

# **Water Resources Data for New Mexico Water Year 1975**



**U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-75-1**

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

# CALENDAR FOR WATER YEAR 1975

1974

## OCTOBER

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

## NOVEMBER

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

## DECEMBER

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

1975

## JANUARY

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

## FEBRUARY

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

## MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## APRIL

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

## MAY

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

## JUNE

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

## JULY

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

## AUGUST

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

## SEPTEMBER

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

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## PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Mexico and with other agencies, by personnel of the New Mexico district of the Water Resources Division under the supervision of W. E. Hale, District Chief, and A. Clebsch Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

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New Mexico State Highway Department  
New Mexico Environmental Improvement Agency  
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1976

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## WATER RESOURCES DATA FOR NEW MEXICO, 1975

Section 1. Surface-Water Records

Section 2. Water-Quality Records

Section 3. Ground-Water Records

### INTRODUCTION

Water resources data for the 1975 water year for New Mexico, consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels of observation wells. Also included are discharge data for crest-stage partial-record stations and water-quality data for partial-record stations or miscellaneous sites. Location of the gaging stations is shown in figures 2 and 3, location of water-quality stations in figure 4, location of observation wells in figure 5. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements, seepage investigations or miscellaneous water-quality analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Mexico.

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

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records have been similarly released in separate reports. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report NM-75-1." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on subsequent pages.

## COOPERATION

The U.S. Geological Survey and organizations of the State of New Mexico have had cooperative agreements for the systematic collection of surface-water records since 1930, of water-quality records since 1940, and of ground-water records since 1934. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

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

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

Pecos River Commission, H. M. Babcock, federal representative and chairman, J. B. Walker, commissioner for New Mexico, R. B. McGowen, Jr., commissioner for Texas.

New Mexico State Highway Department, L. G. Boles, succeeded by J. A. Bird, State Highway engineer.

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

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

Assistance in the form of funds or services was furnished by the following federal agencies:

Corps of Engineers, U.S. Army in the operation of 32 gaging stations and 4 water-quality stations.

Bureau of Reclamation, U.S. Department of the Interior in the operation of 7 gaging stations.

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

Bureau of Indian Affairs, U.S. Department of the Interior in the operation of 5 gaging stations.

Environmental Protection Agency in the operation of several water-quality stations.

Assistance in the form of funds or services was also furnished by the New Mexico Environmental Improvement Agency, the New Mexico Institute of Mining and Technology, the city of Ruidoso, and Carlsbad Irrigation District.

Organizations that furnished data are recognized in the station descriptions.

## DEFINITION OF TERMS

Terms related to water-quality and hydrologic data as used in this report are defined below. See also table for converting English units to International System of units (SI) on page 33.

Acre-foot (AC-FT, ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

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

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

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

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

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

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

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

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

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximate 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inches from 1 square mile or 0.3468 millimeter from 1 square kilometer.

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

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

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate membrane filter method.

Composite-period is the time interval in which samples collected during that period are combined into a single composite sample. The chemical analysis and other measurements made on the composite sample are assumed to be representative of the entire period. The composite periods in this report vary from one day to one month and are based upon changes in the specific conductances of daily samples and/or changes in daily discharges. In this report "sampling period" and "composite period" are used interchangeably.

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



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

1. Chemical-quality samples collected monthly or more frequently.
2. Water-temperature measurements made once or more times daily.
3. Sediment-discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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

Cubic foot per second (CFS, ft<sup>3</sup>/s) 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, total fluids), that passes a given point within a given period of time.

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

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

Discharge-weighted average, (see weighted average).

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

Drainage area of a stream at a specific location is that area, measured in horizontal plane, enclosed by topographic divides from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point.

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 body of impounded surface water together with all tributary surface stream 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 gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those sites where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ( $\text{CaCO}_3$ ).

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

Milliequivalents per liter (ME/L,  $\text{me/l}$ ) is a unit for expressing chemical equivalent concentrations of ions or constituents in solution. Concentrations in milligrams per liter are converted to milliequivalents per liter by multiplying by the appropriate factors in table 1, page 7. The factors are reciprocals of equivalent weights and are calculated by dividing the valences by the atomic or formula weights. The term "milliequivalents" is a contraction of the more precise term "milligram equivalents."

Milligrams per liter (MG/L,  $\text{mg/l}$ ) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams per liter may be converted to parts per million (ppm) by dividing by the density in grams per milliliter. Concentration of suspended sediment also is expressed in  $\text{mg/l}$ , and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 7.

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

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

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

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

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

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

\*Concentrations given in micrograms per liter in this report; multiply concentration by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million\*  
(All values calculated to three significant figures)

<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually 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 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 either by sieve or sedimentation methods. Sedimentation methods (pipet, 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) (Guy, 1969). Fall diameter of a particle is the diameter of a quartz sphere that would fall in water at the same rate as the particle under the same settling conditions.

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

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

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

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

Picocurie per liter (PC/L, pCi/l) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (C or Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute.

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

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

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

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per 100 ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per 100 ml of sample.

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

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

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time (Porterfield, 1972). It is computed by multiplying discharge times concentration in mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hubbell, 1961).

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 or 0.09 meter above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l). These concentrations are determined by filtration and (or) evaporation methods (Guy, 1969).

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigated farmland.

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

Solution is the homogenous 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 and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from aquifer to aquifer, and it may even vary in the same source with changes in the composition of the water. The terms "specific conductance" and "conductivity" are used interchangeably in this report.

Stage-discharge relation is the relation between gage height and the 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." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

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.....	Ephameridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is a temperature sensing device that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" implies the use of a thermograph or other automatic temperature recording device.

Time-weighted average concentration in this report is computed by multiplying the number of days in individual composite periods by the concentration for the corresponding periods and dividing the sum of these products by the total number of days. An annual time-weighted average concentration represents the composition of the water that would be contained in a vessel or reservoir that had received equal volumes of water from the sampled stream for each day of the year. (See composite period, weighted average.)

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

Tons per day is the quantity of a substance in a solution or suspension that passes a stream section during a 24-hour day. When tons per day are computed from instantaneous discharges and concentrations, it is assumed that these values are representative of the 24-hour period.

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

Weighted-average concentration is synonymous to discharge-weighted average concentration in this report. It is computed by multiplying the total discharge for a composite period by the concentration for the corresponding period and dividing the sum of these products by the sum of the discharges. An annual discharge-weighted average concentration represents the composition of the water that would be contained in a reservoir that had received all the water that flowed from the sampled stream during the year. (See composite period, time-weighted average.)

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

#### SPECIAL NETWORKS AND PROGRAMS

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

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

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States."

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.



Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radio chemical program is a network of regularly sampled water quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

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

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

Surveillance network stations are surface-water stations selected for water-quality examinations for water-quality control purposes. These stations are usually located at key regulatory streamflow gaging stations or near the statelines. Data for major inorganic constituents, nutrients, dissolved oxygen, and bacteria are collected at all these stations. Data for trace elements, radiochemicals, and pesticides are collected at some of these stations.

## DOWNSTREAM ORDER AND STATION NUMBERS

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

As an added means of identification, each gaging station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 08313000 which appears just to left of the station name includes the 2-digit part number "08" plus the 6-digit downstream order number "313000." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 07 (Lower Mississippi River basin), Part 08 (Western Gulf of Mexico basin), and Part 09 (Colorado River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

Miscellaneous surface water-quality sites which have not been assigned eight-digit downstream numbers are identified by using the latitude and longitude locations of the sites as the station numbers. These are 15-digit numbers consisting of the latitude and longitude coordinates in degrees, minutes and seconds plus a 2-digit sequence number. For example, the station number for a miscellaneous surface water site located at north latitude 32°11'05", west longitude 104°17'05" and a sequence number assignment of "10" would be 321105104170510.

## LOCAL IDENTIFIER AND STATION NUMBER FOR WELLS AND SPRINGS

Wells and springs in this report are identified by local identifiers derived from a system used by the U.S. Geological Survey for numbering wells and springs in New Mexico. The local identifier is based on the system of public land 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, as illustrated on page . The letters N or S locate the township north or south of the New Mexico base line. The letters E or W locate the range east or west of the New Mexico principal meridian. A zero in a tract number indicates that the well or spring is centrally positioned or has not been located accurately enough to be placed within a tract or quarter section. Three digits in a tract number can locate a well or spring to the nearest 10 acre tract while six digits will locate a site to the nearest 0.16 acre tract. This numbering system is illustrated in figure 1, page 16.

Wells and springs in this report are also identified by station numbers which are essentially the latitudes and the longitudes locating the wells or the springs. These station numbers are the principal identifiers of wells and springs in the U.S. Geological Survey's National Water Data System. For example, the well illustrated in figure 1, page 16 is also located in north latitude  $32^{\circ}13'05''$  and west longitude  $103^{\circ}59'51''$ . It has been assigned a sequence number "01" so its station identification number is 321305103595101.

## EXPLANATION OF SURFACE-WATER RECORDS

Collection and Computation of Data

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

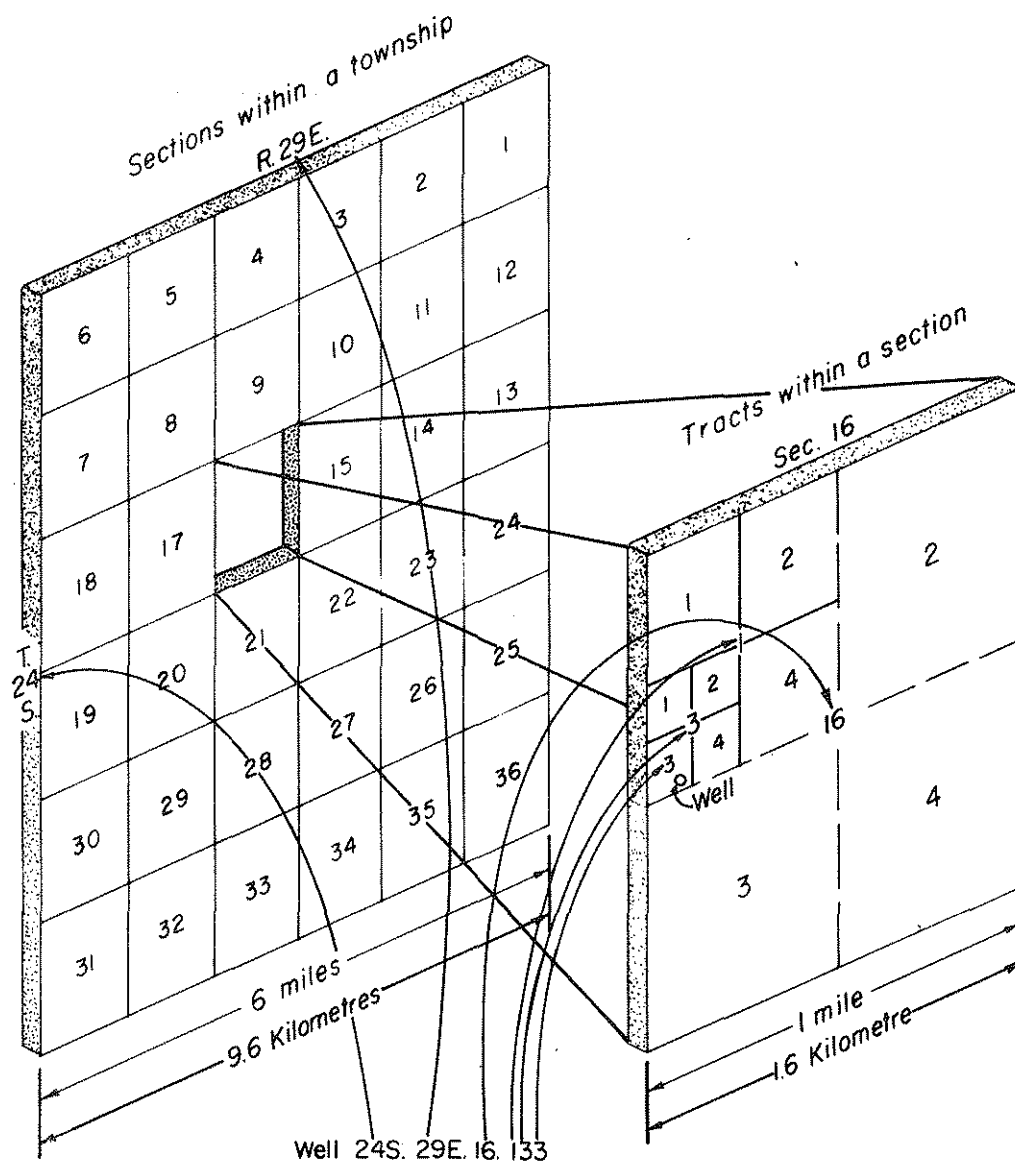


Figure 1.--System of numbering wells and springs in New Mexico.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared for stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and the yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and/or monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily gage heights or elevations at, 0800 hours, are included for some reservoir stations. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation. In the first paragraph headed "Current year": the data given are for the complete current water year unless otherwise specified. In the second paragraph usually headed "Period of record": the data given are for the period of record given in the PERIOD OF RECORD paragraph. Otherwise the data given are for a shorter period and the heading shows the period for which extremes are available. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur

at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932 to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

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

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading.

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

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is expressed in acre-feet (line headed "AC-FT").

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month, except for those stations for which a table of daily elevations (or gage heights) is published.

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

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

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

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

Seepage investigations are presented following measurements at miscellaneous sites. These consist of text and tabulations summarizing data derived primarily from associated series of discharge measurements and observations made within a short time period along a given reach of channel, preferably during a period of relatively stable conditions.



### Accuracy of Data

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

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

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

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

### Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in New Mexico for the period October 1960 to September 1965 are in Water-Supply Papers 1920, 1923, 1925, and 1926; those for period October 1965 to September 1970 are in Water-Supply Papers 2121, 2123, 2125, 2126.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some

records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in New Mexico are compiled in Water-Supply Papers 1311, 1312, and 1313 through September 1950, and in 1731, 1732, and 1733 for October 1950 to September 1960.

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

#### Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in New Mexico through 1973 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

### EXPLANATION OF WATER-QUALITY RECORDS

#### Collection and Examination of Data

Water samples for analyses and water-quality field measurements usually are collected at or near points on streams where gaging stations are maintained by the U.S. Geological Survey for measurement of water discharge. These discharge records are used in conjunction with the computations of the chemical constituents and sediment loads where they are applicable in this report.

Data on the quality of surface water were collected daily at some stations and less frequently at other stations; the locations of surface water stations where quality of water data are collected on a systematic basis are shown on the map on page 264, figure 4.

The data in this report includes a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

For miscellaneous surface-water sites no descriptive statements are given. For ground-water sampling stations, no descriptive statements are given either. However, the well number, depth of well, date of sampling, and other pertinent data, if available, are given in the tables containing the chemical analyses of ground water.

### Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar (1967); Lamar, Goerlitz, and Law (1965); and Goerlitz and Brown (1972). Analyses of radioactive substances in water are described by Barker and others (1963, 1964, and 1965).

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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

For measurements such as pH and specific conductance, field values are considered to be more representative than laboratory values; however, if a sample changes very little between the time it is collected and the time it is measured in the laboratory, and if the laboratory method is more precise than the field method, the laboratory value may be the better value.

The chemical analyses of composite samples in this report generally represent discharge-weighted composites which range from one-day composites to thirty-day composites. The composite periods are selected on the basis of changes in the specific conductance of individual samples and fluctuations in streamflow.

Ground-water quality at a site generally does not change significantly during a short period. Changes in quality may be defined adequately by sampling as infrequently as seasonally or annually.

### Temperature

Water temperatures are measured using a glass stem thermometer at all of the water-quality stations. Water temperatures are taken at the same time water samples are collected. The water temperature records listed under "Records Available" of some station headings are for daily water temperature records. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are used, the records consist of maximum, minimum, and mean temperatures for each day. Monthly averages are also shown.

Table 3.--Degrees fahrenheit (°F) and degrees celsius (°C)\*  
(Temperature reported to nearest 0.5°C)

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

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$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32^{\circ}) \text{ or } ^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32^{\circ}.$$

### Sediment

Suspended sediment concepts are described by Guy (1970), and the techniques for sample collection, analyses, and measurement of suspended sediment are described by Guy and Norman (1970). Methods for computation of fluvial sediment discharges are described by Porterfield (1972). Methods for determining particle sizes of suspended sediment by optical techniques are described by Ritter and Helley (1969). Suspended-sediment concentrations are determined from samples collected by using depth-intergrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

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

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of 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 the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

### Biology

Generally three types of biological data appear in this report; microbiological data on coliform and streptococci bacteria, phytoplankton data and periphyton data. Methods for the collection and analysis of aquatic biological and aquatic microbiological samples are described by Slack and others (1973).

Coliform and streptococci bacteria are indicators of animal waste discharges into a stream or aquifer because these organisms are present in the intestinal tract of warm-blooded animals. These organisms are short-lived and relatively harmless, but their presence in a water supply suggest recent contamination and a possibility that dangerous bacteria may also be present.

Phytoplankton or the plant part of the plankton directly affect water quality, notably the dissolved oxygen, ph, concentration of certain solutes, and optical properties. At times the abundance or presence of particular species of phytoplankton result in nuisance conditions.

Periphyton are the resident community of microorganisms which are captives of their particular reach of stream throughout their lifetime in the water. A change in the composition of these communities is valuable for detecting water quality trends with time.

#### Parameter codes

The five-digit codes shown in parentheses in the column headings of the tables in this report are parameter codes which uniquely identify the data. These are standard codes used to identify the data stored in the files of the National Water Data Storage and Retrieval System which was implemented and is managed by the Water Resources Division (WRD) of the U.S. Geological Survey. These codes are identical to those used by the Environmental Protection Agency (EPA) in all cases where EPA has assigned a parameter code.

Publications

The annual series of Water-supply Papers that give information on quality of surface waters in New Mexico are listed below. Data for the Lower Mississippi River basin are given in Part 7; for the Western Gulf of Mexico basins in Part 8; and for the Colorado River basin in Part 9.

Water-supply paper numbers and parts containing  
quality of surface water for New Mexico

<u>Report year</u>	<u>Parts 1-14</u>	<u>Parts 7-8</u>	<u>Parts 9-14</u>	<u>Irriga- tion A</u>
1941 ....	942	-----	-----	-----
1942 ....	950	-----	-----	-----
1943 ....	970	-----	-----	-----
1944 ....	1022	-----	-----	-----
1945 ....	1030	-----	-----	-----
1946 ....	1050	-----	-----	-----
1947 ....	1102	-----	-----	-----
1948 ....	-----	1133	1133	-----
1949 ....	-----	1163	1163	-----
1950 ....	-----	1188	1189	-----
1951 ....	-----	1199	1200	1264
1952 ....	-----	1252	1253	1362
1953 ....	-----	1292	1293	1380
1954 ....	-----	1352	1353	1430
1955 ....	-----	1402	1403	1465
1956 ....	-----	1452	1453	1485
1957 ....	-----	1522	1523	1524
1958 ....	-----	1573	1574	1575
1959 ....	-----	1644	1645	1699
1960 ....	-----	1744	1745	1746
1961 ....	-----	1884	1885	1886
1962 ....	-----	1944	1945	1946
1963 ....	-----	1950	1951	1952
1964 ....	-----	1957	1958	1967
1965 ....	-----	1964	1965	1968
1966 ....	-----	1994	1995	-----
1967 ....	-----	2014	2015	-----
1968 ....	-----	2096, 2097	2098	-----
1969 ....	-----	2146, 2147	2148	-----
1970 ....	-----	2156, 2157	2158	-----

A "Quality of Surface Waters for Irrigation, Western States."

These reports contain Parts 7, 8, or 9. Parts 10 to 14 in these or other reports.

## EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

The observation-well program, which has been in progress in New Mexico since 1925, was continued during 1975 in cooperation with the State Engineer of New Mexico. About 1,400 wells are measured annually and published in the Technical Report Series by the State Engineer. See State Engineer Technical Report for areas in New Mexico where water levels are observed.

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

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

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

Water-level measurements in this report are given in feet below land-surface datum (lsd); land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

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



### Publications

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

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

Publication of ground-water levels in New Mexico by the Office of the State Engineer was begun in 1955. The first report covers the 5-year period 1951-55. Interim reports are on an annual basis with a more thorough report being published at the end of each 5-year period. These reports are more comprehensive in coverage than the water-supply papers and include comprehensive bibliographies of ground-water reports. Information about reports and other data on ground water in New Mexico may be obtained from the District Office, at the address given on the back of the title page.

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Table 4.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
<u>Length</u>		
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
yards (yd)	.9144	meters (m)
rods	5.0292	meters (m)
miles (mi)	1.609	kilometers (km)
<u>Area</u>		
acres	4047	square meters (m <sup>2</sup> )
	.4047	*hectares (ha)
	.4047	square hectometer (hm <sup>2</sup> )
	.004047	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	2.590	square kilometers (km <sup>2</sup> )
<u>Volume</u>		
gallons (gal)	3.785	**liters (l)
	3.785	cubic decimeters (dm <sup>3</sup> )
	3.785x10 <sup>-3</sup>	cubic meters (m <sup>3</sup> )
million gallons (10 <sup>6</sup> gal)	3785	cubic meters (m <sup>3</sup> )
	3.785x10 <sup>-3</sup>	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	28.32	cubic decimeters (dm <sup>3</sup> )
	.02832	cubic meters (m <sup>3</sup> )
cfs-day (ft <sup>3</sup> /s-day)	2447	cubic meters (m <sup>3</sup> )
	2.447x10 <sup>-3</sup>	cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	1233	cubic meters (m <sup>3</sup> )
	1.233x10 <sup>-3</sup>	cubic hectometers (hm <sup>3</sup> )
	1.233x10 <sup>-6</sup>	cubic kilometers (km <sup>3</sup> )
<u>Flow</u>		
cubic feet per second (ft <sup>3</sup> /s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm <sup>3</sup> /s)
	.02832	cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gpm)	.06309	liters per second (l/s)
	.06309	cubic decimeters per second (dm <sup>3</sup> /s)
	6.309x10 <sup>-5</sup>	cubic meters per second (m <sup>3</sup> /s)
million gallons per day (mgd)	43.81	cubic decimeters per second (dm <sup>3</sup> /s)
	.04381	cubic meters per second (m <sup>3</sup> /s)
<u>Mass</u>		
ton (short)	.9072	tonne (t)

\*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p. 15, 1972 edition.

\*\*The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.



SECTION 1. SURFACE WATER RECORDS

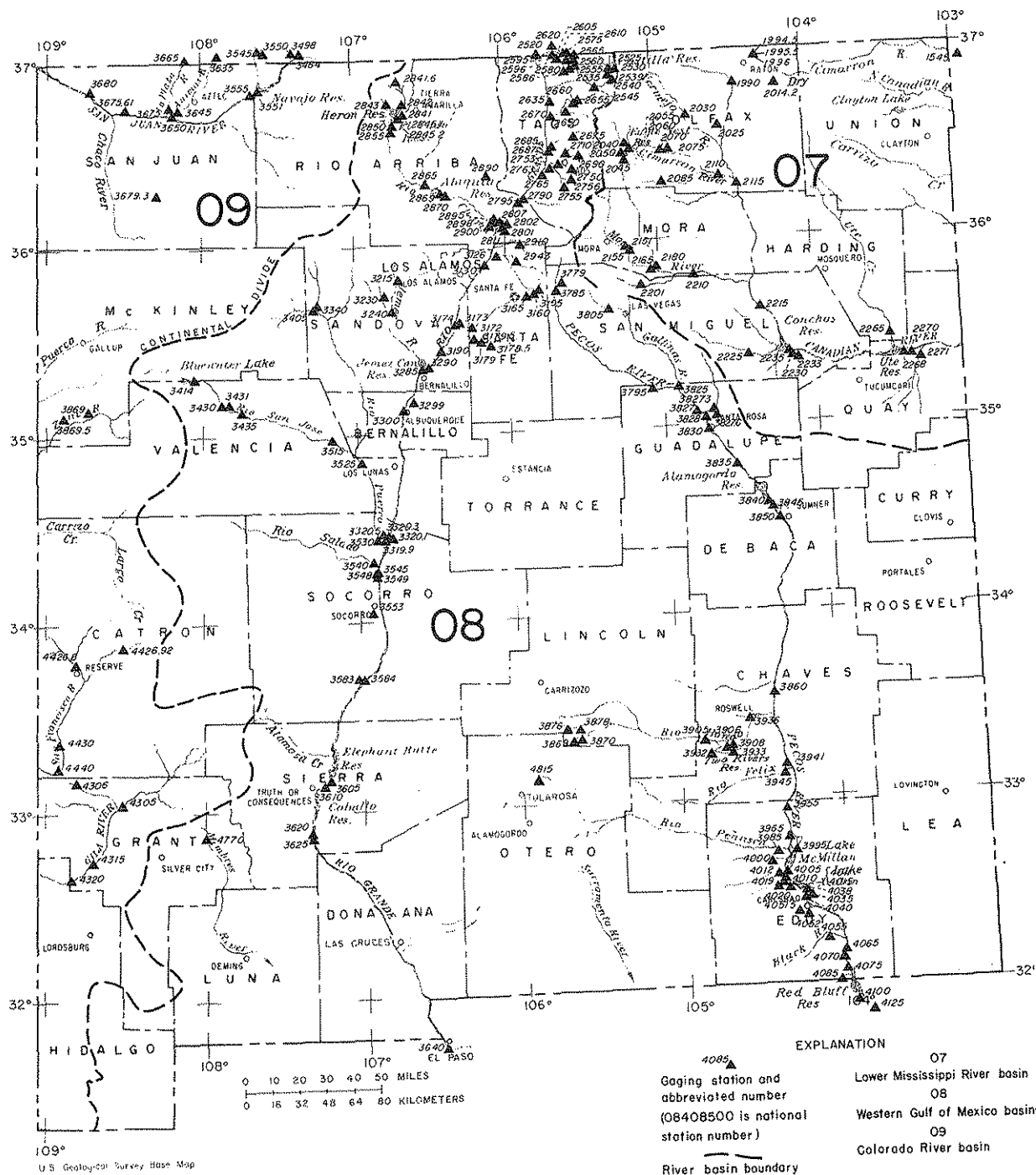


Figure 2.—Map of New Mexico showing location of active gaging stations.



## 07154500 CIMARRON RIVER NEAR KENTON, OKLA.

LOCATION.--Lat 36°55'36", long 102°57'31", in SE¼ sec. 4, T.5 N., R.1 E., Cimarron County, near right bank on downstream side of pier of county road bridge, 1.5 mi (2.4 km) upstream from North Carrizo Creek, 1.7 mi (2.7 km) northeast of Kenton, 2.2 mi (3.5 km) downstream from Carrizozo Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--1,106 mi<sup>2</sup> (2,865 km<sup>2</sup>), of which 68 mi<sup>2</sup> (176 km<sup>2</sup>) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft (1,299.082 m) above mean sea level (levels by State Highway Department). April 1904 to July 1905, nonrecording gage at site 0.9 mi (1.4 km) upstream at different datum. Oct. 1, 1950 to Sept. 19, 1967, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--25 years (1950-75), 22.1 ft<sup>3</sup>/s (0.626 m<sup>3</sup>/s), 16,010 acre-ft/yr (19.7 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft<sup>3</sup>/s (33.4 m<sup>3</sup>/s) June 23 (gage height, 9.59 ft or 2.923 m); no flow at times. Period of record: Maximum discharge, 43,600 ft<sup>3</sup>/s (1,230 m<sup>3</sup>/s) Oct. 17, 1965 (gage height, 22.32 ft or 6.803 m), present datum, from rating curve extended above 7,000 ft<sup>3</sup>/s (198 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair except those for winter period, which are poor. Extensive diversions for irrigation above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.17	.15	.09	.11	.18	.10	.17	0	.03	0	0
2	0	.17	.12	.07	.13	.17	.11	.17	0	.01	168	0
3	0	.17	.10	.05	.13	.17	.10	.12	0	0	6.0	0
4	0	.17	.08	.03	.13	.13	.07	.10	0	0	1.1	0
5	0	.19	.09	.08	.14	.12	.07	.09	0	0	.24	0
6	0	.21	.10	.12	.08	.08	.07	.05	0	0	.09	0
7	0	.21	.09	.14	.06	.10	.08	.04	0	0	.01	0
8	0	.21	.10	.14	.06	.10	.03	.03	0	0	0	0
9	0	.21	.09	.13	.03	.10	.12	.03	0	46	0	0
10	0	.21	.16	.16	.07	.12	.28	.04	.03	17	0	0
11	0	.21	.12	.07	.10	.15	.28	.02	.02	.99	0	0
12	.49	.21	.07	.04	.10	.14	.20	.02	0	.60	0	0
13	3.6	.21	.16	.06	.10	.14	.17	.01	0	25	0	0
14	.16	.21	.06	.10	.10	.13	.16	.01	0	.50	0	.49
15	.13	.21	.07	.14	.10	.12	.12	0	0	.10	0	1.8
16	.13	.21	.08	.15	.10	.13	.10	0	0	.04	0	.40
17	.13	.21	.07	.14	.10	.13	.10	0	0	.01	0	.18
18	.13	.21	.07	.12	.11	.12	.17	0	0	0	0	.10
19	.13	.21	.05	.14	.10	.11	.19	0	0	0	0	.05
20	.14	.21	.06	.15	.11	.11	.13	0	0	0	0	.01
21	.15	.21	.08	.12	.15	.10	.14	0	0	0	0	0
22	.15	.21	.08	.10	.18	.10	.14	0	0	0	0	0
23	.15	.21	.08	.13	.22	.05	.10	0	.43	0	0	0
24	.16	.21	.26	.16	.18	.06	.12	0	76	0	0	0
25	.16	.21	.08	.13	.21	.09	.12	0	.73	0	0	0
26	.16	.25	.04	.13	.19	.10	.09	0	.20	0	0	0
27	.16	.25	.03	.13	.21	.06	.10	0	.08	0	0	0
28	.16	.25	.02	.11	.21	.09	.05	0	.05	0	5.9	0
29	.13	.25	.02	.07	---	.12	.12	0	.04	0	.92	0
30	.15	.21	.02	.11	---	.12	.15	0	.03	0	.12	0
31	.17	---	.10	.13	---	.10	---	0	---	0	.05	---
TOTAL	6.74	6.28	2.70	3.44	3.51	3.54	3.78	.90	120.18	90.28	182.43	51.54
MEAN	.22	.21	.087	.11	.13	.11	.13	.029	4.01	2.91	5.88	1.72
MAX	3.6	.25	.26	.16	.22	.18	.28	.17	76	46	168	.49
MIN	0	.17	.02	.03	.03	.05	.03	0	0	0	0	0
AC-FT	13	12	5.4	6.8	7.0	7.0	7.5	1.8	238	179	362	102

CAL YR 1974 TOTAL 1844.22 MEAN 5.05 MAX 487 MIN 0 AC-FT 3660  
WTR YR 1975 TOTAL 475.32 MEAN 1.30 MAX 168 MIN 0 AC-FT 943

PEAK DISCHARGE (BASE, 2,000 FT<sup>3</sup>/S).--No peak above base.

07199000 CANADIAN RIVER NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°47'14", long 104°27'42", Colfax County, in Maxwell Grant, near right bank at downstream end of bridge pier on U.S. Highways 64 and 85, 3.1 mi (5.0 km) north of Hebron, 5.0 mi (8.0 km) upstream from Chicorica Creek, 8.0 mi (12.9 km) south of Raton, and at mile 888.1 (1,429.0 km).

DRAINAGE AREA.--229 mi<sup>2</sup> (593 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,248 ft (1,904 m) from topographic map. See WSP 1921 for history of changes prior to Aug. 18, 1965.

AVERAGE DISCHARGE.--29 years, 7.64 ft<sup>3</sup>/s (0.216 m<sup>3</sup>/s), 5,540 acre-ft/yr (6.83 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 235 ft<sup>3</sup>/s (6.66 m<sup>3</sup>/s) Sept. 4 (gage height, 4.10 ft or 1.250 m); maximum gage height, 4.41 ft (1.344 m) Jan. 23 (backwater from ice); no flow for many days.

Period of record: Maximum discharge, 62,400 ft<sup>3</sup>/s (1,770 m<sup>3</sup>/s) June 17, 1965 (gage height, 28.2 ft or 8.60 m, from floodmarks, present datum), from rating curve extended above 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow for many days most years.

Flood in 1942 reached a stage of about 28 ft (8.5 m), present datum, at site 150 ft (46 m) upstream, from information by local residents.

REMARKS.--Records poor. Diversions above station for irrigation of a few hundred acres. Part or all of low flow can be diverted to left bank 1.6 mi (2.6 km) above station for stock water, off-channel storage and irrigation. Water quality records for the current year are published in Part 2 of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.06	1.4	.44	.54	.32	.17	.11	.08	0	0	0
2	.01	.08	1.5	.43	.50	.26	.26	.11	.06	0	.01	.05
3	.01	.11	1.8	.44	.45	.26	.17	.11	.03	0	0	.09
4	.01	.11	1.8	.48	.40	.32	.11	.08	.02	0	0	17
5	.01	.08	2.2	.58	.30	.32	.11	.08	.02	.40	0	.04
6	.01	.08	2.5	.66	.24	.21	.08	.11	.02	.12	0	.02
7	.02	.06	1.2	.78	.25	.32	.11	.11	.01	.06	0	.01
8	.02	.08	.60	.82	.27	.26	.14	.11	.01	.10	0	.78
9	.02	.21	.70	.80	.28	.32	.08	.08	.16	.26	0	.20
10	.11	.42	.70	.78	.25	.21	.06	.08	3.8	.21	0	.14
11	.07	1.4	.70	.70	.48	.21	.08	.08	.14	.17	0	.12
12	6.0	1.7	.70	.68	.45	.52	.08	.06	.04	5.2	0	.08
13	.26	1.7	.60	.66	.38	.38	.06	.06	.02	.21	.03	.06
14	.14	1.9	.56	.88	.32	.26	.04	.06	.02	.17	2.1	.05
15	.08	.96	.52	1.1	.32	.26	.03	.06	.02	.08	.21	.02
16	.06	.17	.52	1.2	.45	.45	.03	.08	.02	.04	.08	.01
17	.04	.81	.54	1.1	.38	.14	.03	.08	.02	.81	.06	.01
18	.03	.76	.58	1.2	.45	.21	.04	.08	.01	.22	0	0
19	.03	.17	.60	1.2	.45	.11	.06	.08	.01	.01	0	0
20	.03	.14	.64	1.2	.38	.08	.06	.08	.01	.05	0	.11
21	.08	.14	.62	1.2	.35	.08	.06	.06	.01	.08	0	.04
22	.06	.81	.60	1.1	.35	.11	.06	.08	.01	.03	0	.01
23	.08	.98	.60	1.2	.30	.14	.06	.11	.02	.74	0	.01
24	.06	1.7	.58	1.3	.35	.14	.08	.08	.01	.17	0	.01
25	.06	1.2	.56	1.2	.36	.14	.06	.08	0	.10	0	.01
26	.06	1.1	.54	1.2	.37	.11	.11	.06	0	.05	0	.01
27	.06	1.5	.52	1.2	.38	.32	.11	.08	0	0	0	.01
28	.06	2.0	.52	1.2	.38	.32	.11	.11	0	0	0	.01
29	.08	1.7	.50	1.2	---	.11	.14	.11	0	0	0	.01
30	.08	1.3	.50	.80	---	.14	.14	.08	0	0	0	.01
31	.06	---	.45	.60	---	.17	---	.08	---	0	0	---
TOTAL	7.71	23.43	26.35	28.33	10.38	7.20	2.73	2.63	4.57	9.28	2.44	18.92
MEAN	.25	.78	.85	.91	.37	.23	.091	.085	.15	.30	.080	.63
MAX	6.0	2.0	2.5	1.3	.54	.52	.26	.11	3.8	5.2	2.1	17
MIN	.01	.06	.45	.43	.24	.08	.03	.06	0	0	0	0
AC-FT	15	46	52	56	21	14	5.4	5.2	9.1	18	4.9	38

CAL YR 1974 TOTAL 232.97 MEAN .64 MAX 53 MIN 0 AC-FT 462

WTR YR 1975 TOTAL 144.02 MEAN .39 MAX 17 MIN 0 AC-FT 286

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/S).--No peak above base.

