--	--	120	36	6.9	19	0.8

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 26...	1.5	90	57	3.1	--	171	173	<0.100	<1	20
JUL 30...	2.0	92	58	3.4	0.010	175	181	<0.100	1	20

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 26...	<1.0	1	1	<1	<0.1	6	<1	1	8	1.1
JUL 30...	<1.0	<1	2	<1	0.1	<1	<1	2	5	--

DRAIN ABOUT 3.5 MI EAST OF NM HIGHWAY 44, NM (364207107552011)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 03...	1000	8.2	17.0	5.6	130	42	7.1	32	1	2.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DRAIN ABOUT 3.5 MI EAST OF NM HIGHWAY 44, NM (364207107552011) -- Continued
(HAMMOND IRRIGATION PROJECT)

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (MG/L AS B) (01020)
AUG 03...	128	68	4.5	0.060	240	234	0.300	1	30

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AUG 03...	<1.0	<1	3	<1	0.2	<1	<1	3	<3

WEST HAMMOND POND, ABOUT 2.5 MI WEST OF NM HIGHWAY 44, NM (364121108020010)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 13...	1430	0.29	--	8.2	14.0	18.0	290	75	25	200	5
AUG 04...	1000	0.27	1980	8.3	21.5	--	600	190	31	240	4

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (MG/L AS B) (01020)
APR 13...	7.7	240	390	65	0.20	996	907	<0.100	1	370
AUG 04...	3.2	163	810	12	0.050	1530	1400	3.20	<1	200

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 13...	<1.0	1	1	<1	<0.1	2	2	4	<3	6.8
AUG 04...	<1.0	<1	1	<1	0.2	<1	3	1	5	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER 1.0 MI UPSTREAM FROM MOUTH OF GALLEGOS CANYON, NM (364136108062010)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 27...	0930	450	520	8.3	9.0	9.7	150	49	7.8	43	2
JUL 30...	1200	300	460	8.5	19.5	--	170	53	8.3	35	1

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 27...	2.0	106	130	4.3	--	322	300	<0.100	<1	30
JUL 30...	2.2	109	120	4.7	0.020	283	289	<0.100	1	40

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	1	8	<1	<0.1	4	<1	<1	<3	1.2
JUL 30...	<1.0	<1	2	<1	<0.1	<1	<1	2	7	--

SAN JUAN RIVER NR GALLEGOS CANYON, NM (364136108062011)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 27...	0930	450	520	8.3	9.0	9.0	9.7	150	49	7.7	43

DATE	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)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 27...	2	1.9	110	140	5.2	329	313	<0.100	<1	40

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	1	2	<1	<0.1	1	<1	2	6	<1.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SOUTH POND-GALLEGOS CANYON DRAINAGE, 3.0 MI SOUTH OF HIGHWAY 3003, NM (363555108080610)
(NAVAJO INDIAN IRRIGATION PROJECT)

[illegible][illegible][illegible][illegible]

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WETLAND NEAR SOUTH POND-GALLEGOS CANYON DRAINAGE, 3.0 MI SOUTH OF HIGHWAY 3003, NM (363558108074110)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)
AUG 22...	1100	<5.0	<5.0	<5.0

MIDDLE POND-GALLEGOS CANYON DRAINAGE, 0.5 MI NORTH OF HIGHWAY 3003, NM (363841108070210)
(NAVAJO INDIAN IRRIGATION PROJECT)

[illegible][illegible]

	CHROMIUM, 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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELEN- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATHA- ZINE, TOTAL (UG/L) (39630)	DIA- AZINON, TOTAL (UG/L) (39570)
APR 14...	2	31	1	<0.1	4	25	6	<10	10	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	1.0	--
AUG 04... 22...	<1 --	1 --	<1 --	0.2 --	<1 --	16 --	7 --	<10 --	-- --	-- --	<0.01 --

[illegible]

SAN JUAN RIVER BASIN -- Continued

[illegible][illegible]

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 16...	1500	--	3160	8.4	24.0	6.5	560	170	32	480	9
MAY 17...	1100	--	--	--	--	--	--	--	--	--	--
AUG 02...	1600	1.4	3480	8.2	32.0	5.6	810	260	38	500	8
06...	0900	--	3400	8.3	20.0	7.3	--	--	--	--	--

[illegible]

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

GALLEGOS CANYON 2.0 MI NORTH OF HIGHWAY 3003, NM (364000108065410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	DI- AZINON, TOTAL (UG/L) (39570)
APR 16...	2	2	<1	<0.1	8	8	--	<10	21	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	1.0	--
AUG 02...	1	4	<1	0.1	11	12	6	20	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	<0.01

DATE	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SEVIN, TOTAL (UG/L) (39750)	SILVEX, TOTAL (UG/L) (39760)
APR 16...	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	<0.01	<0.01	--	<0.01
AUG 02...	--	--	--	--	--	--	--	--	--	--
06...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	<0.50	--

ANIMAS RIVER 0.1 MI UPSTREAM FROM MOUTH, NM (364248108130410)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CAO3) (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)
APR 27...	1400	210	570	8.4	14.5	8.4	230	74	11	23
JUL 30...	1400	10	695	8.4	26.5	7.5	280	91	14	40

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CAO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
APR 27...	0.7	2.3	121	120	11	<0.010	341	315	0.200	<1
JUL 30...	1	3.3	150	170	23	0.050	426	431	<0.100	<1

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
APR 27...	50	1.0	1	1	<1	<0.1	1	<1	<1	6
JUL 30...	80	<1.0	<1	4	<1	0.1	<1	<1	<1	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DIVERSION FROM SAN JUAN RIVER, NM (364336108150410)
(FRUITLAND IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 30...	1000	615	8.4	10.5	9.0	190	61	9.5	35	1
AUG 03...	1700	548	8.6	25.5	7.3	190	61	9.6	41	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 30...	2.1	115	130	10	<0.010	340	317	<0.100	<1	40
AUG 03...	2.5	119	150	11	0.020	342	347	0.200	1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 30...	<1.0	1	1	<1	<0.1	1	<1	1	7	<1.0
AUG 03...	<1.0	<1	2	<1	<0.1	<1	<1	1	8	--

FRUITLAND PROJECT DIVERSION, NM (364336108150411)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 30...	1005	615	8.4	10.5	10.5	9.0	190	61	9.5	35	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 30...	2.2	118	140	9.8	<0.010	324	328	<0.100	<1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 30...	<1.0	<1	1	<1	<0.1	1	<1	1	<3	80

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

LA PLATA RIVER AT MOUTH, NM (364410108150410)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 28...	1000	5.4	4470	8.2	10.5	8.8	1300	330	120	580	7
AUG 02...	0900	0.16	1550	8.1	18.5	7.5	430	120	31	180	4

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C 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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 28...	4.0	234	2000	170	0.69	3450	3350	<0.100	<1	190
AUG 02...	2.9	136	410	120	0.20	958	946	<0.100	1	140

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 28...	<1.0	3	1	<1	<0.1	2	<1	4	<10	11
AUG 02...	<1.0	<1	2	<1	0.2	<1	<1	1	6	--

SOUTHWEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190610)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
APR 18...	0930	2260	7.9	13.0	6.5	610	170	46	220	4	3.9	79
APR 18...	0940	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	1330	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	1400	4620	8.7	26.0	7.9	1600	450	110	450	5	9.1	45

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)
APR 18...	650	180	1.7	1490	1320	<0.100	<1	180	<1.0	2	<1
APR 18...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	1800	560	4.7	3690	3410	<0.100	3	390	<1.0	<1	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190610) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 18...	<1	<0.1	2	2	7	<10	5.9	--	--	--	--
APR 18...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	0.10	0.03	<0.01	<0.01
AUG 05...	<1	0.2	<1	<1	27	10	--	--	--	--	--

SOUTHWEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190611)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
APR 18...	0940	610	170	46	220	4	4.0	80	750

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
APR 18...	220	3.4	1530	1460	<0.100	<1	180	<1.0	2

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 18...	1	<1	<0.1	1	2	10	<10	6.3

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 01...	0900	0.38	3450	8.2	16.0	8.3	1200	350	81	380
AUG 05...	1000	--	3450	8.2	16.0	8.2	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)
	(00931)	(00935)	(90410)	(00945)	(00940)	(71870)	(70300)	(70301)	(00631)	(01000)
AUG 01...	5	1.1	226	1400	160	0.55	2680	2580	16.0	<1
05...	--	--	--	--	--	--	--	--	--	--

DATE	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
	(01020)	(01025)	(01030)	(01040)	(01049)	(71890)	(01060)	(01145)	(01085)
AUG 01...	420	<1.0	<1	1	<1	0.1	9	42	6
05...	--	--	--	--	--	--	--	--	--

DATE	ZINC, DIS- SOLVED (UG/L AS ZN)	DI- AZINON, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	SEVIN, TOTAL (UG/L)
	(01090)	(39570)	(39398)	(39530)	(39600)	(39790)	(39540)	(39786)	(39750)
AUG 01...	10	--	--	--	--	--	--	--	--
05...	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.50

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195411)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
		(00061)	(00095)	(00400)	(00010)	(00300)	(00900)	(00915)	(00925)	(00930)
AUG 01...	0910	0.38	3450	8.2	16.0	8.3	1200	350	82	400

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)
	(00931)	(00935)	(90410)	(00945)	(00940)	(71870)	(70300)	(70301)	(00631)	(01000)
AUG 01...	5	1.1	210	1400	160	1.3	2780	2590	16.0	<1

DATE	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
	(01020)	(01025)	(01030)	(01040)	(01049)	(71890)	(01060)	(01145)	(01085)	(01090)
AUG 01...	410	<1.0	1	1	<1	0.1	8	42	6	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

OJO AMARILLO CANYON 4.0 MI SOUTH OF HIGHWAY 3003, NM (364217108204410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 16...	1100	1.4	3920	8.4	11.5	9.1	980	270	74	600	8	2.0
JUN 20...	0900	--	--	--	--	--	--	--	--	--	--	--

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)
APR 16...	83	1700	180	1.4	3010	2950	16.0	<1	380	<1.0	2	1
JUN 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	ATRA-ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T, TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 16...		<1	<0.1	6	33	7	<10	73	--	--	--	--
JUN 20...		--	--	--	--	--	--	--	0.10	0.02	<0.01	<0.01

OJO AMARILLO CANYON 4.0 MI NORTH OF HIGHWAY 3003, NM (364217108204411)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	ATRA-ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T, TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
JUN 20...	0910	0.10	<0.10	<0.10	<0.10

WETLAND SOUTH SIDE OF SAN JUAN RIVER 2 MI UPSTREAM FROM FRUITLAND BRIDGE, NM (364333108223410)
(FRUITLAND IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 17...	1700	0.16	6740	8.2	18.5	12.3	490	97	60	1200	24
AUG 01...	1200	0.92	1900	7.9	22.5	8.5	320	94	20	290	7

DATE	TIME	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 17...		4.0	419	2700	160	0.26	4510	4470	<0.100	1	380
AUG 01...		3.7	196	630	50	0.060	1240	1210	<0.100	2	110

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WETLAND SOUTH SIDE OF SAN JUAN RIVER 2 MI UPSTREAM FROM FRUITLAND BRIDGE, NM (364333108223410) -- Continued
(FRUITLAND IRRIGATION PROJECT)

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 17...	<1.0	2	<1	<1	<0.1	8	<1	--	<10	20
AUG 01...	<1.0	<1	2	<1	0.2	1	<1	3	15	--

SAN JUAN RIVER NEAR FRUITLAND BRIDGE, NM (364432108241610)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 27...	1700	630	600	8.4	16.0	7.8	200	65	10	40	1
JUL 30...	1630	370	580	9.0	27.0	9.5	210	65	11	45	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (MG/L AS B) (01020)
APR 27...	2.4	120	140	9.3	<0.010	377	340	0.300	1	50
JUL 30...	2.6	128	160	12	0.030	362	372	<0.100	1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	2	1	<1	<0.1	1	<1	<1	4	2.2
JUL 30...	<1.0	<1	2	1	<0.1	<1	<1	2	10	--

AVOCET POND, NM (364018108241510)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
APR 18...	1200	650	8.2	13.5	6.8	210	54	18	58	2	9.3	318
JUN 19...	1200	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	1300	--	--	--	--	130	32	11	210	8	9.9	570

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

AVOCET POND, NM (364018108241510) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS B) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
APR 18...	7.6	13	--	380	351	<0.100	7	110	2.0	2	<1
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	19	26	0.090	896	650	<0.100	48	220	<1.0	1	32

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 18...	<1	<0.1	<1	<1	7	<3	<1.0	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	0.10	<0.10	<0.10	<0.10
JUL 07...	<1	<0.1	11	<1	14	3	--	--	--	--	--

WEST AVOCET POND, NM (364037108245710)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 21...	1000	240	9.7	21.0	8.0	65	16	6.1	21	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
AUG 21...	1.6	66	47	2.8	<0.010	146	134	<0.100	2	30

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AUG 21...	<1.0	<1	2	1	<0.1	<1	<1	4	<3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

NORTHWEST POND-BLOCK 3, NM (363942108255510)
(NAVJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 21...	1300	800	7.6	22.0	2.8	190	49	16	88	3
DATE		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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
AUG 21...	17	154	200	37	0.050	532	500	<0.100		5
DATE		BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)
AUG 21...	250	1.0	<1	12	<1	<0.1	<1	1		6
DATE		ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	DI- AZINON, TOTAL (UG/L) (39570)	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL TRI- THION (UG/L) (39786)	SEVIN, TOTAL (UG/L) (39750)
AUG 21...	7	<0.01	<0.01	<0.01	0.14	<0.01	0.61	<0.01	<0.50	

SHUMWAY ARROYO 0.25 MI UPSTREAM OF FARMERS MUTUAL DITCH, NM (364600108265110)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 29...	1430	0.17	5040	8.4	15.0	15.8	1200	220	150	770	10
DATE		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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 29...	5.0	176	2200	280	0.30	3840	3740	1.00	<1	320	
DATE		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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 29...	<1.0	2	2	<1	<0.1	2	3	7	<10	13	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER ABOVE HOGBACK, NM (364447108320710)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)
AUG 08...	1430	298	8.6	27.5	230	70	12	49	1	2.7

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE DIS-SOLVED (MG/L AS I) (71865)	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, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 08...	140	180	12	0.30	0.030	0.004	7.3	421	418	<0.100

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
AUG 08...	10	68	50	3	29	16	<1	940	<3

HOGBACK DIVERSION, NM (364445108324810)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)
APR 29...	1600	--	652	8.5	12.0	8.9	220	69	11	39	1
AUG 03...	1500	27	685	8.8	26.5	9.2	260	80	14	53	1

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 29...	2.3	124	140	8.0	<0.010	379	345	0.300	1	50
AUG 03...	3.2	151	190	16	0.030	444	447	<0.100	1	70

DATE	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 29...	1.0	1	1	<1	<0.1	1	<1	1	6	2.1
AUG 03...	<1.0	<1	2	<1	<0.1	<1	<1	1	<3	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER BL HOGBACK, NM (363502108342110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CaCO_3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)
AUG 09...	0930	140	8.3	25.0	240	77	11	87	2	3.3

DATE	TIME	ALKALINITY LAB (MG/L AS CaCO_3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO_4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS Br) (71870)	IODIDE DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SiO_2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS SiO_2) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L AS SiO_2) (70301)	NITROGEN, NO_2+NO_3 DIS-SOLVED (MG/L AS N) (00631)
AUG 09...	161	270	16	0.20	0.080	0.005	10	567	575	0.600	

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS Al) (01106)	BARIUM, DIS-SOLVED (UG/L AS Ba) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS Fe) (01046)	LITHIUM DIS-SOLVED (UG/L AS Li) (01130)	MANGANESE, DIS-SOLVED (UG/L AS Mn) (01056)	SELENIUM, DIS-SOLVED (UG/L AS Se) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS Sr) (01080)	ZINC, DIS-SOLVED (UG/L AS Zn) (01090)
AUG 09...		<10	95	80	4	30	2	1	970	4

DRAIN AT WETLAND 2.5 MI WEST OF THE HOGBACK, NM (364523108351510)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CaCO_3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORPTION RATIO (00931)
APR 17...	1100	0.14	2800	7.7	14.0	8.3	1300	270	140	190	2
AUG 01...	1400	0.68	2000	7.5	21.5	6.0	970	240	90	120	2

DATE	TIME	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CaCO_3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO_4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	BROMIDE DIS-SOLVED (MG/L AS Br) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NO_2+NO_3 DIS-SOLVED (MG/L AS N) (00631)	ARSENIC DIS-SOLVED (MG/L AS As) (01000)	BORON, DIS-SOLVED (MG/L AS B) (01020)
APR 17...	4.5	281	1300	31	0.050	2370	2110	0.300	<1	390	
AUG 01...	6.4	214	910	19	0.050	1520	1520	0.600	1	270	

DATE	TIME	CADMIUM DIS-SOLVED (UG/L AS Cd) (01025)	CHROMIUM, 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)	MOLYBDENUM, DIS-SOLVED (UG/L AS Mo) (01060)	SELENIUM, DIS-SOLVED (UG/L AS Se) (01145)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS Zn) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 17...		<1.0	1	1	<1	<0.1	6	21	2	<10	27
AUG 01...		<1.0	<1	1	<1	0.1	2	11	2	10	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DRAIN 2.5 MI WEST OF THE HOGBACK, 0.25 MILE ABOVE WETLAND, NM (364532108350210)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
SEP 14...	1100	700	170	67	95	2	8.0	234	660

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
SEP 14...	20	0.030	1260	1160	0.600	<1	210	<1.0

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 14....	<1	3	1	<0.1	<1	9	4	8

SOUTHWEST POND-CHINLE WASH DRAINAGE, NM (363537108264710)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 15...	1600	355	11.0	22.0	11.6	35	9.1	3.0	52	4	1.8
JUN 19...	0930	--	--	--	--	--	--	--	--	--	--
AUG 05...	1000	--	--	--	--	--	--	--	--	--	--
05...	1200	840	9.6	18.0	7.8	29	7.0	2.9	180	14	5.1

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
APR 15...	87	52	1.1	--	197	171	<0.100	3	80	<1.0	2
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	--	--	--	--
05...	284	100	17	0.10	574	483	<0.100	17	300	<1.0	<1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SOUTHWEST POND-CHINLE WASH DRAINAGE, NM (363537108264710) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	DI- AZINON, TOTAL (UG/L) (39570)
APR 15...	4	<1	<0.1	3	<1	--	7	1.3	--	--
JUN 19...	--	--	--	--	--	--	--	--	<0.10	--
AUG 05...	--	--	--	--	--	--	--	--	--	--
05...	13	<1	0.2	8	<1	12	6	--	--	<0.01

DATE	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL TRI- THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SEVIN, TOTAL (UG/L) (39750)	SILVEX, TOTAL (UG/L) (39760)
APR 15...	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	<0.10	<0.10	--	<0.10
AUG 05...	--	--	--	--	--	--	--	--	--	--
05...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	<0.50	--

CHINDE WASH AT HIGHWAY 5005, NM (363636108255110)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
SEP 14...	1300	94	27	6.5	67	3	1.8	90	130

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
SEP 14...	5.5	0.050	287	293	0.300	<1	30	<1.0

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 14...	<1	6	<1	<0.1	<1	1	2	<3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHINLE WASH NEAR FRUITLAND, NM (363829108285210)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 07...	1130	0.13	1410	8.6	31.0	27.5	12	230	67	14	230
AUG 09...	1530	0.12	1380	8.6	--	31.0	--	210	59	15	220

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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)
JUL 07...	7	4.1	121	480	56	0.90	0.080	0.005	8.1	936	934
AUG 09...	7	3.4	103	500	47	0.30	0.090	0.005	6.1	926	914

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUL 07...	<0.100	<10	34	100	10	43	--	3	1400	8
AUG 09...	<0.100	<10	36	90	3	40	2	4	1300	<3

CHACO RIVER AT HOGBACK, NM (364234108315110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 06...	1730	3.9	1410	8.5	31.0	20	420	89	48	160	3
AUG 08...	1200	4.4	1500	8.6	29.5	--	450	98	49	170	4

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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)
JUL 06...	6.5	96	610	48	0.80	0.11	0.009	5.1	1030	1030
AUG 08...	6.8	124	580	51	0.70	0.11	0.009	6.1	1130	1040

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUL 06...	1.20	10	110	440	<3	78	--	3	1700	<3
AUG 08...	1.30	<10	130	440	<3	81	1	2	1800	6

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER BL HOGBACK, NM (364254108334510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 06...	1600	4.1	1560	8.5	33.0	31.5	40	450	97	50	170
AUG 08...	0900	4.1	1430	8.6	--	19.5	--	430	96	46	160

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	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)
JUL 06...	3	7.3	113	640	51	0.80	0.12	0.009	5.3	1120	1100
AUG 08...	3	6.4	129	560	48	0.70	0.11	0.009	5.9	1070	1010

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
JUL 06...	1.40	<10	110	470	15	82	--	3	1800	<3	-3.60
AUG 08...	1.20	10	120	390	3	77	<1	2	1800	4	--

CHACO RIVER AB CONFLUENCE WITH SAN JUAN RIVER, NM (364601108382910)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 06...	1400	3.9	1500	8.6	29.5	49	440	90	52	180	4
AUG 07...	1700	3.9	1700	8.8	29.5	--	440	96	49	210	4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CAC03) (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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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)

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER 0.5 MI UPSTREAM FROM MOUTH, NM (364614108383810)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 28...	2000	12	1440	8.4	15.5	7.4	170	53	9.7	230
JUL 31...	1500	2.7	1650	8.8	31.5	7.9	470	99	53	190

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)
APR 28...	8	5.3	149	500	41	0.030	918	941	2.80	1
JUL 31...	4	7.9	109	700	58	0.12	1210	1180	0.900	1

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
APR 28...	190	1.0	1	12	<1	<0.1	6	4	4	9
JUL 31...	480	<1.0	<1	5	<1	0.2	4	2	3	7

MARSH, NORTH SIDE OF SAN JUAN RIVER, 0.6 MI DOWNSTREAM OF MOUTH OF CHACO RIVER, NM (364628108393501)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
JUN 20...	--	850	7.7	23.5	4.8	350	100	24	42	1
AUG 02...	1400	1060	7.7	24.0	4.5	420	120	29	72	2

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
JUN 20...	3.8	179	250	11	0.020	560	538	<0.100	1	90
AUG 02...	5.1	139	340	24	0.040	728	674	<0.100	1	110

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUN 20...	<1.0	1	1	<1	<0.1	2	<1	1	5
AUG 02...	<1.0	<1	2	<1	0.2	1	<1	1	13

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER AT SHIPROCK MUNICIPAL DIVERSION, NM (364652108412610)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 29...	1730	709	8.5	11.0	9.0	220	70	12	44	1
AUG 02...	1300	780	8.6	25.0	8.1	290	85	18	60	2

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 29...	3.6	125	160	10	<0.010	403	376	0.300	1	50
AUG 02...	3.3	150	230	19	0.030	548	505	<0.100	1	60

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 29...	<1.0	2	3	<1	<0.1	1	<1	1	4	1.3
AUG 02...	<1.0	<1	4	<1	0.2	1	1	2	11	--

DRAIN EAST SIDE OF SAN JUAN RIVER, 1.5 MI DOWNSTREAM OF U.S.G.S. GAGING STATION (09368000), NM (364843108432910)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 17...	1430	0.08	1160	8.4	18.0	13.5	440	110	40	87	2
AUG 02...	1100	2.0	915	8.1	19.5	7.3	390	100	33	53	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 17...	0.80	227	350	26	0.030	756	751	0.300	1	130
AUG 02...	1.4	155	230	18	0.040	590	528	<0.100	1	100

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 17...	<1.0	1	1	<1	<0.1	4	2	1	7	7.3
AUG 02...	<1.0	<1	2	<1	0.2	2	2	<1	8	--

GROUND-WATER LEVELS

BERNALILLO COUNTY
Albuquerque Area

350256106390801. Local number, 10N.03E.32.314.

LOCATION.--Lat 35°02'56", long 106°39'08", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 764 ft, perforated 188-764 ft.

INSTRUMENTATION.--Digital recorder, 1-hr. punch.

DATUM.--Elevation of land-surface datum is 4,941 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Lost record, several days, due to recorder malfunction.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.07 ft below land-surface datum, Jan. 5, 1987;

lowest, 41.05 ft below land-surface datum, July 2, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.05	30.51	29.33	28.62	28.23	27.81	30.17	30.96	38.84	40.46	38.46	38.35
10	31.49	30.58	30.15	28.52	29.75	29.29		34.42	39.68	39.56	38.34	38.49
15	33.19	30.52	30.22	28.53	29.37	29.16		34.35	38.53	38.45	37.46	38.55
20	32.65	31.74	29.04	28.99	28.53	29.77		36.75	38.42	36.74	37.91	37.46
25	32.23	31.89	28.80	28.64	28.41	31.48	31.13	37.87	39.71	38.07	36.08	36.94
ECM	31.25	30.30	28.65	28.39	28.23	30.95		38.38	40.33	39.06	37.48	35.13

WTR YEAR 1990 HIGHEST 27.81 MAR 5, 1990 LOWEST 41.05 JUL 2, 1990

351051106395304. Local number, 11N.03E.18.411.

LOCATION.--Lat 35°10'51", long 106°39'53", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, casing diameter 6 in., with 2 in., P.V.C. piezometer set at 980 ft., casing is screened from 870 to 1,050 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,995 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. P.V.C., 1.80 ft. above land-surface datum.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.29 ft below land-surface datum, Feb. 22, 1984; lowest, 37.78 ft below land-surface datum, July 3, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 5	34.54
Aug. 3	37.60

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.

WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter 14 in., depth 436 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 19	268.49
Aug.	not measured

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

332615104303601. Local number, 10S.24E.21.212.

LOCATION.--Lat 33°26'15", long 104°30'36", Hydrologic Unit 13060008. Owner: Pecos Valley Artesian Conservancy District.

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.

REMARKS.--Records good.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.71	43.99	41.93	40.55	39.33	39.08	42.49	44.82	47.58	50.38	50.02	48.99
10	46.49	43.70	41.59	40.45	39.41	39.84	43.29	44.79	47.94	50.65	49.38	48.17
15	46.10	43.42	41.45	40.21	39.15	40.24	43.60	44.61	48.68	50.30	49.06	48.53
20	45.46	42.98	41.19	39.97	39.14	41.36	44.75	45.48	49.26	50.74	47.85	47.79
25	44.93	42.59	41.01	39.77	39.13	41.72	44.20	46.54	49.75	50.73	48.31	47.25
EOM	44.37	42.32	40.81	39.48	39.18	42.34	44.81	47.23	50.70	50.87	49.06	46.67

WTR YEAR 1990 HIGHEST 39.05 FEB 26, 1990 LOWEST 53.13 JUL 20, 1990

332255104360401. Local number, 11S.23E.03.342.

LOCATION.--Lat 33°22'55", long 104°36'04", Hydrologic Unit 13060008. Owner: J. L. Mask.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 15 in., depth 478 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,725 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--Mar. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 156.97 ft below land-surface datum, Mar. 11, 1952; lowest measured, 198.96 ft below land-surface datum, Oct. 18, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	not measured
Aug. 23	184.83

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 water-table irrigation 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, 15.19 ft below land-surface datum, Jan. 13, 1989; lowest measured, 21.72 ft below land-surface datum, Aug. 26, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	15.34
Aug. 23	15.21

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	70.15
Aug. 23	72.00

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

331525104245201. (formerly 331205104245101) Local number, 12S.25E.23.344.

LOCATION.--Lat 33°12'05", long 104°24'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation 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 due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.84 ft below land-surface datum, Feb. 9, 1989; lowest, 199.68 ft below land-surface datum, June 20, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.20	36.23	21.21	17.48	15.90		95.28	91.01	126.69	146.23		
10	58.25	34.24	19.46	17.39	20.91		95.67	84.45	124.79	147.56		
15	48.15	28.45	18.43	17.01	24.20		94.27	92.97	136.87	140.83		
20	45.53	26.06	17.74	16.95	22.92	79.08	109.09	99.66	137.95	145.34		
25	45.49	23.92	16.89	18.49	25.10	86.57	104.16	116.94	138.19			
EOM	43.55	23.58	16.16	15.93	30.15	99.99	92.00	125.39	145.67			

WTR YEAR 1990 HIGHEST 15.90 FEB 5, 1990 LOWEST 156.48 JULY 13, 1990

331524104245101. Local number, 12S.25E.23.344A.

LOCATION.--Lat 33°15'24", long 104°24'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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.

REMARKS.--Records good.

PERIOD OF RECORD.--1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 102.79 ft below land-surface datum, Apr. 6 and 14, 1969; lowest, 111.17 below land-surface datum, Sep. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	104.56	104.70	104.49	104.35	103.99	103.74	103.48	103.74	103.88	104.20	104.62	104.86
10	104.64	104.72	104.42	104.30	104.04	103.73	103.65	103.64	103.98	104.24	104.64	104.88
15	104.58	104.77	104.49	104.22	104.00	103.73	103.49	103.75	103.99	104.33	104.68	104.89
20	104.58	104.66	104.44	104.29	103.97	103.61	103.60	103.81	104.07	104.37	104.80	104.98
25	104.62	104.66	104.44	104.21	103.87	103.63	103.60	103.81	104.13	104.45	104.81	105.00
EOM	104.66	104.64	104.48	104.09	103.95	103.56	103.60	103.84	104.18	104.51	104.84	105.12

WTR YEAR 1990 HIGHEST 103.44 APR 12, 1990 LOWEST 105.22 SEP 29, 1990

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 water-table irrigation 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: Top of casing, 0.80 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	79.43
Aug. 23	87.24

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

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 record due to float line problems.
 PERIOD OF RECORD.--1940 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.23 ft above land-surface datum, Jan. 27, 1989; lowest, 198.30 ft below land-surface datum, July 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		30.39	15.38	11.84		30.98						117.33
10		25.49	12.76	11.89	15.22			94.02			155.54	112.28
15		23.61		10.44	21.33			91.65			117.74	115.16
20		20.66	10.51	10.84	19.61	93.31		82.81			100.33	107.71
25		17.53	9.80	14.40	22.73	98.62					86.26	99.71
EOM	35.07	17.34	8.74	10.34	33.65						110.41	80.10

WTR YEAR 1990 HIGHEST 8.74 DEC 31, 1989 LOWEST 161.16 AUG 10, 1990

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.
 WELL CHARACTERISTICS.--Drilled artesian stock well, diameter 8 in., depth 460 ft, casing information not available.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,844 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 19	289.92
Aug. 24	293.04

330640104174501. Local number, 14S.26E.12.433B.
 LOCATION.--Lat 33°06'40", long 104°17'45", Hydrologic Unit 13060007. Owner: C. B. Donaghy.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	18.98
Aug. 24	19.02

330404104221201. Local number, 14S.26E.30.444.
 LOCATION.--Lat 33°04'04", long 104°22'12", Hydrologic Unit 13060007. Owner: Bartlett.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 1150 ft, cased to 740 ft, open hole 740-1150 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,484 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.19 ft below land-surface datum, Feb. 10, 1988; lowest measured, 261.75 ft below land-surface datum, Aug. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	81.09
Aug. 24	241.97

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

325845104295501. Local number, 15S.24E.25.433.

LOCATION.--Lat 32°58'45", long 104°29'55", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 910 ft, casing 0-548 ft.

INSTRUMENTATION.--Periodic steel-tape, pressure measurements, and Digital recorder with 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 casing, for steel-tape measurements, 1.45 ft. above land-surface.

REMARKS.--Water levels and pressure readings provided by N.M. State Engineer Office and Pecos Valley Artesian Conservancy District.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.10 ft above land-surface datum, Jan. 25, 1990; lowest, 102.30 ft below land-surface datum, July 17, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			+21.44	+19.72	+16.02		46.17	.50	34.25	61.69	35.47	38.12
10				+14.86		3.42	43.08	.21	27.46	60.83	27.15	29.87
15		+18.56	+21.33		+ 7.93	9.70	46.54	4.11	44.37	52.36	26.09	20.71
20					+10.24	19.14	38.82	27.11	44.92	49.84	34.38	3.71
25	+16.94			+21.10		22.10	24.63	54.33	59.41	58.83	19.46	
EOM				+19.48		37.12	15.01	44.45	57.78	57.58	30.95	

WTR YEAR 1990 HIGHEST +21.10 JAN 25, 1990 LOWEST 66.07 JUNE 28, 1990

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 artesian irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	29.40
July 18	28.89

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.

WELL CHARACTERISTICS.--Drilled water-table industrial well, diameter 16 to 12 in., depth 158 ft, perforated to 50 to 150 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, 19.23 ft below land-surface datum, Sep. 29, 1988; lowest measured, 39.08 ft below land-surface datum, Aug. 1, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	22.30
July 18	22.67

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.

WELL CHARACTERISTICS.--Drilled artesian unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	76.58
July 26	78.05

GROUND-WATER LEVELS

CIBOLA COUNTY
Grants-Bluewater Area

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 artesian unused 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, 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.69 ft below land-surface datum, Sep. 29, 1988; lowest measured, 274.81 ft below land-surface datum, Jan. 23, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	93.58
July 25	98.77

351637107584501. Local number, 12N.11W.14.213.

LOCATION.--Lat 35°16'37", long 107°58'45", Hydrologic Unit 13020207. Owner: Duane Berryhill.

AQUIFER.--San Andres Limestone and Yeso Formation of Permian Age.

WELL CHARACTERISTICS.--Drilled test well, diameter 4 in., depth 130.4 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,605 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.70 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	83.40
Aug. 8	84.51

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 17	8.00
July 30	8.37

GROUND-WATER LEVELS

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 water-table unused 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, Sep. 2, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	135.40
Aug. 21	135.55

CURRY COUNTY
Clovis area

341825103031301. Local number, 01N.37E.15.13311.

LOCATION.--Lat 34°18'25", long 103°03'13", Hydrologic Unit 12050002. Owner: Levi Robbins.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 248 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,109 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.56 ft above land-surface.

REMARKS.--Recorder installed Aug. 1988.

PERIOD OF RECORD.--Feb. 1954, Jan. 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 137.43 ft above land-surface datum, Feb. 17, 1954; lowest, 230.23 ft below land-surface datum, July 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	221.02	221.34	220.90	220.68	220.43	220.27	224.43	222.56	223.75	228.74	225.65	229.22
10	220.99	221.12	220.88	220.62	220.41	220.25	223.44	223.95	226.44	228.96	228.73	227.43
15	221.00	221.20	220.87	220.58	220.36	220.16	223.73	222.95	226.51	229.12	226.53	226.06
20	221.32	221.49	220.81	220.55	220.37	220.22	223.98	222.79	227.62	230.07	225.16	225.42
25	221.59	221.09	220.78	220.51	220.36	222.25	222.97	224.84	229.23	229.36	226.55	225.16
EOM	221.71	220.99	220.70	220.45	220.36	223.26	224.78	224.33	228.84	226.03	228.15	225.04

WTR YEAR 1990 HIGHEST 220.16 MAR 14, 1990 LOWEST 230.23 JUL 19, 1990

342358103093601. Local number, 02N.36E.15.111.

LOCATION.--Lat 34°23'58", long 103°09'36", Hydrologic Unit 12050001. Owner: Anne Humphreys.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	284.85
Aug. 2	not measured

GROUND-WATER LEVELS

CURRY COUNTY
Clovis area

342736103203701. (formerly 342815103270001). Local number, 03N.34E.23.433.

LOCATION.--Lat 34°27'36", long 103°20'37", Hydrologic Unit 12050001. Owner: Archie Baker.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table unused 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, 0.40 ft above land-surface datum.

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, 358.70 ft below land-surface datum, Aug. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	357.41
Aug. 27	357.28

343347103345001. Local number, 04N.32E.22.111.

LOCATION.--Lat 34°33'47", long 103°34'50", Hydrologic Unit 12050001. Owner: Noel Dougherty.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 401 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 4,587 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.50 ft above land-surface.

REMARKS.--Recorder installed Aug. 1988, lost record due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 299.23 ft above land-surface datum, Apr. 23, 1990; lowest, 309.92 ft below land-surface datum, Jan. 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	299.83	299.87		299.78	299.72		299.45	299.78	299.56	299.82	299.84	299.59
10	299.92	299.93		299.85	299.64		299.93	299.59	299.78	299.73	299.67	299.57
15	299.73	299.75	299.67	299.67	299.93	299.58	299.57	299.57	299.64	299.54	299.58	299.49
20	299.72	299.85	299.65	299.84	299.68	299.70	299.63	299.54	299.73	299.62	299.72	299.51
25	299.80	299.98	299.62	299.59	299.80		299.47	299.58	299.78	299.59	299.62	299.44
ECM	299.80			299.63		299.59	299.82	299.64	299.89	299.65	299.63	299.65

WTR YEAR 1990 HIGHEST 299.23 APR 23, 1990 LOWEST 300.27 OCT 18, 1989

343745103201501. (formerly 343743103201501). Local number, 05N.34E.21.443.

LOCATION.--Lat 34°37'45", long 103°20'15", Hydrologic Unit 12050005. Owner: Garrett Farms.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table 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. 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 439.07 ft below land-surface datum, Aug. 27, 1990; lowest measured, 448.41 ft below land-surface datum, Jan. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	439.18
Aug. 27	439.07

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 water-table 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.

REMARKS.--"b" indicates well pumped recently.

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, 446.23b ft Aug. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	445.11
Aug. 27	446.23b

GROUND-WATER LEVELS

395

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 water-table irrigation 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, 10.10 ft below land-surface datum, Sep. 11, 1989; lowest measured, 25.57 ft below land-surface datum, Apr. 25, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	12.45
Sep. 17	10.73

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	17.63
Sep. 17	17.96

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.--Yeso.
 WELL CHARACTERISTICS.--Drilled oil test well, used for stock water, 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	237.50
Aug. 24	240.40

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 artesian irrigation 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, 62.36 ft below land-surface datum, Feb. 10, 1988; lowest measured, 100.54 ft below land-surface datum, Aug. 27, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	61.67
Aug.	not measured

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 water-table unused 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.--Sep. 1937 to Jan. 1966, Aug. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.41 ft below land-surface datum, Aug. 24, 1989; lowest measured, 31.66 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	22.44
Aug. 24	29.10

325638104274801. Local number, 16S.25E.11.111A.

LOCATION.--Lat 32°56'38", long 104°27'48", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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, July 24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.68	58.08	57.51	57.21	57.47	57.81	59.05	60.09	60.91	61.75	62.44	62.67
10	58.68	57.94	57.44	57.18	57.57	58.01	59.28	60.23	61.06	61.89	62.50	62.69
15	58.60	57.84	57.43	57.14	57.61	58.21	59.46	60.36	61.20	61.99	62.57	62.78
20	58.52	57.72	57.37	57.25	57.64	58.42	59.64	60.49	61.33	62.10	62.59	62.86
25	58.39	57.63	57.33	57.34	57.62	58.61	59.80	60.62	61.46	62.21	62.58	62.82
EOB	58.21	57.59	57.29	57.43	57.70	58.83	59.96	60.77	61.61	62.34	62.59	62.70

WTR YEAR 1990 HIGHEST 57.14 JAN 15, 1990 LOWEST 62.89 SEP 20, 1990

325445104253501. Local number, 16S.26E.19.211.

LOCATION.--Lat 32°54'45", long 104°25'35", Hydrologic Unit 13060007. Owner: John Crook.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 160 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,399 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. by 3 in. vertical slot under pump base, at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.60 ft below land-surface datum, Jan. 16, 1969; lowest measured, 112.85 ft below land-surface datum, Sep. 13, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	99.33
Aug. 24	108.48

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 artesian public-supply 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, 514.85 ft below land-surface datum, Jan. 27, 1988; lowest measured, 553.18 ft below land-surface datum, Aug. 7, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	520.08
Aug. 22	530.13

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 artesian observation 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.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.57 ft below land-surface datum, Feb. 20, 1989; lowest, 209.15 ft below land-surface datum, July 31-Aug. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.49	97.32	87.09	78.29	71.88	75.15	105.76	107.20	132.37	151.05	138.30	148.28
10	115.03	95.41	84.98	77.49	72.37	83.45	111.91	105.07	134.72	153.56	133.10	145.63
15	110.40	94.20	83.73	76.56	72.01	88.83	116.72	110.04	139.83	155.00	130.78	140.02
20	107.08	92.06	83.03	75.25	72.63	94.43	120.71	119.34	142.86	153.05	127.61	136.31
25	103.42	89.64	80.09	74.54	72.81	99.39	118.40	127.59	146.39	149.50	134.49	128.07
EQM	100.27	88.62	79.44	73.16	73.25	103.78	111.64	134.09	153.02	146.81	146.70	122.31

WTR YEAR 1990 HIGHEST 71.79 FEB 19, 1990 LOWEST 159.64 JUL 13, 1990

324620104255101. Local number, 18S.26E.06.442B.

LOCATION.--Lat 32°46'20", long 104°25'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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.--Records good.

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, Sep. 13, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	130.61	125.85	120.86	117.25	114.14	112.69	118.00	124.02	127.52	132.58	134.46	134.39
10	130.10	125.05	120.19	116.75	113.86	113.14	119.69	123.67	128.46	133.01	133.92	134.89
15	129.27	124.33	119.70	116.15	113.42	113.53	120.87	123.59	128.87	133.38	133.49	135.04
20	128.59	123.31	119.08	115.83	113.14	114.15	121.90	124.12	129.32	133.60	133.12	134.84
25	127.78	122.54	118.49	115.20	112.84	115.29	122.76	125.05	130.47	133.79	132.87	134.08
EQM	126.69	121.79	117.98	114.60	112.94	116.84	123.55	126.66	131.74	134.19	133.48	133.55

WTR YEAR 1990 HIGHEST 112.62 MAR 2, 1990 LOWEST 135.21 SEP 14, 1990

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 water-table observation 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

REMARKS.--Records good.

PERIOD OF RECORD.--Aug. 1951 to current year. above land-surface datum.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.19	122.22	122.24	122.34	122.29	122.23	122.20	122.36	122.27	122.34	122.48	122.56
10	122.24	122.30	122.24	122.36	122.31	122.28	122.25	122.30	122.34	122.38	122.44	122.55
15	122.20	122.27	122.29	122.29	122.26	122.26	122.24	122.28	122.29	122.33	122.46	122.56
20	122.24	122.31	122.35	122.32	122.33	122.32	122.29	122.26	122.30	122.39	122.49	122.58
25	122.25	122.25	122.34	122.33	122.33	122.31	122.22	122.26	122.33	122.38	122.50	122.57
EQM	122.27	122.35	122.29	122.27	122.34	122.25	122.28	122.30	122.36	122.44	122.51	122.64

WTR YEAR 1990 HIGHEST 122.17 OCT 1, 1989 LOWEST 122.66 SEP 23, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 water-table irrigation well, diameter 13 in., depth 346 ft, casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,286 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of basal flange of pump head, 0.20 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	37.62
July 18	41.05

EDDY COUNTY

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 water-table municipal well, diameter 20 in., depth 327 ft, casing 0-290 ft.

INSTRUMENTATION.--Digital recorder, 1-hr punch.

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.--Records good.

PERIOD OF RECORD.--April 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.98 ft below land-surface datum, June 14, 1987; lowest measured, 26.07 ft below land-surface datum, Aug. 2, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.67	22.19	21.95	21.97	21.94	22.01	22.44	22.83	23.61	24.31	23.23	23.61
10	22.67	22.19	21.93	22.04	22.01	22.17	22.73	23.10	24.00	24.45	23.09	23.45
15	22.53	22.17	22.00	22.04	22.02	22.21	22.92	23.26	24.17	23.84	23.09	23.46
20	22.41	22.09	22.02	22.10	22.11	22.51	22.84	23.36	24.17	23.69	23.15	23.27
25	22.28	21.98	22.10	22.19	22.23	22.59	22.63	23.55	24.08	23.51	23.17	23.02
EOM	22.19	22.09	22.09	21.95	22.24	22.48	22.74	23.56	24.17	23.32	23.57	23.04

WTR YEAR 1990 HIGHEST 21.93 DEC 10, 1989 LOWEST 24.71 JUL 11, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table domestic 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	12.62
Aug. 21	13.93

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.

REMARKS.--Records good.

PERIOD OF RECORD.--1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.13 ft below land-surface datum, June 29, 1987; lowest measured, 98.68 ft below land-surface datum, Aug. 3, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	93.87	93.40	93.15	93.17	93.12	93.18	93.62	94.12	94.90	95.60	94.62	94.99
10	93.85	93.38	93.10	93.21	93.20	93.31	93.98	94.31	95.29	95.77	94.49	94.89
15	93.69	93.48	93.23	93.23	93.23	93.42	94.14	94.55	95.46	95.26	94.49	94.84
20	93.59	93.31	93.20	93.31	93.32	93.71	94.10	94.65	95.39	95.01	94.55	94.70
25	93.46	93.20	93.28	93.36	93.36	93.70	93.91	94.82	95.40	94.85	94.61	94.45
EOM	93.34	93.32	93.31	93.16	93.47	93.74	94.02	94.88	95.53	94.71	94.94	94.49

WTR YEAR 1990 HIGHEST 93.10 DEC 10, 1989 LOWEST 96.03 JUL 12, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

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 water-table unused 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 casing, 0.40 ft above land-surface datum.

REMARKS.--Records good.

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, Sep. 15, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.66	157.87	152.36	149.18	147.75	147.34	151.36	158.68	163.43	167.46	170.33	169.29
10	161.84	156.92	151.65	148.88	147.65	147.79	153.35	158.67	164.52	167.95	170.07	170.17
15	161.22	155.99	151.18	148.47	147.39	148.46	155.09	159.09	165.24	168.45	169.36	170.97
20	161.22	154.91	150.62	148.54	147.61	149.59	156.42	159.49	166.27	168.39	169.05	171.55
25	160.11	153.94	150.26	148.32	147.62	150.11	157.69	160.94	167.31	168.85	169.30	171.12
EOB	158.76	153.32	149.70	147.89	147.73	150.49	158.20	162.42	167.33	169.85	169.26	170.16

WTR YEAR 1990 HIGHEST 147.34 MAR 5, 1990 LOWEST 171.76 SEP 22, 1990

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 water-table irrigation 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.--Sep. 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, Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	33.91
Aug. 21	54.73

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 water-table observation well, diameter 16 in. 0-20 ft, open hole 20-900 ft.

INSTRUMENTATION.--Digital recorder, 1-hr punch.

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.--Records good.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	399.71	399.38	399.12	399.14	399.27	399.42	399.66	400.19	401.10	402.00	400.97	400.81
10	399.78	399.47	399.08	399.28	399.38	399.70	400.16	400.35	401.35	402.19	400.50	400.74
15	399.71	399.33	399.08	399.28	399.35	399.47	400.07	400.71	401.61	401.62	400.51	400.72
20	399.64	399.29	399.00	399.30	399.40	399.93	400.05	400.67	401.84	401.37	400.52	400.50
25	399.56	399.17	399.19	399.38	399.59	399.90	399.89	401.06	401.86	401.24	400.52	400.34
EOB	399.46	399.30	399.10	399.25	399.50	399.62	400.09	401.30	402.01	401.09	400.78	400.37

WTR YEAR 1990 HIGHEST 398.94 DEC 18, 1989 LOWEST 402.37 JUL 10, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

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 water-table irrigation well, diameter 16 in., depth 200 ft.

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, Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	55.74
Aug. 21	54.29

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 water-table irrigation 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, 50.12 ft below land-surface datum, Aug. 22, 1988;
lowest measured, 85.10 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	52.24
Aug. 27	54.77

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 water-table irrigation 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, 35.31 ft below land-surface datum, Aug. 22, 1988;
lowest measured, 54.98 ft below land-surface datum, Sep. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	38.72
Aug. 27	40.00

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 water-table unused 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.

REMARKS.--Records good.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	288.86	288.78	288.58	288.47	288.20	288.63	289.28	289.70	289.71	290.35	290.36	290.52
10	289.05	288.83	288.49	288.64	288.63	288.87	289.59	289.42	289.84	290.37	290.24	290.48
15	288.75	288.80	288.56	288.35	288.52	289.00	289.39	289.55	289.80	290.19	290.17	290.55
20	289.00	288.79	288.73	288.44	288.94	289.35	289.54	289.55	289.95	290.29	290.16	290.58
25	288.75	288.59	288.72	288.57	289.03	289.23	289.36	289.62	290.07	290.28	290.17	290.62
EOM	288.81	288.79	288.49	288.15	289.03	289.21	289.42	289.66	290.25	290.31	290.14	290.72

WTR YEAR 1990 HIGHEST 288.15 JAN 31, 1990 LOWEST 290.82 SEP 30, 1990

GROUND-WATER LEVELS

GUADALUPE COUNTY
Santa Rosa Area

350414104485101. Local number, 10N.20E.28.2214.

LOCATION.--Lat 35°04'14", long 104°48'51", Hydrologic Unit 13060001. Owner: Town of Santa Rosa.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 12 3/4 in. casing 0-514 ft, 10 3/4 in. 505-575 ft, casing perforated 515-575 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 5,162.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.10 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 345.64 ft below land-surface datum, Oct. 17, 1988; lowest measured, 362.36 ft below land-surface datum, Apr. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	350.25	350.78	351.60	352.33	353.05	353.67	353.84	352.98	351.53	351.75	351.41	350.65
10	350.33	350.95	351.73	352.58	353.19	353.87	353.90	352.67	351.43	351.85	351.19	350.68
15	350.69	351.15	351.95	352.56	353.21	353.91	353.59	352.54	351.28	351.77	350.98	350.79
20	350.38	351.26	352.05	352.72	353.42	354.10	353.48	352.29	351.39	351.65	351.48	350.67
25	350.43	351.33	352.19	352.87	353.59	354.18	353.19	352.10	351.90	351.29	350.64	350.55
EOM	350.61	351.53	352.38	352.93	353.70	354.00	353.14	351.79	351.64	351.41	350.53	350.51

WTR YEAR 1990 HIGHEST 350.13 OCT 1, 1989 LOWEST 354.63 MAR 25, 1990

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 water-table municipal 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: 3/4" plugged hole, east side, 1.50 ft above land-surface datum.

REMARKS.--Submersible pump installed in 1984.

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, 55.76 ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	50.47
Aug. 1	51.18

HIDALGO COUNTY
Virden Valley

324051108594101. (formerly 324053108594101). Local number, 19S.21W.03.414.

LOCATION.--Lat 32°40'51", long 108°59'41", Hydrologic Unit 15040002. Owner: Jones, Clouse, and Jensen.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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. 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.27 ft below land-surface datum, Jan. 12, 1979; lowest measured, 15.79 ft below land-surface datum, Aug. 4, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	10.91
July 9	14.30

GROUND-WATER LEVELS

HIDALGO COUNTY
Lordsburg Area

321849108392001. (formerly 321848108391401). Local number, 23S.18W.12.333.

LOCATION.--Lat 32°18'49", long 108°39'20", Hydrologic Unit 15040003. Owner: R. I. McDonald.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 220 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,240 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.--Apr. 1957 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. 7, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	167.66
July 9	171.46

321248108331401. (formerly 321257108331201). Local number, 24S.17W.14.442.

LOCATION.--Lat 32°12'48", long 108°33'14", Hydrologic Unit 15040003. Owner: E. W. Richens.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., depth 420 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,265 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1955 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	87.98
July 9	88.72

Animas Valley

321624108504001. (formerly 321540108514101). Local number, 23S.20W.25.422.

LOCATION.--Lat 32°16'24", long 108°50'40", Hydrologic Unit 15040003. Owner: Kerr Cattle Co.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 0.40 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, 53.44 ft below land-surface datum, July 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 10	51.29
July 11	53.44

315610108493501. (formerly 315645108493501). Local number, 27S.19W.20.343.

LOCATION.--Lat 31°56'10", long 108°49'35", Hydrologic Unit 15040003. Owner: Felix Gauthier.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 358 ft, cased to 358 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,414 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.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.90 ft below land-surface datum, July 29, 1949; lowest measured, 198.50 ft below land-surface datum, Aug. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 10	179.21
July 11	184.59

GROUND-WATER LEVELS

HIDALGO COUNTY
San Simon Valley

315738109004001. Local number, 27S.21W.17.124.

LOCATION.--Lat 34°57'38", long 109°00'40", Hydrologic Unit 15040006. Owner: E. J. Bagwell.

AQUIFER.--Bolson.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 220 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,100 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in west side of pump base, 1.00 ft above land-surface.

PERIOD OF RECORD.--Jan. 1978, Jan. 1980, July 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.98 ft above land-surface datum, Jan. 10, 1980; lowest, 125.56 ft below land-surface datum, July 16, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 9	124.94
July 10	125.54

315048109010201. (formerly 315010108570001). Local number, 28S.21W.30.222.

LOCATION.--Lat 31°50'48", long 109°01'02", Hydrologic Unit 15040006. Owner: C. L. Johnston.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.88 ft below land-surface datum, Jan. 15, 1969; lowest measured, 124.93 ft below land-surface datum, July 16, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 9	122.12
July 10	122.61

Playas Valley

313502108275001. Local number, 31S.16W.33.233.

LOCATION.--Lat 31°35'02", long 108°27'50", Hydrologic Unit 15020006. Owner: U-Bar Ranch.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 654 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,404 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. 1965 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, Sep. 4, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	46.84
July 13	46.87

312938108302301. Local number, 32S.16W.30.134.

LOCATION.--Lat 31°29'38", long 108°30'23", Hydrologic Unit 13030201. Owner: C. C. Edwards.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 150 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,490 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4 in. pipe nipple inside pump shell, 1.45 ft above land-surface datum.

REMARKS.--a indicates pumping water level.

PERIOD OF RECORD.--Mar. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 85.11 ft below land-surface datum, Mar. 27, 1952; lowest measured, 129.10a ft below land-surface datum, Aug. 20, 1962.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	87.35
July 13	87.51

GROUND-WATER LEVELS

LEA COUNTY
Tatum-Lovington-Hobbs Area

332115103403301. Local number, 11S.32E.24.113.

LOCATION.--Lat 33°21'15", long 103°40'33", Hydrologic Unit 12080001. Owner: Paul Hamilton.

AQUIFER.--Ogallala.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 1/2 in., depth 110 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,336 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft. above land-surface.

REMARKS.--Lost record, several days, due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 59.74 ft above land-surface datum, Oct. 03 1989; lowest, 61.72 ft below land-surface datum, Sept. 28, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.75	59.79	59.85				60.65	60.96	61.24	61.42	61.54	61.57
10	59.75	59.80	59.85				60.71	60.99	61.27	61.45	61.55	61.56
15	59.75	59.81					60.75	61.06	61.28	61.48	61.55	
20	59.76	59.80				60.46	60.82	61.11	61.32	61.50	61.56	
25	59.76	59.84				60.52	60.87	61.15	61.35	61.53	61.56	
EOM	59.77	59.84				60.60	60.90	61.20	61.38	61.54	61.57	

WTR YEAR 1990 HIGHEST 59.74 OCT 3, 1989 LOWEST 61.58 SEP 9, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	30.98
Aug. 28	31.24

330455103251301. Local number, 14S.35E.28.1111.

LOCATION.--Lat 35°04'55", long 103°25'13", Hydrologic Unit 12080003. Owner: Paul Fisher.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 137 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,031 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.09 ft below land-surface datum, Jan. 6, 1982; lowest measured, 43.80 ft below land-surface datum, Sept. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	43.25
Aug. 28	43.40

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	67.48
Aug. 28	67.73

GROUND-WATER LEVELS

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 water-table unused 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.

REMARKS.--Record good.

PERIOD OF RECORD.--Aug. 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.63 ft below land-surface datum, Mar. 13, 1990; lowest measured, 67.11 ft below land-surface datum, Aug. 24, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.91	59.87	59.80	59.77	59.70	59.65	59.66	59.75	59.85	60.07	60.17	60.03
10	59.93	59.88	59.77	59.77	59.69	59.65	59.72	59.72	59.91	60.09	60.10	60.02
15	59.89	59.89	59.79	59.74	59.68	59.66	59.68	59.74	59.93	60.10	60.07	60.04
20	59.91	59.86	59.78	59.75	59.69	59.68	59.71	59.77	59.98	60.10	60.07	60.06
25	59.89	59.84	59.78	59.74	59.69	59.70	59.69	59.78	60.03	60.12	60.06	60.06
EOM	59.88	59.85	59.77	59.71	59.70	59.68	59.71	59.78	60.07	60.12	60.03	60.09

WTR YEAR 1990 HIGHEST 59.63 MAR 13, 1990 LOWEST 60.18 JUL 25, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	65.31
Aug. 28	66.88

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.