## ARKANSAS RIVER BASIN

39

07199450 LAKE MALOYA NEAR RATON, N. MEX.

LOCATION.--Lat 36°59'02", long 104°22'24", Colfax County, in Maxwell Grant, near spillway of dam on Chicorica Creek, 6.5 mi (10.5 km) northeast of Raton, and at mile 21.5 (34.6 km).

DRAINAGE AREA.--20.8 mi<sup>2</sup> (53.9 km<sup>2</sup>).

PERIOD OF RECORD.--May to September 1975 (monthend contents only).

GAGE.--Nonrecording gage. Datum of gage is at mean sea level, from topographic map.

EXTREMES.--Maximum contents observed during period, 3,970 acre-ft (4.90 hm<sup>3</sup>) May 31 (elevation, 7,510.79 ft or 2,289.289 m); minimum observed, 3,310 acre-ft (4.08 hm<sup>3</sup>) Sept. 30 (elevation, 7,505.18 ft or 2,287.579 m).

REMARKS.--Reservoir is formed by an earthfill dam, completed in 1907; capacity, 59 acre-ft (72,700 m<sup>3</sup>). Reservoir enlarged in 1916; capacity, 1,130 acre-ft (1.39 hm<sup>3</sup>), spillway elevation, 7,479.0 ft (2,279.60 m). Reservoir enlarged again in 1948; capacity, 4,000 acre-ft (4.93 hm<sup>3</sup>), spillway elevation 7,511.0 ft (2,289.35 m). Elevation of lowest outlet, 7,439.0 ft (2,267.41 m). No dead storage. Water is for municipal use of city of Raton.

COOPERATION.--Elevations furnished by city of Raton. Capacity table furnished by New Mexico Interstate Stream commission.

## MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	-	-	-
Oct. 31.....	-	-	-
Nov. 30.....	-	-	-
Dec. 31.....	-	-	-
CAL YR 1974	-	-	-
Jan. 31.....	-	-	-
Feb. 28.....	-	-	-
Mar. 31.....	-	-	-
Apr. 30.....	-	-	-
May 31.....	7,510.79	3,970	-
June 30.....	7,510.40	3,920	-50
July 31.....	7,508.86	3,730	-190
Aug. 31.....	7,506.49	3,460	-270
Sept. 30.....	7,505.18	3,310	-150
WTR YR 1975	-	-	-

07199550 LAKE ALICE NEAR RATON, N. MEX.

LOCATION.--Lat 36°57'15", long 104°23'06", Colfax County, in Maxwell Grant, near spillway of dam on Chicorica Creek, 4.4 mi (7.1 km) northeast of Raton, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--29.4 mi<sup>2</sup> (76.1 km<sup>2</sup>).

PERIOD OF RECORD.--May to September 1975 (monthend contents only).

GAGE.--Nonrecording gage. Datum of gage is at mean sea level, from topographic map.

EXTREMES.--Maximum contents observed during period, 70 acre-ft (86,300 m<sup>3</sup>) May 31 (elevation, 2,089.55 ft or 2,160.895 m); minimum observed, 61 acre-ft (75,200 m<sup>3</sup>) Sept. 30 (elevation, 7,087.8 ft or 2,160.36 m).

REMARKS.--Reservoir is formed by an earthfill dam, completed in 1892; capacity 100 acre-ft (123,000 m<sup>3</sup>), spillway elevation, 7,078.0 ft (2,157.37 m). Reservoir rehabilitated in 1941; capacity, 71 acre-ft (87,500 m<sup>3</sup>), spillway elevation, 7,089.6 ft (2,160.91 m). Elevation of lowest outlet, 7,064.1 ft (2,153.14 m). No dead storage. Water is for municipal use of city of Raton.

COOPERATION.--Elevations furnished by city of Raton.

## MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 to SEPTEMBER 1975

	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	-	-	-
Oct. 31.....	-	-	-
Nov. 30.....	-	-	-
Dec. 31.....	-	-	-
CAL YR 1974.....	-	-	-
Jan. 31.....	-	-	-
Feb. 28.....	-	-	-
Mar. 31.....	-	-	-
Apr. 30.....	-	-	-
May 31.....	7,089.55	70	-
June 30.....	7,088.50	64	-6
July 31.....	7,088.7	66	+2
Aug. 31.....	7,088.3	64	-2
Sept. 30.....	7,087.8	61	-3
WTR YR 1975.....	-	-	-

## 07199600 CHICORICA CREEK NEAR YANKEE, N. MEX.

LOCATION.--Lat 36°55'50", long 104°22'24", Colfax County, in Maxwell Grant, on right bank 1.0 mi (1.6 km) upstream from East Fork, 1.8 mi (2.9 km) downstream from Lake Alice, 2.8 mi (4.5 km) southwest of Yankee, 4.2 mi (6.8 km) northeast of Raton, 4.1 mi (6.6 km) downstream from Lake Maloya, and at mile 17.4 (28.0 km).

DRAINAGE AREA.--32.5 mi<sup>2</sup>.

PERIOD OF RECORD.--May to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 6,795 ft (2,070 m) from topographic map.

EXTREMES.--Maximum discharge during period, 0.50 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) June 12 (gage height, 1.30 ft or 0.396 m); no flow many days.

Flood of June 17, 1965, reached a stage of 9.25 ft (2.819 m), present datum, from floodmarks (discharge, 2,230 ft<sup>3</sup>/s or 63.2 m<sup>3</sup>/s, by slope-area measurement). The flood of May 18, 1955, was computed as 2,230 ft<sup>3</sup>/s (63.2 m<sup>3</sup>/s) by flow-over-dam method at Lake Maloya 4.1 mi (6.6 km) upstream and, according to a local resident, exceeded the flood of June 1965 at the present site.

REMARKS.--Records fair. Flow regulated by Lake Maloya (see sta 07199450) and Lake Alice (see sta 07199550). See tabulation below for monthly diversion from these reservoirs for municipal supply of city of Raton. Ditch on left bank 600 ft (180 m) upstream can divert entire flow of Chicorica Creek during periods of low flow; see tabulation below for the results of discharge measurements of flow in this ditch. Water quality records for the current year are published in Part 2 of this report.

## DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF FLOW IN DITCH

Date	Discharge	Date	Discharge
May 15	0.29	Aug. 25	0
June 3	.16	Sept. 16	0
25	.06	23	*.005
July 30	*.005		

\*Estimated.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	0	0	.01	.01
2								---	0	0	.01	.01
3								---	0	0	.04	.02
4								---	.05	0	.03	.15
5								---	.08	0	.01	.08
6								---	.05	0	.01	.04
7								---	.01	0	.01	.03
8								---	0	0	.01	.03
9								---	0	0	.01	.03
10								---	.18	0	.01	.03
11								---	.39	0	.01	.01
12								---	.49	.04	.02	.03
13								---	.42	.04	.06	.04
14								0	.19	.04	.05	.04
15								0	0	.04	.04	.08
16								0	0	.04	.04	.07
17								0	0	.01	.04	.06
18								0	0	.01	.03	.08
19								0	0	0	.03	.08
20								0	0	.02	.03	.11
21								0	0	.01	.03	.11
22								.01	0	0	.03	.10
23								.02	0	.01	.03	.09
24								0	0	0	.02	.08
25								0	0	0	.02	.08
26								0	0	0	.02	.08
27								0	0	0	.02	.06
28								0	0	.01	.04	.06
29								.01	0	.01	.03	.06
30								0	0	.01	.03	.07
31								0	---	0	.01	---
TOTAL								-	1.86	.29	.78	1.82
MEAN								-	.062	.009	.025	.061
MAX								-	.49	.04	.06	.15
MIN								-	0	0	.01	.01
AC-FT								-	3.7	.6	1.5	3.6
(†)									242	238	234	158

† Diversion, in acre-ft, from Lake Maloya and Lake Alice for municipal supply of city of Raton.

07201420 UNA DE GATO CREEK BELOW THROTTLE DAM NEAR RATON, N. MEX.

LOCATION.--Lat 36°48'52", long 104°13'57", in SE¼SW¼ sec. 24, T.30 N., R.25 E., Colfax County, on right bank 1.0 mi (1.6 km) downstream from Throttle Dam and 13 mi (21 km) southeast of Raton.

DRAINAGE AREA.--49.5 mi<sup>2</sup>.

PERIOD OF RECORD.--May to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 6,635 ft (2,020 m) from topographic map.

EXTREMES.--Maximum discharge during period, 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) Aug. 9 (gage height, 2.75 ft or 0.838 m), from rating curve extended above 4.4 ft<sup>3</sup>/s (0.12 m<sup>3</sup>/s); minimum, 0.14 ft<sup>3</sup>/s (0.004 m<sup>3</sup>/s) Sept. 27-30.

REMARKS.--Records good except those above 5 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s), which are poor. Flow regulated by Throttle Reservoir (capacity 3,300 acre-ft or 4.07 hm<sup>3</sup>) 1 mi (1.6 km) upstream. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	2.4	2.2	1.3	1.1
2								---	2.4	2.1	1.4	1.2
3								---	2.4	2.1	1.4	1.2
4								---	2.4	2.2	1.2	1.9
5								---	2.4	2.1	1.2	1.2
6								---	2.4	2.1	1.2	1.2
7								---	2.4	2.2	1.2	1.2
8								---	2.4	2.3	1.1	1.1
9								---	2.4	2.2	5.9	.90
10								---	2.4	2.5	1.2	.89
11								---	2.2	1.3	1.2	.91
12								---	2.2	.56	2.9	.95
13								---	2.2	.56	1.2	.94
14								4.5	2.1	.56	1.8	.93
15								4.5	2.1	.57	1.2	.90
16								4.5	2.1	.56	1.2	.90
17								4.5	2.1	.82	1.2	.90
18								4.5	2.1	1.3	1.2	.89
19								4.6	2.2	1.3	1.2	.92
20								4.6	2.1	1.3	1.1	1.0
21								4.7	2.1	1.3	1.2	.88
22								2.5	2.1	1.3	1.2	.87
23								.90	2.1	1.3	1.2	.87
24								1.1	2.1	1.3	1.2	.87
25								1.4	2.1	1.3	1.1	.87
26								2.7	2.1	1.3	1.2	.87
27								2.7	2.1	1.3	1.2	.38
28								2.6	2.1	1.3	1.1	.14
29								2.5	2.1	1.3	1.1	.14
30								2.4	2.3	1.3	1.1	.14
31								2.4	---	1.3	1.1	---
TOTAL								-	66.6	45.13	44.0	27.16
MEAN								-	2.22	1.46	1.42	.91
MAX								-	2.4	2.5	5.9	1.9
MIN								-	2.1	.56	1.1	.14
AC-FY								-	132	90	87	54

07202500 EAGLE TAIL DITCH NEAR MAXWELL, N. MEX.

LOCATION.--Lat 36°38'55", long 104°33'31", Colfax County, in Maxwell Grant, on left bank, 25 ft (8 m) upstream from concrete drop structure, 300 ft (91 m) upstream from Crow Creek, and 7.5 mi (12.1 km) north of Maxwell.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,110 ft (1,860 m) from topographic map. Prior to May 1975, at site about 200 ft upstream at different datum.

EXTREMES.--Current year: Maximum daily discharge during period May to September 1975, 48 ft<sup>3</sup>/s (1.36 m<sup>3</sup>/s) Aug. 10;

no flow most of time.

Period of record: Maximum daily discharge, 217 ft<sup>3</sup>/s (6.15 m<sup>3</sup>/s) Aug. 27, 1946, from rating extended above 85 ft<sup>3</sup>/s (2.41 m<sup>3</sup>/s); no flow at times each year.

REMARKS.--Records good. Eagle Tail ditch diverts water from Chicorica Creek for use near Maxwell. No diversions above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	0	2.7	0	0
2								---	0	2.1	35	0
3								---	0	.06	8.0	0
4								---	0		3.2	2.2
5								---	0	0	.90	30
6								---	0	0	.04	6.6
7								---	0	0	0	2.0
8								---	0	0	0	.55
9								---	0	0	0	3.6
10								---	3.4	1.4	48	5.1
11								---	6.1	.42	6.9	1.0
12								---	3.4	.02	2.0	.14
13								---	2.1	1.6	22	0
14								---	1.6	1.2	41	.06
15								0	.89	.05	20	.29
16								0	.25	0	3.8	.04
17								0	0	0	1.8	0
18								0	0	0	.49	0
19								0	0	0	.21	0
20								0	0	0	.02	0
21								0	0	0	0	0
22								0	0	0	0	2.9
23								0	0	0	0	2.5
24								0	0	0	0	.73
25								0	0	0	0	.19
26								0	0	0	0	0
27								0	0	0	0	0
28								0	0	0	0	0
29								0	0	0	0	0
30								0	0	0	0	0
31								0	---	0	0	---
TOTAL								---	17.74	9.55	193.36	57.90
MEAN								---	.59	.31	6.24	1.93
MAX								---	6.1	2.7	48	30
MIN								---	0	0	0	0
ACFT								---	35	19	384	115

## 07203000 VERMEJO RIVER NEAR DAWSON, N. MEX.

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, in Maxwell Grant, on left bank 1.3 mi (2.1 km) north of Dawson, 2.3 mi (3.7 km) upstream from Rail Canyon, and at mile 22.5 (36.2 km).

DRAINAGE AREA.--301 mi<sup>2</sup> (780 km<sup>2</sup>).

PERIOD OF RECORD.--October 1915 to July 1918, April 1919 to May 1921, January 1922 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,365 ft (1,940 m) from topographic map. See WSP 1311 or 1731 for history of changes prior to Sept. 24, 1953.

AVERAGE DISCHARGE.--51 years (1915-17, 1919-20, 1927-75), 18.3 ft<sup>3</sup>/s (0.518 m<sup>3</sup>/s), 13,260 acre-ft/yr (16.3 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,430 ft<sup>3</sup>/s (40.5 m<sup>3</sup>/s) Aug. 1 (gage height, 6.25 ft or 1.905 m), from rating curve extended above 95 ft<sup>3</sup>/s (2.69 m<sup>3</sup>/s) as explained below; minimum, 0.30 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Dec. 24, Feb. 8, but may have been less during periods of ice effect.

1927-75: Maximum discharge, 12,600 ft<sup>3</sup>/s (357 m<sup>3</sup>/s) June 17, 1965 (gage height, 15.25 ft or 4.648 m), from rating curve extended above 400 ft<sup>3</sup>/s (11.3 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times.

A major flood occurred Aug. 2, 1921, when discharge probably exceeded 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s).

REMARKS.--Records fair except those for winter period and those for July, which are poor. Diversions for irrigation of small acreage and mountain meadows above station. Water quality records for the current year are published in Part 2 of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.6	1.0	.35	1.9	3.1	5.0	7.0	30	10	76	.66
2	1.0	2.3	1.0	.35	1.5	5.3	2.9	5.4	34	8.0	10	.59
3	.91	2.9	.91	.35	1.8	5.8	2.3	4.4	20	8.5	8.0	.59
4	.74	2.9	1.1	.40	1.7	4.5	1.8	11	20	19	7.0	3.5
5	.74	2.3	1.3	.45	1.5	4.4	1.8	19	20	26	6.0	7.5
6	.74	2.1	1.1	.50	.90	5.0	3.6	13	24	26	5.0	4.1
7	1.1	1.3	1.0	.50	.90	5.4	5.4	10	30	27	4.4	3.1
8	1.1	1.6	1.2	.50	1.3	4.4	4.7	8.0	34	15	5.1	2.6
9	1.0	2.1	1.0	.50	1.8	5.8	3.1	10	36	95	9.6	6.0
10	1.0	3.3	.74	.45	4.0	6.2	5.4	19	37	62	22	4.1
11	1.0	2.6	.74	.43	3.8	5.4	6.2	24	39	164	7.5	3.1
12	16	2.1	.74	.40	2.0	5.0	7.5	32	32	123	6.3	5.4
13	7.0	2.6	.66	.40	3.1	3.8	7.5	24	26	69	28	6.6
14	5.8	3.3	.59	.45	2.9	3.3	7.0	20	24	37	33	6.2
15	4.7	3.1	.59	.50	1.8	2.9	5.4	22	32	39	56	4.7
16	3.8	2.9	.52	.45	2.3	3.8	4.7	29	30	94	12	3.8
17	3.1	2.3	.46	.50	2.3	3.8	5.0	30	18	99	7.0	3.1
18	2.9	2.6	.46	.55	1.9	3.6	4.7	32	19	55	5.0	2.6
19	2.6	2.6	.40	.55	1.8	2.0	4.4	32	17	50	3.6	2.6
20	2.4	2.4	.46	.55	2.1	2.3	4.1	27	15	120	2.9	2.9
21	2.4	1.8	.40	.50	1.8	1.8	6.2	34	22	50	2.9	3.3
22	2.3	2.3	.35	.50	1.8	2.3	5.4	27	30	20	3.8	3.8
23	2.3	3.1	.35	.45	1.9	2.4	6.6	30	27	25	2.6	3.3
24	2.6	2.3	.40	.40	2.9	2.4	12	30	14	20	2.3	2.4
25	2.6	1.9	.35	.40	3.6	2.6	10	34	11	18	1.8	2.3
26	2.4	2.3	.35	.52	4.5	2.1	11	34	11	16	1.3	2.1
27	2.6	1.9	.40	1.3	6.5	2.3	20	26	11	14	1.2	1.6
28	2.9	1.2	.40	1.9	3.1	1.9	22	24	11	13	1.0	1.8
29	3.1	1.3	.46	1.5	---	1.8	18	32	17	13	.91	1.8
30	3.1	1.2	.40	1.7	---	4.4	10	30	18	12	.82	1.6
31	2.6	---	.35	2.0	---	5.4	---	24	---	9.0	.66	---
TOTAL	87.73	69.2	20.18	20.30	67.40	115.2	213.7	703.8	709	1356.5	333.69	97.74
MEAN	2.83	2.31	.65	.65	2.41	3.72	7.12	22.7	23.6	43.8	10.8	3.26
MAX	16	3.3	1.3	2.0	6.5	6.2	22	34	39	164	76	7.5
MIN	.74	1.2	.35	.35	.90	1.8	1.8	4.4	11	8.0	.66	.59
AC-FT	174	137	40	40	134	228	424	1400	1410	2690	662	194
CAL YR 1974 TOTAL	1342.09											
WTR YR 1975 TOTAL	3794.44											
MEAN	3.68											
MAX	119											
MIN	.35											
AC-FT	2660											

PEAK DISCHARGE (BASE, 800 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-11	1700	5.97	1,220	8-1	1400	6.25	1,430



## 07204000 MORENO CREEK AT EAGLE NEST, N. MEX.

LOCATION (revised).--Lat 36°33'14", long 105°16'03", Colfax County, in Maxwell Grant, on right bank 175 ft (53 m) upstream from U.S. Highway 64, 250 ft (76 m) northwest of intersection of U.S. Highway 64 and State Highway 38, about 1,000 ft (305 m) upstream from high-water line of Eagle Nest Lake at Eagle Nest.

DRAINAGE AREA.--73.8 mi<sup>2</sup> (191.1 km<sup>2</sup>).

PERIOD OF RECORD.--April 1928 to October 1955, June 1964 to current year. No winter records except 1931-32. 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 Therna" 1928-34.

GAGE.--Water-stage recorder. Concrete control since Oct. 3, 1952. Datum of gage is 8,197.39 ft (2,498.564 m) above mean sea level. 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 (0.430 m) lower.

EXTREMES.--Current year: Maximum discharge, 66 ft<sup>3</sup>/s (1.87 m<sup>3</sup>/s) Apr. 26 (gage height, 2.77 ft or 0.844 m); minimum determined, 0.09 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Oct. 4, 5.

Period of record: Maximum discharge, 240 ft<sup>3</sup>/s (6.80 m<sup>3</sup>/s) Sept. 1, 1946 (gage height, 3.10 ft or 0.945 m, site and datum then in use); maximum gage height, 3.55 ft (1.082 m) May 12, 1973; no flow at times.

REMARKS.--Records good except those for April, which are poor. Diversions for irrigation of about 1,200 acres (4.86 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.98					---	19	15	2.1	2.0	.38
2	.14	.98					---	18	13	2.3	1.8	.38
3	.12	1.0					---	18	12	4.2	1.6	.38
4	.12	1.1					---	19	10	4.7	1.5	1.1
5	.10	1.1					---	22	9.0	5.3	1.4	2.4
6	.14	1.1					---	22	7.8	3.9	1.4	1.8
7	.36	1.1					---	22	7.9	3.3	1.4	1.6
8	.44	1.2					---	22	8.2	4.3	1.6	1.4
9	.40	1.4					---	22	8.3	7.9	2.2	1.4
10	.49	1.4					---	22	12	6.5	2.1	1.2
11	.67	1.2					11	24	12	6.8	2.0	1.2
12	.92	1.2					10	28	9.6	5.8	1.9	3.3
13	1.3	---					11	31	8.0	4.6	2.0	2.5
14	1.1	---					11	33	6.9	3.9	2.4	2.0
15	.92	---					14	35	6.3	3.9	2.0	1.8
16	.62	---					26	38	6.1	4.8	1.8	1.5
17	.62	---					29	40	5.7	4.6	1.5	1.3
18	.54	---					30	37	5.1	4.6	1.4	1.0
19	.49	---					21	36	4.6	4.4	1.2	.82
20	.49	---					19	36	4.4	4.1	1.2	.82
21	.49	---					25	31	4.2	3.8	1.3	1.0
22	.49	---					29	29	3.9	6.2	1.4	1.0
23	.54	---					32	31	3.6	8.1	1.1	.88
24	.54	---					32	26	3.3	5.5	.82	.82
25	.54	---					40	21	3.1	4.1	.66	.76
26	.62	---					48	17	2.9	3.3	.58	.71
27	.72	---					43	17	2.7	2.8	.54	.66
28	.85	---					30	19	2.5	2.7	.50	.62
29	.85	---					24	21	2.3	2.5	.47	.58
30	1.2	---					17	20	2.2	2.4	.44	.58
31	1.1	---					---	17	---	2.1	.38	---
TOTAL	18.06	-					-	793	202.6	135.2	42.59	35.89
MEAN	.58	-					-	25.6	6.75	4.36	1.37	1.20
MAX	1.3	-					-	40	15	8.1	2.4	3.3
MIN	.10	-					-	17	2.2	2.1	.38	.38
AC-FY	36	-					-	1570	402	268	84	71

PEAK DISCHARGE (BASE 35 FT<sup>3</sup>/S)

DATE	TIME	C. H.	DISCHARGE	DATE	TIME	C. H.	DISCHARGE
4-16	2245	2.58	46	5-17	1130	2.41	44
4-26	0545	2.77	66				

## 07204500 CIENEGUILLA CREEK NEAR EAGLE NEST, N. MEX.

LOCATION.--Lat 36°29'07", long 105°15'54", Colfax County, in Maxwell Grant, on right bank 0.1 mi (0.2 km) downstream from Schoolhouse Draw, 0.4 mi (0.6 km) upstream from high-water line of Eagle Nest Lake, 0.5 mi (0.8 km) east of U.S. Highway 64, and 4.7 mi (7.6 km) south of Eagle Nest.

DRAINAGE AREA.--56 mi<sup>2</sup> (145 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Concrete control since Sept. 25, 1947. Altitude of gage is 8,195 ft (2,498 m) 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 (0.3 km) downstream at different datums.

EXTREMES.--Current year: Maximum discharge, 113 ft<sup>3</sup>/s (3.20 m<sup>3</sup>/s) May 5 (gage height, 4.42 ft or 1.347 m); minimum determined, 0.31 ft<sup>3</sup>/s (0.009 m<sup>3</sup>/s) Oct. 3.  
Period of record: Maximum discharge, 505 ft<sup>3</sup>/s (14.3 m<sup>3</sup>/s) June 16, 1965 (gage height, 5.61 ft or 1.710 m), from rating curve extended above 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s); no flow at times.

REMARKS.--Records good. Diversions for irrigation of about 1,000 acres (4.05 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.39	2.3					---	52	18	1.9	2.0	.65
2	1.39	2.2					---	48	16	2.2	1.9	.61
3	1.36	2.2					---	60	11	1.8	1.7	.64
4	1.44	2.4					---	74	9.0	2.1	1.7	7.2
5	1.41	2.2					---	96	8.8	5.4	2.1	18
6	1.50	2.5					---	78	8.6	4.0	2.3	14
7	1.4	2.7					---	62	8.3	2.9	1.9	6.4
8	1.3	3.0					---	60	8.6	7.8	2.7	5.1
9	1.0	3.2					---	64	8.8	28	8.2	4.5
10	1.1	3.2					---	59	13	18	5.7	4.0
11	1.8	2.6					---	64	15	13	3.9	4.6
12	2.5	2.0					---	66	12	13	4.7	12
13	3.0						---	64	9.0	11	4.7	10
14	2.6	---					---	58	8.1	9.1	4.9	7.3
15	2.2	---					---	52	7.2	17	3.5	6.3
16	1.8	---					---	51	6.3	11	2.9	5.7
17	1.6	---					---	49	6.3	8.5	2.6	4.7
18	1.4	---					---	47	5.9	7.6	2.2	4.1
19	1.4	---					---	34	4.0	5.2	1.8	3.8
20	1.3	---					---	35	37	4.9	5.5	4.1
21	1.4	---					42	33	4.4	5.6	3.7	7.0
22	1.4	---					52	30	4.1	5.3	4.2	4.7
23	1.3	---					55	29	3.8	4.7	2.8	4.0
24	1.3	---					60	25	3.4	4.6	2.2	3.9
25	1.5	---					69	22	2.9	4.5	1.6	3.8
26	1.8	---					80	21	2.4	3.9	1.2	3.6
27	1.8	---					71	22	2.2	3.3	1.1	3.4
28	1.9	---					57	20	2.2	3.0	1.1	3.2
29	1.8	---					56	21	2.0	2.7	1.1	3.2
30	3.0	---					54	22	1.7	2.7	.88	3.2
31	2.6	---					---	20	---	2.3	.75	---
TOTAL	46.69	-					-	1442	219.1	218.7	84.03	163.70
MEAN	1.51	-					-	46.5	7.30	7.05	2.71	5.46
MAX	3.0	-					-	96	18	28	8.2	18
MIN	.36	-					-	20	1.7	1.8	.75	.61
AC-FT	93	-					-	2860	435	434	167	325

PEAK DISCHARGE (BASE, 70 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	1000	4.32	100	5-5	2000	4.42	113

## 07205000 SIXMILE CREEK NEAR EAGLE NEST, N. MEX.

LOCATION.--Lat 36°31'07", long 105°16'29", Colfax County, in Maxwell Grant, on left upstream wingwall of concrete control, 250 ft (76 m) downstream from concrete box culvert on U.S. Highway 64, and 2.6 mi (4.2 km) southwest of Eagle Nest.

DRAINAGE AREA.--10.5 mi<sup>2</sup> (27.2 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Concrete control Sept. 11, 1931 to May 1933, and since Sept. 13, 1934. Datum of gage is 8,195.16 ft (2,497.885 m) above mean sea level. Prior to May 18, 1928, nonrecording gage at site 88 ft (27 m) upstream at datum 0.98 ft (0.299 m) higher. May 18, 1928 to Sept. 11, 1938, water-stage recorder at site 88 ft (27 m) upstream at datum 0.43 ft (0.131 m) higher.

AVERAGE DISCHARGE.--18 years (1931-32, 1958-75), 2.51 ft<sup>3</sup>/s (0.071 m<sup>3</sup>/s), 1,820 acre-ft/yr (2.24 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 33 ft<sup>3</sup>/s (0.93 m<sup>3</sup>/s) Mar. 20 (gage height, 1.65 ft or 0.503 m); minimum, 0.04 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Nov. 17, result of freezeup.  
1930-55, 1958-75: Maximum discharge, 128 ft<sup>3</sup>/s (3.62 m<sup>3</sup>/s) Aug. 5, 1969 (gage height, 2.86 ft or 0.871 m), from rating curve extended above 32 ft<sup>3</sup>/s (0.91 m<sup>3</sup>/s); maximum gage height recorded, 3.38 ft (1.030 m) Apr. 2, 1937 (ice jam), site and datum then in use; no flow at times.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 300 acres (1.21 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.30	.37	.50	1.5	1.2	2.6	8.7	6.0	1.4	.69	1.4
2	.24	.36	.40	.52	1.4	1.2	2.5	8.8	5.7	2.4	.55	1.4
3	.24	.38	.39	.52	1.5	1.2	2.8	10	4.9	2.9	.49	1.4
4	.25	.38	.42	.54	1.5	1.2	4.2	13	4.5	3.3	.45	2.4
5	.26	.38	.42	.56	1.5	1.4	6.1	14	4.7	3.3	.48	2.9
6	.35	.41	.39	.60	1.5	1.3	5.4	13	4.8	3.0	.48	1.9
7	.46	.38	.38	1.0	1.5	1.5	4.0	11	4.9	2.8	.44	1.7
8	.37	.29	.39	1.1	1.6	1.5	4.6	10	4.9	3.2	.57	1.6
9	.34	.38	.40	1.2	1.5	1.7	4.1	11	4.9	3.8	.83	1.6
10	.38	.38	.42	1.2	1.6	1.6	3.5	13	5.2	3.5	1.0	1.5
11	.51	.26	.44	1.1	1.6	1.6	3.2	16	2.8	4.4	1.9	2.0
12	.57	.29	.43	.88	1.6	1.4	3.1	19	2.1	3.8	2.0	3.4
13	.55	.32	.45	.96	1.6	1.3	3.2	19	1.8	3.3	2.1	2.2
14	.56	.35	.43	1.1	1.6	1.4	3.8	17	1.8	3.0	2.1	2.0
15	.42	.35	.41	1.2	1.6	1.4	5.6	18	1.7	2.9	1.7	1.9
16	.39	.42	.43	1.1	1.6	1.4	9.1	20	1.7	2.7	1.7	2.0
17	.32	.38	.45	1.2	1.6	1.4	11	17	1.9	3.0	1.6	1.8
18	.24	.41	.42	1.2	1.5	1.5	8.0	13	1.8	3.0	1.5	1.7
19	.24	.41	.45	1.1	1.5	2.2	6.8	12	1.8	2.6	1.5	1.6
20	.24	.29	.47	1.1	1.4	9.7	7.5	11	1.6	2.5	1.6	1.7
21	.23	.32	.45	1.0	1.4	9.2	8.9	10	1.6	2.5	1.7	1.8
22	.26	.35	.48	1.0	1.3	2.9	11	10	1.6	3.0	1.6	1.8
23	.27	.38	.45	1.1	1.2	2.4	10	11	1.5	2.7	1.5	1.7
24	.28	.29	.43	1.1	1.3	1.9	8.6	9.6	1.5	2.5	1.5	1.6
25	.31	.35	.39	1.2	1.2	3.0	11	8.5	1.4	2.4	1.4	1.6
26	.38	.35	.43	1.3	1.2	3.6	12	7.9	1.3	2.2	1.4	1.6
27	.37	.35	.46	1.3	1.2	2.5	9.6	8.0	1.3	2.1	1.4	1.6
28	.37	.40	.50	1.3	1.2	2.1	7.5	7.8	1.3	2.1	1.4	1.6
29	.39	.37	.49	1.3	---	2.0	6.0	7.7	1.2	2.1	1.4	1.6
30	.46	.35	.50	1.4	---	2.1	6.7	7.2	1.3	2.1	1.4	1.5
31	.36	---	.48	1.5	---	2.5	---	6.5	---	1.6	1.4	---
TOTAL	10.85	10.63	13.42	32.18	40.7	71.3	192.4	368.7	83.5	86.1	39.78	54.5
MEAN	.35	.35	.43	1.04	1.45	2.30	6.41	11.9	2.78	2.78	1.28	1.82
MAX	.57	.42	.50	1.5	1.6	9.7	12	20	6.0	4.4	2.1	3.4
MIN	.23	.26	.37	.50	1.2	1.2	2.5	6.5	1.2	1.4	.44	1.4
AC-FT	22	21	27	64	81	141	382	731	166	171	79	108

CAL YR 1974 TOTAL 571.95 MEAN 1.57 MAX 9.5 MIN .10 AC-FT 1130  
WTR YR 1975 TOTAL 1004.06 MEAN 2.75 MAX 20 MIN .23 AC-FT 1990

PEAK DISCHARGE (BASE, 15 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	1745	1.65	33	5-15	1045	1.41	21

## ARKANSAS RIVER BASIN

07205500 EAGLE NEST LAKE NEAR EAGLE NEST, N. MEX.

LOCATION.--Lat 36°31'53", long 105°13'44", Colfax County, in Maxwell Grant, at upstream face of Eagle Nest Dam on Cimarron River, 2.5 mi (4.0 km) southeast of Eagle Nest, 6.7 mi (10.8 km) west of Ute Park, and at mile 48.7 (78.4 km).

DRAINAGE AREA.--167 mi<sup>2</sup> (433 km<sup>2</sup>).

PERIOD OF RECORD.--December 1927 to December 1944 (monthend contents only, published in WSP 1311), May 1950 to September 1965 (monthend contents only), October 1965 to current year. Prior to January 1972 published as Eagle Nest Reservoir.

GAGE.--Nonrecording gage read three to six times a month at random intervals. Datum of gage is 8,056.8 ft (2,455.71 m) above mean sea level. Prior to October 1964 gage heights were raised by addition of 8,000 ft (2,438.4 m) and called elevations.

EXTREMES.--Current year: Maximum contents observed, 26,350 acre-ft (32.5 km<sup>3</sup>) May 26 (gage height, 108.0 ft or 32.918 m); minimum observed, 19,020 acre-ft (23.5 km<sup>3</sup>) Nov. 4 (gage height, 101.25 ft or 30.861 m).  
Period of record: Maximum contents observed, 78,800 acre-ft (97.2 km<sup>3</sup>) May 31, 1942 (gage height, 136.9 ft or 41.73 m); minimum observed, 635 acre-ft (783,000 m<sup>3</sup>) Dec. 14, 1954 (gage height, 61.33 ft or 18.693 m).

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 (97.6 km<sup>3</sup>) between gage heights 35.0 ft (10.67 m) sill of outlet gate, and 137.0 ft (41.76 m), 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 (10.1 km<sup>2</sup>) above reservoir.

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

REVISIONS.--WSP 1281: Drainage area.

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

101.0	18,780
104.0	21,770
108.0	26,350

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19940	---	---	19160	---	---	---	---	26290	---	---	22210
2	---	---	19120	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	19020	19110	---	---	20090	---	---	---	---	22750	---
5	---	---	---	---	---	---	---	24670	26230	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	19690	---	---	---	---	---	21570	---	---	24620	---	---
8	---	---	---	---	---	---	---	24900	---	---	---	22160
9	---	---	19120	---	---	---	---	---	26110	---	---	---
10	---	---	---	---	---	20360	21620	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	22750	---
12	---	19100	---	---	---	---	---	25500	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	19640	---	---	---	19940	---	---	---	---	23700	---	---
15	---	---	---	---	---	---	21990	---	---	---	---	22310
16	---	---	---	---	---	---	---	---	26230	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	19070	---	---	19940	20440	---	---	---	---	22700	---
19	---	---	---	---	---	---	---	26110	---	---	---	---
20	---	---	---	19550	---	---	---	---	---	---	---	---
21	19350	---	---	---	---	---	22850	---	---	23140	---	---
22	---	---	---	19550	---	---	---	---	---	---	---	22280
23	---	---	---	---	---	---	---	---	25990	---	---	---
24	---	---	---	---	---	20540	---	---	---	---	---	---
25	---	19120	---	---	19990	---	---	---	---	---	22480	---
26	---	---	---	---	---	---	---	26350	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	22450	---
28	19120	---	---	---	20000	---	23860	---	---	22850	---	---
29	---	---	---	---	---	---	---	---	---	---	---	22260
30	---	19100	---	---	---	---	24100	---	25320	---	---	22200
31	19100	---	19160	19700	---	20890	---	26300	---	22830	22230	---
(†)	-	-	-	-	-	103.15	-	-	107.15	104.98	-	-
(‡)	-900	0	+60	+540	+300	+890	+3210	+2200	-980	-2490	-600	-30

CAL YR 1974..... ‡ -8,830

WTR YR 1975..... ‡ +2,200

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

‡ Change in contents, in acre-feet.

NOTE.--Monthend contents interpolated or estimated on basis of inflow to and releases from Lake except Mar. 31, June 30, July 31.

## 07206000 CIMARRON RIVER BELOW EAGLE NEST DAM, N. MEX.

LOCATION.--Lat 36°31'55", Long 105°13'43", Colfax County, in Maxwell Grant, on left bank 300 ft (91 m) downstream from Eagle Nest Dam, 2.5 mi (4.0 km) southeast of Eagle Nest, 6.7 mi (10.8 km) west of Ute Park, and at mile 48.6 (78.2 km).

DRAINAGE AREA.--167 mi<sup>2</sup> (433 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Parshall flume since May 15, 1951. Altitude of gage is 8,080 ft (2,463 m) from topographic map. Prior to May 15, 1951, at datum 0.81 ft (0.247 m) higher.

AVERAGE DISCHARGE.--25 years, 13.4 ft<sup>3</sup>/s (0.379 m<sup>3</sup>/s), 9,710 acre-ft/yr (12.0 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 160 ft<sup>3</sup>/s (4.53 m<sup>3</sup>/s) July 11 (gage height, 2.55 ft or 0.777 m); minimum determined, 0.25 ft<sup>3</sup>/s (0.007 m<sup>3</sup>/s) Dec. 1 to Jan. 31.

Period of record: Maximum discharge, 205 ft<sup>3</sup>/s (5.81 m<sup>3</sup>/s) June 14, 1955 (gage height, 2.79 ft or 0.850 m); no flow at times most years.

REMARKS.--Records good except those below 2 ft<sup>3</sup>/s (0.057 m<sup>3</sup>/s), which are poor. Flow regulated by Eagle Nest Lake (see sta 07205500). Diversions for irrigation of about 2,500 acres (10.1 km<sup>2</sup>) above station.

REVISIONS.--WSP 1281: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.4	.25	.25	.30	.30	2.4	29	57	62	9.2	29
2	13	9.2	.25	.25	.30	.30	2.4	29	57	61	2.7	35
3	14	5.4	.25	.25	.30	1.6	2.6	12	28	58	7.2	40
4	11	3.5	.25	.25	.30	3.5	2.6	28	14	57	9.4	27
5	7.0	5.4	.25	.25	.30	3.5	2.4	36	14	57	10	3.8
6	7.0	7.7	.25	.25	.30	3.5	6.6	36	8.7	93	8.6	3.7
7	5.8	7.7	.25	.25	.30	3.5	7.1	39	2.0	107	8.6	3.7
8	4.5	7.7	.25	.25	.30	1.9	4.0	42	27	107	8.3	3.8
9	8.4	8.1	.25	.25	.30	.33	4.0	42	35	107	4.7	4.0
10	8.8	8.1	.25	.25	.30	.33	3.7	28	22	106	.52	4.0
11	8.8	8.1	.25	.25	.30	.33	3.7	40	17	99	.51	4.0
12	15	8.1	.25	.25	.30	.33	3.7	47	17	76	5.0	4.0
13	22	8.1	.25	.25	.30	.42	3.4	50	7.3	80	7.1	4.0
14	22	8.4	.25	.25	.30	.52	3.1	55	2.6	83	7.1	4.2
15	26	8.4	.25	.25	.30	.52	2.9	55	2.2	76	7.1	4.2
16	27	8.4	.25	.25	.30	.52	2.4	55	2.0	68	7.1	4.0
17	27	8.4	.25	.25	.30	.52	2.2	35	12	64	7.1	3.7
18	27	8.4	.25	.25	.30	.52	2.2	46	16	64	7.1	3.4
19	27	4.6	.25	.25	.30	2.3	2.2	44	22	46	8.7	2.6
20	27	.66	.25	.25	.30	5.3	19	34	31	46	11	2.4
21	27	.66	.25	.25	.30	5.0	26	31	31	37	14	2.2
22	24	.66	.25	.25	.30	4.6	32	31	39	25	16	2.2
23	22	.66	.25	.25	.30	3.7	38	31	40	18	16	2.2
24	16	.66	.25	.25	.30	3.4	34	8.3	34	18	16	2.2
25	1.6	.66	.25	.25	.30	3.1	30	22	38	18	16	2.2
26	3.2	.66	.25	.25	.30	2.9	7.8	29	38	18	20	2.2
27	3.2	.66	.25	.25	.30	2.6	22	29	38	25	21	8.0
28	9.8	.66	.25	.25	.30	2.6	29	54	28	28	21	24
29	7.7	.66	.25	.25	---	2.6	29	62	51	15	21	24
30	8.4	.66	.25	.25	---	2.6	29	61	62	8.8	10	24
31	8.4	---	.25	.25	---	2.6	---	57	---	9.6	15	---
TOTAL	448.6	149.36	7.75	7.75	8.40	65.74	359.4	1197.3	792.8	1737.4	323.03	283.7
MEAN	14.5	4.98	.25	.25	.30	2.12	12.0	38.6	26.4	56.0	10.4	9.46
MAX	27	9.2	.25	.25	.30	5.3	38	62	62	107	21	40
MIN	1.6	.66	.25	.25	.30	.30	2.2	8.3	2.0	8.8	.51	2.2
AC-FT	890	296	15	15	17	130	713	2370	1570	3450	641	563
CAL YR 1974 TOTAL	6794.00		MEAN 18.6	MAX 139	MIN .05	AC-FT 13480						
WTR YR 1975 TOTAL	5381.23		MEAN 14.7	MAX 107	MIN .25	AC-FT 10670						

NOTE.--No gage-height record Nov. 26 to Mar. 10.

## 07207000 CINTRON RIVER NEAR CIMARRON, N. MEX.

LOCATION.--Lat 36°31'11", long 104°58'42', Colfax County, in Maxwell Grant, on right bank 1,200 ft (370 m) downstream from Turkey Creek Canyon, 3.6 mi (5.8 km) west of Cimarron, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--294 mi<sup>2</sup> (761 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Concrete control since Nov. 6, 1963. Datum of gage is 6,599.58 ft (2,011.552 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 20.4 ft<sup>3</sup>/s (0.578 m<sup>3</sup>/s), 14,780 acre-ft/yr (18.2 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 325 ft<sup>3</sup>/s (9.20 m<sup>3</sup>/s) July 12 (gage height, 3.03 ft or 0.924 m); minimum, 0.47 ft<sup>3</sup>/s (0.013 m<sup>3</sup>/s) Jan. 29, result of freezeup.

Period of record: Maximum discharge, 15,500 ft<sup>3</sup>/s (439 m<sup>3</sup>/s) June 17, 1965 (gage height, 12.42 ft or 3.786 m, from floodmark), from rating curve extended above 800 ft<sup>3</sup>/s (22.7 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 4.88 ft (1.487 m) and 12.42 ft (3.786 m); no flow at times.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Eagle Nest Lake (see sta 07205500). Diversions above station for irrigation of about 3,500 acres (14.2 km<sup>2</sup>), part of which is below station. Philmont ditch (formerly known as Cimarroncito ditch) diverts from left bank 1.5 mi (2.3 km) above station, flumes under river 0.9 mi (1.4 km) above and bypasses station for off-channel storage and irrigation below; see tabulation below for monthly diversions.

REVISIONS.--WSP 1281: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	3.8	2.5	3.0	4.2	9.3	52	73	63	20	24
2	11	11	3.7	2.0	4.0	4.3	8.5	51	72	62	19	32
3	11	12	3.7	1.5	3.5	4.4	8.1	46	61	62	15	33
4	10	8.1	3.6	1.0	4.5	3.9	8.4	42	39	60	17	45
5	9.7	6.7	3.5	1.6	9.0	5.4	8.8	62	38	61	18	27
6	9.4	7.7	3.4	1.8	3.5	7.0	9.7	63	37	59	16	18
7	10	8.0	3.4	1.9	3.2	6.6	14	62	32	90	15	14
8	7.9	9.1	3.4	2.0	3.5	7.3	13	64	36	95	18	13
9	7.4	9.8	3.5	1.8	4.0	8.2	12	64	57	103	17	12
10	9.8	9.8	3.6	1.3	4.2	6.1	12	57	59	105	13	12
11	11	9.5	3.7	1.2	4.5	5.4	11	57	44	112	11	12
12	16	9.4	3.8	1.1	5.0	5.4	11	71	39	118	17	20
13	23	9.7	3.8	1.2	4.0	5.3	11	74	36	102	17	18
14	25	9.7	3.9	1.5	3.5	5.4	10	79	26	98	16	17
15	24	9.9	4.0	2.0	3.1	5.6	9.2	80	23	98	15	15
16	28	9.9	4.0	2.0	3.2	5.6	8.9	81	20	95	15	14
17	28	9.4	3.8	1.9	3.2	5.6	11	75	21	86	14	13
18	29	9.7	3.6	1.9	3.2	5.2	13	70	29	85	13	12
19	29	9.5	3.5	1.6	3.5	5.5	14	75	30	75	13	11
20	29	7.6	3.2	1.5	4.0	6.2	14	69	41	64	15	11
21	30	4.9	3.0	1.5	3.5	8.9	30	64	43	67	17	12
22	29	4.4	2.8	1.5	3.0	9.5	37	63	44	59	20	11
23	25	4.3	2.5	2.0	3.0	9.4	52	63	51	45	20	10
24	25	4.6	1.8	2.3	3.5	8.1	59	51	43	40	19	9.6
25	15	4.6	2.4	2.5	3.8	10	59	36	45	37	19	9.2
26	8.9	4.0	2.8	2.5	5.0	9.3	58	51	44	35	20	8.8
27	8.3	4.0	3.0	2.1	4.6	8.9	48	51	43	33	23	8.1
28	7.6	3.9	3.2	1.9	4.3	7.8	58	61	40	40	23	13
29	9.7	3.8	3.1	1.8	---	9.1	55	78	40	38	23	14
30	11	3.7	3.0	2.3	---	8.9	52	78	62	25	22	13
31	11	---	2.8	2.5	---	9.0	---	74	---	21	10	---
TOTAL	519.7	230.8	103.3	56.8	105.3	211.5	724.9	1964	1268	2144	530	481.7
MEAN	16.8	7.69	3.33	1.83	3.76	6.82	24.2	63.4	42.3	69.2	17.1	16.1
MAX	30	12	4.0	2.5	5.0	10	59	81	73	118	23	45
MIN	1.4	3.7	1.8	1.1	3.0	3.9	8.1	36	20	21	10	8.1
AC-FT	1030	458	205	113	209	420	1440	3900	2520	4250	1050	955
(†)	59	0	0	0	0	0	0	0	0	231	0	27

CAL YR 1974 TOTAL 7357.9 MEAN 20.2 MAX 124 MIN 1.4 AC-FT 14590 † 1160  
WTR YR 1975 TOTAL 8340.0 MEAN 27.8 MAX 118 MIN 1.1 AC-FT 16540 † 317

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

## 07207500 PONIL CREEK NEAR CIMARRON, N. MEX.

LOCATION.--Lat 36°34'25", long 104°56'46", Colfax County, in Maxwell Grant, on left bank 1.6 mi (2.6 km) downstream from confluence of North and South Ponil Creeks, and 4.7 mi (7.6 km) northwest of Cimarron.

DRAINAGE AREA.--171 mi<sup>2</sup> (443 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,630 ft (2,021 m) from topographic map. Prior to May 8, 1922, at site 0.1 mi (0.2 km) downstream at different datum. May 8, 1922 to Aug. 8, 1929, at site 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE.--36 years (1915-25, 1927-28, 1950-75), 11.4 ft<sup>3</sup>/s (0.323 m<sup>3</sup>/s), 8,260 acre-ft/yr (10.2 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 204 ft<sup>3</sup>/s (5.78 m<sup>3</sup>/s) July 16 (gage height, 2.74 ft or 0.835 m); no flow Oct. 1-9. Period of record: Maximum discharge, 5,630 ft<sup>3</sup>/s (159 m<sup>3</sup>/s) June 17, 1965 (gage height, 11.13 ft or 3.392 m), from rating curve extended above 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 4.55 ft (1.387 m), 5.80 ft (1.768 m), 7.15 ft (2.179 m), and 11.13 ft (3.392 m); no flow many days most years. Discharge for flood of Aug. 8, 1929, which destroyed gage, was estimated as 5,200 ft<sup>3</sup>/s (150 m<sup>3</sup>/s) by State Engineer.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 250 acres (1.0 km<sup>2</sup>) above station. Diversions 1,000 ft (300 m) below station for irrigation of about 300 acres (1.2 km<sup>2</sup>).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.90	.30	.30	1.0	1.8	4.8	31	25	3.0	2.1	.10
2	0	.90	.36	.30	1.0	1.9	3.9	29	22	2.6	2.6	.08
3	0	.90	.45	.30	.98	1.9	3.8	30	20	2.5	2.6	.19
4	0	.90	.50	.35	.96	2.1	4.4	37	19	2.7	1.9	5.4
5	0	.90	.56	.40	.96	2.5	5.9	46	19	3.4	1.6	4.8
6	0	.81	.45	.45	.80	2.9	10	47	18	4.0	1.5	3.0
7	0	.90	.47	.60	.90	2.7	13	42	18	3.8	1.3	1.7
8	0	1.0	.40	.70	1.0	2.7	10	39	18	6.4	2.4	1.4
9	0	1.0	.42	.70	1.1	3.6	10	39	19	14	7.8	1.5
10	.02	1.0	.44	.70	1.0	3.1	9.7	39	25	13	4.6	1.1
11	.26	1.0	.45	.65	1.2	3.1	8.2	48	22	18	4.3	1.1
12	.10	1.0	.46	.60	1.4	2.7	7.3	58	18	40	4.1	6.1
13	.08	.90	.48	.50	1.2	2.5	6.2	65	15	43	8.0	5.4
14	.06	.81	.45	.70	1.0	2.5	6.1	64	13	37	7.4	4.0
15	.04	.90	.42	.90	1.0	2.8	6.1	63	12	35	4.5	2.8
16	.03	.73	.43	1.0	1.1	2.4	8.6	66	11	37	3.4	2.3
17	.02	.73	.44	.95	1.1	2.8	17	68	10	20	3.0	1.8
18	.01	.65	.45	1.1	.90	2.3	24	65	9.9	17	2.2	1.4
19	.02	.51	.47	1.0	.95	2.7	21	63	9.1	12	1.6	1.2
20	.02	.51	.49	1.0	1.1	3.2	19	58	8.6	10	1.6	1.4
21	.08	.45	.49	1.0	1.0	5.1	23	53	8.0	11	2.1	2.0
22	.15	.45	.47	.95	1.0	5.9	31	50	7.4	10	1.9	2.0
23	.18	.34	.45	1.0	.95	6.1	42	47	6.9	12	1.5	1.6
24	.22	.34	.44	1.2	1.2	5.5	46	41	6.3	7.5	.93	1.3
25	.45	.34	.44	1.1	1.3	5.4	53	36	5.5	6.5	.72	1.3
26	.51	.26	.42	1.1	1.4	6.3	63	33	4.8	5.2	.59	1.2
27	.58	.30	.40	1.1	1.5	5.3	60	31	4.3	4.0	.46	1.1
28	.73	.27	.39	1.0	1.6	4.8	67	31	3.8	3.4	.43	1.0
29	.81	.25	.37	1.1	---	5.8	40	31	3.4	3.2	.33	.94
30	.81	.23	.34	1.1	---	6.7	32	30	3.1	3.2	.18	.97
31	.81	---	.30	1.0	---	4.7	---	27	---	2.4	.13	---
TOTAL	5.99	20.18	13.40	24.85	30.60	113.8	636.0	1407	385.1	392.8	77.77	60.18
MEAN	.19	.67	.43	.80	1.09	3.67	21.2	45.4	12.8	12.7	2.51	2.01
MAX	.81	1.0	.56	1.2	1.6	6.7	63	68	25	43	8.0	6.1
MIN	0	.23	.30	.30	.80	1.8	3.8	27	3.1	2.4	.13	.08
AC-FT	12	40	27	49	61	226	1260	2790	764	779	154	119

CAL YR 1974 TOTAL 482.85 MEAN 1.32 MAX 55 MIN 0 AC-FT 958  
WTR YR 1975 TOTAL 3167.67 MEAN 8.68 MAX 68 MIN 0 AC-FT 6280

PEAK DISCHARGE (BASE, 200 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE
7-16	1830	2.74	204

## 07208500 RAYADO CREEK AT SAUBLE RANCH, NEAR CIMARRON, N. MEX.

LOCATION.--Lat 36°22'20", long 104°58'10", Colfax County, in Maxwell Grant, on right bank at Sauble Ranch (Carson-Maxwell Base Camp of Philmont Scout Ranch), 2.5 mi (4.0 km) upstream from State Highway 21, 4.0 mi (6.4 km) downstream from Bonito Creek, and 9.8 mi (15.8 km) southwest of Cimarron.

DRAINAGE AREA.--65 mi<sup>2</sup> (168 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (2,048 m) 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 (82 m) downstream at datum 2.79 ft (0.850 m) lower.

AVERAGE DISCHARGE.--56 years (1911-12, 1913-14, 1915-20, 1923-24, 1927-75), 14.0 ft<sup>3</sup>/s (0.396 m<sup>3</sup>/s), 10,140 acre-ft/yr (12.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 132 ft<sup>3</sup>/s (3.74 m<sup>3</sup>/s) Apr. 25 (gage height, 3.27 ft or 0.997 m); maximum gage height, 3.83 ft or 1.167 m Jan. 5 (backwater from ice); minimum discharge, 0.43 ft<sup>3</sup>/s (0.012 m<sup>3</sup>/s) Nov. 27, result of freezeup.  
1909-12, 1913-75: Maximum discharge, 9,000 ft<sup>3</sup>/s (250 m<sup>3</sup>/s) June 17, 1965 (gage height, 11.5 ft or 3.505 m, from floodmarks), from rating curve extended above 70 ft<sup>3</sup>/s (1.98 m<sup>3</sup>/s) on basis of field estimate of peak flow; minimum, 0.03 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Dec. 3, 1950, but may have been less during periods of ice effect.  
The major flood of June 10, 1913, destroyed the gage (stage and discharge not determined). Another major flood probably occurred Sept. 29 or 30, 1904.

REMARKS.--Records fair except those for January and February, which are poor. No diversion above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	4.3	2.9	2.8	3.3	5.2	8.1	36	37	8.5	7.2	4.4
2	3.7	4.3	3.4	2.6	3.0	5.4	7.0	37	30	8.2	7.2	4.4
3	5.0	4.1	3.4	2.4	3.0	5.9	7.0	43	28	8.2	7.0	5.2
4	6.6	4.1	3.4	2.5	3.0	5.6	9.2	51	28	8.0	6.8	16
5	5.9	3.7	3.2	2.6	3.0	5.4	12	60	26	8.2	6.5	26
6	5.7	3.9	3.2	2.8	2.5	6.2	14	56	26	8.5	7.0	20
7	7.1	3.7	2.5	3.2	2.8	5.6	12	48	25	8.5	6.5	17
8	5.7	3.6	3.6	3.0	3.5	5.4	11	46	24	13	9.7	16
9	5.7	3.6	3.4	3.2	3.0	5.6	11	46	25	13	24	15
10	5.2	3.6	4.1	2.8	4.0	5.2	10	47	32	14	14	14
11	7.1	3.2	3.9	2.4	3.0	5.2	10	50	27	14	12	14
12	8.4	3.0	3.7	2.0	3.0	4.9	9.6	56	22	21	13	20
13	4.8	3.2	3.6	2.6	4.0	5.2	8.8	60	20	25	15	16
14	4.3	2.9	3.2	3.0	3.8	4.9	8.8	60	18	20	14	16
15	4.1	3.0	2.5	3.5	2.7	5.2	9.9	58	18	18	12	15
16	3.9	2.9	3.0	2.3	2.8	5.9	12	58	17	16	12	12
17	3.9	2.6	3.7	2.5	2.9	5.2	17	58	16	18	11	13
18	3.7	3.4	3.6	2.6	2.5	5.4	23	56	15	17	10	12
19	3.6	3.4	3.6	2.6	2.6	5.6	24	53	15	15	9.6	12
20	3.6	2.4	3.6	3.0	3.0	6.6	23	50	14	15	8.8	11
21	3.6	3.2	3.4	3.0	2.7	7.4	28	49	14	15	9.9	11
22	3.6	3.4	3.6	2.9	2.7	7.4	34	48	13	13	8.5	11
23	3.6	3.4	3.6	2.8	2.5	7.0	52	44	12	12	7.8	9.9
24	3.6	2.2	3.0	3.0	2.5	6.8	59	40	12	12	7.2	9.2
25	3.9	3.2	2.5	2.6	3.0	6.4	81	36	11	11	6.8	9.2
26	4.6	2.7	3.0	2.6	3.7	8.5	87	37	10	10	6.5	8.2
27	4.5	1.9	2.5	2.9	3.5	6.4	67	40	9.6	10	6.2	8.0
28	4.3	2.6	3.0	2.9	4.6	5.6	43	39	9.2	9.2	6.0	7.8
29	4.5	2.5	3.5	2.5	---	6.2	41	42	8.8	9.2	5.6	7.5
30	5.5	2.0	3.0	3.3	---	6.8	36	43	8.8	8.0	5.4	7.0
31	4.6	---	3.0	3.5	---	7.5	---	39	---	7.2	4.8	---
TOTAL	147.2	46.0	101.6	86.4	86.6	185.6	775.4	1486	571.4	393.7	288.0	367.8
MEAN	4.75	3.20	3.28	2.79	3.09	5.99	25.8	47.9	19.0	12.7	9.29	12.3
MAX	8.4	4.3	4.1	3.5	4.6	8.5	87	60	37	25	24	26
MIN	2.9	1.9	2.5	2.0	2.5	4.9	7.0	36	8.8	7.2	4.8	4.4
AC-FI	292	190	202	171	172	368	1540	2950	1130	781	571	730

CAL YR 1974 TOTAL 2105.5 MEAN 5.77 MAX 20 MIN 1.9 AC-FI 4160  
WTR YR 1975 TOTAL 4585.7 MEAN 12.6 MAX 87 MIN 1.9 AC-FI 9100

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE
4-25	2200	3.27	132



## 07211000 CIMARRON RIVER AT SPRINGER, N. MEX.

LOCATION.--Lat 36°21'37", long 104°35'53", Colfax County, in Maxwell Grant, on left bank at Springer, 400 ft (120 m) downstream from bridge on State Highway 199, 0.3 mi (0.5 km) upstream from Salado Creek, and at mile 8.2 (13.2 km).

DRAINAGE AREA.--1,032 mi<sup>2</sup> (2,673 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1954. Altitude of gage is 5,770 ft (1,759 m) from topographic map. See WSP 1311 or 1731 for history of changes prior to July 17, 1942.

AVERAGE DISCHARGE.--51 years (1920-21, 1924-25, 1926-75), 17.2 ft<sup>3</sup>/s (0.487 m<sup>3</sup>/s), 12,460 acre-ft/yr (15.4 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 41 ft<sup>3</sup>/s (1.16 m<sup>3</sup>/s) Apr. 26 (gage height, 3.86 ft or 1.177 m); minimum, 0.08 ft<sup>3</sup>/s (0.002 m<sup>3</sup>/s) Sept. 3.

1930-75: Maximum discharge, 29,500 ft<sup>3</sup>/s (835 m<sup>3</sup>/s) June 18, 1965 (gage height, 19.96 ft or 6.084 m, from floodmarks), from rating curve extended above 1,800 ft<sup>3</sup>/s (51.0 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; no flow at times in 1954, 1956-57.

Maximum stage, about 22 ft (6.7 m) Sept. 29, 1904 (backwater from debris on railroad bridge). Another major flood occurred June 11, 1913. Maximum discharge of these floods probably exceeded 10,000 ft<sup>3</sup>/s (280 m<sup>3</sup>/s), but probably were less than the 1965 flood.

REMARKS.--Records good except those for winter period, which are fair. Flow partly regulated by Eagle Nest Lake (see sta 07205500). Diversions for irrigation of about 23,000 acres (93.1 km<sup>2</sup>) above station and a few hundred acres between station and mouth.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	1.4	2.0	2.0	2.3	3.0	1.8	2.6	5.8	.78	.31	.11
2	.43	1.4	2.0	1.8	2.0	2.7	1.6	4.2	7.2	.46	.26	.10
3	.42	1.7	2.0	1.6	2.3	2.5	1.7	4.2	7.4	.33	.30	.11
4	.38	1.5	2.1	1.7	2.0	2.4	1.8	4.3	5.2	.75	.23	2.0
5	.35	1.1	2.2	1.7	1.8	2.5	1.7	4.4	4.1	1.3	.27	2.3
6	.37	1.1	2.3	2.2	1.7	2.1	1.6	2.9	4.3	.73	.33	4.9
7	.76	1.4	2.2	2.2	1.8	1.8	1.8	2.8	3.9	.44	.16	3.6
8	.67	1.5	2.2	2.4	2.0	1.8	1.4	2.5	3.7	.69	.27	3.1
9	.53	1.8	2.1	2.1	1.8	2.1	1.6	2.0	12	2.5	.31	3.3
10	.89	2.7	2.2	2.0	2.3	1.9	2.1	2.2	26	2.0	.55	3.7
11	.90	2.0	2.2	1.9	1.7	1.9	2.7	2.3	16	1.7	.25	3.3
12	2.6	1.7	2.0	1.8	1.8	1.8	3.5	2.2	9.0	1.5	.29	3.9
13	2.1	1.7	1.9	1.9	2.0	1.9	3.5	1.8	5.4	1.3	.64	4.5
14	2.2	1.7	1.7	1.9	1.8	1.8	3.1	1.8	3.9	1.5	.34	4.8
15	1.8	1.7	2.0	2.2	2.0	1.9	2.8	2.2	3.2	1.5	.19	3.2
16	1.4	1.7	1.9	2.3	2.3	2.2	2.5	2.4	2.8	1.1	.33	2.4
17	1.1	1.7	2.0	3.0	2.3	2.5	2.2	2.3	2.4	.90	.16	1.8
18	.91	1.7	1.8	4.3	2.3	2.2	1.8	1.9	2.1	.86	.15	1.4
19	.72	1.8	1.9	4.1	2.3	2.2	1.7	2.0	1.8	.64	.17	1.1
20	.76	1.7	1.9	4.0	2.5	2.0	1.8	2.3	1.6	.57	.17	1.0
21	1.2	1.8	2.0	2.7	2.5	1.9	1.7	2.8	1.6	1.0	.17	1.5
22	2.6	1.8	2.2	2.4	2.0	1.7	1.8	3.9	1.9	2.0	.20	1.5
23	1.6	1.8	1.9	2.4	3.0	1.6	2.3	4.2	2.3	2.0	.18	1.2
24	1.5	1.5	1.8	2.9	3.4	1.5	1.7	3.5	1.9	1.4	.15	1.1
25	1.4	1.7	1.8	3.4	3.4	1.5	1.6	2.7	1.6	1.2	.15	.88
26	1.3	1.9	1.8	3.3	3.7	1.5	2.8	3.1	1.4	.72	.14	.75
27	1.2	1.7	1.8	2.7	3.7	1.5	1.5	8.5	1.5	.55	.16	.63
28	1.3	1.8	2.0	2.8	3.5	1.6	1.6	10	1.6	.52	.14	.52
29	1.9	1.9	1.7	2.3	---	1.6	1.1	11	1.4	.80	.13	.45
30	1.7	2.0	2.1	2.8	---	1.8	1.1	12	1.0	.42	.12	.52
31	1.5	---	2.1	2.5	---	1.8	---	6.7	---	.39	.11	---
TOTAL	36.95	50.9	61.8	77.3	66.2	61.2	59.9	121.7	144.8	32.55	7.33	59.67
MEAN	1.19	1.70	1.99	2.49	2.36	1.97	2.00	3.93	4.80	1.05	.24	1.99
MAX	2.6	2.7	2.3	4.3	3.7	3.6	3.5	12	26	2.5	.64	4.9
MIN	.35	1.1	1.7	1.6	1.7	1.5	1.1	1.8	1.0	.33	.11	.10
AC-FT	73	101	123	153	131	121	119	241	286	65	15	118

CAL YR 1974 TOTAL 830.95 MEAN 2.28 MAX 50 MIN .09 AC-FT 1650  
WTR YR 1975 TOTAL 779.50 MEAN 2.14 MAX 26 MIN .10 AC-FT 1550

PEAK DISCHARGE (BASE, 280 FT<sup>3</sup>/S).--No peak above base.

## 07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec. 21, T.24 N., R.23 E., Colfax County, on left bank at head of gorge, 2.0 mi (3.2 km) south of Taylor Springs, 2.3 mi (3.7 km) downstream from Cimarron River, 2.4 mi (3.9 km) upstream from Chico Creek, 7.1 mi (11.4 km) southeast of Springer, and at mile 850.4 (1,368.3 km).

DRAINAGE AREA.--2,850 mi<sup>2</sup> (7,380 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,635 ft (1,718 m) from topographic map. Prior to June 10, 1964, water-stage recorder at site 1.7 mi (2.7 km) downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

AVERAGE DISCHARGE.--30 years (1939-58, 1964-75), 88.6 ft<sup>3</sup>/s (2,509 m<sup>3</sup>/s), 64,190 acre-ft/yr (79.1 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 810 ft<sup>3</sup>/s (22.9 m<sup>3</sup>/s) July 21 (gage height, 3.31 ft or 1.009 m); no flow at times.

Period of record: Maximum discharge, 162,000 ft<sup>3</sup>/s (4,590 m<sup>3</sup>/s) June 18, 1965 (gage height, 47.4 ft or 14.448 m, from floodmarks), from rating curve extended above 7,000 ft<sup>3</sup>/s (198 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times some years.

Maximum flood prior to 1965 occurred Sept. 29, 1904 (discharge published as 91,100 ft<sup>3</sup>/s or 2,580 m<sup>3</sup>/s in WSP 842, 847).

REMARKS.--Records poor. Diversions for irrigation for about 30,000 acres (121 km<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	7.6	4.7	4.5	11	17	5.9	2.4	9.9	.83	.24	0
2	2.0	6.6	5.2	5.0	12	15	5.2	3.5	13	.52	18	0
3	1.7	6.2	5.4	4.5	10	13	4.9	4.5	10	.46	46	0
4	1.6	6.6	5.8	5.0	12	12	4.9	4.7	9.9	.34	11	6.1
5	1.4	6.2	6.0	5.5	11	12	4.7	4.7	7.3	.40	3.7	42
6	1.4	6.2	5.6	6.0	10	10	4.2	4.7	5.9	.46	1.9	19
7	2.4	6.2	5.4	6.0	12	8.4	4.2	3.7	5.7	.58	1.2	9.9
8	2.8	6.2	5.0	6.0	14	7.3	3.7	3.5	5.2	.28	.97	5.4
9	2.6	6.2	5.4	6.0	15	9.4	3.7	3.2	7.4	4.4	1.5	4.2
10	2.9	11	5.5	5.5	17	9.0	4.9	3.0	112	2.6	17	4.5
11	6.6	9.4	5.2	5.0	18	8.4	8.0	2.9	48	2.6	3.7	12
12	39	8.0	5.0	4.0	19	6.6	12	2.9	24	3.2	1.4	6.2
13	25	7.3	4.8	4.5	19	7.0	14	2.4	13	2.0	.97	3.5
14	19	6.6	4.7	5.0	17	7.0	13	2.2	8.7	1.8	.70	3.2
15	12	7.0	4.8	5.5	17	7.3	4.9	2.0	5.9	1.5	.58	2.8
16	8.7	7.6	4.9	4.5	18	8.4	7.0	2.3	5.4	1.3	29	2.0
17	7.0	7.3	5.0	5.0	19	8.4	5.2	2.8	4.7	1.0	3.2	1.5
18	5.9	6.6	5.0	5.5	17	8.0	4.2	2.8	3.7	.90	1.4	1.0
19	5.4	5.9	5.2	5.0	18	7.0	4.2	2.2	3.0	.83	.83	.83
20	4.7	5.2	5.4	5.0	19	6.6	4.0	2.3	2.6	.76	.70	.97
21	4.2	5.4	6.0	4.5	19	5.7	4.0	2.0	2.3	130	.76	1.0
22	7.7	5.7	6.6	4.0	15	4.9	4.0	2.4	2.2	21	.58	1.2
23	27	5.4	7.0	4.5	15	4.2	4.0	4.0	2.3	7.3	.46	1.5
24	19	5.2	5.6	5.0	19	4.2	3.5	4.2	2.6	4.5	.40	1.2
25	9.9	4.9	4.0	5.5	23	4.0	3.0	4.2	2.3	4.2	.16	1.1
26	8.0	4.9	4.8	6.0	27	4.0	2.9	3.4	1.8	2.6	0	1.1
27	7.0	4.8	4.8	7.0	26	4.0	3.4	4.7	1.6	1.7	0	.97
28	56	4.7	4.7	8.0	20	4.0	2.6	9.4	1.7	.97	0	.76
29	26	4.6	5.4	8.0	---	4.7	2.4	11	1.4	.64	0	.58
30	14	4.5	4.6	9.0	---	5.7	2.3	15	1.1	.52	0	.58
31	9.4	---	4.0	10	---	5.7	---	13	---	.34	0	---
TOTAL	343.0	190.0	161.5	174.5	469	238.9	159.9	136.0	391.2	228.25	146.35	135.09
MEAN	11.1	6.33	5.21	5.63	16.8	7.71	5.33	4.39	13.0	7.36	4.72	4.50
MAX	56	11	7.0	10	27	17	14	15	112	130	46	42
MIN	1.4	4.5	4.0	4.0	10	4.0	2.3	2.0	1.1	.34	0	0
AC-FT	680	377	320	346	930	474	317	270	776	453	290	268

CAL YR 1974 TOTAL 4415.87 MEAN 12.1 MAX 632 MIN 0 AC-FT 8760  
WTR YR 1975 TOTAL 2773.69 MEAN 7.60 MAX 130 MIN 0 AC-FT 5500

PEAK DISCHARGE (BASE, 3,000 FT<sup>3</sup>/S).--No peak above base.