WELL CHARACTERISTICS.--Drilled water-table observation 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, 174.79 ft below land-surface datum, Aug. 7, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	172.80
Aug. 28	173.60

325132103112501. Local number, 17S.38E.07.111A.

LOCATION.--Lat 32°51'32", long 103°11'25", Hydrologic Unit 12080003. Owner: L. R. Seblings.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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, 1.91 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	69.77
Aug. 28	66.48

GROUND-WATER LEVELS

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.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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, Sep. 4, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	62.24
Aug. 28	62.98

LINCOLN COUNTY
Hondo Valley

333242105340701. Local number, 09S.14E.10.132.
 LOCATION.--Lat 33°32'42", long 105°34'07", Hydrologic Unit 13060008. Owner: Village of Capitan.
 AQUIFER.--Mancos Shale of Late Cretaceous Age.
 WELL CHARACTERISTICS.--Drilled water-table municipal 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	38.43
Aug. 22	38.66

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	59.97
Aug. 22	59.70

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 water-table domestic and stock well, diameter 12 in., depth 125 ft, cased to 110 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,989 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, 44.43 ft below land-surface datum, Aug. 18, 1988; lowest measured, 60.18 ft below land-surface datum, Jan. 15, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	46.57
Aug. 23	45.39

GROUND-WATER LEVELS

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.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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.
 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, 189.21 ft below land-surface datum, Jan. 4, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	189.21
Aug.	not measured

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.--Bolson Deposits.
 WELL CHARACTERISTICS.--Dug and drilled water-table unused 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 1989 TO SEPTEMBER 1990

DATE	LEVEL
Jan. 24	100.80
July	not measured

321415107565501. Local number, 24S.11W.14.122.
 LOCATION.--Lat 32°14'15", long 107°56'55", Hydrologic Unit 13030202. Owner: Charles Waldrop.
 AQUIFER.--Bolson Deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., reported depth 350 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	166.83
July 2	172.60

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.--Bolson Deposits.
 WELL CHARACTERISTICS.--Drilled artesian irrigation 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 4,090 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
 REMARKS.--"c" indicates nearby well pumping.
 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	28.17
July 2	82.94c

GROUND-WATER LEVELS

LUNA COUNTY
Mimbres Valley

320915104294501. Local number, 25S.06W.07.211.

LOCATION.--Lat 32°09'15", long 104°29'45", Hydrologic Unit 13030202. Owner: H. C. Telles.

AQUIFER.--Bolson Deposits.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	84.98
July 2	84.96

315525107374501. Local number, 27S.08W.35.122.

LOCATION.--Lat 31°55'25", long 107°37'45", Hydrologic Unit 13030202. Owner: M. M. Gibson.

AQUIFER.--Bolson Deposits.

WELL CHARACTERISTICS.--Drilled water-table unused irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	75.68
July 2	76.78

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	38.09
July 2	38.50

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	11.81
July 2	11.44

GROUND-WATER LEVELS

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 CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 20	4.97
Aug. 20	2.76

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb.	not measured
Sep. 10	100.80

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 water-table irrigation 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, Sep. 15, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	92.83
Aug. 27	92.72

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	58.36
Aug. 27	65.47

GROUND-WATER LEVELS

QUAY COUNTY
House Area

343848103555801. Local number, 05N.28E.23.222232.
 LOCATION.--Lat 34°38'48", long 103°55'58", Hydrologic Unit 13060004. Owner: Jimmy Snipes.
 AQUIFER.--Ogallala Formation.
 WELL CHARACTERISTICS.--Drilled water-table stock well, diameter 6 in., depth 93.5 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,126 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, west side, 2.00 ft above land-surface datum.
 REMARKS.--"b" indicates well pumped recently.
 PERIOD OF RECORD.--Jan. 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.90 ft below land-surface datum, Mar. 16 and June 15, 1990; lowest measured, 84.22b ft below land-surface datum, Feb. 18, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 16	74.90
Sep. 13	74.92

343855103482901. (formerly 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.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL
Jan. 12	44.00
June 15	44.52

344406103555501. Local number, 06N.28E.13.33333.
 LOCATION.--Lat 34°44'06", long 103°55'55", Hydrologic Unit 13060004. Owner: Jack Jennings.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled domestic well, diameter 16 in., depth 131 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,816 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4 in. hole in cover plate, 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1948 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.47 ft below land-surface datum, Jan. 20, 1948; lowest measured, 119.28 ft below land-surface datum, Sep. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan.	not measured
Sep. 13	119.28

GROUND-WATER LEVELS

QUAY COUNTY
House Area

344339103552201. (formerly 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.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 131 ft, cased to 131 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,785 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 14	96.12
June	not measured

Northern High Plains

353239103111301. Local number, 15N.35E.11.22111.
 LOCATION.--Lat 35°32'39", long 103°11'13", Hydrologic Unit 11080006. Owner: J. L. Smith.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 175 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,126 ft above National Geodetic Vertical Datum of 1929. Measuring point: 2 1/2 in. hole, in east side of casing, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--July 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.59 ft below land-surface datum, July 12, 1989; lowest measured, 114.67 ft below land-surface datum, Feb. 5, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	90.34
July 20	90.39

354238103132301. Local number, 17N.35E.16.221.
 LOCATION.--Lat 35°42'38", long 103°13'23", Hydrologic Unit 11090101. Owner: L. C. Morrison.
 AQUIFER.--Dakota Formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter unknown, depth 250 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,465 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in south side of pump base, 2.00 ft. above land-surface datum.
 PERIOD OF RECORD.--Oct. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 159.67 ft below land-surface datum, Apr. 27, 1990; lowest measured, 171.59 ft below land-surface datum, Sep. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Apr. 27	159.67
July 20	162.39

GROUND-WATER LEVELS

ROOSEVELT COUNTY
Fortales Valley

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 water-table unused well, diameter 18 in., depth 105 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

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.

REMARKS.--Lost record, several days, due to recorder malfunction.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	84.32	84.27	84.14	84.10	83.93	83.85	83.75	83.70	83.63			83.88
10	84.32	84.23	84.12	84.08	83.94	83.85	83.78	83.64				83.89
15	84.31	84.28	84.18	84.05	83.93	83.84	83.72	83.65				83.92
20	84.29	84.18	84.15	84.08	83.93	83.79	83.73	83.67				83.94
25	84.28	84.19	84.12	84.04	83.90	83.82	83.70	83.64				83.94
EOB	84.25	84.16	84.13	83.97	83.92	83.77	83.71	83.64			83.86	83.95

WTR YEAR 1990 HIGHEST 83.62 MAY 18, 1990 LOWEST 84.40 OCT 5, 1989

340753103083101. Local number, 02S.36E.14.311.

LOCATION.--Lat 34°07'53", long 103°08'31", Hydrologic Unit 12050001. Owner: Glen McAfee.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 151 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,938 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 5.00 ft. above land-surface.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.37 ft above land-surface datum, Jan. 6, 1975; lowest, 60.77 ft below land-surface datum, Jan. 11, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.58	64.83	64.46	64.37	64.12	64.14	64.59	64.79	70.32	70.60	66.95	76.71
10	65.71	64.54	64.43	64.26	64.13	64.12	64.69	64.84	69.04	78.94	68.78	67.84
15	64.58	65.31	64.37	64.23	64.32	64.09	64.20	65.10	77.52	69.78	67.56	68.73
20	64.56	64.64	64.31	64.20	64.29	64.06	64.24	66.42	77.26	77.54	67.04	67.62
25	64.77	64.52	64.29	64.17	64.17	64.01	67.24	67.31	68.53	79.05	66.83	67.37
EOB	64.50	64.95	64.51	64.17	64.25	64.40	65.17	68.18	78.54	67.65	78.17	67.55

WTR YEAR 1990 HIGHEST 63.95 MAR 27, 1990 LOWEST 79.44 JUL 25, 1990

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 water-table irrigation 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 3,939 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.

REMARKS.--a means well pumping during measurement.

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, 115.21a ft below land-surface datum, Aug. 11, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan.	not measured
Aug. 28	94.76

GROUND-WATER LEVELS

SANDOVAL COUNTY
Bernalillo Area

352235106282401. Local number, 13N.04E.12.112.
 LOCATION.--Lat 35°22'35", long 106°28'24", Hydrologic Unit 13020201. Owner: John Bowers.
 AQUIFER.--Valley Fill
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 50 ft, cased.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 5,117 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, 20.94 ft below land-surface datum, Sep. 9, 1987; lowest measured, 25.27 ft below land-surface datum, Jan. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	24.14
Sep. 21	21.03

SANTA FE COUNTY
Estancia Valley

350534106024801. (formerly 350525106025001). Local number, 10N.08E.13.133.
 LOCATION.--Lat 35°05'34", long 106°02'48", Hydrologic Unit 13050001. Owner: W. R. Irby.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 513 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,274 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.
 REMARKS.-- c indicates nearby well pumping, a indicates well pumping during measurement.
 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, 181.55a ft below land-surface datum, Aug. 4, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	137.80
Aug. 30	150.34c

350344106004601. (formerly 350340106005001). Local number, 10N.09E.29.133.
 LOCATION.--Lat 35°03'44", long 106°00'46", Hydrologic Unit 13050001. Owner: Phil Wallen.
 AQUIFER.--Glorieta Sandstone of Permian Age.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 14 in., reported depth 200 ft, cased to 140 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,248 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. 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.00 ft below land-surface datum, May 4, 1949; lowest measured, 124.46 ft below land-surface datum, Aug. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	107.45
Aug.	not measured

GROUND-WATER LEVELS

SANTA FE COUNTY
Santa Fe Area

353636106021001. Local number, 16N.08E.13.444.

LOCATION.--Lat 35°36'36", long 106°02'10", Hydrologic Unit 13020201. Owner: Harold Nelson.

AQUIFER.--Tesuque Formation of Santa Fe Group.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 1/2 in., depth 337 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,400 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 256.04 ft below land-surface datum, Jan. 20, 1982; lowest measured, 262.91 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 27	262.35
Aug. 31	262.91

353753105580501. Local number, 16N.09E.10.42114.

LOCATION.--Lat 35°37'53", long 105°58'05", Hydrologic Unit 13020201. Owner: Paul Ragel.

AQUIFER.--Ancha Formation of Santa Fe Group.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in., depth 243 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,720 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. plug in cover plate, 6.00 ft below land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 149.52 ft below land-surface datum, Dec. 11, 1957; lowest measured, 227.11 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 27	226.24
Aug. 31	227.11

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 water-table irrigation 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, 220.95 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 27	215.37
Aug. 31	220.95

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.

WELL CHARACTERISTICS.--Drilled water-table unused 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 in. hole in west side of pump base, 0.50 ft above top of casing, and 1.50 ft above land-surface datum. Pipe, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 25, 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.18 ft below land-surface datum, Sep. 11, 1989; lowest measured, 65.56 ft below land-surface datum, Feb. 25, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	51.18
Sep. 14	50.37

GROUND-WATER LEVELS

Sierra County
Hot Springs Area

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 water-table irrigation 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, Sep. 11, 1975; lowest, 41.97 ft below land-surface datum, Feb. 29, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	41.66
Sep. 14	39.38

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 water-table unused well, diameter 10 in., depth 32 ft, cased to 32 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,198 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.29 ft below land-surface datum, Feb. 12, 1987; lowest measured, 25.95 ft below land-surface datum, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	20.61
Sep. 14	22.10

TAOS COUNTY
Sunshine Valley

365035105360501. (formerly 365036105355301). Local number, 30N.13E.18.1121.

LOCATION.--Lat 36°50'35", long 105°36'05", Hydrologic Unit 13020101. Owner: U. S. Government.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 10 in., depth 500 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 7,597 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	70.86
Aug. 21	70.89

GROUND-WATER LEVELS

TAOS COUNTY
Sunshine Valley

365644105363501. (formerly 365650105370001). Local number, 01S.74W.24.244.
 LOCATION.--Lat 36°56'44", long 105°36'35", Hydrologic Unit 13020101. Owner: Dimmitt.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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, 186.79 ft below land-surface datum, Mar. 3, 1989; lowest measured, 213.53 ft below land-surface datum, Aug. 10, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	187.98
Aug. 21	187.86

365410105345601. (formerly 365410105354501). Local number, 02S.73W.05.244.
 LOCATION.--Lat 36°54'10", long 105°34'56", Hydrologic Unit 13020101. Owner: Unknown.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table domestic and stock well, diameter 6 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 7,590 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, 72.77 ft below land-surface datum, Aug. 17, 1988; lowest measured, 84.78 ft below land-surface datum, Jan. 27, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	75.13
Aug. 21	73.56

TORRANCE COUNTY
Estancia Valley

343443106024401. Local number, 04N.09E.07.334.
 LOCATION.--Lat 34°34'43", long 106°02'44", Hydrologic Unit 13050001. Owner: Franklin Development.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused 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 northwest side of pump base, 1.50 ft above land-surface datum.
 REMARKS.--"c" indicates nearby well pumping.
 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, 93.91 ft below land-surface datum, Aug. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	81.79
Aug. 30	90.87c

344016106070901. (formerly 344016106064701). Local number, 05N.08E.08.424.
 LOCATION.--Lat 34°40'16", long 106°07'09", Hydrologic Unit 13050001. Owner: J. J. Spangler.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 204 ft, cased to 98 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,218 ft above National Geodetic Vertical Datum of 1929. Measuring point: .75 inch plug in south side of discharge pipe, 1.80 ft above land-surface datum.
 PERIOD OF RECORD.--Mar. 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, Sep. 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	123.51
Aug.	not measured

GROUND-WATER LEVELS

TORRANCE COUNTY
Estancia Valley

344234106070601. (formerly 344234106074901). Local number, 06N.08E.32.212.
 LOCATION.--Lat 34°42'34", long 106°07'06", Hydrologic Unit 13050001. Owner: Robert Mc Math.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., reported depth 209 ft, cased to 84 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,174 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, Sep. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	80.19
Aug. 30	81.29

344604105574601. (formerly 344622105575501). Local number, 06N.09E.11.211.
 LOCATION.--Lat 34°46'04", long 105°57'46", Hydrologic Unit 13050001. Owner: Paragon Corp.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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.--May 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.07 ft below land-surface datum, May 4, 1949; lowest measured, 28.25 ft below land-surface datum, July 19, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	12.65
Aug. 30	16.03

345908106024901. (formerly 345900106034301). Local number, 09N.08E.24.332.
 LOCATION.--Lat 34°59'08", long 106°02'49", Hydrologic Unit 13050001. Owner: Unknown.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,205 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.--Jan. 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, 85.95 ft below land-surface datum, Aug. 30, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	82.57
Aug. 30	85.95

UNION COUNTY
Clayton Area

355144103041201. (formerly 360940103083501). Local number, 19N.36E.23.244.
 LOCATION.--Lat 35°51'44", long 103°04'12", Hydrologic Unit 11090102. Owner: Stevens.
 AQUIFER.--Dakota and Purgatoire Sandstone.
 WELL CHARACTERISTICS.--Drilled water-table unused 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 indicates nearby well pumping during measurement.
 PERIOD OF RECORD.--Nov. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.22 ft below land-surface datum, Mar. 17, 1971; lowest measured, 158.58c ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 11	148.29
July 19	148.35

GROUND-WATER LEVELS

UNION COUNTY
Clayton Area

361847103064701. (formerly 361910103170501). Local number, 24N.36E.17.244.
LOCATION.--Lat 36°18'47", long 103°06'47", Hydrologic Unit 11090103. Owner: Glen Burrows.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 20 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 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.38 ft below land-surface datum, May 8, 1968; lowest measured, 94.59 ft below land-surface datum, Jan. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 11	94.59
July	not measured

Capulin Area

364444104000201. (formerly 364430103595501). Local number, 29N.28E.18.341.
LOCATION.--Lat 36°44'44", long 104°00'02", Hydrologic Unit 11040001. Owner: City of Raton.
AQUIFER.--Cinders.
WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 78 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,820.8 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.
REMARKS.-- a indicates well pumping during measurement.
PERIOD OF RECORD.--July 1951, Aug. 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.01 ft below land-surface datum, Feb. 8, 1974; lowest measured, 53.38a ft below land-surface datum, Aug. 7, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 17	34.16
July 30	34.36

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE) U-UPPER, M-MIDDLE, L-LOWER:
000 EXRV-UNKNOWN, Extrusive Rocks; 000 IRSV-UNKNOWN, Intrusive Rocks; 110 AVMB-Cenozoic, Quaternary, Alluvium, Bolson Deposits and other Surface Deposits; 110 BLSN-Cenozoic, Quaternary, Bolson Fill; 122 SNTFL-Cenozoic, Tertiary, Miocene, Santa Fe Group, Lower Part; 210 CRCS-Mesozoic, Cretaceous, Cretaceous System; 210-MNCS-Mesozoic, Cretaceous, Mancos Shale; 211 MVRD-Mesozoic, Upper Cretaceous, Mesaverde Group; 221 MRSN-Mesozoic, Upper Jurassic, Morrison Formation; 231 CHNL-Mesozoic, Upper Triassic, Chinle Formation; 231 SNRS-Mesozoic, Upper Triassic, Santa Rosa Sandstone; 310 GLRT-Paleozoic, Permian, Glorieta Sandstone; Member of San Andres Formation of Manzano Group; 313 BRNL-Paleozoic, Permian, Guadalupian, Bernal Formation of Artesia Group; 313 SADG-Paleozoic, Permian, Guadalupian, San Andres Limestone and Glorieta Sandstone; 325 MDER-Paleozoic, Middle Pennsylvanian, Des Moinesian, Madera Limestone; 325 MDERU-Paleozoic, Middle Pennsylvanian, Des Moinesian, Madera Limestone, Upper Arkosic Limestone Member; 400 PCMB-Paleozoic, Precambrian, Precambrian Erathem.

REMARKS.--Ground Water sites in this table are segregated by county which appear alphabetically. The sites are then listed in ascending local indentifiers.

BERNALILLO COUNTY

BERNARDINE COUNTY								ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT			
08N.06E.02.331	345630106172301	001	GW	08-28-90	1225	325MDER	7380	28	4.0	
08N.06E.11.222	345628106162601	001	GW	08-27-90	1300		7262	9	10	
08N.06E.14.131	345516106170901	001	GW	08-28-90	1605		7287	7	3.0	
08N.06E.23.211	345446106164301	001	GW	08-27-90	1800	325MDER	7362	16	10	
08N.07E.12.323	345312106093301	001	GW	09-04-90	1128		6520	11	10	
08N.07E.16.141	345535106122001	001	GW	09-05-90	1810	325MDER	6715	8	7.0	
08N.07E.28.221	345348106122601	001	GW	08-24-90	1700	325MDER	6660	24	3.0	
08N.07E.29.321 POHL	345323106140001	001	GW	08-29-90	1346		--	3	12	
08N.07E.29.324A DOW	345319106135101	001	GW	01-17-90	1605	325MDER	6790	10	--	
		001	GW	02-15-90	1241	325MDER	6790	--	--	
		001	GW	03-21-90	1652	325MDER	6790	10	--	
		001	GW	04-12-90	1421	325MDER	6790	17	--	
		001	GW	05-16-90	0927	325MDER	6790	12	--	
		001	GW	06-13-90	1005	325MDER	6790	17	--	
		001	GW	07-13-90	0932	325MDER	6790	10	--	
		001	GW	08-21-90	1102	325MDER	6790	15	--	
		001	GW	09-17-90	1147	325MDER	6790	10	4.0	
08N.07E.34.222	345254106111201	001	GW	09-05-90	1425		6705	31	4.0	
09N.05E.12.213	350130106212501	001	GW	07-27-90	1335	325MDER	7160	5	6.0	
09N.05E.12.214 GILLEN	350131106211601	001	GW	07-27-90	1020		--	8	8.0	
09N.05E.12.241 STANTON	350119106210901	001	GW	01-12-90	1150	325MDER	--	--	--	
		001	GW	02-15-90	0950		--	--	--	
		001	GW	03-16-90	0928		--	--	--	
		001	GW	04-13-90	0917		--	15	--	
		001	GW	05-23-90	0815		--	5	--	
		001	GW	06-12-90	1232		--	11	--	
		001	GW	07-24-90	0925		--	10	--	
		001	GW	08-21-90	0838		--	8	--	
		001	GW	09-18-90	1107		--	12	4.0	
09N.05E.12.421 NAEB	350111106210901	001	GW	07-27-90	1715		--	6	4.0	
09N.05E.20.331	345909106194901	001	GW	07-30-90	1245	325MDER	7520	12	3.0	
09N.06E.07.341 STURGEON	350058106203701	001	GW	08-16-90	1300	325MDER	--	21	3.0	
09N.06E.17.142 OAK FLATS	345956106192301	001	GW	06-24-90	1020	325MDER	--	--	--	
09N.06E.18.131	350032106202301	001	GW	08-28-90	1915	325MDER	7280	19	3.0	
09N.06E.19.413 CLAYTON	345918106202001	001	GW	01-12-90	1015	325MDER	7660	--	--	
		001	GW	02-14-90	1210	325MDER	7660	--	--	
		001	GW	03-21-90	1207	325MDERU	7660	14	--	
		001	GW	04-13-90	1119	325MDER	7660	5	--	
		001	GW	05-21-90	0956	325MDER	7660	5	--	
		001	GW	06-15-90	0812	325MDER	7660	5	--	
		001	GW	07-18-90	1225	325MDER	7660	3	--	
		001	GW	08-22-90	1403	325MDER	7660	4	12	
		001	GW	09-18-90	1355	325MDER	7660	4	6.0	
09N.06E.20.333 BUSTER	345858106194601	001	GW	01-11-90	1050	325MDER	7490	--	--	
		001	GW	02-14-90	1440	325MDERU	7490	--	--	
		001	GW	03-21-90	1402	325MDERU	7490	12	--	
		001	GW	04-13-90	1426	325MDERU	7490	11	--	
		001	GW	05-16-90	1318	325MDERU	7490	12	--	
		001	GW	06-13-90	1355	325MDERU	7490	14	--	
		001	GW	07-13-90	1327	325MDERU	7490	8	--	
		001	GW	08-22-90	1239	325MDERU	7490	10	--	
		001	GW	09-20-90	1132	325MDERU	7490	9	6.0	
09N.06E.22.234	345924106165501	001	GW	08-20-90	1334	325MDERU	7342	9	6.0	
09N.06E.22.333	345900106174101	001	GW	08-22-90	1211	325MDER	7416	3	2.0	
09N.06E.22.334	345900106173501	001	GW	08-29-90	1025	325MDER	7415	11	10	
09N.06E.26.244	345832106154501	001	GW	08-25-90	1755	325MDER	7180	7	4.0	
09N.06E.29.114	345847106194201	001	GW	08-07-90	1720	325MDER	7462	12	6.0	
09N.06E.29.142	345844106192301	001	GW	08-07-90	1205	325MDER	7520	17	10	
09N.06E.29.244 MOSIER	345833106185101	001	GW	01-11-90	1245	325MDER	7420	--	--	
		001	GW	02-14-90	1625	325MDER	7420	--	--	
		001	GW	03-21-90	1532	325MDER	7420	8	--	
		001	GW	04-13-90	1256	325MDER	7420	9	--	
		001	GW	05-16-90	1132	325MDER	7420	12	--	
		001	GW	06-13-90	1208	325MDER	7420	7	--	
		001	GW	07-13-90	1141	325MDER	7420	8	--	

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
08N.06E.02.331	08-28-90	620	7.1	29.0	15.0	--	300	83	22	32
08N.06E.11.222	08-27-90	1280	7.1	28.0	14.0	--	550	180	25	49
08N.06E.14.131	08-28-90	650	7.4	31.0	12.5	--	320	78	30	21
08N.06E.23.211	08-27-90	650	7.1	26.0	14.5	--	270	81	16	58
08N.07E.12.323	09-04-90	550	7.8	25.0	15.0	--	170	39	18	55
08N.07E.16.141	09-05-90	800	7.5	20.0	14.5	--	350	120	11	54
08N.07E.28.221	08-24-90	750	7.2	27.0	13.0	--	380	130	13	29
08N.07E.29.321	PO 08-29-90	880	7.8	30.0	16.0	--	120	27	12	160
08N.07E.29.324A	DO 01-17-90	710	7.3	--	--	--	--	--	--	--
	02-15-90	760	7.4	--	11.5	--	--	--	--	--
	03-21-90	705	7.3	17.5	12.0	--	--	--	--	--
	04-12-90	710	7.3	15.0	12.0	--	350	120	12	31
	05-16-90	720	7.3	14.0	12.5	--	--	--	--	--
	06-13-90	700	7.3	22.0	16.0	--	--	--	--	--
	07-13-90	720	7.3	19.5	15.5	--	--	--	--	--
	08-21-90	710	7.3	25.0	15.0	--	--	--	--	--
	09-17-90	700	7.3	20.5	14.0	--	--	--	--	--
08N.07E.34.222	09-05-90	700	8.3	24.0	16.5	--	88	20	9.3	130
09N.05E.12.213	07-27-90	820	7.1	32.0	13.0	--	--	<3.0	<1.0	140
09N.05E.12.214	GI 07-27-90	1110	7.0	31.0	13.0	--	510	160	28	41
09N.05E.12.241	STA 01-12-90	1030	7.1	--	11.0	--	--	--	--	--
	02-15-90	--	7.2	--	11.0	--	--	--	--	--
	03-16-90	1190	7.2	--	10.5	5.2	--	--	--	--
	04-13-90	1180	7.1	16.0	11.0	--	520	160	30	46
	05-23-90	1180	7.1	23.5	12.0	--	--	--	--	--
	06-12-90	1160	7.2	26.0	14.0	--	--	--	--	--
	07-24-90	1140	7.3	20.5	11.5	--	--	--	--	--
	08-21-90	1130	7.3	21.0	11.5	--	--	--	--	--
	09-18-90	1130	7.5	22.5	13.0	--	--	--	--	--
09N.05E.12.421	NA 07-27-90	1010	7.1	30.0	15.0	--	490	150	29	39
09N.05E.20.331	07-30-90	1000	7.2	28.0	12.0	--	470	160	17	19
09N.06E.07.341	ST 08-16-90	1000	7.1	22.5	12.5	--	500	150	30	31
09N.06E.17.142	OA 06-24-90	820	7.3	--	13.5	--	420	110	35	23
09N.06E.18.131	08-28-90	710	7.2	27.0	14.0	--	350	99	26	32
09N.06E.19.413	CLA 01-12-90	710	8.3	--	14.5	--	--	--	--	--
	02-14-90	710	8.3	--	14.5	0.5	--	--	--	--
	03-21-90	710	8.3	17.0	15.0	--	--	--	--	--
	04-13-90	720	8.2	14.5	14.5	--	52	9.0	7.1	150
	05-21-90	710	8.2	20.0	14.0	--	--	--	--	--
	06-15-90	720	8.1	--	17.5	--	--	--	--	--
	07-18-90	750	8.1	26.0	15.0	--	--	--	--	--
	08-22-90	720	8.1	16.0	14.0	--	--	--	--	--
	09-18-90	695	8.1	22.5	14.5	--	--	--	--	--
09N.06E.20.333	BUS 01-11-90	1020	7.1	--	10.0	--	--	--	--	--
	02-14-90	1080	7.1	--	10.0	--	--	--	--	--
	03-21-90	1160	7.2	16.5	10.5	--	--	--	--	--
	04-13-90	1150	7.1	18.5	10.5	--	560	200	14	24
	05-16-90	1200	7.1	15.0	11.0	--	--	--	--	--
	06-13-90	1210	7.1	30.0	13.5	--	--	--	--	--
	07-13-90	1130	7.1	24.0	11.5	--	--	--	--	--
	08-22-90	1130	7.0	24.5	11.0	--	--	--	--	--
	09-20-90	1090	7.1	19.5	14.5	--	--	--	--	--
09N.06E.22.234	08-20-90	1100	7.2	20.0	13.0	--	490	160	21	39
09N.06E.22.333	08-22-90	600	7.3	13.0	12.0	--	260	77	16	37
09N.06E.22.334	08-29-90	500	7.5	28.0	16.0	--	210	58	15	34
09N.06E.26.244	08-25-90	1250	7.1	--	13.0	--	620	190	35	37
09N.06E.29.114	08-07-90	800	7.8	32.0	14.0	--	170	29	24	120
09N.06E.29.142	08-07-90	1030	7.1	25.0	14.0	--	500	150	30	30
09N.06E.29.244	MOS 01-11-90	1280	7.2	--	13.0	--	--	--	--	--
	02-14-90	1270	7.2	--	13.0	2.2	--	--	--	--
	03-21-90	1260	7.2	17.5	13.5	--	--	--	--	--
	04-13-90	1290	7.1	--	13.0	--	510	140	39	71
	05-16-90	1300	7.1	14.0	13.0	--	--	--	--	--
	06-13-90	1310	7.2	23.5	16.0	--	--	--	--	--
	07-13-90	1270	7.1	21.5	14.5	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
08N.06E.02.331	08-28-90	0.8	4.3	--	--	--	215	37	27
08N.06E.11.222	08-27-90	0.9	3.4	--	--	--	123	110	230
08N.06E.14.131	08-28-90	0.5	4.6	--	--	--	269	41	47
08N.06E.23.211	08-27-90	2	2.6	--	--	--	291	42	18
08N.07E.12.323	09-04-90	2	3.8	--	--	--	216	44	23
08N.07E.16.141	09-05-90	1	1.4	--	--	--	312	87	49
08N.07E.28.221	08-24-90	0.6	0.70	--	--	--	251	59	40
08N.07E.29.321	08-29-90	6	6.8	--	--	--	336	74	37
08N.07E.29.324A	DO 01-17-90	--	--	--	--	--	--	--	25
	02-15-90	--	--	--	--	--	--	--	27
	03-21-90	--	--	--	--	--	--	--	27
	04-12-90	0.7	1.2	--	--	--	328	42	27
	05-16-90	--	--	--	--	--	--	--	31
	06-13-90	--	--	--	--	--	--	--	28
	07-13-90	--	--	--	--	--	--	--	26
	08-21-90	--	--	--	--	--	--	--	26
	09-17-90	--	--	--	--	--	--	--	23
08N.07E.34.222	09-05-90	6	3.1	300	2	249	252	73	34
09N.05E.12.213	07-27-90	--	1.6	--	--	--	88	36	51
09N.05E.12.214	GI 07-27-90	0.8	2.1	--	--	--	279	59	150
09N.05E.12.241	STA 01-12-90	--	--	--	--	--	--	--	110
	02-15-90	--	--	--	--	--	--	--	130
	03-16-90	--	--	--	--	--	--	--	160
	04-13-90	0.9	1.6	--	--	--	299	53	160
	05-23-90	--	--	--	--	--	--	--	150
	06-12-90	--	--	--	--	--	--	--	160
	07-24-90	--	--	--	--	--	--	--	150
	08-21-90	--	--	--	--	--	--	--	140
	09-18-90	--	--	--	--	--	--	--	140
09N.05E.12.421	NA 07-27-90	0.8	2.1	--	--	--	260	64	120
09N.05E.20.331	07-30-90	0.4	1.1	--	--	--	155	47	160
09N.06E.07.341	ST 08-16-90	0.6	1.5	--	--	--	172	68	130
09N.06E.17.142	OA 06-24-90	0.5	4.0	--	--	--	360	71	45
09N.06E.18.131	08-28-90	0.7	2.3	--	--	--	211	52	37
09N.06E.19.413	CLA 01-12-90	--	--	--	--	--	--	--	27
	02-14-90	--	--	--	--	--	--	--	28
	03-21-90	--	--	--	--	--	--	--	21
	04-13-90	9	3.9	--	--	--	325	21	28
	05-21-90	--	--	--	--	--	--	--	24
	06-15-90	--	--	--	--	--	--	--	27
	07-18-90	--	--	--	--	--	--	--	35
	08-22-90	--	--	--	--	328	--	--	34
	09-18-90	--	--	--	--	--	--	--	28
09N.06E.20.333	BUS 01-11-90	--	--	--	--	--	--	--	140
	02-14-90	--	--	--	--	--	--	--	150
	03-21-90	--	--	--	--	--	--	--	160
	04-13-90	0.4	1.0	--	--	--	281	48	160
	05-16-90	--	--	--	--	--	--	--	200
	06-13-90	--	--	--	--	--	--	--	180
	07-13-90	--	--	--	--	--	--	--	170
	08-22-90	--	--	--	--	--	--	--	190
	09-20-90	--	--	--	--	--	--	--	180
09N.06E.22.234	08-20-90	0.8	1.4	--	--	--	98	88	180
09N.06E.22.333	08-22-90	1	1.8	--	--	--	245	53	29
09N.06E.22.334	08-29-90	1	2.4	--	--	--	215	45	24
09N.06E.26.244	08-25-90	0.6	2.0	--	--	--	171	240	150
09N.06E.29.114	08-07-90	4	9.6	--	--	--	293	49	71
09N.06E.29.142	08-07-90	0.6	3.3	--	--	--	116	66	150
09N.06E.29.244	MOS 01-11-90	--	--	--	--	--	--	--	170
	02-14-90	--	--	--	--	--	--	--	160
	03-21-90	--	--	--	--	--	--	--	150
	04-13-90	1	5.6	--	--	--	317	120	150
	05-16-90	--	--	--	--	--	--	--	180
	06-13-90	--	--	--	--	--	--	--	170
	07-13-90	--	--	--	--	--	--	--	150

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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)
08N.06E.02.331	08-28-90	1.3	14	350	--	<0.010	<0.100	<0.100	<0.010
08N.06E.11.222	08-27-90	0.40	17	689	--	<0.010	<0.100	<0.100	<0.010
08N.06E.14.131	08-28-90	0.70	16	400	--	<0.010	0.100	0.100	<0.010
08N.06E.23.211	08-27-90	0.80	15	408	--	<0.010	<0.100	<0.100	<0.010
08N.07E.12.323	09-04-90	0.70	15	336	--	<0.010	1.80	1.80	0.040
08N.07E.16.141	09-05-90	0.60	17	536	--	<0.010	1.90	1.90	0.040
08N.07E.28.221	08-24-90	0.50	18	466	--	<0.010	5.50	5.80	<0.010
08N.07E.29.321	PO 08-29-90	1.1	9.2	529	--	<0.010	<0.100	<0.100	<0.010
08N.07E.29.324A	DO 01-17-90	--	--	--	--	<0.010	2.10	--	0.030
	02-15-90	--	--	--	--	<0.010	2.20	--	<0.010
	03-21-90	--	--	--	--	<0.010	2.10	--	<0.010
	04-12-90	0.10	19	458	--	<0.010	2.10	2.10	<0.010
	05-16-90	--	--	--	--	<0.010	2.20	--	<0.010
	06-13-90	--	--	--	--	<0.010	2.30	--	0.020
	07-13-90	--	--	--	--	<0.010	2.40	--	0.030
	08-21-90	--	--	--	--	<0.010	2.20	--	0.010
	09-17-90	--	--	--	--	<0.010	2.10	--	<0.010
08N.07E.34.222	09-05-90	1.1	11	437	--	<0.010	1.30	1.30	0.040
09N.05E.12.213	07-27-90	0.20	17	--	--	<0.010	2.30	2.40	0.020
09N.05E.12.214	GI 07-27-90	0.40	16	645	--	<0.010	4.60	4.80	<0.010
09N.05E.12.241	STA 01-12-90	--	--	--	--	<0.010	2.80	--	0.030
	02-15-90	--	--	--	--	<0.010	2.90	--	<0.010
	03-16-90	--	--	--	--	<0.010	5.90	--	0.010
	04-13-90	0.20	17	666	--	<0.010	4.20	4.20	<0.010
	05-23-90	--	--	--	--	<0.010	4.30	--	<0.010
	06-12-90	--	--	--	--	<0.010	4.30	--	0.010
	07-24-90	--	--	--	--	<0.010	4.00	--	0.010
	08-21-90	--	--	--	--	<0.010	3.80	--	0.020
	09-18-90	--	--	--	--	<0.010	4.10	--	<0.010
09N.05E.12.421	NA 07-27-90	1.0	14	583	--	<0.010	1.60	1.70	<0.010
09N.05E.20.331	07-30-90	0.30	16	526	--	<0.010	2.60	2.80	<0.010
09N.06E.07.341	ST 08-16-90	0.40	16	536	--	<0.010	1.30	1.40	<0.010
09N.06E.17.142	OA 06-24-90	0.20	13	519	--	<0.010	0.600	0.500	0.050
09N.06E.18.131	08-28-90	0.50	17	395	--	<0.010	0.600	0.600	<0.010
09N.06E.19.413	CLA 01-12-90	--	--	--	--	<0.010	<0.100	--	0.040
	02-14-90	--	--	--	--	<0.010	<0.100	--	0.050
	03-21-90	--	--	--	--	<0.010	<0.100	--	0.050
	04-13-90	4.4	11	430	--	<0.010	<0.100	<0.100	0.050
	05-21-90	--	--	--	--	<0.010	<0.100	--	0.040
	06-15-90	--	--	--	--	<0.010	<0.100	--	0.060
	07-18-90	--	--	--	--	<0.010	<0.100	--	<0.010
	08-22-90	--	--	--	--	<0.010	<0.100	--	<0.010
	09-18-90	--	--	--	--	<0.010	<0.100	--	0.040
09N.06E.20.333	BUS 01-11-90	--	--	--	--	<0.010	5.80	--	0.040
	02-14-90	--	--	--	--	<0.010	6.10	--	<0.010
	03-21-90	--	--	--	--	<0.010	9.10	--	<0.010
	04-13-90	0.10	21	680	--	<0.010	9.40	9.80	<0.010
	05-16-90	--	--	--	--	<0.010	13.0	--	<0.010
	06-13-90	--	--	--	--	<0.010	<0.100	--	0.020
	07-13-90	--	--	--	11.0	0.010	11.0	--	0.130
	08-22-90	--	--	--	--	<0.010	9.80	--	0.030
	09-20-90	--	--	--	--	<0.010	8.20	--	<0.010
09N.06E.22.234	08-20-90	0.20	16	583	--	<0.010	4.30	4.30	<0.010
09N.06E.22.333	08-22-90	0.40	18	380	--	<0.010	0.200	0.200	<0.010
09N.06E.22.334	08-29-90	0.60	19	327	--	<0.010	<0.100	<0.100	<0.010
09N.06E.26.244	08-25-90	0.40	16	788	--	<0.010	3.30	3.30	0.010
09N.06E.29.114	08-07-90	1.0	15	495	--	<0.010	<0.100	0.100	0.130
09N.06E.29.142	08-07-90	0.10	14	524	--	<0.010	2.50	2.50	0.010
09N.06E.29.244	MOS 01-11-90	--	--	--	--	<0.010	3.50	--	0.030
	02-14-90	--	--	--	--	<0.010	3.40	--	<0.010
	03-21-90	--	--	--	--	<0.010	3.10	--	<0.010
	04-13-90	0.70	17	749	2.88	0.020	2.90	3.40	<0.010
	05-16-90	--	--	--	--	<0.010	2.90	--	<0.010
	06-13-90	--	--	--	--	<0.010	3.20	--	0.030
	07-13-90	--	--	--	--	<0.010	3.00	--	0.020

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
08N.06E.02.331	08-28-90	--	--	<0.010	0.5	110	27	28	0.02
08N.06E.11.222	08-27-90	--	--	<0.010	3.9	90	11	<1	0.12
08N.06E.14.131	08-28-90	--	--	<0.010	1.0	150	8	2	0.02
08N.06E.23.211	08-27-90	--	--	0.020	1.7	160	<3	<1	0.04
08N.07E.12.323	09-04-90	0.26	2.1	<0.010	0.9	160	<3	<1	0.02
08N.07E.16.141	09-05-90	0.26	2.2	0.010	3.0	100	13	5	0.03
08N.07E.28.221	08-24-90	--	6.3	<0.010	2.1	40	4	1	0.08
08N.07E.29.321	PO 08-29-90	--	--	<0.010	1.6	260	3	8	0.03
08N.07E.29.324A	DO 01-17-90	--	--	0.030	1.9	40	--	--	0.05
	02-15-90	--	2.5	0.010	1.9	50	20	--	0.05
	03-21-90	--	--	0.020	1.6	40	30	--	0.05
	04-12-90	--	--	0.020	2.0	50	21	2	0.04
	05-16-90	--	2.4	0.020	1.8	40	20	--	0.05
	06-13-90	0.48	2.8	0.030	1.8	40	60	--	0.05
	07-13-90	0.17	2.6	0.030	2.3	40	10	--	0.03
	08-21-90	0.49	2.7	0.020	1.8	40	20	--	0.03
	09-17-90	--	2.3	0.070	1.8	40	30	--	0.03
08N.07E.34.222	09-05-90	--	--	<0.010	0.5	240	<3	<1	0.01
09N.05E.12.213	07-27-90	0.48	2.8	0.020	1.2	40	20	21	0.05
09N.05E.12.214	GI 07-27-90	--	5.2	0.020	1.6	40	11	<1	0.07
09N.05E.12.241	STA 01-12-90	--	--	0.030	1.9	50	--	--	0.06
	02-15-90	--	3.4	0.020	1.8	50	<10	--	0.09
	03-16-90	--	--	0.010	1.5	40	20	--	0.08
	04-13-90	--	4.6	0.010	2.0	50	5	<1	0.09
	05-23-90	--	4.6	0.010	1.9	40	30	--	0.07
	06-12-90	0.49	4.8	0.020	2.2	50	10	--	0.09
	07-24-90	0.59	4.6	0.010	1.8	50	10	--	0.08
	08-21-90	0.48	4.3	0.020	1.9	40	20	--	0.09
	09-18-90	--	4.6	0.030	1.9	50	30	--	0.07
09N.05E.12.421	NA 07-27-90	--	2.1	0.010	1.8	70	5	1	0.05
09N.05E.20.331	07-30-90	--	3.1	0.020	2.6	30	<3	<1	0.07
09N.06E.07.341	ST 08-16-90	--	1.6	0.020	2.2	40	--	<1	0.06
09N.06E.17.142	OA 06-24-90	0.45	1.1	<0.010	1.6	70	6	3	0.03
09N.06E.18.131	08-28-90	--	--	<0.010	1.0	80	8	<1	0.04
09N.06E.19.413	CLA 01-12-90	--	--	<0.010	0.7	270	--	--	<0.01
	02-14-90	0.75	--	0.010	0.6	270	<10	--	0.04
	03-21-90	0.25	--	<0.010	0.2	260	10	--	0.01
	04-13-90	--	--	<0.010	0.5	280	8	<1	0.02
	05-21-90	--	--	<0.010	0.3	270	<10	--	0.02
	06-15-90	--	--	<0.010	0.2	280	<10	--	0.02
	07-18-90	--	--	<0.010	0.5	270	<10	--	0.01
	08-22-90	--	--	0.010	0.6	260	20	--	0.07
	09-18-90	--	--	0.030	0.5	270	20	--	0.01
09N.06E.20.333	BUS 01-11-90	0.36	6.2	0.030	3.6	30	--	--	0.10
	02-14-90	--	6.6	0.020	3.0	30	10	--	0.11
	03-21-90	--	9.8	0.040	3.0	30	20	--	0.12
	04-13-90	--	10	0.030	3.4	30	<3	<1	0.12
	05-16-90	--	14	0.030	3.3	30	20	--	0.15
	06-13-90	0.58	--	0.040	3.4	40	<10	--	0.16
	07-13-90	0.57	12	0.050	3.9	40	20	--	0.12
	08-22-90	0.57	10	0.030	3.1	30	20	--	0.12
	09-20-90	--	8.7	0.020	3.4	40	20	--	0.11
09N.06E.22.234	08-20-90	--	5.2	0.020	3.6	50	<3	<1	0.09
09N.06E.22.333	08-22-90	--	--	<0.010	0.6	100	6	4	0.02
09N.06E.22.334	08-29-90	--	--	<0.010	0.5	140	<3	7	0.03
09N.06E.26.244	08-25-90	0.39	3.7	<0.010	3.5	60	8	<1	0.08
09N.06E.29.114	08-07-90	0.37	--	<0.010	1.8	240	8	4	0.02
09N.06E.29.142	08-07-90	0.49	3.0	<0.010	2.0	60	4	<1	0.07
09N.06E.29.244	MOS 01-11-90	0.37	3.9	0.030	4.3	120	--	--	0.08
	02-14-90	--	3.7	<0.010	4.0	120	20	--	0.10
	03-21-90	--	3.8	0.010	3.7	110	30	--	0.08
	04-13-90	--	3.4	0.010	4.2	120	18	4	0.08
	05-16-90	--	3.5	0.020	4.3	120	40	--	0.09
	06-13-90	0.77	4.0	<0.010	4.6	120	380	--	0.09
	07-13-90	0.48	3.5	<0.010	4.5	120	30	--	0.07

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)
09N.06E.29.244 MOSIER	345833106185101	001		GW	08-21-90	1252	325MDER	7420	8
		001		GW	09-17-90	1347	325MDER	7420	10
09N.06E.29.332 DENNISON	345816106193801	001		GW	08-10-90	1345	325MDER	--	23
09N.06E.30.432 SHEPHARD	345813106201201	001		GW	08-08-90	1330	325MDER	--	17
09N.06E.31.131	345750106204901	001		GW	09-06-90	1710	325MDER	7440	15
09N.06E.31.413 NEWSTEDS	345729106202001	001		GW	09-06-90	1022	325MDER	--	6
09N.06E.32.442	345722106185901	001		GW	08-24-90	1215	325MDER	7430	10
09N.06E.34.242A	345747106164301	001		GW	08-16-90	1730	325MDER	7165	17
09N.06E.34.431	345721106171201	001		GW	08-21-90	1555	325MDER	7260	23
10N.04.5E.25.124 FIFER	350400106273801	001		GW	05-08-90	1200	400PCMB	--	24
10N.04.5E.25.144C WALL	350345106273501	001		GW	09-20-90	1305	110AVMB	5780	16
10N.04.5E.25.234B	350347106271901	001		GW	05-09-90	1920	400PCMB	5840	26
10N.05E.02.233A SOUTHWICK	350721106222101	001		GW	01-12-90	1740	231SNRS	6765	--
		001		GW	02-13-90	1555		6765	--
		001		GW	03-19-90	1110		6765	10
		001		GW	04-11-90	1302		6765	15
		001		GW	05-21-90	1320		6765	--
		001		GW	06-15-90	1052		6765	5
		001		GW	07-18-90	1028		6765	6
		001		GW	08-17-90	1137		6765	--
		001		GW	09-13-90	1021		6765	5
10N.05E.02.241 CANDELARIA	350729106220501	001		GW	05-09-90	1600		--	--
10N.05E.02.414 TEXACO STA	350709106221301	001		GW	04-27-90	1045		--	10
10N.05E.10.423	350617106230901	001		SP	04-16-90	1620	310GLRT	--	--
10N.05E.11.324 CUSHING	350615106223301	001		GW	01-10-90	1515	210MNCS	6580	--
		001		GW	02-16-90	1244	210MNCS	6580	--
		001		GW	03-15-90	1600	210MNCS	6580	--
		001		GW	04-16-90	1120	210MNCS	6580	12
		001		GW	05-14-90	1415	210MNCS	6580	10
		001		GW	06-15-90	1540	210MNCS	6580	10
		001		GW	07-17-90	1515	210MNCS	6580	10
		001		GW	08-16-90	1502	210MNCS	6580	10
		001		GW	09-13-90	1242	210MNCS	6580	5
10N.05E.11.341 EAST MTN.	350609106223901	001		GW	04-26-90	1610		--	14
10N.05E.12.122 CARNES	350644106212701	001		GW	07-11-90	1700		--	6
10N.05E.12.332	350606106214901	001		GW	07-17-90	1530		6490	32
10N.05E.12.422 THOMPSON	350619106205801	001		GW	06-25-90	1300		--	13
10N.05E.14.132 U.S. WEST	350546106224901	001		GW	07-24-90	0835		--	16
10N.05E.14.223	350545106220901	001		GW	04-24-90	1345	110AVMB	6430	18
10N.05E.14.312 AESCHLIMEN	350531106224301	001		GW	01-10-90	1633	211MVRD	--	--
		001		GW	02-12-90	1645		--	--
		001		GW	03-14-90	1620		--	15
		001		GW	04-11-90	1530		--	13
		001		GW	05-22-90	0900		--	13
		001		GW	06-20-90	1313		--	18
		001		GW	07-18-90	1503		--	10
		001		GW	08-22-90	1625		--	6
		001		GW	09-20-90	0938		--	11
10N.05E.14.413A CZERNY	350522106222501	001		GW	01-09-90	1030		--	--
		001		GW	02-12-90	0920		--	--
		001		GW	03-20-90	0905		--	13
		001		GW	04-10-90	0850		--	15
		001		GW	05-15-90	0939		--	10
		001		GW	06-12-90	0816		--	19
		001		GW	07-10-90	0830		--	12
		001		GW	09-04-90	1155		--	10
		001		GW	09-18-90	0935		--	12
10N.05E.14.431B TIJERAS CI	350520106222502	001		GW	04-09-90	1750		--	55
10N.05E.19.322 LEIB	350423106263301	001		GW	01-09-90	1510	400PCMB	6255	--
		001		GW	02-22-90	1545	110AVMB	6255	--
		001		GW	03-20-90	1450	110AVMB	6255	12
		001		GW	04-17-90	1240	110AVMB	6255	15
		001		GW	05-15-90	1140	110AVMB	6255	11
		001		GW	06-19-90	1428	110AVMB	6255	15
		001		GW	07-12-90	1241	110AVMB	6255	6

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
09N.06E.29.244 MOS	08-21-90	--	1200	7.1	25.5	13.0	--	--	--
	09-17-90	8.0	1140	7.2	21.5	13.5	--	--	--
09N.06E.29.332 DE	08-10-90	2.0	750	7.1	30.0	15.0	--	380	110
09N.06E.30.432 SH	08-08-90	6.0	1150	7.1	29.0	15.0	--	510	150
09N.06E.31.131	09-06-90	6.0	710	7.2	25.0	14.5	--	370	120
09N.06E.31.413 NE	09-06-90	4.0	650	7.4	25.0	13.0	--	290	75
09N.06E.32.442	08-24-90	10	800	7.1	26.0	13.5	--	370	110
09N.06E.34.242A	08-16-90	3.0	790	7.1	19.0	13.5	--	350	91
09N.06E.34.431	08-21-90	4.0	1020	7.0	20.0	13.5	--	540	180
10N.04.5E.25.124	05-08-90	2.0	1110	7.5	18.0	18.0	--	440	120
10N.04.5E.25.144C	09-20-90	4.0	900	7.3	27.0	16.5	--	460	120
10N.04.5E.25.234B	05-09-90	5.0	1400	7.2	--	17.5	0.9	610	180
10N.05E.02.233A SO	01-12-90	--	700	9.5	--	13.5	--	--	--
	02-13-90	--	720	9.5	--	13.5	--	--	--
	03-19-90	--	710	9.5	12.5	14.0	--	--	--
	04-11-90	--	700	9.5	22.0	14.5	--	3	0.93
	05-21-90	--	720	9.3	32.0	14.5	--	--	--
	06-15-90	--	710	9.2	--	17.0	--	--	--
	07-18-90	--	7	9.3	27.5	14.0	--	--	--
	08-17-90	--	710	9.4	23.5	15.0	--	--	--
	09-13-90	9.0	705	9.3	23.5	14.0	--	--	--
10N.05E.02.241 CA	05-09-90	--	1190	7.2	--	14.0	4.3	610	220
10N.05E.02.414 TE	04-27-90	2.0	2320	7.3	--	16.0	--	1200	240
10N.05E.10.423	04-16-90	--	480	7.4	--	15.0	6.6	250	85
10N.05E.11.324 CUS	01-10-90	--	950	7.2	--	13.5	--	--	--
	02-16-90	--	990	7.3	--	12.5	--	--	--
	03-15-90	--	990	7.4	--	13.0	--	--	--
	04-16-90	--	990	7.4	22.0	13.5	--	490	150
	05-14-90	--	905	7.2	24.0	13.5	--	--	--
	06-15-90	--	830	7.5	--	16.5	--	--	--
	07-17-90	--	730	7.4	31.0	14.5	--	--	--
	08-16-90	--	730	7.4	--	14.0	--	--	--
	09-13-90	--	710	7.3	33.0	17.0	--	--	--
10N.05E.11.341 EA	04-26-90	4.0	1620	7.4	--	15.0	--	480	130
10N.05E.12.122 CA	07-11-90	2.0	3700	7.1	--	15.0	--	1700	320
10N.05E.12.332	07-17-90	6.0	4000	7.2	--	17.5	--	2200	510
10N.05E.12.422 TH	06-25-90	6.0	730	7.3	--	14.0	--	370	110
10N.05E.14.132 U.	07-24-90	1.0	600	7.4	--	16.0	--	320	100
10N.05E.14.223	04-24-90	3.0	2650	7.3	--	15.0	6.2	1000	260
10N.05E.14.312 AES	01-10-90	--	1000	7.2	--	12.5	--	--	--
	02-12-90	--	990	7.2	--	13.5	--	--	--
	03-14-90	--	980	7.2	--	14.5	1.6	--	--
	04-11-90	--	980	7.2	22.0	14.0	--	490	150
	05-22-90	--	990	7.1	23.0	14.5	--	--	--
	06-20-90	--	980	7.2	29.0	18.5	--	--	--
	07-18-90	--	980	7.1	31.5	14.5	--	--	--
	08-22-90	--	970	7.1	17.0	14.0	--	--	--
	09-20-90	3.0	930	7.2	21.0	14.0	--	--	--
10N.05E.14.413A CZ	01-09-90	--	--	7.4	--	12.0	--	--	--
	02-12-90	--	1140	7.4	--	12.5	--	--	--
	03-20-90	--	1130	7.4	9.5	12.0	--	--	--
	04-10-90	--	1120	7.3	10.5	12.5	--	470	140
	05-15-90	--	1180	7.3	17.0	13.5	--	--	--
	06-12-90	--	1200	7.3	19.0	16.0	--	--	--
	07-10-90	--	1110	7.4	20.0	15.5	--	--	--
	09-04-90	3.0	1100	7.3	25.0	21.0	--	--	--
	09-18-90	5.0	1120	7.3	20.0	17.0	--	--	--
10N.05E.14.431B TI	04-09-90	3.5	1270	7.4	--	13.0	--	560	150
10N.05E.19.322 LEI	01-09-90	--	515	7.6	--	16.0	5.7	--	--
	02-22-90	--	550	7.7	--	16.5	7.9	--	--
	03-20-90	--	515	7.8	22.5	17.5	--	--	--
	04-17-90	--	510	7.7	4.5	16.5	--	240	69
	05-15-90	--	530	7.6	21.5	17.5	--	--	--
	06-19-90	--	550	7.6	23.5	21.0	--	--	--
	07-12-90	--	585	7.6	28.5	19.0	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	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- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
09N.06E.29.244 MOS	08-21-90	--	--	--	--	--	--	--	150
	09-17-90	--	--	--	--	--	--	--	140
09N.06E.29.332 DE	08-10-90	26	22	0.5	3.1	--	165	49	76
09N.06E.30.432 SH	08-08-90	33	43	0.8	2.6	--	188	120	170
09N.06E.31.131	09-06-90	18	22	0.5	1.8	--	176	52	52
09N.06E.31.413 NE	09-06-90	26	41	1	4.6	--	229	45	35
09N.06E.32.442	08-24-90	22	27	0.6	2.5	--	250	51	66
09N.06E.34.242A	08-16-90	30	39	0.9	2.7	--	209	61	76
09N.06E.34.431	08-21-90	22	27	0.5	1.9	--	295	120	130
10N.04.5E.25.124	05-08-90	33	50	1	9.0	--	250	180	77
10N.04.5E.25.144C	09-20-90	38	40	0.8	10	--	216	170	30
10N.04.5E.25.234B	05-09-90	39	69	1	10	--	319	180	170
10N.05E.02.233A SO	01-12-90	--	--	--	--	288	--	--	14
	02-13-90	--	--	--	--	318	--	--	15
	03-19-90	--	--	--	--	318	--	--	15
	04-11-90	0.08	170	45	0.10	316	312	39	14
	05-21-90	--	--	--	--	324	--	--	12
	06-15-90	--	--	--	--	326	--	--	15
	07-18-90	--	--	--	--	316	--	--	13
	08-17-90	--	--	--	--	318	--	--	14
	09-13-90	--	--	--	--	324	--	--	13
10N.05E.02.241 CA	05-09-90	14	37	0.7	0.90	--	262	270	95
10N.05E.02.414 TE	04-27-90	150	140	2	4.9	--	306	1100	110
10N.05E.10.423	04-16-90	9.6	6.9	0.2	0.70	--	--	15	5.5
10N.05E.11.324 CUS	01-10-90	--	--	--	--	--	--	--	25
	02-16-90	--	--	--	--	--	--	--	29
	03-15-90	--	--	--	--	--	--	--	33
	04-16-90	27	33	0.7	0.80	--	368	120	24
	05-14-90	--	--	--	--	--	--	--	26
	06-15-90	--	--	--	--	--	--	--	22
	07-17-90	--	--	--	--	--	--	--	18
	08-16-90	--	--	--	--	--	--	--	18
	09-13-90	--	--	--	--	--	--	--	17
10N.05E.11.341 EA	04-26-90	38	180	4	3.6	--	338	360	120
10N.05E.12.122 CA	07-11-90	210	330	4	8.0	--	521	1400	230
10N.05E.12.332	07-17-90	220	230	2	7.5	--	101	2200	230
10N.05E.12.422 TH	06-25-90	23	21	0.5	1.3	--	270	84	25
10N.05E.14.132 U	07-24-90	16	17	0.4	1.2	--	202	89	6.8
10N.05E.14.223	04-24-90	97	210	3	4.3	--	345	710	310
10N.05E.14.312 AES	01-10-90	--	--	--	--	--	--	--	67
	02-12-90	--	--	--	--	--	--	--	63
	03-14-90	--	--	--	--	--	--	--	69
	04-11-90	28	32	0.6	1.6	--	299	160	66
	05-22-90	--	--	--	--	--	--	--	58
	06-20-90	--	--	--	--	--	--	--	70
	07-18-90	--	--	--	--	--	--	--	72
	08-22-90	--	--	--	--	--	--	--	67
	09-20-90	--	--	--	--	--	--	--	63
10N.05E.14.413A CZ	01-09-90	--	--	--	--	--	--	--	130
	02-12-90	--	--	--	--	--	--	--	120
	03-20-90	--	--	--	--	--	--	--	130
	04-10-90	29	59	1	1.9	--	268	140	130
	05-15-90	--	--	--	--	--	--	--	150
	06-12-90	--	--	--	--	--	--	--	140
	07-10-90	--	--	--	--	--	--	--	130
	09-04-90	--	--	--	--	--	--	--	120
	09-18-90	--	--	--	--	--	--	--	130
10N.05E.14.431B TI	04-09-90	44	54	1	1.8	--	281	160	150
10N.05E.19.322 LEI	01-09-90	--	--	--	--	--	--	--	9.1
	02-22-90	--	--	--	--	--	--	--	8.9
	03-20-90	--	--	--	--	--	--	--	14
	04-17-90	17	23	0.6	3.8	--	194	86	11
	05-15-90	--	--	--	--	--	--	--	11
	06-19-90	--	--	--	--	--	--	--	10
	07-12-90	--	--	--	--	--	--	--	9.4

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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)
09N.06E.29.244 MOS	08-21-90	--	--	--	2.98	0.020	3.00	--	<0.010
	09-17-90	--	--	--	--	<0.010	2.70	--	<0.010
09N.06E.29.332 DE	08-10-90	0.40	15	415	--	<0.010	3.20	3.30	<0.010
09N.06E.30.432 SH	08-08-90	0.10	17	666	--	<0.010	3.90	4.00	0.020
09N.06E.31.131	09-06-90	0.20	16	395	--	<0.010	1.70	1.70	0.050
09N.06E.31.413 NE	09-06-90	1.0	13	380	--	<0.010	0.500	0.500	0.040
09N.06E.32.442	08-24-90	0.30	16	445	--	<0.010	<0.100	<0.100	0.020
09N.06E.34.242A	08-16-90	0.60	14	441	--	<0.010	0.200	0.200	<0.010
09N.06E.34.431	08-21-90	0.20	25	696	--	<0.010	2.80	2.90	<0.010
10N.04.5E.25.124	05-08-90	2.7	27	658	--	<0.010	2.10	2.10	<0.010
10N.04.5E.25.144C	09-20-90	1.9	18	558	--	<0.010	0.900	--	0.030
10N.04.5E.25.234B	05-09-90	1.7	26	894	--	<0.010	29.0	6.10	0.010
10N.05E.02.233A SO	01-12-90	--	--	--	0.480	0.020	0.500	--	<0.010
	02-13-90	--	--	--	0.290	0.010	0.300	--	<0.010
	03-19-90	--	--	--	0.380	0.020	0.400	--	<0.010
	04-11-90	0.50	10	425	0.490	0.010	0.500	0.500	<0.010
	05-21-90	--	--	--	0.280	0.020	0.300	--	<0.010
	06-15-90	--	--	--	0.380	0.020	0.400	--	<0.010
	07-18-90	--	--	--	0.280	0.020	0.300	--	<0.010
	08-17-90	--	--	--	0.490	0.010	0.500	--	0.020
	09-13-90	--	--	--	0.280	0.020	0.300	--	<0.010
10N.05E.02.241 CA	05-09-90	<0.10	27	833	--	<0.010	3.00	2.70	<0.010
10N.05E.02.414 TE	04-27-90	<0.10	21	1950	0.850	0.050	0.900	0.800	0.710
10N.05E.10.423	04-16-90	0.20	18	285	--	<0.010	0.200	0.200	<0.010
10N.05E.11.324 CUS	01-10-90	--	--	--	--	<0.010	8.60	--	0.030
	02-16-90	--	--	--	--	<0.010	7.30	--	0.010
	03-15-90	--	--	--	--	<0.010	8.30	--	0.020
	04-16-90	0.40	22	625	--	<0.010	6.00	6.10	<0.010
	05-14-90	--	--	--	--	<0.010	4.20	--	<0.010
	06-15-90	--	--	--	--	<0.010	2.90	--	<0.010
	07-17-90	--	--	--	--	<0.010	1.60	--	<0.010
	08-16-90	--	--	--	--	<0.010	1.10	--	0.010
	09-13-90	--	--	--	--	<0.010	1.10	--	<0.010
10N.05E.11.341 EA	04-26-90	0.50	16	1060	1.97	0.030	2.00	2.20	0.270
10N.05E.12.122 CA	07-11-90	0.30	11	2850	--	<0.010	<0.100	<0.100	0.900
10N.05E.12.332	07-17-90	<0.10	11	3470	0.590	0.010	0.600	0.600	0.270
10N.05E.12.422 TH	06-25-90	0.20	23	477	--	<0.010	5.80	6.20	<0.010
10N.05E.14.132 U.	07-24-90	0.70	18	370	--	<0.010	<0.100	<0.100	<0.010
10N.05E.14.223	04-24-90	<0.10	25	1850	--	<0.010	5.40	5.60	0.040
10N.05E.14.312 AES	01-10-90	--	--	--	--	<0.010	<0.100	--	0.040
	02-12-90	--	--	--	--	<0.010	<0.100	--	<0.010
	03-14-90	--	--	--	--	<0.010	<0.100	--	<0.010
	04-11-90	0.20	20	637	--	<0.010	<0.100	<0.100	<0.010
	05-22-90	--	--	--	--	<0.010	<0.100	--	<0.010
	06-20-90	--	--	--	--	<0.010	<0.100	--	0.020
	07-18-90	--	--	--	--	<0.010	<0.100	--	<0.010
	08-22-90	--	--	--	--	<0.010	<0.100	--	0.030
	09-20-90	--	--	--	--	<0.010	<0.100	--	<0.010
10N.05E.14.413A CZ	01-09-90	--	--	--	--	<0.010	2.10	--	0.030
	02-12-90	--	--	--	--	<0.010	1.80	--	<0.010
	03-20-90	--	--	--	--	<0.010	1.60	--	<0.010
	04-10-90	0.20	18	686	--	<0.010	1.70	1.70	<0.010
	05-15-90	--	--	--	--	<0.010	1.80	--	<0.010
	06-12-90	--	--	--	--	<0.010	2.00	--	0.020
	07-10-90	--	--	--	--	<0.010	1.70	--	0.010
	09-04-90	--	--	--	--	<0.010	1.70	--	0.040
	09-18-90	--	--	--	1.69	0.010	1.70	--	<0.010
10N.05E.14.431B TI	04-09-90	<0.10	24	768	--	<0.010	3.50	3.60	<0.010
10N.05E.19.322 LEI	01-09-90	--	--	--	--	<0.010	1.00	--	<0.010
	02-22-90	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	<0.010	0.700	--	<0.010
	04-17-90	2.1	21	352	--	<0.010	0.700	0.700	<0.010
	05-15-90	--	--	--	--	<0.010	1.00	--	<0.010
	06-19-90	--	--	--	--	<0.010	0.800	--	<0.010
	07-12-90	--	--	--	--	<0.010	0.900	--	<0.010

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
09N.06E.29.244 MOS	08-21-90	--	3.8	0.010	3.5	120	30	--	0.07
	09-17-90	--	3.5	0.040	3.1	120	60	--	0.08
09N.06E.29.332 DE	08-10-90	--	3.8	<0.010	2.2	80	3	2	0.06
09N.06E.30.432 SH	08-08-90	0.68	4.6	<0.010	3.4	50	9	<1	0.09
09N.06E.31.131	09-06-90	0.85	2.6	0.020	2.3	40	<3	1	0.03
09N.06E.31.413 NE	09-06-90	0.16	0.70	<0.010	0.9	120	9	2	0.01
09N.06E.32.442	08-24-90	0.38	--	<0.010	2.0	50	<3	<1	0.05
09N.06E.34.242A	08-16-90	--	--	<0.010	1.4	100	10	7	0.04
09N.06E.34.431	08-21-90	--	3.4	0.020	2.3	40	9	1	0.07
10N.04.5E.25.124	05-08-90	--	--	0.030	0.8	90	7	<1	0.06
10N.04.5E.25.144C	09-20-90	--	--	<0.010	0.4	80	7	3	0.06
10N.04.5E.25.234B	05-09-90	0.49	30	<0.010	1.5	100	3	1	0.28
10N.05E.02.233A SO	01-12-90	--	0.70	0.010	0.1	630	--	--	0.02
	02-13-90	--	0.50	0.210	0.4	630	20	--	0.05
	03-19-90	--	0.70	0.010	<0.1	620	20	--	0.06
	04-11-90	--	--	0.010	<0.1	640	11	3	0.01
	05-21-90	--	0.60	<0.010	0.1	650	<10	--	0.02
	06-15-90	--	0.60	<0.010	0.1	640	<10	--	0.01
	07-18-90	--	--	<0.010	0.5	640	10	--	0.01
	08-17-90	0.18	0.70	0.010	0.1	640	<10	--	0.07
	09-13-90	--	--	0.010	0.3	650	<10	--	0.06
10N.05E.02.241 CA	05-09-90	--	3.5	0.110	0.7	80	22	<1	0.05
10N.05E.02.414 TE	04-27-90	0.0	1.6	0.010	1.2	140	30	20	0.03
10N.05E.10.423	04-16-90	--	0.40	<0.010	<0.1	20	5	<1	0.01
10N.05E.11.324 CUS	01-10-90	--	--	0.030	1.0	50	--	--	0.08
	02-16-90	0.39	7.7	0.040	0.8	50	10	--	0.11
	03-15-90	0.38	8.7	0.040	0.6	40	<10	--	0.08
	04-16-90	--	6.2	0.030	0.8	40	13	4	0.05
	05-14-90	--	4.5	0.030	0.7	40	20	--	0.06
	06-15-90	--	3.4	0.020	0.5	50	10	--	0.04
	07-17-90	--	1.9	0.020	0.6	40	20	--	0.03
	08-16-90	0.49	1.6	0.020	0.7	50	40	--	0.09
	09-13-90	--	--	0.020	0.9	40	20	--	0.03
10N.05E.11.341 EA	04-26-90	0.13	2.4	<0.010	0.7	140	10	10	0.05
10N.05E.12.122 CA	07-11-90	0.10	--	0.020	4.8	170	27000	260	0.06
10N.05E.12.332	07-17-90	0.23	1.1	0.020	1.5	100	30	210	0.06
10N.05E.12.422 TH	06-25-90	--	6.2	0.040	0.6	50	<3	<1	0.07
10N.05E.14.132 U.	07-24-90	--	--	<0.010	0.6	30	3	7	<0.01
10N.05E.14.223	04-24-90	0.36	5.8	0.020	1.5	110	20	10	0.12
10N.05E.14.312 AES	01-10-90	--	--	<0.010	1.2	40	--	--	0.03
	02-12-90	--	--	0.040	0.8	50	270	--	0.04
	03-14-90	--	--	<0.010	1.2	30	120	--	0.05
	04-11-90	--	--	<0.010	1.1	40	120	7	0.02
	05-22-90	--	--	<0.010	1.4	40	130	--	0.04
	06-20-90	--	--	<0.010	1.9	40	120	--	0.03
	07-18-90	--	--	<0.010	1.0	40	110	--	0.03
	08-22-90	--	--	<0.010	1.1	40	10	--	0.03
	09-20-90	--	--	<0.010	1.7	50	110	--	0.02
10N.05E.14.413A CZ	01-09-90	--	--	<0.010	0.8	40	--	--	0.05
	02-12-90	--	2.1	0.020	0.6	50	20	--	0.08
	03-20-90	--	--	<0.010	0.4	50	<10	--	0.04
	04-10-90	--	2.0	0.020	0.6	50	3	1	0.13
	05-15-90	--	2.1	0.010	0.5	40	10	--	0.06
	06-12-90	0.28	2.3	<0.010	0.7	50	10	--	0.07
	07-10-90	0.19	1.9	0.010	0.6	50	20	--	0.05
	09-04-90	0.36	2.1	<0.010	0.7	50	<10	--	0.04
	09-18-90	--	2.2	0.020	0.7	40	30	--	0.11
10N.05E.14.431B TI	04-09-90	--	3.9	0.020	1.1	60	5	<1	0.04
10N.05E.19.322 LEI	01-09-90	--	1.2	<0.010	0.5	30	--	--	0.03
	02-22-90	--	--	--	1.0	30	20	--	0.16
	03-20-90	--	--	<0.010	0.3	30	<10	--	0.03
	04-17-90	--	1.0	<0.010	0.2	30	10	1	0.01
	05-15-90	--	--	<0.010	0.3	30	20	--	0.03
	06-19-90	--	1.2	<0.010	0.3	30	<10	--	0.02
	07-12-90	--	--	<0.010	0.7	30	10	--	0.02

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
10N.05E.19.322	LEIB	350423106263301	001	GW	08-20-90	1542	110AVMB	6255	8	--
			001	GW	09-19-90	1308	110AVMB	6255	10	6.0
10N.05E.19.334	RICH	350410106264401	001	GW	04-20-90	1130		--	17	--
10N.05E.19.341	STOUT	350414106263801	001	GW	04-20-90	1530		--	36	--
10N.05E.21.322	CANON DE	350436106243301	001	GW	04-24-90	1820		--	23	4.0
10N.05E.22.234	TIJERAS PO	350449106231901	001	GW	01-09-90	1215		--	--	--
			001	GW	02-12-90	1140		--	--	--
			001	GW	03-13-90	1430		--	20	--
			001	GW	04-16-90	1342		--	22	--
			001	GW	05-14-90	1125		--	10	--
			001	GW	06-12-90	1101		--	9	16
			001	GW	07-11-90	1207		--	15	--
			001	GW	08-13-90	1333		--	13	--
			001	GW	09-14-90	1327		--	12	9.0
10N.05E.22.344A		350417106232501	001	GW	04-25-90	1450	325MDER	6385	20	5.0
10N.05E.22.411	LOS VECIN	350444106233101	001	GW	04-25-90	1805		--	27	10
10N.05E.23.131	GRIEGO	350451106225801	001	GW	07-10-90	1210		--	9	10
10N.05E.23.313		350434106225701	001	GW	06-24-90	0940	325MDER	6350	--	--
10N.05E.26.332		350341106225001	001	GW	09-04-90	1848		6440	10	10
10N.05E.30.122		350405106263501	001	GW	04-24-90	1030	400FCMB	6075	20	4.0
10N.05E.30.124		350401106263001	001	GW	04-19-90	1140	400FCMB	6040	41	--
10N.05E.30.213		350357106262801	001	GW	04-19-90	1545	400FCMB	6005	48	--
10N.05E.30.213	MCIVER	350410106262601	001	GW	01-30-90	1120	110AVMB	6030	15	--
			001	GW	02-22-90	1825	110AVMB	6030	--	--
			001	GW	03-30-90	1032	110AVMB	6030	23	--
			001	GW	04-17-90	1419	110AVMB	6030	17	--
			001	GW	05-15-90	1305	110AVMB	6030	16	--
			001	GW	06-20-90	1117	110AVMB	6030	13	--
			001	GW	07-12-90	1428	110AVMB	6030	13	--
			001	GW	08-21-90	1510	110AVMB	6030	15	--
10N.05E.30.321	GARCIA	350344106264401	001	GW	09-20-90	1333	110AVMB	6030	11	3.5
10N.05E.30.322		350339106263501	001	GW	08-31-90	1809		--	12	10
10N.05E.30.324A		350336106263501	001	GW	05-07-90	1115	110AVMB	5860	12	4.0
10N.06E.04.113		350728106184101	001	GW	05-07-90	1730	110AVMB	5870	17	4.0
			001	GW	07-17-90	1830	325MDERU	6840	10	5.0
10N.06E.04.444		350654106174801	001	GW	07-18-90	1805	325MDER	6998	13	4.0
10N.06E.05.441	MCCRACKEN	350655106185601	001	GW	01-10-90	1140	325MDER	--	--	--
			001	GW	02-16-90	0904		--	--	--
			001	GW	03-20-90	1158		--	12	--
			001	GW	04-10-90	1042		--	12	--
			001	GW	05-22-90	1056		--	16	--
			001	GW	06-18-90	0917		--	15	--
			001	GW	07-10-90	1335		--	10	--
			001	GW	08-17-90	0958		--	--	--
			001	GW	09-19-90	1126		--	10	6.0
10N.06E.07.112	BLANKERT	350644106203801	001	GW	07-03-90	1635		--	44	3.0
10N.06E.07.114		350635106203701	001	GW	07-25-90	1720		6600	24	3.0
10N.06E.07.314	BEAR MTN D	350613106203801	001	GW	06-22-90	1700		--	--	4.0
10N.06E.07.322	CANYON AUT	350619106202201	001	GW	06-22-90	1120		--	23	5.0
			001	GW	09-28-90	1230		--	11	11
10N.06E.07.331	FOSTER	350604106205801	001	GW	01-13-90	1435		--	--	--
			001	GW	02-16-90	1047		--	--	--
			001	GW	03-16-90	1215		--	15	--
			001	GW	04-10-90	1320		--	15	--
			001	GW	05-18-90	1345		--	16	--
			001	GW	06-18-90	1117		--	14	--
			001	GW	07-10-90	1201		--	12	--
			001	GW	08-14-90	1358		--	12	--
			001	GW	09-14-90	1144		--	11	8.0
10N.06E.07.422	MCFADDEN	350617106194901	001	GW	09-24-90	1710		--	--	--
10N.06E.08.211	KUNZ	350646106191101	001	GW	06-26-90	1425		--	23	5.0
10N.06E.08.323	DERR	350611106192901	001	GW	06-26-90	1835		--	13	4.0
10N.06E.09.122	KLINE	350643106175601	001	GW	06-25-90	1750		--	23	5.0
10N.06E.09.341		350607106183901	001	GW	07-11-90	1445	325MDER	6883	15	10
10N.06E.10.331	BACA BRAUL	350604106174201	001	GW	09-26-90	1105		--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
10N.05E.19.322	LEI 08-20-90	550	7.6	20.0	17.0	--	--	--	--	--
	09-19-90	570	7.7	22.5	17.0	--	--	--	--	--
10N.05E.19.334	RI 04-20-90	720	7.6	--	17.0	6.9	330	96	22	31
10N.05E.19.341	ST 04-20-90	620	7.7	--	17.0	0.2	390	130	16	34
10N.05E.21.322	C 04-24-90	1850	7.1	--	15.5	--	850	240	61	44
10N.05E.22.234	TIJ 01-09-90	910	7.6	--	14.0	--	--	--	--	--
	02-12-90	900	7.6	--	14.0	--	--	--	--	--
	03-13-90	910	7.7	--	13.5	--	--	--	--	--
	04-16-90	890	7.6	23.0	14.0	--	340	64	44	54
	05-14-90	890	7.6	23.0	14.5	--	--	--	--	--
	06-12-90	820	7.6	24.0	16.0	--	--	--	--	--
	07-11-90	990	7.3	24.5	15.5	--	--	--	--	--
	08-13-90	930	7.2	--	14.0	--	--	--	--	--
	09-14-90	1030	7.2	25.5	14.0	--	--	--	--	--
10N.05E.22.344A	04-25-90	710	7.6	11.0	20.0	1.2	290	57	35	40
10N.05E.22.411	L 04-25-90	940	7.4	--	14.5	2.0	420	110	35	42
10N.05E.23.131	GR 07-10-90	1000	7.3	--	12.5	--	490	140	33	40
10N.05E.23.313	06-24-90	680	7.4	--	16.0	--	350	74	39	26
10N.05E.26.332	09-04-90	700	7.4	19.0	14.0	--	390	110	27	17
10N.05E.30.122	04-24-90	830	7.8	17.5	17.0	7.1	370	110	24	38
10N.05E.30.124	04-19-90	950	7.6	--	17.5	7.5	250	73	16	34
10N.05E.30.213	04-19-90	1000	7.5	--	17.0	7.3	410	120	26	53
10N.05E.30.213	MCI 01-30-90	1050	7.7	--	14.5	--	--	--	--	--
	02-22-90	1110	7.6	--	16.0	--	--	--	--	--
	03-30-90	1120	7.6	6.0	16.0	--	--	--	--	--
	04-17-90	1100	7.6	6.5	16.0	--	510	150	32	37
	05-15-90	1130	7.5	21.0	17.5	--	--	--	--	--
	06-20-90	1140	7.5	28.5	21.5	--	--	--	--	--
	07-12-90	1130	7.5	28.0	19.5	--	--	--	--	--
	08-21-90	1120	7.5	29.0	18.5	--	--	--	--	--
	09-20-90	1090	7.6	26.5	17.0	--	--	--	--	--
10N.05E.30.321	GA 08-31-90	950	7.6	33.0	18.0	--	440	130	27	48
10N.05E.30.322	05-07-90	1290	7.4	--	16.0	--	540	160	35	60
10N.05E.30.324A	05-07-90	890	7.3	--	13.0	--	400	120	24	41
10N.06E.04.113	07-17-90	860	8.2	--	17.0	--	67	16	6.5	170
10N.06E.04.444	07-18-90	3020	7.1	--	16.0	--	1000	260	90	210
10N.06E.05.441	MCC 01-10-90	2590	7.2	--	--	--	--	--	--	--
	02-16-90	2470	7.1	--	12.0	--	--	--	--	--
	03-20-90	2460	7.2	13.0	13.0	--	--	--	--	--
	04-10-90	2500	7.3	16.5	13.5	--	1000	280	75	100
	05-22-90	2590	7.1	23.5	15.0	--	--	--	--	--
	06-18-90	2600	7.1	29.0	18.0	--	--	--	--	--
	07-10-90	2590	7.1	27.5	16.0	--	--	--	--	--
	08-17-90	2580	7.1	18.0	14.5	--	--	--	--	--
	09-19-90	2530	7.2	21.0	14.5	--	--	--	--	--
10N.06E.07.112	BL 07-03-90	3210	7.4	--	15.5	--	790	120	120	540
10N.06E.07.114	07-25-90	590	7.5	--	15.5	--	280	81	20	20
10N.06E.07.314	BE 06-22-90	1400	7.3	--	14.0	--	580	160	43	66
10N.06E.07.322	CA 06-22-90	860	7.4	--	15.0	--	370	97	30	57
	09-28-90	900	--	20.0	14.5	--	--	--	--	--
10N.06E.07.331	FOS 01-13-90	1490	7.3	--	13.5	--	--	--	--	--
	02-16-90	1510	7.3	--	13.0	--	--	--	--	--
	03-16-90	1500	7.4	--	13.5	--	--	--	--	--
	04-10-90	1470	7.1	16.0	14.0	--	630	180	44	60
	05-18-90	1510	7.3	23.0	14.0	--	--	--	--	--
	06-18-90	1580	7.2	30.5	17.5	--	--	--	--	--
	07-10-90	1550	7.2	26.5	15.0	--	--	--	--	--
	08-14-90	1510	7.2	18.0	13.5	--	--	--	--	--
	09-14-90	1520	7.2	25.0	14.0	--	--	--	--	--
10N.06E.07.422	MC 09-24-90	--	--	--	--	--	300	79	24	18
10N.06E.08.211	KU 06-26-90	660	7.5	--	16.0	--	320	73	33	22
10N.06E.08.323	D 06-26-90	720	7.3	--	16.0	--	360	110	21	16
10N.06E.09.122	KL 06-25-90	2150	7.2	--	15.0	--	1000	260	92	77
10N.06E.09.341	07-11-90	1350	7.1	--	14.5	--	660	180	50	47
10N.06E.10.331	BA 09-26-90	--	--	--	--	--	1200	340	92	150

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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 CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
10N.05E.19.322 LEI	08-20-90	--	--	--	--	12	--	--	--
	09-19-90	--	--	--	--	12	--	--	--
10N.05E.19.334 RI	04-20-90	0.7	4.5	227	110	23	2.5	21	454
10N.05E.19.341 ST	04-20-90	0.7	4.0	166	110	29	2.8	22	461
10N.05E.21.322 C	04-24-90	0.7	1.2	244	26	460	<0.10	23	1060
10N.05E.22.234 TIJ	01-09-90	--	--	--	--	110	--	--	--
	02-12-90	--	--	--	--	100	--	--	--
	03-13-90	--	--	--	--	110	--	--	--
	04-16-90	1	5.4	226	93	100	1.1	18	518
	05-14-90	--	--	--	--	110	--	--	--
	06-12-90	--	--	--	--	85	--	--	--
	07-11-90	--	--	--	--	110	--	--	--
	08-13-90	--	--	--	--	100	--	--	--
	09-14-90	--	--	--	--	120	--	--	--
10N.05E.22.344A	04-25-90	1	2.5	259	37	40	1.4	19	388
10N.05E.22.411 L	04-25-90	0.9	2.4	265	150	82	<0.10	20	609
10N.05E.23.131 GR	07-10-90	0.8	1.5	235	160	110	0.20	18	651
10N.05E.23.313	06-24-90	0.6	2.4	265	71	35	0.20	17	429
10N.05E.26.332	09-04-90	0.4	1.9	165	77	58	0.30	17	421
10N.05E.30.122	04-24-90	0.9	4.5	218	110	46	2.0	23	530
10N.05E.30.124	04-19-90	0.9	4.0	60	140	69	1.7	20	456
10N.05E.30.213	04-19-90	1	5.6	205	120	110	1.6	21	638
10N.05E.30.213 MCI	01-30-90	--	--	--	--	100	--	--	--
	02-22-90	--	--	--	--	110	--	--	--
	03-30-90	--	--	--	--	9.1	--	--	--
	04-17-90	0.7	5.6	216	130	110	1.7	22	689
	05-15-90	--	--	--	--	120	--	--	--
	06-20-90	--	--	--	--	130	--	--	--
	07-12-90	--	--	--	--	120	--	--	--
	08-21-90	--	--	--	--	120	--	--	--
	09-20-90	--	--	--	--	120	--	--	--
10N.05E.30.321 GA	08-31-90	1	6.2	152	170	79	2.1	20	618
10N.05E.30.322	05-07-90	1	8.0	242	140	110	1.4	2.2	781
10N.05E.30.324A	05-07-90	0.9	4.0	245	99	84	0.30	17	541
10N.06E.04.113	07-17-90	9	2.4	299	53	67	1.7	12	510
10N.06E.04.444	07-18-90	3	4.3	213	310	780	0.20	14	1800
10N.06E.05.441 MCC	01-10-90	--	--	--	--	570	--	--	--
	02-16-90	--	--	--	--	580	--	--	--
	03-20-90	--	--	--	--	600	--	--	--
	04-10-90	1	5.3	220	120	590	0.30	18	1370
	05-22-90	--	--	--	--	580	--	--	--
	06-18-90	--	--	--	--	570	--	--	--
	07-10-90	--	--	--	--	630	--	--	--
	08-17-90	--	--	--	--	600	--	--	--
	09-19-90	--	--	--	--	580	--	--	--
10N.06E.07.112 BL	07-03-90	8	8.5	392	1500	22	0.30	14	2560
10N.06E.07.114	07-25-90	0.5	1.4	208	100	7.1	0.30	21	381
10N.06E.07.314 BE	06-22-90	1	2.8	254	60	270	0.10	19	815
10N.06E.07.322 CA	06-22-90	1	2.3	276	100	65	0.50	22	569
	09-28-90	--	--	--	98	74	0.30	--	--
10N.06E.07.331 FOS	01-13-90	--	--	--	--	250	--	--	--
	02-16-90	--	--	--	--	250	--	--	--
	03-16-90	--	--	--	--	260	--	--	--
	04-10-90	1	2.5	280	74	250	<0.10	19	864
	05-18-90	--	--	--	--	290	--	--	--
	06-18-90	--	--	--	--	270	--	--	--
	07-10-90	--	--	--	--	280	--	--	--
	08-14-90	--	--	--	--	260	--	--	--
	09-14-90	--	--	--	--	280	--	--	--
10N.06E.07.422 MC	09-24-90	0.5	1.5	213	64	17	0.20	22	353
10N.06E.08.211 KU	06-26-90	0.5	1.8	249	52	38	1.0	11	385
10N.06E.08.323 D	06-26-90	0.4	1.5	219	70	46	0.10	16	424
10N.06E.09.122 KL	06-25-90	1	2.5	276	450	360	0.20	19	1460
10N.06E.09.341	07-11-90	0.8	2.7	281	190	170	0.20	16	895
10N.06E.10.331 BA	09-26-90	2	2.0	305	510	510	0.10	19	1810

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED TOTAL (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
10N.05E.19.322 LEI	08-20-90	--	<0.010	--	0.800	--	<0.010	--	--
	09-19-90	--	<0.010	--	1.00	--	<0.010	--	--
10N.05E.19.334 RI	04-20-90	--	<0.010	--	1.80	1.80	<0.010	--	--
10N.05E.19.341 ST	04-20-90	--	<0.010	--	2.70	3.00	<0.010	--	--
10N.05E.21.322 C	04-24-90	--	<0.010	--	13.0	14.0	<0.010	--	--
10N.05E.22.234 TIJ	01-09-90	0.680	0.020	--	0.700	--	0.010	--	--
	02-12-90	0.580	0.020	--	0.600	--	0.010	--	0.29
	03-13-90	0.470	0.030	--	0.500	--	<0.010	--	--
	04-16-90	0.460	0.040	--	0.500	0.600	<0.010	--	--
	05-14-90	0.360	0.040	--	0.400	--	<0.010	--	--
	06-12-90	0.290	0.010	--	0.300	--	0.010	--	0.19
	07-11-90	--	<0.010	--	0.800	--	<0.010	--	--
	08-13-90	--	<0.010	--	0.800	--	0.010	--	0.19
	09-14-90	--	<0.010	--	1.30	--	<0.010	--	--
10N.05E.22.344A	04-25-90	0.180	0.020	--	0.200	0.200	0.020	--	0.18
10N.05E.22.411 L	04-25-90	--	<0.010	--	1.80	1.90	<0.010	--	--
10N.05E.23.131 GR	07-10-90	--	<0.010	--	1.70	1.70	0.010	--	--
10N.05E.23.313	06-24-90	--	<0.010	--	1.10	1.20	<0.010	--	--
10N.05E.26.332	09-04-90	--	<0.010	--	3.10	3.10	0.040	--	0.46
10N.05E.30.122	04-24-90	--	<0.010	--	9.30	9.50	0.010	--	0.29
10N.05E.30.124	04-19-90	--	<0.010	--	13.0	14.0	<0.010	--	--
10N.05E.30.213	04-19-90	--	<0.010	--	13.0	13.0	<0.010	--	--
10N.05E.30.213 MCI	01-30-90	--	<0.010	--	15.0	--	<0.010	--	--
	02-22-90	--	--	--	--	--	--	--	--
	03-30-90	--	<0.010	--	15.0	--	0.010	--	0.59
	04-17-90	--	<0.010	--	15.0	15.0	<0.010	--	--
	05-15-90	--	<0.010	--	15.0	--	<0.010	--	--
	06-20-90	--	<0.010	--	15.0	--	0.030	--	0.27
	07-12-90	15.0	0.010	--	15.0	--	0.120	--	0.28
	08-21-90	--	<0.010	--	2.80	--	0.070	--	0.43
	09-20-90	--	<0.010	--	15.0	--	<0.010	--	--
10N.05E.30.321 GA	08-31-90	--	<0.010	--	9.20	10.0	0.040	--	0.86
10N.05E.30.322	05-07-90	--	<0.010	--	27.0	27.0	<0.010	--	--
10N.05E.30.324A	05-07-90	--	<0.010	--	1.10	1.00	<0.010	--	--
10N.06E.04.113	07-17-90	--	<0.010	--	0.300	0.500	0.020	--	--
10N.06E.04.444	07-18-90	--	<0.010	--	<0.100	<0.100	0.020	--	0.18
10N.06E.05.441 MCC	01-10-90	--	<0.010	--	12.0	--	0.060	--	0.34
	02-16-90	--	<0.010	--	10.0	--	<0.010	--	--
	03-20-90	--	<0.010	--	11.0	--	0.010	--	0.89
	04-10-90	--	<0.010	--	11.0	12.0	<0.010	--	--
	05-22-90	--	<0.010	--	8.40	--	<0.010	--	--
	06-18-90	--	<0.010	--	12.0	--	<0.010	--	--
	07-10-90	--	<0.010	--	12.0	--	0.010	--	0.59
	08-17-90	--	<0.010	--	13.0	--	<0.010	--	--
	09-19-90	--	<0.010	--	13.0	--	<0.010	--	--
10N.06E.07.112 BL	07-03-90	--	<0.010	--	<0.100	<0.100	1.00	--	0.20
10N.06E.07.114	07-25-90	--	<0.010	--	1.20	1.30	0.010	--	--
10N.06E.07.314 BE	06-22-90	--	<0.010	--	9.10	9.50	0.020	--	0.58
10N.06E.07.322 CA	06-22-90	--	<0.010	--	--	6.60	0.010	--	0.79
	09-28-90	--	<0.010	<0.010	6.20	6.20	0.030	<0.010	0.67
10N.06E.07.331 FOS	01-13-90	--	<0.010	--	15.0	--	0.040	--	0.36
	02-16-90	--	<0.010	--	17.0	--	<0.010	--	--
	03-16-90	--	<0.010	--	14.0	--	0.010	--	0.29
	04-10-90	--	<0.010	--	15.0	15.0	<0.010	--	--
	05-18-90	--	<0.010	--	14.0	--	0.020	--	0.88
	06-18-90	--	<0.010	--	14.0	--	<0.010	--	--
	07-10-90	--	<0.010	--	14.0	--	0.010	--	0.59
	08-14-90	--	<0.010	--	15.0	--	<0.010	--	--
	09-14-90	--	<0.010	--	14.0	--	<0.010	--	--
10N.06E.07.422 MC	09-24-90	--	<0.010	--	0.100	--	0.030	--	--
10N.06E.08.211 KU	06-26-90	--	<0.010	--	0.900	0.900	0.020	--	--
10N.06E.08.323 D	06-26-90	--	<0.010	--	2.60	2.80	0.010	--	0.69
10N.06E.09.122 KL	06-25-90	--	<0.010	--	6.40	7.80	0.020	--	0.58
10N.06E.09.341	07-11-90	--	<0.010	--	15.0	16.0	0.020	--	0.68
10N.06E.10.331 BA	09-26-90	--	<0.010	--	4.90	--	0.020	--	0.48

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.05E.19.322 LEI	08-20-90	1.0	<0.010	---	0.4	30	10	--	0.02
	09-19-90	--	<0.010	---	0.5	30	10	--	0.02
10N.05E.19.334 RI	04-20-90	2.0	<0.010	---	2.7	50	7	<1	0.04
10N.05E.19.341 ST	04-20-90	--	<0.010	---	0.3	30	9	11	0.07
10N.05E.21.322 C	04-24-90	14	<0.010	---	0.8	50	17	3	0.19
10N.05E.22.234 TIJ	01-09-90	--	0.020	--	1.1	190	--	--	0.04
	02-12-90	0.90	0.010	---	0.7	190	350	--	0.05
	03-13-90	--	<0.010	---	0.9	190	320	--	0.04
	04-16-90	0.70	<0.010	---	0.8	200	110	68	0.02
	05-14-90	0.70	0.010	---	0.6	200	140	--	0.05
	06-12-90	0.50	<0.010	---	0.5	220	90	--	0.04
	07-11-90	--	0.010	---	1.0	170	60	--	0.03
	08-13-90	1.0	0.020	---	0.6	160	60	--	0.05
	09-14-90	1.7	<0.010	---	0.7	150	170	--	0.06
10N.05E.22.344A	04-25-90	0.40	<0.010	---	0.3	80	43	4	0.03
10N.05E.22.411 L	04-25-90	2.1	<0.010	--	1.1	90	8	<1	0.06
10N.05E.23.131 GR	07-10-90	--	0.020	---	0.7	40	<3	<1	0.05
10N.05E.23.313	06-24-90	1.5	<0.010	---	0.3	60	14	<1	0.04
10N.05E.26.332	09-04-90	3.6	<0.010	---	0.5	50	7	2	0.03
10N.05E.30.122	04-24-90	9.6	<0.010	---	0.6	50	6	<1	0.10
10N.05E.30.124	04-19-90	13	<0.010	---	1.1	30	9	11	0.13
10N.05E.30.213	04-19-90	14	<0.010	---	0.7	80	11	<1	0.15
10N.05E.30.213 MCI	01-30-90	15	<0.010	---	0.7	30	--	--	0.17
	02-22-90	--	--	---	0.4	40	30	--	0.02
	03-30-90	16	<0.010	---	0.8	40	560	--	0.19
	04-17-90	16	<0.010	---	0.9	40	8	2	0.14
	05-15-90	16	<0.010	---	0.9	40	20	--	0.16
	06-20-90	15	<0.010	---	0.6	40	20	--	0.14
	07-12-90	15	0.540	---	1.4	40	20	--	0.12
	08-21-90	3.3	<0.010	---	0.9	30	10	--	0.16
	09-20-90	15	<0.010	--	1.0	40	20	--	0.12
10N.05E.30.321 GA	08-31-90	10	<0.010	---	1.0	110	<3	18	0.09
10N.05E.30.322	05-07-90	28	<0.010	---	1.1	90	7	<1	0.23
10N.05E.30.324A	05-07-90	1.5	0.020	---	0.8	40	17	2	0.03
10N.06E.04.113	07-17-90	--	<0.010	---	0.5	250	<3	<1	0.03
10N.06E.04.444	07-18-90	--	<0.010	--	3.3	90	40	10	0.14
10N.06E.05.441 MCC	01-10-90	12	0.020	---	2.8	50	--	--	0.22
	02-16-90	10	<0.010	---	2.7	50	30	--	0.21
	03-20-90	12	<0.010	---	3.7	60	30	--	0.16
	04-10-90	12	<0.010	---	3.0	50	40	<10	0.19
	05-22-90	9.1	<0.010	--	2.8	50	40	--	0.17
	06-18-90	17	<0.010	---	2.6	60	30	--	0.19
	07-10-90	13	0.020	---	3.0	60	30	--	0.19
	08-17-90	13	<0.010	---	2.8	70	50	--	0.25
	09-19-90	13	<0.010	---	2.9	60	50	--	0.19
10N.06E.07.112 BL	07-03-90	--	<0.010	---	0.8	350	30	10	0.01
10N.06E.07.114	07-25-90	--	0.200	---	0.3	50	4	2	0.02
10N.06E.07.314 BE	06-22-90	9.7	0.010	---	1.5	100	<3	32	0.13
10N.06E.07.322 CA	06-22-90	--	0.010	---	2.2	100	8	<1	0.08
	09-28-90	6.9	<0.010	<0.010	2.2	120	--	--	--
10N.06E.07.331 FOS	01-13-90	15	0.020	---	1.8	120	--	--	0.17
	02-16-90	17	0.020	---	1.8	110	<10	--	0.21
	03-16-90	14	0.021	---	1.4	120	20	--	0.15
	04-10-90	15	0.020	---	2.0	130	7	<1	0.15
	05-18-90	15	0.030	---	2.0	110	70	--	0.14
	06-18-90	14	0.010	---	1.6	110	<10	--	0.17
	07-10-90	15	0.020	---	2.1	120	<10	--	0.16
	08-14-90	16	0.030	---	1.8	120	20	--	0.17
	09-14-90	15	<0.010	---	1.7	120	20	--	0.17
10N.06E.07.422 MC	09-24-90	--	0.010	---	0.3	50	5	<1	0.05
10N.06E.08.211 KU	06-26-90	--	<0.010	---	0.4	80	21	16	0.03
10N.06E.08.323 D	06-26-90	3.3	<0.010	---	1.5	50	<3	<1	0.05
10N.06E.09.122 KL	06-25-90	7.0	0.020	---	3.1	70	30	10	0.12
10N.06E.09.341	07-11-90	16	0.030	---	2.4	50	11	<1	0.13
10N.06E.10.331 BA	09-26-90	5.4	0.020	---	6.6	130	30	<10	0.15

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
10N.06E.10.344	CARISTO	350559106171401	001	GW	07-02-90	1730		--	15	2.0
10N.06E.12.313	DAVIS JAME	350609106153701	001	GW	09-21-90	1928		--	--	--
10N.06E.13.224	T.HARRELL	350537106144301	001	GW	06-29-90	1430	325MDER	6742	30	0.3
10N.06E.13.321	TOLMAN	350525106151701	001	GW	01-29-90	1808	325MDER	6775	--	--
			001	GW	02-15-90	1520	325MDER	6775	--	--
			001	GW	03-19-90	1343	325MDER	6775	--	--
			001	GW	04-18-90	0838	325MDER	6775	10	--
			001	GW	06-12-90	1439	325MDER	6775	11	--
			001	GW	07-09-90	1010	325MDER	6775	18	--
			001	GW	08-20-90	1332	325MDER	6775	12	--
10N.06E.16.121	CARDAMONE	350556106182901	001	GW	09-19-90	0945	325MDER	6775	10	6.0
10N.06E.26.132		350356106162901	001	GW	07-24-90	1752		--	7	9.0
10N.06E.27.444		350323106164601	001	GW	09-21-90	1540	325MDER	7030	--	--
11N.05E.19.113	BORMAN	351003106205401	001	GW	07-18-90	1250	325MDER	6994	21	6.0
			001	GW	04-10-90	1540		--	20	--
11N.05E.23.222B	MATHEWS	351011106220401	001	GW	01-17-90	1215		--	--	--
			001	GW	02-13-90	1400		--	--	--
			001	GW	03-15-90	1337		--	14	--
			001	GW	04-09-90	1524		--	14	--
			001	GW	05-17-90	1353		--	6	--
			001	GW	06-19-90	0955		--	7	--
			001	GW	07-17-90	1328		--	10	--
			001	GW	08-16-90	1311		--	6	--
			001	GW	09-12-90	1321		--	10	3.0
11N.05E.24.213	BUDAGHER	351007106211501	001	GW	09-21-90	1045		--	--	--
11N.05E.24.241		350958106211101	001	GW	04-27-90	1535	231CHNL	6920	17	3.0
11N.05E.24.412	ANISON	350949106211801	001	GW	01-08-90	1510		--	--	--
			001	GW	02-13-90	1030		--	--	--
			001	GW	03-15-90	1126		--	20	--
			001	GW	04-17-90	0929		--	12	--
			001	GW	05-17-90	0815		--	10	--
			001	GW	06-19-90	0812		--	13	--
			001	GW	07-18-90	0850		--	7	--
			001	GW	08-17-90	0800		--	10	12
			001	GW	09-13-90	0839		--	10	9.0
11N.05E.24.443	WESTBROOK	350930106210701	001	GW	01-30-90	1540		--	10	--
			001	GW	02-12-90	1520		--	--	--
			001	GW	03-14-90	1252		--	18	--
			001	GW	04-11-90	1026		--	17	--
			001	GW	05-17-90	1557		--	16	--
			001	GW	06-15-90	1327		--	15	--
			001	GW	07-11-90	1427		--	16	--
			001	GW	08-16-90	1119		--	12	--
			001	GW	09-12-90	1125		--	10	2.0
11N.05E.25.143		350901106214201	001	GW	07-16-90	1710		6978	5	6.0
11N.05E.25.144B		350904106213101	001	GW	07-13-90	1448	231SNRS	6975	19	4.0
11N.05E.25.211	CHESTER	350924106212501	001	GW	09-25-90	1405		--	--	--
11N.05E.25.343	PLUMLEE	350836106213801	001	GW	07-25-90	1300		--	110	5.0
11N.05E.25.411	MCVEETY	350858106212401	001	GW	09-27-90	1830		--	--	--
11N.05E.25.422	SAVIERS	350857106210001	001	GW	05-08-90	1630		--	28	5.0
11N.05E.35.244A		350811106221701	001	GW	05-09-90	1145	231CHNL	6960	28	10
11N.05E.35.434		350744106222201	001	GW	07-24-90	1315	231SNRS	6965	18	4.0
11N.05E.36.113		350821106215801	001	GW	05-08-90	1855	313BRNL	6915	10	5.0
11N.05E.36.311		350802106215401	001	GW	05-04-90	1700	231SNRS	6855	14	1.0
11N.05E.36.313	LARSON	350754106215401	001	GW	05-04-90	1320		--	28	4.0
11N.06E.19.122	LIEBLING	351014106202801	001	GW	02-22-90	1247		6798	--	--
			001	GW	03-14-90	1026		6798	20	--
			001	GW	04-09-90	1320		6798	20	--
			001	GW	05-17-90	1213		6798	15	--
			001	GW	06-18-90	1438		6798	10	--
			001	GW	07-17-90	1150		6798	--	--
			001	GW	08-15-90	1423		6798	13	--
			001	GW	09-12-90	0933		6798	12	1.0
11N.06E.19.124	PETES RESTA	351004106202901	001	GW	01-12-90	1350		--	--	--
11N.06E.19.313		350940106205401	001	GW	04-13-90	1730	110AVMB	6865	52	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
10N.06E.10.344 CA	07-02-90	1510	7.0	--	16.5	--	740	180	70	60
10N.06E.12.313 DA	09-21-90	--	--	--	--	--	300	80	25	32
10N.06E.13.224 T.H	06-29-90	1190	8.5	--	16.0	--	12	2.5	1.5	290
10N.06E.13.321 TOL	01-29-90	2000	7.4	--	13.0	--	--	--	--	--
	02-15-90	2030	7.4	--	13.5	--	--	--	--	--
	03-19-90	2020	7.5	17.5	14.5	--	--	--	--	--
	04-18-90	2050	7.3	1.5	14.5	--	870	280	42	52
	06-12-90	2090	7.3	29.0	16.5	--	--	--	--	--
	07-09-90	2010	7.5	28.0	16.0	--	--	--	--	--
	08-20-90	2050	7.2	21.0	14.5	--	--	--	--	--
	09-19-90	2010	7.3	20.0	14.5	--	--	--	--	--
10N.06E.16.121 CA	07-24-90	1280	7.1	--	16.0	--	600	170	43	40
10N.06E.26.132	09-21-90	--	--	--	--	--	110	19	16	210
10N.06E.27.444	07-18-90	1150	7.4	--	15.0	--	460	120	38	69
11N.05E.19.113 BO	04-10-90	580	7.6	--	13.5	--	240	60	21	25
11N.05E.23.222B MA	01-17-90	850	7.2	--	11.0	--	--	--	--	--
	02-13-90	880	7.2	--	10.5	--	--	--	--	--
	03-15-90	860	7.2	--	11.0	5.6	--	--	--	--
	04-09-90	910	7.2	11.5	10.5	--	410	140	15	30
	05-17-90	890	7.1	20.5	11.0	--	--	--	--	--
	06-19-90	880	7.1	26.5	15.0	--	--	--	--	--
	07-17-90	810	7.1	29.0	12.5	--	--	--	--	--
	08-16-90	890	7.2	20.0	12.0	--	--	--	--	--
	09-12-90	870	7.1	28.5	12.0	--	--	--	--	--
11N.05E.24.213 BU	09-21-90	--	--	--	--	--	320	110	9.9	8.8
11N.05E.24.241	04-27-90	510	7.4	--	14.0	--	260	87	9.4	9.6
11N.05E.24.412 ANI	01-08-90	462	7.3	--	11.0	4.4	--	--	--	--
	02-13-90	453	7.4	--	11.0	--	--	--	--	--
	03-15-90	455	7.4	--	11.0	--	--	--	--	--
	04-17-90	430	7.4	3.0	11.5	--	250	87	7.6	6.5
	05-17-90	438	7.3	9.5	12.0	--	--	--	--	--
	06-19-90	463	7.3	22.5	17.0	--	--	--	--	--
	07-18-90	460	7.3	24.5	15.5	--	--	--	--	--
	08-17-90	5	7.4	17.5	13.5	--	--	--	--	--
	09-13-90	442	7.3	21.0	13.0	--	--	--	--	--
11N.05E.24.443 WES	01-30-90	1190	7.2	--	13.0	--	--	--	--	--
	02-12-90	1190	7.2	--	13.0	--	--	--	--	--
	03-14-90	1190	7.3	--	13.5	--	--	--	--	--
	04-11-90	1190	7.1	14.0	13.5	--	570	190	22	31
	05-17-90	1210	7.1	24.5	14.0	--	--	--	--	--
	06-15-90	1200	7.1	24.5	16.0	--	--	--	--	--
	07-11-90	1250	7.3	20.5	17.0	--	--	--	--	--
	08-16-90	1180	7.2	20.5	14.0	--	--	--	--	--
	09-12-90	1190	7.1	24.0	14.0	--	--	--	--	--
11N.05E.25.143	07-16-90	600	7.4	--	14.5	--	250	82	12	27
11N.05E.25.144B	07-13-90	790	7.3	--	13.0	--	360	110	21	24
11N.05E.25.211 CH	09-25-90	--	--	--	--	--	180	56	8.8	54
11N.05E.25.343 PL	07-25-90	910	7.5	29.0	14.0	--	390	98	36	32
11N.05E.25.411 M	09-27-90	--	--	--	--	--	430	130	25	76
11N.05E.25.422 SA	05-08-90	1010	7.4	--	15.0	--	440	100	47	42
11N.05E.35.244A	05-09-90	650	7.4	--	14.0	5.7	280	81	19	28
11N.05E.35.434	07-24-90	600	7.4	29.5	15.0	--	250	74	16	29
11N.05E.36.113	05-08-90	600	7.5	--	14.0	--	240	70	15	39
11N.05E.36.311	05-04-90	1710	7.2	--	14.5	--	870	260	54	55
11N.05E.36.313 LA	05-04-90	2150	7.2	--	13.5	--	1100	380	27	85
11N.06E.19.122 LIE	02-22-90	680	7.6	--	10.5	--	--	--	--	--
	03-14-90	670	7.6	--	11.0	--	--	--	--	--
	04-09-90	670	7.5	14.0	12.0	--	310	94	19	17
	05-17-90	670	7.5	20.5	13.0	--	--	--	--	--
	06-18-90	690	7.5	34.0	17.5	--	--	--	--	--
	07-17-90	625	7.5	28.0	17.0	--	--	--	--	--
	08-15-90	700	7.5	19.5	14.5	--	--	--	--	--
	09-12-90	685	7.4	28.5	16.0	--	--	--	--	--
11N.06E.19.124 PET	01-12-90	550	7.5	--	13.5	--	--	--	--	--
11N.06E.19.313	04-13-90	1450	7.3	--	14.0	--	640	180	47	40

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY 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)
10N.06E.10.344 CA	07-02-90	1	3.2	--	--	307	170	250	0.30
10N.06E.12.313 DA	09-21-90	0.8	2.7	--	--	296	62	12	1.8
10N.06E.13.224 T.H	06-29-90	36	3.7	605	564	558	47	20	11
10N.06E.13.321 TOL	01-29-90	--	--	--	--	--	--	470	--
	02-15-90	--	--	--	--	--	--	470	--
	03-19-90	--	--	--	--	--	--	470	--
	04-18-90	0.8	1.6	--	--	176	94	450	0.80
	06-12-90	--	--	--	--	--	--	480	--
	07-09-90	--	--	--	--	--	--	530	--
	08-20-90	--	--	--	--	--	--	460	--
	09-19-90	--	--	--	--	--	--	470	--
10N.06E.16.121 CA	07-24-90	0.7	2.3	--	--	201	170	180	0.30
10N.06E.26.132	09-21-90	9	5.1	--	--	436	87	51	6.3
10N.06E.27.444	07-18-90	1	2.4	--	--	256	150	150	0.40
11N.05E.19.113 BO	04-10-90	0.7	1.3	--	--	174	18	63	0.30
11N.05E.23.222B MA	01-17-90	--	--	--	--	--	--	75	--
	02-13-90	--	--	--	--	--	--	75	--
	03-15-90	--	--	--	--	--	--	85	--
	04-09-90	0.6	1.5	--	--	253	41	96	0.20
	05-17-90	--	--	--	--	--	--	110	--
	06-19-90	--	--	--	--	--	--	90	--
	07-17-90	--	--	--	--	--	--	95	--
	08-16-90	--	--	--	--	--	--	86	--
	09-12-90	--	--	--	--	--	--	89	--
11N.05E.24.213 BU	09-21-90	0.2	0.90	--	--	227	25	32	0.30
11N.05E.24.241	04-27-90	0.3	0.80	--	--	223	16	15	0.20
11N.05E.24.412 ANI	01-08-90	--	--	--	--	--	--	8.5	--
	02-13-90	--	--	--	--	--	--	8.1	--
	03-15-90	--	--	--	--	--	--	12	--
	04-17-90	0.2	0.60	--	--	230	15	10	0.70
	05-17-90	--	--	--	--	--	--	9.0	--
	06-19-90	--	--	--	--	--	--	9.4	--
	07-18-90	--	--	--	--	--	--	9.8	--
	08-17-90	--	--	--	--	--	--	9.7	--
	09-13-90	--	--	--	--	--	--	8.2	--
11N.05E.24.443 WES	01-30-90	--	--	--	--	--	--	150	--
	02-12-90	--	--	--	--	--	--	150	--
	03-14-90	--	--	--	--	--	--	160	--
	04-11-90	0.6	1.1	--	--	269	20	160	<0.10
	05-17-90	--	--	--	--	--	--	160	--
	06-15-90	--	--	--	--	--	--	150	--
	07-11-90	--	--	--	--	--	--	180	--
	08-16-90	--	--	--	--	--	--	150	--
	09-12-90	--	--	--	--	--	--	170	--
11N.05E.25.143	07-16-90	0.7	0.50	--	--	240	17	26	0.10
11N.05E.25.144B	07-13-90	0.5	1.2	--	--	228	28	96	<0.10
11N.05E.25.211 CH	09-25-90	2	0.50	--	--	269	17	14	0.30
11N.05E.25.343 PL	07-25-90	0.7	2.1	--	--	178	15	180	0.20
11N.05E.25.411 M	09-27-90	2	1.7	--	--	222	28	230	<0.10
11N.05E.25.422 SA	05-08-90	0.9	5.3	--	--	244	120	130	0.20
11N.05E.35.244A	05-09-90	0.7	0.70	--	--	246	25	41	0.20
11N.05E.35.434	07-24-90	0.8	1.0	--	--	220	30	27	0.30
11N.05E.36.113	05-08-90	1	0.80	--	--	264	23	23	0.40
11N.05E.36.311	05-04-90	0.8	2.8	--	--	209	410	250	<0.10
11N.05E.36.313 LA	05-04-90	1	1.2	--	--	203	630	290	<0.10
11N.06E.19.122 LIE	02-22-90	--	--	--	--	--	--	76	--
	03-14-90	--	--	--	--	--	--	72	--
	04-09-90	0.4	1.1	--	--	187	42	74	0.20
	05-17-90	--	--	--	--	--	--	85	--
	06-18-90	--	--	--	--	--	--	79	--
	07-17-90	--	--	--	--	--	--	84	--
	08-15-90	--	--	--	--	--	--	100	--
	09-12-90	--	--	--	--	--	--	92	--
11N.06E.19.124 PET	01-12-90	--	--	--	--	--	--	42	--
11N.06E.19.313	04-13-90	0.7	2.1	--	--	199	53	300	0.20