## ARKANSAS RIVER BASIN

07215500 MORA RIVER AT LA CUEVA, N. MEX.

55

LOCATION.--Lat 35°56'27", long 105°14'59", Mora County, in Mora Grant, on left bank 45 ft (14 m) upstream from bridge on State Highway 3 at La Cueva, 0.3 mi (0.5 km) downstream from La Cueva damsite, and at mile 86.8 (139.7 km). Prior to Mar. 14 at site 700 ft (210 m) downstream.

DRAINAGE AREA.--173 mi<sup>2</sup> (448 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft (2,134 m) from topographic map. Prior to Apr. 15, 1931, nonrecording gage, and Apr. 15, 1931 to Apr. 18, 1962, water-stage recorder near present site at different datums. Apr. 19, 1962 to Mar. 13, 1974, water-stage recorder at site 700 ft (210 m) downstream at different datum.

AVERAGE DISCHARGE.--48 years (1906-10, 1931-75), 27.9 ft<sup>3</sup>/s (0.790 m<sup>3</sup>/s), 20,210 acre-ft/yr (24.9 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 262 ft<sup>3</sup>/s (7.42 m<sup>3</sup>/s) July 11 (gage height, 3.79 ft or 1.155 m); minimum, 0.36 ft<sup>3</sup>/s (0.010 m<sup>3</sup>/s) Feb. 16, result of freezeup.

1931-75: Maximum discharge, 1,530 ft<sup>3</sup>/s (43.3 m<sup>3</sup>/s) Sept. 23, 1941 (gage height, 7.58 ft or 2.310 m, site and datum then in use), from rating curve extended above 400 ft<sup>3</sup>/s (11.3 m<sup>3</sup>/s); no flow at times.

Flood of Sept. 23, 1904, may have exceeded 20,000 ft<sup>3</sup>/s (566 m<sup>3</sup>/s); another major flood occurred June 11, 1913, but is believed less than that of 1904.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 7,000 acres (28.3 km<sup>2</sup>), part of which is below station. See tabulation below for monthly and yearly diversion of La Cueva Canal, which bypasses gage on left bank.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	3.5	3.4	8.0	1.6	1.0	6.4	35	65	22	37	7.3
2	5.6	5.8	2.5	9.0	1.5	.93	7.7	30	59	24	37	7.5
3	5.4	6.7	2.3	9.0	1.3	.67	7.2	28	56	24	37	7.7
4	5.2	5.6	2.2	9.5	1.2	.67	7.1	9.4	62	26	32	20
5	5.2	5.7	2.2	9.0	1.1	.65	6.9	10	72	29	26	61
6	5.4	5.7	2.0	9.5	1.1	1.1	6.6	25	76	28	22	49
7	5.9	6.2	2.9	9.0	1.2	1.5	6.5	27	77	29	24	42
8	4.7	5.2	3.4	9.0	1.2	1.5	6.0	29	67	28	20	45
9	5.5	4.2	3.4	8.6	1.0	1.5	5.8	24	79	42	31	42
10	3.8	4.0	3.3	7.5	.83	1.4	5.5	25	119	73	32	43
11	4.2	4.1	3.3	7.0	.85	1.4	5.6	25	103	134	28	59
12	11	4.0	3.3	6.5	.83	1.5	5.4	31	94	114	29	120
13	6.3	4.0	3.5	7.5	.83	1.5	3.2	46	87	102	36	87
14	5.8	3.3	3.5	9.0	.82	1.6	6.3	46	86	97	43	77
15	5.5	3.2	3.5	10	.81	1.6	1.8	52	88	101	38	65
16	4.3	5.9	3.3	9.9	.75	4.5	11	50	82	112	34	60
17	3.9	5.7	3.1	10	.75	7.7	13	52	84	104	31	54
18	3.5	3.3	3.5	10	.75	7.3	11	51	78	97	20	50
19	3.7	3.8	3.5	8.5	.83	7.3	11	49	75	87	16	49
20	3.9	4.2	3.3	5.5	.87	6.9	7.7	56	69	81	17	45
21	3.8	4.0	4.0	3.4	.81	5.8	10	57	56	95	25	46
22	3.9	3.8	4.2	4.6	3.4	5.2	18	57	60	92	28	44
23	4.3	4.0	4.4	3.8	1.2	3.7	29	53	55	88	30	43
24	4.4	4.3	5.0	3.6	.89	3.8	33	47	46	89	26	40
25	4.7	4.3	7.5	2.8	1.1	5.1	37	49	48	84	23	36
26	4.8	4.5	8.5	2.2	1.0	8.6	46	48	48	75	22	34
27	6.1	4.1	7.8	2.1	.83	8.2	45	58	42	64	19	34
28	5.5	3.4	8.5	2.1	.83	7.8	44	61	34	53	11	33
29	5.0	3.3	9.2	1.9	---	4.1	44	73	28	55	8.3	29
30	6.0	3.7	8.5	2.0	---	3.9	38	72	21	54	8.5	26
31	3.9	---	7.2	1.9	---	3.7	---	63	---	45	9.1	---
TOTAL	156.8	133.5	136.2	202.4	30.18	112.12	501.9	1338.4	2016	2148	799.9	1355.5
MEAN	5.06	4.45	4.39	6.53	1.08	3.62	16.7	43.2	67.2	69.3	25.8	45.2
MAX	11	6.7	9.2	10	3.4	8.6	46	73	119	134	43	120
MIN	3.5	3.2	2.0	1.9	.75	.65	3.2	9.4	21	22	8.3	7.3
AC-FT	311	265	270	401	60	222	996	2650	4000	4260	1590	2690
(†)	305	479	512	395	532	419	469	575	672	397	161	375

CAL YR 1974 TOTAL 2117.30 MEAN 5.80 MAX 40 MIN 2.0 AC-FT 4200 † 2800  
WTR YR 1975 TOTAL 8930.90 MEAN 24.5 MAX 134 MIN .65 AC-FT 17710 † 5290

PEAK DISCHARGE (BASE, 300 FT<sup>3</sup>/S).--No peak above base. † Diversion, in acre-feet, by La Cueva Canal.

07216500 MORA RIVER NEAR COLONDRINAS, N. MEX.

LOCATION.--Lat 35°53'27", long 105°09'47", Mora County, in Mora Grant, on right bank, 0.7 mi (1.1 km) upstream from bridge on State Highway 160, 1.2 mi (1.9 km) east of Colondrinillas, 1.9 mi (3.1 km) upstream from Coyote Creek, 4.7 mi (7.6 km) downstream from Rito Cebolla, and at mile 75.8 (122.0 km).

DRAINAGE AREA.--267 mi<sup>2</sup> (692 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft (2,057 m) from topographic map. Mar. 10, 1915 to June 4, 1921, water-stage recorder at site 2.8 mi (4.5 km) upstream at different datum. July 6, 1921 to Jan. 5, 1929, nonrecording gage or water-stage recorder at site 0.7 mi (1.1 km) downstream at datum about 14 ft (4.3 m) lower and Jan. 6, 1929 to Apr. 1, 1972, water-stage recorder at site 0.7 mi (1.1 km) downstream at datum about 15 ft (4.6 m) lower.

AVERAGE DISCHARGE.--58 years (1915-20, 1921-22, 1923-75), 34.3 ft<sup>3</sup>/s (0.971 m<sup>3</sup>/s), 24,850 acre-ft/yr (30.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 815 ft<sup>3</sup>/s (23.1 m<sup>3</sup>/s) July 12 (gage height, 3.65 ft or 1.113 m), from rating curve extended above 370 ft<sup>3</sup>/s (10.5 m<sup>3</sup>/s); minimum, 0.62 ft<sup>3</sup>/s (0.018 m<sup>3</sup>/s) Feb. 6, result of freezeup.

Period of record: Maximum discharge, 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s) Aug. 22, 1952 (gage height, 14.4 ft or 4.39 m, site and datum then in use), from rating curve extended above 660 ft<sup>3</sup>/s (18.7 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times.

Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s).

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 12,000 acres (48.6 km<sup>2</sup>) above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	2.8	2.8	7.7	5.0	6.6	5.6	27	64	11	31	9.2
2	4.0	2.7	2.7	7.5	4.5	8.3	8.3	24	59	12	30	8.4
3	4.3	6.5	2.7	7.5	4.1	8.0	8.4	23	51	12	30	9.3
4	4.5	5.0	2.7	8.0	4.0	5.6	8.2	16	51	14	27	17
5	4.9	5.0	2.7	8.0	3.6	4.8	8.2	4.7	60	17	23	63
6	5.9	4.9	2.6	8.5	3.8	4.8	7.1	16	70	17	21	62
7	9.1	6.3	2.5	8.5	4.3	4.8	3.8	18	74	17	22	44
8	7.0	5.8	2.5	8.0	4.1	4.8	4.1	23	61	17	20	50
9	39	3.3	2.6	7.5	4.0	5.9	3.9	19	69	43	27	47
10	12	3.3	2.7	7.0	3.7	5.6	3.9	19	151	72	28	45
11	7.6	2.7	2.7	6.5	3.7	5.1	5.2	19	128	208	26	47
12	32	3.0	2.7	6.0	3.3	5.0	8.0	22	96	235	25	192
13	17	3.3	2.5	7.0	3.3	5.1	8.3	37	84	122	31	117
14	12	3.3	3.0	8.0	3.5	4.8	9.7	40	78	102	40	98
15	8.9	2.8	3.4	10	3.4	5.2	30	42	81	111	37	77
16	7.6	3.2	3.1	12	3.3	5.4	38	44	73	126	31	69
17	5.1	7.2	3.2	12	4.1	7.0	23	47	80	139	30	62
18	4.1	3.8	3.1	13	4.0	6.6	18	46	70	115	21	55
19	3.9	2.8	3.4	11	3.8	6.1	15	40	68	97	16	52
20	3.6	3.1	3.7	10	3.7	6.1	9.8	48	63	86	16	50
21	2.9	3.3	4.2	7.8	3.5	5.8	6.7	56	45	101	22	49
22	2.6	3.2	4.9	6.8	3.5	5.8	16	53	46	92	27	49
23	2.8	2.8	4.1	7.4	4.5	4.9	24	51	43	99	28	45
24	3.0	2.9	4.3	8.6	5.5	4.2	32	43	30	92	26	43
25	2.7	3.2	4.2	8.5	5.2	5.5	36	45	30	90	23	39
26	3.4	3.2	5.5	7.5	5.4	7.8	43	41	28	74	23	37
27	4.6	3.2	7.3	6.8	5.5	7.0	42	59	27	62	20	34
28	4.6	3.0	7.1	6.3	5.3	10	39	65	21	48	14	34
29	3.7	2.6	8.6	5.3	---	6.4	40	77	19	45	11	32
30	3.4	2.6	7.8	6.0	---	5.8	33	80	15	45	8.7	27
31	4.3	---	6.8	6.1	---	5.5	---	65	---	39	9.5	---
TOTAL	234.8	110.8	122.1	250.8	115.6	184.3	538.2	1209.7	1835	2360	744.2	1562.9
MEAN	7.57	3.69	3.94	8.09	4.13	5.95	17.9	39.0	61.2	76.1	24.0	52.1
MAX	39	7.2	8.6	13	5.5	10	43	80	151	235	40	192
MIN	2.6	2.6	2.5	5.3	3.3	4.2	3.8	4.7	15	11	8.7	8.4
AC-FT	466	220	242	497	229	366	1070	2400	3640	4680	1480	3100
CAL YR 1974	TOTAL	2154.2	MEAN	5.90	MAX	140	MIN	1.4	AC-FT	4270		
WTR YR 1975	TOTAL	9268.4	MEAN	25.4	MAX	235	MIN	2.5	AC-FT	18380		

PEAK DISCHARGE (BASE, 400 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-11	2230	3.20	585	7-12	1730	3.65	815

07218000 COYOTE CREEK NEAR GOLONDRINAS, N. MEX.

LOCATION.--Lat 35°55'00", long 105°09'49", Mora County, in Mora Grant, on left bank 0.5 mi (0.8 km) downstream from Coyote Creek damsite, 2.3 mi (3.7 km) northeast of Golondrin, and at mile 2.7 (4.3 km).

DRAINAGE AREA.--215 mi<sup>2</sup> (557 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,785 ft (2,068 m) from topographic map. Prior to Apr. 26, 1938, at site 0.4 mi (0.6 km) downstream at different datum (nonrecording gage prior to Apr. 20, 1929). Apr. 26, 1938 to Sept. 25, 1946, at site 139 ft (42 m) downstream at same datum.

AVERAGE DISCHARGE.--47 years, 11.7 ft<sup>3</sup>/s (0.331 m<sup>3</sup>/s), 8,480 acre-ft/yr (10.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 478 ft<sup>3</sup>/s (13.5 m<sup>3</sup>/s) July 17 (gage height, 4.28 ft or 1.305 m), from rating curve extended above 27 ft<sup>3</sup>/s (0.76 m<sup>3</sup>/s) as explained below; minimum, 0.36 ft<sup>3</sup>/s (0.010 m<sup>3</sup>/s) Aug. 30.

Period of record: Maximum discharge, 4,050 ft<sup>3</sup>/s (115 m<sup>3</sup>/s) Aug. 17, 1961 (gage height, 9.60 ft or 2.926 m), from rating curve extended above 250 ft<sup>3</sup>/s (7.08 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.54 ft (1.689 m), 7.74 ft (2.359 m), and 9.60 ft (2.926 m); maximum gage height, 10.1 ft (3.08 m) Aug. 30, 1936 (site and datum then in use); no flow Aug. 4, 1945, Apr. 10, May 9, 10, 1956.

REMARKS.--Records fair except those for winter period, which are poor. Diversions (including off-channel storage) for irrigation of about 4,000 acres (16.2 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.8	2.2	8.4	4.7	5.7	5.7	24	8.0	2.0	2.9	.59
2	1.3	3.1	2.2	8.0	4.5	5.2	5.7	22	6.5	2.0	2.5	.68
3	1.3	2.6	2.6	8.0	4.2	5.7	5.7	18	5.9	2.2	2.2	.59
4	1.1	2.6	2.5	8.2	4.8	5.0	5.0	18	6.8	2.4	2.2	6.6
5	1.1	2.8	2.8	8.0	4.6	4.7	5.0	18	7.4	2.5	2.2	13
6	1.1	2.5	2.6	7.8	4.4	7.3	5.4	20	6.8	2.5	1.9	8.6
7	1.4	2.5	2.4	7.6	4.5	10	5.7	21	6.2	2.4	1.1	6.5
8	1.2	2.2	2.2	6.8	4.8	11	6.8	24	5.9	1.9	1.2	6.5
9	1.4	2.2	2.5	6.4	4.7	13	5.4	19	15	7.0	1.4	4.0
10	1.6	2.1	3.0	6.0	4.9	14	7.4	18	27	7.1	1.3	5.2
11	2.2	1.8	3.0	5.6	4.7	13	10	17	21	39	1.7	6.3
12	5.0	1.9	3.0	5.0	4.8	12	12	16	14	125	2.0	25
13	6.3	1.8	2.8	6.2	4.7	10	11	17	11	27	2.7	17
14	4.6	1.7	3.0	6.6	4.5	8.9	12	23	8.9	15	2.7	17
15	4.5	1.7	3.5	6.8	4.5	9.2	15	23	8.9	11	2.4	16
16	4.3	1.7	3.5	6.2	4.6	9.2	29	30	8.9	48	2.0	16
17	4.3	1.6	4.0	6.6	4.8	7.4	43	40	6.8	62	1.7	15
18	3.6	1.6	4.5	5.9	4.6	6.5	72	40	5.7	59	1.5	13
19	2.1	1.4	4.5	6.8	4.4	6.5	56	40	5.4	17	1.5	12
20	2.2	1.6	4.5	6.2	4.7	8.0	40	37	4.7	16	1.5	12
21	2.3	1.6	4.3	5.0	4.4	10	36	30	3.0	13	1.1	12
22	2.3	1.6	4.3	4.6	4.2	15	36	25	1.9	12	.77	8.9
23	2.4	1.7	4.0	5.7	4.0	15	38	21	1.7	12	.59	9.8
24	2.4	1.8	4.5	5.9	6.4	13	35	16	1.7	11	.51	9.0
25	2.4	1.8	5.0	6.5	7.0	14	33	12	1.6	10	.51	8.5
26	2.5	1.9	6.0	6.2	7.4	13	37	9.6	1.6	9.6	.51	8.2
27	3.1	2.2	7.0	6.2	6.2	10	37	9.2	1.6	8.6	.51	7.7
28	2.6	1.9	8.0	5.2	5.9	9.2	34	7.7	1.6	5.4	.59	6.9
29	2.5	2.1	9.0	4.7	---	9.0	30	8.3	1.7	4.2	.51	4.3
30	2.6	2.1	8.5	5.2	---	8.0	26	10	1.9	3.6	.43	4.1
31	3.0	---	8.0	5.0	---	6.5	---	9.6	---	2.9	.51	---
TOTAL	80.0	60.9	129.9	197.3	137.9	295.0	697.8	643.4	209.1	543.3	45.14	280.96
MEAN	2.58	2.03	4.19	6.36	4.93	9.52	23.3	20.8	6.97	17.5	1.46	9.37
MAX	6.3	3.1	9.0	8.4	7.4	15	72	40	27	125	2.9	25
MIN	1.1	1.4	2.2	4.6	4.0	4.7	5.0	7.7	1.6	1.9	.43	.59
AC-FT	159	121	258	391	274	585	1380	1280	415	1080	90	557

CAL YR 1974 TOTAL 1385.23 MEAN 3.80 MAX 85 MIN .38 AC-FT 2750  
WTR YR 1975 TOTAL 3320.70 MEAN 9.10 MAX 125 MIN .43 AC-FT 6590

PEAK DISCHARGE (BASE, 180 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	0100	4.08	418	7-16	2000	3.95	382
7-12	2100	3.75	332	7-17	2400	4.28	478

## 07220100 LAKE ISABEL FEEDER CANAL NEAR SAPELLO, N. MEX.

LOCATION.--Lat 35°44'42", long 105°09'25", San Miguel County, in Mora Grant, on right bank 20 ft (6.1 m) upstream from concrete crossing, 1.0 mi (1.6 km) northwest of Los Alamos, 2.0 mi (3.2 km) downstream from canal heading, and 5.7 mi (9.2 km) southeast of Sapello.

PERIOD OF RECORD.--September 1956 to June 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (2,070 m) from topographic map. Prior to Aug. 10, 1967, at site 650 ft (200 m) upstream at datum 2.93 ft (0.893 m) higher.

EXTREMES.--Period of record: Maximum daily discharge, 322 ft<sup>3</sup>/s (9.12 m<sup>3</sup>/s) Aug. 2, 1965; no flow at times.

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

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

Month	Maximum	Minimum	Mean	Diversion in acre-feet
October.....	0	0	0	0
November.....	0	0	0	0
December.....	0	0	0	0
CAL YR 1974.....	1.3	0	.004	2.9
January.....	0	0	0	0
February.....	0	0	0	0
March.....	0	0	0	0
April.....	0	0	0	0
May.....	0	0	0	0
June.....	0	0	0	0
July.....	-	-	-	-
August.....	-	-	-	-
September.....	-	-	-	-
WTR YR 1975.....	-	-	-	-

NOTE.--The diversion dam on Sapello River washed out during flood of Aug. 8, 1972.

## 07221000 MORA RIVER NEAR SHOEMAKER, N. MEX.

LOCATION.--Lat 35°48'01", Long 104°46'58", Mora County, in Mora Grant, on left bank 5.5 mi (8.8 km) east of Shoemaker, 12.3 mi (19.8 km) upstream from Pedros Creek, and at mile 39.4 (63.4 km).

DRAINAGE AREA.--1,104 mi<sup>2</sup> (2,859 km<sup>2</sup>), of which 71 mi<sup>2</sup> (184 km<sup>2</sup>) is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,145 ft (1,873 m) from topographic map. Prior to Oct. 10, 1934, at site 2,000 ft (610 m) upstream at different datum.

AVERAGE DISCHARGE.--57 years (1914-18, 1919-24, 1927-75), 58.8 ft<sup>3</sup>/s (1.665 m<sup>3</sup>/s), 42,600 acre-ft/yr (52.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,140 ft<sup>3</sup>/s (32.3 m<sup>3</sup>/s) July 12 (gage height, 4.39 ft or 1.338 m); minimum, 0.45 ft<sup>3</sup>/s (0.013 m<sup>3</sup>/s) Dec. 14, result of freezeup.

Period of record: Maximum discharge, 15,200 ft<sup>3</sup>/s (430 m<sup>3</sup>/s) June 3, 1948 (gage height, 12.79 ft or 3.898 m), from rating curve extended above 2,800 ft<sup>3</sup>/s (79.3 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 10.09 ft (3.075 m) and 12.79 ft (3.898 m); no flow at times.

Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 30,000 ft<sup>3</sup>/s (850 m<sup>3</sup>/s).

REMARKS.--Records good. Diversions for irrigation of about 26,000 acres (105 km<sup>2</sup>) above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1281: 1931(M), 1933-34(M), 1937(M), 1938(P), 1939-40(M), 1941-42(P). WSP 1731: 1921, 1928, 1951(M). Revised figures of discharge in cubic feet per second, for the period Dec. 15-31, 1974, superseding those published in WRD N. Mex., Part 1, 1974, are given in the table below.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.3	3.2	16	29	29	5.9	33	91	8.3	14	8.0
2	1.5	2.5	3.0	18	27	30	5.9	26	81	8.0	13	7.6
3	1.4	3.0	3.2	16	26	38	5.9	22	72	7.6	13	7.6
4	1.3	3.7	3.0	18	24	49	5.9	17	58	7.6	14	128
5	1.2	3.0	3.0	21	22	41	6.6	17	52	7.6	11	25
6	1.4	3.0	3.0	21	17	36	5.6	10	47	7.3	9.6	36
7	2.5	3.5	3.5	22	19	31	5.2	9.2	51	6.9	8.7	37
8	2.1	3.2	3.5	19	23	33	4.9	8.7	47	7.6	9.2	32
9	1.7	3.5	3.2	25	23	21	4.7	9.6	42	8.0	11	31
10	1.6	3.9	3.7	19	22	20	5.6	11	94	22	10	34
11	4.2	3.7	3.7	16	22	21	5.6	10	170	112	9.2	127
12	4.7	3.5	3.7	20	21	20	6.9	12	123	423	8.7	150
13	3.2	3.2	3.7	26	20	16	5.9	15	98	378	8.7	174
14	4.9	3.5	3.2	25	17	12	5.6	31	86	154	8.7	112
15	3.5	3.2	4.5	26	16	10	5.9	34	82	126	10	98
16	2.5	3.2	9.4	32	15	11	38	37	72	119	12	82
17	2.3	3.5	10	31	15	11	75	44	67	180	12	74
18	2.7	3.5	9.7	31	16	8.0	85	57	66	198	13	64
19	2.5	3.2	10	32	16	9.2	85	58	56	138	10	58
20	2.3	3.0	11	32	17	8.3	63	56	49	107	8.7	57
21	2.3	3.0	13	29	18	12	49	59	41	91	8.7	57
22	2.3	3.0	12	26	18	5.6	46	62	28	96	8.3	57
23	2.7	3.7	12	26	15	8.0	34	59	23	92	8.0	56
24	2.5	3.7	12	29	14	11	36	57	19	85	7.3	51
25	2.3	3.5	11	32	20	6.6	49	53	16	86	7.3	45
26	2.3	3.2	11	33	27	8.3	52	49	15	78	7.6	42
27	2.7	3.5	11	29	29	5.6	62	45	11	63	8.3	39
28	2.7	3.2	12	28	28	7.6	62	58	8.7	53	9.2	38
29	2.7	3.2	17	28	---	7.6	61	88	9.2	42	7.6	37
30	2.5	3.5	14	28	---	6.9	49	114	10	33	7.3	33
31	2.3	---	14	30	---	6.9	---	105	---	21	7.6	---
TOTAL	76.4	98.6	240.2	784	576	540.6	932.1	1266.5	1684.9	2765.9	301.7	1797.2
MEAN	2.46	3.29	7.75	25.3	20.6	17.4	31.1	40.9	56.2	89.2	9.73	59.9
MAX	4.9	3.9	17	33	29	49	85	114	170	423	14	174
MIN	1.2	2.3	3.0	16	14	5.6	4.7	8.7	8.7	6.9	7.3	7.6
AC-FT	152	196	476	1560	1140	1070	1850	2510	3340	5490	598	3560
CAL YR 1974 TOTAL	3305.26			MEAN 9.06	MAX 322	MIN .15	AC-FT 6560					
WTR YR 1975 TOTAL	11064.10			MEAN 30.3	MAX 423	MIN 1.2	AC-FT 21950					

PEAK DISCHARGE (BASE, 800 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	0830	4.39	1,140	7-13	0230	3.94	890

NOTE.--Figures of discharge, in cubic feet per second, for the period Dec. 15-31, 1974, are revisions and supersede those published in WRD N. Mex., Part 1, 1974.

## ARKANSAS RIVER BASIN

07221500 CANADIAN RIVER NEAR SANCHEZ, N. MEX.

LOCATION.--Lat 35°39'08", long 104°22'39", in SW¼ sec.34, T.17 N., R.24 E., San Miguel County, on right bank 1,000 ft (300 m) downstream from bridge on State Highway 65, 0.9 mi (1.4 km) upstream from Lagartija Creek, 3.2 mi (5.1 km) northeast of Sanchez, 10 mi (16 km) downstream from Mora River, 25 mi (40 km) southwest of Mosquero, and at mile 777.0 (1,250.2 km).

DRAINAGE AREA.--6,015 mi<sup>2</sup> (15,579 km<sup>2</sup>), of which 303 mi<sup>2</sup> (785 km<sup>2</sup>) is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,495 ft (1,370 m) from topographic map. May 15, 1912 to Dec. 31, 1914, at two sites within 100 ft (30 m) about 3 mi (4.8 km) upstream at different datums. October 1935 to June 1965 at site 1,000 ft (300 m) upstream at datum 7.32 ft (2.231 m) higher prior to October 1963 and 5.32 ft (1.622 m) higher thereafter. June 1965 to October 1966 at site 0.6 mi (1.0 km) upstream at datum about 20 ft (6.1 m) higher. Supplemental water-stage recorder at site 0.6 mi (1.0 km) upstream used at various times since 1966.

AVERAGE DISCHARGE.--42 years (1912-14, 1935-75), 202 ft<sup>3</sup>/s (5,721 m<sup>3</sup>/s), 146,300 acre-ft/yr (180 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 517 ft<sup>3</sup>/s (14.6 m<sup>3</sup>/s) July 13 (gage height, 3.53 ft or 1.076 m); minimum, 2.4 ft<sup>3</sup>/s (0.068 m<sup>3</sup>/s) Dec. 14, result of freezeup.

Period of record: Maximum discharge, 145,000 ft<sup>3</sup>/s (4,110 m<sup>3</sup>/s) June 18, 1965 (gage height, about 38.1 ft or 11.61 m, from floodmarks, present site and datum), from rating curve extended above 91,000 ft<sup>3</sup>/s (2,580 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times.

The flood of Sept. 29 or 30, 1904 probably exceeded 100,000 ft<sup>3</sup>/s (2,830 m<sup>3</sup>/s), but is believed to have been less than the peak of June 18, 1965.

REMARKS.--Records good. Diversions for irrigation of about 56,000 acres (227 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	27	13	20	43	34	14	50	124	11	52	4.7
2	9.9	28	9.9	24	40	47	14	45	129	9.4	49	5.0
3	8.7	24	11	25	43	32	15	36	117	7.4	29	6.4
4	8.0	21	10	26	42	33	14	29	102	6.7	20	6.0
5	6.4	19	9.9	27	41	42	14	23	88	6.4	25	18
6	6.0	17	9.4	23	40	46	14	20	61	7.7	16	94
7	7.4	16	9.4	23	40	26	13	17	52	8.3	12	44
8	8.3	14	9.9	18	38	21	13	14	51	8.3	10	30
9	7.4	13	9.5	20	32	20	12	13	63	9.4	10	33
10	7.0	13	11	15	36	26	12	12	116	11	21	34
11	7.4	13	12	22	37	26	13	9.0	71	36	106	53
12	20	13	13	29	36	23	16	8.3	285	23	34	226
13	31	13	12	34	34	21	20	8.3	220	301	21	194
14	26	13	11	35	36	30	20	7.0	156	329	13	249
15	37	12	11	23	34	25	38	7.7	122	181	13	184
16	35	15	11	21	32	26	39	7.4	100	138	34	138
17	33	16	12	21	33	26	28	15	88	124	19	113
18	28	14	11	22	33	24	22	23	73	201	14	90
19	24	14	10	23	33	22	62	29	65	206	13	75
20	19	13	10	23	31	21	89	44	62	168	9.9	65
21	17	12	9.9	26	31	20	86	49	52	133	9.4	64
22	16	12	12	25	36	19	69	46	44	115	10	95
23	14	12	13	25	41	17	54	50	38	115	9.9	88
24	13	13	13	27	36	17	45	52	34	117	8.0	70
25	12	13	12	33	33	16	38	50	26	113	7.0	62
26	11	13	13	32	33	17	34	52	20	107	6.7	54
27	11	13	13	32	30	15	38	50	19	102	6.4	47
28	12	12	15	35	33	15	45	52	16	84	5.2	42
29	19	12	18	32	---	13	53	54	15	64	5.7	40
30	17	12	17	38	---	14	53	56	13	51	5.0	37
31	16	---	16	38	---	16	---	121	---	41	4.3	---
TOTAL	499.5	452	367.9	817	1007	750	997	1049.7	2422	2834.6	598.5	2261.1
MEAN	16.1	15.1	11.9	26.4	36.0	24.2	33.2	33.9	80.7	91.4	19.3	75.4
MAX	37	28	18	38	43	47	89	121	285	329	106	249
MIN	6.0	12	9.4	15	30	13	12	7.0	13	6.4	4.3	4.7
AC-FI	991	897	730	1620	2000	1490	1980	2080	4800	5620	1190	4480

CAL YR 1974 TOTAL 8243.71 MEAN 22.6 MAX 792 MIN 0 AC-FI 16350  
WTR YR 1975 TOTAL 14056.30 MEAN 38.5 MAX 329 MIN 4.3 AC-FI 27880

PEAK DISCHARGE (BASE, 3,500 FT<sup>3</sup>/S).--No peak above base.

NOTE.--Supplemental gage used Feb. 20-28, Apr. 10 to May 5.



## 07222500 CONCHAS RIVER AT VARIADERO, N. MEX.

LOCATION.--Lat 35°24'10", long 104°26'35", in NE1/4 sec.36, T.14 N., R.23 E., San Miguel County, on left bank 1.5 mi (2.4 km) northeast of Variadero, 14 mi (23 km) west of Conchas Dam, and at mile 15.0 (24.1 km).

DRAINAGE AREA.--523 mi<sup>2</sup> (1,355 km<sup>2</sup>), of which 130 mi<sup>2</sup> (337 km<sup>2</sup>) is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,390 ft (1,340 m), revised, from topographic map. Prior to Mar. 30, 1942, at site 1.5 mi (2.4 km) upstream at different datum. Mar. 30, 1942 to May 18, 1950, at present site at datum 0.5 ft (0.15 m) higher.

AVERAGE DISCHARGE.--39 years, 16.0 ft<sup>3</sup>/s (0.453 m<sup>3</sup>/s), 11,590 acre-ft/yr (14.3 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,540 ft<sup>3</sup>/s (100 m<sup>3</sup>/s) Aug. 16 (gage height, 6.61 ft or 2.015 m), from rating curve extended above 760 ft<sup>3</sup>/s (21.5 m<sup>3</sup>/s) as explained below; no flow many days.

Period of record: Maximum discharge, 44,000 ft<sup>3</sup>/s (1,250 m<sup>3</sup>/s) Sept. 1, 1942 (gage height, 19.96 ft or 6.084 m, present datum). from rating curve extended above 760 ft<sup>3</sup>/s (21.5 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 10.5 ft (3.20 m) and 19.96 ft (6.084 m), present datum; no flow many days.

REMARKS.--Records fair. Diversions for irrigation of about 300 acres (1.21 km<sup>2</sup>) above station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	.04	.13	.22	.22	.06	0	.01	0	.02	0
2	0	.03	.04	.16	.13	.19	.06	0	0	0	24	0
3	0	.03	.04	.13	.10	.13	.04	0	0	0	8.8	0
4	0	.04	.04	.13	.08	.16	.03	0	0	0	2.8	0
5	0	.04	.04	.13	.06	.10	.01	0	0	0	.89	0
6	0	.04	.04	.16	.04	.10	.01	0	0	0	.22	0
7	0	.04	.04	.16	.04	.06	.02	0	0	0	.06	0
8	0	.04	.06	.19	.04	.08	.01	0	0	0	.02	0
9	0	.04	.06	.16	.04	.25	.01	0	0	0	0	0
10	0	.04	.06	.10	.04	.25	.05	0	.03	0	0	0
11	0	.06	.06	.08	.01	.19	.22	0	.02	0	0	0
12	.37	.06	.06	.06	.01	.10	.83	0	0	0	0	3.7
13	4.2	.04	.06	.08	.01	.10	.77	0	0	0	0	.10
14	3.9	.04	.06	.10	.01	.10	.33	0	0	0	0	.01
15	1.8	.04	.06	.13	.02	.13	.16	0	0	0	0	0
16	1.9	.06	.06	.08	.06	.19	.10	0	0	0	710	0
17	.71	.06	.08	.08	.08	.13	.05	0	0	0	76	0
18	.03	.04	.08	.06	.13	.10	.03	0	0	215	19	0
19	.04	.04	.06	.04	.10	.10	.01	0	0	11	7.2	0
20	.04	.02	.06	.04	.08	.08	0	0	0	2.0	2.7	.29
21	.03	.02	.06	.03	.06	.06	0	0	0	.18	1.0	.06
22	.03	.04	.06	.05	1.1	.03	0	0	0	.06	.33	0
23	.10	.06	.04	.06	1.2	.03	0	0	0	.02	.06	0
24	.03	.06	.02	.06	.55	0	0	0	0	119	.01	0
25	.03	.06	.04	.06	.45	.01	0	0	0	19	0	0
26	.02	.06	.06	.03	.33	.01	0	0	0	4.6	0	0
27	.26	.02	.10	.02	.25	.03	0	0	0	1.7	0	0
28	.02	.02	.10	.03	.22	.01	0	23	0	.50	0	0
29	.02	.01	.08	.03	---	.04	0	3.6	0	.16	0	0
30	.02	.02	.06	.29	---	.08	0	.22	0	.10	0	0
31	.02	---	.04	.33	---	.10	---	.04	---	.06	0	---
TOTAL	13.57	1.20	1.76	3.19	5.46	3.16	2.80	26.86	.06	373.30	853.11	4.16
MEAN	.44	.040	.057	.10	.20	.10	.093	.87	.002	12.0	27.5	.14
MAX	4.2	.06	.10	.33	1.2	.25	.83	23	.03	215	710	3.7
MIN	0	.01	.02	.02	.01	0	0	0	0	0	0	0
AC-FT	27	2.4	3.5	6.3	11	6.3	5.6	53	.1	740	1690	8.3
CAL YR 1974	TOTAL	367.79	MEAN 1.01	MAX 112	MIN 0	AC-FT 730						
WTR YR 1975	TOTAL	1288.63	MEAN 3.53	MAX 710	MIN 0	AC-FT 2560						

PEAK DISCHARGE (BASE, 1,500 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-16	0930	6.61	3,540	7-18	0400	4.37	1,500

## ARKANSAS RIVER BASIN

## 07223000 BELL RANCH CANAL BELOW CONCHAS DAM, N. MEX.

LOCATION.--Lat 35°24'10", long 104°11'07", San Miguel County, in Pablo Montoya Grant, on left bank, 1,270 ft (390 m) downstream from Conchas Dam and 23.5 mi (37.8 km) north of Newkirk.