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ 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)
10N.06E.10.344 CA	07-02-90	19	944	--	<0.010	1.70	1.70	<0.010	--
10N.06E.12.313 DA	09-21-90	13	406	--	<0.010	<0.100	--	0.030	--
10N.06E.13.224 T.H	06-29-90	10	684	--	<0.010	<0.100	<0.100	0.010	0.39
10N.06E.13.321 TOL	01-29-90	--	--	--	<0.010	6.20	--	<0.010	--
	02-15-90	--	--	--	<0.010	5.80	--	<0.010	--
	03-19-90	--	--	--	<0.010	6.30	--	<0.010	--
	04-18-90	21	1070	--	<0.010	6.60	6.30	0.021	0.28
	06-12-90	--	--	--	<0.010	6.10	--	<0.010	--
	07-09-90	--	--	--	<0.010	6.70	--	0.020	0.28
	08-20-90	--	--	--	<0.010	6.10	--	0.020	0.58
	09-19-90	--	--	--	<0.010	6.60	--	<0.010	--
10N.06E.16.121 CA	07-24-90	15	773	--	<0.010	6.00	7.10	<0.010	--
10N.06E.26.132	09-21-90	9.8	666	--	<0.010	0.100	--	<0.010	--
10N.06E.27.444	07-18-90	15	735	--	<0.010	8.90	8.20	0.020	0.68
11N.05E.19.113 BO	04-10-90	24	326	--	<0.010	2.00	2.00	<0.010	--
11N.05E.23.222B MA	01-17-90	--	--	--	<0.010	0.500	--	0.030	--
	02-13-90	--	--	--	<0.010	0.400	--	<0.010	--
	03-15-90	--	--	--	<0.010	0.400	--	0.020	--
	04-09-90	18	495	--	<0.010	0.400	0.400	<0.010	--
	05-17-90	--	--	--	<0.010	0.400	--	<0.010	--
	06-19-90	--	--	--	<0.010	0.200	--	<0.010	--
	07-17-90	--	--	--	<0.010	0.200	--	<0.010	--
	08-16-90	--	--	--	<0.010	0.200	--	<0.010	--
	09-12-90	--	--	--	<0.010	0.300	--	<0.010	--
11N.05E.24.213 BU	09-21-90	20	343	--	<0.010	0.700	--	<0.010	--
11N.05E.24.241	04-27-90	20	295	0.680	0.020	0.700	0.800	<0.010	--
11N.05E.24.412 ANI	01-08-90	--	--	--	<0.010	0.400	--	0.030	--
	02-13-90	--	--	--	<0.010	0.400	--	<0.010	--
	03-15-90	--	--	--	<0.010	0.300	--	0.010	--
	04-17-90	17	284	--	<0.010	0.400	0.400	<0.010	--
	05-17-90	--	--	--	<0.010	0.400	--	<0.010	--
	06-19-90	--	--	--	<0.010	0.300	--	<0.010	--
	07-18-90	--	--	--	<0.010	0.400	--	<0.010	--
	08-17-90	--	--	--	<0.010	0.400	--	0.010	0.29
	09-13-90	--	--	--	<0.010	0.400	--	<0.010	--
11N.05E.24.443 WES	01-30-90	--	--	2.09	0.010	2.10	--	<0.010	--
	02-12-90	--	--	--	<0.010	5.10	--	<0.010	--
	03-14-90	--	--	--	<0.010	23.0	--	<0.010	--
	04-11-90	28	720	--	<0.010	23.0	24.0	<0.010	--
	05-17-90	--	--	--	<0.010	24.0	--	<0.010	--
	06-15-90	--	--	--	<0.010	24.0	--	<0.010	--
	07-11-90	--	--	--	<0.010	24.0	--	<0.010	--
	08-16-90	--	--	--	<0.010	22.0	--	<0.010	--
	09-12-90	--	--	--	<0.010	23.0	--	<0.010	--
11N.05E.25.143	07-16-90	24	339	--	<0.010	1.40	1.40	0.020	0.28
11N.05E.25.144B	07-13-90	28	471	--	<0.010	5.70	5.80	0.010	0.49
11N.05E.25.211 CH	09-25-90	18	330	--	<0.010	1.30	--	0.030	--
11N.05E.25.343 PL	07-25-90	23	507	--	<0.010	3.20	3.20	<0.010	--
11N.05E.25.411 M	09-27-90	18	642	--	<0.010	3.90	--	0.030	0.37
11N.05E.25.422 SA	05-08-90	22	615	--	<0.010	0.500	0.500	<0.010	--
11N.05E.35.244A	05-09-90	27	389	--	<0.010	4.40	4.30	<0.010	--
11N.05E.35.434	07-24-90	24	349	--	<0.010	3.50	3.60	<0.010	--
11N.05E.36.113	05-08-90	26	366	--	<0.010	2.30	2.30	<0.010	--
11N.05E.36.311	05-04-90	21	1210	--	<0.010	6.00	6.30	<0.010	--
11N.05E.36.313 LA	05-04-90	19	1570	--	<0.010	4.10	4.00	<0.010	--
11N.06E.19.122 LIE	02-22-90	--	--	--	<0.010	2.70	--	<0.010	--
	03-14-90	--	--	--	<0.010	2.70	--	<0.010	--
	04-09-90	26	397	--	<0.010	2.70	2.60	<0.010	--
	05-17-90	--	--	--	<0.010	2.80	--	0.050	0.25
	06-18-90	--	--	--	<0.010	2.90	--	<0.010	--
	07-17-90	--	--	--	<0.010	3.00	--	<0.010	--
	08-15-90	--	--	--	<0.010	2.70	--	<0.010	--
	09-12-90	--	--	--	<0.010	2.50	--	<0.010	--
11N.06E.19.124 PET	01-12-90	--	--	--	<0.010	1.10	--	0.020	--
11N.06E.19.313	04-13-90	31	813	--	<0.010	9.20	9.20	<0.010	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.06E.10.344 CA	07-02-90	1.9	0.020	--	140	8	2	--	--
10N.06E.12.313 DA	09-21-90	--	0.030	0.4	100	29	18	--	0.05
10N.06E.13.224 T.H	06-29-90	--	<0.010	0.6	410	5	7	--	0.06
10N.06E.13.321 TOL	01-29-90	--	0.030	2.9	50	--	--	--	0.16
	02-15-90	--	0.010	3.2	50	40	--	--	0.17
	03-19-90	6.8	0.020	2.9	50	40	--	--	0.17
	04-18-90	6.9	0.010	3.1	50	40	<10	50	0.12
	06-12-90	6.8	0.010	3.1	50	20	--	--	0.14
	07-09-90	7.0	0.020	3.2	50	30	--	--	0.15
	08-20-90	6.7	0.020	3.1	50	20	--	--	0.15
	09-19-90	7.2	<0.010	3.0	50	30	--	--	0.12
10N.06E.16.121 CA	07-24-90	6.6	0.030	2.4	60	5	<1	--	0.11
10N.06E.26.132	09-21-90	--	<0.010	0.7	360	<3	2	--	0.07
10N.06E.27.444	07-18-90	9.6	0.020	3.7	100	4	<1	--	0.12
11N.05E.19.113 BO	04-10-90	--	<0.010	0.7	110	5	<1	--	0.04
11N.05E.23.222B MA	01-17-90	--	<0.010	0.8	20	--	--	--	0.03
	02-13-90	0.90	0.020	0.6	20	10	--	--	0.04
	03-15-90	--	<0.010	0.5	20	<10	--	--	0.03
	04-09-90	--	<0.010	0.7	20	17	<1	--	0.05
	05-17-90	1.1	<0.010	0.9	20	70	--	--	0.04
	06-19-90	--	<0.010	0.6	20	<10	--	--	0.03
	07-17-90	--	<0.010	0.7	20	20	--	--	0.03
	08-16-90	0.40	0.010	0.7	20	10	--	--	0.09
	09-12-90	--	<0.010	0.8	20	<10	--	--	0.04
11N.05E.24.213 BU	09-21-90	--	0.020	0.8	<10	<3	<1	--	0.02
11N.05E.24.241	04-27-90	1.1	<0.010	0.2	10	9	<1	--	0.02
11N.05E.24.412 ANI	01-08-90	--	0.010	0.2	10	--	--	--	0.01
	02-13-90	--	0.010	0.3	10	10	--	--	0.03
	03-15-90	--	<0.010	0.1	20	<10	--	--	0.01
	04-17-90	--	<0.010	<0.1	10	3	<1	--	0.01
	05-17-90	--	0.010	0.1	<10	10	--	--	0.02
	06-19-90	1.6	0.020	0.1	<10	<10	--	--	0.01
	07-18-90	--	<0.010	0.3	10	<10	--	--	0.01
	08-17-90	0.70	0.010	0.2	20	<10	--	--	0.08
	09-13-90	--	0.010	0.3	<10	<10	--	--	0.02
11N.05E.24.443 WES	01-30-90	--	0.020	1.3	60	--	--	--	0.23
	02-12-90	6.3	0.100	--	70	20	--	--	0.27
	03-14-90	--	0.020	1.5	70	10	--	--	0.23
	04-11-90	24	0.020	1.4	70	<3	<1	--	0.19
	05-17-90	25	0.030	1.6	60	20	--	--	0.19
	06-15-90	24	0.010	1.5	60	<10	--	--	0.20
	07-11-90	25	0.030	1.7	60	20	--	--	0.20
	08-16-90	23	0.020	1.5	60	20	--	--	0.24
	09-12-90	23	0.020	1.2	70	20	--	--	0.17
11N.05E.25.143	07-16-90	1.7	0.010	0.7	120	<3	<1	--	0.04
11N.05E.25.144B	07-13-90	6.2	0.030	1.2	70	4	<1	--	0.08
11N.05E.25.211 CH	09-25-90	--	<0.010	0.3	100	<3	<1	--	0.06
11N.05E.25.343 PL	07-25-90	3.6	0.030	1.7	130	9	6	--	0.08
11N.05E.25.411 M	09-27-90	4.3	<0.010	1.8	210	4	<1	--	0.07
11N.05E.25.422 SA	05-08-90	--	0.010	0.6	100	4	<1	--	0.07
11N.05E.35.244A	05-09-90	4.8	0.020	0.7	110	4	<1	--	0.06
11N.05E.35.434	07-24-90	3.9	0.020	0.5	100	12	<1	--	0.04
11N.05E.36.113	05-08-90	4.6	0.010	0.5	150	5	<1	--	0.04
11N.05E.36.311	05-04-90	6.4	<0.010	1.6	270	5	<1	--	0.11
11N.05E.36.313 LA	05-04-90	4.4	<0.010	1.4	80	70	10	--	0.09
11N.06E.19.122 LIE	02-22-90	2.9	0.010	1.6	40	20	--	--	0.08
	03-14-90	--	0.020	1.5	50	<10	--	--	0.08
	04-09-90	3.0	0.010	1.2	50	7	<1	--	0.06
	05-17-90	3.1	0.020	1.5	50	20	--	--	0.05
	06-18-90	3.8	<0.010	1.2	50	10	--	--	0.08
	07-17-90	3.6	<0.010	1.1	50	20	--	--	0.06
	08-15-90	3.0	0.020	1.8	50	20	--	--	0.06
	09-12-90	3.0	0.020	1.6	50	10	--	--	0.07
11N.06E.19.124 PET	01-12-90	--	<0.010	0.7	20	--	--	--	3.3
11N.06E.19.313	04-13-90	9.8	0.020	3.5	110	16	9	--	0.13

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)
11N.06E.19.341A GILLET	350935106204001	001	GW	09-26-90	1840			--	--
11N.06E.20.223 KENNEDY	351008106190201	001	GW	01-29-90	1400			--	--
		001	GW	04-11-90	1050			--	8
11N.06E.20.244	350954106185401	001	GW	04-11-90	1625	221MRSN	6670	80	
11N.06E.20.432	350941106194701	001	GW	09-19-90	1330	310GLRT	6720	--	
11N.06E.21.133 PAVEL	350949106184501	001	GW	01-31-90	1235			--	--
		001	GW	02-12-90	1310			--	--
		001	GW	03-20-90	1308			--	13
		001	GW	04-09-90	1100			--	12
		001	GW	05-17-90	1004			--	10
		001	GW	06-18-90	1255			--	14
		001	GW	07-18-90	0944			--	7
		001	GW	08-15-90	1242			--	11
		001	GW	09-11-90	1251			--	6
11N.06E.22.444	350928106164401	001	GW	08-31-90	0945		6970	--	
11N.06E.26.344	350835106161501	001	GW	08-23-90	1333	325MDER	6845	--	
11N.06E.28.322	350856106182301	001	GW	08-24-90	1148	325MDER	6720	--	4
11N.06E.29.232	350908106190601	001	GW	07-20-90	0937		6800	--	12
11N.06E.30.221 PASCOE	350921106200301	001	GW	09-25-90	1805		--	--	
11N.06E.30.323 DAVIS	350850106204001	001	GW	04-27-90	1910		--	--	28
11N.06E.32.144	350806106192901	001	GW	09-27-90	1405	210CRCS	6865	--	
11N.06E.34.322	350802106172201	001	GW	08-24-90	1325	325MDER	6900	--	10

LOCAL IDENT- I- FIER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
11N.06E.19.341A GI	09-26-90	--	--	--	--	--	--	280	82
11N.06E.20.223 K	01-29-90	--	510	7.7	--	13.5	--	--	--
	04-11-90	--	520	7.7	--	14.0	--	220	51
11N.06E.20.244	04-11-90	--	820	6.6	--	15.5	--	450	100
11N.06E.20.432	09-19-90	--	--	--	--	--	--	730	250
11N.06E.21.133 PAV	01-31-90	--	650	7.5	--	13.5	--	--	--
	02-12-90	--	640	7.5	--	14.0	--	--	--
	03-20-90	--	660	7.5	--	15.0	--	--	--
	04-09-90	--	660	7.4	11.0	13.5	3.3	320	78
	05-17-90	--	660	7.5	12.0	13.5	--	--	--
	06-18-90	--	650	7.4	33.0	17.5	--	--	--
	07-18-90	--	640	7.4	25.0	13.0	--	--	--
	08-15-90	--	655	7.4	18.5	14.0	--	--	--
	09-11-90	--	610	7.5	29.5	14.0	--	--	--
11N.06E.22.444	08-31-90	--	415	8.3	26.5	--	--	170	34
11N.06E.26.344	08-23-90	--	500	7.7	27.5	16.0	--	230	64
11N.06E.28.322	08-24-90	--	810	7.6	26.5	15.5	--	340	100
11N.06E.29.232	07-20-90	--	750	7.3	23.0	14.0	--	390	120
11N.06E.30.221 PA	09-25-90	--	--	--	--	--	--	1000	390
11N.06E.30.323 DA	04-27-90	4.0	680	7.4	--	15.0	--	280	72
11N.06E.32.144	09-27-90	--	--	--	--	--	--	390	86
11N.06E.34.322	08-24-90	--	920	8.4	28.0	15.0	--	33	6.5

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	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)
11N.06E.19.341A GI	09-26-90	18	22	0.6	1.3	234	19	56	0.30
11N.06E.20.223 K	01-29-90	--	--	--	--	--	--	17	--
	04-11-90	22	32	0.9	1.5	221	36	12	0.20
11N.06E.20.244	04-11-90	49	23	0.5	1.7	362	130	7.2	0.40
11N.06E.20.432	09-19-90	25	130	2	2.1	110	580	200	0.30
11N.06E.21.133 PAV	01-31-90	--	--	--	--	--	--	24	--
	02-12-90	--	--	--	--	--	--	24	--
	03-20-90	--	--	--	--	--	--	19	--
	04-09-90	30	24	0.6	1.4	292	49	23	0.20
	05-17-90	--	--	--	--	--	--	25	--
	06-18-90	--	--	--	--	--	--	23	--
	07-18-90	--	--	--	--	--	--	21	--
	08-15-90	--	--	--	--	--	--	23	--
	09-11-90	--	--	--	--	--	--	22	--
11N.06E.22.444	08-31-90	21	30	1	1.6	191	31	6.8	0.40
11N.06E.26.344	08-23-90	16	16	0.5	2.1	137	23	35	0.60
11N.06E.28.322	08-24-90	22	49	1	1.3	248	48	87	0.20
11N.06E.29.232	07-20-90	22	24	0.5	2.1	189	230	5.9	0.30
11N.06E.30.221 PA	09-25-90	8.7	18	0.2	0.90	166	800	9.7	0.20
11N.06E.30.323 DA	04-27-90	25	46	1	2.9	294	88	5.8	0.30
11N.06E.32.144	09-27-90	42	63	1	4.1	394	95	17	0.10
11N.06E.34.322	08-24-90	4.1	220	17	4.7	447	35	13	11

LOCAL IDENT- IFIER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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)
11N.06E.19.341A GI	09-26-90	22	361	--	<0.010	2.40	--	<0.010	--
11N.06E.20.223 K	01-29-90	--	--	1.89	0.010	1.90	--	<0.010	--
	04-11-90	19	323	3.38	0.020	3.40	3.70	<0.010	--
11N.06E.20.244	04-11-90	40	577	--	<0.010	1.90	1.90	<0.010	--
11N.06E.20.432	09-19-90	18	1270	--	<0.010	2.80	--	0.020	0.48
11N.06E.21.133 PAV	01-31-90	--	--	--	<0.010	1.20	--	<0.010	--
	02-12-90	--	--	--	<0.010	1.20	--	<0.010	--
	03-20-90	--	--	--	<0.010	1.20	--	<0.010	--
	04-09-90	28	414	--	<0.010	1.20	1.20	<0.010	--
	05-17-90	--	--	--	<0.010	1.30	--	<0.010	--
	06-18-90	--	--	--	<0.010	1.20	--	<0.010	--
	07-18-90	--	--	--	<0.010	1.20	--	<0.010	--
	08-15-90	--	--	--	<0.010	1.20	--	<0.010	--
	09-11-90	--	--	--	<0.010	1.10	--	<0.010	--
11N.06E.22.444	08-31-90	29	270	--	<0.010	0.400	0.400	<0.010	--
11N.06E.26.344	08-23-90	26	349	--	<0.010	17.0	19.0	0.050	0.65
11N.06E.28.322	08-24-90	24	507	--	<0.010	5.70	6.10	<0.010	--
11N.06E.29.232	07-20-90	22	541	--	<0.010	0.200	0.200	0.010	--
11N.06E.30.221 PA	09-25-90	22	1350	--	<0.010	0.300	--	<0.010	--
11N.06E.30.323 DA	04-27-90	26	443	--	0.020	<0.100	<0.100	0.080	0.22
11N.06E.32.144	09-27-90	23	567	--	<0.010	0.300	--	0.020	--
11N.06E.34.322	08-24-90	8.9	572	--	<0.010	<0.100	<0.100	0.020	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
11N.06E.19.341A GI	09-26-90	--	<0.010	0.7	60	7	2	0.04
11N.06E.20.223 K	01-29-90	--	0.030	0.1	110	--	--	0.04
	04-11-90	3.6	0.010	0.1	260	4	<1	0.04
11N.06E.20.244	04-11-90	--	0.040	0.2	60	43	2	0.04
11N.06E.20.432	09-19-90	3.3	<0.010	2.3	410	11	14	0.11
11N.06E.21.133 PAV	01-31-90	--	0.010	0.4	60	--	--	0.04
	02-12-90	1.9	0.020	0.4	70	10	--	0.06
	03-20-90	1.4	0.020	0.4	70	<10	--	0.03
	04-09-90	1.6	0.020	0.5	430	<10	<10	0.03
	05-17-90	1.7	0.010	0.6	70	20	--	0.02
	06-18-90	2.3	<0.010	0.3	70	<10	--	0.03
	07-18-90	--	0.030	0.6	70	<10	--	0.01
	08-15-90	1.4	0.020	0.6	70	<10	--	0.03
	09-11-90	1.3	0.020	0.6	70	<10	--	0.05
11N.06E.22.444	08-31-90	--	0.010	0.7	110	<3	<1	<0.01
11N.06E.26.344	08-23-90	18	0.040	0.9	50	<3	10	0.13
11N.06E.28.322	08-24-90	6.4	0.020	2.6	160	<3	<1	0.08
11N.06E.29.232	07-20-90	--	0.020	0.3	60	23	4	<0.01
11N.06E.30.221 PA	09-25-90	--	<0.010	0.4	40	15	<1	0.08
11N.06E.30.323 DA	04-27-90	--	<0.010	0.3	110	630	26	0.01
11N.06E.32.144	09-27-90	--	0.010	1.1	150	8	19	0.02
11N.06E.34.322	08-24-90	--	<0.010	0.3	380	32	7	0.02

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DONA ANA COUNTY

LOCAL IDENT- I- FLIER	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)
19S.05E.17.331 MAR-1SW	323906106274301	013	GW	01-30-90	1245	110AVMB	550.00	4132	940	
		013	GW	03-26-90	1115	110AVMB	550.00	4132	--	
		013	GW	08-29-90	1110	110AVMB	550.00	4132	820	
19S.05E.17.334 MAR-2SW	323857106273201	013	GW	01-30-90	1300	110AVMB	650.00	4138	980	
		013	GW	03-26-90	1045	110AVMB	650.00	4138	--	
		013	GW	08-29-90	1030	110AVMB	650.00	4138	830	
19S.05E.19.413 MAR-4	323842106281201	013	GW	01-30-90	1400	110AVMB	750.00	4223	880	
		013	GW	03-26-90	0945	110AVMB	750.00	4223	--	
		013	GW	08-30-90	1330	110AVMB	750.00	4223	795	
21S.04E.10.133 MARKHAM SPR	322952106314401	013	SP	08-30-90	1120		--	6060	760	
21S.04E.14.114 HTA-3	322910106303601	013	GW	01-30-90	1010	400PCMB	160.00	5150	930	
		013	GW	04-03-90	1500	400PCMB	160.00	5150	--	
		013	GW	08-29-90	1305	400PCMB	160.00	5150	810	
21S.04E.23.233 HTA-1	322801106300801	013	GW	01-30-90	0930	400PCMB	250.00	5018	850	
		013	GW	03-27-90	1120	400PCMB	250.00	5018	1100	
		013	GW	08-20-90	1355	400PCMB	250.00	5018	--	
		013	GW	08-29-90	1355	400PCMB	250.00	5018	--	
21S.05E.16.132 SMR-1	322856106262701	013	GW	01-30-90	1100	110BLSN	473.00	4171	870	
		013	GW	03-26-90	1150	110BLSN	473.00	4171	--	
		013	GW	08-30-90	1500	110BLSN	473.00	4171	785	
22S.04E.12.214 SW-20	322446106290801	013	GW	01-18-90	1145	110BLSN	838.00	4354	640	
		013	GW	03-06-90	1010	110BLSN	838.00	4354	--	
		013	GW	03-20-90	1145	110BLSN	838.00	4354	--	
22S.04E.12.414 SW-19	322424106290301	013	GW	08-28-90	0930	110BLSN	838.00	4354	560	
		013	GW	01-18-90	1105	110BLSN	800.00	4294	440	
		013	GW	03-06-90	0950	110BLSN	800.00	4294	--	
		013	GW	04-18-90	1200	110BLSN	800.00	4294	--	
22S.04E.12.434 SW-18	322405106290101	013	GW	01-18-90	1035	110BLSN	800.00	4264	440	
		013	GW	03-06-90	1025	110BLSN	800.00	4264	--	
		013	GW	03-20-90	1115	110BLSN	800.00	4264	--	
		013	GW	08-28-90	0835	110BLSN	800.00	4264	395	
22S.04E.13.241 SW-17	322347106285801	013	GW	01-18-90	1005	110BLSN	900.00	4260	410	
		013	GW	03-06-90	1035	110BLSN	900.00	4260	--	
		013	GW	03-20-90	1050	110BLSN	900.00	4260	--	
		013	GW	08-27-90	1500	110BLSN	900.00	4260	345	
22S.04E.13.311 SW-13	322331106293801	013	GW	08-31-90	1130	110BLSN	534.00	4330	625	
22S.04E.13.432 SW-16	322325106290401	013	GW	01-18-90	0935	110BLSN	890.00	4270	610	
		013	GW	03-07-90	0945	110BLSN	890.00	4270	--	
		013	GW	03-20-90	1000	110BLSN	890.00	4270	--	
22S.04E.24.144 SW-15A	322249106291801	013	GW	01-24-90	0930	110BLSN	1100.00	4293	390	
		013	GW	03-07-90	1010	110BLSN	1100.00	4293	--	
		013	GW	03-19-90	1140	110BLSN	1100.00	4293	--	
		013	GW	03-21-90	0945	110BLSN	1100.00	4293	--	
22S.04E.24.212A SW-10A	322309106290201	013	GW	08-27-90	1410	110BLSN	1100.00	4293	320	
		013	GW	01-24-90	1000	110BLSN	805.00	4273	420	
		013	GW	03-07-90	0955	110BLSN	805.00	4273	--	
		013	GW	03-21-90	0915	110BLSN	805.00	4273	--	
22S.05E.19.141 SW-22	322256106282601	013	GW	08-31-90	0951	110BLSN	805.00	4273	340	
		013	GW	01-24-90	1050	110BLSN	733.00	4217	360	
		013	GW	03-07-90	1030	110BLSN	733.00	4217	--	
		013	GW	03-19-90	1120	110BLSN	733.00	4217	--	
		013	GW	03-21-90	1035	110BLSN	733.00	4217	--	
22S.05E.19.323 SW-21	322237106282801	013	GW	08-28-90	1025	110BLSN	733.00	4217	340	
		013	GW	01-24-90	1130	110BLSN	700.00	4207	320	
		013	GW	03-07-90	1020	110BLSN	700.00	4207	--	
		013	GW	03-19-90	1130	110BLSN	700.00	4207	--	
		013	GW	03-21-90	1015	110BLSN	700.00	4207	--	
		013	GW	08-28-90	1100	110BLSN	700.00	4207	305	

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
19S.05E.17.331 MAR	01-30-90	--	--	--	24.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.5	--	25.5	380	80	43	33	0.7
19S.05E.17.334 MAR	01-30-90	--	--	--	25.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.6	--	26.5	330	68	39	54	1
19S.05E.19.413 MAR	01-30-90	--	--	--	25.0	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	7.5	--	26.0	370	81	41	29	0.7
21S.04E.10.133 MAR	08-30-90	--	7.4	20.0	20.5	310	89	22	43	1
21S.04E.14.114 HTA	01-30-90	--	--	--	19.5	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.5	--	20.0	300	89	19	57	1
21S.04E.23.233 HTA	01-30-90	--	--	--	21.0	--	--	--	--	--
	03-27-90	--	--	--	24.5	--	--	--	--	--
	08-20-90	--	--	--	22.0	--	--	--	--	--
	08-29-90	749	7.6	--	--	280	89	14	53	1
21S.05E.16.132 SMR	01-30-90	--	--	--	26.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	7.7	--	28.0	370	74	45	28	0.6
22S.04E.12.214 SW-	01-18-90	--	--	--	25.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	7.8	--	26.5	210	62	13	35	1
22S.04E.12.414 SW-	01-18-90	--	--	--	25.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	27.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	8.0	--	28.0	110	34	5.5	41	2
22S.04E.13.241 SW-	01-18-90	--	--	--	27.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	7.9	--	27.0	110	34	5.7	31	1
22S.04E.13.311 SW-	08-31-90	--	7.4	--	22.5	240	68	16	41	1
22S.04E.13.432 SW-	01-18-90	--	--	--	25.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	26.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	7.9	--	27.0	110	34	5.5	29	1
22S.04E.24.212A SW	01-24-90	--	--	--	25.5	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	--	7.5	--	26.0	140	40	8.5	23	0.9
22S.05E.19.141 SW-	01-24-90	--	--	--	28.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	8.0	--	28.5	88	29	3.6	40	2
22S.05E.19.323 SW-	01-24-90	--	--	--	25.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	7.5	--	26.0	110	31	7.7	20	0.8

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	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)	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)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	2.0	209	180	38	0.40	0.17	24	551	535
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	2.2	209	180	41	0.40	0.17	24	533	542
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	2.1	205	160	31	0.40	0.14	23	528	499
21S.04E.10.133 MAR	08-30-90	0.60	233	130	24	4.0	0.20	32	482	490
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	0.80	224	130	30	5.0	0.20	25	515	509
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	1.7	180	140	31	4.0	0.20	32	493	495
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	2.0	245	150	24	0.90	0.14	29	509	506
22S.04E.12.214 SW-	01-18-90	--	--	--	--	0.50	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.7	128	110	26	1.4	0.19	31	376	370
22S.04E.12.414 SW-	01-18-90	--	--	--	--	0.40	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	0.40	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.0	110	64	14	1.1	0.11	31	257	265
22S.04E.13.241 SW-	01-18-90	--	--	--	--	0.50	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	2.2	123	46	11	0.50	0.090	36	242	246
22S.04E.13.311 SW-	08-31-90	2.7	176	100	21	0.40	0.13	40	410	420
22S.04E.13.432 SW-	01-18-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	0.40	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	2.3	116	53	8.0	0.40	0.060	37	239	242
22S.04E.24.212A SW	01-24-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	2.0	87	53	19	0.30	0.12	47	243	257
22S.05E.19.141 SW-	01-24-90	--	--	--	--	0.40	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	1.9	104	54	10	1.1	0.070	29	240	235
22S.05E.19.323 SW-	01-24-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.0	86	42	13	1.3	0.11	46	222	223

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	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)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
19S.05E.17.331 MAR	01-30-90	1.80	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	1.80	--	--	<10	<1	28	50	<1.0
19S.05E.17.334 MAR	01-30-90	1.60	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	1.60	--	--	<10	<1	36	60	<1.0
19S.05E.19.413 MAR	01-30-90	1.60	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	1.70	1.70	--	<0.010	<10	<1	29	50	<1.0
21S.04E.10.133 MAR	08-30-90	1.20	1.20	1.4	<0.010	<10	<1	38	20	<1.0
21S.04E.14.114 HTA	01-30-90	4.00	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	3.90	4.00	4.2	<0.010	<10	<1	30	30	1.0
21S.04E.23.233 HTA	01-30-90	4.90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	4.90	--	--	<10	<1	34	40	<1.0
21S.05E.16.132 SMR	01-30-90	1.20	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	1.30	--	--	<10	<1	33	30	1.0
22S.04E.12.214 SW-	01-18-90	2.60	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	2.50	--	--	<10	1	65	30	<1.0
22S.04E.12.414 SW-	01-18-90	1.50	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	1.90	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	1.40	--	--	<10	1	49	20	<1.0
22S.04E.13.241 SW-	01-18-90	1.20	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	1.20	--	--	20	<1	54	20	<1.0
22S.04E.13.311 SW-	08-31-90	--	5.60	--	--	<10	<1	98	20	<1.0
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	1.60	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	0.700	--	--	<10	<1	53	20	2.0
22S.04E.24.212A SW	01-24-90	2.90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	--	2.60	--	--	<10	<1	50	20	1.0
22S.05E.19.141 SW-	01-24-90	0.800	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	0.800	--	--	<10	1	54	20	<1.0
22S.05E.19.323 SW-	01-24-90	1.90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	1.90	--	--	<10	<1	50	10	<1.0

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	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)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	3	7	1	16	1	<0.1	<1	<1.0
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	2	5	1	16	<1	<0.1	<1	<1.0
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	<1	2	36	1	15	7	<0.1	<1	<1.0
21S.04E.10.133 MAR	08-30-90	<1	1	8	<1	36	2	<0.1	<1	1.0
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	2	6	1	27	<1	<0.1	1	2.0
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	1	12	1	26	3	<0.1	<1	<1.0
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	<1	2	17	<1	13	3	<0.1	<1	<1.0
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	1	2	<3	1	17	<1	<0.1	2	<1.0
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	1	1	<3	1	10	<1	<0.1	<1	<1.0
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	1	2	<3	1	12	<1	0.1	1	<1.0
22S.04E.13.311 SW-	08-31-90	2	2	13	1	9	<1	<0.1	<1	<1.0
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	<1	1	<3	<1	10	2	0.1	<1	<1.0
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	1	3	21	1	9	4	<0.1	<1	<1.0
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	<1	1	<3	1	7	<1	<0.1	<1	<1.0
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	<1	1	<3	<1	6	<1	<0.1	<1	<1.0

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	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)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-29-90	1100	43	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	0.60
	08-29-90	1000	30	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-30-90	870	39	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	240	29	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	<0.20
	08-29-90	270	120	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	<0.20
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	340	76	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-30-90	360	61	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	3.7	<0.4	4.4	<0.4	3.8	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	390	17	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	3.5	<0.4	4.5	<0.4	3.7	<0.4	--
	04-18-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	4.8	<0.4	3.9	<0.4	3.2	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	360	10	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	2.2	<0.4	4.4	<0.4	3.6	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
	08-27-90	300	12	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	520	23	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	4.7	<0.4	4.1	<0.4	3.5	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.5	<0.4	5.8	0.6	5.0	0.6	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
	08-27-90	310	29	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.3	<0.4	2.6	<0.4	2.1	<0.4	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
	08-31-90	290	61	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.8	<0.4	4.7	<0.4	4.1	<0.4	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	310	23	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	1.4	<0.4	3.9	<0.4	3.1	<0.4	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	230	27	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)
19S.05E.17.331	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	0.40	1.1	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR 08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.12.434	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW- 08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.24.144	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	4.9	0.30	<0.20	<0.20	0.20	<0.20	<0.20
	08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

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QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

	LOCAL IDENT- IFIER	DATE	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)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)
19S.05E.17.331	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA	01-30-90	--	--	--	--	--	--	--	--	--
		04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA	01-30-90	--	--	--	--	--	--	--	--	--
		03-27-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-20-90	--	--	--	--	--	--	--	--	--
		08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		04-18-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.12.434	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW-	08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.24.144	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	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- ELDRIN TOTAL (UG/L) (39380)
19S.05E.17.331	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR 08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	04-18-90	<0.20	<0.2	--	--	--	--	--	--	--
22S.04E.12.434	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW- 08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
22S.04E.24.144	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	--	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	04-18-90	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	--	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-07-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-31-90	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- & I- FIER,	DATE	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)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-30-90	--	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	--	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-20-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-30-90	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	04-18-90	--	--	--	--	--	<0.2	<0.2	0.3
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	--	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-07-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-31-90	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

LINCOLN COUNTY

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QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

LINCOLN COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
09S.07E.25.134	08-14-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

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)
09N.18W.05.324	350214108454001	031	GW	12-15-89	1040	231CHNL	161.60	1540	
LOCAL IDENT- I- FIER	DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
09N.18W.05.324	12-15-89	6473	1440	22	1750	1830	8.6	8.0	20.0
LOCAL IDENT- I- FIER	DATE	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
09N.18W.05.324	12-15-89	27	10	0.46	380	32	0.50	234	550
LOCAL IDENT- I- FIER	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 DIS- SOLVED (MG/L AS N) (00631)	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)
09N.18W.05.324	12-15-89	86	3.3	10	1180	<0.100	<10	<1	8
LOCAL IDENT- I- FIER	DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	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)
09N.18W.05.324	12-15-89	1100	<1.0	<1	1	110	<1	24	0.1
LOCAL IDENT- I- FIER	DATE	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)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
09N.18W.05.324	12-15-89	<1	1.0	10	6.1	5.0	4.5	0.40	1.3

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

OTERO COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
19S.06E.21.321 HELSTF-2	323832106201301	035	GW		06-09-90	2130	110AVMB	1000	833
					06-10-90	1400	110AVMB	520.00	693
					06-11-90	1400	110AVMB	520.00	493
					06-11-90	1700	110AVMB	520.00	413
					06-11-90	2100	110AVMB	520.00	293
19S.06E.21.321A HELSTF-3	323831106201301	035	GW		07-02-90	0140	110AVMB	520.00	--
19S.06E.28.221A HELSTF-1	323803106194201	035	GW		05-14-90	1200	110AVMB	100.00	--

LOCAL IDENT- I- FIER	DATE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF HOLE, TOTAL (FEET) (72001)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
19S.06E.21.321 HEL	06-09-90	815	3950	1000	114000	--	7.3	--	22000
	06-10-90	675	3950	1000	83000	--	7.5	--	12000
	06-11-90	475	3950	1000	22700	--	7.9	--	3700
	06-11-90	395	3950	1000	21400	--	7.8	--	4600
	06-11-90	275	3950	1000	7800	--	7.9	--	1800
19S.06E.21.321A HE	07-02-90	--	3950	540	--	13900	7.8	22.0	2700
19S.06E.28.221A HE	05-14-90	--	3949	130	--	11600	7.3	--	2800

LOCAL IDENT- I- FIER	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)
19S.06E.21.321 HEL	06-09-90	760	4800	28000	83	450	146	15000	46000
	06-10-90	1000	2200	17000	69	270	129	8200	33000
	06-11-90	590	550	4400	31	98	147	7400	4500
	06-11-90	720	680	3800	24	98	163	6600	4600
	06-11-90	370	210	1200	12	34	142	2800	1200
19S.06E.21.321A HE	07-02-90	390	420	2500	21	53	88	5100	2400
19S.06E.28.221A HE	05-14-90	440	410	2100	17	29	200	6700	750

LOCAL IDENT- I- FIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	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)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
19S.06E.21.321 HEL	06-09-90	0.80	21	7.6	111000	95200	0.700	530	46
	06-10-90	5.0	14	14	67700	61800	0.500	<100	39
	06-11-90	1.8	1.7	19	18700	17700	0.900	20	52
	06-11-90	2.0	2.0	16	17300	16600	1.70	30	15
	06-11-90	0.40	0.54	20	5940	5940	2.50	10	3
19S.06E.21.321A HE	07-02-90	1.6	0.98	25	11800	11000	1.30	<20	17
19S.06E.28.221A HE	05-14-90	<0.10	0.31	30	10900	10600	15.0	20	43

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

OTERO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
19S.06E.21.321 HEL	06-09-90	100	1100	<20	<10	<1	<10	1100	<10
	06-10-90	100	14000	<10	<10	<1	<10	600	<10
	06-11-90	100	980	<2.0	4	1	<2	90	<2
	06-11-90	100	720	<2.0	3	1	<2	100	<2
	06-11-90	<100	490	<1.0	3	1	3	80	<1
19S.06E.21.321A HE	07-02-90	<100	660	<2.0	3	<1	<2	50	<2
19S.06E.28.221A HE	05-14-90	100	1500	1.0	<2	<1	<1	30	<1

LOCAL IDENT- IFIER	DATE	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)	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
19S.06E.21.321 HEL	06-09-90	3200	1100	0.3	2	<10	12000	11000
	06-10-90	1700	490	0.3	<2	<10	14000	7000
	06-11-90	620	150	0.5	2	<2.0	4500	1500
	06-11-90	500	150	0.8	7	<2.0	5100	2200
	06-11-90	210	120	0.2	7	<1.0	6300	390
19S.06E.21.321A HE	07-02-90	370	130	0.4	12	<2.0	6300	90
19S.06E.28.221A HE	05-14-90	230	170	0.2	4	<1.0	60	1200

SAN JUAN COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
29N.16W.09.342 SAN JUAN FL	364430108312501	045	GW	06-12-90	1530			--	5060
		045	GW	08-01-90	1530	110AVMB		--	5060
ALLUVIAL WELL ON CHACO RIV	363458108342401	045	GW	08-03-90	1100	110AVMB		900.00	5140
NR032.0505X0180 CHACO R WE	364325108353001	045	GW	06-12-90	0930	110AVMB		9.00	4980
		045	GW	08-02-90	1000	110AVMB		9.00	4980

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
29N.16W.09.342 SAN	06-12-90	1100	7.3	16.0	580	160	44	53	1
	08-01-90	990	7.1	18.5	520	140	40	48	0.9
ALLUVIAL WELL ON C	08-03-90	1200	7.5	24.0	200	67	7.5	220	7
NR032.0505X0180 CH	06-12-90	2000	7.4	15.5	400	86	44	330	7
	08-02-90	1890	7.4	18.0	320	69	35	290	7

LOCAL IDENT- IFIER	DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)
29N.16W.09.342 SAN	06-12-90	1.9	311	330	15	0.50	0.050	0.007
	08-01-90	1.9	352	260	12	0.30	0.040	0.009
ALLUVIAL WELL ON C	08-03-90	4.8	214	420	10	1.0	0.030	0.003
NR032.0505X0180 CH	06-12-90	6.0	137	770	58	1.2	0.13	0.014
	08-02-90	6.2	156	720	56	1.0	0.030	0.011

SAN JUAN COUNTY -- Continued

LOCAL IDENTIFIER	DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34/S-32 STABLE ISOTOPE RATIO PER MIL (82086)
29N.16W.09.342 SAN	06-12-90	13	58	1	3	1600	9	--
	08-01-90	23	56	8	2	1400	4	--
ALLUVIAL WELL ON C	08-03-90	110	23	900	<1	1100	5	--
NR032.0505X0180 CH	06-12-90	5100	160	550	<1	4200	1200	-6.80
	08-02-90	4100	150	420	<1	3500	320	--

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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
334 RC-4	331135106345701	051	GW	03-27-90	0930	110AVMB	710.00	4595	5.90	

[illegible][illegible]

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SIERRA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLOR- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
13S.04E.11.334 RC-	03-27-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

SOCORRO 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)
06S.03E.05.232 SRC-1	334908106390801	053		GW	04-03-90	1000	110AVMB	750.00	4950	3800
06S.03E.05.233N SRC PROD	334908106391202	053		GW	04-03-90	1050		--	--	365
		053		GW	09-04-90	1100		--	--	420
06S.03E.05.233S SRC PROD	334908106391203	053		GW	04-03-90	1115		--	--	1060
06S.05E.05.234 SRC-2	334907106391201	053		GW	04-03-90	0910	110AVMB	720.00	4953	3800
		053		GW	09-04-90	1130	110AVMB	720.00	4953	3400

LOCAL IDENT- I- FIER	DATE	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
06S.03E.05.232 SRC	04-03-90	--	26.5	--	--	--	--	--	--	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	7.4	29.0	66	13	8.1	57	3	1.1	19
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	--	--
06S.05E.05.234 SRC	04-03-90	--	27.0	--	--	--	--	--	--	--
	09-04-90	7.7	28.0	1700	380	170	260	3	9.0	41

LOCAL IDENT- I- FIER	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)	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 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	2.00	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	0.500	--
	09-04-90	160	13	0.40	0.15	32	298	300	--	0.800
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	1.00	--
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	2.40	--
	09-04-90	2000	36	0.20	0.50	32	3300	2930	--	2.50

LOCAL IDENT- I- FIER	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)	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	--	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	<10	<1	<2	420	<1.0	1	1	6	<1
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	--	--
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	20	1	<100	430	<1.0	2	<1	40	<1

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SOCORRO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	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)	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	<0.20
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	<0.20
	09-04-90	15	<1	0.1	<1	<1.0	210	14	--
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	<0.20
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	<0.20
	09-04-90	50	20	0.1	8	<1.0	4900	<10	--

LOCAL IDENT- I- FIER	DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE 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)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	0.50	0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	0.30	0.40	0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	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)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
	09-04-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

TAOS COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)
28N.12E.08 BIG ARSENIC SEE	364058105412201	055	SP	07-24-90	1015	000EXRV	6880	178	8.1	
28N.12E.09.BLM VISITOR CEN	364057105401701	055	GW	07-23-90	1500	122SNTFL	--	230	8.1	
28N.12E.09.MOTTI SPRING BE	364042105393901	055	SP	07-25-90	0955	122SNTFL	--	225	8.2	
28N.12E.17. LITTLE ARSENIC	363957105411401	055	SP	07-24-90	1115	000EXRV	--	208	8.2	
29N.12E.20.BLM CHIFLO WELL	364422105403201	055	GW	07-24-90	1318	122SNTFL	--	235	8.3	

LOCAL IDENT- I- FIER	DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
28N.12E.08 BIG ARS	07-24-90	20.0	15.5	68	19	5.1	20	1	2.3	103
28N.12E.09.BLM VIS	07-23-90	21.0	19.0	65	17	5.4	22	1	2.3	103
28N.12E.09.MOTTI S	07-25-90	20.0	17.5	59	15	5.2	21	1	2.4	--
28N.12E.17. LITTLE	07-24-90	22.0	15.0	62	17	4.7	20	1	2.7	98
29N.12E.20.BLM CHI	07-24-90	21.5	18.5	64	17	5.2	21	1	2.7	105

LOCAL IDENT- I- FIER	DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
28N.12E.08 BIG ARS	07-24-90	0	85	83	21	8.9	1.1	33	157	164
28N.12E.09.BLM VIS	07-23-90	0	84	85	19	7.5	1.4	32	148	162
28N.12E.09.MOTTI S	07-25-90	--	--	82	19	8.4	1.3	33	160	157
28N.12E.17. LITTLE	07-24-90	0	80	82	15	7.2	1.2	35	144	153
29N.12E.20.BLM CHI	07-24-90	0	86	88	21	6.9	1.5	33	166	163

LOCAL IDENT- I- FIER	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 ORTH, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
28N.12E.08 BIG ARS	07-24-90	0.700	0.700	<0.010	--	0.90	0.010	<0.010	3	<1
28N.12E.09.BLM VIS	07-23-90	0.700	1.10	0.020	0.18	0.90	<0.010	<0.010	5	<1
28N.12E.09.MOTTI S	07-25-90	0.600	0.600	<0.010	--	--	0.010	0.010	<3	<1
28N.12E.17. LITTLE	07-24-90	0.500	0.500	<0.010	--	--	<0.010	<0.010	7	<1
29N.12E.20.BLM CHI	07-24-90	0.800	0.800	0.050	--	--	0.020	<0.010	10	<1

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM - Continued

DATE	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)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CR) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 05...	0.010	3.8	<1	<1	60	<1	<1.0	4	2	8	2	8
MAR 30...	<0.010	1.6	<1	<1	50	<1	<1.0	3	<5	4	<10	7
MAY 03...	0.020	4.6	<1	<1	80	<1	<1.0	4	2	13	2	9
AUG 14...	0.040	29	2	1	80	<1	<1.0	28	<1	14	4	7

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)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	DI- CHORO- BROMO- METHANE TOTAL (UG/L) (32101)
OCT 05...	4	<1	<0.10	<0.1	1	1	20	4	--	--	--	<0.20
MAR 30...	1	<10	<0.10	<0.1	1	1	10	6	75	0.20	48	<0.20
MAY 03...	6	<1	<0.10	<0.1	1	1	30	<3	307	1.2	50	<0.20
AUG 14...	33	<1	<0.10	0.1	<1	<1	230	7	1560	2.1	58	<0.20

DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	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)	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)	1,2- TRANSDI- CHLORO- ETHENE TOTAL (UG/L) (34546)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER TOTAL (UG/L) (77651)	XYLENE TOTAL WATER TOTAL (UG/L) (81551)
OCT 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
MAR 30...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.8	<0.2	<0.2	<0.2
MAY 03...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
AUG 14...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08379940 GALLINAS CREEK AB BURRO CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)
APR 10...	1015	1028	*9735	3.6	60	6.7	8.5	2.5	40	--	42
MAY 09...	0915	1028	*9735	7.4	59	7.7	9.0	3.0	40	--	45
JUN 20...	0945	1028	*9735	1.7	112	8.6	16.0	9.0	5	8.3	57
JUL 27...	0940	1028	*9735	2.6	130	7.9	20.0	9.5	--	8.6	--
AUG 29...	1530	1028	*9735	3.0	85	8.3	20.0	13.0	--	7.5	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	15	<3.0	<10	<1.0	31	38	--	8.1	<5.0	0.33	74
MAY 09...	15	<3.0	<10	2.0	32	39	--	11	<5.0	0.20	82
JUN 20...	21	1.1	<10	2.0	52	64	0	9.3	6.3	0.23	84
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	3	<0.040	<0.100	--	1.8	0.170	1300	<5	<100	<1	<5
MAY 09...	9	<0.040	0.100	0.24	0.34	0.030	1100	<5	<100	<1	<5
JUN 20...	<3	<0.040	<0.100	--	0.25	0.020	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	1200	<5	<50	<0.50	<50	<5	<1	<50	3	0.03
MAY 09...	<50	730	<5	<50	<0.50	<50	<5	<1	<50	10	0.20
JUN 20...	<50	60	<5	<50	<0.50	<50	<5	<1	<50	8	0.04
JUL 27...	--	--	--	--	--	--	--	--	--	4	0.03
AUG 29...	--	--	--	--	--	--	--	--	--	6	0.05

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380000 GALLINAS CREEK NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
APR 10...	1130	1028	*9735	12	100	6.9	10.5	5.5	30	--	62	18
MAY 09...	1030	1028	*9735	21	92	8.0	14.5	6.5	30	--	57	20
JUN 20...	1120	1028	*9735	3.1	130	9.1	21.0	15.5	5	7.7	58	22
JUL 27...	1110	1028	*9735	8.1	160	8.1	23.0	15.0	--	7.5	--	--
AUG 30...	0830	1028	*9735	9.3	135	8.0	17.0	12.0	--	8.2	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
APR 10...	4.2	<10	<1.0	49	60	--	9.5	<5.0	0.23	88	13
MAY 09...	<3.0	<10	2.0	47	57	--	12	<5.0	0.17	88	13
JUN 20...	1.1	<10	3.0	60	74	0	9.6	6.4	0.27	122	3
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
APR 10...	<0.040	0.100	0.48	0.58	0.130	1000	<5	<100	<1	<5	<50
MAY 09...	<0.040	0.100	0.02	<0.16	0.040	1200	<5	<100	<1	<5	<50
JUN 20...	<0.040	0.100	0.02	<0.16	0.020	<50	<5	<100	<1	<5	<50
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	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)
APR 10...	940	<5	<50	<0.50	<50	<5	<1	<50	<50	11	0.35
MAY 09...	1000	<5	<50	<0.50	<50	<5	<1	<50	--	16	0.92
JUN 20...	150	<5	<50	<0.50	<50	<5	<1	<50	--	6	0.05
JUL 27...	--	--	--	--	--	--	--	--	--	9	0.20
AUG 30...	--	--	--	--	--	--	--	--	--	13	0.33

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380075 PORVENIR CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
APR 10...	1300	1028	*9735	12	90	6.7	10.5	5.0	30	--	55
MAY 09...	1115	1028	*9735	29	82	7.9	13.5	5.5	40	--	45
JUN 20...	1245	1028	*9735	2.4	140	9.0	24.0	17.5	5	7.2	70
JUL 27...	1330	1028	*9735	9.0	101	7.8	23.0	13.5	--	7.8	--
AUG 30...	0945	1028	*9735	7.4	128	8.0	22.0	12.0	--	8.2	--

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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET 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)
APR 10...	20	<3.0	<10	<1.0	44	53	--	9.4	<5.0	0.23	80
MAY 09...	16	<3.0	<10	2.0	40	48	--	12	<5.0	0.18	82
JUN 20...	27	<1.0	<10	3.0	65	79	0	10	6.3	0.24	102
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
APR 10...	22	<0.040	<0.100	--	1.2	0.230	1200	<5	<100	<1	<5
MAY 09...	9	<0.040	0.100	0.09	<0.23	4.54	1200	<5	<100	<1	<5
JUN 20...	<3	<0.040	0.270	0.0	<0.14	0.010	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
APR 10...	<50	960	<5	<50	<0.50	<50	<5	<1	<50	14	0.43
MAY 09...	<50	1000	<5	<50	<0.50	<50	<5	<1	<50	8	0.63
JUN 20...	<50	<50	<5	<50	<0.50	<50	<5	<1	<50	6	0.04
JUL 27...	--	--	--	--	--	--	--	--	--	7	0.17
AUG 30...	--	--	--	--	--	--	--	--	--	2	0.04

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380090 PORVENIR CANYON AT MOUTH NR EL PORVENIR, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
APR 10...	1345	1028	*9735	12	101	7.3	12.5	9.0	25	--	60	
MAY 09...	1315	1028	*9735	32	82	7.9	18.0	10.0	40	--	50	
JUN 20...	1415	1028	*9735	1.0	160	9.2	24.5	24.0	5	6.4	77	
JUL 27...	1505	1028	*9735	10	108	8.0	20.5	17.0	--	7.8	--	
AUG 30...	1200	1028	1028	8.6	135	8.2	24.0	16.0	--	7.5	--	
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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	22	<3.0	<10	<1.0	48	58	--	10	<5.0	0.32	82	
MAY 09...	17	<3.0	<10	2.0	42	51	--	12	<5.0	0.19	86	
JUN 20...	28	1.7	<10	3.0	74	91	0	10	6.6	0.27	116	
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	
AUG 30...	--	--	--	--	--	--	--	--	--	--	--	
DATE		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	<3	<0.040	0.100	0.54	0.64	0.180	800	<5	<100	<1	<5	
MAY 09...	8	<0.040	0.100	0.35	0.45	0.020	1200	<5	<100	<1	<5	
JUN 20...	4	<0.040	<0.100	--	<0.14	0.010	<50	<5	<100	<1	<5	
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	
AUG 30...	--	--	--	--	--	--	--	--	--	--	--	
DATE		COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	540	<5	<50	<0.50	<50	<5	<1	<50	64	2.1	
MAY 09...	<50	850	<5	<50	<0.50	<50	<5	<1	<50	10	0.87	
JUN 20...	<50	140	<5	<50	<0.50	<50	<5	<1	<50	3	0.01	
JUL 27...	--	--	--	--	--	--	--	--	--	9	0.25	
AUG 30...	--	--	--	--	--	--	--	--	--	4	0.09	

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

08380500 GALLINAS CREEK NR MONTEZUMA, NM

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
APR 10...	1500	1028	*9735	29	148	7.6	14.0	13.0	20	--	90
MAY 09...	1545	1028	*9735	53	130	8.3	20.0	14.5	30	--	75
JUN 20...	1600	1028	*9735	5.4	240	9.3	24.0	25.0	5	7.5	120
JUL 27...	1630	1028	*9735	24	178	8.8	18.0	20.5	--	7.4	--
AUG 30...	1400	1028	*9735	24	200	8.7	26.0	19.5	--	7.4	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR-BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR-BONATE WATER WH FET 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)
APR 10...	30	3.6	<10	<1.0	71	87	--	12	<5.0	0.30	106
MAY 09...	24	3.6	<10	2.0	60	73	--	13	<5.0	0.25	102
JUN 20...	38	5.4	<10	6.0	110	130	2	13	7.3	0.26	150
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	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)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
APR 10...	9	<0.040	<0.100	--	0.33	0.130	900	<5	<100	<1	<5
MAY 09...	23	<0.040	0.100	0.23	0.33	0.020	1300	<5	<100	<1	<5
JUN 20...	<3	<0.040	0.100	0.03	<0.17	0.010	<50	<5	<100	<1	<5
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 10...	<50	830	<5	60	<0.50	<50	<5	<1	<50	752	59
MAY 09...	<50	1300	<5	60	<0.50	<50	<5	<1	<50	25	3.6
JUN 20...	<50	130	<5	<50	<0.50	<50	<5	<1	<50	9	0.13
JUL 27...	--	--	--	--	--	--	--	--	--	5	0.32
AUG 30...	--	--	--	--	--	--	--	--	--	9	0.58

* Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

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 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN

RIO GRANDE BELOW LEASBURG DAM, NM (322841106551010)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
JAN 09...	1040	38	1480	8.2	14.5	6.5	1.0	400	180	120	23

DATE	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 DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	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)
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JAN 09...	160	4	7.8	249	7	216	200	360	130	0.40
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DATE	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)
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JAN 09...	18	984	951	<0.010	0.210	0.050	0.050	0.35	<0.010	<0.010
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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)
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JAN 09...	<10	2	84	<0.5	2.0	1	<3	<10	8	<10
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DATE	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)
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JAN 09...	120	46	0.1	<10	<10	<1	<1.0	1400	<6	25
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RIO GRANDE BELOW PICACHO BRIDGE NR LAS CRUCES, NM (321745106492510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
JAN 09...	1330	36	1650	8.3	19.5	12.0	0.20	430	200	130	24

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW PICACHO BRIDGE NR LAS CRUCES, NM (321745106492510) -- Continued

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 09...	190	4	11	263	7	228	207	380	170	0.50

DATE	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)
JAN 09...	19	1090	1060	<0.010	0.180	0.050	0.050	0.55	0.010	0.010

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)
JAN 09...	<10	2	90	<0.5	<1.0	1	<3	<10	5	<10

DATE	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)
JAN 09...	150	29	0.1	<10	<10	<1	<1.0	1500	<6	19

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JAN 09...	1520	29	1650	8.3	20.5	13.5	7.4	400	180	120	23

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 09...	180	4	12	249	10	220	210	350	170	0.60	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510) -- Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, 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)
JAN 09...	1080	1020	1.45	0.250	1.70	1.60	1.30	1.0	1.10	1.00

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)
JAN 09...	10	2	94	<0.5	<1.0	1	<3	<10	13	10

DATE	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)
JAN 09...	140	15	0.1	10	<10	<1	<1.0	1500	<6	36

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L) CACO3 (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)
JAN 10...	0915	26	1680	8.3	5.0	4.0	2.7	400	180	120	24

DATE	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 DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
JAN 10...	180	4	11	249	10	220	215	330	170	0.60	18

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, 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)
JAN 10...	1120	1000	2.32	0.280	2.60	1.00	0.920	1.0	1.40	1.10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510) -- Continued

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)
JAN 10...	<10	2	100	<0.5	<1.0	1	<3	<10	9	10

DATE	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)
JAN 10...	140	29	<0.1	<10	<10	<1	<1.0	1500	<6	10

RIO GRANDE AT TX 259 BRIDGE AT CANUTILLO, TX (315454106360610)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JAN 10...	1150	67	1780	8.4	16.0	9.0	4.7	400	150	120	24

DATE	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 DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	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)
JAN 10...	200	4	13	276	12	246	241	370	180	0.70	19

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 ORTHOS, DIS- SOLVED (MG/L AS P) (00671)
JAN 10...	1140	1080	1.20	0.100	1.30	0.260	0.290	0.74	0.460	0.430

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)
JAN 10...	<10	2	76	<0.5	<1.0	<1	<3	<10	7	<10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

RIO GRANDE BASIN -- Continued

RIO GRANDE AT TX 259 BRIDGE AT CANUTILLO, TX (315454106360610) -- Continued

DATE	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)
JAN 10...	150	24	0.1	<10	<10	<1	<1.0	1500	<6	7

SAN JUAN RIVER BASIN

SAN JUAN RIVER AT DIVERSION, NM (364447107483910)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 26...	1300	260	310	8.4	11.0	10.0	110	33	6.5	18	0.7
JUL 30...	0900	190	--	--	--	--	120	36	6.9	19	0.8

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 26...	1.5	90	57	3.1	--	171	173	<0.100	<1	20
JUL 30...	2.0	92	58	3.4	0.010	175	181	<0.100	1	20

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 26...	<1.0	1	1	<1	<0.1	6	<1	1	8	1.1
JUL 30...	<1.0	<1	2	<1	0.1	<1	<1	2	5	--

DRAIN ABOUT 3.5 MI EAST OF NM HIGHWAY 44, NM (364207107552011)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 03...	1000	8.2	17.0	5.6	130	42	7.1	32	1	2.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DRAIN ABOUT 3.5 MI EAST OF NM HIGHWAY 44, NM (364207107552011) -- Continued
(HAMMOND IRRIGATION PROJECT)

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
AUG 03...	128	68	4.5	0.060	240	234	0.300	1	30
DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AUG 03...	<1.0	<1	3	<1	0.2	<1	<1	3	<3

WEST HAMMOND POND, ABOUT 2.5 MI WEST OF NM HIGHWAY 44, NM (364121108020010)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 13...	1430	0.29	--	8.2	14.0	18.0	290	75	25	200	5
AUG 04...	1000	0.27	1980	8.3	21.5	--	600	190	31	240	4

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 13...	7.7	240	390	65	0.20	996	907	<0.100	1	370
AUG 04...	3.2	163	810	12	0.050	1530	1400	3.20	<1	200
DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 13...	<1.0	1	1	<1	<0.1	2	2	4	<3	6.8
AUG 04...	<1.0	<1	1	<1	0.2	<1	3	1	5	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER 1.0 MI UPSTREAM FROM MOUTH OF GALLEGOS CANYON, NM (364136108062010)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 27...	0930	450	520	8.3	9.0	9.7	150	49	7.8	43	2
JUL 30...	1200	300	460	8.5	19.5	--	170	53	8.3	35	1

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 27...	2.0	106	130	4.3	--	322	300	<0.100	<1	30
JUL 30...	2.2	109	120	4.7	0.020	283	289	<0.100	1	40

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	1	8	<1	<0.1	4	<1	<1	<3	1.2
JUL 30...	<1.0	<1	2	<1	<0.1	<1	<1	2	7	--

SAN JUAN RIVER NR GALLEGOS CANYON, NM (364136108062011)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 27...	0930	450	520	8.3	9.0	9.0	9.7	150	49	7.7	43

DATE	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)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 27...	2	1.9	110	140	5.2	329	313	<0.100	<1	40

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	1	2	<1	<0.1	1	<1	2	6	<1.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WETLAND NEAR SOUTH POND-GALLEGOS CANYON DRAINAGE, 3.0 MI SOUTH OF HIGHWAY 3003, NM (363558108074110)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	1,2-DI- CHLORO- BENZENE	1,3-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE
		TOTAL (UG/L) (34536)	TOTAL (UG/L) (34566)	TOTAL (UG/L) (34571)
AUG 22...	1100	<5.0	<5.0	<5.0

MIDDLE POND-GALLEGOS CANYON DRAINAGE, 0.5 MI NORTH OF HIGHWAY 3003, NM (363841108070210)
(NAVAJO INDIAN IRRIGATION PROJECT)

[illegible]

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C. DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
APR 14...	1.5	192	1000	160	1.7	2290	1990	6.00	<1	340	<1.0
MAY 17...	--	--	--	--	--	--	--	--	--	--	--
AUG 04... 22...	0.70 --	75 --	1200 --	200 --	1.5 --	2390 --	2190 --	5.10 --	1 --	390 --	<1.0 --

[illegible][illegible]

SAN JUAN RIVER BASIN -- Continued

[illegible][illegible][illegible]

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 16...	1500	--	3160	8.4	24.0	6.5	560	170	32	480	9
MAY 17...	1100	--	--	--	--	--	--	--	--	--	--
AUG 02...	1600	1.4	3480	8.2	32.0	5.6	810	260	38	500	8
06...	0900	--	3400	8.3	20.0	7.3	--	--	--	--	--

[illegible]

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

GALLEGOS CANYON 2.0 MI NORTH OF HIGHWAY 3003, NM (364000108065410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	CHROMIUM, 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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	DI- AZINON, TOTAL (UG/L) (39570)
APR 16...	2	2	<1	<0.1	8	8	--	<10	21	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	1.0	--
AUG 02...	1	4	<1	0.1	11	12	6	20	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	<0.01

DATE	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SEVIN, TOTAL (UG/L) (39750)	SILVEX, TOTAL (UG/L) (39760)
APR 16...	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	<0.01	<0.01	--	<0.01
AUG 02...	--	--	--	--	--	--	--	--	--	--
06...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	<0.50	--

ANIMAS RIVER 0.1 MI UPSTREAM FROM MOUTH, NM (364248108130410)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 27...	1400	210	570	8.4	14.5	8.4	230	74	11	23
JUL 30...	1400	10	695	8.4	26.5	7.5	280	91	14	40

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
APR 27...	0.7	2.3	121	120	11	<0.010	341	315	0.200	<1
JUL 30...	1	3.3	150	170	23	0.050	426	431	<0.100	<1

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
APR 27...	50	1.0	1	1	<1	<0.1	1	<1	<1	6
JUL 30...	80	<1.0	<1	4	<1	0.1	<1	<1	<1	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DIVERSION FROM SAN JUAN RIVER, NM (364336108150410)
(FRUITLAND IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 30...	1000	615	8.4	10.5	9.0	190	61	9.5	35	1
AUG 03...	1700	548	8.6	25.5	7.3	190	61	9.6	41	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 30...	2.1	115	130	10	<0.010	340	317	<0.100	<1	40
AUG 03...	2.5	119	150	11	0.020	342	347	0.200	1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 30...	<1.0	1	1	<1	<0.1	1	<1	1	7	<1.0
AUG 03...	<1.0	<1	2	<1	<0.1	<1	<1	1	8	--

FRUITLAND PROJECT DIVERSION, NM (364336108150411)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 30...	1005	615	8.4	10.5	10.5	9.0	190	61	9.5	35	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 30...	2.2	118	140	9.8	<0.010	324	328	<0.100	<1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 30...	<1.0	<1	1	<1	<0.1	1	<1	1	<3	80

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

LA PLATA RIVER AT MOUTH, NM (364410108150410)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 28...	1000	5.4	4470	8.2	10.5	8.8	1300	330	120	580	7
AUG 02...	0900	0.16	1550	8.1	18.5	7.5	430	120	31	180	4

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C 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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 28...	4.0	234	2000	170	0.69	3450	3350	<0.100	<1	190
AUG 02...	2.9	136	410	120	0.20	958	946	<0.100	1	140

DATE	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 28...	<1.0	3	1	<1	<0.1	2	<1	4	<10	11
AUG 02...	<1.0	<1	2	<1	0.2	<1	<1	1	6	--

SOUTHWEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190610)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
APR 18...	0930	2260	7.9	13.0	6.5	610	170	46	220	4	3.9	79
APR 18...	0940	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	1330	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	1400	4620	8.7	26.0	7.9	1600	450	110	450	5	9.1	45

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)
APR 18...	650	180	1.7	1490	1320	<0.100	<1	180	<1.0	2	<1
APR 18...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	1800	560	4.7	3690	3410	<0.100	3	390	<1.0	<1	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190610) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 18...	<1	<0.1	2	2	7	<10	5.9	--	--	--	--
APR 18...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	0.10	0.03	<0.01	<0.01
AUG 05...	<1	0.2	<1	<1	27	10	--	--	--	--	--

SOUTHWEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190611)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
APR 18...	0940	610	170	46	220	4	4.0	80	750	
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
APR 18...	220	3.4	1530	1460	<0.100	<1	180	<1.0	2	
DATE	TIME	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	
APR 18...		1	<1	<0.1	1	2	10	<10	6.3	

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 01...	0900	0.38	3450	8.2	16.0	8.3	1200	350	81	380
AUG 05...	1000	--	3450	8.2	16.0	8.2	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)
	(00931)	(00935)	(90410)	(00945)	(00940)	(71870)	(70300)	(70301)	(00631)	(01000)
AUG 01...	5	1.1	226	1400	160	0.55	2680	2580	16.0	<1
05...	--	--	--	--	--	--	--	--	--	--

DATE	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
	(01020)	(01025)	(01030)	(01040)	(01049)	(71890)	(01060)	(01145)	(01085)
AUG 01...	420	<1.0	<1	1	<1	0.1	9	42	6
05...	--	--	--	--	--	--	--	--	--

DATE	ZINC, DIS- SOLVED (UG/L AS ZN)	DI- AZINON, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	SEVIN, TOTAL (UG/L)
	(01090)	(39570)	(39398)	(39530)	(39600)	(39790)	(39540)	(39786)	(39750)
AUG 01...	10	--	--	--	--	--	--	--	--
05...	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.50

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195411)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
		(00061)	(00095)	(00400)	(00010)	(00300)	(00900)	(00915)	(00925)	(00930)
AUG 01...	0910	0.38	3450	8.2	16.0	8.3	1200	350	82	400

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)
	(00931)	(00935)	(90410)	(00945)	(00940)	(71870)	(70300)	(70301)	(00631)	(01000)
AUG 01...	5	1.1	210	1400	160	1.3	2780	2590	16.0	<1

DATE	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
	(01020)	(01025)	(01030)	(01040)	(01049)	(71890)	(01060)	(01145)	(01085)	(01090)
AUG 01...	410	<1.0	1	1	<1	0.1	8	42	6	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

OJO AMARILLO CANYON 4.0 MI SOUTH OF HIGHWAY 3003, NM (364217108204410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 16...	1100	1.4	3920	8.4	11.5	9.1	980	270	74	600	8	2.0
JUN 20...	0900	--	--	--	--	--	--	--	--	--	--	--

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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
APR 16...	83	1700	180	1.4	3010	2950	16.0	<1	380	<1.0	2	1
JUN 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	ATRA-ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 16...		<1	<0.1	6	33	7	<10	73	--	--	--	--
JUN 20...		--	--	--	--	--	--	--	0.10	0.02	<0.01	<0.01

OJO AMARILLO CANYON 4.0 MI NORTH OF HIGHWAY 3003, NM (364217108204411)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	ATRA-ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
JUN 20...	0910	0.10	<0.10	<0.10	<0.10

WETLAND SOUTH SIDE OF SAN JUAN RIVER 2 MI UPSTREAM FROM FRUITLAND BRIDGE, NM (364333108223410)
(FRUITLAND IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (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)
APR 17...	1700	0.16	6740	8.2	18.5	12.3	490	97	60	1200	24
AUG 01...	1200	0.92	1900	7.9	22.5	8.5	320	94	20	290	7

DATE	TIME	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)
APR 17...		4.0	419	2700	160	0.26	4510	4470	<0.100	1	380
AUG 01...		3.7	196	630	50	0.060	1240	1210	<0.100	2	110

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

WETLAND SOUTH SIDE OF SAN JUAN RIVER 2 MI UPSTREAM FROM FRUITLAND BRIDGE, NM (364333108223410) -- Continued
(FRUITLAND IRRIGATION PROJECT)

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 17...	<1.0	2	<1	<1	<0.1	8	<1	--	<10	20
AUG 01...	<1.0	<1	2	<1	0.2	1	<1	3	15	--

SAN JUAN RIVER NEAR FRUITLAND BRIDGE, NM (364432108241610)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CAO3) (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)
APR 27...	1700	630	600	8.4	16.0	7.8	200	65	10	40	1
JUL 30...	1630	370	580	9.0	27.0	9.5	210	65	11	45	1

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CAO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BORON, DIS- SOLVED (MG/L AS B) (01020)
APR 27...	2.4	120	140	9.3	<0.010	377	340	0.300	1	50
JUL 30...	2.6	128	160	12	0.030	362	372	<0.100	1	50

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 27...	<1.0	2	1	<1	<0.1	1	<1	<1	4	2.2
JUL 30...	<1.0	<1	2	1	<0.1	<1	<1	2	10	--

AVOCET POND, NM (364018108241510)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CAO3) (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)	ALKA- LINITY LAB (MG/L AS CAO3) (90410)
APR 18...	1200	650	8.2	13.5	6.8	210	54	18	58	2	9.3	318
JUN 19...	1200	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	1300	--	--	--	--	130	32	11	210	8	9.9	570

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

AVOCET POND, NM (364018108241510) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COFFER, DIS- SOLVED (UG/L AS CU) (01040)
APR 18...	7.6	13	--	380	351	<0.100	7	110	2.0	2	<1
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	19	26	0.090	896	650	<0.100	48	220	<1.0	1	32

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
APR 18...	<1	<0.1	<1	<1	7	<3	<1.0	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	0.10	<0.10	<0.10	<0.10
JUL 07...	<1	<0.1	11	<1	14	3	--	--	--	--	--

WEST AVOCET POND, NM (364037108245710)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 21...	1000	240	9.7	21.0	8.0	65	16	6.1	21	1

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
AUG 21...	1.6	66	47	2.8	<0.010	146	134	<0.100	2	30

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COFFER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AUG 21...	<1.0	<1	2	1	<0.1	<1	<1	4	<3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

NORTHWEST POND-BLOCK 3, NM (363942108255510)
(NAVJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
AUG 21...	1300	800	7.6	22.0	2.8	190	49	16	88	3
DATE		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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
AUG 21...	17	154	200	37	0.050	532	500	<0.100		5
DATE		BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)
AUG 21...	250	1.0	<1	12	<1	<0.1	<1	1	6	
DATE		ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	DI- AZINON, TOTAL (UG/L) (39570)	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL TRI- THION (UG/L) (39786)	SEVIN, TOTAL (UG/L) (39750)
AUG 21...	7	<0.01	<0.01	<0.01	0.14	<0.01	0.61	<0.01	<0.50	

SHUMWAY ARROYO 0.25 MI UPSTREAM OF FARMERS MUTUAL DITCH, NM (364600108265110)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 29...	1430	0.17	5040	8.4	15.0	15.8	1200	220	150	770	10
DATE		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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 29...	5.0	176	2200	280	0.30	3840	3740	1.00	<1	320	
DATE		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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 29...	<1.0	2	2	<1	<0.1	2	3	7	<10	13	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER ABOVE HOGBACK, NM (364447108320710)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)
AUG 08...	1430	298	8.6	27.5	230	70	12	49	1	2.7

DATE	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 08...	140	180	12	0.30	0.030	0.004	7.3	421	418	<0.100

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
AUG 08...	10	68	50	3	29	16	<1	940	<3

HOGBACK DIVERSION, NM (364445108324810)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
APR 29...	1600	--	652	8.5	12.0	8.9	220	69	11	39	1
AUG 03...	1500	27	685	8.8	26.5	9.2	260	80	14	53	1

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ARSENIC, DIS-SOLVED (MG/L AS AS) (01000)	BORON, DIS-SOLVED (MG/L AS B) (01020)
APR 29...	2.3	124	140	8.0	<0.010	379	345	0.300	1	50
AUG 03...	3.2	151	190	16	0.030	444	447	<0.100	1	70

DATE	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 29...	1.0	1	1	<1	<0.1	1	<1	1	6	2.1
AUG 03...	<1.0	<1	2	<1	<0.1	<1	<1	1	<3	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER BL HOGBACK, NM (363502108342110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)
AUG 09...	0930	140	8.3	25.0	240	77	11	87	2	3.3

DATE	TIME	ALKALINITY LAB (MG/L 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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS NA) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L AS SR) (70301)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 09...	161	270	16	0.20	0.080	0.005	10	567	575	0.600	

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
AUG 09...		<10	95	80	4	30	2	1	970	4

DRAIN AT WETLAND 2.5 MI WEST OF THE HOGBACK, NM (364523108351510)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)
APR 17...	1100	0.14	2800	7.7	14.0	8.3	1300	270	140	190	2
AUG 01...	1400	0.68	2000	7.5	21.5	6.0	970	240	90	120	2

DATE	TIME	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS NA) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L AS NA) (70301)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)	BORON, DIS-SOLVED (MG/L AS B) (01020)
APR 17...	4.5	281	1300	31	0.050	2370	2110	0.300	<1	390	
AUG 01...	6.4	214	910	19	0.050	1520	1520	0.600	1	270	

DATE	TIME	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR 17...	<1.0	1	1	<1	<0.1	6	21	2	<10	27	
AUG 01...	<1.0	<1	1	<1	0.1	2	11	2	10	--	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

DRAIN 2.5 MI WEST OF THE HOGBACK, 0.25 MILE ABOVE WETLAND, NM (364532108350210)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LITY LAB (MG/L CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
SEP 14...	1100	700	170	67	95	2	8.0	234	660

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
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SEP 14...	20	0.030	1260	1160	0.600	<1	210	<1.0
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DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
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SEP 14...	<1	3	1	<0.1	<1	9	4	8
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SOUTHWEST POND-CHINLE WASH DRAINAGE, NM (363537108264710)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 15...	1600	355	11.0	22.0	11.6	35	9.1	3.0	52	4	1.8
JUN 19...	0930	--	--	--	--	--	--	--	--	--	--
AUG 05...	1000	--	--	--	--	--	--	--	--	--	--
05...	1200	840	9.6	18.0	7.8	29	7.0	2.9	180	14	5.1

DATE	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
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APR 15...	87	52	1.1	--	197	171	<0.100	3	80	<1.0	2
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	--	--	--	--	--	--	--	--	--	--	--
05...	284	100	17	0.10	574	483	<0.100	17	300	<1.0	<1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SOUTHWEST POND-CHINLE WASH DRAINAGE, NM (363537108264710) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	ATRA- ZINE, TOTAL (UG/L) (39630)	DI- AZINON, TOTAL (UG/L) (39570)
APR 15...	4	<1	<0.1	3	<1	--	7	1.3	--	--
JUN 19...	--	--	--	--	--	--	--	--	<0.10	--
AUG 05...	--	--	--	--	--	--	--	--	--	--
05...	13	<1	0.2	8	<1	12	6	--	--	<0.01

DATE	ETHION, TOTAL (UG/L) (39398)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	PARA- THION, TOTAL (UG/L) (39540)	TOTAL TRI- THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SEVIN, TOTAL (UG/L) (39750)	SILVEX, TOTAL (UG/L) (39760)
APR 15...	--	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	<0.10	<0.10	--	<0.10
AUG 05...	--	--	--	--	--	--	--	--	--	--
05...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	<0.50	--

CHINLE WASH AT HIGHWAY 5005, NM (363636108255110)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE SOLVED (MG/L AS SO4) (00945)
SEP 14...	1300	94	27	6.5	67	3	1.8	90	130

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
SEP 14...	5.5	0.050	287	293	0.300	<1	30	<1.0

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 14...	<1	6	<1	<0.1	<1	1	2	<3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHINLE WASH NEAR FRUITLAND, NM (363829108285210)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (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)
JUL 07...	1130	0.13	1410	8.6	31.0	27.5	12	230	67	14	230
AUG 09...	1530	0.12	1380	8.6	--	31.0	--	210	59	15	220

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	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)
JUL 07...	7	4.1	121	480	56	0.90	0.080	0.005	8.1	936	934
AUG 09...	7	3.4	103	500	47	0.30	0.090	0.005	6.1	926	914

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUL 07...	<0.100	<10	34	100	10	43	--	3	1400	8
AUG 09...	<0.100	<10	36	90	3	40	2	4	1300	<3

CHACO RIVER AT HOGBACK, NM (364234108315110)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (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)
JUL 06...	1730	3.9	1410	8.5	31.0	20	420	89	48	160	3
AUG 08...	1200	4.4	1500	8.6	29.5	--	450	98	49	170	4

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	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)
JUL 06...	6.5	96	610	48	0.80	0.11	0.009	5.1	1030	1030
AUG 08...	6.8	124	580	51	0.70	0.11	0.009	6.1	1130	1040

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUL 06...	1.20	10	110	440	<3	78	--	3	1700	<3
AUG 08...	1.30	<10	130	440	<3	81	1	2	1800	6

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER BL HOGBACK, NM (364254108334510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 06...	1600	4.1	1560	8.5	33.0	31.5	40	450	97	50	170
AUG 08...	0900	4.1	1430	8.6	--	19.5	--	430	96	46	160

DATE	TIME	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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)
JUL 06...	3	7.3	113	640	51	0.80	0.12	0.009	5.3	1120	1100	
AUG 08...	3	6.4	129	560	48	0.70	0.11	0.009	5.9	1070	1010	

DATE	TIME	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
JUL 06...	1.40	<10	110	470	15	82	--	3	1800	<3	-3.60	
AUG 08...	1.20	10	120	390	3	77	<1	2	1800	4	--	

CHACO RIVER AB CONFLUENCE WITH SAN JUAN RIVER, NM (364601108382910)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	HARD-NESS TOTAL (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)
JUL 06...	1400	3.9	1500	8.6	29.5	49	440	90	52	180	4
AUG 07...	1700	3.9	1700	8.8	29.5	--	440	96	49	210	4

DATE	TIME	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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	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)
JUL 06...	6.9	102	640	53	0.90	0.11	0.007	4.0	948	1090	
AUG 07...	7.6	119	620	57	0.90	0.12	0.008	6.6	1240	1120	

DATE	TIME	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUL 06...	0.700	<10	89	450	<3	82	--	2	1700	<3	
AUG 07...	0.800	<10	130	450	<3	85	2	2	1800	<3	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER 0.5 MI UPSTREAM FROM MOUTH, NM (364614108383810)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (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)
APR 28...	2000	12	1440	8.4	15.5	7.4	170	53	9.7	230
JUL 31...	1500	2.7	1650	8.8	31.5	7.9	470	99	53	190
DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
APR 28...	8	5.3	149	500	41	0.030	918	941	2.80	1
JUL 31...	4	7.9	109	700	58	0.12	1210	1180	0.900	1
DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
APR 28...	190	1.0	1	12	<1	<0.1	6	4	4	9
JUL 31...	480	<1.0	<1	5	<1	0.2	4	2	3	7

MARSH, NORTH SIDE OF SAN JUAN RIVER, 0.6 MI DOWNSTREAM OF MOUTH OF CHACO RIVER, NM (364628108393501)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)	
JUN 20...	--	850	7.7	23.5	4.8	350	100	24	42	1	
AUG 02...	1400	1060	7.7	24.0	4.5	420	120	29	72	2	
DATE		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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
JUN 20...	3.8	179	250	11	0.020	560	538	<0.100	1	90	
AUG 02...	5.1	139	340	24	0.040	728	674	<0.100	1	110	
DATE		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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
JUN 20...	<1.0	1	1	<1	<0.1	2	<1	1	5		
AUG 02...	<1.0	<1	2	<1	0.2	1	<1	1	13		

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER AT SHIPROCK MUNICIPAL DIVERSION, NM (364652108412610)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)	
APR 29...	1730	709	8.5	11.0	9.0	220	70	12	44	1	
AUG 02...	1300	780	8.6	25.0	8.1	290	85	18	60	2	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 29...	3.6	125	160	10	<0.010	403	376	0.300	1	50	
AUG 02...	3.3	150	230	19	0.030	548	505	<0.100	1	60	
DATE		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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 29...	<1.0	2	3	<1	<0.1	1	<1	1	4	1.3	
AUG 02...	<1.0	<1	4	<1	0.2	1	1	2	11	--	

DRAIN EAST SIDE OF SAN JUAN RIVER, 1.5 MI DOWNSTREAM OF U.S.G.S. GAGING STATION (09368000), NM (364843108432910)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
APR 17...	1430	0.08	1160	8.4	18.0	13.5	440	110	40	87	2
AUG 02...	1100	2.0	915	8.1	19.5	7.3	390	100	33	53	1
DATE		POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	ALKA- LINEITY LAB (MG/L) AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	BROMIDE DIS- SOLVED (MG/L) AS BR (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	ARSENIC DIS- SOLVED (UG/L) AS AS (01000)	BORON, DIS- SOLVED (UG/L) AS B (01020)
APR 17...		0.80	227	350	26	0.030	756	751	0.300	1	130
AUG 02...		1.4	155	230	18	0.040	590	528	<0.100	1	100
DATE		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)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO (01060)	SELE- NIUM, DIS- SOLVED (UG/L) AS SE (01145)	VANA- DIUM, DIS- SOLVED (UG/L) AS V (01085)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U (22703)
APR 17...		<1.0	1	1	<1	<0.1	4	2	1	7	7.3
AUG 02...		<1.0	<1	2	<1	0.2	2	2	<1	8	--

GROUND-WATER LEVELS

BERNALILLO COUNTY
Albuquerque Area

350256106390801. Local number, 10N.03E.32.314.

LOCATION.--Lat 35°02'56", long 106°39'08", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 764 ft, perforated 188-764 ft.

INSTRUMENTATION.--Digital recorder, 1-hr. punch.

DATUM.--Elevation of land-surface datum is 4,941 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Lost record, several days, due to recorder malfunction.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.07 ft below land-surface datum, Jan. 5, 1987;

lowest, 41.05 ft below land-surface datum, July 2, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.05	30.51	29.33	28.62	28.23	27.81	30.17	30.96	38.84	40.46	38.46	38.35
10	31.49	30.58	30.15	28.52	29.75	29.29		34.42	39.68	39.56	38.34	38.49
15	33.19	30.52	30.22	28.53	29.37	29.16		34.35	38.53	38.45	37.46	38.55
20	32.65	31.74	29.04	28.99	28.53	29.77		36.75	38.42	36.74	37.91	37.46
25	32.23	31.89	28.80	28.64	28.41	31.48	31.13	37.87	39.71	38.07	36.08	36.94
EOM	31.25	30.30	28.65	28.39	28.23	30.95		38.38	40.33	39.06	37.48	35.13

WTR YEAR 1990 HIGHEST 27.81 MAR 5, 1990 LOWEST 41.05 JUL 2, 1990

351051106395304. Local number, 11N.03E.18.411.

LOCATION.--Lat 35°10'51", long 106°39'53", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, casing diameter 6 in., with 2 in., P.V.C. piezometer set at 980 ft., casing is screened from 870 to 1,050 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,995 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. P.V.C., 1.80 ft. above land-surface datum.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.29 ft below land-surface datum, Feb. 22, 1984; lowest, 37.78 ft below land-surface datum, July 3, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 5	34.54
Aug. 3	37.60

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.

WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter 14 in., depth 436 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 19	268.49
Aug.	not measured

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

332615104303601. Local number, 10S.24E.21.212.

LOCATION.--Lat 33°26'15", long 104°30'36", Hydrologic Unit 13060008. Owner: Pecos Valley Artesian Conservancy District.

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.

REMARKS.--Records good.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.71	43.99	41.93	40.55	39.33	39.08	42.49	44.82	47.58	50.38	50.02	48.99
10	46.49	43.70	41.59	40.45	39.41	39.84	43.29	44.79	47.94	50.65	49.38	48.17
15	46.10	43.42	41.45	40.21	39.15	40.24	43.60	44.61	48.68	50.30	49.06	48.53
20	45.46	42.98	41.19	39.97	39.14	41.36	44.75	45.48	49.26	50.74	47.85	47.79
25	44.93	42.59	41.01	39.77	39.13	41.72	44.20	46.54	49.75	50.73	48.31	47.25
EOM	44.37	42.32	40.81	39.48	39.18	42.34	44.81	47.23	50.70	50.87	49.06	46.67

WTR YEAR 1990 HIGHEST 39.05 FEB 26, 1990 LOWEST 53.13 JUL 20, 1990

332255104360401. Local number, 11S.23E.03.342.

LOCATION.--Lat 33°22'55", long 104°36'04", Hydrologic Unit 13060008. Owner: J. L. Mask.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 15 in., depth 478 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,725 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--Mar. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 156.97 ft below land-surface datum, Mar. 11, 1952; lowest measured, 198.96 ft below land-surface datum, Oct. 18, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	not measured
Aug. 23	184.83

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 water-table irrigation 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, 15.19 ft below land-surface datum, Jan. 13, 1989; lowest measured, 21.72 ft below land-surface datum, Aug. 26, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	15.34
Aug. 23	15.21

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	70.15
Aug. 23	72.00

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

331525104245201. (formerly 331205104245101) Local number, 12S.25E.23.344.

LOCATION.--Lat 33°12'05", long 104°24'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation 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 due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.84 ft below land-surface datum, Feb. 9, 1989; lowest, 199.68 ft below land-surface datum, June 20, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.20	36.23	21.21	17.48	15.90		95.28	91.01	126.69	146.23		
10	58.25	34.24	19.46	17.39	20.91		95.67	84.45	124.79	147.56		
15	48.15	28.45	18.43	17.01	24.20		94.27	92.97	136.87	140.83		
20	45.53	26.06	17.74	16.95	22.92	79.08	109.09	99.66	137.95	145.34		
25	45.49	23.92	16.89	18.49	25.10	86.57	104.16	116.94	138.19			
EOM	43.55	23.58	16.16	15.93	30.15	99.99	92.00	125.39	145.67			

WTR YEAR 1990 HIGHEST 15.90 FEB 5, 1990 LOWEST 156.48 JULY 13, 1990

331524104245101. Local number, 12S.25E.23.344A.

LOCATION.--Lat 33°15'24", long 104°24'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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.

REMARKS.--Records good.

PERIOD OF RECORD.--1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 102.79 ft below land-surface datum, Apr. 6 and 14, 1969; lowest, 111.17 below land-surface datum, Sep. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	104.56	104.70	104.49	104.35	103.99	103.74	103.48	103.74	103.88	104.20	104.62	104.86
10	104.64	104.72	104.42	104.30	104.04	103.73	103.65	103.64	103.98	104.24	104.64	104.88
15	104.58	104.77	104.49	104.22	104.00	103.73	103.49	103.75	103.99	104.33	104.68	104.89
20	104.58	104.66	104.44	104.29	103.97	103.61	103.60	103.81	104.07	104.37	104.80	104.98
25	104.62	104.66	104.44	104.21	103.87	103.63	103.60	103.81	104.13	104.45	104.81	105.00
EOM	104.66	104.64	104.48	104.09	103.95	103.56	103.60	103.84	104.18	104.51	104.84	105.12

WTR YEAR 1990 HIGHEST 103.44 APR 12, 1990 LOWEST 105.22 SEP 29, 1990

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 water-table irrigation 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: Top of casing, 0.80 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	79.43
Aug. 23	87.24

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

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 record due to float line problems.

PERIOD OF RECORD.--1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.23 ft above land-surface datum, Jan. 27, 1989; lowest, 198.30 ft below land-surface datum, July 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		30.39	15.38	11.84		30.98						117.33
10		25.49	12.76	11.89	15.22			94.02			155.54	112.28
15		23.61		10.44	21.33			91.65			117.74	115.16
20		20.66	10.51	10.84	19.61	93.31		82.81			100.33	107.71
25		17.53	9.80	14.40	22.73	98.62					86.26	99.71
EOY	35.07	17.34	8.74	10.34	33.65						110.41	80.10

WTR YEAR 1990 HIGHEST 8.74 DEC 31, 1989 LOWEST 161.16 AUG 10, 1990

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.

WELL CHARACTERISTICS.--Drilled artesian stock well, diameter 8 in., depth 460 ft, casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,844 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 19	289.92
Aug. 24	293.04

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	18.98
Aug. 24	19.02

330404104221201. Local number, 14S.26E.30.444.

LOCATION.--Lat 33°04'04", long 104°22'12", Hydrologic Unit 13060007. Owner: Bartlett.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 1150 ft, cased to 740 ft, open hole 740-1150 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,484 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.19 ft below land-surface datum, Feb. 10, 1988; lowest measured, 261.75 ft below land-surface datum, Aug. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	81.09
Aug. 24	241.97

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

325845104295501. Local number, 15S.24E.25.433.

LOCATION.--Lat 32°58'45", long 104°29'55", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 910 ft, casing 0-548 ft.

INSTRUMENTATION.--Periodic steel-tape, pressure measurements, and Digital recorder with 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 casing, for steel-tape measurements, 1.45 ft. above land-surface.

REMARKS.--Water levels and pressure readings provided by N.M. State Engineer Office and Pecos Valley Artesian Conservancy District.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.10 ft above land-surface datum, Jan. 25, 1990; lowest, 102.30 ft below land-surface datum, July 17, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			+21.44	+19.72	+16.02		46.17	.50	34.25	61.69	35.47	38.12
10				+14.86		3.42	43.08	.21	27.46	60.83	27.15	29.87
15		+18.56	+21.33		+ 7.93	9.70	46.54	4.11	44.37	52.36	26.09	20.71
20					+10.24	19.14	38.82	27.11	44.92	49.84	34.38	3.71
25	+16.94			+21.10		22.10	24.63	54.33	59.41	58.83	19.46	
EOM				+19.48		37.12	15.01	44.45	57.78	57.58	30.95	

WTR YEAR 1990 HIGHEST +21.10 JAN 25, 1990 LOWEST 66.07 JUNE 28, 1990

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 artesian irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	29.40
July 18	28.89

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.

WELL CHARACTERISTICS.--Drilled water-table industrial well, diameter 16 to 12 in., depth 158 ft, perforated to 50 to 150 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, 19.23 ft below land-surface datum, Sep. 29, 1988; lowest measured, 39.08 ft below land-surface datum, Aug. 1, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	22.30
July 18	22.67

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.

WELL CHARACTERISTICS.--Drilled artesian unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	76.58
July 26	78.05

GROUND-WATER LEVELS

CIBOLA COUNTY
Grants-Bluewater Area

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 artesian unused 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, 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.69 ft below land-surface datum, Sep. 29, 1988; lowest measured, 274.81 ft below land-surface datum, Jan. 23, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	93.58
July 25	98.77

351637107584501. Local number, 12N.11W.14.213.

LOCATION.--Lat 35°16'37", long 107°58'45", Hydrologic Unit 13020207. Owner: Duane Berryhill.

AQUIFER.--San Andres Limestone and Yeso Formation of Permian Age.

WELL CHARACTERISTICS.--Drilled test well, diameter 4 in., depth 130.4 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,605 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.70 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 9	83.40
Aug. 8	84.51

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 17	8.00
July 30	8.37

GROUND-WATER LEVELS

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 water-table unused 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, Sep. 2, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	135.40
Aug. 21	135.55

CURRY COUNTY
Clovis area

341825103031301. Local number, 01N.37E.15.13311.

LOCATION.--Lat 34°18'25", long 103°03'13", Hydrologic Unit 12050002. Owner: Levi Robbins.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 248 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,109 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.56 ft above land-surface.

REMARKS.--Recorder installed Aug. 1988.

PERIOD OF RECORD.--Feb. 1954, Jan. 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 137.43 ft above land-surface datum, Feb. 17, 1954; lowest, 230.23 ft below land-surface datum, July 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	221.02	221.34	220.90	220.68	220.43	220.27	224.43	222.56	223.75	228.74	225.65	229.22
10	220.99	221.12	220.88	220.62	220.41	220.25	223.44	223.95	226.44	228.96	228.73	227.43
15	221.00	221.20	220.87	220.58	220.36	220.16	223.73	222.95	226.51	229.12	226.53	226.06
20	221.32	221.49	220.81	220.55	220.37	220.22	223.98	222.79	227.62	230.07	225.16	225.42
25	221.59	221.09	220.78	220.51	220.36	222.25	222.97	224.84	229.23	229.36	226.55	225.16
EOM	221.71	220.99	220.70	220.45	220.36	223.26	224.78	224.33	228.84	226.03	228.15	225.04

WTR YEAR 1990 HIGHEST 220.16 MAR 14, 1990 LOWEST 230.23 JUL 19, 1990

342358103093601. Local number, 02N.36E.15.111.

LOCATION.--Lat 34°23'58", long 103°09'36", Hydrologic Unit 12050001. Owner: Anne Humphreys.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	284.85
Aug. 2	not measured

GROUND-WATER LEVELS

CURRY COUNTY
Clovis area

342736103203701. (formerly 342815103270001). Local number, 03N.34E.23.433.
 LOCATION.--Lat 34°27'36", long 103°20'37", Hydrologic Unit 12050001. Owner: Archie Baker.
 AQUIFER.--Ogallala Formation.
 WELL CHARACTERISTICS.--Drilled water-table unused 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; 0.40 ft above land-surface datum.
 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, 358.70 ft below land-surface datum, Aug. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	357.41
Aug. 27	357.28

343347103345001. Local number, 04N.32E.22.111.
 LOCATION.--Lat 34°33'47", long 103°34'50", Hydrologic Unit 12050001. Owner: Noel Dougherty.
 AQUIFER.--Ogallala Formation.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 401 ft.
 INSTRUMENTATION.--Continuous strip-chart recorder.
 DATUM.--Elevation of land-surface datum is 4,587 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.50 ft above land-surface.
 REMARKS.--Recorder installed Aug. 1988, lost record due to recorder malfunction.
 PERIOD OF RECORD.--Jan. 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 299.23 ft above land-surface datum, Apr. 23, 1990; lowest, 309.92 ft below land-surface datum, Jan. 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	299.83	299.87		299.78	299.72		299.45	299.78	299.56	299.82	299.84	299.59
10	299.92	299.93		299.85	299.64		299.93	299.59	299.78	299.73	299.67	299.57
15	299.73	299.75	299.67	299.67	299.93	299.58	299.57	299.57	299.64	299.54	299.58	299.49
20	299.72	299.85	299.65	299.84	299.68	299.70	299.63	299.54	299.73	299.62	299.72	299.51
25	299.80	299.98	299.62	299.59	299.80		299.47	299.58	299.78	299.59	299.62	299.44
ECM	299.80			299.63		299.59	299.82	299.64	299.89	299.65	299.63	299.65

WTR YEAR 1990 HIGHEST 299.23 APR 23, 1990 LOWEST 300.27 OCT 18, 1989

343745103201501. (formerly 343743103201501). Local number, 05N.34E.21.443.
 LOCATION.--Lat 34°37'45", long 103°20'15", Hydrologic Unit 12050005. Owner: Garrett Farms.
 AQUIFER.--Ogallala Formation.
 WELL CHARACTERISTICS.--Drilled water-table 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. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 439.07 ft below land-surface datum, Aug. 27, 1990; lowest measured, 448.41 ft below land-surface datum, Jan. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	439.18
Aug. 27	439.07

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 water-table 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.
 REMARKS.--"h" indicates well pumped recently.
 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, 446.23b ft Aug. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	445.11
Aug. 27	446.23b

GROUND-WATER LEVELS

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 water-table irrigation 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, 10.10 ft below land-surface datum, Sep. 11, 1989; lowest measured, 25.57 ft below land-surface datum, Apr. 25, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	12.45
Sep. 17	10.73

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	17.63
Sep. 17	17.96

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.--Yeso.

WELL CHARACTERISTICS.--Drilled oil test well, used for stock water, 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	237.50
Aug. 24	240.40

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 artesian irrigation 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, 62.36 ft below land-surface datum, Feb. 10, 1988; lowest measured, 100.54 ft below land-surface datum, Aug. 27, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	61.67
Aug.	not measured

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 water-table unused 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.--Sep. 1937 to Jan. 1966, Aug. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.41 ft below land-surface datum, Aug. 24, 1989; lowest measured, 31.66 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	22.44
Aug. 24	29.10

325638104274801. Local number, 16S.25E.11.111A.

LOCATION.--Lat 32°56'38", long 104°27'48", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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, July 24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.68	58.08	57.51	57.21	57.47	57.81	59.05	60.09	60.91	61.75	62.44	62.67
10	58.68	57.94	57.44	57.18	57.57	58.01	59.28	60.23	61.06	61.89	62.50	62.69
15	58.60	57.84	57.43	57.14	57.61	58.21	59.46	60.36	61.20	61.99	62.57	62.78
20	58.52	57.72	57.37	57.25	57.64	58.42	59.64	60.49	61.33	62.10	62.59	62.86
25	58.39	57.63	57.33	57.34	57.62	58.61	59.80	60.62	61.46	62.21	62.58	62.82
ECM	58.21	57.59	57.29	57.43	57.70	58.83	59.96	60.77	61.61	62.34	62.59	62.70

WTR YEAR 1990 HIGHEST 57.14 JAN 15, 1990 LOWEST 62.89 SEP 20, 1990

325445104253501. Local number, 16S.26E.19.211.

LOCATION.--Lat 32°54'45", long 104°25'35", Hydrologic Unit 13060007. Owner: John Crook.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 160 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,399 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. by 3 in. vertical slot under pump base, at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.60 ft below land-surface datum, Jan. 16, 1969; lowest measured, 112.85 ft below land-surface datum, Sep. 13, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	99.33
Aug. 24	108.48

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 artesian public-supply 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, 514.85 ft below land-surface datum, Jan. 27, 1988; lowest measured, 553.18 ft below land-surface datum, Aug. 7, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	520.08
Aug. 22	530.13

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 artesian observation 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.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.57 ft below land-surface datum, Feb. 20, 1989; lowest, 209.15 ft below land-surface datum, July 31-Aug. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.49	97.32	87.09	78.29	71.88	75.15	105.76	107.20	132.37	151.05	138.30	148.28
10	115.03	95.41	84.98	77.49	72.37	83.45	111.91	105.07	134.72	153.56	133.10	145.63
15	110.40	94.20	83.73	76.56	72.01	88.83	116.72	110.04	139.83	155.00	130.78	140.02
20	107.08	92.06	83.03	75.25	72.63	94.43	120.71	119.34	142.86	153.05	127.61	136.31
25	103.42	89.64	80.09	74.54	72.81	99.39	118.40	127.59	146.39	149.50	134.49	128.07
EOM	100.27	88.62	79.44	73.16	73.25	103.78	111.64	134.09	153.02	146.81	146.70	122.31

WTR YEAR 1990 HIGHEST 71.79 FEB 19, 1990 LOWEST 159.64 JUL 13, 1990

324620104255101. Local number, 18S.26E.06.442B.

LOCATION.--Lat 32°46'20", long 104°25'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table 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.--Records good.

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, Sep. 13, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	130.61	125.85	120.86	117.25	114.14	112.69	118.00	124.02	127.52	132.58	134.46	134.39
10	130.10	125.05	120.19	116.75	113.86	113.14	119.69	123.67	128.46	133.01	133.92	134.89
15	129.27	124.33	119.70	116.15	113.42	113.53	120.87	123.59	128.87	133.38	133.49	135.04
20	128.59	123.31	119.08	115.83	113.14	114.15	121.90	124.12	129.32	133.60	133.12	134.84
25	127.78	122.54	118.49	115.20	112.84	115.29	122.76	125.05	130.47	133.79	132.87	134.08
EOM	126.69	121.79	117.98	114.60	112.94	116.84	123.55	126.66	131.74	134.19	133.48	133.55

WTR YEAR 1990 HIGHEST 112.62 MAR 2, 1990 LOWEST 135.21 SEP 14, 1990

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 water-table observation 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

REMARKS.--Records good.

PERIOD OF RECORD.--Aug. 1951 to current year. above land-surface datum.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.19	122.22	122.24	122.34	122.29	122.23	122.20	122.36	122.27	122.34	122.48	122.56
10	122.24	122.30	122.24	122.36	122.31	122.28	122.25	122.30	122.34	122.38	122.44	122.55
15	122.20	122.27	122.29	122.29	122.26	122.26	122.24	122.28	122.29	122.33	122.46	122.56
20	122.24	122.31	122.35	122.32	122.33	122.32	122.29	122.26	122.30	122.39	122.49	122.58
25	122.25	122.25	122.34	122.33	122.33	122.31	122.22	122.26	122.33	122.38	122.50	122.57
EOM	122.27	122.35	122.29	122.27	122.34	122.25	122.28	122.30	122.36	122.44	122.51	122.64

WTR YEAR 1990 HIGHEST 122.17 OCT 1, 1989 LOWEST 122.66 SEP 23, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

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 water-table irrigation well, diameter 13 in., depth 346 ft, casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,286 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of basal flange of pump head, 0.20 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	37.62
July 18	41.05

EDDY COUNTY

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 water-table municipal well, diameter 20 in., depth 327 ft, casing 0-290 ft.

INSTRUMENTATION.--Digital recorder, 1-hr punch.

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.--Records good.

PERIOD OF RECORD.--April 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.98 ft below land-surface datum, June 14, 1987; lowest measured, 26.07 ft below land-surface datum, Aug. 2, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.67	22.19	21.95	21.97	21.94	22.01	22.44	22.83	23.61	24.31	23.23	23.61
10	22.67	22.19	21.93	22.04	22.01	22.17	22.73	23.10	24.00	24.45	23.09	23.45
15	22.53	22.17	22.00	22.04	22.02	22.21	22.92	23.26	24.17	23.84	23.09	23.46
20	22.41	22.09	22.02	22.10	22.11	22.51	22.84	23.36	24.17	23.69	23.15	23.27
25	22.28	21.98	22.10	22.19	22.23	22.59	22.63	23.55	24.08	23.51	23.17	23.02
EOM	22.19	22.09	22.09	21.95	22.24	22.48	22.74	23.56	24.17	23.32	23.57	23.04

WTR YEAR 1990 HIGHEST 21.93 DEC 10, 1989 LOWEST 24.71 JUL 11, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table domestic 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 24	12.62
Aug. 21	13.93

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.

REMARKS.--Records good.

PERIOD OF RECORD.--1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.13 ft below land-surface datum, June 29, 1987; lowest measured, 98.68 ft below land-surface datum, Aug. 3, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	93.87	93.40	93.15	93.17	93.12	93.18	93.62	94.12	94.90	95.60	94.62	94.99
10	93.85	93.38	93.10	93.21	93.20	93.31	93.98	94.31	95.29	95.77	94.49	94.89
15	93.69	93.48	93.23	93.23	93.23	93.42	94.14	94.55	95.46	95.26	94.49	94.84
20	93.59	93.31	93.20	93.31	93.32	93.71	94.10	94.65	95.39	95.01	94.55	94.70
25	93.46	93.20	93.28	93.36	93.36	93.70	93.91	94.82	95.40	94.85	94.61	94.45
EOM	93.34	93.32	93.31	93.16	93.47	93.74	94.02	94.88	95.53	94.71	94.94	94.49

WTR YEAR 1990 HIGHEST 93.10 DEC 10, 1989 LOWEST 96.03 JUL 12, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

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 water-table unused 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 casing, 0.40 ft above land-surface datum.

REMARKS.--Records good.

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, Sep. 15, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.66	157.87	152.36	149.18	147.75	147.34	151.36	158.68	163.43	167.46	170.33	169.29
10	161.84	156.92	151.65	148.88	147.65	147.79	153.35	158.67	164.52	167.95	170.07	170.17
15	161.22	155.99	151.18	148.47	147.39	148.46	155.09	159.09	165.24	168.45	169.36	170.97
20	161.22	154.91	150.62	148.54	147.61	149.59	156.42	159.49	166.27	168.39	169.05	171.55
25	160.11	153.94	150.26	148.32	147.62	150.11	157.69	160.94	167.31	168.85	169.30	171.12
EOM	158.76	153.32	149.70	147.89	147.73	150.49	158.20	162.42	167.33	169.85	169.26	170.16

WTR YEAR 1990 HIGHEST 147.34 MAR 5, 1990 LOWEST 171.76 SEP 22, 1990

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 water-table irrigation 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.--Sep. 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, Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	33.91
Aug. 21	54.73

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 water-table observation well, diameter 16 in. 0-20 ft, open hole 20-900 ft.

INSTRUMENTATION.--Digital recorder, 1-hr punch.

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.--Records good.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	399.71	399.38	399.12	399.14	399.27	399.42	399.66	400.19	401.10	402.00	400.97	400.81
10	399.78	399.47	399.08	399.28	399.38	399.70	400.16	400.35	401.35	402.19	400.50	400.74
15	399.71	399.33	399.08	399.28	399.35	399.47	400.07	400.71	401.61	401.62	400.51	400.72
20	399.64	399.29	399.00	399.30	399.40	399.93	400.05	400.67	401.84	401.37	400.52	400.50
25	399.56	399.17	399.19	399.38	399.59	399.90	399.89	401.06	401.86	401.24	400.52	400.34
EOM	399.46	399.30	399.10	399.25	399.50	399.62	400.09	401.30	402.01	401.09	400.78	400.37

WTR YEAR 1990 HIGHEST 398.94 DEC 18, 1989 LOWEST 402.37 JUL 10, 1990

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

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 water-table irrigation well, diameter 16 in., depth 200 ft.
 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, Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	55.74
Aug. 21	54.29

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 water-table irrigation 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, 50.12 ft below land-surface datum, Aug. 22, 1988;
 lowest measured, 85.10 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	52.24
Aug. 27	54.77

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 water-table irrigation 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, 35.31 ft below land-surface datum, Aug. 22, 1988;
 lowest measured, 54.98 ft below land-surface datum, Sep. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	38.72
Aug. 27	40.00

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 water-table unused 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.
 REMARKS.--Records good.
 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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	288.86	288.78	288.58	288.47	288.20	288.63	289.28	289.70	289.71	290.35	290.36	290.52
10	289.05	288.83	288.49	288.64	288.63	288.87	289.59	289.42	289.84	290.37	290.24	290.48
15	288.75	288.80	288.56	288.35	288.52	289.00	289.39	289.55	289.80	290.19	290.17	290.55
20	289.00	288.79	288.73	288.44	288.94	289.35	289.54	289.55	289.95	290.29	290.16	290.58
25	288.75	288.59	288.72	288.57	289.03	289.23	289.36	289.62	290.07	290.28	290.17	290.62
EOM	288.81	288.79	288.49	288.15	289.03	289.21	289.42	289.66	290.25	290.31	290.14	290.72

WTR YEAR 1990 HIGHEST 288.15 JAN 31, 1990 LOWEST 290.82 SEP 30, 1990

GROUND-WATER LEVELS

GUADALUPE COUNTY
Santa Rosa Area

350414104485101. Local number, 10N.20E.28.2214.

LOCATION.--Lat 35°04'14", long 104°48'51", Hydrologic Unit 13060001. Owner: Town of Santa Rosa.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 12 3/4 in. casing 0-514 ft, 10 3/4 in. 505-575 ft, casing perforated 515-575 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 5,162.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.10 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 345.64 ft below land-surface datum, Oct. 17, 1988; lowest measured, 362.36 ft below land-surface datum, Apr. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	350.25	350.78	351.60	352.33	353.05	353.67	353.84	352.98	351.53	351.75	351.41	350.65
10	350.33	350.95	351.73	352.58	353.19	353.87	353.90	352.67	351.43	351.85	351.19	350.68
15	350.69	351.15	351.95	352.56	353.21	353.91	353.59	352.54	351.28	351.77	350.98	350.79
20	350.38	351.26	352.05	352.72	353.42	354.10	353.48	352.29	351.39	351.65	351.48	350.67
25	350.43	351.33	352.19	352.87	353.59	354.18	353.19	352.10	351.90	351.29	350.64	350.55
EOM	350.61	351.53	352.38	352.93	353.70	354.00	353.14	351.79	351.64	351.41	350.53	350.51

WTR YEAR 1990 HIGHEST 350.13 OCT 1, 1989 LOWEST 354.63 MAR 25, 1990

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 water-table municipal 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: 3/4" plugged hole, east side, 1.50 ft above land-surface datum.

REMARKS.--Submersible pump installed in 1984.

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, 55.76 ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	50.47
Aug. 1	51.18

HIDALGO COUNTY
Virden Valley

324051108594101. (formerly 324053108594101). Local number, 19S.21W.03.414.

LOCATION.--Lat 32°40'51", long 108°59'41", Hydrologic Unit 15040002. Owner: Jones, Clouse, and Jensen.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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. 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.27 ft below land-surface datum, Jan. 12, 1979; lowest measured, 15.79 ft below land-surface datum, Aug. 4, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	10.91
July 9	14.30

GROUND-WATER LEVELS

HIDALGO COUNTY
Lordsburg Area

321849108392001. (formerly 321848108391401). Local number, 23S.18W.12.333.

LOCATION.--Lat 32°18'49", long 108°39'20", Hydrologic Unit 15040003. Owner: R. I. McDonald.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 220 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,240 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.--Apr. 1957 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. 7, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	167.66
July 9	171.46

321248108331401. (formerly 321257108331201). Local number, 24S.17W.14.442.

LOCATION.--Lat 32°12'48", long 108°33'14", Hydrologic Unit 15040003. Owner: E. W. Richens.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., depth 420 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,265 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1955 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 8	87.98
July 9	88.72

Animas Valley

321624108504001. (formerly 321540108514101). Local number, 23S.20W.25.422.

LOCATION.--Lat 32°16'24", long 108°50'40", Hydrologic Unit 15040003. Owner: Kerr Cattle Co.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 0.40 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, 53.44 ft below land-surface datum, July 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 10	51.29
July 11	53.44

315610108493501. (formerly 315645108493501). Local number, 27S.19W.20.343.

LOCATION.--Lat 31°56'10", long 108°49'35", Hydrologic Unit 15040003. Owner: Felix Gauthier.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 358 ft, cased to 358 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,414 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.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.90 ft below land-surface datum, July 29, 1949; lowest measured, 198.50 ft below land-surface datum, Aug. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 10	179.21
July 11	184.59

GROUND-WATER LEVELS

HIDALGO COUNTY
San Simon Valley

315738109004001. Local number, 27S.21W.17.124.

LOCATION.--Lat 34°57'38", long 109°00'40", Hydrologic Unit 15040006. Owner: E. J. Bagwell.

AQUIFER.--Bolson.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 220 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,100 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in west side of pump base, 1.00 ft above land-surface.

PERIOD OF RECORD.--Jan. 1978, Jan. 1980, July 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.98 ft above land-surface datum, Jan. 10, 1980; lowest, 125.56 ft below land-surface datum, July 16, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 9	124.94
July 10	125.54

315048109010201. (formerly 315010108570001). Local number, 28S.21W.30.222.

LOCATION.--Lat 31°50'48", long 109°01'02", Hydrologic Unit 15040006. Owner: C. L. Johnston.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.88 ft below land-surface datum, Jan. 15, 1969; lowest measured, 124.93 ft below land-surface datum, July 16, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 9	122.12
July 10	122.61

Playas Valley

313502108275001. Local number, 31S.16W.33.233.

LOCATION.--Lat 31°35'02", long 108°27'50", Hydrologic Unit 15020006. Owner: U-Bar Ranch.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 654 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,404 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. 1965 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, Sep. 4, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	46.84
July 13	46.87

312938108302301. Local number, 32S.16W.30.134.

LOCATION.--Lat 31°29'38", long 108°30'23", Hydrologic Unit 13030201. Owner: C. C. Edwards.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 150 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,490 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4 in. pipe nipple inside pump shell, 1.45 ft above land-surface datum.

REMARKS.--a indicates pumping water level.

PERIOD OF RECORD.--Mar. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 85.11 ft below land-surface datum, Mar. 27, 1952; lowest measured, 129.10a ft below land-surface datum, Aug. 20, 1962.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	87.35
July 13	87.51

GROUND-WATER LEVELS

LEA COUNTY
Tatum-Lovington-Hobbs Area

332115103403301. Local number, 11S.32E.24.113.

LOCATION.--Lat 33°21'15", long 103°40'33", Hydrologic Unit 12080001. Owner: Paul Hamilton.

AQUIFER.--Ogallala.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 1/2 in., depth 110 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,336 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft. above land-surface.

REMARKS.--Lost record, several days, due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 59.74 ft above land-surface datum, Oct. 03 1989; lowest, 61.72 ft below land-surface datum, Sept. 28, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.75	59.79	59.85				60.65	60.96	61.24	61.42	61.54	61.57
10	59.75	59.80	59.85				60.71	60.99	61.27	61.45	61.55	61.56
15	59.75	59.81					60.75	61.06	61.28	61.48	61.55	
20	59.76	59.80				60.46	60.82	61.11	61.32	61.50	61.56	
25	59.76	59.84				60.52	60.87	61.15	61.35	61.53	61.56	
EOM	59.77	59.84				60.60	60.90	61.20	61.38	61.54	61.57	

WTR YEAR 1990 HIGHEST 59.74 OCT 3, 1989 LOWEST 61.58 SEP 9, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	30.98
Aug. 28	31.24

330455103251301. Local number, 14S.35E.28.1111.

LOCATION.--Lat 35°04'55", long 103°25'13", Hydrologic Unit 12080003. Owner: Paul Fisher.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 137 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,031 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.09 ft below land-surface datum, Jan. 6, 1982; lowest measured, 43.80 ft below land-surface datum, Sept. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	43.25
Aug. 28	43.40

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	67.48
Aug. 28	67.73

GROUND-WATER LEVELS

405

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 water-table unused 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.

REMARKS.--Record good.

PERIOD OF RECORD.--Aug. 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.63 ft below land-surface datum, Mar. 13, 1990; lowest measured, 67.11 ft below land-surface datum, Aug. 24, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.91	59.87	59.80	59.77	59.70	59.65	59.66	59.75	59.85	60.07	60.17	60.03
10	59.93	59.88	59.77	59.77	59.69	59.65	59.72	59.72	59.91	60.09	60.10	60.02
15	59.89	59.89	59.79	59.74	59.68	59.66	59.68	59.74	59.93	60.10	60.07	60.04
20	59.91	59.86	59.78	59.75	59.69	59.68	59.71	59.77	59.98	60.10	60.07	60.06
25	59.89	59.84	59.78	59.74	59.69	59.70	59.69	59.78	60.03	60.12	60.06	60.06
EOM	59.88	59.85	59.77	59.71	59.70	59.68	59.71	59.78	60.07	60.12	60.03	60.09

WTR YEAR 1990 HIGHEST 59.63 MAR 13, 1990 LOWEST 60.18 JUL 25, 1990

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.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	65.31
Aug. 28	66.88

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.

WELL CHARACTERISTICS.--Drilled water-table observation 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, 174.79 ft below land-surface datum, Aug. 7, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	172.80
Aug. 28	173.60

325132103112501. Local number, 17S.38E.07.111A.

LOCATION.--Lat 32°51'32", long 103°11'25", Hydrologic Unit 12080003. Owner: L. R. Seblings.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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, 1.91 ft above land-surface datum.

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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	69.77
Aug. 28	66.48

GROUND-WATER LEVELS

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.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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, Sep. 4, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 3	62.24
Aug. 28	62.98

LINCOLN COUNTY
Hondo Valley

333242105340701. Local number, 09S.14E.10.132.
 LOCATION.--Lat 33°32'42", long 105°34'07", Hydrologic Unit 13060008. Owner: Village of Capitan.
 AQUIFER.--Mancos Shale of Late Cretaceous Age.
 WELL CHARACTERISTICS.--Drilled water-table municipal 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	38.43
Aug. 22	38.66

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 water-table unused 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	59.97
Aug. 22	59.70

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 water-table domestic and stock well, diameter 12 in., depth 125 ft, cased to 110 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,989 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, 44.43 ft below land-surface datum, Aug. 18, 1988; lowest measured, 60.18 ft below land-surface datum, Jan. 15, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 22	46.57
Aug. 23	45.39

GROUND-WATER LEVELS

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.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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.
 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, 189.21 ft below land-surface datum, Jan. 4, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 4	189.21
Aug.	not measured

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.--Bolson Deposits.
 WELL CHARACTERISTICS.--Dug and drilled water-table unused 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 1989 TO SEPTEMBER 1990

DATE	LEVEL
Jan. 24	100.80
July	not measured

321415107565501. Local number, 24S.11W.14.122.
 LOCATION.--Lat 32°14'15", long 107°56'55", Hydrologic Unit 13030202. Owner: Charles Waldrop.
 AQUIFER.--Bolson Deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., reported depth 350 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	166.83
July 2	172.60

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.--Bolson Deposits.
 WELL CHARACTERISTICS.--Drilled artesian irrigation 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 4,090 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
 REMARKS.--"c" indicates nearby well pumping.
 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	28.17
July 2	82.94c

GROUND-WATER LEVELS

LUNA COUNTY
Mimbres Valley

320915104294501. Local number, 25S.06W.07.211.

LOCATION.--Lat 32°09'15", long 104°29'45", Hydrologic Unit 13030202. Owner: H. C. Telles.

AQUIFER.--Bolson Deposits.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	84.98
July 2	84.96

315525107374501. Local number, 27S.08W.35.122.

LOCATION.--Lat 31°55'25", long 107°37'45", Hydrologic Unit 13030202. Owner: M. M. Gibson.

AQUIFER.--Bolson Deposits.

WELL CHARACTERISTICS.--Drilled water-table unused irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	75.68
July 2	76.78

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	38.09
July 2	38.50

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 2	11.81
July 2	11.44

GROUND-WATER LEVELS

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 CHARACTERISTICS.--Drilled water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 20	4.97
Aug. 20	2.76

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb.	not measured
Sep. 10	100.80

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 water-table irrigation 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, Sep. 15, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	92.83
Aug. 27	92.72

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 water-table irrigation 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 26	58.36
Aug. 27	65.47

GROUND-WATER LEVELS

QUAY COUNTY
House Area

343848103555801. Local number, 05N.28E.23.222232.

LOCATION.--Lat 34°38'48", long 103°55'58", Hydrologic Unit 13060004. Owner: Jimmy Snipes.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled water-table stock well, diameter 6 in., depth 93.5 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,126 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, west side, 2.00 ft above land-surface datum.

REMARKS.--"b" indicates well pumped recently.

PERIOD OF RECORD.--Jan. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.90 ft below land-surface datum, Mar. 16 and June 15, 1990; lowest measured, 84.22b ft below land-surface datum, Feb. 18, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 16	74.90
Sep. 13	74.92

343855103482901. (formerly 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.

WELL CHARACTERISTICS.--Drilled water-table irrigation 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 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL
Jan. 12	44.00
June 15	44.52

344406103555501. Local number, 06N.28E.13.33333.

LOCATION.--Lat 34°44'06", long 103°55'55", Hydrologic Unit 13060004. Owner: Jack Jennings.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 16 in., depth 131 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,816 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4 in. hole in cover plate, 0.40 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.47 ft below land-surface datum, Jan. 20, 1948; lowest measured, 119.28 ft below land-surface datum, Sep. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan.	not measured
Sep. 13	119.28

GROUND-WATER LEVELS

QUAY COUNTY
House Area

344339103552201. (formerly 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.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 131 ft, cased to 131 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,785 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 14	96.12
June	not measured

Northern High Plains

353239103111301. Local number, 15N.35E.11.22111.
 LOCATION.--Lat 35°32'39", long 103°11'13", Hydrologic Unit 11080006. Owner: J. L. Smith.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 175 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,126 ft above National Geodetic Vertical Datum of 1929. Measuring point: 2 1/2 in. hole, in east side of casing, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--July 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.59 ft below land-surface datum, July 12, 1989; lowest measured, 114.67 ft below land-surface datum, Feb. 5, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 12	90.34
July 20	90.39

354238103132301. Local number, 17N.35E.16.221.
 LOCATION.--Lat 35°42'38", long 103°13'23", Hydrologic Unit 11090101. Owner: L. C. Morrison.
 AQUIFER.--Dakota Formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter unknown, depth 250 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,465 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in south side of pump base, 2.00 ft. above land-surface datum.
 PERIOD OF RECORD.--Oct. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 159.67 ft below land-surface datum, Apr. 27, 1990; lowest measured, 171.59 ft below land-surface datum, Sep. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Apr. 27	159.67
July 20	162.39

GROUND-WATER LEVELS

ROOSEVELT COUNTY
Portales Valley

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 water-table unused well, diameter 18 in., depth 105 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

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.

REMARKS.--Lost record, several days, due to recorder malfunction.

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 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	84.32	84.27	84.14	84.10	83.93	83.85	83.75	83.70	83.63			83.88
10	84.32	84.23	84.12	84.08	83.94	83.85	83.78	83.64				83.89
15	84.31	84.28	84.18	84.05	83.93	83.84	83.72	83.65				83.92
20	84.29	84.18	84.15	84.08	83.93	83.79	83.73	83.67				83.94
25	84.28	84.19	84.12	84.04	83.90	83.82	83.70	83.64				83.94
EOB	84.25	84.16	84.13	83.97	83.92	83.77	83.71	83.64			83.86	83.95

WTR YEAR 1990 HIGHEST 83.62 MAY 18, 1990 LOWEST 84.40 OCT 5, 1989

340753103083101. Local number, 02S.36E.14.311.

LOCATION.--Lat 34°07'53", long 103°08'31", Hydrologic Unit 12050001. Owner: Glen McAfee.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 151 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,938 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 5.00 ft. above land-surface.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.37 ft above land-surface datum, Jan. 6, 1975; lowest, 60.77 ft below land-surface datum, Jan. 11, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.58	64.83	64.46	64.37	64.12	64.14	64.59	64.79	70.32	70.60	66.95	76.71
10	65.71	64.54	64.43	64.26	64.13	64.12	64.69	64.84	69.04	78.94	68.78	67.84
15	64.58	65.31	64.37	64.23	64.32	64.09	64.20	65.10	77.52	69.78	67.56	68.73
20	64.56	64.64	64.31	64.20	64.29	64.06	64.24	66.42	77.26	77.54	67.04	67.62
25	64.77	64.52	64.29	64.17	64.17	64.01	67.24	67.31	68.53	79.05	66.83	67.37
EOB	64.50	64.95	64.51	64.17	64.25	64.40	65.17	68.18	78.54	67.65	78.17	67.55

WTR YEAR 1990 HIGHEST 63.95 MAR 27, 1990 LOWEST 79.44 JUL 25, 1990

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 water-table irrigation 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 3,939 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.

REMARKS.--a means well pumping during measurement.

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, 115.21a ft below land-surface datum, Aug. 11, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan.	not measured
Aug. 28	94.76

GROUND-WATER LEVELS

SANDOVAL COUNTY
Bernalillo Area

352235106282401. Local number, 13N.04E.12.112.
 LOCATION.--Lat 35°22'35", long 106°28'24", Hydrologic Unit 13020201. Owner: John Bowers.
 AQUIFER.--Valley Fill
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 50 ft, cased.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 5,117 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, 20.94 ft below land-surface datum, Sep. 9, 1987; lowest measured, 25.27 ft below land-surface datum, Jan. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 23	24.14
Sep. 21	21.03

SANTA FE COUNTY
Estancia Valley

350534106024801. (formerly 350525106025001). Local number, 10N.08E.13.133.
 LOCATION.--Lat 35°05'34", long 106°02'48", Hydrologic Unit 13050001. Owner: W. R. Irby.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 513 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,274 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.
 REMARKS.--c indicates nearby well pumping, a indicates well pumping during measurement.
 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, 181.55a ft below land-surface datum, Aug. 4, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	137.80
Aug. 30	150.34c

350344106004601. (formerly 350340106005001). Local number, 10N.09E.29.133.
 LOCATION.--Lat 35°03'44", long 106°00'46", Hydrologic Unit 13050001. Owner: Phil Wallen.
 AQUIFER.--Glorieta Sandstone of Permian Age.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 14 in., reported depth 200 ft, cased to 140 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,248 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. 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.00 ft below land-surface datum, May 4, 1949; lowest measured, 124.46 ft below land-surface datum, Aug. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	107.45
Aug.	not measured

GROUND-WATER LEVELS

SANTA FE COUNTY
Santa Fe Area

353636106021001. Local number, 16N.08E.13.444.

LOCATION.--Lat 35°36'36", long 106°02'10", Hydrologic Unit 13020201. Owner: Harold Nelson.

AQUIFER.--Tesuque Formation of Santa Fe Group.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 1/2 in., depth 337 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,400 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 256.04 ft below land-surface datum, Jan. 20, 1982; lowest measured, 262.91 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 27	262.35
Aug. 31	262.91

353753105580501. Local number, 16N.09E.10.42114.

LOCATION.--Lat 35°37'53", long 105°58'05", Hydrologic Unit 13020201. Owner: Paul Ragel.

AQUIFER.--Ancha Formation of Santa Fe Group.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in., depth 243 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,720 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. plug in cover plate, 6.00 ft below land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 149.52 ft below land-surface datum, Dec. 11, 1957; lowest measured, 227.11 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 27	226.24
Aug. 31	227.11

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 water-table irrigation 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, 220.95 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 27	215.37
Aug. 31	220.95

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.

WELL CHARACTERISTICS.--Drilled water-table unused 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 in. hole in west side of pump base, 0.50 ft above top of casing, and 1.50 ft above land-surface datum. Pipe, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 25, 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.18 ft below land-surface datum, Sep. 11, 1989; lowest measured, 65.56 ft below land-surface datum, Feb. 25, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	51.18
Sep. 14	50.37

GROUND-WATER LEVELS

Sierra County
Hot Springs Area

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 water-table irrigation 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, Sep. 11, 1975; lowest, 41.97 ft below land-surface datum, Feb. 29, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	41.66
Sep. 14	39.38

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 water-table unused well, diameter 10 in., depth 32 ft, cased to 32 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,198 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.29 ft below land-surface datum, Feb. 12, 1987; lowest measured, 25.95 ft below land-surface datum, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 28	20.61
Sep. 14	22.10

TAOS COUNTY
Sunshine Valley

365035105360501. (formerly 365036105355301). Local number, 30N.13E.18.1121.

LOCATION.--Lat 36°50'35", long 105°36'05", Hydrologic Unit 13020101. Owner: U. S. Government.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 10 in., depth 500 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 7,597 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--Sep. 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 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	70.86
Aug. 21	70.89

GROUND-WATER LEVELS

TAOS COUNTY
Sunshine Valley

365644105363501. (formerly 365650105370001). Local number, 01S.74W.24.244.
 LOCATION.--Lat 36°56'44", long 105°36'35", Hydrologic Unit 13020101. Owner: Dimmitt.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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, 186.79 ft below land-surface datum, Mar. 3, 1989; lowest measured, 213.53 ft below land-surface datum, Aug. 10, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	187.98
Aug. 21	187.86

365410105345601. (formerly 365410105354501). Local number, 02S.73W.05.244.
 LOCATION.--Lat 36°54'10", long 105°34'56", Hydrologic Unit 13020101. Owner: Unknown.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table domestic and stock well, diameter 6 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 7,590 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, 72.77 ft below land-surface datum, Aug. 17, 1988; lowest measured, 84.78 ft below land-surface datum, Jan. 27, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Mar. 19	75.13
Aug. 21	73.56

TORRANCE COUNTY
Estancia Valley

343443106024401. Local number, 04N.09E.07.334.
 LOCATION.--Lat 34°34'43", long 106°02'44", Hydrologic Unit 13050001. Owner: Franklin Development.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused 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 northwest side of pump base, 1.50 ft above land-surface datum.
 REMARKS.--"c" indicates nearby well pumping.
 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, 93.91 ft below land-surface datum, Aug. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 12	81.79
Aug. 30	90.87c

344016106070901. (formerly 344016106064701). Local number, 05N.08E.08.424.
 LOCATION.--Lat 34°40'16", long 106°07'09", Hydrologic Unit 13050001. Owner: J. J. Spangler.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 204 ft, cased to 98 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,218 ft above National Geodetic Vertical Datum of 1929. Measuring point: .75 inch plug in south side of discharge pipe, 1.80 ft above land-surface datum.
 PERIOD OF RECORD.--Mar. 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, Sep. 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	123.51
Aug.	not measured

GROUND-WATER LEVELS

TORRANCE COUNTY
Estancia Valley

344234106070601. (formerly 344234106074901). Local number, 06N.08E.32.212.
 LOCATION.--Lat 34°42'34", long 106°07'06", Hydrologic Unit 13050001. Owner: Robert Mc Math.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., reported depth 209 ft, cased to 84 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,174 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, Sep. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	80.19
Aug. 30	81.29

344604105574601. (formerly 344622105575501). Local number, 06N.09E.11.211.
 LOCATION.--Lat 34°46'04", long 105°57'46", Hydrologic Unit 13050001. Owner: Paragon Corp.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation 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.--May 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.07 ft below land-surface datum, May 4, 1949; lowest measured, 28.25 ft below land-surface datum, July 19, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	12.65
Aug. 30	16.03

345908106024901. (formerly 345900106034301). Local number, 09N.08E.24.332.
 LOCATION.--Lat 34°59'08", long 106°02'49", Hydrologic Unit 13050001. Owner: Unknown.
 AQUIFER.--Valley Fill
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,205 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.--Jan. 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, 85.95 ft below land-surface datum, Aug. 30, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Feb. 13	82.57
Aug. 30	85.95

UNION COUNTY
Clayton Area

355144103041201. (formerly 360940103083501). Local number, 19N.36E.23.244.
 LOCATION.--Lat 35°51'44", long 103°04'12", Hydrologic Unit 11090102. Owner: Stevens.
 AQUIFER.--Dakota and Purgatoire Sandstone.
 WELL CHARACTERISTICS.--Drilled water-table unused 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 indicates nearby well pumping during measurement.
 PERIOD OF RECORD.--Nov. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.22 ft below land-surface datum, Mar. 17, 1971; lowest measured, 158.58c ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 11	148.29
July 19	148.35

GROUND-WATER LEVELS

UNION COUNTY
Clayton Area

361847103064701. (formerly 361910103170501). Local number, 24N.36E.17.244.
 LOCATION.--Lat 36°18'47", long 103°06'47", Hydrologic Unit 11090103. Owner: Glen Burrows.
 AQUIFER.--Ogallala Formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 20 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 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.38 ft below land-surface datum, May 8, 1968; lowest measured, 94.59 ft below land-surface datum, Jan. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 11	94.59
July	not measured

Capulin Area

364444104000201. (formerly 364430103595501). Local number, 29N.28E.18.341.
 LOCATION.--Lat 36°44'44", long 104°00'02", Hydrologic Unit 11040001. Owner: City of Raton.
 AQUIFER.--Cinders.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 78 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,820.8 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.
 REMARKS.-- a indicates well pumping during measurement.
 PERIOD OF RECORD.--July 1951, Aug. 1958 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.01 ft below land-surface datum, Feb. 8, 1974; lowest measured, 53.38a ft below land-surface datum, Aug. 7, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL
Jan. 17	34.16
July 30	34.36

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE) U-UPPER, M-MIDDLE, L-LOWER:
000 EXRV-UNKNOWN, Extrusive Rocks; 000 IRSV-UNKNOWN, Intrusive Rocks; 110 AVMB-Cenozoic, Quaternary, Alluvium, Bolson Deposits and other Surface Deposits; 110 BLSN-Cenozoic, Quaternary, Bolson Fill; 122 SNTFL-Cenozoic, Tertiary, Miocene, Santa Fe Group, Lower Part; 210 CRCS-Mesozoic, Cretaceous, Cretaceous System; 210-MNCS-Mesozoic, Cretaceous, Mancos Shale; 211 MVRD-Mesozoic, Upper Cretaceous, Mesaverde Group; 221 MRSN-Mesozoic, Upper Jurassic, Morrison Formation; 231 CHNL-Mesozoic, Upper Triassic, Chinle Formation; 231 SNRS-Mesozoic, Upper Triassic, Santa Rosa Sandstone; 310 GLRT-Paleozoic, Permian, Glorieta Sandstone; Member of San Andres Formation of Manzano Group; 313 BRNL-Paleozoic, Permian, Guadalupian, Bernal Formation of Artesia Group; 313 SADG-Paleozoic, Permian, Guadalupian, San Andres Limestone and Glorieta Sandstone; 325 MDER-Paleozoic, Middle Pennsylvanian, Des Moinesian, Madera Limestone; 325 MDERU-Paleozoic, Middle Pennsylvanian, Des Moinesian, Madera Limestone, Upper Arkosic Limestone Member; 400 PCMB-Paleozoic, Precambrian, Precambrian Erathem.

REMARKS.--Ground Water sites in this table are segregated by county which appear alphabetically. The sites are then listed in ascending local indentifiers.

BERNALILLO COUNTY

BERNARDINE COUNTY							ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT		
08N.06E.02.331	345630106172301	001	GW	08-28-90	1225	325MDER	7380	28	4.0
08N.06E.11.222	345628106162601	001	GW	08-27-90	1300		7262	9	10
08N.06E.14.131	345516106170901	001	GW	08-28-90	1605		7287	7	3.0
08N.06E.23.211	345446106164301	001	GW	08-27-90	1800	325MDER	7362	16	10
08N.07E.12.323	345312106093301	001	GW	09-04-90	1128		6520	11	10
08N.07E.16.141	345535106122001	001	GW	09-05-90	1810	325MDER	6715	8	7.0
08N.07E.28.221	345348106122601	001	GW	08-24-90	1700	325MDER	6660	24	3.0
08N.07E.29.321 POHL	345323106140001	001	GW	08-29-90	1346		--	3	12
08N.07E.29.324A DOW	345319106135101	001	GW	01-17-90	1605	325MDER	6790	10	--
		001	GW	02-15-90	1241	325MDER	6790	--	--
		001	GW	03-21-90	1652	325MDER	6790	10	--
		001	GW	04-12-90	1421	325MDER	6790	17	--
		001	GW	05-16-90	0927	325MDER	6790	12	--
		001	GW	06-13-90	1005	325MDER	6790	17	--
		001	GW	07-13-90	0932	325MDER	6790	10	--
		001	GW	08-21-90	1102	325MDER	6790	15	--
		001	GW	09-17-90	1147	325MDER	6790	10	4.0
08N.07E.34.222	345254106111201	001	GW	09-05-90	1425		6705	31	4.0
09N.05E.12.213	350130106212501	001	GW	07-27-90	1335	325MDER	7160	5	6.0
09N.05E.12.214 GILLEN	350131106211601	001	GW	07-27-90	1020		--	8	8.0
09N.05E.12.241 STANTON	350119106210901	001	GW	01-12-90	1150	325MDER	--	--	--
		001	GW	02-15-90	0950		--	--	--
		001	GW	03-16-90	0928		--	--	--
		001	GW	04-13-90	0917		--	15	--
		001	GW	05-23-90	0815		--	5	--
		001	GW	06-12-90	1232		--	11	--
		001	GW	07-24-90	0925		--	10	--
		001	GW	08-21-90	0838		--	8	--
		001	GW	09-18-90	1107		--	12	4.0
09N.05E.12.421 NAEB	350111106210901	001	GW	07-27-90	1715		--	6	4.0
09N.05E.20.331	345909106194901	001	GW	07-30-90	1245	325MDER	7520	12	3.0
09N.06E.07.341 STURGEON	350058106203701	001	GW	08-16-90	1300	325MDER	--	21	3.0
09N.06E.17.142 OAK FLATS	345956106192301	001	GW	06-24-90	1020	325MDER	--	--	--
09N.06E.18.131	350032106202301	001	GW	08-28-90	1915	325MDER	7280	19	3.0
09N.06E.19.413 CLAYTON	345918106202001	001	GW	01-12-90	1015	325MDER	7660	--	--
		001	GW	02-14-90	1210	325MDER	7660	--	--
		001	GW	03-21-90	1207	325MDERU	7660	14	--
		001	GW	04-13-90	1119	325MDER	7660	5	--
		001	GW	05-21-90	0956	325MDER	7660	5	--
		001	GW	06-15-90	0812	325MDER	7660	5	--
		001	GW	07-18-90	1225	325MDER	7660	3	--
		001	GW	08-22-90	1403	325MDER	7660	4	12
		001	GW	09-18-90	1355	325MDER	7660	4	6.0
09N.06E.20.333 BUSTER	345858106194601	001	GW	01-11-90	1050	325MDER	7490	--	--
		001	GW	02-14-90	1440	325MDERU	7490	--	--
		001	GW	03-21-90	1402	325MDERU	7490	12	--
		001	GW	04-13-90	1426	325MDERU	7490	11	--
		001	GW	05-16-90	1318	325MDERU	7490	12	--
		001	GW	06-13-90	1355	325MDERU	7490	14	--
		001	GW	07-13-90	1327	325MDERU	7490	8	--
		001	GW	08-22-90	1239	325MDERU	7490	10	--
		001	GW	09-20-90	1132	325MDERU	7490	9	6.0
09N.06E.22.234	345924106165501	001	GW	08-20-90	1334	325MDERU	7342	9	6.0
09N.06E.22.333	345900106174101	001	GW	08-22-90	1211	325MDER	7416	3	2.0
09N.06E.22.334	345900106173501	001	GW	08-29-90	1025	325MDER	7415	11	10
09N.06E.26.244	345832106154501	001	GW	08-25-90	1755	325MDER	7180	7	4.0
09N.06E.29.114	345847106194201	001	GW	08-07-90	1720	325MDER	7462	12	6.0
09N.06E.29.142	345844106192301	001	GW	08-07-90	1205	325MDER	7520	17	10
09N.06E.29.244 MOSIER	345833106185101	001	GW	01-11-90	1245	325MDER	7420	--	--
		001	GW	02-14-90	1625	325MDER	7420	--	--
		001	GW	03-21-90	1532	325MDER	7420	8	--
		001	GW	04-13-90	1256	325MDER	7420	9	--
		001	GW	05-16-90	1132	325MDER	7420	12	--
		001	GW	06-13-90	1208	325MDER	7420	7	--
		001	GW	07-13-90	1141	325MDER	7420	8	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
08N.06E.02.331	08-28-90	620	7.1	29.0	15.0	--	300	83	22	32
08N.06E.11.222	08-27-90	1280	7.1	28.0	14.0	--	550	180	25	49
08N.06E.14.131	08-28-90	650	7.4	31.0	12.5	--	320	78	30	21
08N.06E.23.211	08-27-90	650	7.1	26.0	14.5	--	270	81	16	58
08N.07E.12.323	09-04-90	550	7.8	25.0	15.0	--	170	39	18	55
08N.07E.16.141	09-05-90	800	7.5	20.0	14.5	--	350	120	11	54
08N.07E.28.221	08-24-90	750	7.2	27.0	13.0	--	380	130	13	29
08N.07E.29.321	PO 08-29-90	880	7.8	30.0	16.0	--	120	27	12	160
08N.07E.29.324A	DO 01-17-90	710	7.3	--	--	--	--	--	--	--
	02-15-90	760	7.4	--	11.5	--	--	--	--	--
	03-21-90	705	7.3	17.5	12.0	--	--	--	--	--
	04-12-90	710	7.3	15.0	12.0	--	350	120	12	31
	05-16-90	720	7.3	14.0	12.5	--	--	--	--	--
	06-13-90	700	7.3	22.0	16.0	--	--	--	--	--
	07-13-90	720	7.3	19.5	15.5	--	--	--	--	--
	08-21-90	710	7.3	25.0	15.0	--	--	--	--	--
	09-17-90	700	7.3	20.5	14.0	--	--	--	--	--
08N.07E.34.222	09-05-90	700	8.3	24.0	16.5	--	88	20	9.3	130
09N.05E.12.213	07-27-90	820	7.1	32.0	13.0	--	--	<3.0	<1.0	140
09N.05E.12.214	GI 07-27-90	1110	7.0	31.0	13.0	--	510	160	28	41
09N.05E.12.241	STA 01-12-90	1030	7.1	--	11.0	--	--	--	--	--
	02-15-90	--	7.2	--	11.0	--	--	--	--	--
	03-16-90	1190	7.2	--	10.5	5.2	--	--	--	--
	04-13-90	1180	7.1	16.0	11.0	--	520	160	30	46
	05-23-90	1180	7.1	23.5	12.0	--	--	--	--	--
	06-12-90	1160	7.2	26.0	14.0	--	--	--	--	--
	07-24-90	1140	7.3	20.5	11.5	--	--	--	--	--
	08-21-90	1130	7.3	21.0	11.5	--	--	--	--	--
	09-18-90	1130	7.5	22.5	13.0	--	--	--	--	--
09N.05E.12.421	NA 07-27-90	1010	7.1	30.0	15.0	--	490	150	29	39
09N.05E.20.331	07-30-90	1000	7.2	28.0	12.0	--	470	160	17	19
09N.06E.07.341	ST 08-16-90	1000	7.1	22.5	12.5	--	500	150	30	31
09N.06E.17.142	OA 06-24-90	820	7.3	--	13.5	--	420	110	35	23
09N.06E.18.131	08-28-90	710	7.2	27.0	14.0	--	350	99	26	32
09N.06E.19.413	CLA 01-12-90	710	8.3	--	14.5	--	--	--	--	--
	02-14-90	710	8.3	--	14.5	0.5	--	--	--	--
	03-21-90	710	8.3	17.0	15.0	--	--	--	--	--
	04-13-90	720	8.2	14.5	14.5	--	52	9.0	7.1	150
	05-21-90	710	8.2	20.0	14.0	--	--	--	--	--
	06-15-90	720	8.1	--	17.5	--	--	--	--	--
	07-18-90	750	8.1	26.0	15.0	--	--	--	--	--
	08-22-90	720	8.1	16.0	14.0	--	--	--	--	--
	09-18-90	695	8.1	22.5	14.5	--	--	--	--	--
09N.06E.20.333	BUS 01-11-90	1020	7.1	--	10.0	--	--	--	--	--
	02-14-90	1080	7.1	--	10.0	--	--	--	--	--
	03-21-90	1160	7.2	16.5	10.5	--	--	--	--	--
	04-13-90	1150	7.1	18.5	10.5	--	560	200	14	24
	05-16-90	1200	7.1	15.0	11.0	--	--	--	--	--
	06-13-90	1210	7.1	30.0	13.5	--	--	--	--	--
	07-13-90	1130	7.1	24.0	11.5	--	--	--	--	--
	08-22-90	1130	7.0	24.5	11.0	--	--	--	--	--
	09-20-90	1090	7.1	19.5	14.5	--	--	--	--	--
09N.06E.22.234	08-20-90	1100	7.2	20.0	13.0	--	490	160	21	39
09N.06E.22.333	08-22-90	600	7.3	13.0	12.0	--	260	77	16	37
09N.06E.22.334	08-29-90	500	7.5	28.0	16.0	--	210	58	15	34
09N.06E.26.244	08-25-90	1250	7.1	--	13.0	--	620	190	35	37
09N.06E.29.114	08-07-90	800	7.8	32.0	14.0	--	170	29	24	120
09N.06E.29.142	08-07-90	1030	7.1	25.0	14.0	--	500	150	30	30
09N.06E.29.244	MOS 01-11-90	1280	7.2	--	13.0	--	--	--	--	--
	02-14-90	1270	7.2	--	13.0	2.2	--	--	--	--
	03-21-90	1260	7.2	17.5	13.5	--	--	--	--	--
	04-13-90	1290	7.1	--	13.0	--	510	140	39	71
	05-16-90	1300	7.1	14.0	13.0	--	--	--	--	--
	06-13-90	1310	7.2	23.5	16.0	--	--	--	--	--
	07-13-90	1270	7.1	21.5	14.5	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
08N.06E.02.331	08-28-90	0.8	4.3	--	--	--	215	37	27
08N.06E.11.222	08-27-90	0.9	3.4	--	--	--	123	110	230
08N.06E.14.131	08-28-90	0.5	4.6	--	--	--	269	41	47
08N.06E.23.211	08-27-90	2	2.6	--	--	--	291	42	18
08N.07E.12.323	09-04-90	2	3.8	--	--	--	216	44	23
08N.07E.16.141	09-05-90	1	1.4	--	--	--	312	87	49
08N.07E.28.221	08-24-90	0.6	0.70	--	--	--	251	59	40
08N.07E.29.321 PO	08-29-90	6	6.8	--	--	--	336	74	37
08N.07E.29.324A DO	01-17-90	--	--	--	--	--	--	--	25
	02-15-90	--	--	--	--	--	--	--	27
	03-21-90	--	--	--	--	--	--	--	27
	04-12-90	0.7	1.2	--	--	--	328	42	27
	05-16-90	--	--	--	--	--	--	--	31
	06-13-90	--	--	--	--	--	--	--	28
	07-13-90	--	--	--	--	--	--	--	26
	08-21-90	--	--	--	--	--	--	--	26
	09-17-90	--	--	--	--	--	--	--	23
08N.07E.34.222	09-05-90	6	3.1	300	2	249	252	73	34
09N.05E.12.213	07-27-90	--	1.6	--	--	--	88	36	51
09N.05E.12.214 GI	07-27-90	0.8	2.1	--	--	--	279	59	150
09N.05E.12.241 STA	01-12-90	--	--	--	--	--	--	--	110
	02-15-90	--	--	--	--	--	--	--	130
	03-16-90	--	--	--	--	--	--	--	160
	04-13-90	0.9	1.6	--	--	--	299	53	160
	05-23-90	--	--	--	--	--	--	--	150
	06-12-90	--	--	--	--	--	--	--	160
	07-24-90	--	--	--	--	--	--	--	150
	08-21-90	--	--	--	--	--	--	--	140
	09-18-90	--	--	--	--	--	--	--	140
09N.05E.12.421 NA	07-27-90	0.8	2.1	--	--	--	260	64	120
09N.05E.20.331	07-30-90	0.4	1.1	--	--	--	155	47	160
09N.06E.07.341 ST	08-16-90	0.6	1.5	--	--	--	172	68	130
09N.06E.17.142 OA	06-24-90	0.5	4.0	--	--	--	360	71	45
09N.06E.18.131	08-28-90	0.7	2.3	--	--	--	211	52	37
09N.06E.19.413 CLA	01-12-90	--	--	--	--	--	--	--	27
	02-14-90	--	--	--	--	--	--	--	28
	03-21-90	--	--	--	--	--	--	--	21
	04-13-90	9	3.9	--	--	--	325	21	28
	05-21-90	--	--	--	--	--	--	--	24
	06-15-90	--	--	--	--	--	--	--	27
	07-18-90	--	--	--	--	--	--	--	35
	08-22-90	--	--	--	--	328	--	--	34
	09-18-90	--	--	--	--	--	--	--	28
09N.06E.20.333 BUS	01-11-90	--	--	--	--	--	--	--	140
	02-14-90	--	--	--	--	--	--	--	150
	03-21-90	--	--	--	--	--	--	--	160
	04-13-90	0.4	1.0	--	--	--	281	48	160
	05-16-90	--	--	--	--	--	--	--	200
	06-13-90	--	--	--	--	--	--	--	180
	07-13-90	--	--	--	--	--	--	--	170
	08-22-90	--	--	--	--	--	--	--	190
	09-20-90	--	--	--	--	--	--	--	180
09N.06E.22.234	08-20-90	0.8	1.4	--	--	--	98	88	180
09N.06E.22.333	08-22-90	1	1.8	--	--	--	245	53	29
09N.06E.22.334	08-29-90	1	2.4	--	--	--	215	45	24
09N.06E.26.244	08-25-90	0.6	2.0	--	--	--	171	240	150
09N.06E.29.114	08-07-90	4	9.6	--	--	--	293	49	71
09N.06E.29.142	08-07-90	0.6	3.3	--	--	--	116	66	150
09N.06E.29.244 MOS	01-11-90	--	--	--	--	--	--	--	170
	02-14-90	--	--	--	--	--	--	--	160
	03-21-90	--	--	--	--	--	--	--	150
	04-13-90	1	5.6	--	--	--	317	120	150
	05-16-90	--	--	--	--	--	--	--	180
	06-13-90	--	--	--	--	--	--	--	170
	07-13-90	--	--	--	--	--	--	--	150

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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)
08N.06E.02.331	08-28-90	1.3	14	350	--	<0.010	<0.100	<0.100	<0.010
08N.06E.11.222	08-27-90	0.40	17	689	--	<0.010	<0.100	<0.100	<0.010
08N.06E.14.131	08-28-90	0.70	16	400	--	<0.010	0.100	0.100	<0.010
08N.06E.23.211	08-27-90	0.80	15	408	--	<0.010	<0.100	<0.100	<0.010
08N.07E.12.323	09-04-90	0.70	15	336	--	<0.010	1.80	1.80	0.040
08N.07E.16.141	09-05-90	0.60	17	536	--	<0.010	1.90	1.90	0.040
08N.07E.28.221	08-24-90	0.50	18	466	--	<0.010	5.50	5.80	<0.010
08N.07E.29.321	PO 08-29-90	1.1	9.2	529	--	<0.010	<0.100	<0.100	<0.010
08N.07E.29.324A	DO 01-17-90	--	--	--	--	<0.010	2.10	--	0.030
	02-15-90	--	--	--	--	<0.010	2.20	--	<0.010
	03-21-90	--	--	--	--	<0.010	2.10	--	<0.010
	04-12-90	0.10	19	458	--	<0.010	2.10	2.10	<0.010
	05-16-90	--	--	--	--	<0.010	2.20	--	<0.010
	06-13-90	--	--	--	--	<0.010	2.30	--	0.020
	07-13-90	--	--	--	--	<0.010	2.40	--	0.030
	08-21-90	--	--	--	--	<0.010	2.20	--	0.010
	09-17-90	--	--	--	--	<0.010	2.10	--	<0.010
08N.07E.34.222	09-05-90	1.1	11	437	--	<0.010	1.30	1.30	0.040
09N.05E.12.213	07-27-90	0.20	17	--	--	<0.010	2.30	2.40	0.020
09N.05E.12.214	GI 07-27-90	0.40	16	645	--	<0.010	4.60	4.80	<0.010
09N.05E.12.241	STA 01-12-90	--	--	--	--	<0.010	2.80	--	0.030
	02-15-90	--	--	--	--	<0.010	2.90	--	<0.010
	03-16-90	--	--	--	--	<0.010	5.90	--	0.010
	04-13-90	0.20	17	666	--	<0.010	4.20	4.20	<0.010
	05-23-90	--	--	--	--	<0.010	4.30	--	<0.010
	06-12-90	--	--	--	--	<0.010	4.30	--	0.010
	07-24-90	--	--	--	--	<0.010	4.00	--	0.010
	08-21-90	--	--	--	--	<0.010	3.80	--	0.020
	09-18-90	--	--	--	--	<0.010	4.10	--	<0.010
09N.05E.12.421	NA 07-27-90	1.0	14	583	--	<0.010	1.60	1.70	<0.010
09N.05E.20.331	07-30-90	0.30	16	526	--	<0.010	2.60	2.80	<0.010
09N.06E.07.341	ST 08-16-90	0.40	16	536	--	<0.010	1.30	1.40	<0.010
09N.06E.17.142	OA 06-24-90	0.20	13	519	--	<0.010	0.600	0.500	0.050
09N.06E.18.131	08-28-90	0.50	17	395	--	<0.010	0.600	0.600	<0.010
09N.06E.19.413	CLA 01-12-90	--	--	--	--	<0.010	<0.100	--	0.040
	02-14-90	--	--	--	--	<0.010	<0.100	--	0.050
	03-21-90	--	--	--	--	<0.010	<0.100	--	0.050
	04-13-90	4.4	11	430	--	<0.010	<0.100	<0.100	0.050
	05-21-90	--	--	--	--	<0.010	<0.100	--	0.040
	06-15-90	--	--	--	--	<0.010	<0.100	--	0.060
	07-18-90	--	--	--	--	<0.010	<0.100	--	<0.010
	08-22-90	--	--	--	--	<0.010	<0.100	--	<0.010
	09-18-90	--	--	--	--	<0.010	<0.100	--	0.040
09N.06E.20.333	BUS 01-11-90	--	--	--	--	<0.010	5.80	--	0.040
	02-14-90	--	--	--	--	<0.010	6.10	--	<0.010
	03-21-90	--	--	--	--	<0.010	9.10	--	<0.010
	04-13-90	0.10	21	680	--	<0.010	9.40	9.80	<0.010
	05-16-90	--	--	--	--	<0.010	13.0	--	<0.010
	06-13-90	--	--	--	--	<0.010	<0.100	--	0.020
	07-13-90	--	--	--	11.0	0.010	11.0	--	0.130
	08-22-90	--	--	--	--	<0.010	9.80	--	0.030
	09-20-90	--	--	--	--	<0.010	8.20	--	<0.010
09N.06E.22.234	08-20-90	0.20	16	583	--	<0.010	4.30	4.30	<0.010
09N.06E.22.333	08-22-90	0.40	18	380	--	<0.010	0.200	0.200	<0.010
09N.06E.22.334	08-29-90	0.60	19	327	--	<0.010	<0.100	<0.100	<0.010
09N.06E.26.244	08-25-90	0.40	16	788	--	<0.010	3.30	3.30	0.010
09N.06E.29.114	08-07-90	1.0	15	495	--	<0.010	<0.100	0.100	0.130
09N.06E.29.142	08-07-90	0.10	14	524	--	<0.010	2.50	2.50	0.010
09N.06E.29.244	MOS 01-11-90	--	--	--	--	<0.010	3.50	--	0.030
	02-14-90	--	--	--	--	<0.010	3.40	--	<0.010
	03-21-90	--	--	--	--	<0.010	3.10	--	<0.010
	04-13-90	0.70	17	749	2.88	0.020	2.90	3.40	<0.010
	05-16-90	--	--	--	--	<0.010	2.90	--	<0.010
	06-13-90	--	--	--	--	<0.010	3.20	--	0.030
	07-13-90	--	--	--	--	<0.010	3.00	--	0.020

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
08N.06E.02.331	08-28-90	--	--	<0.010	0.5	110	27	28	0.02
08N.06E.11.222	08-27-90	--	--	<0.010	3.9	90	11	<1	0.12
08N.06E.14.131	08-28-90	--	--	<0.010	1.0	150	8	2	0.02
08N.06E.23.211	08-27-90	--	--	0.020	1.7	160	<3	<1	0.04
08N.07E.12.323	09-04-90	0.26	2.1	<0.010	0.9	160	<3	<1	0.02
08N.07E.16.141	09-05-90	0.26	2.2	0.010	3.0	100	13	5	0.03
08N.07E.28.221	08-24-90	--	6.3	<0.010	2.1	40	4	1	0.08
08N.07E.29.321	PO 08-29-90	--	--	<0.010	1.6	260	3	8	0.03
08N.07E.29.324A	DO 01-17-90	--	--	0.030	1.9	40	--	--	0.05
	02-15-90	--	2.5	0.010	1.9	50	20	--	0.05
	03-21-90	--	--	0.020	1.6	40	30	--	0.05
	04-12-90	--	--	0.020	2.0	50	21	2	0.04
	05-16-90	--	2.4	0.020	1.8	40	20	--	0.05
	06-13-90	0.48	2.8	0.030	1.8	40	60	--	0.05
	07-13-90	0.17	2.6	0.030	2.3	40	10	--	0.03
	08-21-90	0.49	2.7	0.020	1.8	40	20	--	0.03
	09-17-90	--	2.3	0.070	1.8	40	30	--	0.03
08N.07E.34.222	09-05-90	--	--	<0.010	0.5	240	<3	<1	0.01
09N.05E.12.213	07-27-90	0.48	2.8	0.020	1.2	40	20	21	0.05
09N.05E.12.214	GI 07-27-90	--	5.2	0.020	1.6	40	11	<1	0.07
09N.05E.12.241	STA 01-12-90	--	--	0.030	1.9	50	--	--	0.06
	02-15-90	--	3.4	0.020	1.8	50	<10	--	0.09
	03-16-90	--	--	0.010	1.5	40	20	--	0.08
	04-13-90	--	4.6	0.010	2.0	50	5	<1	0.09
	05-23-90	--	4.6	0.010	1.9	40	30	--	0.07
	06-12-90	0.49	4.8	0.020	2.2	50	10	--	0.09
	07-24-90	0.59	4.6	0.010	1.8	50	10	--	0.08
	08-21-90	0.48	4.3	0.020	1.9	40	20	--	0.09
	09-18-90	--	4.6	0.030	1.9	50	30	--	0.07
09N.05E.12.421	NA 07-27-90	--	2.1	0.010	1.8	70	5	1	0.05
09N.05E.20.331	07-30-90	--	3.1	0.020	2.6	30	<3	<1	0.07
09N.06E.07.341	ST 08-16-90	--	1.6	0.020	2.2	40	--	<1	0.06
09N.06E.17.142	OA 06-24-90	0.45	1.1	<0.010	1.6	70	6	3	0.03
09N.06E.18.131	08-28-90	--	--	<0.010	1.0	80	8	<1	0.04
09N.06E.19.413	CLA 01-12-90	--	--	<0.010	0.7	270	--	--	<0.01
	02-14-90	0.75	--	0.010	0.6	270	<10	--	0.04
	03-21-90	0.25	--	<0.010	0.2	260	10	--	0.01
	04-13-90	--	--	<0.010	0.5	280	8	<1	0.02
	05-21-90	--	--	<0.010	0.3	270	<10	--	0.02
	06-15-90	--	--	<0.010	0.2	280	<10	--	0.02
	07-18-90	--	--	<0.010	0.5	270	<10	--	0.01
	08-22-90	--	--	0.010	0.6	260	20	--	0.07
	09-18-90	--	--	0.030	0.5	270	20	--	0.01
09N.06E.20.333	BUS 01-11-90	0.36	6.2	0.030	3.6	30	--	--	0.10
	02-14-90	--	6.6	0.020	3.0	30	10	--	0.11
	03-21-90	--	9.8	0.040	3.0	30	20	--	0.12
	04-13-90	--	10	0.030	3.4	30	<3	<1	0.12
	05-16-90	--	14	0.030	3.3	30	20	--	0.15
	06-13-90	0.58	--	0.040	3.4	40	<10	--	0.16
	07-13-90	0.57	12	0.050	3.9	40	20	--	0.12
	08-22-90	0.57	10	0.030	3.1	30	20	--	0.12
	09-20-90	--	8.7	0.020	3.4	40	20	--	0.11
09N.06E.22.234	08-20-90	--	5.2	0.020	3.6	50	<3	<1	0.09
09N.06E.22.333	08-22-90	--	--	<0.010	0.6	100	6	4	0.02
09N.06E.22.334	08-29-90	--	--	<0.010	0.5	140	<3	7	0.03
09N.06E.26.244	08-25-90	0.39	3.7	<0.010	3.5	60	8	<1	0.08
09N.06E.29.114	08-07-90	0.37	--	<0.010	1.8	240	8	4	0.02
09N.06E.29.142	08-07-90	0.49	3.0	<0.010	2.0	60	4	<1	0.07
09N.06E.29.244	MOS 01-11-90	0.37	3.9	0.030	4.3	120	--	--	0.08
	02-14-90	--	3.7	<0.010	4.0	120	20	--	0.10
	03-21-90	--	3.8	0.010	3.7	110	30	--	0.08
	04-13-90	--	3.4	0.010	4.2	120	18	4	0.08
	05-16-90	--	3.5	0.020	4.3	120	40	--	0.09
	06-13-90	0.77	4.0	<0.010	4.6	120	380	--	0.09
	07-13-90	0.48	3.5	<0.010	4.5	120	30	--	0.07

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)
09N.06E.29.244 MOSIER	345833106185101	001	GW	08-21-90	1252	325MDER	7420	8	
		001	GW	09-17-90	1347	325MDER	7420	10	
09N.06E.29.332 DENNISON	345816106193801	001	GW	08-10-90	1345	325MDER	--	23	
09N.06E.30.432 SHEPHARD	345813106201201	001	GW	08-08-90	1330	325MDER	--	17	
09N.06E.31.131	345750106204901	001	GW	09-06-90	1710	325MDER	7440	15	
09N.06E.31.413 NEWSTEDS	345729106202001	001	GW	09-06-90	1022	325MDER	--	6	
09N.06E.32.442	345722106185901	001	GW	08-24-90	1215	325MDER	7430	10	
09N.06E.34.242A	345747106164301	001	GW	08-16-90	1730	325MDER	7165	17	
09N.06E.34.431	345721106171201	001	GW	08-21-90	1555	325MDER	7260	23	
10N.04.5E.25.124 FIFER	350400106273801	001	GW	05-08-90	1200	400FCMB	--	24	
10N.04.5E.25.144C WALL	350345106273501	001	GW	09-20-90	1305	110AVMB	5780	16	
10N.04.5E.25.234B	350347106271901	001	GW	05-09-90	1920	400FCMB	5840	26	
10N.05E.02.233A SOUTHWICK	350721106222101	001	GW	01-12-90	1740	231SNRS	6765	--	
		001	GW	02-13-90	1555		6765	--	
		001	GW	03-19-90	1110		6765	10	
		001	GW	04-11-90	1302		6765	15	
		001	GW	05-21-90	1320		6765	--	
		001	GW	06-15-90	1052		6765	5	
		001	GW	07-18-90	1028		6765	6	
		001	GW	08-17-90	1137		6765	--	
		001	GW	09-13-90	1021		6765	5	
10N.05E.02.241 CANDELARIA	350729106220501	001	GW	05-09-90	1600		--	--	
10N.05E.02.414 TEXACO STA	350709106221301	001	GW	04-27-90	1045		--	10	
10N.05E.10.423	350617106230901	001	SP	04-16-90	1620	310GLRT	--	--	
10N.05E.11.324 CUSHING	350615106223301	001	GW	01-10-90	1515	210MNCS	6580	--	
		001	GW	02-16-90	1244	210MNCS	6580	--	
		001	GW	03-15-90	1600	210MNCS	6580	--	
		001	GW	04-16-90	1120	210MNCS	6580	12	
		001	GW	05-14-90	1415	210MNCS	6580	10	
		001	GW	06-15-90	1540	210MNCS	6580	10	
		001	GW	07-17-90	1515	210MNCS	6580	10	
		001	GW	08-16-90	1502	210MNCS	6580	10	
		001	GW	09-13-90	1242	210MNCS	6580	5	
10N.05E.11.341 EAST MTN.	350609106223901	001	GW	04-26-90	1610		--	14	
10N.05E.12.122 CARNES	350644106212701	001	GW	07-11-90	1700		--	6	
10N.05E.12.332	350606106214901	001	GW	07-17-90	1530		6490	32	
10N.05E.12.422 THOMPSON	350619106205801	001	GW	06-25-90	1300		--	13	
10N.05E.14.132 U.S. WEST	350546106224901	001	GW	07-24-90	0835		--	16	
10N.05E.14.223	350545106220901	001	GW	04-24-90	1345	110AVMB	6430	18	
10N.05E.14.312 AESCHLIMEN	350531106224301	001	GW	01-10-90	1633	211MVRD	--	--	
		001	GW	02-12-90	1645		--	--	
		001	GW	03-14-90	1620		--	15	
		001	GW	04-11-90	1530		--	13	
		001	GW	05-22-90	0900		--	13	
		001	GW	06-20-90	1313		--	18	
		001	GW	07-18-90	1503		--	10	
		001	GW	08-22-90	1625		--	6	
		001	GW	09-20-90	0938		--	11	
10N.05E.14.413A CZERNY	350522106222501	001	GW	01-09-90	1030		--	--	
		001	GW	02-12-90	0920		--	--	
		001	GW	03-20-90	0905		--	13	
		001	GW	04-10-90	0850		--	15	
		001	GW	05-15-90	0939		--	10	
		001	GW	06-12-90	0816		--	19	
		001	GW	07-10-90	0830		--	12	
		001	GW	09-04-90	1155		--	10	
		001	GW	09-18-90	0935		--	12	
10N.05E.14.431B TIJERAS CI	350520106222502	001	GW	04-09-90	1750		--	55	
10N.05E.19.322 LEIB	350423106263301	001	GW	01-09-90	1510	400PCMB	6255	--	
		001	GW	02-22-90	1545	110AVMB	6255	--	
		001	GW	03-20-90	1450	110AVMB	6255	12	
		001	GW	04-17-90	1240	110AVMB	6255	15	
		001	GW	05-15-90	1140	110AVMB	6255	11	
		001	GW	06-19-90	1428	110AVMB	6255	15	
		001	GW	07-12-90	1241	110AVMB	6255	6	