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 4,150 ft (1,265 m) from headgate elevations.

EXTREMES.--Period of record: Maximum daily discharge, 21 ft<sup>3</sup>/s (0.595 m<sup>3</sup>/s) July 10-13, Sept. 7-10, 1948, June 27, Aug. 7, 1951; no flow many days each year.

REMARKS.--Records good. Canal diverts from Conchas Lake (see sta 07223500) for irrigation of about 700 acres (2.83 km<sup>2</sup>) on Bell Ranch.

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

Month	Maximum	Minimum	Mean	Diversion in acre-feet
October.....	2.3	0	.19	12
November.....	0	0	0	0
December.....	5.7	0	1.32	81
CAL YR 1974.....	11	0	2.57	1,860
January.....	0	0	0	0
February.....	0	0	0	0
March.....	0	0	0	0
April.....	7.4	0	3.18	189
May.....	9.3	0	5.22	321
June.....	6.0	0	1.83	109
July.....	8.1	0	1.42	87
August.....	12	0	8.39	516
September.....	10	0	4.72	281
WTR YR 1975.....	12	0	2.20	1,600

## 07223300 CONCHAS CANAL BELOW CONCHAS DAM, N. MEX.

LOCATION.--Lat 35°22'51", long 104°10'58", San Miguel County, in Pablo Montoya Grant, in Conchas Canal operations building below Conchas Dam, and 21.5 mi (34.6 km) north of Newkirk. Prior to Dec. 31, 1973, at site 1.0 mi (1.6 km) downstream.

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

GAGE.--Flowmeters in each of two 90-in diameter steel diversion conduits. Prior to Nov. 19, 1948, water-stage recorder at site 0.2 mi (0.3 km) downstream. Nov. 20, 1948 to Dec. 31, 1973, water-stage recorder at site 1.0 mi (1.6 km) downstream.

EXTREMES.--Period of record: Maximum daily discharge, 751 ft<sup>3</sup>/s (21.3 m<sup>3</sup>/s) Aug. 31, 1961; no flow many days each year.

REMARKS.--Records good. Water is diverted from Conchas Lake for irrigation of about 35,000 acres (142 km<sup>2</sup>) on Tucumcari Project (1966 conditions). Water quality records for the current year are published in Part 2 of this report.

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

Month	Mean	Diversion in acre-feet
October.....	65.8	4,050
November.....	0	0
December.....	0	0
CAL YR 1974.....	161	116,600
January.....	0	0
February.....	0	0
March.....	0	0
April.....	19.6	1,170
May.....	270	16,580
June.....	146	8,700
July.....	91.2	5,610
August.....	205	12,620
September.....	151	8,980
WTR YR 1975.....	79.7	57,710

## 07223500 CONCHAS LAKE AT CONCHAS DAM, N. MEX.

LOCATION.--Lat 35°24'10", long 104°11'25", San Miguel County, in Pablo Montoya Grant, stilling well within concrete portion of Conchas Dam on Canadian River, 24 mi (39 km) north of Newkirk, and at mile 746.0 (1,200.3 km).

DRAINAGE AREA.--7,409 mi<sup>2</sup> (19,189 km<sup>2</sup>), of which 433 mi<sup>2</sup> (1,121 km<sup>2</sup>) 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 at mean sea level.

EXTREMES.--Current year: Maximum contents, 134,700 acre-ft (166 hm<sup>3</sup>) Oct. 1 (elevation, 4,172.16 ft or 1,271.674 m); minimum, 91,190 acre-ft (112 hm<sup>3</sup>) Sept. 30 (elevation, 4,161.35 ft or 1,268.379 m).

Period of record: Maximum contents, 479,600 acre-ft (591 hm<sup>3</sup>) Apr. 24, 1942 (elevation, 4,208.41 ft or 1,282.723 m); minimum after initial filling, 82,840 acre-ft (102 hm<sup>3</sup>) Sept. 12, 13, 1964 (elevation, 4,156.05 ft or 1,266.764 m); minimum elevation, 4,155.80 ft (1,266.688 m) Sept. 24, 1954.

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 (407 hm<sup>3</sup>) between elevations 4,060.0 ft (1,237.49 m) and 4,201.0 (1,280.46 m), crest of 300-ft (91.4-m) ungated service spillway. Inactive storage, 70,490 acre-ft (86.9 hm<sup>3</sup>) at elevation 4,155.0 ft (1,266.44 m). Lake usually not drawn below elevation, 4,157.35 ft (1,267.160 m), sill of irrigation outlet (capacity, 77,790 acre-ft or 95.9 hm<sup>3</sup>) except for minor sluicing and operation of small powerplant; during 1954-55, 1964 there was some pumping into Conchas Canal. Capacity of 198,800 acre-ft (245 hm<sup>3</sup>) between elevations 4,201.0 ft (1,280.46 m), crest of 300-ft (91.4-m) ungated service spillway, and 4,218.0 ft (1,285.65 m), crest of 3,000-ft (914-m) 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. Diversion above station for irrigation of about 57,000 acres (231 km<sup>2</sup>). Direct diversions through Conchas Dam to Bell Ranch Canal and Conchas Canal (see sta 07223000, 07223300) irrigate about 36,000 acres (146 km<sup>2</sup>) near Tucumcari, and on Bell Ranch.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)  
(Based on survey by Corps of Engineers in 1970)

4,160	86,520
4,170	125,100
4,180	173,900

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134300	130700	129700	129400	130400	132000	132400	130600	114100	107400	107500	96420
2	133900	130600	129700	129300	130500	132000	132300	130100	114100	107100	107300	95840
3	133400	130600	129700	129300	130500	132100	132300	129600	114000	106700	107100	95290
4	132900	130600	129700	129300	130600	132200	132200	128900	113800	106400	106900	94790
5	132500	130600	129700	129300	130600	132300	132200	128200	113600	106100	106500	94280
6	132100	130600	129700	129300	130700	132300	132200	127300	113500	106000	106100	93850
7	131600	130600	129600	129300	130800	132300	132100	126400	113300	105800	105600	93420
8	131200	130600	129600	129300	130800	132500	132000	125500	113000	105800	105300	92990
9	130800	130600	129500	129300	130900	132600	131800	124700	113000	105700	104800	92670
10	130600	130500	129500	129300	130900	132600	131900	123900	113000	105700	104300	92280
11	130400	130500	129500	129400	130900	132700	131900	123300	112800	105600	103800	92030
12	130600	130500	129400	129400	131000	132700	132200	122500	112700	105500	103300	92880
13	130600	130500	129400	129400	131100	132800	132200	121900	112800	105300	103000	93100
14	130600	130400	129400	129400	131100	132900	132200	121200	112700	105700	102500	93280
15	130600	130400	129400	129400	131200	132900	132200	120500	112600	105900	102900	93420
16	130700	130400	129300	129400	131200	133000	132200	119900	112300	105900	105000	93530
17	130700	130400	129300	129500	131300	133000	132200	119300	112100	105800	105000	93530
18	130800	130300	129300	129500	131400	133000	132000	118700	111700	106000	104500	93460
19	130800	130200	129300	129600	131500	133000	132000	118100	111300	106300	103900	93310
20	130800	130100	129300	129600	131500	133000	132000	117600	111100	106200	103400	93210
21	130700	130100	129300	129700	131500	133000	132100	117100	110700	106100	102800	93210
22	130700	130100	129200	129700	131600	133000	132300	116600	110400	106500	102300	93060
23	130800	130100	129100	129700	131700	132900	132300	116100	110100	107100	101700	92960
24	130800	130000	129000	129800	131800	132800	132400	115800	109800	107500	101200	92810
25	130700	130000	129100	129900	131800	132700	132300	115400	109600	107700	100600	92640
26	130700	129900	129100	129900	131900	132600	132300	115000	109200	107800	99940	92390
27	130800	129800	129100	129900	131900	132600	132200	114700	108800	108000	99340	92250
28	130800	129800	129100	130000	132000	132500	131800	114500	108400	108100	98780	92000
29	130800	129800	129100	130100	---	132500	131400	114500	108100	108100	98150	91610
30	130700	129700	129300	130100	---	132500	131000	114300	107700	107900	97600	91190
31	130700	---	129300	130200	---	132500	---	114200	---	107600	97050	---
MAX	134300	130700	129700	130200	132000	133000	132400	130600	114100	108100	107500	96420
MIN	130400	129700	129000	129300	130400	132000	131000	114200	107700	105300	97050	91190
(†)	4171.28	4171.06	4170.96	4171.17	4171.56	4171.67	4171.35	4167.41	4165.78	4165.75	4162.98	4161.35
(‡)	-4000	-1000	-400	+900	+1800	+500	-1500	-16800	-65000	-100	-10550	-5860
CAL YR 1974	MAX	256500	MIN	129000	†	-124600						
WTR YR 1975	MAX	134300	MIN	91190	†	-43510						

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

07226500 UTE CREEK NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°26'18", long 103°31'31", in NW¼SE¼ sec.15, T.14 N., R.32 E., Harding County, on right bank 1.9 mi (3.1 km) downstream from Alamosa Creek, 4.5 mi (7.2 km) upstream from State Road 155, 4.7 mi (7.6 km) upstream from high-water line of Ute Reservoir, 8.2 mi (13.2 km) northwest of Logan, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--2,060 mi<sup>2</sup> (5,335 km<sup>2</sup>), of which 617 mi<sup>2</sup> (1,598 km<sup>2</sup>) is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,815 ft (1,163 m) from topographic map. Prior to May 24, 1914, at site 4.2 mi (6.8 km) downstream at different datum. Jan. 13, 1942 to Dec. 15, 1955, at site 4.8 mi (7.7 km) downstream at datum of 3,758.50 ft (1,145.591 m) above mean sea level. Dec. 16, 1955 to Sept. 30, 1964, at site 4.8 mi (7.7 km) downstream at datum of 3,757.50 ft (1,145.286 m) above mean sea level.

AVERAGE DISCHARGE.--33 years, 25.3 ft<sup>3</sup>/s (0.716 m<sup>3</sup>/s), (18,330 acre-ft/yr (22.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,680 ft<sup>3</sup>/s (161 m<sup>3</sup>/s) June 27 (gage height, 5.27 ft or 1.606 m), from rating curve extended above 2,800 ft<sup>3</sup>/s (79.3 m<sup>3</sup>/s); no flow most of time.

1942-75: Maximum discharge, 24,500 ft<sup>3</sup>/s (694 m<sup>3</sup>/s) May 28, 1946, July 12, 1951 (gage height, 8.4 ft or 2.56 m, site and datum then in use), from rating curve extended above 7,700 ft<sup>3</sup>/s (218 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.2 ft (1.58 m) and 7.2 ft (2.19 m); maximum gage height, 8.76 ft (2.670 m) July 17, 1972; no flow most of time.

Flood of May 1, 1914, reached a stage of 22.95 ft (6.995 m) site and datum then in use. Another major flood reached a stage of 16.0 ft (4.88 m), 1942 datum, sometime in 1941, from information furnished by Bureau of Reclamation (discharge, about 70,000 ft<sup>3</sup>/s or 1,980 m<sup>3</sup>/s).

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.5						0	0	0	0	0
2	0	.60						0	0	0	2.0	0
3	0	.27						0	0	0	2.2	0
4	0	.05						0	0	0	.40	0
5	0	.01						0	0	0	.20	0
6	0	0						0	0	0	.10	0
7	0	0						0	0	0	0	0
8	0	0						0	0	0	0	0
9	0	0						0	.06	10	0	0
10	1.8	0						0	.14	247	0	0
11	.16	0						.41	.09	85	0	0
12	6.9	0						0	0	13	0	12
13	2.6	0						0	0	.04	300	.86
14	.17	0						0	0	0	250	0
15	0	0						0	0	0	50	0
16	0	0						0	0	0	10	0
17	0	0						0	0	0	4.6	0
18	0	0						0	0	0	2.6	0
19	0	0						0	0	0	2.0	0
20	0	0						0	0	0	1.0	0
21	0	0						0	0	420	.40	3.1
22	0	0						0	0	100	.20	7.4
23	4.1	0						0	0	10	0	.09
24	.60	0						0	0	2.3	0	0
25	0	0						0	0	2.0	0	0
26	0	0						0	0	0	0	0
27	4.4	0						.02	146	0	0	0
28	8.3	0						.06	373	0	64	0
29	3.6	0						0	13	0	0	0
30	6.4	0						0	.18	0	0	0
31	4.4	---					---	0	---	0	0	---
TOTAL	43.43	2.43	0	0	0	0	0	.49	532.47	889.34	689.70	23.45
MEAN	1.40	.081	0	0	0	0	0	.016	17.7	28.7	22.2	.78
MAX	8.3	1.5	0	0	0	0	0	.41	373	420	300	12
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	86	4.8	0	0	0	0	0	1.0	1060	1760	1370	47

CAL YR 1974 TOTAL 76.47 MEAN .21 MAX 16 MIN 0 AC-FT 152  
WTR YR 1975 TOTAL 2181.31 MEAN 5.98 MAX 420 MIN 0 AC-FT 4330

PEAK DISCHARGE (BASE, 3,700 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE
6-27	2400	5.27	5,680

## 07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ sec.21, T.13 N., R.33 E., Quay County, on face of Ute Dam on Canadian River, 2.5 mi (4.0 km) southwest of Logan, 3.5 mi (5.6 km) downstream from Ute Creek, and at mile 673.1 (1,083.0 km).

DRAINAGE AREA.--11,140 mi<sup>2</sup> (28,853 km<sup>2</sup>), of which 1,110 mi<sup>2</sup> (2,875 km<sup>2</sup>) is probably noncontributing.

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

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

EXTREMES.--Current year: Maximum contents observed, 94,140 acre-ft (116 hm<sup>3</sup>) Aug. 18 (elevation, 3,756.08 ft or 1,144.853 m); minimum, 84,710 acre-ft (104 hm<sup>3</sup>) June 27 (elevation, 3,753.48 ft or 1,144.061 m).

Period of record: Maximum contents observed, 119,900 acre-ft (148 hm<sup>3</sup>) June 17, 1969 (elevation, 3,762.4 ft or 1,146.78 m); minimum observed, 22,230 acre-ft (27.4 hm<sup>3</sup>) Aug. 7, 1964 (elevation, 3,726.2 ft or 1,135.75 m).

REMARKS.--Reservoir is formed by earthfill dam 121 ft (37 m) high above streambed, 2,050 ft (620 m) long; an earth-dike section on north (left) bank of Canadian River is 2,860 ft (870 m) long and has a maximum height of 27 ft (8 m); a concrete spillway section 840 ft (260 m) long is constructed between main embankment and the dike. Construction completed in May 1963; storage began Dec. 13, 1962. Capacity, 109,600 acre-ft (135 hm<sup>3</sup>) at elevation 3,760.0 ft (1,146.05 m), crest of 840-ft (260-m) ungated service spillway. Top of dam is at elevation 3,801.0 ft (1,158.54 m). Maximum design capacity of 307,000 acre-ft (379 hm<sup>3</sup>) at elevation 3,791.0 ft (1,155.50 m), 31.0 ft (9.4 m) above crest of spillway, allows 197,400 acre-ft (243 hm<sup>3</sup>) of capacity for protection of the structure. Dead storage, 20,710 acre-ft (25.5 hm<sup>3</sup>) at elevation 3,725.0 ft (1,135.38 m), sill of outlet gate; inactive pool of 49,870 acre-ft (61.5 hm<sup>3</sup>) below elevation 3,741.6 ft (1,140.44 m) is maintained for fish and wildlife. Figures given herein represent total contents. Reservoir is planned to furnish water for municipal and industrial uses and for recreational purposes; some incidental flood control. Diversions above station for irrigation of about 90,000 acres (364 km<sup>2</sup>). Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by New Mexico Interstate Stream Commission prior to Feb. 25, 1974.

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

3,752	79,640	3,756	93,840
3,754	86,550	3,758	101,500

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87690	90880	89560	89270	89240	89340	88690	87370	86370	88950	93240	92720
2	87620	90840	89560	89310	89240	89340	88690	87370	86400	88840	93280	92610
3	87580	90840	89560	89310	89240	89310	88690	87290	86440	88770	93320	92560
4	87440	90840	89560	89310	89240	89310	88660	87260	86330	88690	93320	92420
5	87370	90840	89560	89310	89240	89310	88620	87150	86300	88590	93320	92310
6	87260	90840	89490	89310	89240	89270	88620	86970	86260	88550	93200	92280
7	87370	90840	89450	89310	89200	89200	88620	86940	86120	88510	93090	92240
8	87440	90660	89450	89310	89200	89160	88620	86870	86010	88410	92980	92090
9	87440	90580	89450	89310	89240	89160	88620	86830	86010	89850	92870	91980
10	87900	90580	89420	89270	89240	89160	88620	86830	85980	91130	92720	91910
11	88120	90510	89380	89240	89200	89160	88620	87010	85980	91460	92610	91790
12	89090	90470	89380	89240	89160	89160	88580	87150	85980	91570	92460	91980
13	89780	90400	89380	89240	89130	89160	88580	87120	85940	91650	92350	92240
14	89780	90400	89340	89240	89130	89160	88510	87080	85870	91540	92310	92500
15	89780	90360	89310	89270	89130	89130	88480	87010	85770	91460	92310	92500
16	89780	90330	89310	89310	89130	89130	88370	86970	85730	91350	93200	92460
17	89780	90330	89270	89310	89160	89130	88260	86900	85630	91170	94060	92460
18	89780	90250	89240	89310	89160	89130	88190	86790	85520	91100	94100	92280
19	89780	90140	89200	89310	89240	89130	88050	86720	85420	91060	93990	92200
20	89780	90140	89200	89240	89240	89130	88010	86690	85310	91060	93840	92240
21	89780	90110	89160	89240	89240	89090	88010	86620	85240	91350	93730	92280
22	89780	90070	89130	89240	89270	89050	87970	86550	85170	92790	93690	92350
23	90000	89960	89090	89240	89270	89080	87940	86440	85130	93200	93580	92390
24	90000	89930	89090	89240	89310	88910	87900	86330	85130	93470	93430	92350
25	90000	89850	89050	89240	89310	88870	87830	86260	85060	93500	93320	92350
26	90000	89780	89050	89200	89310	88770	87760	86190	84990	93540	93200	92280
27	90620	89740	89090	89160	89340	88770	87620	86160	85310	93540	93090	92200
28	90800	89560	89090	89160	89340	88730	87640	86330	85130	93470	93090	92160
29	90880	89560	89090	89160	---	88730	87440	86330	85050	93390	93060	92090
30	90990	89560	89200	89240	---	88690	87400	86370	85020	93280	93020	91980
31	90950	---	89200	89240	---	88690	---	86330	---	93170	92910	---
MAX	90990	90880	89560	89310	89340	89340	88690	87370	89130	93540	94100	92720
MIN	87260	89560	89050	89160	89130	88690	87400	86160	84990	88410	92310	91790
(†)	3755.22	3754.84	3754.74	3754.75	3754.78	3754.60	3754.24	3753.94	3754.69	3755.82	3755.75	3755.50
(‡)	+3260	-1390	-360	+40	+100	-650	-1290	-1070	+2690	+4150	-260	-930

CAL YR 1974 MAX 94970 MIN 84640 † -4,640

WTR YR 1975 MAX 94100 MIN 84990 † +4,290

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.



## 07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.

LOCATION.—Lat 35°20'28", long 103°23'40", in SW¼NW¼ sec.24, T.13 N., R.33 E., Quay County, on right bank 0.3 mi (0.5 km) upstream from bridge on State Highway 39, 1.9 mi (3.1 km) southeast of Logan, and at mile 2.3 (3.7 km).

DRAINAGE AREA.—786 mi<sup>2</sup> (2,036 km<sup>2</sup>).

PERIOD OF RECORD.—August 1959 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 3,665 ft (1,117 m) from topographic map.

AVERAGE DISCHARGE.—16 years, 51.4 ft<sup>3</sup>/s (1.456 m<sup>3</sup>/s), 37,240 acre-ft/yr (45.9 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 5,280 ft<sup>3</sup>/s (150 m<sup>3</sup>/s) June 28 (gage height, 7.02 ft or 2.140 m); no flow at times.  
Period of record: Maximum discharge, 26,700 ft<sup>3</sup>/s (756 m<sup>3</sup>/s) July 9, 1960 (gage height, 14.3 ft or 4.36 m); no flow at times.  
1941-47: Maximum discharge determined, about 13,400 ft<sup>3</sup>/s (379 m<sup>3</sup>/s) Sept. 18, 1946 (gage height, 9.04 ft or 2.755 m), at site 500 ft (150 m) downstream at different datum, from unpublished records collected by Bureau of Reclamation.  
A peak of 26,100 ft<sup>3</sup>/s (739 m<sup>3</sup>/s) date unknown (gage height, 12.9 ft or 3.93 m), was measured by slope-area method in May 1957.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	40	5.0	5.0	3.3	25	1.8	0	6.0	1.0	142	0
2	11	26	7.1	5.5	7.1	17	.89	0	.89	.23	816	0
3	10	20	8.2	6.5	6.0	10	1.2	0	.46	0	750	0
4	17	31	7.6	7.6	8.2	7.6	.60	4.3	0	0	44	0
5	20	22	6.0	7.0	8.9	4.5	.11	3.3	0	0	8.9	0
6	28	18	4.5	8.0	6.0	1.8	0	.40	0	0	4.5	0
7	40	18	3.7	8.0	5.0	.20	.15	0	0	0	3.3	0
8	47	14	3.3	7.6	6.0	0	0	0	0	0	2.6	0
9	191	11	3.0	7.0	3.7	4.1	0	1.6	0	0	2.3	0
10	452	9.5	4.1	6.2	3.0	5.0	.79	2.1	9.6	176	1.8	0
11	1460	8.9	5.5	5.4	2.6	3.0	40	15	20	157	.80	0
12	1120	7.6	4.5	6.4	1.8	1.4	22	24	6.5	260	.25	1.1
13	603	7.1	3.7	7.2	1.4	.40	54	13	.70	89	0	5.5
14	126	5.5	4.1	8.0	1.2	3.0	21	10	0	25	2.6	19
15	52	5.5	3.0	7.8	1.2	2.6	7.6	10	0	2.6	3.0	10
16	34	6.5	3.3	7.0	2.1	2.2	3.3	6.5	0	.14	4.1	6.5
17	26	6.5	4.5	7.0	7.1	2.0	.74	5.0	0	0	2.3	3.7
18	21	5.0	5.5	7.4	8.9	1.6	0	4.1	0	0	1.2	1.0
19	18	4.1	5.0	6.6	6.5	1.2	0	3.3	0	0	.43	.60
20	15	3.3	3.3	4.3	6.0	.74	0	3.7	6.6	0	0	1.6
21	11	3.3	3.3	3.3	2.6	.60	0	2.6	15	225	0	44
22	13	3.0	4.1	2.6	5.0	.27	0	1.4	.21	1430	0	44
23	199	3.0	2.6	3.7	6.5	0	0	.74	18	552	0	10
24	143	3.3	2.1	5.0	10	.03	0	.46	12	168	0	2.3
25	60	3.7	2.3	5.0	85	.12	0	.19	.68	46	0	.89
26	42	3.0	3.0	3.0	72	.01	0	0	0	17	0	.46
27	66	3.3	8.2	2.1	44	0	0	3.9	1.6	8.9	.04	.12
28	211	3.3	8.9	1.4	40	.46	0	20	1190	5.5	0	0
29	128	3.3	8.9	1.6	---	.74	0	6.5	34	2.1	0	0
30	60	4.1	8.2	5.0	---	1.2	0	6.5	7.1	.74	0	0
31	58	---	9.5	7.6	---	2.1	---	5.0	---	.12	0	---
TOTAL	5295	302.8	156.0	175.8	361.1	98.87	154.18	153.59	1329.34	3166.33	1790.12	150.77
MEAN	171	10.1	5.03	5.67	12.9	3.19	5.14	4.95	44.3	102	57.7	5.03
MAX	1460	40	9.5	8.0	85	25	54	24	1190	1430	816	44
MIN	10	3.0	2.1	1.4	1.2	0	0	0	0	0	0	0
AC-FT	10500	601	309	349	716	196	306	305	2640	6280	3550	299
CAL YR 1974 TOTAL	11830.72			MEAN 32.4	MAX 1460	MIN 0	AC-FT 23470					
WTR YR 1975 TOTAL	13133.90			MEAN 36.0	MAX 1460	MIN 0	AC-FT 26050					

PEAK DISCHARGE (BASE, 3,500 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-28	0130	7.02	5,280	8-1	2400	5.78	3,660
7-22	1200	5.98	3,900				

## WESTERN GULF OF MEXICO BASINS

## RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, COLO.

LOCATION.--Lat 37°04'42", long 105°45'22", in sec.22, T.33 N., R.11 E., Conejos County, on right bank at highway bridge, 6 mi (10 km) north of Colorado-New Mexico State Line, 7 mi (11 km) downstream from Culebra Creek, 10 mi (16 km) east of Lobatos, 14 mi (23 km) east of Antonito, and at mile 1,722.1 (2,770.9 km).

DRAINAGE AREA.--7,700 mi<sup>2</sup> (19,900 km<sup>2</sup>) approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in northern part of San Luis Valley, Colo.

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-04.

GAGE.--Water-stage recorder. Datum of gage is 7,427.63 ft (2,263.942 m) above mean sea level. Prior to Nov. 8, 1910, nonrecording gages at same site and datum.

AVERAGE DISCHARGE.--76 years, 589 ft<sup>3</sup>/s (16.68 m<sup>3</sup>/s), 426,700 acre-ft/yr (526 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,490 ft<sup>3</sup>/s (70.5 m<sup>3</sup>/s) June 18 (gage height, 4.17 ft or 1.271 m); minimum daily, 15 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) Oct. 1.

Period of record: Maximum discharge observed, 13,200 ft<sup>3</sup>/s (374 m<sup>3</sup>/s) June 8, 1905 (gage height, 9.1 ft or 2.77 m), from rating curve extended above 8,000 ft<sup>3</sup>/s (230 m<sup>3</sup>/s); no flow at times in 1950-51, 1956.

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	54	170	145	220	280	370	320	1290	1350	685	390
2	16	69	150	150	225	300	365	286	1370	1430	538	370
3	16	92	150	150	240	315	360	335	1440	1540	496	375
4	16	90	170	150	245	300	345	478	1560	1620	514	375
5	17	82	195	155	245	315	360	568	1610	1530	520	395
6	23	80	210	155	235	375	380	608	1740	1350	502	420
7	29	80	210	160	235	380	430	425	1900	1380	472	430
8	32	92	160	165	235	390	484	445	1910	1340	440	420
9	34	90	170	170	235	455	514	430	1470	1260	440	425
10	53	90	160	170	235	440	484	460	1200	1340	435	410
11	60	95	170	175	235	490	466	538	1650	1540	472	420
12	62	90	175	175	240	450	435	699	2080	1620	490	410
13	67	90	170	175	245	435	415	925	2220	1680	520	450
14	73	90	170	170	250	430	405	1240	2140	1670	562	502
15	67	90	170	170	250	395	395	1550	2260	1610	587	556
16	67	82	170	170	255	390	390	1840	2380	1530	538	562
17	69	85	160	175	255	385	405	1970	2390	1300	508	538
18	65	90	160	175	250	380	445	2140	2400	1250	466	484
19	58	95	165	175	260	380	484	2150	2140	1230	450	435
20	55	85	160	175	260	390	472	2000	1750	979	435	415
21	51	110	165	175	255	420	430	1920	1530	840	410	380
22	51	125	165	175	220	450	450	1820	1430	961	395	365
23	50	120	160	175	210	472	478	1820	1370	1040	405	360
24	50	142	155	180	255	440	514	1610	1640	840	430	350
25	50	160	155	185	265	420	526	1240	1750	705	440	330
26	51	190	140	185	260	410	615	1220	1740	760	484	315
27	51	165	140	175	260	430	808	1580	1670	768	496	302
28	53	140	145	170	270	450	664	1860	1550	636	472	294
29	58	100	140	165	---	390	508	1930	1210	574	445	294
30	60	110	140	180	---	380	390	1780	1180	622	430	286
31	60	---	140	210	---	370	---	1530	---	643	420	---
TOTAL	1480	3101	5088	5280	6845	12307	13787	37717	51970	36938	14897	12058
MEAN	47.7	103	164	170	244	397	460	1217	1732	1192	481	402
MAX	73	190	210	210	270	490	808	2150	2400	1680	685	562
MIN	15	50	140	145	210	280	345	286	1180	574	395	286
AC-FT	2940	6150	10000	10470	13580	24410	27350	74810	103100	73270	29550	23920

CAL YR 1974 TOTAL 61262 MEAN 168 MAX 760 MIN 12 AC-FT 121500  
WTR YR 1975 TOTAL 201460 MEAN 552 MAX 2400 MIN 15 AC-FT 399600



LOCATION.--Lat 37°00'03", long 105°43'19", Castilla County, in Sangre de Cristo Grant, on left bank 0.6 mi (1.0 km) upstream from Colorado-New Mexico State line, 1.7 mi (2.7 km) upstream from Costilla Creek, 5.5 mi (8.8 km) west of Jaroso, and at mile 1,713.3 (2,756.7 km).

AVERAGE DISCHARGE,---22 years, 330 ft<sup>3</sup>/s (9,346 m<sup>3</sup>/s), 239,100 acre-ft/yr (295 hm<sup>3</sup>/yr).

Period of record: Maximum discharge, 4,150 ft<sup>3</sup>/s (118 m<sup>3</sup>/s) May 29, 1958 (gage height, 7.07 ft or 2.155 m); no flow at times in 1956.

Flood of June 8, 1905 (daily discharge, 13,100 ft<sup>3</sup>/s or 371 m<sup>3</sup>/s at station near Lobatos 5.8 mi or 9.3 km upstream), was probably the greatest since at least 1828.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1732: 1954(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	14	55	150	145	215	275	391	330	1240	1250	707	440
2	15	64	165	145	220	295	391	289	1270	1350	679	441
3	16	90	160	150	235	310	385	317	1360	1400	501	375
4	16	95	165	150	245	310	375	445	1460	1530	612	390
5	16	88	190	155	245	315	385	523	1520	1440	623	394
6	18	86	205	155	240	370	398	587	1640	1740	512	418
7	25	84	210	160	235	390	442	414	1830	1280	444	431
8	31	97	180	160	235	405	498	421	1880	1280	448	470
9	33	108	165	170	235	470	527	418	1530	1190	445	435
10	41	106	165	170	235	456	512	431	1220	1240	445	410
11	59	103	165	175	235	494	487	512	1590	1440	462	425
12	61	99	170	175	240	484	456	607	2090	1540	487	410
13	63	97	175	175	240	448	442	840	2260	1610	508	431
14	68	97	170	175	245	452	428	1090	2190	1610	539	480
15	66	92	170	170	250	411	411	1390	2270	1550	571	519
16	64	88	170	170	250	401	391	1670	2400	1450	531	535
17	66	88	165	175	255	401	394	1840	2390	1240	504	523
18	64	92	160	175	255	398	445	1970	2440	1140	470	477
19	59	95	160	175	255	398	484	2000	2240	1170	456	435
20	55	86	165	175	260	401	490	1900	1830	930	442	411
21	54	90	160	175	260	418	445	1790	1580	790	418	385
22	54	118	165	175	230	442	448	1730	1470	880	404	368
23	54	120	165	175	215	484	487	1700	1360	974	404	362
24	52	128	160	180	240	452	512	1530	1620	835	431	350
25	52	157	155	180	260	414	512	1220	1730	694	438	360
26	50	175	145	185	265	421	595	1120	1740	720	476	330
27	52	170	140	180	260	445	752	1410	1650	775	487	310
28	54	160	140	175	265	414	671	1710	1560	653	470	302
29	54	108	145	170	---	408	539	1820	1210	563	445	302
30	50	105	140	175	---	408	404	1680	1110	611	431	290
31	55	---	140	205	---	385	---	1470	---	635	421	---
TOTAL	1440	3141	5080	5275	6820	12575	14097	35174	51667	35078	14951	12066
MEAN	46.5	105	164	170	244	466	470	1135	1722	1132	482	402
MAX	68	175	210	205	265	494	752	2000	2440	1610	707	535
MIN	14	55	140	145	215	275	375	289	1110	563	404	298
AC-FT	2860	6230	10080	10460	13530	24940	27960	69770	102500	69580	29660	

## 08252500 COSTILLA CREEK ABOVE COSTILLA DAM, N. MEX.

LOCATION.--Lat 36°53'52", long 105°15'16", Taos County, in Sangre de Cristo Grant, on left bank 1,900 ft (580 m) upstream from normal high-water line of Costilla Reservoir, 2.1 mi (3.4 km) northeast of Costilla Dam, 16 mi (26 km) southeast of Costilla, and at mile 36.9 (59.4 km).

DRAINAGE AREA.--25.1 mi<sup>2</sup> (65.0 km<sup>2</sup>).

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Prior to October 1951, published as "above reservoir, near Costilla."

GAGE.--Water-stage recorder. Concrete control since Sept. 17, 1965. Altitude of gage is 9,429 ft (2,874 m) from topographic map. See WSP 1923 for history of changes prior to Sept. 17, 1965.

EXTREMES.--Current year: Maximum discharge, 46 ft<sup>3</sup>/s (1.30 m<sup>3</sup>/s) July 9 (gage height, 2.63 ft or 0.802 m); minimum not determined. Period of record: Maximum discharge, 3,870 ft<sup>3</sup>/s (110 m<sup>3</sup>/s) July 22, 1954 (gage height, 6.3 ft or 1.92 m, from floodmarks, present site and datum), on basis of slope-area measurement of peak flow; minimum not determined. The flood in 1954 destroyed the gaging station and is highest known since about 1909, from information by local range rider. A portion of this flow may have originated in Casias Creek basin (see REMARKS).

REMARKS.--Records good. Natural flow may be augmented by transbasin diversions or irrigation returns from about 1,300 acres (5.26 km<sup>2</sup>) irrigated from Casias Creek (see sta 08253000).

REVISIONS (WATER YEARS).--WSP 878: 1937. WSP 1923: 1937-50, drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4							---	17	4.1	5.6	2.1
2	1.4							---	19	7.9	5.4	2.2
3	1.6							---	22	7.9	5.1	3.4
4	2.0							---	24	9.3	4.9	5.1
5	1.7							---	23	4.4	4.7	5.4
6	1.8							---	23	7.4	4.1	3.2
7	2.0							---	23	6.5	3.8	2.9
8	---							---	21	8.1	4.2	3.8
9	---							---	22	16	7.0	4.0
10	---							---	28	15	5.8	2.6
11	---							---	23	11	4.9	3.8
12	---							---	19	10	5.4	5.2
13	---							---	16	9.3	6.7	4.0
14	---							20	16	9.6	5.4	3.4
15	---							25	16	7.9	4.1	3.5
16	---							26	17	4.1	4.0	2.9
17	---							27	18	8.7	3.8	2.4
18	---							26	16	8.4	3.4	2.3
19	---							26	16	7.9	3.4	2.2
20	---							26	15	17	4.1	2.2
21	---							28	14	16	5.6	2.6
22	---							27	13	12	4.1	2.6
23	---							23	12	10	3.5	2.4
24	---							20	11	9.6	3.1	2.4
25	---							20	10	8.7	2.5	2.4
26	---							23	9.9	7.4	2.8	2.4
27	---							24	9.3	6.7	2.8	2.3
28	---							24	8.7	6.3	2.9	2.3
29	---							21	8.1	7.0	2.4	2.3
30	---							17	8.4	5.7	2.3	2.3
31	---							16	---	5.6	2.2	---
TOTAL	-	-	-	-	-	-	-	-	498.4	288.5	139.0	91.0
MFAN	-	-	-	-	-	-	-	-	16.6	9.31	4.19	3.03
MAX	-	-	-	-	-	-	-	-	28	17	7.0	5.4
MIN	-	-	-	-	-	-	-	-	4.1	5.6	2.2	2.1
AC-FT	-	-	-	-	-	-	-	-	989	572	258	180

PEAK DISCHARGE (BASE, 40 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 9	2100	2.63	46	7-20	1700	2.57	40

## 08253000 CASIAS CREEK NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°53'48", long 105°15'35", Taos County, in Sangre de Cristo Grant, on left bank 200 ft (61 m) downstream from road crossing, 900 ft (270 m) upstream from normal high-water line of Costilla Reservoir, 1.8 mi (2.9 km) northeast of Costilla Dam, and 16 mi (26 km) southeast of Costilla.

DRAINAGE AREA.--16.6 mi<sup>2</sup> (43.0 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,404 ft (2,866 m) from topographic map. Prior to July 18, 1940, water-stage recorder and wooden control 100 ft (30 m) downstream at datum 1.56 ft (0.475 m) lower.

EXTREMES.--Current year: Maximum discharge, 50 ft<sup>3</sup>/s (1.42 m<sup>3</sup>/s) July 9 (gage height, 1.22 ft or 0.372 m); minimum not determined. Period of record: Maximum discharge, 181 ft<sup>3</sup>/s (5.13 m<sup>3</sup>/s) July 20, 1971 (gage height, 2.07 ft or 0.631 m), from rating curve extended above 85 ft<sup>3</sup>/s (2.41 m<sup>3</sup>/s); minimum not determined.

REMARKS.--Records good. Diversion 3.5 mi (5.6 km) upstream for irrigation of about 1,300 acres (5.26 km<sup>2</sup>), part of which is in Costilla Creek basin.

REVISIONS (WATER YEARS).--WSP 1282: 1948-51. WSP 1923: Drainage area. See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7							---	18	26	8.0	4.5
2	3.4							---	19	25	7.7	4.5
3	3.4							---	22	23	6.1	5.4
4	4.0							---	25	22	6.1	6.9
5	3.7							---	26	20	5.8	7.3
6	3.7							---	30	20	5.4	5.8
7	3.7							8.8	32	19	5.4	5.8
8	---							8.8	32	20	5.8	6.1
9	---							8.4	32	28	7.3	6.1
10	---							9.4	37	27	6.9	5.4
11	---							11	30	25	6.1	6.1
12	---							13	26	23	6.1	7.3
13	---							12	26	21	7.3	6.1
14	---							11	26	19	6.1	5.8
15	---							13	26	10	5.0	5.8
16	---							15	29	9.8	4.7	5.4
17	---							16	32	9.8	4.5	4.7
18	---							17	34	10	4.5	4.5
19	---							17	35	9.3	4.5	4.2
20	---							17	34	9.3	5.8	4.5
21	---							18	32	10	6.5	4.5
22	---							19	31	14	5.0	4.5
23	---							20	29	13	4.5	4.5
24	---							17	28	13	4.7	4.5
25	---							17	29	12	6.5	4.2
26	---							18	28	12	6.5	4.2
27	---							20	27	11	6.5	4.2
28	---							21	26	11	6.5	4.2
29	---							20	26	11	5.8	4.2
30	---							18	26	10	5.8	4.2
31	---							18	---	8.4	5.0	---
TOTAL	-	-	-	-	-	-	-	-	853	501.6	182.4	155.4
MEAN	-	-	-	-	-	-	-	-	28.4	16.2	5.88	5.18
MAX	-	-	-	-	-	-	-	-	37	28	8.0	7.3
MIN	-	-	-	-	-	-	-	-	18	8.4	4.5	4.2
AC-FT	-	-	-	-	-	-	-	-	1690	995	362	308

PEAK DISCHARGE (BASE, 35 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-10	1500	1.13	40	7-9	2100	1.22	50
6-19	0500	1.09	36				

## 08253500 SANTISTEVAN CREEK NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°53'03", long 105°16'50", Taos County, in Sangre de Cristo Grant, on left bank 200 ft (61 m) upstream from road crossing, 1,300 ft (400 m) upstream from normal high-water line of Costilla Reservoir, 0.6 mi (1.0 km) north of Costilla Dam, and 16 mi (26 km) southeast of Costilla.

DRAINAGE AREA.--2.15 mi<sup>2</sup> (5.57 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,487 ft (2,892 m) from topographic map. Prior to June 27, 1940, water-stage recorder and wooden control at datum 0.99 ft (0.302 m) lower.

EXTREMES.--Current year: Maximum discharge 8.8 ft<sup>3</sup>/s (0.25 m<sup>3</sup>/s) July 8 (gage height, 1.00 ft or 0.305 m); minimum not determined. Period of record: Maximum discharge, 18 ft<sup>3</sup>/s (0.510 m<sup>3</sup>/s) Aug. 11, 1941, July 12, 1957; maximum gage height 1.73 ft (0.527 m) Aug. 11, 1941; minimum not determined.

REMARKS.--Records fair. No diversions above or below station.

REVISIONS.--WSP 1923: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61							---	3.7	5.2	2.5	1.2
2	.61							---	4.0	5.2	2.4	1.2
3	.61							---	4.1	5.0	2.3	1.3
4	.61							---	4.3	4.9	2.2	1.7
5	.61							---	4.5	4.8	2.2	1.5
6	.61							---	4.7	4.7	2.1	1.3
7	.61							1.2	4.9	4.5	1.9	1.3
8	---							1.3	5.1	5.1	2.0	1.3
9	---							1.4	5.3	4.8	2.1	1.3
10	---							1.6	5.9	4.4	1.9	1.2
11	---							1.3	6.0	4.3	1.9	1.4
12	---							1.9	5.8	4.2	1.9	1.5
13	---							2.0	5.9	4.0	2.2	1.3
14	---							2.1	6.0	3.8	1.9	1.4
15	---							2.3	6.0	3.7	1.8	1.2
16	---							2.6	6.1	3.6	1.8	1.2
17	---							2.8	6.1	3.5	1.7	1.2
18	---							2.9	6.0	3.4	1.7	1.2
19	---							3.0	6.1	3.4	1.6	1.1
20	---							3.2	6.2	3.5	1.7	1.1
21	---							3.1	6.3	3.4	1.9	1.2
22	---							3.2	6.1	3.3	1.6	1.2
23	---							3.1	6.1	3.2	1.6	1.1
24	---							3.1	6.0	3.2	1.5	1.1
25	---							3.2	5.9	3.1	1.5	1.0
26	---							3.4	5.8	3.0	1.4	.99
27	---							3.5	5.7	2.9	1.4	.93
28	---							3.7	5.6	2.8	1.4	.93
29	---							3.7	5.4	2.7	1.3	.93
30	---							3.7	5.3	2.6	1.2	.88
31	---							3.6	---	2.6	1.2	---
TOTAL	-	-	-	-	-	-	-	-	164.9	118.8	55.8	36.16
MEAN	-	-	-	-	-	-	-	-	5.50	3.83	1.80	1.21
MAX	-	-	-	-	-	-	-	-	6.3	5.2	2.5	1.7
MIN	-	-	-	-	-	-	-	-	3.7	2.6	1.2	.88
AC-FT	-	-	-	-	-	-	-	-	327	236	111	72

PEAK DISCHARGE (BASE, 6.0 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-11	1500	0.80	6.4	6-20	1400	0.87	7.3
6-16	1830	.79	6.3	7- 8	1630	1.00	8.8

## 08253900 COSTILLA RESERVOIR NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°52'32", long 105°16'45", Taos County, in Sangre de Cristo Grant, on face of Costilla Dam on Costilla Creek, 16 mi (26 km) southeast of Costilla, and at mile 34.8 (56.0 km).

DRAINAGE AREA.--54.6 mi<sup>2</sup> (141.4 km<sup>2</sup>).

PERIOD OF RECORD.--May 1922 to September 1965 (monthend contents only), October 1965 to current year. Records prior to October 1960 published in WSP 1732. Prior to October 1966, published as Costilla Lake near Costilla.

GAGE.--Inclined staff gage painted on base of railroad rail on left side of control tower of Dam. Altitude of gage is -107 ft (-33 m) from topographic map.

EXTREMES.--Current year: Maximum contents observed, 6,740 acre-ft (8.31 hm<sup>3</sup>) June 16 (gage height, 9,486.1 ft or 2,891.36 m); minimum observed, 134 acre-ft (165,000 m<sup>3</sup>) Sept. 4 (gage height, 9,423.2 ft or 2,872.19 m).  
Period of record: Maximum contents observed, 15,130 acre-ft (18.7 hm<sup>3</sup>) June 13, 1938, June 20-23, 1941 (gage height, 9,511.5 ft or 2,899.11 m); no contents October 1925 to February 1926, September 1956, Aug. 22 to Sept. 24, 1972.

REMARKS.--Reservoir is formed by earthfill dam faced with broken stone. Storage began in 1920. Capacity 15,740 acre-ft (19.4 hm<sup>3</sup>) between gage heights 9,405.0 ft (2,866.64 m), sill of outlet, and 9,513.0 ft (2,899.56 m), crest of ungated spillway cut in natural rock. By order of New Mexico State Engineer storage is limited to 14,540 acre-ft (17.9 hm<sup>3</sup>) maximum, and 10,880 acre-ft (13.4 hm<sup>3</sup>) for not to exceed 60 days. Diversions for irrigation of about 1,300 acres (5.26 km<sup>2</sup>) above Reservoir.

COOPERATION.--Gage readings collected in cooperation with New Mexico Interstate Stream Commission.

REVISIONS.--WSP 1923: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-ft)  
(Based on original survey, furnished by New Mexico Interstate Stream Commission)

9,423	131	9,440	556	9,470	3,260
9,425	165	9,450	959	9,480	5,270
9,430	270	9,460	1,760	9,490	7,790

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	5730	3000	319
2	---	---	---	---	---	---	---	---	5950	5660	---	225
3	---	---	---	---	---	---	---	---	---	---	2970	149
4	---	---	---	---	---	---	---	---	5970	5390	2860	134
5	---	---	---	---	---	---	---	---	---	---	2680	153
6	---	---	---	---	---	---	---	3910	6090	5350	---	---
7	447	---	---	---	---	---	---	---	---	5320	---	171
8	---	---	---	---	---	---	---	---	6240	5230	2300	225
9	---	---	---	---	---	---	---	---	6340	5160	2310	259
10	---	---	---	---	---	---	---	---	---	5120	2330	284
11	---	---	---	---	---	---	---	---	6460	5070	2190	302
12	---	---	---	---	---	---	---	---	6560	---	2070	335
13	---	---	---	---	---	---	---	---	6540	4770	1920	---
14	---	---	---	---	---	---	---	---	6670	---	1920	---
15	---	---	---	---	---	---	---	---	---	---	1690	---
16	---	---	---	---	---	---	---	---	6740	4720	---	---
17	---	---	---	---	---	---	---	---	---	4640	1680	---
18	---	---	---	---	---	---	---	---	---	6540	4550	---
19	---	1120	---	---	---	---	---	---	---	6510	---	1410
20	---	---	---	---	---	---	---	4850	6460	6530	1270	---
21	---	---	---	---	---	---	---	---	---	4490	1100	---
22	---	---	---	---	---	---	---	---	---	4330	959	---
23	---	---	---	---	---	---	---	---	6620	4210	---	---
24	---	---	---	---	---	---	---	---	6340	4070	984	625
25	---	---	---	---	---	---	---	5140	---	3910	851	---
26	---	---	---	---	---	---	---	5390	6090	---	632	---
27	---	---	---	---	---	---	---	5450	6070	3890	583	---
28	---	---	---	---	2100	---	---	5480	---	3800	459	---
29	---	---	---	---	---	---	---	5620	---	3680	359	---
30	---	1300	---	---	---	---	3500	---	6090	3440	---	750
31	900	---	1600	1850	---	2500	---	5800	---	3170	372	---
(†)	---	---	---	---	---	---	---	---	9483.5	9469.5	9434.0	---
(‡)	+550	+400	+300	+250	+250	+400	+1000	+2300	+290	-2920	-2798	+378

CAL YR 1974..... † -4,500  
WTR YR 1975..... ‡ +400

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

‡ Change in contents, in acre-feet.

NOTE.--Contents interpolated at end of month except June 30, July 31 and Aug. 31.

## 08254000 COSTILLA CREEK BELOW COSTILLA DAM, N. MEX.

LOCATION.--Lat 36°52'26", long 105°16'47", Taos County, in Sangre de Cristo Grant, on left bank 125 ft (38 m) downstream from Costilla Dam, 16 mi (26 km) southeast of Costilla, and at mile 34.7 (55.8 km).

DRAINAGE AREA.--54.6 mi<sup>2</sup> (141.4 km<sup>2</sup>).

PERIOD OF RECORD.--April 1937 to current year (no winter records 1937-44, 1947-49). Monthly discharge only for some periods, published in WSP 1312. Prior to October 1951, published as "below reservoir, near Costilla."

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,290 ft (2,832 m) from topographic map.

AVERAGE DISCHARGE.--29 years (1944-47, 1949-75), 16.6 ft<sup>3</sup>/s (0.470 m<sup>3</sup>/s), 12,030 acre-ft/yr (14.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 114 ft<sup>3</sup>/s (3.23 m<sup>3</sup>/s) June 30 (gage height, 1.88 ft or 0.573 m); minimum not determined.

Period of record: Maximum discharge, 286 ft<sup>3</sup>/s (8.10 m<sup>3</sup>/s) May 9, 10, 1942 (gage height, 2.65 ft or 0.808 m); no flow at times.

REMARKS.--Records good except those below 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s), which are poor. Flow regulated by Costilla Reservoir (see sta 08253900). Diversions for irrigation of about 1,300 acres (5.26 km<sup>2</sup>) above Reservoir.

REVISIONS.--WSP 1923: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.03	.03	.03	.03	.03	.03	.07	5.1	112	46	48
2	.03	.03	.03	.03	.03	.03	.03	.07	22	108	18	46
3	.03	.03	.03	.03	.03	.03	.03	.07	33	92	35	35
4	.03	.03	.03	.03	.03	.03	.03	.07	33	56	84	8.5
5	.03	.03	.03	.03	.03	.03	.03	.07	33	38	16	5.2
6	.03	.03	.03	.03	.03	.03	.03	.07	15	44	74	3.0
7	.03	.03	.03	.03	.03	.03	.03	.07	19	72	74	1.8
8	.03	.03	.03	.03	.03	.03	.03	.05	17	74	40	.11
9	.03	.03	.03	.03	.03	.03	.03	.05	59	74	16	.05
10	.03	.03	.03	.03	.03	.03	.03	.03	46	74	36	.03
11	.03	.03	.03	.03	.03	.03	.03	.03	21	53	98	.03
12	.03	.03	.03	.03	.03	.03	.03	.03	21	37	92	.03
13	.03	.03	.03	.03	.03	.03	.03	.03	21	47	79	.03
14	.03	.03	.03	.03	.03	.03	.03	.07	9.9	81	74	.05
15	.03	.03	.03	.03	.03	.03	.03	.09	13	81	43	.07
16	.03	.03	.03	.03	.03	.03	.05	.13	73	81	10	.05
17	.03	.03	.03	.03	.03	.03	.05	.13	94	81	27	.03
18	.03	.03	.03	.03	.03	.03	.05	.13	94	44	75	.03
19	.03	.03	.03	.03	.03	.03	.05	.13	94	18	86	.03
20	.03	.03	.03	.03	.03	.03	.05	.13	63	35	84	.05
21	.03	.03	.03	.03	.03	.03	.05	.16	49	98	83	.05
22	.03	.03	.03	.03	.03	.03	.05	.16	57	102	35	.05
23	.03	.03	.03	.03	.03	.03	.05	.16	84	102	7.9	.05
24	.03	.03	.03	.03	.03	.03	.05	.16	84	102	35	.05
25	.03	.03	.03	.03	.03	.03	.05	.16	87	57	82	.05
26	.03	.03	.03	.03	.03	.03	.05	.19	94	25	67	.05
27	.03	.03	.03	.03	.03	.03	.05	.19	64	44	64	.03
28	.03	.03	.03	.03	.03	.03	.05	.16	40	106	59	.03
29	.03	.03	.03	.03	---	.03	.05	.16	55	105	27	.03
30	.03	.03	.03	.03	---	.03	.05	.13	111	105	5.4	.03
31	.03	---	.03	.03	---	.03	---	.13	---	98	17	---
TOTAL	.93	.90	.93	.93	.84	.93	1.20	3.28	1492.19	2246	1655.3	148.51
MEAN	.030	.030	.030	.030	.030	.030	.040	.11	49.7	72.5	53.4	4.95
MAX	.03	.03	.03	.03	.03	.03	.05	.19	111	112	98	48
MIN	.03	.03	.03	.03	.03	.03	.03	.03	.19	18	5.4	.03
AC-FT	1.8	1.8	1.8	1.8	1.7	1.8	2.4	6.5	2960	4450	3280	295
CAL YR 1974 TOTAL	5744.66											
WTR YR 1975 TOTAL	5551.94											
MEAN 1974	15.7											
MAX 1974	128											
MIN 1974	.02											
AC-FT 1974	11390											
MEAN 1975	15.2											
MAX 1975	112											
MIN 1975	.03											
AC-FT 1975	11010											

NOTE.--No gage-height record Oct. 31 to May 6.

## 08254500 COSTILLA CREEK NEAR AMALIA, N. MEX.

LOCATION.—Lat 36°52'33", Long 105°23'22", Taos County, in Sangre de Cristo Grant, on right bank 0.5 mi (0.8 km) upstream from second bridge upstream from Amalia, 2.4 mi (3.9 km) downstream from Latir Creek, 5.8 mi (9.3 km) southeast of Amalia, 10.5 mi (16.9 km) southeast of Costilla, and at mile 25.4 (40.9 km).<sup>1</sup>

DRAINAGE AREA.—152 mi<sup>2</sup> (394 km<sup>2</sup>).

PERIOD OF RECORD.—May 1949 to September 1959 and April 1961 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1732.

GAGE.—Water-stage recorder. Concrete control since Sept. 27, 1965. Altitude of gage is 8,521 ft (2,597 m) from topographic map. May 1949 to May 2, 1956, at site 40 ft (12 m) upstream at datum 0.81 ft (0.247 m) lower. May 3, 1956 to Sept. 27, 1965, at site 10 ft (3 m) downstream at datum 1.81 ft (0.552 m) lower.

EXTREMES.—Current year: Maximum discharge, 316 ft<sup>3</sup>/s (8.95 m<sup>3</sup>/s) Apr. 25 (gage height, 3.01 ft or 0.917 m); minimum not determined. Period of record: Maximum discharge, 689 ft<sup>3</sup>/s (19.5 m<sup>3</sup>/s) Apr. 25, 1958 (gage height, 3.70 ft or 1.128 m, site and datum then in use); maximum gage height, 3.11 ft (0.948 m) July 27, 1966; minimum discharge not determined.

REMARKS.—Records good. Flow regulated by Costilla Reservoir (see sta 08253900) about 10 mi (16 km) upstream. Diversions for irrigation of about 1,300 acres (5.26 km<sup>2</sup>) above Costilla Reservoir.

REVISIONS (WATER YEARS).—WSP 1732: 1956(M). WSP 1923: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0						---	60	58	122	70	51
2	4.0						---	66	72	122	28	49
3	4.0						---	76	83	112	30	40
4	4.2						---	84	86	84	84	24
5	4.0						---	91	87	60	84	24
6	4.0						---	70	79	59	80	13
7	4.2						---	67	62	84	80	11
8	4.4						---	71	64	91	62	9.7
9	---						---	74	105	94	32	7.0
10	---						---	82	109	94	34	7.0
11	---						---	95	79	78	102	7.5
12	---						---	10	71	57	102	13
13	---						---	10	66	57	92	9.7
14	---						---	102	57	91	89	8.4
15	---						19	107	45	92	70	6.1
16	---						27	112	102	94	21	7.0
17	---						35	114	121	92	23	4.2
18	---						33	112	119	72	80	5.5
19	---						31	110	119	36	94	9.3
20	---						34	107	97	39	94	5.3
21	---						47	102	79	114	96	6.0
22	---						81	101	82	112	63	6.0
23	---						132	94	106	110	19	5.7
24	---						146	84	104	110	26	5.5
25	---						172	77	104	81	84	5.3
26	---						154	75	110	40	77	5.1
27	---						100	75	92	42	72	4.9
28	---						69	75	65	109	68	4.9
29	---						66	74	66	110	47	4.9
30	---						57	58	119	109	13	4.6
31	---						---	69	---	106	12	---
TOTAL	-	-	-	-	-	-	-	2705	2609	2673	1931	371.5
MEAN	-	-	-	-	-	-	-	87.3	87.0	86.2	62.3	12.4
MAX	-	-	-	-	-	-	-	114	121	122	102	51
MIN	-	-	-	-	-	-	-	60	45	36	12	4.6
AC-FT	-	-	-	-	-	-	-	5370	5170	5300	3030	737

## 08255500 COSTILLA CREEK NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, in Sangre de Cristo Grant, on right bank 70 ft (21 m) downstream from bridge on State Highway 196, 0.5 mi (0.8 km) upstream from diversion dam, 1.6 mi (2.6 km) southeast of Costilla, and at mile 15.9 (25.6 km).

DRAINAGE AREA.--195 mi<sup>2</sup> (505 km<sup>2</sup>).

PERIOD OF RECORD.--March 1936 to current year (no winter records 1936-43). Monthly discharge for March 1943 and calendar-year estimates for 1942-43, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1952. Altitude of gage is 7,900 ft (2,408 m) from topographic map. Prior to June 18, 1944, at site 200 ft (61 m) downstream at different datum. June 18, 1944 to Sept. 30, 1964, at site 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE.--34 years (1941-75), 41.6 ft<sup>3</sup>/s (1.178 m<sup>3</sup>/s), 30,140 acre-ft/yr (37.2 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 293 ft<sup>3</sup>/s (8.30 m<sup>3</sup>/s) Apr. 26 (gage height, 3.63 ft or 1.106 m); minimum, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Nov. 27, result of freezeup.

Period of record: Maximum discharge, 1,150 ft<sup>3</sup>/s (32.6 m<sup>3</sup>/s) May 11, 1942 (gage height, 5.37 ft or 1.637 m, site and datum then in use); minimum, 0.34 ft<sup>3</sup>/s (0.010 m<sup>3</sup>/s) Mar. 15, 1969, result of freezeup.

A major flood occurred in 1886, from information by local residents.

REMARKS.--Records fair. Regulation by Costilla Reservoir (see sta 08253900) 19 mi (31 km) upstream. Diversions for irrigation of about 2,000 acres (8.09 km<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1937-39(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	7.2	5.5	4.0	5.5	10	13	64	66	132	86	41
2	5.3	9.0	5.5	5.0	5.0	10	10	64	73	135	40	48
3	5.1	8.9	6.0	5.0	5.0	10	11	74	92	130	34	46
4	5.3	7.7	7.0	4.5	6.0	10	15	88	99	108	78	35
5	5.1	7.0	8.0	4.5	6.0	11	19	94	100	74	80	35
6	5.5	7.5	7.0	5.0	5.0	11	24	79	96	69	79	21
7	5.7	8.2	6.0	6.0	5.5	11	23	66	73	86	79	17
8	5.8	7.2	5.5	5.5	6.5	11	19	68	71	96	73	16
9	4.6	9.8	4.5	6.0	6.0	11	19	78	119	104	44	15
10	6.8	9.8	4.5	5.0	7.0	11	18	76	160	108	39	13
11	8.4	7.5	5.0	4.0	6.5	11	14	89	107	99	88	12
12	7.9	7.2	5.5	3.5	6.5	11	16	109	88	71	100	18
13	8.7	8.1	5.5	4.0	6.5	11	16	105	79	66	92	15
14	8.3	8.1	4.5	4.5	8.0	10	15	105	72	92	90	14
15	7.9	7.8	5.0	4.5	7.0	11	17	117	55	102	80	14
16	7.5	8.2	5.5	4.5	7.0	8.9	28	120	102	105	35	13
17	7.2	6.4	5.5	4.5	7.0	10	37	124	143	102	29	11
18	7.0	7.5	6.0	5.0	7.0	8.5	40	122	143	92	66	9.9
19	6.7	8.3	6.5	5.0	7.0	10	30	126	147	50	85	8.9
20	6.2	5.6	5.0	5.0	7.5	14	34	122	132	48	85	8.2
21	6.3	6.3	5.0	5.0	8.0	15	47	119	94	119	98	8.8
22	6.5	7.1	5.5	4.5	7.0	12	73	126	93	128	81	9.2
23	6.8	8.5	5.5	4.0	6.5	9.8	132	124	120	126	32	9.4
24	6.9	6.1	5.0	5.0	7.0	12	139	102	119	124	26	8.8
25	6.7	6.6	4.0	6.0	8.1	13	174	90	112	107	78	8.3
26	6.8	7.3	4.5	5.5	8.5	16	185	88	119	55	78	8.0
27	7.6	5.5	4.5	5.0	9.0	12	126	89	110	49	72	7.6
28	7.7	6.4	5.0	5.5	7.5	12	71	90	72	105	69	7.0
29	8.0	6.0	5.5	5.0	---	12	73	89	66	117	60	7.0
30	9.8	5.0	4.5	5.5	---	11	58	80	115	117	23	6.7
31	8.2	---	4.0	5.5	---	12	---	70	---	112	19	---
TOTAL	213.0	221.8	166.5	151.5	191.1	348.2	1500	2948	3037	3028	2018	491.8
MEAN	6.87	7.39	5.37	4.89	6.83	11.2	50.0	95.1	101	97.7	65.1	16.4
MAX	9.8	9.8	8.0	6.0	9.5	16	185	126	160	135	100	48
MIN	5.1	5.0	4.0	3.5	5.0	8.5	10	64	55	48	19	6.7
AC-FT	422	440	330	301	379	691	2980	5850	6020	6010	4000	975
CAL YR 1974	TOTAL	9236.7	MEAN	25.3	MAX	135	MIN	4.0	AC-FT	18320		
WTR YR 1975	TOTAL	14314.9	MEAN	39.2	MAX	185	MIN	3.5	AC-FT	28390		

PEAK DISCHARGE (BASE, 175 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0215	3.63	293				



## 08260500 COSTILLA CREEK BELOW DIVERSION DAM, AT COSTILLA, N. MEX.

LOCATION.—Lat 36°58'03", long 105°31'00", Taos County, in Sangre de Cristo Grant, on right bank 650 ft (200 m) downstream from diversion dam, 1.1 mi (1.8 km) southeast of Costilla, and at mile 15.3 (24.6 km).

DRAINAGE AREA.—197 mi<sup>2</sup> (510 km<sup>2</sup>).

PERIOD OF RECORD.—April 1952 to current year (no winter records).

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 7,861 ft (2,396 m) from topographic map.

EXTREMES.—Current year: Maximum discharge, 242 ft<sup>3</sup>/s (6.85 m<sup>3</sup>/s) Apr. 26 (gage height, 3.19 ft or 0.972 m); maximum gage height, 3.27 ft (0.997 m) July 25 (backwater from diversion structure); minimum discharge not determined.

Period of record: Maximum discharge, 525 ft<sup>3</sup>/s (14.9 m<sup>3</sup>/s) July 22, 1954 (gage height, 4.03 ft or 1.228 m); maximum gage height, 5.05 ft (1.539 m) July 24, 1957 (backwater from debris); no flow Oct. 14, 1963.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably exceeded 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s), based on records for upstream station (see sta 08255500).

REMARKS.—Records poor. Flow partly regulated by Costilla Reservoir (see sta 08253900) 20 mi (32 km) upstream, and by canal headgates or sluice gates at diversion dam. Diversions above station for irrigation of about 5,000 acres (20.2 km<sup>2</sup>), 3,000 acres (12.1 km<sup>2</sup>) of which are below station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06						---	52	11	15	4.2	1.0
2	.06						---	28	9.1	17	2.2	1.2
3	.06						---	39	8.7	12	1.5	2.6
4	.08						---	44	9.7	19	1.9	12
5	.08						---	55	12	14	1.5	1.2
6	.08						---	45	15	13	1.4	1.0
7	.08						---	32	9.5	12	1.4	1.0
8	.08						---	26	10	12	6.4	1.0
9	---						---	30	19	15	7.8	.96
10	---						---	18	33	17	3.1	.98
11	---						---	18	4.9	11	4.7	.87
12	---						---	22	3.1	29	4.7	.87
13	---						---	23	12	18	3.6	.83
14	---						---	19	15	13	3.4	.72
15	---						---	21	13	7.9	8.7	.67
16	---						.35	21	15	1.2	8.1	.87
17	---						.95	27	17	6.8	3.8	.83
18	---						.33	20	18	14	5.8	.86
19	---						.19	24	22	35	5.0	.74
20	---						.23	17	22	17	4.4	.73
21	---						.62	15	18	16	4.7	.87
22	---						18	17	14	15	4.2	.84
23	---						98	33	14	14	2.4	.80
24	---						103	14	11	13	1.6	.80
25	---						131	11	10	18	1.6	.77
26	---						156	11	11	11	1.5	.80
27	---						109	10	17	7.8	1.4	.78
28	---						54	11	29	5.9	1.3	.73
29	---						61	9.7	18	1.4	1.3	.67
30	---						52	14	15	1.3	1.1	.69
31	---						---	11	---	1.1	1.0	---
TOTAL	-	-	-	-	-	-	-	737.7	436.0	408.5	107.3	38.38
MEAN	-	-	-	-	-	-	-	23.8	14.5	13.2	3.46	1.28
MAX	-	-	-	-	-	-	-	55	33	35	8.7	12
MIN	-	-	-	-	-	-	-	9.7	3.1	1.1	1.0	.67
AC-FT	-	-	-	-	-	-	-	1460	865	810	213	76

## 08261000 COSTILLA CREEK AT GARCIA, COLO.

LOCATION.—Lat 36°59'21", long 105°31'54", Taos County, in Sangre de Cristo Grant, on left bank 0.4 mi (0.6 km) downstream from old State Highway 3, 0.5 mi (0.8 km) upstream from New Mexico-Colorado State line, 0.9 mi (1.4 km) south of Garcia, and at mile 13.3 (21.4 km).

DRAINAGE AREA.—200 mi<sup>2</sup> (520 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—June 1944 to current year (no winter records).

GAGE.—Water-stage recorder. Concrete control since Oct. 9, 1956. Altitude of gage is 7,758 ft (2,365 m) from topographic map. Prior to Apr. 20, 1950, at site 0.4 mi (0.6 km) downstream at different datum.

EXTREMES.—Current year: Maximum discharge, 224 ft<sup>3</sup>/s (6.34 m<sup>3</sup>/s) Apr. 25 (gage height, 3.95 ft or 1.204 m); no flow for many days. Period of record: Maximum discharge, 460 ft<sup>3</sup>/s (13.0 m<sup>3</sup>/s) July 24, 1957 (gage height, 4.76 ft or 1.451 m); no flow for many days most years.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s).

REMARKS.—Records good except those below 5 cfs, which are fair. Flow partly regulated by Costilla Reservoir (see sta 08253900) 22 mi (35 km) upstream. Diversions above station for irrigation of about 5,500 acres, (22.3 km<sup>2</sup>), 2,000 acres (8.09 km<sup>2</sup>) of which are below station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						---	57	8.4	8.4	2.8	0
2	0						---	32	8.4	9.1	2.6	0
3	0						---	40	9.4	9.1	0	0
4	0						---	54	9.7	14	0	2.7
5	0						---	61	10	12	0	0
6	0						---	48	12	12	0	0
7	0						---	34	11	11	0	0
8	0						---	29	9.7	9.4	2.5	0
9	---						---	34	12	9.1	2.7	0
10	---						---	20	20	11	0	0
11	---						---	19	9.8	9.1	0	0
12	---						---	21	5.3	21	0	0
13	---						---	22	11	12	0	0
14	---						---	18	15	8.7	0	0
15	---						---	20	13	3.9	2.9	0
16	---						0	22	12	3.4	4.6	0
17	---						0	22	14	4.1	0	0
18	---						0	20	13	9.2	0	0
19	---						0	23	14	24	0	0
20	---						0	16	14	9.7	0	0
21	---						0	14	13	15	0.7	0
22	---						5.7	16	10	9.7	0.9	0
23	---						7.8	27	9.7	9.4	1.4	0
24	---						9.5	15	5.8	9.4	0	0
25	---						11.9	12	5.8	12	0	0
26	---						14.1	11	5.5	4.3	0	0
27	---						107	8.2	9.6	3.2	0	0
28	---						57	4.7	26	5.6	0	0
29	---						6.8	5.3	8.7	4.6	0	0
30	---						5.5	10	9.4	1.8	0	0
31	---						---	9.7	---	0.2	0	---
TOTAL	-	-	-	-	-	-	-	744.4	335.2	278.36	16.06	2.7
MEAN	-	-	-	-	-	-	-	24.0	11.2	8.98	.52	.090
MAX	-	-	-	-	-	-	-	61	26	24	4.6	2.7
MIN	-	-	-	-	-	-	-	4.7	5.3	0.2	0	0
AC-FI	-	-	-	-	-	-	-	148.0	66.5	55.2	32	5.4

## PRINCIPAL DIVERSIONS FROM COSTILLA CREEK, NEW MEXICO-COLORADO

Records of discharge are collected at 8 gaging stations on 3 diversions from Costilla Creek. Each of these stations is equipped with a water-stage recorder and a Parshall flume. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado below the gaging station on Costilla Creek near Costilla, N. Mex. Records collected during irrigation season only.