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
09N.06E.29.244 MOS	08-21-90	--	1200	7.1	25.5	13.0	--	--	--
	09-17-90	8.0	1140	7.2	21.5	13.5	--	--	--
09N.06E.29.332 DE	08-10-90	2.0	750	7.1	30.0	15.0	--	380	110
09N.06E.30.432 SH	08-08-90	6.0	1150	7.1	29.0	15.0	--	510	150
09N.06E.31.131	09-06-90	6.0	710	7.2	25.0	14.5	--	370	120
09N.06E.31.413 NE	09-06-90	4.0	650	7.4	25.0	13.0	--	290	75
09N.06E.32.442	08-24-90	10	800	7.1	26.0	13.5	--	370	110
09N.06E.34.242A	08-16-90	3.0	790	7.1	19.0	13.5	--	350	91
09N.06E.34.431	08-21-90	4.0	1020	7.0	20.0	13.5	--	540	180
10N.04.5E.25.124	05-08-90	2.0	1110	7.5	18.0	18.0	--	440	120
10N.04.5E.25.144C	09-20-90	4.0	900	7.3	27.0	16.5	--	460	120
10N.04.5E.25.234B	05-09-90	5.0	1400	7.2	--	17.5	0.9	610	180
10N.05E.02.233A SO	01-12-90	--	700	9.5	--	13.5	--	--	--
	02-13-90	--	720	9.5	--	13.5	--	--	--
	03-19-90	--	710	9.5	12.5	14.0	--	--	--
	04-11-90	--	700	9.5	22.0	14.5	--	3	0.93
	05-21-90	--	720	9.3	32.0	14.5	--	--	--
	06-15-90	--	710	9.2	--	17.0	--	--	--
	07-18-90	--	7	9.3	27.5	14.0	--	--	--
	08-17-90	--	710	9.4	23.5	15.0	--	--	--
	09-13-90	9.0	705	9.3	23.5	14.0	--	--	--
10N.05E.02.241 CA	05-09-90	--	1190	7.2	--	14.0	4.3	610	220
10N.05E.02.414 TE	04-27-90	2.0	2320	7.3	--	16.0	--	1200	240
10N.05E.10.423	04-16-90	--	480	7.4	--	15.0	6.6	250	85
10N.05E.11.324 CUS	01-10-90	--	950	7.2	--	13.5	--	--	--
	02-16-90	--	990	7.3	--	12.5	--	--	--
	03-15-90	--	990	7.4	--	13.0	--	--	--
	04-16-90	--	990	7.4	22.0	13.5	--	490	150
	05-14-90	--	905	7.2	24.0	13.5	--	--	--
	06-15-90	--	830	7.5	--	16.5	--	--	--
	07-17-90	--	730	7.4	31.0	14.5	--	--	--
	08-16-90	--	730	7.4	--	14.0	--	--	--
	09-13-90	--	710	7.3	33.0	17.0	--	--	--
10N.05E.11.341 EA	04-26-90	4.0	1620	7.4	--	15.0	--	480	130
10N.05E.12.122 CA	07-11-90	2.0	3700	7.1	--	15.0	--	1700	320
10N.05E.12.332	07-17-90	6.0	4000	7.2	--	17.5	--	2200	510
10N.05E.12.422 TH	06-25-90	6.0	730	7.3	--	14.0	--	370	110
10N.05E.14.132 U.	07-24-90	1.0	600	7.4	--	16.0	--	320	100
10N.05E.14.223	04-24-90	3.0	2650	7.3	--	15.0	6.2	1000	260
10N.05E.14.312 AES	01-10-90	--	1000	7.2	--	12.5	--	--	--
	02-12-90	--	990	7.2	--	13.5	--	--	--
	03-14-90	--	980	7.2	--	14.5	1.6	--	--
	04-11-90	--	980	7.2	22.0	14.0	--	490	150
	05-22-90	--	990	7.1	23.0	14.5	--	--	--
	06-20-90	--	980	7.2	29.0	18.5	--	--	--
	07-18-90	--	980	7.1	31.5	14.5	--	--	--
	08-22-90	--	970	7.1	17.0	14.0	--	--	--
	09-20-90	3.0	930	7.2	21.0	14.0	--	--	--
10N.05E.14.413A CZ	01-09-90	--	--	7.4	--	12.0	--	--	--
	02-12-90	--	1140	7.4	--	12.5	--	--	--
	03-20-90	--	1130	7.4	9.5	12.0	--	--	--
	04-10-90	--	1120	7.3	10.5	12.5	--	470	140
	05-15-90	--	1180	7.3	17.0	13.5	--	--	--
	06-12-90	--	1200	7.3	19.0	16.0	--	--	--
	07-10-90	--	1110	7.4	20.0	15.5	--	--	--
	09-04-90	3.0	1100	7.3	25.0	21.0	--	--	--
	09-18-90	5.0	1120	7.3	20.0	17.0	--	--	--
10N.05E.14.431B TI	04-09-90	3.5	1270	7.4	--	13.0	--	560	150
10N.05E.19.322 LEI	01-09-90	--	515	7.6	--	16.0	5.7	--	--
	02-22-90	--	550	7.7	--	16.5	7.9	--	--
	03-20-90	--	515	7.8	22.5	17.5	--	--	--
	04-17-90	--	510	7.7	4.5	16.5	--	240	69
	05-15-90	--	530	7.6	21.5	17.5	--	--	--
	06-19-90	--	550	7.6	23.5	21.0	--	--	--
	07-12-90	--	585	7.6	28.5	19.0	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	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- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
09N.06E.29.244 MOS	08-21-90	--	--	--	--	--	--	--	150
	09-17-90	--	--	--	--	--	--	--	140
09N.06E.29.332 DE	08-10-90	26	22	0.5	3.1	--	165	49	76
09N.06E.30.432 SH	08-08-90	33	43	0.8	2.6	--	188	120	170
09N.06E.31.131	09-06-90	18	22	0.5	1.8	--	176	52	52
09N.06E.31.413 NE	09-06-90	26	41	1	4.6	--	229	45	35
09N.06E.32.442	08-24-90	22	27	0.6	2.5	--	250	51	66
09N.06E.34.242A	08-16-90	30	39	0.9	2.7	--	209	61	76
09N.06E.34.431	08-21-90	22	27	0.5	1.9	--	295	120	130
10N.04.5E.25.124	05-08-90	33	50	1	9.0	--	250	180	77
10N.04.5E.25.144C	09-20-90	38	40	0.8	10	--	216	170	30
10N.04.5E.25.234B	05-09-90	39	69	1	10	--	319	180	170
10N.05E.02.233A SO	01-12-90	--	--	--	--	288	--	--	14
	02-13-90	--	--	--	--	318	--	--	15
	03-19-90	--	--	--	--	318	--	--	15
	04-11-90	0.08	170	45	0.10	316	312	39	14
	05-21-90	--	--	--	--	324	--	--	12
	06-15-90	--	--	--	--	326	--	--	15
	07-18-90	--	--	--	--	316	--	--	13
	08-17-90	--	--	--	--	318	--	--	14
	09-13-90	--	--	--	--	324	--	--	13
10N.05E.02.241 CA	05-09-90	14	37	0.7	0.90	--	262	270	95
10N.05E.02.414 TE	04-27-90	150	140	2	4.9	--	306	1100	110
10N.05E.10.423	04-16-90	9.6	6.9	0.2	0.70	--	--	15	5.5
10N.05E.11.324 CUS	01-10-90	--	--	--	--	--	--	--	25
	02-16-90	--	--	--	--	--	--	--	29
	03-15-90	--	--	--	--	--	--	--	33
	04-16-90	27	33	0.7	0.80	--	368	120	24
	05-14-90	--	--	--	--	--	--	--	26
	06-15-90	--	--	--	--	--	--	--	22
	07-17-90	--	--	--	--	--	--	--	18
	08-16-90	--	--	--	--	--	--	--	18
	09-13-90	--	--	--	--	--	--	--	17
10N.05E.11.341 EA	04-26-90	38	180	4	3.6	--	338	360	120
10N.05E.12.122 CA	07-11-90	210	330	4	8.0	--	521	1400	230
10N.05E.12.332	07-17-90	220	230	2	7.5	--	101	2200	230
10N.05E.12.422 TH	06-25-90	23	21	0.5	1.3	--	270	84	25
10N.05E.14.132 U.	07-24-90	16	17	0.4	1.2	--	202	89	6.8
10N.05E.14.223	04-24-90	97	210	3	4.3	--	345	710	310
10N.05E.14.312 AES	01-10-90	--	--	--	--	--	--	--	67
	02-12-90	--	--	--	--	--	--	--	63
	03-14-90	--	--	--	--	--	--	--	69
	04-11-90	28	32	0.6	1.6	--	299	160	66
	05-22-90	--	--	--	--	--	--	--	58
	06-20-90	--	--	--	--	--	--	--	70
	07-18-90	--	--	--	--	--	--	--	72
	08-22-90	--	--	--	--	--	--	--	67
	09-20-90	--	--	--	--	--	--	--	63
10N.05E.14.413A CZ	01-09-90	--	--	--	--	--	--	--	130
	02-12-90	--	--	--	--	--	--	--	120
	03-20-90	--	--	--	--	--	--	--	130
	04-10-90	29	59	1	1.9	--	268	140	130
	05-15-90	--	--	--	--	--	--	--	150
	06-12-90	--	--	--	--	--	--	--	140
	07-10-90	--	--	--	--	--	--	--	130
	09-04-90	--	--	--	--	--	--	--	120
	09-18-90	--	--	--	--	--	--	--	130
10N.05E.14.431B TI	04-09-90	44	54	1	1.8	--	281	160	150
10N.05E.19.322 LEI	01-09-90	--	--	--	--	--	--	--	9.1
	02-22-90	--	--	--	--	--	--	--	8.9
	03-20-90	--	--	--	--	--	--	--	14
	04-17-90	17	23	0.6	3.8	--	194	86	11
	05-15-90	--	--	--	--	--	--	--	11
	06-19-90	--	--	--	--	--	--	--	10
	07-12-90	--	--	--	--	--	--	--	9.4

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA (MG/L AS N) (00610)
09N.06E.29.244 MOS	08-21-90	--	--	--	2.98	0.020	3.00	--	<0.010
	09-17-90	--	--	--	--	<0.010	2.70	--	<0.010
09N.06E.29.332 DE	08-10-90	0.40	15	415	--	<0.010	3.20	3.30	<0.010
09N.06E.30.432 SH	08-08-90	0.10	17	666	--	<0.010	3.90	4.00	0.020
09N.06E.31.131	09-06-90	0.20	16	395	--	<0.010	1.70	1.70	0.050
09N.06E.31.413 NE	09-06-90	1.0	13	380	--	<0.010	0.500	0.500	0.040
09N.06E.32.442	08-24-90	0.30	16	445	--	<0.010	<0.100	<0.100	0.020
09N.06E.34.242A	08-16-90	0.60	14	441	--	<0.010	0.200	0.200	<0.010
09N.06E.34.431	08-21-90	0.20	25	696	--	<0.010	2.80	2.90	<0.010
10N.04.5E.25.124	05-08-90	2.7	27	658	--	<0.010	2.10	2.10	<0.010
10N.04.5E.25.144C	09-20-90	1.9	18	558	--	<0.010	0.900	--	0.030
10N.04.5E.25.234B	05-09-90	1.7	26	894	--	<0.010	29.0	6.10	0.010
10N.05E.02.233A SO	01-12-90	--	--	--	0.480	0.020	0.500	--	<0.010
	02-13-90	--	--	--	0.290	0.010	0.300	--	<0.010
	03-19-90	--	--	--	0.380	0.020	0.400	--	<0.010
	04-11-90	0.50	10	425	0.490	0.010	0.500	0.500	<0.010
	05-21-90	--	--	--	0.280	0.020	0.300	--	<0.010
	06-15-90	--	--	--	0.380	0.020	0.400	--	<0.010
	07-18-90	--	--	--	0.280	0.020	0.300	--	<0.010
	08-17-90	--	--	--	0.490	0.010	0.500	--	0.020
	09-13-90	--	--	--	0.280	0.020	0.300	--	<0.010
10N.05E.02.241 CA	05-09-90	<0.10	27	833	--	<0.010	3.00	2.70	<0.010
10N.05E.02.414 TE	04-27-90	<0.10	21	1950	0.850	0.050	0.900	0.800	0.710
10N.05E.10.423	04-16-90	0.20	18	285	--	<0.010	0.200	0.200	<0.010
10N.05E.11.324 CUS	01-10-90	--	--	--	--	<0.010	8.60	--	0.030
	02-16-90	--	--	--	--	<0.010	7.30	--	0.010
	03-15-90	--	--	--	--	<0.010	8.30	--	0.020
	04-16-90	0.40	22	625	--	<0.010	6.00	6.10	<0.010
	05-14-90	--	--	--	--	<0.010	4.20	--	<0.010
	06-15-90	--	--	--	--	<0.010	2.90	--	<0.010
	07-17-90	--	--	--	--	<0.010	1.60	--	<0.010
	08-16-90	--	--	--	--	<0.010	1.10	--	0.010
	09-13-90	--	--	--	--	<0.010	1.10	--	<0.010
10N.05E.11.341 EA	04-26-90	0.50	16	1060	1.97	0.030	2.00	2.20	0.270
10N.05E.12.122 CA	07-11-90	0.30	11	2850	--	<0.010	<0.100	<0.100	0.900
10N.05E.12.332	07-17-90	<0.10	11	3470	0.590	0.010	0.600	0.600	0.270
10N.05E.12.422 TH	06-25-90	0.20	23	477	--	<0.010	5.80	6.20	<0.010
10N.05E.14.132 U.	07-24-90	0.70	18	370	--	<0.010	<0.100	<0.100	<0.010
10N.05E.14.223	04-24-90	<0.10	25	1850	--	<0.010	5.40	5.60	0.040
10N.05E.14.312 AES	01-10-90	--	--	--	--	<0.010	<0.100	--	0.040
	02-12-90	--	--	--	--	<0.010	<0.100	--	<0.010
	03-14-90	--	--	--	--	<0.010	<0.100	--	<0.010
	04-11-90	0.20	20	637	--	<0.010	<0.100	<0.100	<0.010
	05-22-90	--	--	--	--	<0.010	<0.100	--	<0.010
	06-20-90	--	--	--	--	<0.010	<0.100	--	0.020
	07-18-90	--	--	--	--	<0.010	<0.100	--	<0.010
	08-22-90	--	--	--	--	<0.010	<0.100	--	0.030
	09-20-90	--	--	--	--	<0.010	<0.100	--	<0.010
10N.05E.14.413A CZ	01-09-90	--	--	--	--	<0.010	2.10	--	0.030
	02-12-90	--	--	--	--	<0.010	1.80	--	<0.010
	03-20-90	--	--	--	--	<0.010	1.60	--	<0.010
	04-10-90	0.20	18	686	--	<0.010	1.70	1.70	<0.010
	05-15-90	--	--	--	--	<0.010	1.80	--	<0.010
	06-12-90	--	--	--	--	<0.010	2.00	--	0.020
	07-10-90	--	--	--	--	<0.010	1.70	--	0.010
	09-04-90	--	--	--	--	<0.010	1.70	--	0.040
	09-18-90	--	--	--	1.69	0.010	1.70	--	<0.010
10N.05E.14.431B TI	04-09-90	<0.10	24	768	--	<0.010	3.50	3.60	<0.010
10N.05E.19.322 LEI	01-09-90	--	--	--	--	<0.010	1.00	--	<0.010
	02-22-90	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	<0.010	0.700	--	<0.010
	04-17-90	2.1	21	352	--	<0.010	0.700	0.700	<0.010
	05-15-90	--	--	--	--	<0.010	1.00	--	<0.010
	06-19-90	--	--	--	--	<0.010	0.800	--	<0.010
	07-12-90	--	--	--	--	<0.010	0.900	--	<0.010

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
09N.06E.29.244 MOS	08-21-90	--	3.8	0.010	3.5	120	30	--	0.07
	09-17-90	--	3.5	0.040	3.1	120	60	--	0.08
09N.06E.29.332 DE	08-10-90	--	3.8	<0.010	2.2	80	3	2	0.06
09N.06E.30.432 SH	08-08-90	0.68	4.6	<0.010	3.4	50	9	<1	0.09
09N.06E.31.131	09-06-90	0.85	2.6	0.020	2.3	40	<3	1	0.03
09N.06E.31.413 NE	09-06-90	0.16	0.70	<0.010	0.9	120	9	2	0.01
09N.06E.32.442	08-24-90	0.38	--	<0.010	2.0	50	<3	<1	0.05
09N.06E.34.242A	08-16-90	--	--	<0.010	1.4	100	10	7	0.04
09N.06E.34.431	08-21-90	--	3.4	0.020	2.3	40	9	1	0.07
10N.04.5E.25.124	05-08-90	--	--	0.030	0.8	90	7	<1	0.06
10N.04.5E.25.144C	09-20-90	--	--	<0.010	0.4	80	7	3	0.06
10N.04.5E.25.234B	05-09-90	0.49	30	<0.010	1.5	100	3	1	0.28
10N.05E.02.233A SO	01-12-90	--	0.70	0.010	0.1	630	--	--	0.02
	02-13-90	--	0.50	0.210	0.4	630	20	--	0.05
	03-19-90	--	0.70	0.010	<0.1	620	20	--	0.06
	04-11-90	--	--	0.010	<0.1	640	11	3	0.01
	05-21-90	--	0.60	<0.010	0.1	650	<10	--	0.02
	06-15-90	--	0.60	<0.010	0.1	640	<10	--	0.01
	07-18-90	--	--	<0.010	0.5	640	10	--	0.01
	08-17-90	0.18	0.70	0.010	0.1	640	<10	--	0.07
	09-13-90	--	--	0.010	0.3	650	<10	--	0.06
10N.05E.02.241 CA	05-09-90	--	3.5	0.110	0.7	80	22	<1	0.05
10N.05E.02.414 TE	04-27-90	0.0	1.6	0.010	1.2	140	30	20	0.03
10N.05E.10.423	04-16-90	--	0.40	<0.010	<0.1	20	5	<1	0.01
10N.05E.11.324 CUS	01-10-90	--	--	0.030	1.0	50	--	--	0.08
	02-16-90	0.39	7.7	0.040	0.8	50	10	--	0.11
	03-15-90	0.38	8.7	0.040	0.6	40	<10	--	0.08
	04-16-90	--	6.2	0.030	0.8	40	13	4	0.05
	05-14-90	--	4.5	0.030	0.7	40	20	--	0.06
	06-15-90	--	3.4	0.020	0.5	50	10	--	0.04
	07-17-90	--	1.9	0.020	0.6	40	20	--	0.03
	08-16-90	0.49	1.6	0.020	0.7	50	40	--	0.09
	09-13-90	--	--	0.020	0.9	40	20	--	0.03
10N.05E.11.341 EA	04-26-90	0.13	2.4	<0.010	0.7	140	10	10	0.05
10N.05E.12.122 CA	07-11-90	0.10	--	0.020	4.8	170	27000	260	0.06
10N.05E.12.332	07-17-90	0.23	1.1	0.020	1.5	100	30	210	0.06
10N.05E.12.422 TH	06-25-90	--	6.2	0.040	0.6	50	<3	<1	0.07
10N.05E.14.132 U.	07-24-90	--	--	<0.010	0.6	30	3	7	<0.01
10N.05E.14.223	04-24-90	0.36	5.8	0.020	1.5	110	20	10	0.12
10N.05E.14.312 AES	01-10-90	--	--	<0.010	1.2	40	--	--	0.03
	02-12-90	--	--	0.040	0.8	50	270	--	0.04
	03-14-90	--	--	<0.010	1.2	30	120	--	0.05
	04-11-90	--	--	<0.010	1.1	40	120	7	0.02
	05-22-90	--	--	<0.010	1.4	40	130	--	0.04
	06-20-90	--	--	<0.010	1.9	40	120	--	0.03
	07-18-90	--	--	<0.010	1.0	40	110	--	0.03
	08-22-90	--	--	<0.010	1.1	40	10	--	0.03
	09-20-90	--	--	<0.010	1.7	50	110	--	0.02
10N.05E.14.413A CZ	01-09-90	--	--	<0.010	0.8	40	--	--	0.05
	02-12-90	--	2.1	0.020	0.6	50	20	--	0.08
	03-20-90	--	--	<0.010	0.4	50	<10	--	0.04
	04-10-90	--	2.0	0.020	0.6	50	3	1	0.13
	05-15-90	--	2.1	0.010	0.5	40	10	--	0.06
	06-12-90	0.28	2.3	<0.010	0.7	50	10	--	0.07
	07-10-90	0.19	1.9	0.010	0.6	50	20	--	0.05
	09-04-90	0.36	2.1	<0.010	0.7	50	<10	--	0.04
	09-18-90	--	2.2	0.020	0.7	40	30	--	0.11
10N.05E.14.431B TI	04-09-90	--	3.9	0.020	1.1	60	5	<1	0.04
10N.05E.19.322 LEI	01-09-90	--	1.2	<0.010	0.5	30	--	--	0.03
	02-22-90	--	--	--	1.0	30	20	--	0.16
	03-20-90	--	--	<0.010	0.3	30	<10	--	0.03
	04-17-90	--	1.0	<0.010	0.2	30	10	1	0.01
	05-15-90	--	--	<0.010	0.3	30	20	--	0.03
	06-19-90	--	1.2	<0.010	0.3	30	<10	--	0.02
	07-12-90	--	--	<0.010	0.7	30	10	--	0.02

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
10N.05E.19.322	LEIB	350423106263301	001	GW	08-20-90	1542	110AVMB	6255	8	--
			001	GW	09-19-90	1308	110AVMB	6255	10	6.0
10N.05E.19.334	RICH	350410106264401	001	GW	04-20-90	1130	--	--	17	--
10N.05E.19.341	STOUT	350414106263801	001	GW	04-20-90	1530	--	--	36	--
10N.05E.21.322	CANON DE	350436106243301	001	GW	04-24-90	1820	--	--	23	4.0
10N.05E.22.234	TIJERAS PO	350449106231901	001	GW	01-09-90	1215	--	--	--	--
			001	GW	02-12-90	1140	--	--	--	--
			001	GW	03-13-90	1430	--	--	20	--
			001	GW	04-16-90	1342	--	--	22	--
			001	GW	05-14-90	1125	--	--	10	--
			001	GW	06-12-90	1101	--	--	9	16
			001	GW	07-11-90	1207	--	--	15	--
			001	GW	08-13-90	1333	--	--	13	--
			001	GW	09-14-90	1327	--	--	12	9.0
10N.05E.22.344A		350417106232501	001	GW	04-25-90	1450	325MDER	6385	20	5.0
10N.05E.22.411	LOS VECIN	350444106233101	001	GW	04-25-90	1805	--	--	27	10
10N.05E.23.131	GRIEGO	350451106225801	001	GW	07-10-90	1210	--	--	9	10
10N.05E.23.313		350434106225701	001	GW	06-24-90	0940	325MDER	6350	--	--
10N.05E.26.332		350341106225001	001	GW	09-04-90	1848	--	6440	10	10
10N.05E.30.122		350405106263501	001	GW	04-24-90	1030	400FCMB	6075	20	4.0
10N.05E.30.124		350401106263001	001	GW	04-19-90	1140	400FCMB	6040	41	--
10N.05E.30.213		350357106262801	001	GW	04-19-90	1545	400FCMB	6005	48	--
10N.05E.30.213	MCIVER	350410106262601	001	GW	01-30-90	1120	110AVMB	6030	15	--
			001	GW	02-22-90	1825	110AVMB	6030	--	--
			001	GW	03-30-90	1032	110AVMB	6030	23	--
			001	GW	04-17-90	1419	110AVMB	6030	17	--
			001	GW	05-15-90	1305	110AVMB	6030	16	--
			001	GW	06-20-90	1117	110AVMB	6030	13	--
			001	GW	07-12-90	1428	110AVMB	6030	13	--
			001	GW	08-21-90	1510	110AVMB	6030	15	--
			001	GW	09-20-90	1333	110AVMB	6030	11	3.5
10N.05E.30.321	GARCIA	350344106264401	001	GW	08-31-90	1809	--	--	12	10
10N.05E.30.322		350339106263501	001	GW	05-07-90	1115	110AVMB	5860	12	4.0
10N.05E.30.324A		350336106263501	001	GW	05-07-90	1730	110AVMB	5870	17	4.0
10N.06E.04.113		350728106184101	001	GW	07-17-90	1830	325MDERU	6840	10	5.0
10N.06E.04.444		350654106174801	001	GW	07-18-90	1805	325MDER	6998	13	4.0
10N.06E.05.441	MCCRACKEN	350655106185601	001	GW	01-10-90	1140	325MDER	--	--	--
			001	GW	02-16-90	0904	--	--	--	--
			001	GW	03-20-90	1158	--	--	12	--
			001	GW	04-10-90	1042	--	--	12	--
			001	GW	05-22-90	1056	--	--	16	--
			001	GW	06-18-90	0917	--	--	15	--
			001	GW	07-10-90	1335	--	--	10	--
			001	GW	08-17-90	0958	--	--	--	--
			001	GW	09-19-90	1126	--	--	10	6.0
10N.06E.07.112	BLANKERT	350644106203801	001	GW	07-03-90	1635	--	--	44	3.0
10N.06E.07.114		350635106203701	001	GW	07-25-90	1720	6600	--	24	3.0
10N.06E.07.314	BEAR MTN D	350613106203801	001	GW	06-22-90	1700	--	--	--	4.0
10N.06E.07.322	CANYON AUT	350619106202201	001	GW	06-22-90	1120	--	--	23	5.0
			001	GW	09-28-90	1230	--	--	11	11
10N.06E.07.331	FOSTER	350604106205801	001	GW	01-13-90	1435	--	--	--	--
			001	GW	02-16-90	1047	--	--	--	--
			001	GW	03-16-90	1215	--	--	15	--
			001	GW	04-10-90	1320	--	--	15	--
			001	GW	05-18-90	1345	--	--	16	--
			001	GW	06-18-90	1117	--	--	14	--
			001	GW	07-10-90	1201	--	--	12	--
			001	GW	08-14-90	1358	--	--	12	--
			001	GW	09-14-90	1144	--	--	11	8.0
10N.06E.07.422	MCFADDEN	350617106194901	001	GW	09-24-90	1710	--	--	--	--
10N.06E.08.211	KUNZ	350646106191101	001	GW	06-26-90	1425	--	--	23	5.0
10N.06E.08.323	DERR	350611106192901	001	GW	06-26-90	1835	--	--	13	4.0
10N.06E.09.122	KLINE	350643106175601	001	GW	06-25-90	1750	--	--	23	5.0
10N.06E.09.341		350607106183901	001	GW	07-11-90	1445	325MDER	6883	15	10
10N.06E.10.331	BACA BRAUL	350604106174201	001	GW	09-26-90	1105	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
10N.05E.19.322 LEI	08-20-90	550	7.6	20.0	17.0	--	--	--	--	--
	09-19-90	570	7.7	22.5	17.0	--	--	--	--	--
10N.05E.19.334 RI	04-20-90	720	7.6	--	17.0	6.9	330	96	22	31
10N.05E.19.341 ST	04-20-90	620	7.7	--	17.0	0.2	390	130	16	34
10N.05E.21.322 C	04-24-90	1850	7.1	--	15.5	--	850	240	61	44
10N.05E.22.234 TIJ	01-09-90	910	7.6	--	14.0	--	--	--	--	--
	02-12-90	900	7.6	--	14.0	--	--	--	--	--
	03-13-90	910	7.7	--	13.5	--	--	--	--	--
	04-16-90	890	7.6	23.0	14.0	--	340	64	44	54
	05-14-90	890	7.6	23.0	14.5	--	--	--	--	--
	06-12-90	820	7.6	24.0	16.0	--	--	--	--	--
	07-11-90	990	7.3	24.5	15.5	--	--	--	--	--
	08-13-90	930	7.2	--	14.0	--	--	--	--	--
	09-14-90	1030	7.2	25.5	14.0	--	--	--	--	--
10N.05E.22.344A	04-25-90	710	7.6	11.0	20.0	1.2	290	57	35	40
10N.05E.22.411 L	04-25-90	940	7.4	--	14.5	2.0	420	110	35	42
10N.05E.23.131 GR	07-10-90	1000	7.3	--	12.5	--	490	140	33	40
10N.05E.23.313	06-24-90	680	7.4	--	16.0	--	350	74	39	26
10N.05E.26.332	09-04-90	700	7.4	19.0	14.0	--	390	110	27	17
10N.05E.30.122	04-24-90	830	7.8	17.5	17.0	7.1	370	110	24	38
10N.05E.30.124	04-19-90	950	7.6	--	17.5	7.5	250	73	16	34
10N.05E.30.213	04-19-90	1000	7.5	--	17.0	7.3	410	120	26	53
10N.05E.30.213 MCI	01-30-90	1050	7.7	--	14.5	--	--	--	--	--
	02-22-90	1110	7.6	--	16.0	--	--	--	--	--
	03-30-90	1120	7.6	6.0	16.0	--	--	--	--	--
	04-17-90	1100	7.6	6.5	16.0	--	510	150	32	37
	05-15-90	1130	7.5	21.0	17.5	--	--	--	--	--
	06-20-90	1140	7.5	28.5	21.5	--	--	--	--	--
	07-12-90	1130	7.5	28.0	19.5	--	--	--	--	--
	08-21-90	1120	7.5	29.0	18.5	--	--	--	--	--
	09-20-90	1090	7.6	26.5	17.0	--	--	--	--	--
10N.05E.30.321 GA	08-31-90	950	7.6	33.0	18.0	--	440	130	27	48
10N.05E.30.322	05-07-90	1290	7.4	--	16.0	--	540	160	35	60
10N.05E.30.324A	05-07-90	890	7.3	--	13.0	--	400	120	24	41
10N.06E.04.113	07-17-90	860	8.2	--	17.0	--	67	16	6.5	170
10N.06E.04.444	07-18-90	3020	7.1	--	16.0	--	1000	260	90	210
10N.06E.05.441 MCC	01-10-90	2590	7.2	--	--	--	--	--	--	--
	02-16-90	2470	7.1	--	12.0	--	--	--	--	--
	03-20-90	2460	7.2	13.0	13.0	--	--	--	--	--
	04-10-90	2500	7.3	16.5	13.5	--	1000	280	75	100
	05-22-90	2590	7.1	23.5	15.0	--	--	--	--	--
	06-18-90	2600	7.1	29.0	18.0	--	--	--	--	--
	07-10-90	2590	7.1	27.5	16.0	--	--	--	--	--
	08-17-90	2580	7.1	18.0	14.5	--	--	--	--	--
	09-19-90	2530	7.2	21.0	14.5	--	--	--	--	--
10N.06E.07.112 BL	07-03-90	3210	7.4	--	15.5	--	790	120	120	540
10N.06E.07.114	07-25-90	590	7.5	--	15.5	--	280	81	20	20
10N.06E.07.314 BE	06-22-90	1400	7.3	--	14.0	--	580	160	43	66
10N.06E.07.322 CA	06-22-90	860	7.4	--	15.0	--	370	97	30	57
	09-28-90	900	--	20.0	14.5	--	--	--	--	--
10N.06E.07.331 FOS	01-13-90	1490	7.3	--	13.5	--	--	--	--	--
	02-16-90	1510	7.3	--	13.0	--	--	--	--	--
	03-16-90	1500	7.4	--	13.5	--	--	--	--	--
	04-10-90	1470	7.1	16.0	14.0	--	630	180	44	60
	05-18-90	1510	7.3	23.0	14.0	--	--	--	--	--
	06-18-90	1580	7.2	30.5	17.5	--	--	--	--	--
	07-10-90	1550	7.2	26.5	15.0	--	--	--	--	--
	08-14-90	1510	7.2	18.0	13.5	--	--	--	--	--
	09-14-90	1520	7.2	25.0	14.0	--	--	--	--	--
10N.06E.07.422 MC	09-24-90	--	--	--	--	--	300	79	24	18
10N.06E.08.211 KU	06-26-90	660	7.5	--	16.0	--	320	73	33	22
10N.06E.08.323 D	06-26-90	720	7.3	--	16.0	--	360	110	21	16
10N.06E.09.122 KL	06-25-90	2150	7.2	--	15.0	--	1000	260	92	77
10N.06E.09.341	07-11-90	1350	7.1	--	14.5	--	660	180	50	47
10N.06E.10.331 BA	09-26-90	--	--	--	--	--	1200	340	92	150

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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 CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
10N.05E.19.322 LEI	08-20-90	--	--	--	--	12	--	--	--
	09-19-90	--	--	--	--	12	--	--	--
10N.05E.19.334 RI	04-20-90	0.7	4.5	227	110	23	2.5	21	454
10N.05E.19.341 ST	04-20-90	0.7	4.0	166	110	29	2.8	22	461
10N.05E.21.322 C	04-24-90	0.7	1.2	244	26	460	<0.10	23	1060
10N.05E.22.234 TIJ	01-09-90	--	--	--	--	110	--	--	--
	02-12-90	--	--	--	--	100	--	--	--
	03-13-90	--	--	--	--	110	--	--	--
	04-16-90	1	5.4	226	93	100	1.1	18	518
	05-14-90	--	--	--	--	110	--	--	--
	06-12-90	--	--	--	--	85	--	--	--
	07-11-90	--	--	--	--	110	--	--	--
	08-13-90	--	--	--	--	100	--	--	--
	09-14-90	--	--	--	--	120	--	--	--
10N.05E.22.344A	04-25-90	1	2.5	259	37	40	1.4	19	388
10N.05E.22.411 L	04-25-90	0.9	2.4	265	150	82	<0.10	20	609
10N.05E.23.131 GR	07-10-90	0.8	1.5	235	160	110	0.20	18	651
10N.05E.23.313	06-24-90	0.6	2.4	265	71	35	0.20	17	429
10N.05E.26.332	09-04-90	0.4	1.9	165	77	58	0.30	17	421
10N.05E.30.122	04-24-90	0.9	4.5	218	110	46	2.0	23	530
10N.05E.30.124	04-19-90	0.9	4.0	60	140	69	1.7	20	456
10N.05E.30.213	04-19-90	1	5.6	205	120	110	1.6	21	638
10N.05E.30.213 MCI	01-30-90	--	--	--	--	100	--	--	--
	02-22-90	--	--	--	--	110	--	--	--
	03-30-90	--	--	--	--	9.1	--	--	--
	04-17-90	0.7	5.6	216	130	110	1.7	22	689
	05-15-90	--	--	--	--	120	--	--	--
	06-20-90	--	--	--	--	130	--	--	--
	07-12-90	--	--	--	--	120	--	--	--
	08-21-90	--	--	--	--	120	--	--	--
	09-20-90	--	--	--	--	120	--	--	--
10N.05E.30.321 GA	08-31-90	1	6.2	152	170	79	2.1	20	618
10N.05E.30.322	05-07-90	1	8.0	242	140	110	1.4	2.2	781
10N.05E.30.324A	05-07-90	0.9	4.0	245	99	84	0.30	17	541
10N.06E.04.113	07-17-90	9	2.4	299	53	67	1.7	12	510
10N.06E.04.444	07-18-90	3	4.3	213	310	780	0.20	14	1800
10N.06E.05.441 MCC	01-10-90	--	--	--	--	570	--	--	--
	02-16-90	--	--	--	--	580	--	--	--
	03-20-90	--	--	--	--	600	--	--	--
	04-10-90	1	5.3	220	120	590	0.30	18	1370
	05-22-90	--	--	--	--	580	--	--	--
	06-18-90	--	--	--	--	570	--	--	--
	07-10-90	--	--	--	--	630	--	--	--
	08-17-90	--	--	--	--	600	--	--	--
	09-19-90	--	--	--	--	580	--	--	--
10N.06E.07.112 BL	07-03-90	8	8.5	392	1500	22	0.30	14	2560
10N.06E.07.114	07-25-90	0.5	1.4	208	100	7.1	0.30	21	381
10N.06E.07.314 BE	06-22-90	1	2.8	254	60	270	0.10	19	815
10N.06E.07.322 CA	06-22-90	1	2.3	276	100	65	0.50	22	569
	09-28-90	--	--	--	98	74	0.30	--	--
10N.06E.07.331 FOS	01-13-90	--	--	--	--	250	--	--	--
	02-16-90	--	--	--	--	250	--	--	--
	03-16-90	--	--	--	--	260	--	--	--
	04-10-90	1	2.5	280	74	250	<0.10	19	864
	05-18-90	--	--	--	--	290	--	--	--
	06-18-90	--	--	--	--	270	--	--	--
	07-10-90	--	--	--	--	280	--	--	--
	08-14-90	--	--	--	--	260	--	--	--
	09-14-90	--	--	--	--	280	--	--	--
10N.06E.07.422 MC	09-24-90	0.5	1.5	213	64	17	0.20	22	353
10N.06E.08.211 KU	06-26-90	0.5	1.8	249	52	38	1.0	11	385
10N.06E.08.323 D	06-26-90	0.4	1.5	219	70	46	0.10	16	424
10N.06E.09.122 KL	06-25-90	1	2.5	276	450	360	0.20	19	1460
10N.06E.09.341	07-11-90	0.8	2.7	281	190	170	0.20	16	895
10N.06E.10.331 BA	09-26-90	2	2.0	305	510	510	0.10	19	1810

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	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, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
10N.05E.19.322 LEI	08-20-90	--	<0.010	--	0.800	--	<0.010	--	--
	09-19-90	--	<0.010	--	1.00	--	<0.010	--	--
10N.05E.19.334 RI	04-20-90	--	<0.010	--	1.80	1.80	<0.010	--	--
10N.05E.19.341 ST	04-20-90	--	<0.010	--	2.70	3.00	<0.010	--	--
10N.05E.21.322 C	04-24-90	--	<0.010	--	13.0	14.0	<0.010	--	--
10N.05E.22.234 TIJ	01-09-90	0.680	0.020	--	0.700	--	0.010	--	--
	02-12-90	0.580	0.020	--	0.600	--	0.010	--	0.29
	03-13-90	0.470	0.030	--	0.500	--	<0.010	--	--
	04-16-90	0.460	0.040	--	0.500	0.600	<0.010	--	--
	05-14-90	0.360	0.040	--	0.400	--	<0.010	--	--
	06-12-90	0.290	0.010	--	0.300	--	0.010	--	0.19
	07-11-90	--	<0.010	--	0.800	--	<0.010	--	--
	08-13-90	--	<0.010	--	0.800	--	0.010	--	0.19
	09-14-90	--	<0.010	--	1.30	--	<0.010	--	--
10N.05E.22.344A	04-25-90	0.180	0.020	--	0.200	0.200	0.020	--	0.18
10N.05E.22.411 L	04-25-90	--	<0.010	--	1.80	1.90	<0.010	--	--
10N.05E.23.131 GR	07-10-90	--	<0.010	--	1.70	1.70	0.010	--	--
10N.05E.23.313	06-24-90	--	<0.010	--	1.10	1.20	<0.010	--	--
10N.05E.26.332	09-04-90	--	<0.010	--	3.10	3.10	0.040	--	0.46
10N.05E.30.122	04-24-90	--	<0.010	--	9.30	9.50	0.010	--	0.29
10N.05E.30.124	04-19-90	--	<0.010	--	13.0	14.0	<0.010	--	--
10N.05E.30.213	04-19-90	--	<0.010	--	13.0	13.0	<0.010	--	--
10N.05E.30.213 MCI	01-30-90	--	<0.010	--	15.0	--	<0.010	--	--
	02-22-90	--	--	--	--	--	--	--	--
	03-30-90	--	<0.010	--	15.0	--	0.010	--	0.59
	04-17-90	--	<0.010	--	15.0	15.0	<0.010	--	--
	05-15-90	--	<0.010	--	15.0	--	<0.010	--	--
	06-20-90	--	<0.010	--	15.0	--	0.030	--	0.27
	07-12-90	15.0	0.010	--	15.0	--	0.120	--	0.28
	08-21-90	--	<0.010	--	2.80	--	0.070	--	0.43
	09-20-90	--	<0.010	--	15.0	--	<0.010	--	--
10N.05E.30.321 GA	08-31-90	--	<0.010	--	9.20	10.0	0.040	--	0.86
10N.05E.30.322	05-07-90	--	<0.010	--	27.0	27.0	<0.010	--	--
10N.05E.30.324A	05-07-90	--	<0.010	--	1.10	1.00	<0.010	--	--
10N.06E.04.113	07-17-90	--	<0.010	--	0.300	0.500	0.020	--	--
10N.06E.04.444	07-18-90	--	<0.010	--	<0.100	<0.100	0.020	--	0.18
10N.06E.05.441 MCC	01-10-90	--	<0.010	--	12.0	--	0.060	--	0.34
	02-16-90	--	<0.010	--	10.0	--	<0.010	--	--
	03-20-90	--	<0.010	--	11.0	--	0.010	--	0.89
	04-10-90	--	<0.010	--	11.0	12.0	<0.010	--	--
	05-22-90	--	<0.010	--	8.40	--	<0.010	--	--
	06-18-90	--	<0.010	--	12.0	--	<0.010	--	--
	07-10-90	--	<0.010	--	12.0	--	0.010	--	0.59
	08-17-90	--	<0.010	--	13.0	--	<0.010	--	--
	09-19-90	--	<0.010	--	13.0	--	<0.010	--	--
10N.06E.07.112 BL	07-03-90	--	<0.010	--	<0.100	<0.100	1.00	--	0.20
10N.06E.07.114	07-25-90	--	<0.010	--	1.20	1.30	0.010	--	--
10N.06E.07.314 BE	06-22-90	--	<0.010	--	9.10	9.50	0.020	--	0.58
10N.06E.07.322 CA	06-22-90	--	<0.010	--	--	6.60	0.010	--	0.79
	09-28-90	--	<0.010	<0.010	6.20	6.20	0.030	<0.010	0.67
10N.06E.07.331 FOS	01-13-90	--	<0.010	--	15.0	--	0.040	--	0.36
	02-16-90	--	<0.010	--	17.0	--	<0.010	--	--
	03-16-90	--	<0.010	--	14.0	--	0.010	--	0.29
	04-10-90	--	<0.010	--	15.0	15.0	<0.010	--	--
	05-18-90	--	<0.010	--	14.0	--	0.020	--	0.88
	06-18-90	--	<0.010	--	14.0	--	<0.010	--	--
	07-10-90	--	<0.010	--	14.0	--	0.010	--	0.59
	08-14-90	--	<0.010	--	15.0	--	<0.010	--	--
	09-14-90	--	<0.010	--	14.0	--	<0.010	--	--
10N.06E.07.422 MC	09-24-90	--	<0.010	--	0.100	--	0.030	--	--
10N.06E.08.211 KU	06-26-90	--	<0.010	--	0.900	0.900	0.020	--	--
10N.06E.08.323 D	06-26-90	--	<0.010	--	2.60	2.80	0.010	--	0.69
10N.06E.09.122 KL	06-25-90	--	<0.010	--	6.40	7.80	0.020	--	0.58
10N.06E.09.341	07-11-90	--	<0.010	--	15.0	16.0	0.020	--	0.68
10N.06E.10.331 BA	09-26-90	--	<0.010	--	4.90	--	0.020	--	0.48

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.05E.19.322 LEI	08-20-90	1.0	<0.010	--	0.4	30	10	--	0.02
	09-19-90	--	<0.010	--	0.5	30	10	--	0.02
10N.05E.19.334 RI	04-20-90	2.0	<0.010	--	2.7	50	7	<1	0.04
10N.05E.19.341 ST	04-20-90	--	<0.010	--	0.3	30	9	11	0.07
10N.05E.21.322 C	04-24-90	14	<0.010	--	0.8	50	17	3	0.19
10N.05E.22.234 TIJ	01-09-90	--	0.020	--	1.1	190	--	--	0.04
	02-12-90	0.90	0.010	--	0.7	190	350	--	0.05
	03-13-90	--	<0.010	--	0.9	190	320	--	0.04
	04-16-90	0.70	<0.010	--	0.8	200	110	68	0.02
	05-14-90	0.70	0.010	--	0.6	200	140	--	0.05
	06-12-90	0.50	<0.010	--	0.5	220	90	--	0.04
	07-11-90	--	0.010	--	1.0	170	60	--	0.03
	08-13-90	1.0	0.020	--	0.6	160	60	--	0.05
	09-14-90	1.7	<0.010	--	0.7	150	170	--	0.06
10N.05E.22.344A	04-25-90	0.40	<0.010	--	0.3	80	43	4	0.03
10N.05E.22.411 L	04-25-90	2.1	<0.010	--	1.1	90	8	<1	0.06
10N.05E.23.131 GR	07-10-90	--	0.020	--	0.7	40	<3	<1	0.05
10N.05E.23.313	06-24-90	1.5	<0.010	--	0.3	60	14	<1	0.04
10N.05E.26.332	09-04-90	3.6	<0.010	--	0.5	50	7	2	0.03
10N.05E.30.122	04-24-90	9.6	<0.010	--	0.6	50	6	<1	0.10
10N.05E.30.124	04-19-90	13	<0.010	--	1.1	30	9	11	0.13
10N.05E.30.213	04-19-90	14	<0.010	--	0.7	80	11	<1	0.15
10N.05E.30.213 MCI	01-30-90	15	<0.010	--	0.7	30	--	--	0.17
	02-22-90	--	--	--	0.4	40	30	--	0.02
	03-30-90	16	<0.010	--	0.8	40	560	--	0.19
	04-17-90	16	<0.010	--	0.9	40	8	2	0.14
	05-15-90	16	<0.010	--	0.9	40	20	--	0.16
	06-20-90	15	<0.010	--	0.6	40	20	--	0.14
	07-12-90	15	0.540	--	1.4	40	20	--	0.12
	08-21-90	3.3	<0.010	--	0.9	30	10	--	0.16
	09-20-90	15	<0.010	--	1.0	40	20	--	0.12
10N.05E.30.321 GA	08-31-90	10	<0.010	--	1.0	110	<3	18	0.09
10N.05E.30.322	05-07-90	28	<0.010	--	1.1	90	7	<1	0.23
10N.05E.30.324A	05-07-90	1.5	0.020	--	0.8	40	17	2	0.03
10N.06E.04.113	07-17-90	--	<0.010	--	0.5	250	<3	<1	0.03
10N.06E.04.444	07-18-90	--	<0.010	--	3.3	90	40	10	0.14
10N.06E.05.441 MCC	01-10-90	12	0.020	--	2.8	50	--	--	0.22
	02-16-90	10	<0.010	--	2.7	50	30	--	0.21
	03-20-90	12	<0.010	--	3.7	60	30	--	0.16
	04-10-90	12	<0.010	--	3.0	50	40	<10	0.19
	05-22-90	9.1	<0.010	--	2.8	50	40	--	0.17
	06-18-90	17	<0.010	--	2.6	60	30	--	0.19
	07-10-90	13	0.020	--	3.0	60	30	--	0.19
	08-17-90	13	<0.010	--	2.8	70	50	--	0.25
	09-19-90	13	<0.010	--	2.9	60	50	--	0.19
10N.06E.07.112 BL	07-03-90	--	<0.010	--	0.8	350	30	10	0.01
10N.06E.07.114	07-25-90	--	0.200	--	0.3	50	4	2	0.02
10N.06E.07.314 BE	06-22-90	9.7	0.010	--	1.5	100	<3	32	0.13
10N.06E.07.322 CA	06-22-90	--	0.010	--	2.2	100	8	<1	0.08
	09-28-90	6.9	<0.010	<0.010	2.2	120	--	--	--
10N.06E.07.331 FOS	01-13-90	15	0.020	--	1.8	120	--	--	0.17
	02-16-90	17	0.020	--	1.8	110	<10	--	0.21
	03-16-90	14	0.021	--	1.4	120	20	--	0.15
	04-10-90	15	0.020	--	2.0	130	7	<1	0.15
	05-18-90	15	0.030	--	2.0	110	70	--	0.14
	06-18-90	14	0.010	--	1.6	110	<10	--	0.17
	07-10-90	15	0.020	--	2.1	120	<10	--	0.16
	08-14-90	16	0.030	--	1.8	120	20	--	0.17
	09-14-90	15	<0.010	--	1.7	120	20	--	0.17
10N.06E.07.422 MC	09-24-90	--	0.010	--	0.3	50	5	<1	0.05
10N.06E.08.211 KU	06-26-90	--	<0.010	--	0.4	80	21	16	0.03
10N.06E.08.323 D	06-26-90	3.3	<0.010	--	1.5	50	<3	<1	0.05
10N.06E.09.122 KL	06-25-90	7.0	0.020	--	3.1	70	30	10	0.12
10N.06E.09.341	07-11-90	16	0.030	--	2.4	50	11	<1	0.13
10N.06E.10.331 BA	09-26-90	5.4	0.020	--	6.6	130	30	<10	0.15

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72006)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
10N.06E.10.344	CARISTO	350559106171401	001	GW	07-02-90	1730		--	15	2.0
10N.06E.12.313	DAVIS JAME	350609106153701	001	GW	09-21-90	1928		--	--	--
10N.06E.13.224	T.HARRELL	350537106144301	001	GW	06-29-90	1430	325MDER	6742	30	0.3
10N.06E.13.321	TOLMAN	350525106151701	001	GW	01-29-90	1808	325MDER	6775	--	--
			001	GW	02-15-90	1520	325MDER	6775	--	--
			001	GW	03-19-90	1343	325MDER	6775	--	--
			001	GW	04-18-90	0838	325MDER	6775	10	--
			001	GW	06-12-90	1439	325MDER	6775	11	--
			001	GW	07-09-90	1010	325MDER	6775	18	--
			001	GW	08-20-90	1332	325MDER	6775	12	--
			001	GW	09-19-90	0945	325MDER	6775	10	6.0
10N.06E.16.121	CARDAMONE	350556106182901	001	GW	07-24-90	1752		--	7	9.0
10N.06E.26.132		350356106162901	001	GW	09-21-90	1540	325MDER	7030	--	--
10N.06E.27.444		350323106164601	001	GW	07-18-90	1250	325MDER	6994	21	6.0
11N.05E.19.113	BORMAN	351003106205401	001	GW	04-10-90	1540		--	20	--
11N.05E.23.222B	MATHEWS	351011106220401	001	GW	01-17-90	1215		--	--	--
			001	GW	02-13-90	1400		--	--	--
			001	GW	03-15-90	1337		--	14	--
			001	GW	04-09-90	1524		--	14	--
			001	GW	05-17-90	1353		--	6	--
			001	GW	06-19-90	0955		--	7	--
			001	GW	07-17-90	1328		--	10	--
			001	GW	08-16-90	1311		--	6	--
			001	GW	09-12-90	1321		--	10	3.0
11N.05E.24.213	BUDAGHER	351007106211501	001	GW	09-21-90	1045		--	--	--
11N.05E.24.241		350958106211101	001	GW	04-27-90	1535	231CHNL	6920	17	3.0
11N.05E.24.412	ANISON	350949106211801	001	GW	01-08-90	1510		--	--	--
			001	GW	02-13-90	1030		--	--	--
			001	GW	03-15-90	1126		--	20	--
			001	GW	04-17-90	0929		--	12	--
			001	GW	05-17-90	0815		--	10	--
			001	GW	06-19-90	0812		--	13	--
			001	GW	07-18-90	0850		--	7	--
			001	GW	08-17-90	0800		--	10	12
			001	GW	09-13-90	0839		--	10	9.0
11N.05E.24.443	WESTBROOK	350930106210701	001	GW	01-30-90	1540		--	10	--
			001	GW	02-12-90	1520		--	--	--
			001	GW	03-14-90	1252		--	18	--
			001	GW	04-11-90	1026		--	17	--
			001	GW	05-17-90	1557		--	16	--
			001	GW	06-15-90	1327		--	15	--
			001	GW	07-11-90	1427		--	16	--
			001	GW	08-16-90	1119		--	12	--
			001	GW	09-12-90	1125		--	10	2.0
11N.05E.25.143		350901106214201	001	GW	07-16-90	1710		6978	5	6.0
11N.05E.25.144B		350904106213101	001	GW	07-13-90	1448	231SNRS	6975	19	4.0
11N.05E.25.211	CHESTER	350924106212501	001	GW	09-25-90	1405		--	--	--
11N.05E.25.343	FLUMLEE	350836106213801	001	GW	07-25-90	1300		--	110	5.0
11N.05E.25.411	MCVEETY	350858106212401	001	GW	09-27-90	1830		--	--	--
11N.05E.25.422	SAVIERS	350857106210001	001	GW	05-08-90	1630		--	28	5.0
11N.05E.35.244A		350811106221701	001	GW	05-09-90	1145	231CHNL	6960	28	10
11N.05E.35.434		350744106222201	001	GW	07-24-90	1315	231SNRS	6965	18	4.0
11N.05E.36.113		350821106215801	001	GW	05-08-90	1855	313BRNL	6915	10	5.0
11N.05E.36.311		350802106215401	001	GW	05-04-90	1700	231SNRS	6855	14	1.0
11N.05E.36.313	LARSON	350754106215401	001	GW	05-04-90	1320		--	28	4.0
11N.06E.19.122	LIEBLING	351014106202801	001	GW	02-22-90	1247		6798	--	--
			001	GW	03-14-90	1026		6798	20	--
			001	GW	04-09-90	1320		6798	20	--
			001	GW	05-17-90	1213		6798	15	--
			001	GW	06-18-90	1438		6798	10	--
			001	GW	07-17-90	1150		6798	--	--
			001	GW	08-15-90	1423		6798	13	--
			001	GW	09-12-90	0933		6798	12	1.0
11N.06E.19.124	PETES RESTA	351004106202901	001	GW	01-12-90	1350		--	--	--
11N.06E.19.313		350940106205401	001	GW	04-13-90	1730	110AVMB	6865	52	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (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)
10N.06E.10.344 CA	07-02-90	1510	7.0	--	16.5	--	740	180	70	60
10N.06E.12.313 DA	09-21-90	--	--	--	--	--	300	80	25	32
10N.06E.13.224 T.H	06-29-90	1190	8.5	--	16.0	--	12	2.5	1.5	290
10N.06E.13.321 TOL	01-29-90	2000	7.4	--	13.0	--	--	--	--	--
	02-15-90	2030	7.4	--	13.5	--	--	--	--	--
	03-19-90	2020	7.5	17.5	14.5	--	--	--	--	--
	04-18-90	2050	7.3	1.5	14.5	--	870	280	42	52
	06-12-90	2090	7.3	29.0	16.5	--	--	--	--	--
	07-09-90	2010	7.5	28.0	16.0	--	--	--	--	--
	08-20-90	2050	7.2	21.0	14.5	--	--	--	--	--
	09-19-90	2010	7.3	20.0	14.5	--	--	--	--	--
10N.06E.16.121 CA	07-24-90	1280	7.1	--	16.0	--	600	170	43	40
10N.06E.26.132	09-21-90	--	--	--	--	--	110	19	16	210
10N.06E.27.444	07-18-90	1150	7.4	--	15.0	--	460	120	38	69
11N.05E.19.113 BO	04-10-90	580	7.6	--	13.5	--	240	60	21	25
11N.05E.23.222B MA	01-17-90	850	7.2	--	11.0	--	--	--	--	--
	02-13-90	880	7.2	--	10.5	--	--	--	--	--
	03-15-90	860	7.2	--	11.0	5.6	--	--	--	--
	04-09-90	910	7.2	11.5	10.5	--	410	140	15	30
	05-17-90	890	7.1	20.5	11.0	--	--	--	--	--
	06-19-90	880	7.1	26.5	15.0	--	--	--	--	--
	07-17-90	810	7.1	29.0	12.5	--	--	--	--	--
	08-16-90	890	7.2	20.0	12.0	--	--	--	--	--
	09-12-90	870	7.1	28.5	12.0	--	--	--	--	--
11N.05E.24.213 BU	09-21-90	--	--	--	--	--	320	110	9.9	8.8
11N.05E.24.241	04-27-90	510	7.4	--	14.0	--	260	87	9.4	9.6
11N.05E.24.412 ANI	01-08-90	462	7.3	--	11.0	4.4	--	--	--	--
	02-13-90	453	7.4	--	11.0	--	--	--	--	--
	03-15-90	455	7.4	--	11.0	--	--	--	--	--
	04-17-90	430	7.4	3.0	11.5	--	250	87	7.6	6.5
	05-17-90	438	7.3	9.5	12.0	--	--	--	--	--
	06-19-90	463	7.3	22.5	17.0	--	--	--	--	--
	07-18-90	460	7.3	24.5	15.5	--	--	--	--	--
	08-17-90	5	7.4	17.5	13.5	--	--	--	--	--
	09-13-90	442	7.3	21.0	13.0	--	--	--	--	--
11N.05E.24.443 WES	01-30-90	1190	7.2	--	13.0	--	--	--	--	--
	02-12-90	1190	7.2	--	13.0	--	--	--	--	--
	03-14-90	1190	7.3	--	13.5	--	--	--	--	--
	04-11-90	1190	7.1	14.0	13.5	--	570	190	22	31
	05-17-90	1210	7.1	24.5	14.0	--	--	--	--	--
	06-15-90	1200	7.1	24.5	16.0	--	--	--	--	--
	07-11-90	1250	7.3	20.5	17.0	--	--	--	--	--
	08-16-90	1180	7.2	20.5	14.0	--	--	--	--	--
	09-12-90	1190	7.1	24.0	14.0	--	--	--	--	--
11N.05E.25.143	07-16-90	600	7.4	--	14.5	--	250	82	12	27
11N.05E.25.144B	07-13-90	790	7.3	--	13.0	--	360	110	21	24
11N.05E.25.211 CH	09-25-90	--	--	--	--	--	180	56	8.8	54
11N.05E.25.343 PL	07-25-90	910	7.5	29.0	14.0	--	390	98	36	32
11N.05E.25.411 M	09-27-90	--	--	--	--	--	430	130	25	76
11N.05E.25.422 SA	05-08-90	1010	7.4	--	15.0	--	440	100	47	42
11N.05E.35.244A	05-09-90	650	7.4	--	14.0	5.7	280	81	19	28
11N.05E.35.434	07-24-90	600	7.4	29.5	15.0	--	250	74	16	29
11N.05E.36.113	05-08-90	600	7.5	--	14.0	--	240	70	15	39
11N.05E.36.311	05-04-90	1710	7.2	--	14.5	--	870	260	54	55
11N.05E.36.313 LA	05-04-90	2150	7.2	--	13.5	--	1100	380	27	85
11N.06E.19.122 LIE	02-22-90	680	7.6	--	10.5	--	--	--	--	--
	03-14-90	670	7.6	--	11.0	--	--	--	--	--
	04-09-90	670	7.5	14.0	12.0	--	310	94	19	17
	05-17-90	670	7.5	20.5	13.0	--	--	--	--	--
	06-18-90	690	7.5	34.0	17.5	--	--	--	--	--
	07-17-90	625	7.5	28.0	17.0	--	--	--	--	--
	08-15-90	700	7.5	19.5	14.5	--	--	--	--	--
	09-12-90	685	7.4	28.5	16.0	--	--	--	--	--
11N.06E.19.124 PET	01-12-90	550	7.5	--	13.5	--	--	--	--	--
11N.06E.19.313	04-13-90	1450	7.3	--	14.0	--	640	180	47	40