08256000 ACEQUIA MADRE AT COSTILLA, N. MEX.--Lat 36°58'03", long 105°30'57", Taos County, 275 ft (84 m) downstream from diversion dam. Period of record May 1944 to current year. Acequia diverts from right bank of Costilla Creek.

08256500 MESA DITCH NEAR GARCIA, COLO.--Lat 36°59'50", long 105°30'49", Costilla County, 429 ft (130 m) north of milepost No. 136 + 54 on New Mexico-Colorado State line. Period of record, June 1944 to September 1965, May 1969 to current year. Ditch diverts from right bank of Acequia Madre for irrigation in Colorado.

08257500 CORDILLERA DITCH AT GARCIA, COLO.--Lat 36°59'41", long 105°31'39", Taos County, 570 ft (170 m) south of New Mexico-Colorado State line. Period of record, June 1944 to current year. Ditch diverts from left bank of Acequia Madre for irrigation in Colorado.

08258000 CERRO CANAL AT COSTILLA, N. MEX.--Lat 36°57'56", long 105°31'07", Taos County, 1,400 ft (430 m) downstream from diversion dam. Period of record, April 1944 to current year. Canal diverts from left bank of Costilla Creek.

08258600 CERRO CANAL BELOW ASSOCIATION DITCH AT COSTILLA, N. MEX.--Lat 36°57'41", long 105°32'05", Taos County, 220 ft (67 m) downstream from head of Association ditch. Period of record, May 1972 to current year.

08259500 NEW MEXICO BRANCH CERRO CANAL NEAR JAROSO, COLO.--Lat 36°59'37", long 105°34'28", Taos County, 45 ft (14 m) downstream from headgate. Period of record, June 1944 to current year. Canal diverts from left bank of Cerro Canal for irrigation in New Mexico.

08259600 CERRO CANAL AT STATE LINE NEAR JAROSO, COLO.--Lat 36°59'41", long 105°34'36", Taos County, 780 ft (240 m) downstream from head of N. Mex. branch Cerro Canal. Period of record, April 1973 to current year. Flow measured is delivered to Colorado.

08262000 EASTDALE NO. 1 INTAKE CANAL NEAR JAROSO, COLO.--Lat 37°02'25", long 105°36'15", Costilla County, 750 ft (230 m) downstream from headgate. Period of record, June 1944 to current year. Canal diverts from right bank of Costilla Creek to Eastdale Reservoir No. 1 for irrigation in Colorado.

## MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR 1975

	Acequia Madre	Mesa ditch	Cordillera ditch	Cerro Canal at Costilla	Cerro Canal below Association ditch	New Mexico branch Cerro Canal	Cerro Canal at State line nr Jaroso	Eastdale No. 1 intake canal
October . . . . .	-	-	-	-	-	-	-	0
November . . . . .	-	-	-	-	-	-	-	13
December . . . . .	-	-	-	-	-	-	-	0
CAL YR 1974 . . . . .	-	-	-	-	-	-	-	1,130
January . . . . .	-	-	-	-	-	-	-	-
February . . . . .	-	-	-	-	-	-	-	-
March . . . . .	-	-	-	-	-	-	-	1.8
April . . . . .	-	-	-	-	-	-	-	1,260
May . . . . .	670	a	14	3,730	1,820	130	1,700	685
June . . . . .	810	a	17	4,360	1,710	241	1,470	.5
July . . . . .	814	a	52	4,440	2,000	192	1,830	51
August . . . . .	644	a	12	3,180	1,380	181	1,150	.04
September . . . . .	162	a	9.1	705	315	.5	256	6.3
WTR YR 1975 . . . . .	-	-	-	-	-	-	-	-

a Minor ungaged diversions during season; total probably did not exceed 1 acre-foot.

## RIO GRANDE BASIN

08263500 RIO GRANDE NEAR CERRO, N. MEX.

LOCATION.--Lat 36°44'24", long 105°40'59", in NW 1/4 sec. 20, T. 29 N., R. 12 E., Taos County, on left bank 4 mi (6 km) southwest of Cerro, 5.5 mi (8.8 km) northwest of Questa, 7.4 mi (11.9 km) upstream from Red River, and at mile 1,693.1 (2,724.2 km).

DRAINAGE AREA.--8,440 mi<sup>2</sup> (21,860 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--May 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,110 ft (2,167 m) from topographic map.

AVERAGE DISCHARGE.--27 years, 380 ft<sup>3</sup>/s (10.76 m<sup>3</sup>/s), 275,300 acre-ft/yr (339-hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,460 ft<sup>3</sup>/s (69.7 m<sup>3</sup>/s) June 18 (gage height, 9.15 ft or 2.789 m); minimum, 50 ft<sup>3</sup>/s (1.42 m<sup>3</sup>/s) Oct. 1.

Period of record: Maximum discharge, 9,740 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) June 22, 1949 (gage height, 15.78 ft or 4.810 m); minimum, 43 ft<sup>3</sup>/s (1.22 m<sup>3</sup>/s) Sept. 22, 1956.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 7,000 acres (28.3 km<sup>2</sup>) in New Mexico.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	94	144	175	248	302	417	387	1370	1250	694	436
2	51	94	208	180	246	318	408	331	1290	1410	689	410
3	52	103	197	180	262	342	406	316	1410	1430	546	395
4	52	125	197	180	277	342	398	398	1480	1600	527	412
5	52	126	206	182	274	328	391	531	1560	1540	542	406
6	52	122	234	186	270	373	400	624	1660	1420	533	417
7	53	118	245	191	260	454	421	538	1820	1330	521	442
8	58	119	242	192	262	429	478	444	1950	1380	484	442
9	68	129	194	198	263	448	521	480	1720	1290	470	438
10	70	135	205	200	263	498	542	458	1300	1260	468	454
11	77	133	192	205	265	502	510	529	1390	1450	466	433
12	98	130	203	205	265	517	486	599	1980	1600	508	444
13	100	125	210	202	274	478	458	826	2220	1660	521	434
14	100	122	206	200	275	472	440	1020	2190	1700	542	480
15	106	124	208	200	280	462	425	1360	2290	1640	586	521
16	105	122	205	200	279	429	410	1640	2320	1580	570	557
17	104	118	202	202	284	417	400	1860	2360	1380	540	559
18	105	116	196	202	285	417	412	2030	2360	1200	506	519
19	104	123	194	203	280	416	478	2110	2250	1230	484	478
20	98	124	196	205	292	419	508	2040	1910	1090	472	442
21	95	116	194	208	285	425	474	1910	1600	890	454	417
22	93	130	198	205	284	458	444	1870	1520	896	431	393
23	91	150	198	205	288	484	482	1790	1360	999	421	382
24	92	144	197	203	267	502	510	1690	1550	964	440	382
25	90	159	192	211	299	442	519	1400	1740	800	456	367
26	90	182	191	213	289	456	568	1200	1760	719	482	353
27	91	219	170	206	287	460	696	1360	1690	840	510	340
28	92	170	169	205	294	436	734	1700	1680	755	504	326
29	93	178	176	197	---	440	627	1880	1360	615	484	321
30	96	122	170	192	---	436	480	1810	1220	618	462	323
31	96	---	170	229	---	414	---	1640	---	643	448	---
TOTAL	2574	3972	6109	6162	7617	13316	14443	36771	52220	37179	15761	12723
MEAN	83.0	132	197	199	272	430	481	1186	1741	1199	508	424
MAX	106	219	245	229	299	517	734	2110	2360	1700	694	559
MIN	50	94	144	175	208	302	391	316	1220	615	421	321
AC-FT	5110	7880	12120	12220	15110	26410	28650	72940	103600	73740	31260	25240
CAL YR 1974	TOTAL	74714	MEAN 205	MAX 816	MIN 49	AC-FT 148200						
WTR YR 1975	TOTAL	208847	MEAN 572	MAX 2360	MIN 50	AC-FT 414200						

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-18	2230	8.68	2,150	6-8	1900	8.45	2,010
5-29	2000	8.44	2,000	6-18	1330	9.15	2,460

## 08265000 RED RIVER NEAR QUESTA, N. MEX.

LOCATION.--Lat 36°42'12", long 105°34'04", in NW¼ sec. 32, T.29 N., R.13 E. (projected), Taos County, in Carson National Forest, on left bank 1.3 mi (2.1 km) upstream from Cabresto Creek, 1.5 mi (2.4 km) east of Questa, and at mile 9.0 (14.5 km).

DRAINAGE AREA.--113 mi<sup>2</sup> (293 km<sup>2</sup>).

PERIOD OF RECORD.--April to October 1910 and January to September 1911 (gage heights and discharge measurements only), October 1912 to March 1924, May 1924 to September 1925, January to March 1926, September 1926 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Colorado above Questa 1910-11, 1926-30, and as Rio Colorado near Questa 1912-25, 1930-48.

GAGE.--Water-stage recorder. Wood or concrete control since Mar. 20, 1936. Datum of gage is 7,451.92 ft (2,271.345 m) above mean sea level. See WSP 1923 for history of changes prior to Oct. 4, 1938.

AVERAGE DISCHARGE.--52 years (1912-25, 1926-65) 55.9 ft<sup>3</sup>/s (1.583 m<sup>3</sup>/s), 40,500 acre-ft/yr (49.9 hm<sup>3</sup>/yr), prior to extensive upstream diversions by Molycorp; 10 years (1965-75) 31.0 ft<sup>3</sup>/s (0.878 m<sup>3</sup>/s), 22,460 acre-ft/yr (27.7 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 199 ft<sup>3</sup>/s (5.64 m<sup>3</sup>/s) June 10 (gage height, 3.71 ft or 1.131 m); minimum, 2.8 ft<sup>3</sup>/s (0.079 m<sup>3</sup>/s) Dec. 8-9, but may have been less during periods of ice effect.  
1930-75: Maximum discharge, 886 ft<sup>3</sup>/s (25.1 m<sup>3</sup>/s) May 25, 1942, from rating curve extended above 450 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s); maximum gage height, 4.47 ft or 1.362 m June 14, 1973; minimum discharge, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Nov. 23, 1957.  
The peak of June 15, 1921, may have equaled or exceeded the peak of May 25, 1942.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few hundred acres above station. Figures of discharge do not include flow in South ditch which diverts from left bank 1,500 ft (460 m) upstream and bypasses gage for irrigation and stock water below.  
Since January 1966 tailings pipelines from Molybdenum Corp. of America (Molycorp) refinery 5.5 mi (8.8 km) upstream bypass gage on left bank and discharge into settling pond 3 mi (5 km) downstream. Effluent from this pond enters Red River as surface water and is included in discharge at Red River at mouth near Questa (see sta 08267000). See tabulation below for monthly discharge through tailings pipelines (records furnished by Molycorp).

REVISIONS (WATER YEARS).--WSP 808: 1935. WSP 1392: 1913, 1932, 1941, 1947-48. WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	13	4.0	3.5	6.4	8.0	11	43	120	120	43	24
2	11	12	4.4	3.8	4.9	7.8	9.3	42	124	121	41	23
3	9.9	12	4.8	3.5	4.8	8.0	8.7	49	136	120	40	26
4	10	12	4.2	3.5	5.5	7.5	9.1	64	155	119	38	40
5	9.3	9.8	4.5	3.8	6.2	7.8	11	77	170	115	36	54
6	9.8	10	4.7	4.0	5.0	8.3	13	70	181	107	37	41
7	11	11	4.4	4.5	5.5	7.5	13	63	190	106	36	36
8	11	11	3.9	4.5	6.0	7.3	11	69	189	109	38	33
9	9.9	11	3.5	4.5	6.3	7.8	12	78	187	118	44	32
10	11	11	3.6	4.2	6.4	7.8	12	87	190	117	47	29
11	13	10	3.7	4.0	5.5	7.8	12	108	170	108	45	32
12	15	10	3.9	3.5	5.0	7.9	11	124	154	102	41	48
13	12	10	4.0	3.8	6.5	7.7	11	133	147	94	43	41
14	13	9.5	3.7	4.0	6.8	6.9	12	133	151	95	46	39
15	12	9.9	3.9	4.5	6.5	7.5	13	144	158	91	39	37
16	11	9.6	4.0	5.0	6.7	6.7	15	158	170	92	35	36
17	11	8.4	4.0	5.5	6.9	7.4	19	162	176	89	33	35
18	11	8.6	3.9	6.0	7.2	7.1	20	157	175	87	32	32
19	12	9.1	3.8	5.5	6.0	7.6	17	156	169	80	29	30
20	11	7.0	3.7	5.5	6.0	8.5	18	155	160	78	32	29
21	11	8.4	4.0	5.0	6.5	9.2	23	155	157	85	46	31
22	12	9.4	3.8	4.5	5.5	8.6	29	161	150	73	42	30
23	12	8.7	3.6	4.0	5.0	8.2	38	152	143	66	37	29
24	12	7.8	3.4	4.3	6.0	6.8	50	134	140	65	34	28
25	12	8.2	3.3	5.0	7.0	8.8	72	129	140	61	31	26
26	13	9.4	3.5	5.1	7.5	11	78	138	140	56	28	26
27	13	6.4	3.7	5.2	7.5	8.5	67	150	133	52	28	24
28	13	8.5	3.9	5.5	8.1	7.7	53	160	129	51	29	23
29	14	4.4	3.7	5.7	---	8.0	47	153	124	50	27	22
30	15	3.5	3.7	6.4	---	8.4	41	138	120	48	26	22
31	13	---	3.7	6.2	---	8.6	---	127	---	45	25	---
TOTAL	363.9	276.6	120.2	144.0	173.2	246.7	756.1	3669	4648	2720	1128	958
MEAN	11.7	9.22	3.88	4.65	6.19	7.96	25.2	118	155	87.7	36.4	31.9
MAX	15	13	4.7	6.4	8.1	11	78	162	190	121	47	54
MIN	9.3	3.5	3.3	3.5	4.8	6.7	8.7	42	120	45	25	22
AC-FI	722	549	238	286	344	449	1500	7280	9220	5400	2240	1900
(†)	694	638	611	629	594	697	658	478	541	675	653	620

CAL YR 1974 TOTAL 6616.3 MEAN 18.1 MAX 122 MIN 3.3 AC-FI 13120 † 7620  
WTR YR 1975 TOTAL 15283.7 MEAN 41.7 MAX 190 MIN 3.3 AC-FI 30160 † 7490

PEAK DISCHARGE (BASE, 160 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE
5-16	2200	3.52	176
6-10	0600	3.71	199

† Diversion, in acre-ft, through Molycorp tailings pipelines.

## 08266000 CABRESTO CREEK NEAR QUESTA, N. MEX.

LOCATION.—Lat 36°43'50", long 105°33'12", in SEKSEK sec.21, T.29 N., R.13 E., Taos County, in Carson National Forest, on right bank 900 ft (270 m) downstream from Llano ditch heading, 2.6 mi (4.2 km) downstream from Lake Fork, 3 mi (5 km) northeast of Questa, and at mile 3.5 (5.6 km).

DRAINAGE AREA.—36.7 mi<sup>2</sup> (95.1 km<sup>2</sup>).

PERIOD OF RECORD.—September 1943 to current year.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 7,845 ft (2,391 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.—32 years, 9.48 ft<sup>3</sup>/s (0.268 m<sup>3</sup>/s), 6,870 acre-ft/yr (8.47 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 59 ft<sup>3</sup>/s (1.67 m<sup>3</sup>/s) May 15 (gage height, 2.80 ft or 0.853 m); minimum, 0.78 ft<sup>3</sup>/s (0.022 m<sup>3</sup>/s) Feb. 6, result of freezeup.

Period of record: Maximum discharge, 176 ft<sup>3</sup>/s (4.98 m<sup>3</sup>/s) June 8, 1957 (gage height, 4.44 ft or 1.353 m); minimum, 0.44 ft<sup>3</sup>/s (0.012 m<sup>3</sup>/s) Dec. 2, 1950, result of freezeup.

The flood of May 25, 1942, may have exceeded the maximum of record.

REMARKS.—Records good except those for January, which are fair. Llano ditch, the only diversion above station, diverts from right bank 900 ft (270 m) above gage for irrigation of about 800 acres (3.24 km<sup>2</sup>) below. See tabulation below for monthly diversion of Llano ditch (records of daily discharge available in District files). Flow regulated by Cabresto Reservoir (capacity, 732 acre-feet or 903,000 m<sup>3</sup>, after reconstruction in 1928) on Lake Fork 1 mi (2 km) above mouth.

REVISIONS.—WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.0	2.9	2.5	3.3	3.9	4.2	15	26	11	12	8.5
2	2.6	4.1	3.7	2.7	2.7	4.0	3.9	15	26	12	12	8.3
3	2.6	4.2	3.6	2.5	2.7	4.0	3.7	16	24	12	12	8.2
4	2.6	4.1	3.7	2.5	3.4	3.9	4.4	19	25	11	12	11
5	2.7	3.7	3.6	2.6	3.3	4.1	4.8	21	28	11	12	12
6	2.7	4.0	3.4	2.8	2.0	4.2	5.3	21	38	11	11	10
7	2.8	3.9	3.4	3.0	2.7	4.1	5.8	20	39	11	11	9.4
8	2.9	3.8	3.3	3.0	3.4	4.1	4.8	21	37	12	13	9.1
9	2.8	4.2	2.1	3.0	3.3	4.2	5.2	20	36	13	13	8.8
10	3.0	4.1	2.4	2.8	3.3	4.3	5.1	19	37	12	12	8.6
11	3.2	3.8	3.1	2.5	3.3	4.5	5.0	26	31	11	11	8.7
12	3.4	3.7	3.3	2.0	3.1	4.3	4.9	34	25	11	8.6	9.9
13	3.4	3.8	3.5	2.2	3.5	4.3	4.8	36	22	11	8.5	9.2
14	3.4	4.1	2.8	2.4	3.5	4.1	4.7	41	21	16	8.2	8.9
15	3.4	4.0	3.0	2.5	3.4	4.3	4.8	43	20	14	8.5	8.6
16	3.4	4.0	3.3	2.6	3.5	4.2	5.6	47	17	11	10	8.4
17	3.3	3.7	3.2	2.7	3.5	4.4	6.7	46	17	11	9.9	8.0
18	3.3	4.0	3.2	2.8	3.6	3.8	7.1	45	16	11	9.5	7.6
19	3.3	3.9	3.1	2.8	3.4	3.8	6.4	45	15	11	9.3	7.5
20	3.3	3.5	2.8	2.8	3.4	4.0	7.2	44	14	12	11	7.5
21	3.4	3.3	2.9	2.7	3.6	4.2	9.5	44	13	12	14	8.0
22	3.5	3.6	2.8	2.5	3.1	4.1	11	42	12	11	13	7.9
23	3.6	3.7	2.7	2.4	2.8	3.8	14	40	12	11	12	7.4
24	3.5	3.4	2.6	2.5	3.7	3.0	16	36	12	11	11	7.1
25	3.5	3.3	2.2	2.7	3.8	3.9	20	34	12	11	11	7.0
26	3.5	3.5	3.1	2.8	3.8	4.3	23	34	11	11	11	6.9
27	3.9	3.2	2.9	2.9	3.7	3.5	21	35	11	11	10	6.7
28	3.8	3.3	2.8	3.0	3.8	3.2	18	35	11	11	10	6.5
29	4.0	3.0	3.0	2.9	---	3.5	17	34	11	12	9.6	4.0
30	4.1	2.3	3.0	3.3	---	3.4	15	31	11	11	9.2	3.3
31	4.1	---	3.0	3.3	---	4.0	---	28	---	11	8.8	---
TOTAL	101.6	111.2	94.4	83.7	92.6	123.4	267.9	987	630	358	334.1	241.0
MEAN	3.28	3.71	3.05	2.70	3.31	3.94	8.93	31.8	21.0	11.5	10.8	8.10
MAX	4.1	4.2	3.7	3.3	3.8	4.5	23	47	39	16	14	12
MIN	2.6	2.3	2.1	2.0	2.0	3.0	3.7	15	11	11	8.2	3.3
AC-FT	202	221	187	166	184	245	531	1960	1250	710	663	482
(†)	0	-	-	-	-	-	-	745	1020	572	155	0
CAL YR 1974	TOTAL	2239.8	MEAN	6.14	MAX	18	MIN	2.1	AC-FT	4440		
WTH YR 1975	TOTAL	3426.9	MEAN	9.39	MAX	47	MIN	2.0	AC-FT	6880		

† Diversion, in acre-ft, by Llano ditch.

RIO GRANDE BASIN

83

08267000 RED RIVER AT MOUTH, NEAR QUESTA, N. MEX.

LOCATION.--Lat 36°38'53", long 105°41'34", in SW¼NW¼ sec.20, T.28 N., R.12 E., Taos County, in Carson National Forest, on left bank 250 ft (76 m) upstream from Rio Grande, and 6.5 mi (10.5 km) southwest of Questa.

DRAINAGE AREA.--190 mi<sup>2</sup> (492 km<sup>2</sup>).

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October and November 1950, published in WSP 1732.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m) from topographic map.

AVERAGE DISCHARGE.--25 years, 76.9 ft<sup>3</sup>/s (2.178 m<sup>3</sup>/s), 55,710 acre-ft/yr (68.7 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 318 ft<sup>3</sup>/s (9.01 m<sup>3</sup>/s) Aug. 12 (gage height, 4.28 ft or 1.305 m); minimum, 34 ft<sup>3</sup>/s (0.96 m<sup>3</sup>/s) Dec. 2.

Period of record: Maximum discharge, 730 ft<sup>3</sup>/s (20.7 m<sup>3</sup>/s) Aug. 12, 1964 (gage height, 6.05 ft or 1.844 m); minimum 29 ft<sup>3</sup>/s (0.82 m<sup>3</sup>/s) Feb. 13, 1965.

REMARKS.--Records good. Diversions for irrigation of about 3,000 acres (12.1 km<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	54	35	39	53	58	47	83	158	157	87	59
2	46	54	36	39	49	60	45	82	163	159	84	58
3	44	55	35	39	47	56	43	87	173	162	82	60
4	44	54	36	38	48	52	44	102	191	158	79	74
5	44	52	38	40	49	50	46	115	212	156	77	98
6	44	51	40	41	44	52	48	110	224	148	76	81
7	46	51	42	43	44	51	49	105	233	145	74	74
8	46	50	43	44	48	49	47	106	235	146	78	71
9	46	49	41	48	49	55	50	115	235	155	85	70
10	49	48	41	46	50	54	51	122	237	158	86	66
11	49	47	41	42	49	55	50	140	227	152	87	66
12	55	47	41	41	46	53	50	161	203	150	91	86
13	54	48	43	41	50	52	50	182	192	143	85	79
14	54	48	41	42	52	50	51	183	192	140	88	76
15	53	48	41	42	50	51	52	192	196	138	82	74
16	52	48	42	42	51	49	53	211	205	139	79	73
17	52	46	42	43	52	49	56	215	209	140	77	70
18	52	47	41	43	51	49	58	209	214	139	74	63
19	52	47	41	43	50	50	56	208	214	132	71	61
20	52	44	40	44	50	53	57	204	204	129	73	61
21	52	44	40	43	52	54	61	203	200	137	90	64
22	52	44	40	43	48	52	64	211	192	122	83	64
23	52	45	39	43	48	49	73	206	186	111	74	63
24	52	42	39	44	49	44	87	183	179	109	70	61
25	52	41	37	46	52	46	115	173	180	108	66	59
26	52	41	39	47	52	47	127	181	179	106	64	60
27	54	39	39	47	52	46	116	191	174	102	62	58
28	53	37	39	48	54	44	105	203	172	99	65	58
29	55	37	41	47	---	45	94	195	166	96	63	57
30	58	36	40	51	---	45	81	182	157	93	60	56
31	55	---	39	55	---	48	---	167	---	90	60	---
TOTAL	1568	1394	1232	1354	1389	1568	1926	5027	5902	4119	2372	2020
MEAN	50.6	46.5	39.7	43.7	49.6	50.6	64.2	162	197	133	76.5	67.3
MAX	58	55	43	55	54	60	127	215	237	162	91	98
MIN	44	36	35	38	44	44	43	82	157	90	60	56
AC-FT	3110	2760	2440	2690	2760	3110	3820	9970	11710	8170	4700	4010

CAL YR 1974 TOTAL 20010 MEAN 54.4 MAX 154 MIN 35 AC-FT 39690  
WTR YR 1975 TOTAL 29871 MEAN 81.8 MAX 237 MIN 35 AC-FT 59250

PEAK DISCHARGE (BASE, 175 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-17	0400	3.52	227	8-12	1600	4.28	318
6-10	0900	3.66	243				

08267500 RIO HONDO NEAR VALDEZ, N. MEX.

LOCATION.--Lat 36°32'30", long 105°33'21", Taos County, in Carson National Forest, on right bank 500 ft (150 m) upstream from first diversion, 1.6 mi (2.6 km) east of Valdez, 3.8 mi (6.1 km) downstream from South Fork, and at mile 9.2 (14.8 km).

DRAINAGE AREA.--36.2 mi<sup>2</sup> (93.8 km<sup>2</sup>).

PERIOD OF RECORD.--August 1934 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1938. Altitude of gage is 7,650 ft (2,332 m) from topographic map. Prior to Oct. 28, 1938, at datum 1.92 ft (0.585 m) lower.

AVERAGE DISCHARGE.--41 years, 34.1 ft<sup>3</sup>/s (0.966 m<sup>3</sup>/s), 24,710 acre-ft/yr (30.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 166 ft<sup>3</sup>/s (4.70 m<sup>3</sup>/s) June 7 (gage height, 2.88 ft or 0.878 m); maximum gage height, 3.81 ft (1.161 m) Dec. 17 (ice jam); minimum discharge, 4.8 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Feb. 6, but may have been less during periods of ice effect.

Period of record: Maximum discharge, 541 ft<sup>3</sup>/s (15.3 m<sup>3</sup>/s) May 13, 1941; maximum gage height, 4.81 ft (1.466 m) Jan. 5, 1970 (ice jam); minimum discharge, about 1 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) Jan. 27, 1942, result of freezeup.

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

REVISIONS (WATER YEARS).--WSP 1342: 1935. WSP 1712: Drainage area. WSP 1732: 1942(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	9.0	7.0	10	8.7	12	26	72	90	33	23
2	11	12	9.7	10	9.5	9.6	13	25	76	92	32	22
3	10	12	9.5	9.0	9.5	10	13	27	91	85	30	23
4	10	12	9.3	8.0	9.0	10	12	34	111	82	29	34
5	11	11	9.2	9.5	8.0	10	14	43	125	80	25	45
6	11	11	9.2	10	6.5	10	17	40	145	78	27	32
7	12	11	9.1	10	7.5	10	17	35	152	78	27	28
8	11	11	9.0	10	9.0	10	19	34	149	77	28	27
9	11	11	8.0	10	8.4	10	14	40	147	77	31	27
10	11	11	8.5	9.0	8.3	10	13	50	138	76	28	25
11	12	11	9.0	8.5	8.0	9.4	12	64	118	73	27	26
12	12	11	9.5	8.5	7.9	9.2	12	76	109	74	26	34
13	12	11	9.5	9.0	8.1	8.8	12	79	113	73	30	31
14	11	11	9.0	9.5	8.1	8.7	11	86	119	72	31	30
15	11	11	8.0	9.5	8.0	8.9	12	97	129	70	26	30
16	10	11	8.5	9.5	8.0	8.8	14	115	142	67	25	29
17	10	10	8.5	9.0	8.0	9.0	18	120	145	66	25	29
18	11	11	8.5	9.0	8.0	8.9	18	115	148	62	24	29
19	11	10	8.4	9.0	8.0	9.7	17	111	144	60	24	28
20	11	9.9	8.0	9.0	8.0	12	18	101	140	56	25	28
21	11	10	7.5	9.0	8.0	13	21	180	137	54	34	29
22	11	10	7.5	8.0	7.5	12	29	103	128	51	30	28
23	12	10	7.4	9.0	6.5	12	38	91	122	48	27	26
24	11	9.8	7.2	10	8.0	11	41	76	116	46	26	25
25	11	9.7	7.0	10	8.3	10	50	70	117	44	25	24
26	12	9.7	7.5	9.5	8.1	10	50	75	115	41	24	23
27	13	8.9	8.0	9.0	8.1	9.2	43	88	106	40	24	22
28	12	9.4	7.5	9.0	8.2	9.0	36	104	101	38	24	22
29	12	9.0	8.0	10	---	9.0	31	97	96	38	21	22
30	13	8.5	8.0	11	---	8.5	27	83	92	36	23	22
31	12	---	7.5	12	---	11	---	75	---	35	23	---
TOTAL	350	314.9	260.5	289.5	228.5	306.4	654	2280	3643	1959	834	823
MEAN	11.3	10.5	8.40	9.34	8.16	9.88	21.8	73.5	121	63.2	27.1	27.4
MAX	13	12	9.7	12	10	13	50	120	152	92	34	45
MIN	10	8.5	7.0	7.0	6.5	8.5	11	25	72	35	23	22
AC-FT	694	625	517	574	453	608	1300	4520	7230	3890	1660	1630
CAL YR 1974 TOTAL	6467.5											
WTR YR 1975 TOTAL	11947.8											
MEAN 17.7												
MAX 80												
MIN 7.0												
AC-FT 12830												
MEAN 32.7												
MAX 152												
MIN 6.5												
AC-FT 23700												

PEAK DISCHARGE (BASE, 80 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-17	0045	2.71	127	6-7	0215	2.88	166
5-28	1415	2.63	111	6-17	2245	2.83	154

NOTE.--No gage-height record Dec. 26 to Feb. 4.



08268500 ARROYO HONDO AT ARROYO HONDO, N. MEX.

LOCATION.—Lat 36°31'56", long 105°41'06", Taos County, in Arroyo Hondo Grant, on left bank 0.9 mi (1.4 km) downstream from Arroyo Hondo, and at mile 1.4 (2.3 km).

DRAINAGE AREA.—65.6 mi<sup>2</sup> (169.9 km<sup>2</sup>).

PERIOD OF RECORD.—April 1910 to June 1912 (discharge measurements and fragmentary gage-height record), July 1912 to December 1928 (fragmentary), and January 1932 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Hondo near Arroyo Hondo prior to 1928, and as Rio Hondo at Arroyo Hondo 1928-65.

GAGE.—Water-stage recorder. Altitude of gage is 6,670 ft (2,033 m) from topographic map. See WSP 1923 for history of changes prior to Sept. 11, 1963. Sept. 11, 1963 to Apr. 2, 1969, at site 25 ft (8 m) downstream on right bank at same datum.

AVERAGE DISCHARGE.—59 years (1912-28, 1932-75), 26.9 ft<sup>3</sup>/s (0.762 m<sup>3</sup>/s), 19,490 acre-ft/yr (24.0 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 98 ft<sup>3</sup>/s (2.78 m<sup>3</sup>/s) June 9 (gage height, 3.37 ft or 1.027 m); minimum, 4.6 ft<sup>3</sup>/s (0.13 m<sup>3</sup>/s) Oct. 4, part of each day May 6-9.

1938-75: Maximum discharge, 1,060 ft<sup>3</sup>/s (30.0 m<sup>3</sup>/s) July 19, 1948 (gage height, 3.75 ft or 1.143 m), from rating curve extended above 200 ft<sup>3</sup>/s (5.66 m<sup>3</sup>/s); maximum gage height, 3.90 ft (1.189 m) June 15, 1973; minimum discharge, 3.8 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Aug. 1, 6, 1963.

Maximum gage height observed, 5.45 ft (1.661 m), site and datum then in use, Aug. 23, 1935; discharge uncertain, but probably exceeded 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s). A minimum daily discharge of 3 ft<sup>3</sup>/s (0.08 m<sup>3</sup>/s) occurred Oct. 19, 1912 (statement in WSP 328 that there was no flow in January and much of February 1912 is believed erroneous). Discharge not determined for the major floods of Oct. 6, 1911, Sept. 1, 1932, and July 22, 1934.

REMARKS.—Records good. Diversions above station for irrigation of about 2,500 acres (10.1 km<sup>2</sup>).

REVISIONS (WATER YEARS).—WSP 1342: 1915, 1932(M), 1934-38(M). WSP 1712: Drainage area. WSP 1732: 1926.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	7.6	11	11	14	17	15	17	23	36	8.3	7.1
2	9.9	7.6	14	14	15	18	13	16	25	37	8.3	7.1
3	5.0	8.0	18	13	14	18	13	13	33	38	8.2	7.4
4	5.0	7.4	16	12	15	17	14	6.2	44	37	7.8	11
5	5.0	7.2	16	14	15	18	15	6.2	57	35	7.7	9.9
6	5.4	6.9	15	14	10	18	16	5.0	73	32	7.6	7.8
7	6.4	6.8	15	15	13	18	15	5.4	84	30	7.7	7.6
8	5.9	6.9	15	15	18	18	11	5.0	89	27	8.9	7.6
9	6.4	7.4	13	16	16	18	12	5.0	90	29	8.6	7.7
10	7.2	7.1	14	15	16	17	13	5.5	87	34	7.8	7.5
11	6.8	7.3	15	14	15	17	13	7.7	77	37	7.6	8.4
12	8.2	7.6	16	13	14	16	13	11	64	38	7.7	9.2
13	6.8	7.6	16	13	15	16	12	14	59	34	9.3	8.2
14	6.4	7.7	13	16	15	15	12	17	62	33	8.6	7.9
15	6.4	7.3	13	16	16	15	13	24	66	29	7.5	7.7
16	6.8	7.2	14	15	16	15	14	33	75	25	7.9	7.5
17	6.8	7.3	14	15	16	15	14	40	75	23	9.5	7.4
18	6.8	7.5	16	15	16	15	14	40	78	20	8.9	7.3
19	6.4	7.5	16	15	16	15	13	40	79	18	8.1	7.3
20	6.4	7.3	13	15	16	16	13	41	74	18	9.6	7.5
21	6.4	7.3	15	15	16	17	14	42	73	16	9.9	7.7
22	6.4	7.3	16	13	14	16	13	50	67	14	8.3	7.9
23	6.8	7.3	16	15	12	16	18	46	63	13	8.2	7.8
24	6.8	7.3	13	17	15	15	19	37	60	12	7.6	7.8
25	6.8	8.6	9.2	17	16	15	23	34	60	14	7.7	7.9
26	7.2	11	14	17	16	15	21	37	61	11	7.6	11
27	8.6	9.6	16	16	16	15	18	44	52	9.8	7.8	11
28	7.7	10	13	15	16	14	17	57	45	9.0	8.2	9.2
29	8.6	9.6	14	15	---	14	18	53	41	8.6	7.5	9.0
30	8.9	9.2	14	20	---	13	17	39	39	9.0	7.3	8.8
31	7.8	---	12	22	---	16	---	30	---	8.7	7.1	---
TOTAL	207.8	234.4	445.2	468	424	498	446	821.0	1875	735.1	252.8	247.2
MEAN	6.70	7.81	14.4	15.1	15.1	16.1	14.9	26.5	62.5	23.7	8.15	8.24
MAX	8.9	11	18	22	18	18	23	57	90	38	9.9	11
MIN	5.0	6.8	9.2	11	10	13	11	5.0	23	8.6	7.1	7.1
AC-FT	412	465	883	928	841	988	885	1630	3720	1460	501	490

CAL YR 1974 TOTAL 3381.5 MEAN 9.26 MAX 40 MIN 4.2 AC-FT 6710  
WTR YR 1975 TOTAL 6654.5 MEAN 18.2 MAX 90 MIN 5.0 AC-FT 13200

PEAK DISCHARGE (BASE, 75 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-9	0715	3.37	98	6-19	0730	3.31	87

## RIO GRANDE BASIN

08268700 RIO GRANDE NEAR ARROYO HONDO, N. MEX.

LOCATION.--Lat 36°32'04", long 105°42'34", in NW¼ sec. 31, T.27 N., R.12 E., Taos County, on right bank 350 ft (110 m) downstream from Arroyo Hondo, 400 ft (120 m) downstream from bridge on county road, 2.2 mi (3.5 km) west of Arroyo Hondo, 11.6 mi (18.7 km) north-west of Taos, and at mile 1,677.4 (2,698.9 km).