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
10N.06E.10.344 CA	07-02-90	1	3.2	--	--	307	170	250	0.30
10N.06E.12.313 DA	09-21-90	0.8	2.7	--	--	296	62	12	1.8
10N.06E.13.224 T.H	06-29-90	36	3.7	605	564	558	47	20	11
10N.06E.13.321 TOL	01-29-90	--	--	--	--	--	--	470	--
	02-15-90	--	--	--	--	--	--	470	--
	03-19-90	--	--	--	--	--	--	470	--
	04-18-90	0.8	1.6	--	--	176	94	450	0.80
	06-12-90	--	--	--	--	--	--	480	--
	07-09-90	--	--	--	--	--	--	530	--
	08-20-90	--	--	--	--	--	--	460	--
	09-19-90	--	--	--	--	--	--	470	--
10N.06E.16.121 CA	07-24-90	0.7	2.3	--	--	201	170	180	0.30
10N.06E.26.132	09-21-90	9	5.1	--	--	436	87	51	6.3
10N.06E.27.444	07-18-90	1	2.4	--	--	256	150	150	0.40
11N.05E.19.113 BO	04-10-90	0.7	1.3	--	--	174	18	63	0.30
11N.05E.23.222B MA	01-17-90	--	--	--	--	--	--	75	--
	02-13-90	--	--	--	--	--	--	75	--
	03-15-90	--	--	--	--	--	--	85	--
	04-09-90	0.6	1.5	--	--	253	41	96	0.20
	05-17-90	--	--	--	--	--	--	110	--
	06-19-90	--	--	--	--	--	--	90	--
	07-17-90	--	--	--	--	--	--	95	--
	08-16-90	--	--	--	--	--	--	86	--
	09-12-90	--	--	--	--	--	--	89	--
11N.05E.24.213 BU	09-21-90	0.2	0.90	--	--	227	25	32	0.30
11N.05E.24.241	04-27-90	0.3	0.80	--	--	223	16	15	0.20
11N.05E.24.412 ANI	01-08-90	--	--	--	--	--	--	8.5	--
	02-13-90	--	--	--	--	--	--	8.1	--
	03-15-90	--	--	--	--	--	--	12	--
	04-17-90	0.2	0.60	--	--	230	15	10	0.70
	05-17-90	--	--	--	--	--	--	9.0	--
	06-19-90	--	--	--	--	--	--	9.4	--
	07-18-90	--	--	--	--	--	--	9.8	--
	08-17-90	--	--	--	--	--	--	9.7	--
	09-13-90	--	--	--	--	--	--	8.2	--
11N.05E.24.443 WES	01-30-90	--	--	--	--	--	--	150	--
	02-12-90	--	--	--	--	--	--	150	--
	03-14-90	--	--	--	--	--	--	160	--
	04-11-90	0.6	1.1	--	--	269	20	160	<0.10
	05-17-90	--	--	--	--	--	--	160	--
	06-15-90	--	--	--	--	--	--	150	--
	07-11-90	--	--	--	--	--	--	180	--
	08-16-90	--	--	--	--	--	--	150	--
	09-12-90	--	--	--	--	--	--	170	--
11N.05E.25.143	07-16-90	0.7	0.50	--	--	240	17	26	0.10
11N.05E.25.144B	07-13-90	0.5	1.2	--	--	228	28	96	<0.10
11N.05E.25.211 CH	09-25-90	2	0.50	--	--	269	17	14	0.30
11N.05E.25.343 PL	07-25-90	0.7	2.1	--	--	178	15	180	0.20
11N.05E.25.411 M	09-27-90	2	1.7	--	--	222	28	230	<0.10
11N.05E.25.422 SA	05-08-90	0.9	5.3	--	--	244	120	130	0.20
11N.05E.35.244A	05-09-90	0.7	0.70	--	--	246	25	41	0.20
11N.05E.35.434	07-24-90	0.8	1.0	--	--	220	30	27	0.30
11N.05E.36.113	05-08-90	1	0.80	--	--	264	23	23	0.40
11N.05E.36.311	05-04-90	0.8	2.8	--	--	209	410	250	<0.10
11N.05E.36.313 LA	05-04-90	1	1.2	--	--	203	630	290	<0.10
11N.06E.19.122 LIE	02-22-90	--	--	--	--	--	--	76	--
	03-14-90	--	--	--	--	--	--	72	--
	04-09-90	0.4	1.1	--	--	187	42	74	0.20
	05-17-90	--	--	--	--	--	--	85	--
	06-18-90	--	--	--	--	--	--	79	--
	07-17-90	--	--	--	--	--	--	84	--
	08-15-90	--	--	--	--	--	--	100	--
	09-12-90	--	--	--	--	--	--	92	--
11N.06E.19.124 PET	01-12-90	--	--	--	--	--	--	42	--
11N.06E.19.313	04-13-90	0.7	2.1	--	--	199	53	300	0.20

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ 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)
10N.06E.10.344 CA	07-02-90	19	944	--	<0.010	1.70	1.70	<0.010	--
10N.06E.12.313 DA	09-21-90	13	406	--	<0.010	<0.100	--	0.030	--
10N.06E.13.224 T.H	06-29-90	10	684	--	<0.010	<0.100	<0.100	0.010	0.39
10N.06E.13.321 TOL	01-29-90	--	--	--	<0.010	6.20	--	<0.010	--
	02-15-90	--	--	--	<0.010	5.80	--	<0.010	--
	03-19-90	--	--	--	<0.010	6.30	--	<0.010	--
	04-18-90	21	1070	--	<0.010	6.60	6.30	0.021	0.28
	06-12-90	--	--	--	<0.010	6.10	--	<0.010	--
	07-09-90	--	--	--	<0.010	6.70	--	0.020	0.28
	08-20-90	--	--	--	<0.010	6.10	--	0.020	0.58
	09-19-90	--	--	--	<0.010	6.60	--	<0.010	--
10N.06E.16.121 CA	07-24-90	15	773	--	<0.010	6.00	7.10	<0.010	--
10N.06E.26.132	09-21-90	9.8	666	--	<0.010	0.100	--	<0.010	--
10N.06E.27.444	07-18-90	15	735	--	<0.010	8.90	8.20	0.020	0.68
11N.05E.19.113 BO	04-10-90	24	326	--	<0.010	2.00	2.00	<0.010	--
11N.05E.23.222B MA	01-17-90	--	--	--	<0.010	0.500	--	0.030	--
	02-13-90	--	--	--	<0.010	0.400	--	<0.010	--
	03-15-90	--	--	--	<0.010	0.400	--	0.020	--
	04-09-90	18	495	--	<0.010	0.400	0.400	<0.010	--
	05-17-90	--	--	--	<0.010	0.400	--	<0.010	--
	06-19-90	--	--	--	<0.010	0.200	--	<0.010	--
	07-17-90	--	--	--	<0.010	0.200	--	<0.010	--
	08-16-90	--	--	--	<0.010	0.200	--	<0.010	--
	09-12-90	--	--	--	<0.010	0.300	--	<0.010	--
11N.05E.24.213 BU	09-21-90	20	343	--	<0.010	0.700	--	<0.010	--
11N.05E.24.241	04-27-90	20	295	0.680	0.020	0.700	0.800	<0.010	--
11N.05E.24.412 ANI	01-08-90	--	--	--	<0.010	0.400	--	0.030	--
	02-13-90	--	--	--	<0.010	0.400	--	<0.010	--
	03-15-90	--	--	--	<0.010	0.300	--	0.010	--
	04-17-90	17	284	--	<0.010	0.400	0.400	<0.010	--
	05-17-90	--	--	--	<0.010	0.400	--	<0.010	--
	06-19-90	--	--	--	<0.010	0.300	--	<0.010	--
	07-18-90	--	--	--	<0.010	0.400	--	<0.010	--
	08-17-90	--	--	--	<0.010	0.400	--	0.010	0.29
	09-13-90	--	--	--	<0.010	0.400	--	<0.010	--
11N.05E.24.443 WES	01-30-90	--	--	2.09	0.010	2.10	--	<0.010	--
	02-12-90	--	--	--	<0.010	5.10	--	<0.010	--
	03-14-90	--	--	--	<0.010	23.0	--	<0.010	--
	04-11-90	28	720	--	<0.010	23.0	24.0	<0.010	--
	05-17-90	--	--	--	<0.010	24.0	--	<0.010	--
	06-15-90	--	--	--	<0.010	24.0	--	<0.010	--
	07-11-90	--	--	--	<0.010	24.0	--	<0.010	--
	08-16-90	--	--	--	<0.010	22.0	--	<0.010	--
	09-12-90	--	--	--	<0.010	23.0	--	<0.010	--
11N.05E.25.143	07-16-90	24	339	--	<0.010	1.40	1.40	0.020	0.28
11N.05E.25.144B	07-13-90	28	471	--	<0.010	5.70	5.80	0.010	0.49
11N.05E.25.211 CH	09-25-90	18	330	--	<0.010	1.30	--	0.030	--
11N.05E.25.343 PL	07-25-90	23	507	--	<0.010	3.20	3.20	<0.010	--
11N.05E.25.411 M	09-27-90	18	642	--	<0.010	3.90	--	0.030	0.37
11N.05E.25.422 SA	05-08-90	22	615	--	<0.010	0.500	0.500	<0.010	--
11N.05E.35.244A	05-09-90	27	389	--	<0.010	4.40	4.30	<0.010	--
11N.05E.35.434	07-24-90	24	349	--	<0.010	3.50	3.60	<0.010	--
11N.05E.36.113	05-08-90	26	366	--	<0.010	2.30	2.30	<0.010	--
11N.05E.36.311	05-04-90	21	1210	--	<0.010	6.00	6.30	<0.010	--
11N.05E.36.313 LA	05-04-90	19	1570	--	<0.010	4.10	4.00	<0.010	--
11N.06E.19.122 LIE	02-22-90	--	--	--	<0.010	2.70	--	<0.010	--
	03-14-90	--	--	--	<0.010	2.70	--	<0.010	--
	04-09-90	26	397	--	<0.010	2.70	2.60	<0.010	--
	05-17-90	--	--	--	<0.010	2.80	--	0.050	0.25
	06-18-90	--	--	--	<0.010	2.90	--	<0.010	--
	07-17-90	--	--	--	<0.010	3.00	--	<0.010	--
	08-15-90	--	--	--	<0.010	2.70	--	<0.010	--
	09-12-90	--	--	--	<0.010	2.50	--	<0.010	--
11N.06E.19.124 PET	01-12-90	--	--	--	<0.010	1.10	--	0.020	--
11N.06E.19.313	04-13-90	31	813	--	<0.010	9.20	9.20	<0.010	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.06E.10.344	CA 07-02-90	1.9	0.020	--	140	8	2	--	--
10N.06E.12.313	DA 09-21-90	--	0.030	0.4	100	29	18	--	0.05
10N.06E.13.224	T.H 06-29-90	--	<0.010	0.6	410	5	7	--	0.06
10N.06E.13.321	TOL 01-29-90	--	0.030	2.9	50	--	--	--	0.16
	02-15-90	--	0.010	3.2	50	40	--	--	0.17
	03-19-90	6.8	0.020	2.9	50	40	--	--	0.17
	04-18-90	6.9	0.010	3.1	50	40	<10	50	0.12
	06-12-90	6.8	0.010	3.1	50	20	--	--	0.14
	07-09-90	7.0	0.020	3.2	50	30	--	--	0.15
	08-20-90	6.7	0.020	3.1	50	20	--	--	0.15
	09-19-90	7.2	<0.010	3.0	50	30	--	--	0.12
10N.06E.16.121	CA 07-24-90	6.6	0.030	2.4	60	5	<1	--	0.11
10N.06E.26.132	09-21-90	--	<0.010	0.7	360	<3	2	--	0.07
10N.06E.27.444	07-18-90	9.6	0.020	3.7	100	4	<1	--	0.12
11N.05E.19.113	BO 04-10-90	--	<0.010	0.7	110	5	<1	--	0.04
11N.05E.23.222B	MA 01-17-90	--	<0.010	0.8	20	--	--	--	0.03
	02-13-90	0.90	0.020	0.6	20	10	--	--	0.04
	03-15-90	--	<0.010	0.5	20	<10	--	--	0.03
	04-09-90	--	<0.010	0.7	20	17	<1	--	0.05
	05-17-90	1.1	<0.010	0.9	20	70	--	--	0.04
	06-19-90	--	<0.010	0.6	20	<10	--	--	0.03
	07-17-90	--	<0.010	0.7	20	20	--	--	0.03
	08-16-90	0.40	0.010	0.7	20	10	--	--	0.09
	09-12-90	--	<0.010	0.8	20	<10	--	--	0.04
11N.05E.24.213	BU 09-21-90	--	0.020	0.8	<10	<3	<1	--	0.02
11N.05E.24.241	04-27-90	1.1	<0.010	0.2	10	9	<1	--	0.02
11N.05E.24.412	ANI 01-08-90	--	0.010	0.2	10	--	--	--	0.01
	02-13-90	--	0.010	0.3	10	10	--	--	0.03
	03-15-90	--	<0.010	0.1	20	<10	--	--	0.01
	04-17-90	--	<0.010	<0.1	10	3	<1	--	0.01
	05-17-90	--	0.010	0.1	<10	10	--	--	0.02
	06-19-90	1.6	0.020	0.1	<10	<10	--	--	0.01
	07-18-90	--	<0.010	0.3	10	<10	--	--	0.01
	08-17-90	0.70	0.010	0.2	20	<10	--	--	0.08
	09-13-90	--	0.010	0.3	<10	<10	--	--	0.02
11N.05E.24.443	WES 01-30-90	--	0.020	1.3	60	--	--	--	0.23
	02-12-90	6.3	0.100	--	70	20	--	--	0.27
	03-14-90	--	0.020	1.5	70	10	--	--	0.23
	04-11-90	24	0.020	1.4	70	<3	<1	--	0.19
	05-17-90	25	0.030	1.6	60	20	--	--	0.19
	06-15-90	24	0.010	1.5	60	<10	--	--	0.20
	07-11-90	25	0.030	1.7	60	20	--	--	0.20
	08-16-90	23	0.020	1.5	60	20	--	--	0.24
	09-12-90	23	0.020	1.2	70	20	--	--	0.17
11N.05E.25.143	07-16-90	1.7	0.010	0.7	120	<3	<1	--	0.04
11N.05E.25.144B	07-13-90	6.2	0.030	1.2	70	4	<1	--	0.08
11N.05E.25.211	CH 09-25-90	--	<0.010	0.3	100	<3	<1	--	0.06
11N.05E.25.343	PL 07-25-90	3.6	0.030	1.7	130	9	6	--	0.08
11N.05E.25.411	M 09-27-90	4.3	<0.010	1.8	210	4	<1	--	0.07
11N.05E.25.422	SA 05-08-90	--	0.010	0.6	100	4	<1	--	0.07
11N.05E.35.244A	05-09-90	4.8	0.020	0.7	110	4	<1	--	0.06
11N.05E.35.434	07-24-90	3.9	0.020	0.5	100	12	<1	--	0.04
11N.05E.36.113	05-08-90	4.6	0.010	0.5	150	5	<1	--	0.04
11N.05E.36.311	05-04-90	6.4	<0.010	1.6	270	5	<1	--	0.11
11N.05E.36.313	LA 05-04-90	4.4	<0.010	1.4	80	70	10	--	0.09
11N.06E.19.122	LIE 02-22-90	2.9	0.010	1.6	40	20	--	--	0.08
	03-14-90	--	0.020	1.5	50	<10	--	--	0.08
	04-09-90	3.0	0.010	1.2	50	7	<1	--	0.06
	05-17-90	3.1	0.020	1.5	50	20	--	--	0.05
	06-18-90	3.8	<0.010	1.2	50	10	--	--	0.08
	07-17-90	3.6	<0.010	1.1	50	20	--	--	0.06
	08-15-90	3.0	0.020	1.8	50	20	--	--	0.06
	09-12-90	3.0	0.020	1.6	50	10	--	--	0.07
11N.06E.19.124	PET 01-12-90	--	<0.010	0.7	20	--	--	--	3.3
11N.06E.19.313	04-13-90	9.8	0.020	3.5	110	16	9	--	0.13

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)
11N.06E.19.341A GILLETT	350935106204001	001	GW	09-26-90	1840			--	--
11N.06E.20.223 KENNEDY	351008106190201	001	GW	01-29-90	1400			--	--
		001	GW	04-11-90	1050			--	8
11N.06E.20.244	350954106185401	001	GW	04-11-90	1625	221MRSN	6670	80	
11N.06E.20.432	350941106194701	001	GW	09-19-90	1330	310GLRT	6720	--	
11N.06E.21.133 PAVEL	350949106184501	001	GW	01-31-90	1235			--	--
		001	GW	02-12-90	1310			--	--
		001	GW	03-20-90	1308			--	13
		001	GW	04-09-90	1100			--	12
		001	GW	05-17-90	1004			--	10
		001	GW	06-18-90	1255			--	14
		001	GW	07-18-90	0944			--	7
		001	GW	08-15-90	1242			--	11
		001	GW	09-11-90	1251			--	6
11N.06E.22.444	350928106164401	001	GW	08-31-90	0945		6970	--	
11N.06E.26.344	350835106161501	001	GW	08-23-90	1333	325MDER	6845	--	
11N.06E.28.322	350856106182301	001	GW	08-24-90	1148	325MDER	6720	--	4
11N.06E.29.232	350908106190601	001	GW	07-20-90	0937		6800	--	12
11N.06E.30.221 PASCOE	350921106200301	001	GW	09-25-90	1805		--	--	
11N.06E.30.323 DAVIS	350850106204001	001	GW	04-27-90	1910		--	--	28
11N.06E.32.144	350806106192901	001	GW	09-27-90	1405	210CRCS	6865	--	
11N.06E.34.322	350802106172201	001	GW	08-24-90	1325	325MDER	6900	--	10

LOCAL IDENT- I- FIER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
11N.06E.19.341A GI	09-26-90	--	--	--	--	--	--	280	82
11N.06E.20.223 K	01-29-90	--	510	7.7	--	13.5	--	--	--
	04-11-90	--	520	7.7	--	14.0	--	220	51
11N.06E.20.244	04-11-90	--	820	6.6	--	15.5	--	450	100
11N.06E.20.432	09-19-90	--	--	--	--	--	--	730	250
11N.06E.21.133 PAV	01-31-90	--	650	7.5	--	13.5	--	--	--
	02-12-90	--	640	7.5	--	14.0	--	--	--
	03-20-90	--	660	7.5	--	15.0	--	--	--
	04-09-90	--	660	7.4	11.0	13.5	3.3	320	78
	05-17-90	--	660	7.5	12.0	13.5	--	--	--
	06-18-90	--	650	7.4	33.0	17.5	--	--	--
	07-18-90	--	640	7.4	25.0	13.0	--	--	--
	08-15-90	--	655	7.4	18.5	14.0	--	--	--
	09-11-90	--	610	7.5	29.5	14.0	--	--	--
11N.06E.22.444	08-31-90	--	415	8.3	26.5	--	--	170	34
11N.06E.26.344	08-23-90	--	500	7.7	27.5	16.0	--	230	64
11N.06E.28.322	08-24-90	--	810	7.6	26.5	15.5	--	340	100
11N.06E.29.232	07-20-90	--	750	7.3	23.0	14.0	--	390	120
11N.06E.30.221 PA	09-25-90	--	--	--	--	--	--	1000	390
11N.06E.30.323 DA	04-27-90	4.0	680	7.4	--	15.0	--	280	72
11N.06E.32.144	09-27-90	--	--	--	--	--	--	390	86
11N.06E.34.322	08-24-90	--	920	8.4	28.0	15.0	--	33	6.5

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	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)
11N.06E.19.341A GI	09-26-90	18	22	0.6	1.3	234	19	56	0.30
11N.06E.20.223 K	01-29-90	--	--	--	--	--	--	17	--
	04-11-90	22	32	0.9	1.5	221	36	12	0.20
11N.06E.20.244	04-11-90	49	23	0.5	1.7	362	130	7.2	0.40
11N.06E.20.432	09-19-90	25	130	2	2.1	110	580	200	0.30
11N.06E.21.133 PAV	01-31-90	--	--	--	--	--	--	24	--
	02-12-90	--	--	--	--	--	--	24	--
	03-20-90	--	--	--	--	--	--	19	--
	04-09-90	30	24	0.6	1.4	292	49	23	0.20
	05-17-90	--	--	--	--	--	--	25	--
	06-18-90	--	--	--	--	--	--	23	--
	07-18-90	--	--	--	--	--	--	21	--
	08-15-90	--	--	--	--	--	--	23	--
	09-11-90	--	--	--	--	--	--	22	--
11N.06E.22.444	08-31-90	21	30	1	1.6	191	31	6.8	0.40
11N.06E.26.344	08-23-90	16	16	0.5	2.1	137	23	35	0.60
11N.06E.28.322	08-24-90	22	49	1	1.3	248	48	87	0.20
11N.06E.29.232	07-20-90	22	24	0.5	2.1	189	230	5.9	0.30
11N.06E.30.221 PA	09-25-90	8.7	18	0.2	0.90	166	800	9.7	0.20
11N.06E.30.323 DA	04-27-90	25	46	1	2.9	294	88	5.8	0.30
11N.06E.32.144	09-27-90	42	63	1	4.1	394	95	17	0.10
11N.06E.34.322	08-24-90	4.1	220	17	4.7	447	35	13	11

LOCAL IDENT- IFIER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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)
11N.06E.19.341A GI	09-26-90	22	361	--	<0.010	2.40	--	<0.010	--
11N.06E.20.223 K	01-29-90	--	--	1.89	0.010	1.90	--	<0.010	--
	04-11-90	19	323	3.38	0.020	3.40	3.70	<0.010	--
11N.06E.20.244	04-11-90	40	577	--	<0.010	1.90	1.90	<0.010	--
11N.06E.20.432	09-19-90	18	1270	--	<0.010	2.80	--	0.020	0.48
11N.06E.21.133 PAV	01-31-90	--	--	--	<0.010	1.20	--	<0.010	--
	02-12-90	--	--	--	<0.010	1.20	--	<0.010	--
	03-20-90	--	--	--	<0.010	1.20	--	<0.010	--
	04-09-90	28	414	--	<0.010	1.20	1.20	<0.010	--
	05-17-90	--	--	--	<0.010	1.30	--	<0.010	--
	06-18-90	--	--	--	<0.010	1.20	--	<0.010	--
	07-18-90	--	--	--	<0.010	1.20	--	<0.010	--
	08-15-90	--	--	--	<0.010	1.20	--	<0.010	--
	09-11-90	--	--	--	<0.010	1.10	--	<0.010	--
11N.06E.22.444	08-31-90	29	270	--	<0.010	0.400	0.400	<0.010	--
11N.06E.26.344	08-23-90	26	349	--	<0.010	17.0	19.0	0.050	0.65
11N.06E.28.322	08-24-90	24	507	--	<0.010	5.70	6.10	<0.010	--
11N.06E.29.232	07-20-90	22	541	--	<0.010	0.200	0.200	0.010	--
11N.06E.30.221 PA	09-25-90	22	1350	--	<0.010	0.300	--	<0.010	--
11N.06E.30.323 DA	04-27-90	26	443	--	0.020	<0.100	<0.100	0.080	0.22
11N.06E.32.144	09-27-90	23	567	--	<0.010	0.300	--	0.020	--
11N.06E.34.322	08-24-90	8.9	572	--	<0.010	<0.100	<0.100	0.020	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
11N.06E.19.341A GI	09-26-90	--	<0.010	0.7	60	7	2	0.04
11N.06E.20.223 K	01-29-90	--	0.030	0.1	110	--	--	0.04
	04-11-90	3.6	0.010	0.1	260	4	<1	0.04
11N.06E.20.244	04-11-90	--	0.040	0.2	60	43	2	0.04
11N.06E.20.432	09-19-90	3.3	<0.010	2.3	410	11	14	0.11
11N.06E.21.133 PAV	01-31-90	--	0.010	0.4	60	--	--	0.04
	02-12-90	1.9	0.020	0.4	70	10	--	0.06
	03-20-90	1.4	0.020	0.4	70	<10	--	0.03
	04-09-90	1.6	0.020	0.5	430	<10	<10	0.03
	05-17-90	1.7	0.010	0.6	70	20	--	0.02
	06-18-90	2.3	<0.010	0.3	70	<10	--	0.03
	07-18-90	--	0.030	0.6	70	<10	--	0.01
	08-15-90	1.4	0.020	0.6	70	<10	--	0.03
	09-11-90	1.3	0.020	0.6	70	<10	--	0.05
11N.06E.22.444	08-31-90	--	0.010	0.7	110	<3	<1	<0.01
11N.06E.26.344	08-23-90	18	0.040	0.9	50	<3	10	0.13
11N.06E.28.322	08-24-90	6.4	0.020	2.6	160	<3	<1	0.08
11N.06E.29.232	07-20-90	--	0.020	0.3	60	23	4	<0.01
11N.06E.30.221 PA	09-25-90	--	<0.010	0.4	40	15	<1	0.08
11N.06E.30.323 DA	04-27-90	--	<0.010	0.3	110	630	26	0.01
11N.06E.32.144	09-27-90	--	0.010	1.1	150	8	19	0.02
11N.06E.34.322	08-24-90	--	<0.010	0.3	380	32	7	0.02

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
DONA ANA COUNTY

LOCAL IDENT- IFIER	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)
19S.05E.17.331 MAR-1SW	323906106274301	013	GW	01-30-90	1245	110AVMB	550.00	4132	940	
		013	GW	03-26-90	1115	110AVMB	550.00	4132	--	
		013	GW	08-29-90	1110	110AVMB	550.00	4132	820	
19S.05E.17.334 MAR-2SW	323857106273201	013	GW	01-30-90	1300	110AVMB	650.00	4138	980	
		013	GW	03-26-90	1045	110AVMB	650.00	4138	--	
		013	GW	08-29-90	1030	110AVMB	650.00	4138	830	
19S.05E.19.413 MAR-4	323842106281201	013	GW	01-30-90	1400	110AVMB	750.00	4223	880	
		013	GW	03-26-90	0945	110AVMB	750.00	4223	--	
		013	GW	08-30-90	1330	110AVMB	750.00	4223	795	
21S.04E.10.133 MARKHAM SPR	322952106314401	013	SP	08-30-90	1120		--	6060	760	
21S.04E.14.114 HTA-3	322910106303601	013	GW	01-30-90	1010	400PCMB	160.00	5150	930	
		013	GW	04-03-90	1500	400PCMB	160.00	5150	--	
		013	GW	08-29-90	1305	400PCMB	160.00	5150	810	
21S.04E.23.233 HTA-1	322801106300801	013	GW	01-30-90	0930	400PCMB	250.00	5018	850	
		013	GW	03-27-90	1120	400PCMB	250.00	5018	1100	
		013	GW	08-20-90	1355	400PCMB	250.00	5018	--	
21S.05E.16.132 SMR-1	322856106262701	013	GW	08-29-90	1355	400PCMB	250.00	5018	--	
		013	GW	01-30-90	1100	110BLSN	473.00	4171	870	
		013	GW	03-26-90	1150	110BLSN	473.00	4171	--	
		013	GW	08-30-90	1500	110BLSN	473.00	4171	785	
22S.04E.12.214 SW-20	322446106290801	013	GW	01-18-90	1145	110BLSN	838.00	4354	640	
		013	GW	03-06-90	1010	110BLSN	838.00	4354	--	
		013	GW	03-20-90	1145	110BLSN	838.00	4354	--	
		013	GW	08-28-90	0930	110BLSN	838.00	4354	560	
22S.04E.12.414 SW-19	322424106290301	013	GW	01-18-90	1105	110BLSN	800.00	4294	440	
		013	GW	03-06-90	0950	110BLSN	800.00	4294	--	
		013	GW	04-18-90	1200	110BLSN	800.00	4294	--	
22S.04E.12.434 SW-18	322405106290101	013	GW	01-18-90	1035	110BLSN	800.00	4264	440	
		013	GW	03-06-90	1025	110BLSN	800.00	4264	--	
		013	GW	03-20-90	1115	110BLSN	800.00	4264	--	
		013	GW	08-28-90	0835	110BLSN	800.00	4264	395	
22S.04E.13.241 SW-17	322347106285801	013	GW	01-18-90	1005	110BLSN	900.00	4260	410	
		013	GW	03-06-90	1035	110BLSN	900.00	4260	--	
		013	GW	03-20-90	1050	110BLSN	900.00	4260	--	
		013	GW	08-27-90	1500	110BLSN	900.00	4260	345	
22S.04E.13.311 SW-13	322331106293801	013	GW	08-31-90	1130	110BLSN	534.00	4330	625	
		013	GW	01-18-90	0935	110BLSN	890.00	4270	610	
22S.04E.13.432 SW-16	322325106290401	013	GW	03-07-90	0945	110BLSN	890.00	4270	--	
		013	GW	03-20-90	1000	110BLSN	890.00	4270	--	
		013	GW	01-24-90	0930	110BLSN	1100.00	4293	390	
22S.04E.24.144 SW-15A	322249106291801	013	GW	03-07-90	1010	110BLSN	1100.00	4293	--	
		013	GW	03-19-90	1140	110BLSN	1100.00	4293	--	
		013	GW	03-21-90	0945	110BLSN	1100.00	4293	--	
		013	GW	08-27-90	1410	110BLSN	1100.00	4293	320	
22S.04E.24.212A SW-10A	322309106290201	013	GW	01-24-90	1000	110BLSN	805.00	4273	420	
		013	GW	03-07-90	0955	110BLSN	805.00	4273	--	
		013	GW	03-21-90	0915	110BLSN	805.00	4273	--	
22S.05E.19.141 SW-22	322256106282601	013	GW	08-31-90	0951	110BLSN	805.00	4273	340	
		013	GW	01-24-90	1050	110BLSN	733.00	4217	360	
		013	GW	03-07-90	1030	110BLSN	733.00	4217	--	
22S.05E.19.323 SW-21	322237106282801	013	GW	03-19-90	1120	110BLSN	733.00	4217	--	
		013	GW	03-21-90	1035	110BLSN	733.00	4217	--	
		013	GW	08-28-90	1025	110BLSN	733.00	4217	340	
		013	GW	01-24-90	1130	110BLSN	700.00	4207	320	
		013	GW	03-07-90	1020	110BLSN	700.00	4207	--	
		013	GW	03-19-90	1130	110BLSN	700.00	4207	--	
		013	GW	03-21-90	1015	110BLSN	700.00	4207	--	
		013	GW	08-28-90	1100	110BLSN	700.00	4207	305	
		013	GW	03-07-90	1020	110BLSN	700.00	4207	--	

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- PIER	DATE	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
19S.05E.17.331 MAR	01-30-90	--	--	--	24.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.5	--	25.5	380	80	43	33	0.7
19S.05E.17.334 MAR	01-30-90	--	--	--	25.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.6	--	26.5	330	68	39	54	1
19S.05E.19.413 MAR	01-30-90	--	--	--	25.0	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	7.5	--	26.0	370	81	41	29	0.7
21S.04E.10.133 MAR	08-30-90	--	7.4	20.0	20.5	310	89	22	43	1
21S.04E.14.114 HTA	01-30-90	--	--	--	19.5	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	7.5	--	20.0	300	89	19	57	1
21S.04E.23.233 HTA	01-30-90	--	--	--	21.0	--	--	--	--	--
	03-27-90	--	--	--	24.5	--	--	--	--	--
	08-20-90	--	--	--	22.0	--	--	--	--	--
	08-29-90	749	7.6	--	--	280	89	14	53	1
21S.05E.16.132 SMR	01-30-90	--	--	--	26.5	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	7.7	--	28.0	370	74	45	28	0.6
22S.04E.12.214 SW-	01-18-90	--	--	--	25.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	7.8	--	26.5	210	62	13	35	1
22S.04E.12.414 SW-	01-18-90	--	--	--	25.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	27.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	8.0	--	28.0	110	34	5.5	41	2
22S.04E.13.241 SW-	01-18-90	--	--	--	27.5	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	7.9	--	27.0	110	34	5.7	31	1
22S.04E.13.311 SW-	08-31-90	--	7.4	--	22.5	240	68	16	41	1
22S.04E.13.432 SW-	01-18-90	--	--	--	25.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	26.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	7.9	--	27.0	110	34	5.5	29	1
22S.04E.24.212A SW	01-24-90	--	--	--	25.5	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	--	7.5	--	26.0	140	40	8.5	23	0.9
22S.05E.19.141 SW-	01-24-90	--	--	--	28.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	8.0	--	28.5	88	29	3.6	40	2
22S.05E.19.323 SW-	01-24-90	--	--	--	25.0	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	7.5	--	26.0	110	31	7.7	20	0.8

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	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 CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	2.0	209	180	38	0.40	0.17	24	551	535
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	2.2	209	180	41	0.40	0.17	24	533	542
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	2.1	205	160	31	0.40	0.14	23	528	499
21S.04E.10.133 MAR	08-30-90	0.60	233	130	24	4.0	0.20	32	482	490
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	0.80	224	130	30	5.0	0.20	25	515	509
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	1.7	180	140	31	4.0	0.20	32	493	495
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	2.0	245	150	24	0.90	0.14	29	509	506
22S.04E.12.214 SW-	01-18-90	--	--	--	--	0.50	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.7	128	110	26	1.4	0.19	31	376	370
22S.04E.12.414 SW-	01-18-90	--	--	--	--	0.40	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	0.40	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.0	110	64	14	1.1	0.11	31	257	265
22S.04E.13.241 SW-	01-18-90	--	--	--	--	0.50	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	2.2	123	46	11	0.50	0.090	36	242	246
22S.04E.13.311 SW-	08-31-90	2.7	176	100	21	0.40	0.13	40	410	420
22S.04E.13.432 SW-	01-18-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	0.40	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	2.3	116	53	8.0	0.40	0.060	37	239	242
22S.04E.24.212A SW	01-24-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	2.0	87	53	19	0.30	0.12	47	243	257
22S.05E.19.141 SW-	01-24-90	--	--	--	--	0.40	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	1.9	104	54	10	1.1	0.070	29	240	235
22S.05E.19.323 SW-	01-24-90	--	--	--	--	0.30	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	2.0	86	42	13	1.3	0.11	46	222	223

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	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)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
19S.05E.17.331	MAR 01-30-90	1.80	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	1.80	--	--	<10	<1	28	50	<1.0
19S.05E.17.334	MAR 01-30-90	1.60	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	1.60	--	--	<10	<1	36	60	<1.0
19S.05E.19.413	MAR 01-30-90	1.60	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	1.70	1.70	--	<0.010	<10	<1	29	50	<1.0
21S.04E.10.133	MAR 01-30-90	1.20	1.20	1.4	<0.010	<10	<1	38	20	<1.0
21S.04E.14.114	HTA 01-30-90	4.00	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	3.90	4.00	4.2	<0.010	<10	<1	30	30	1.0
21S.04E.23.233	HTA 01-30-90	4.90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	4.90	--	--	<10	<1	34	40	<1.0
21S.05E.16.132	SMR 01-30-90	1.20	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	--	1.30	--	--	<10	<1	33	30	1.0
22S.04E.12.214	SW- 01-18-90	2.60	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	2.50	--	--	<10	1	65	30	<1.0
22S.04E.12.414	SW- 01-18-90	1.50	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434	SW- 01-18-90	1.90	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	1.40	--	--	<10	1	49	20	<1.0
22S.04E.13.241	SW- 01-18-90	1.20	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	1.20	--	--	20	<1	54	20	<1.0
22S.04E.13.311	SW- 08-31-90	--	5.60	--	--	<10	<1	98	20	<1.0
22S.04E.13.432	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144	SW- 01-24-90	1.60	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	--	0.700	--	--	<10	<1	53	20	2.0
22S.04E.24.212A	SW 01-24-90	2.90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	--	2.60	--	--	<10	<1	50	20	1.0
22S.05E.19.141	SW- 01-24-90	0.800	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	0.800	--	--	<10	1	54	20	<1.0
22S.05E.19.323	SW- 01-24-90	1.90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	--	1.90	--	--	<10	<1	50	10	<1.0

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	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)	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)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	3	7	1	16	1	<0.1	<1	<1.0
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	2	5	1	16	<1	<0.1	<1	<1.0
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	<1	2	36	1	15	7	<0.1	<1	<1.0
21S.04E.10.133 MAR	08-30-90	<1	1	8	<1	36	2	<0.1	<1	1.0
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	2	6	1	27	<1	<0.1	1	2.0
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	<1	1	12	1	26	3	<0.1	<1	<1.0
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	--
	08-30-90	<1	2	17	<1	13	3	<0.1	<1	<1.0
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	1	2	<3	1	17	<1	<0.1	2	<1.0
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-28-90	1	1	<3	1	10	<1	<0.1	<1	<1.0
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
	08-27-90	1	2	<3	1	12	<1	0.1	1	<1.0
22S.04E.13.311 SW-	08-31-90	2	2	13	1	9	<1	<0.1	<1	<1.0
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	--	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-27-90	<1	1	<3	<1	10	2	0.1	<1	<1.0
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-31-90	1	3	21	1	9	4	<0.1	<1	<1.0
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	<1	1	<3	1	7	<1	<0.1	<1	<1.0
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	--
	08-28-90	<1	1	<3	<1	6	<1	<0.1	<1	<1.0

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	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)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-29-90	1100	43	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	0.60
	08-29-90	1000	30	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-30-90	870	39	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	240	29	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--	<0.20
	08-29-90	270	120	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--	<0.20
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	340	76	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--	<0.20
	08-30-90	360	61	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	3.7	<0.4	4.4	<0.4	3.8	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.12.414 SW-	08-28-90	390	17	--	--	--	--	--	--	--
	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	3.5	<0.4	4.5	<0.4	3.7	<0.4	--
	04-18-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	4.8	<0.4	3.9	<0.4	3.2	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	360	10	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	2.2	<0.4	4.4	<0.4	3.6	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
	08-27-90	300	12	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	520	23	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	4.7	<0.4	4.1	<0.4	3.5	<0.4	--
	03-20-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.5	<0.4	5.8	0.6	5.0	0.6	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
22S.04E.24.212A SW	08-27-90	310	29	--	--	--	--	--	--	--
	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.3	<0.4	2.6	<0.4	2.1	<0.4	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
22S.05E.19.141 SW-	08-31-90	290	61	--	--	--	--	--	--	--
	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	3.8	<0.4	4.7	<0.4	4.1	<0.4	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
22S.05E.19.323 SW-	08-28-90	310	23	--	--	--	--	--	--	--
	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	1.4	<0.4	3.9	<0.4	3.1	<0.4	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	--	--	--	--	--	--	--	--	<0.20
	08-28-90	230	27	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)
19S.05E.17.331	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	0.40	1.1	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR 08-30-90	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	04-18-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.12.434	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW- 08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.24.144	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	4.9	0.30	<0.20	<0.20	0.20	<0.20	<0.20
22S.05E.19.141	SW- 08-31-90	--	--	--	--	--	--	--	--	--
	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

	LOCAL IDENT- I- FIER	DATE	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE 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)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)
19S.05E.17.331	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR	08-30-90	--	--	--	--	--	--	--	--	--
		01-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA	01-30-90	--	--	--	--	--	--	--	--	--
		04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA	01-30-90	--	--	--	--	--	--	--	--	--
		03-27-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-20-90	--	--	--	--	--	--	--	--	--
		08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR	01-30-90	--	--	--	--	--	--	--	--	--
		03-26-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		04-18-90	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.13.241	SW-	08-28-90	--	--	--	--	--	--	--	--	--
		01-18-90	--	--	--	--	--	--	--	--	--
		03-06-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW-	08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW-	01-18-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-20-90	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.24.144	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW-	01-24-90	--	--	--	--	--	--	--	--	--
		03-07-90	--	--	--	--	--	--	--	--	--
		03-19-90	--	--	--	--	--	--	--	--	--
		03-21-90	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
		08-28-90	--	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	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)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-20-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	--	--	--	--	--	--	--
	03-21-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	08-28-90	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	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- ELDRIN TOTAL (UG/L) (39380)
19S.05E.17.331	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.17.334	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
19S.05E.19.413	MAR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.10.133	MAR 08-30-90	--	--	--	--	--	--	--	--	--
21S.04E.14.114	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	04-03-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.04E.23.233	HTA 01-30-90	--	--	--	--	--	--	--	--	--
	03-27-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--	--
21S.05E.16.132	SMR 01-30-90	--	--	--	--	--	--	--	--	--
	03-26-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--	--
22S.04E.12.214	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.12.414	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	04-18-90	<0.20	<0.2	--	--	--	--	--	--	--
22S.04E.12.434	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.04E.13.241	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-06-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.13.311	SW- 08-31-90	--	--	--	--	--	--	--	--	--
22S.04E.13.432	SW- 01-18-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-20-90	<0.20	<0.2	--	--	--	--	--	--	--
22S.04E.24.144	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--	--
22S.04E.24.212A	SW 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-31-90	--	--	--	--	--	--	--	--	--
22S.05E.19.141	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--
22S.05E.19.323	SW- 01-24-90	--	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--	--
	03-19-90	--	--	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
	03-21-90	<0.20	<0.2	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	--	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	--	--	--
	08-20-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	--	--	--
	08-30-90	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	04-18-90	--	--	--	--	--	--	--	--
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	--	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-07-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-20-90	--	--	--	--	--	--	--	--
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-31-90	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.01
	03-21-90	--	--	--	--	--	--	--	--
	08-28-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DONA ANA COUNTY -- Continued

LOCAL IDENT- & I- FIER,	DATE	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)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
19S.05E.17.331 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.17.334 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
19S.05E.19.413 MAR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-30-90	--	--	--	--	--	--	--	--
21S.04E.10.133 MAR	08-30-90	--	--	--	--	--	--	--	--
21S.04E.14.114 HTA	01-30-90	--	--	--	--	--	--	--	--
	04-03-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-29-90	--	--	--	--	--	--	--	--
21S.04E.23.233 HTA	01-30-90	--	--	--	--	--	--	--	--
	03-27-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-20-90	--	--	--	--	--	--	--	--
	08-29-90	--	--	--	--	--	--	--	--
21S.05E.16.132 SMR	01-30-90	--	--	--	--	--	--	--	--
	03-26-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-30-90	--	--	--	--	--	--	--	--
22S.04E.12.214 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.12.414 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	04-18-90	--	--	--	--	--	<0.2	<0.2	0.3
22S.04E.12.434 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.04E.13.241 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-06-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	08-31-90	--	--	--	--	--	--	--	--
22S.04E.13.432 SW-	01-18-90	--	--	--	--	--	--	--	--
	03-07-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-20-90	--	--	--	--	--	<0.2	<0.2	<0.2
22S.04E.24.144 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-27-90	--	--	--	--	--	--	--	--
22S.04E.24.212A SW	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-31-90	--	--	--	--	--	--	--	--
22S.05E.19.141 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--
22S.05E.19.323 SW-	01-24-90	--	--	--	--	--	--	--	--
	03-07-90	--	--	--	--	--	--	--	--
	03-19-90	<0.01	<0.01	<0.1	<0.10	<0.01	--	--	--
	03-21-90	--	--	--	--	--	<0.2	<0.2	<0.2
	08-28-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

LINCOLN COUNTY

[illegible]

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

LINCOLN COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
09S.07E.25.134	08-14-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

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)
09N.18W.05.324	350214108454001	031	GW	12-15-89	1040	231CHNL	161.60	1540	
LOCAL IDENT- I- FIER	DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
09N.18W.05.324	12-15-89	6473	1440	22	1750	1830	8.6	8.0	20.0
LOCAL IDENT- I- FIER	DATE	HARD- NESS TOTAL (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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
09N.18W.05.324	12-15-89	27	10	0.46	380	32	0.50	234	550
LOCAL IDENT- I- FIER	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 DIS- SOLVED (MG/L AS N) (00631)	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)
09N.18W.05.324	12-15-89	86	3.3	10	1180	<0.100	<10	<1	8
LOCAL IDENT- I- FIER	DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	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)
09N.18W.05.324	12-15-89	1100	<1.0	<1	1	110	<1	24	0.1
LOCAL IDENT- I- FIER	DATE	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)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	RADIUM 226, DIS- SOLVED (PCI/L RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
09N.18W.05.324	12-15-89	<1	1.0	10	6.1	5.0	4.5	0.40	1.3

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
OTERO COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
19S.06E.21.321 HELSTF-2	323832106201301	035	GW	06-09-90	2130	110AVMB	1000	833	
								693	
								493	
								413	
								293	
19S.06E.21.321A HELSTF-3	323831106201301	035	GW	07-02-90	0140	110AVMB	520.00	--	
19S.06E.28.221A HELSTF-1	323803106194201	035	GW	05-14-90	1200	110AVMB	100.00	--	

LOCAL IDENT- I- FIER	DATE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF HOLE, TOTAL (FEET) (72001)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
19S.06E.21.321 HEL	06-09-90	815	3950	1000	114000	--	7.3	--	22000
	06-10-90	675	3950	1000	83000	--	7.5	--	12000
	06-11-90	475	3950	1000	22700	--	7.9	--	3700
	06-11-90	395	3950	1000	21400	--	7.8	--	4600
	06-11-90	275	3950	1000	7800	--	7.9	--	1800
19S.06E.21.321A HE	07-02-90	--	3950	540	--	13900	7.8	22.0	2700
19S.06E.28.221A HE	05-14-90	--	3949	130	--	11600	7.3	--	2800

LOCAL IDENT- I- FIER	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)
19S.06E.21.321 HEL	06-09-90	760	4800	28000	83	450	146	15000	46000
	06-10-90	1000	2200	17000	69	270	129	8200	33000
	06-11-90	590	550	4400	31	98	147	7400	4500
	06-11-90	720	680	3800	24	98	163	6600	4600
	06-11-90	370	210	1200	12	34	142	2800	1200
19S.06E.21.321A HE	07-02-90	390	420	2500	21	53	88	5100	2400
19S.06E.28.221A HE	05-14-90	440	410	2100	17	29	200	6700	750

LOCAL IDENT- I- FIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	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)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
19S.06E.21.321 HEL	06-09-90	0.80	21	7.6	111000	95200	0.700	530	46
	06-10-90	5.0	14	14	67700	61800	0.500	<100	39
	06-11-90	1.8	1.7	19	18700	17700	0.900	20	52
	06-11-90	2.0	2.0	16	17300	16600	1.70	30	15
	06-11-90	0.40	0.54	20	5940	5940	2.50	10	3
19S.06E.21.321A HE	07-02-90	1.6	0.98	25	11800	11000	1.30	<20	17
19S.06E.28.221A HE	05-14-90	<0.10	0.31	30	10900	10600	15.0	20	43

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

OTERO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
19S.06E.21.321 HEL	06-09-90	100	1100	<20	<10	<1	<10	1100	<10
	06-10-90	100	14000	<10	<10	<1	<10	600	<10
	06-11-90	100	980	<2.0	4	1	<2	90	<2
	06-11-90	100	720	<2.0	3	1	<2	100	<2
	06-11-90	<100	490	<1.0	3	1	3	80	<1
19S.06E.21.321A HE	07-02-90	<100	660	<2.0	3	<1	<2	50	<2
19S.06E.28.221A HE	05-14-90	100	1500	1.0	<2	<1	<1	30	<1

LOCAL IDENT- IFIER	DATE	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)	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
19S.06E.21.321 HEL	06-09-90	3200	1100	0.3	2	<10	12000	11000
	06-10-90	1700	490	0.3	<2	<10	14000	7000
	06-11-90	620	150	0.5	2	<2.0	4500	1500
	06-11-90	500	150	0.8	7	<2.0	5100	2200
	06-11-90	210	120	0.2	7	<1.0	6300	390
19S.06E.21.321A HE	07-02-90	370	130	0.4	12	<2.0	6300	90
19S.06E.28.221A HE	05-14-90	230	170	0.2	.4	<1.0	60	1200

SAN JUAN COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
29N.16W.09.342 SAN JUAN FL	364430108312501	045	GW	06-12-90	1530			--	5060
		045	GW	08-01-90	1530	110AVMB		--	5060
ALLUVIAL WELL ON CHACO RIV	363458108342401	045	GW	08-03-90	1100	110AVMB		900.00	5140
NR032.0505X0180 CHACO R WE	364325108353001	045	GW	06-12-90	0930	110AVMB		9.00	4980
		045	GW	08-02-90	1000	110AVMB		9.00	4980

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)
29N.16W.09.342 SAN	06-12-90	1100	7.3	16.0	580	160	44	53	1
	08-01-90	990	7.1	18.5	520	140	40	48	0.9
ALLUVIAL WELL ON C	08-03-90	1200	7.5	24.0	200	67	7.5	220	7
NR032.0505X0180 CH	06-12-90	2000	7.4	15.5	400	86	44	330	7
	08-02-90	1890	7.4	18.0	320	69	35	290	7

LOCAL IDENT- IFIER	DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)
29N.16W.09.342 SAN	06-12-90	1.9	311	330	15	0.50	0.050	0.007
	08-01-90	1.9	352	260	12	0.30	0.040	0.009
ALLUVIAL WELL ON C	08-03-90	4.8	214	420	10	1.0	0.030	0.003
NR032.0505X0180 CH	06-12-90	6.0	137	770	58	1.2	0.13	0.014
	08-02-90	6.2	156	720	56	1.0	0.030	0.011

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SIERRA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
13S.04E.11.334 RC-	03-27-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

SOCORRO 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)
06S.03E.05.232 SRC-1	334908106390801	053		GW	04-03-90	1000	110AVMB	750.00	4950	3800
06S.03E.05.233N SRC PROD	334908106391202	053		GW	04-03-90	1050		--	--	365
		053		GW	09-04-90	1100		--	--	420
06S.03E.05.233S SRC PROD	334908106391203	053		GW	04-03-90	1115		--	--	1060
06S.05E.05.234 SRC-2	334907106391201	053		GW	04-03-90	0910	110AVMB	720.00	4953	3800
		053		GW	09-04-90	1130	110AVMB	720.00	4953	3400

LOCAL IDENT- IFIER	DATE	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)	ALKA- LITY LAB (MG/L AS CACO3) (90410)
06S.03E.05.232 SRC	04-03-90	--	26.5	--	--	--	--	--	--	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	7.4	29.0	66	13	8.1	57	3	1.1	19
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	--	--
06S.05E.05.234 SRC	04-03-90	--	27.0	--	--	--	--	--	--	--
	09-04-90	7.7	28.0	1700	380	170	260	3	9.0	41

LOCAL IDENT- IFIER	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)	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 CONSTITUENTS, 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)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	2.00	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	0.500	--
	09-04-90	160	13	0.40	0.15	32	298	300	--	0.800
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	1.00	--
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	2.40	--
	09-04-90	2000	36	0.20	0.50	32	3300	2930	--	2.50

LOCAL IDENT- IFIER	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)	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	--	--
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	<10	<1	<2	420	<1.0	1	1	6	<1
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	--	--
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	--	--
	09-04-90	20	1	<100	430	<1.0	2	<1	40	<1

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

SOCORRO COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	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)	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
06S.03E.05.232 SRC	04-03-90	--	--	--	--	--	--	--	<0.20
06S.03E.05.233N SR	04-03-90	--	--	--	--	--	--	--	<0.20
	09-04-90	15	<1	0.1	<1	<1.0	210	14	--
06S.03E.05.233S SR	04-03-90	--	--	--	--	--	--	--	<0.20
06S.05E.05.234 SRC	04-03-90	--	--	--	--	--	--	--	<0.20
	09-04-90	50	20	0.1	8	<1.0	4900	<10	--

LOCAL IDENT- I- FIER	DATE	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE 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)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	0.50	0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	0.30	0.40	0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	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)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	09-04-90	--	--	--	--	--	--	--	--

LOCAL IDENT- I- FIER	DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
06S.03E.05.232 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
06S.03E.05.233N SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
	09-04-90	--	--	--	--	--	--	--	--
06S.03E.05.233S SR	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
06S.05E.05.234 SRC	04-03-90	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
	09-04-90	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

TAOS COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)
28N.12E.08 BIG ARSENIC SEE	364058105412201	055	SP	07-24-90	1015	000EXRV	6880	178	8.1	
28N.12E.09.BLM VISITOR CEN	364057105401701	055	GW	07-23-90	1500	122SNTFL	--	230	8.1	
28N.12E.09.MOTTL SPRING BE	364042105393901	055	SP	07-25-90	0955	122SNTFL	--	225	8.2	
28N.12E.17. LITTLE ARSENIC	363957105411401	055	SP	07-24-90	1115	000EXRV	--	208	8.2	
29N.12E.20.BLM CHIFLO WELL	364422105403201	055	GW	07-24-90	1318	122SNTFL	--	235	8.3	

LOCAL IDENT- I- FIER	DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (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)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
28N.12E.08 BIG ARS	07-24-90	20.0	15.5	68	19	5.1	20	1	2.3	103
28N.12E.09.BLM VIS	07-23-90	21.0	19.0	65	17	5.4	22	1	2.3	103
28N.12E.09.MOTTI S	07-25-90	20.0	17.5	59	15	5.2	21	1	2.4	--
28N.12E.17. LITTLE	07-24-90	22.0	15.0	62	17	4.7	20	1	2.7	98
29N.12E.20.BLM CHI	07-24-90	21.5	18.5	64	17	5.2	21	1	2.7	105

LOCAL IDENT- I- FIER	DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
28N.12E.08 BIG ARS	07-24-90	0	85	83	21	8.9	1.1	33	157	164
28N.12E.09.BLM VIS	07-23-90	0	84	85	19	7.5	1.4	32	148	162
28N.12E.09.MOTTI S	07-25-90	--	--	82	19	8.4	1.3	33	160	157
28N.12E.17. LITTLE	07-24-90	0	80	82	15	7.2	1.2	35	144	153
29N.12E.20.BLM CHI	07-24-90	0	86	88	21	6.9	1.5	33	166	163

LOCAL IDENT- I- FIER	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 ORTH, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
28N.12E.08 BIG ARS	07-24-90	0.700	0.700	<0.010	--	0.90	0.010	<0.010	3	<1
28N.12E.09.BLM VIS	07-23-90	0.700	1.10	0.020	0.18	0.90	<0.010	<0.010	5	<1
28N.12E.09.MOTTI S	07-25-90	0.600	0.600	<0.010	--	--	0.010	0.010	<3	<1
28N.12E.17. LITTLE	07-24-90	0.500	0.500	<0.010	--	--	<0.010	<0.010	7	<1
29N.12E.20.BLM CHI	07-24-90	0.800	0.800	0.050	--	--	0.020	<0.010	10	<1

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

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

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

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