DRAINAGE AREA.--8,760 mi<sup>2</sup> (22,690 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 567 ft<sup>3</sup>/s (16.06 m<sup>3</sup>/s), 410,800 acre-ft/yr (507 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft<sup>3</sup>/s (74.8 m<sup>3</sup>/s) June 18 (gage height, 4.67 ft or 1.423 m); minimum, 152 ft<sup>3</sup>/s (4.30 m<sup>3</sup>/s) Oct. 1, 2, 3.

Period of record: Maximum discharge, 4,400 ft<sup>3</sup>/s (125 m<sup>3</sup>/s) June 22, 1965 (gage height, 5.81 ft or 1.771 m); maximum gage height, 5.82 ft (1.774 m) May 23, 1973; minimum discharge, 136 ft<sup>3</sup>/s (3.85 m<sup>3</sup>/s) Aug. 2, 1963.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 15,000 acres (60.7 km<sup>2</sup>) in New Mexico.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	206	217	210	385	428	516	457	1620	1450	788	547
2	156	204	311	280	359	449	513	493	1508	1640	825	526
3	155	212	315	246	365	467	511	460	1640	1670	684	510
4	157	233	304	293	392	472	502	510	1710	1810	643	544
5	157	242	310	295	385	450	494	661	1800	1780	655	557
6	157	233	336	295	376	481	505	755	1900	1690	654	548
7	159	231	356	300	371	539	521	734	2100	1540	646	561
8	160	228	359	303	377	538	562	595	2200	1600	617	563
9	171	238	307	315	377	560	613	631	2000	1530	595	561
10	179	247	324	311	378	611	643	620	1750	1490	603	575
11	181	244	299	312	379	605	616	681	1650	1650	593	552
12	208	242	320	313	375	630	597	778	2140	1800	693	589
13	214	237	320	313	384	592	568	991	2380	1830	662	570
14	213	233	318	315	392	577	550	1210	2360	1870	671	598
15	217	235	317	320	391	582	538	1540	2340	1820	696	601
16	216	232	318	320	393	539	526	1830	2490	1780	703	676
17	214	227	314	330	395	532	516	2040	2540	1620	664	679
18	215	225	312	340	399	528	526	2160	2550	1410	635	647
19	216	230	308	340	391	527	577	2250	2480	1400	603	600
20	208	230	304	330	398	529	617	2210	2150	1310	595	562
21	203	225	305	318	399	532	605	2080	1870	1090	600	545
22	201	219	309	314	392	552	571	2080	1790	1030	569	518
23	200	256	308	313	354	578	497	2010	1640	1130	547	503
24	200	256	305	315	343	602	643	1940	1760	1140	551	499
25	197	250	288	322	410	548	701	1700	1960	958	568	489
26	198	283	280	326	405	549	740	1450	1990	846	580	475
27	204	316	273	328	397	553	833	1580	1920	943	612	463
28	202	294	271	317	408	553	921	1920	1900	892	620	446
29	205	289	281	316	---	540	798	2080	1650	763	596	433
30	213	225	269	328	---	537	653	2030	1450	730	572	436
31	209	---	278	327	---	529	---	1850	---	758	558	---
TOTAL	5939	7222	9440	9715	10760	16715	18073	42426	59230	42970	19596	16418
MEAN	192	241	305	313	384	539	602	1369	1974	1386	632	547
MAX	217	316	359	340	410	630	921	2250	2550	1870	825	679
MIN	154	204	217	280	343	428	494	460	1450	730	547	433
AC-FT	11780	14320	18720	19270	21340	33160	35850	84150	117500	85230	38070	32570
CAL YR 1974 TOTAL	116986											
WTR YR 1975 TOTAL	258508											
MEAN 321												
MAX 421												
MIN 154												
AC-FT 232000												
WTR 512800												

PEAK DISCHARGE (BASE, 1,400 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-19	0100	4.38	2,320	6-8	2130	unknown	2,300
5-29	2230	4.28	2,210	6-18	1545	4.67	2,640

## 08269000 RIO PUEBLO DE TAOS NEAR TAOS, N. MEX.

LOCATION.--Lat 36°26'22", long 105°30'11", in SW 1/4 sec. 36, T.26 N., R.13 E., Taos County, in Taos Pueblo Grant, on right bank 2.3 mi (3.7 km) east of Taos Pueblo, 4.5 mi (7.2 km) northeast of Taos, 5.8 mi (9.3 km) upstream from Rio Lucero, and at mile 15.1 (24.3 km).

DRAINAGE AREA.--66.6 mi<sup>2</sup> (172.5 km<sup>2</sup>).

PERIOD OF RECORD.--January 1911 to December 1916, January 1940 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Nov. 20, 1962. Altitude of gage is 7,380 ft (2,249 m) from topographic map. See WSP 1923 for history of changes prior to Nov. 20, 1962.

AVERAGE DISCHARGE.--30 years (1910-16, 1940-51, 1962-75), 27.8 ft<sup>3</sup>/s (0.787 m<sup>3</sup>/s), 20,140 acre-ft/yr (24.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 163 ft<sup>3</sup>/s (4.62 m<sup>3</sup>/s) May 16 (gage height, 1.57 ft or 0.479 m); minimum, 2.7 ft<sup>3</sup>/s (0.076 m<sup>3</sup>/s) Dec. 21, result of freezeup.

Period of record: Maximum discharge, 970 ft<sup>3</sup>/s (27.5 m<sup>3</sup>/s) May 14, 1941 (gage height, 3.90 ft or 1.189 m, from floodmark, site and datum then in use), from rating curve extended above 290 ft<sup>3</sup>/s (8.21 m<sup>3</sup>/s); minimum, about 0.9 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Jan 9, 1964, result of freezeup.

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

REVISIONS (WATER YEARS).--WSP 1312: 1911-12, 1914. WSP 1732: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.8	5.2	5.0	6.4	6.8	10	42	70	38	14	9.2
2	5.3	7.0	5.6	5.5	6.1	7.4	9.1	42	71	37	13	9.0
3	5.2	7.4	5.9	5.0	6.0	8.4	8.9	47	78	36	13	9.3
4	5.5	7.0	5.1	4.5	5.9	8.0	11	65	92	37	13	20
5	5.5	6.1	5.7	5.0	6.7	8.0	15	84	97	38	12	30
6	6.1	7.0	5.7	5.4	5.5	8.8	20	80	99	34	12	21
7	6.1	7.1	5.5	5.5	5.0	8.1	19	70	99	33	12	17
8	6.6	6.8	5.2	5.2	6.0	8.0	16	66	97	33	14	15
9	6.1	7.8	4.0	5.4	6.5	8.1	14	73	94	37	23	15
10	6.4	7.3	5.0	5.0	6.4	7.9	13	86	95	37	18	14
11	9.3	6.7	5.5	4.5	6.4	8.1	12	108	84	35	15	17
12	8.7	6.6	6.0	4.0	6.0	7.2	11	129	73	34	14	33
13	8.0	7.0	6.0	4.5	6.3	6.8	11	146	69	32	16	26
14	7.4	6.9	5.0	5.0	6.5	6.5	11	141	71	31	18	23
15	6.9	6.6	5.5	5.5	6.5	7.2	12	148	72	30	15	21
16	6.8	6.6	5.5	5.5	6.0	7.0	18	154	75	28	14	20
17	6.3	6.0	5.0	5.5	5.9	7.2	28	146	77	27	13	19
18	6.2	6.8	5.5	5.7	7.2	3.1	139	76	26	13	17	17
19	6.2	6.6	5.5	5.7	7.9	26	143	73	25	12	16	16
20	6.2	5.3	5.0	5.7	6.3	11	26	138	69	23	13	15
21	6.0	5.7	4.5	5.8	6.1	14	36	135	65	22	17	16
22	6.4	6.5	5.1	5.5	6.0	13	48	137	60	24	15	15
23	6.7	6.8	4.9	5.9	5.0	11	64	122	56	24	13	14
24	6.2	5.1	4.5	6.0	5.5	8.5	71	102	52	22	12	13
25	6.2	5.4	4.0	6.0	6.0	10	83	97	50	20	11	13
26	7.0	5.7	4.5	5.7	6.5	11	92	98	49	19	11	12
27	7.6	4.7	5.5	5.7	6.0	8.4	74	106	46	17	11	12
28	7.9	5.3	5.0	5.8	6.4	8.0	57	116	44	17	11	12
29	7.7	5.3	5.5	5.8	---	10	47	99	42	17	11	11
30	8.2	5.0	5.2	6.1	---	11	43	89	40	16	10	11
31	7.2	---	5.0	4.4	---	11	---	76	---	15	9.5	---
TOTAL	208.9	190.9	161.7	167.8	170.9	271.5	940.0	3224	2135	864	418.5	495.5
MEAN	6.74	6.36	5.22	5.41	6.10	8.76	31.3	104	71.2	27.9	13.5	16.5
MAX	9.3	7.8	6.0	6.4	6.9	14	92	154	99	38	23	33
MIN	5.2	4.7	4.0	4.0	5.0	6.5	8.9	42	40	15	9.5	9.0
AC-FT	414	379	321	333	339	539	1860	6390	4230	1710	830	983

CAL YR 1974 TOTAL 4784.3 MEAN 13.1 MAX 70 MIN 4.0 AC-FT 9490  
WTR YR 1975 TOTAL 9248.7 MEAN 25.3 MAX 154 MIN 4.0 AC-FT 18340

PEAK DISCHARGE (BASE, 60 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-25	2300	1.40	100	5-16	0230	1.57	163
5-5	2045	1.36	89	6-5	2015	1.40	100

## 08271000 RIO LUCERO NEAR ARROYO SECO, N. MEX.

LOCATION.--Lat 36°30'30", long 105°31'49", Taos County, in Tract C Taos Pueblo Grant, on right bank 200 ft (61 m) upstream from diversion dam for Tenorio and Indian ditches, 2.2 mi (3.5 km) east of Arroyo Seco, 7.4 mi (11.9 km) northeast of Taos, and at mile 8.1 (13.0 km).

DRAINAGE AREA.--16.6 mi<sup>2</sup> (43.0 km<sup>2</sup>).

PERIOD OF RECORD.--April to December 1910 (discharge measurements and occasional gage heights), January 1911 to September 1915, March to December 1916 (fragmentary), October 1933 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Fragmentary records for October 1915 to February 1916, published in WSP 438, are unreliable and should not be used. Published as "near Taos," 1910-16.

GAGE.--Water-stage recorder. Concrete control since Nov. 21, 1962. Datum of gage is 8,051.44 ft (2,454.079 m) above mean sea level. See WSP 1923 for history of changes prior to Nov. 21, 1962.

AVERAGE DISCHARGE.--36 years (1910-15, 1933-51, 1962-75), 21.9 ft<sup>3</sup>/s (0.620 m<sup>3</sup>/s), 15,870 acre-ft/yr (19.6 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 119 ft<sup>3</sup>/s (3.37 m<sup>3</sup>/s) June 7 (gage height, 1.71 ft or 0.521 m); minimum, 2.9 ft<sup>3</sup>/s (0.082 m<sup>3</sup>/s) Dec. 16, result of freezeup.

Period of record: Maximum discharge, 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s), revised, May 13, 1941 (gage height, 3.12 ft or 0.951 m, datum then in use); minimum discharge, about 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) Nov. 2, 1951, result of freezeup.

REVISIONS.--The maximum discharge for water year 1973 has been revised to 256 ft<sup>3</sup>/s (7.25 m<sup>3</sup>/s) June 14, 1973 (gage height, 2.09 ft or 0.637 m) superseding figure published in WRD N. Mex. Part 1, 1973.

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

REVISIONS (WATER YEARS).--WSP 1512: 1912, 1916, 1949. WSP 1732: Drainage area. See also PERIOD OF RECORD. Revised figures of discharge, in cubic feet per second, for water year 1973, superseding those published in WRD N. Mex. Part 1, 1973, are given herewith:

June 7, 1973...	116	June 13, 1973...	194	June 19, 1973...	150	June 25, 1973...	119
8.....	130	14.....	228	20.....	136	26.....	133
9.....	154	15.....	201	21.....	141	27.....	154
10.....	157	16.....	187	22.....	136	28.....	173
11.....	154	17.....	166	23.....	127	29.....	170
12.....	198	18.....	157	24.....	119	30.....	157

Month	Total	Mean	Maximum	Minimum	Ac-ft
June 1973.....	4,368	146	228	86	8,660
WTR YR 1973.....	11,161.8	30.6	228	4.4	22,140
CAL YR 1973.....	11,166.0	30.6	228	4.4	22,150

DAY	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	6.7	5.3	5.1	5.6	5.0	5.1	15	42	56	18	13
2	7.2	7.0	5.5	5.1	5.5	5.2	5.0	15	47	54	18	13
3	6.9	6.9	5.6	5.0	5.4	5.4	5.2	17	61	52	17	13
4	6.8	6.7	5.4	5.1	5.4	5.4	6.2	26	76	53	17	21
5	6.9	6.1	5.4	5.0	5.4	5.4	8.2	33	87	50	16	27
6	7.5	6.5	5.4	5.1	5.2	5.4	10	29	99	47	16	23
7	7.9	6.5	5.4	5.1	5.3	5.4	9.9	25	104	46	15	22
8	7.2	6.2	5.3	5.0	5.3	5.4	8.9	24	90	46	17	21
9	6.9	6.7	6.1	5.1	5.3	5.4	8.1	28	87	48	20	20
10	8.0	6.6	6.5	5.1	5.0	5.4	7.4	34	88	48	19	19
11	8.2	6.4	6.8	5.0	4.9	5.4	6.9	46	73	46	17	24
12	7.8	6.6	7.0	4.9	4.9	5.2	6.6	59	62	46	17	33
13	7.4	6.6	7.0	5.0	4.9	5.3	6.4	59	65	44	19	31
14	7.2	6.2	6.4	5.1	4.9	5.2	6.3	57	78	42	21	29
15	6.9	6.2	5.6	5.1	5.0	5.6	7.1	67	83	40	18	27
16	6.8	6.6	5.9	5.1	5.0	5.4	9.8	71	84	39	18	26
17	6.7	6.6	6.6	5.1	4.9	5.6	13	70	84	37	17	24
18	6.6	6.3	6.8	5.2	4.9	5.5	13	65	86	35	16	23
19	6.5	6.3	6.8	5.4	4.8	6.0	12	66	85	34	16	22
20	6.5	5.6	6.5	5.3	4.8	7.7	13	62	83	32	17	21
21	6.5	6.4	6.2	5.3	4.8	8.7	17	63	85	30	21	20
22	6.9	6.5	6.0	5.3	4.8	7.8	24	70	83	29	18	19
23	6.7	6.1	5.8	5.3	4.5	7.0	30	59	76	28	17	18
24	6.5	5.4	5.6	5.3	5.0	6.3	34	47	74	26	16	17
25	6.6	5.7	5.5	5.3	5.0	5.9	40	46	76	24	16	17
26	7.3	5.4	5.8	5.6	5.0	5.6	41	57	72	23	15	17
27	7.9	5.4	5.8	5.6	5.0	5.6	32	72	70	22	15	16
28	7.4	6.0	5.0	5.6	5.0	5.5	24	74	66	21	15	15
29	7.5	5.6	5.2	5.6	---	5.1	19	65	61	21	14	15
30	6.8	5.0	5.3	5.7	---	4.8	17	50	58	20	14	15
31	6.6	---	5.1	5.7	---	5.0	---	44	---	19	13	---
TOTAL	220.0	186.8	182.6	162.2	141.5	177.6	446.1	1515	2285	1158	523	621
MEAN	7.10	6.23	5.89	5.23	5.05	5.73	14.9	48.9	76.2	37.4	16.9	20.7
MAX	8.2	7.0	7.0	5.7	5.6	8.7	41	74	104	56	21	33
MIN	6.5	5.0	5.0	4.9	4.5	4.8	5.0	15	42	19	13	13
AC-FT	436	371	362	322	281	352	885	3010	4530	2300	1040	1230
CAL YR 1974 TOTAL	4194.3											
WTR YR 1975 TOTAL	7618.8											
MEAN	11.5											
MAX	42											
MIN	4.0											
AC-FT	8320											
MEAN	20.9											
MAX	104											
MIN	4.5											
AC-FT	15110											

PEAK DISCHARGE (BASE, 70 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-15	1915	1.53	78	6-7	0115	1.71	119
5-21	2400	1.51	74	6-15	1830	1.59	90
5-27	2030	1.55	82				

## 08275000 RIO FERNANDO DE TAOS NEAR TAOS, N. MEX.

LOCATION.--Lat 36°22'32", long 105°32'55", in W<sub>2</sub>NW<sub>4</sub> sec.27, T.25 N., R.13 E., Taos County, in Carson National Forest, on right bank 175 ft (53 m) upstream from Acequia Madre del Norte del Canon, 2.5 mi (4.0 km) southeast of Taos, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--71.7 mi<sup>2</sup> (185.7 km<sup>2</sup>).

PERIOD OF RECORD.--April to September 1910 (gage heights and discharge measurements only), October 1910 to June 1911 (discharge measurements only), October 1912 to September 1917, October 1927 to December 1928, October to November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since Dec. 13, 1962. Altitude of gage is 7,140 ft (2,176 m) from topographic map. See WSP 1923 for history of changes prior to Dec. 13, 1962.

AVERAGE DISCHARGE.--19 years (1912-17, 1927-28, 1962-75), 6.27 ft<sup>3</sup>/s (0.178 m<sup>3</sup>/s), 4,540 acre-ft/yr (5.60 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 58 ft<sup>3</sup>/s (1.64 m<sup>3</sup>/s) Aug. 8 (gage height, 1.43 ft or 0.436 m); minimum, 0.24 ft<sup>3</sup>/s (0.007 m<sup>3</sup>/s) Oct. 2, 3, 4.

1962-75: Maximum discharge, 219 ft<sup>3</sup>/s (6.20 m<sup>3</sup>/s) May 13, 1973 (gage height, 2.38 ft or 0.725 m); minimum, 0.02 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Jan. 14-18, 1967, Sept. 15, 16-17, 18-19, 1972.

A flood of undetermined magnitude occurred July 21, 1921.

REMARKS.--Records good except those for January, which are fair. A few very small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1512: 1914-15. WSP 1923: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	1.4	1.0	.73	1.2	2.3	4.3	26	17	3.5	1.8	1.1
2	.29	1.3	1.3	.76	1.2	2.6	3.6	26	15	3.5	1.6	.92
3	.26	1.4	1.4	.70	1.1	2.8	3.5	27	14	3.6	1.5	.93
4	.26	1.6	1.4	.60	1.2	2.9	4.1	32	12	3.7	1.4	3.4
5	.28	1.5	1.4	.65	1.4	3.2	4.9	36	11	3.8	1.4	8.2
6	.35	1.4	1.4	.70	1.2	3.3	5.7	36	10	3.8	1.5	5.4
7	.51	1.4	1.4	.75	1.3	3.1	6.8	36	9.8	3.5	1.3	3.9
8	.55	1.4	1.3	.65	1.5	3.0	5.8	35	9.8	3.7	3.0	3.2
9	.49	1.5	.91	.57	1.4	3.4	6.8	35	9.6	4.5	3.8	2.9
10	.57	1.4	1.2	.57	1.5	3.0	6.7	36	13	5.1	3.0	2.7
11	.85	1.4	1.0	.55	1.5	3.2	6.2	38	13	5.1	2.4	3.0
12	.91	1.4	1.2	.50	1.5	3.0	5.8	43	11	4.6	2.9	4.9
13	1.3	1.4	1.2	.70	1.7	3.0	5.6	48	9.2	4.3	3.0	4.5
14	1.1	1.4	1.0	.80	1.7	2.9	5.4	49	8.3	4.8	2.7	3.8
15	1.2	1.4	1.1	.85	1.8	3.1	6.4	49	7.9	5.1	2.3	3.2
16	.91	1.4	1.0	.90	1.8	3.0	10	49	7.4	4.4	1.9	2.8
17	.91	1.4	.99	.95	1.8	3.0	21	47	7.3	4.5	1.8	2.4
18	.88	1.5	.94	1.0	1.9	2.8	28	43	6.8	4.0	1.6	2.2
19	.82	1.4	.87	1.0	1.6	3.0	19	39	6.5	3.6	1.5	1.9
20	.82	1.3	.79	1.0	1.8	3.5	18	38	6.3	3.4	1.7	1.8
21	.86	1.4	.82	1.0	1.9	3.9	29	35	6.1	3.3	2.5	2.1
22	1.0	1.6	.73	1.0	1.6	4.0	39	33	5.8	3.1	2.5	2.1
23	1.2	1.7	.59	1.1	1.6	3.9	39	31	5.5	3.4	2.0	1.9
24	1.2	1.5	.52	1.1	1.7	3.1	36	28	5.2	3.7	1.7	1.8
25	1.2	1.4	.59	1.1	2.0	3.8	37	25	5.1	3.4	1.5	1.8
26	1.2	1.4	.76	1.1	2.1	4.4	38	23	4.5	3.1	1.4	1.5
27	1.5	1.3	.73	1.1	2.0	3.9	35	22	4.4	2.7	1.4	1.5
28	1.5	1.3	.70	1.1	2.2	3.4	31	21	4.1	2.5	1.6	1.5
29	1.5	1.2	.81	1.1	---	3.9	30	20	3.9	2.4	1.5	1.5
30	1.8	.97	.74	1.1	---	3.6	27	20	3.6	2.4	1.3	1.4
31	1.6	---	.73	1.1	---	4.0	---	18	---	2.1	1.2	---
TOTAL	28.11	42.07	30.52	26.83	45.2	102.0	518.6	1044	253.3	114.6	60.7	80.25
MEAN	.91	1.40	.98	.87	1.61	3.29	17.3	33.7	8.44	3.70	1.96	2.68
MAX	1.8	1.7	1.4	1.1	2.2	4.4	39	49	17	5.1	3.8	4.2
MIN	.26	.97	.52	.50	1.1	2.3	3.5	18	3.6	2.1	1.2	.92
AC-FT	56	83	61	53	90	202	1030	2070	502	227	120	159

CAL YR 1974 TOTAL 889.41 MEAN 2.44 MAX 9.7 MIN .17 AC-FT 1760  
WTR YR 1975 TOTAL 2346.18 MEAN 6.43 MAX 49 MIN .26 AC-FT 4650

PEAK DISCHARGE (BASE, 25 ft<sup>3</sup>/s)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-17	2315	1.31	44	5-14	1200	1.57	51
4-22	2330	1.43	56	8- 8	1400	1.43	58

## 08275300 RIO PUEBLO DE TAOS NEAR RANCHITO, N. MEX.

LOCATION.—Lat 36°23'38", long 105°37'23", Taos County, in Gijosa Grant, on left bank 1,100 ft (340 m) downstream from Rio Fernando de Taos, 1.6 mi (2.6 km) southwest of Ranchito, and at mile 7.9 (12.7 km).

DRAINAGE AREA.—199 mi<sup>2</sup> (515 km<sup>2</sup>).

PERIOD OF RECORD.—March 1957 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 6,747 ft (2,056 m) from topographic map.

AVERAGE DISCHARGE.—18 years, 27.3 ft<sup>3</sup>/s (0.773 m<sup>3</sup>/s), 19,780 acre-ft/yr (24.4 km<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 190 ft<sup>3</sup>/s (5.38 m<sup>3</sup>/s) May 13 (gage height, 3.08 ft or 0.939 m); maximum gage height, 4.45 ft (1.356 m) Jan. 22 (ice jam); minimum discharge, 3.4 ft<sup>3</sup>/s (0.096 m<sup>3</sup>/s) Aug. 29, 30.  
Period of record: Maximum discharge, 702 ft<sup>3</sup>/s (19.9 m<sup>3</sup>/s) May 21, 1973 (gage height, 4.24 ft or 1.292 m); maximum gage height, 4.45 ft (1.356 m) Jan. 22, 1975 (ice jam); minimum discharge, 0.21 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s) Aug. 24, 1972.

REMARKS.—Records fair. Diversions for irrigation of about 9,000 acres (36.4 km<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	13	12	12	20	20	19	45	65	23	7.7	5.4
2	5.3	12	13	11	19	21	18	42	62	23	6.3	5.4
3	5.2	13	13	10	19	20	17	39	63	24	5.1	6.0
4	5.1	16	13	9.5	18	18	18	49	66	29	5.2	19
5	4.8	15	14	10	16	18	19	59	68	27	5.3	31
6	4.4	14	14	11	13	20	22	75	82	25	5.4	21
7	5.9	13	13	12	15	18	23	71	88	21	6.0	17
8	5.0	13	13	12	16	17	22	64	86	18	7.4	16
9	4.8	15	11	14	17	31	21	68	83	20	11	15
10	6.4	14	12	13	10	21	20	73	98	22	7.4	13
11	7.9	14	14	11	17	22	20	98	88	27	6.8	18
12	6.8	13	15	8.0	18	21	19	139	75	28	6.1	37
13	6.8	13	16	10	17	19	20	165	67	26	8.6	28
14	6.5	13	15	11	17	17	20	142	67	27	9.7	24
15	6.8	13	15	14	16	17	19	147	70	27	7.5	22
16	7.9	13	16	17	16	16	18	173	73	24	7.5	20
17	8.2	13	15	19	16	16	26	166	75	24	5.8	18
18	7.9	13	14	21	15	16	36	150	71	23	5.6	17
19	7.9	12	11	20	15	16	33	143	68	19	5.9	15
20	7.9	12	10	19	16	17	30	133	62	18	7.5	14
21	7.6	12	10	18	16	19	35	129	53	18	12	14
22	7.9	12	12	16	15	19	51	133	52	17	12	14
23	7.9	12	11	14	14	18	66	125	50	16	9.0	13
24	7.9	12	10	15	17	17	69	103	47	15	6.6	11
25	7.8	12	9.0	17	17	18	82	85	44	14	8.5	9.8
26	7.8	12	10	19	17	18	112	84	40	15	5.6	7.9
27	10	12	12	20	18	18	97	88	38	12	5.5	7.9
28	10	12	14	21	20	17	65	94	36	12	5.6	8.8
29	12	12	13	19	---	19	51	92	31	11	4.8	10
30	18	11	12	22	---	19	47	83	24	9.5	4.5	11
31	16	---	11	25	---	19	---	71	---	7.6	5.9	---
TOTAL	239.6	386	393.0	478.5	468	582	1113	3138	1892	621.1	214.4	469.1
MEAN	7.73	12.9	12.7	15.2	16.7	18.8	37.1	101	63.1	20.0	6.93	15.6
MAX	18	16	16	25	20	31	112	173	98	24	12	17
MIN	4.4	11	9.0	8.0	13	16	17	39	24	7.6	4.5	5.3
AC-FT	475	766	780	933	928	1150	2210	6220	3750	1230	420	930

CAL YR 1974 TOTAL 4754.2 MEAN 13.0 MAX 56 MIN 2.0 AC-FT 9430  
WTR YR 1975 TOTAL 9987.1 MEAN 27.4 MAX 173 MIN 4.4 AC-FT 19810

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0545	2.86	136	6-10	0630	2.63	106
5-13	0730	3.08	190				

## 08275500 RIO GRANDE DEL RANCHO NEAR TALPA, N. MEX.

LOCATION.—Lat 36°17'52", long 105°34'55", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on left bank 1.4 mi (2.3 km) downstream from Rito de la Olla (locally known as Pot Creek), 3.2 mi (5.1 km) south of Talpa, 4.3 mi (6.9 km) upstream from Rio Chiquito and at mile 6.9 (11.1 km).

DRAINAGE AREA.—83 mi<sup>2</sup> (210 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—October 1952 to current year. Prior to October 1955, published as Rio Grande del Rancho near Ranchos de Taos, and October 1955 to September 1960 as Rio Grande de Ranchos near Talpa.

GAGE.—Water-stage recorder. Altitude of gage is 7,238 ft (2,206 m) from topographic map. Prior to Nov. 11, 1952, nonrecording gage at site 1,035 ft (320 m) downstream at lower datum. Nov. 11, 1952 to Nov. 5, 1968, water-stage recorder at site 1,000 ft (300 m) downstream at lower datum.

AVERAGE DISCHARGE.—23 years, 19.4 ft<sup>3</sup>/s (0.549 m<sup>3</sup>/s), 14,060 acre-ft/yr (17.3 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 173 ft<sup>3</sup>/s (4.90 m<sup>3</sup>/s) May 16 (gage height, 2.29 ft or 0.698 m); minimum, 2.5 ft<sup>3</sup>/s (0.071 m<sup>3</sup>/s) Dec. 9.

Period of record: Maximum discharge, 497 ft<sup>3</sup>/s (14.1 m<sup>3</sup>/s) May 21, 1973 (gage height, 3.87 ft or 1.180 m); maximum gage height, 4.01 ft (1.222 m) Sept. 10, 1964, site and datum then in use; minimum discharge, 0.2 ft<sup>3</sup>/s (0.01 m<sup>3</sup>/s) Jan. 5, 1955, result of freezeup.

REMARKS.—Records good. Minor diversions for irrigation above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.8	4.3	4.0	4.4	6.5	8.3	35	22	21	7.4	5.6
2	4.1	5.7	5.1	4.5	3.8	6.8	7.6	37	78	21	7.0	5.7
3	3.7	5.8	5.2	4.0	4.2	6.8	7.1	42	83	20	6.7	6.2
4	3.7	5.8	4.8	4.0	4.7	6.4	4.7	51	93	19	6.6	16
5	3.7	5.5	4.9	4.5	4.7	6.8	10	61	99	18	6.4	25
6	4.0	5.5	4.9	4.5	3.7	7.3	12	60	100	17	6.1	18
7	5.1	5.6	4.9	4.7	4.6	7.3	13	56	99	16	5.9	15
8	4.8	5.5	4.8	4.0	5.3	7.3	11	56	92	15	7.1	14
9	4.6	4.1	3.5	5.1	5.1	7.7	11	57	89	19	12	14
10	5.4	6.2	4.3	5.0	5.2	7.4	10	61	91	17	13	14
11	6.6	5.9	4.9	4.0	4.9	7.2	9.7	78	78	17	9.9	15
12	6.4	5.7	5.1	3.6	4.4	6.8	9.5	113	68	16	11	26
13	6.7	5.7	4.9	4.5	5.2	6.8	9.4	142	62	15	11	25
14	6.2	5.7	4.6	4.8	5.5	6.6	9.2	146	60	15	11	25
15	5.8	5.6	4.7	4.5	5.4	6.8	11	155	60	15	9.0	24
16	5.4	5.4	4.7	4.5	5.4	6.4	14	167	60	15	6.2	22
17	5.2	5.3	5.0	4.5	5.2	6.8	18	162	59	15	7.8	20
18	5.2	5.3	4.9	4.5	5.3	6.1	21	154	57	14	7.1	18
19	5.1	5.4	5.0	4.5	5.4	6.9	19	160	53	14	7.1	17
20	5.2	5.1	4.5	4.5	5.1	7.6	19	164	48	14	7.5	15
21	5.2	5.1	4.9	4.3	5.9	8.4	22	164	44	12	19	15
22	5.4	5.2	4.7	4.0	5.2	8.3	28	152	40	11	9.4	15
23	5.4	5.2	4.3	3.5	4.9	7.7	35	144	37	11	4.0	14
24	5.3	5.1	3.7	3.9	5.3	6.5	40	123	34	11	7.2	13
25	5.2	5.0	4.1	4.0	5.8	7.6	40	115	31	10	6.8	12
26	5.4	4.9	5.3	4.2	5.9	8.6	56	120	29	9.0	6.5	12
27	5.6	4.5	5.0	4.0	5.7	8.1	59	126	26	9.2	6.3	11
28	5.9	4.7	5.0	4.4	6.0	7.1	47	132	24	8.4	6.4	10
29	5.8	4.6	4.7	4.0	---	7.0	37	124	23	8.4	6.5	9.8
30	6.5	3.8	4.5	4.5	---	6.5	34	103	21	9.2	6.1	9.5
31	6.1	---	4.5	5.0	---	7.5	---	93	---	7.8	5.8	---
TOTAL	162.5	160.7	145.7	135.0	141.2	221.8	630.5	3366	1817	443.4	246.6	401.8
MEAN	5.24	5.36	4.70	4.35	5.44	7.15	21.0	109	60.6	14.3	7.95	15.4
MAX	6.7	6.2	5.3	5.1	6.0	8.6	56	167	100	21	13	26
MIN	3.7	3.8	3.5	3.5	3.7	6.1	7.1	35	21	7.4	5.8	5.6
AC-FT	122	119	289	268	280	440	1250	6640	3600	680	490	916

CAL YR 1974 TOTAL 4095.4 MEAN 11.2 MAX 68 MIN 3.5 AC-FT 1120  
WTR YR 1975 TOTAL 7932.8 MEAN 21.7 MAX 167 MIN 3.5 AC-FT 15730

PEAK DISCHARGE (BASE, 60 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0430	1.50	60	5-28	0300	2.05	131
5-16	0330	2.29	173				

## 08275600 RIO CHIQUITO NEAR TALPA, N. MEX.

LOCATION.--Lat 36°19'55", long 105°34'42", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on right bank 1 mi (2 km) southeast of Talpa, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--37.0 mi<sup>2</sup> (95.8 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,223 ft (2,202 m) from topographic map.

AVERAGE DISCHARGE.--18 years, 7.94 ft<sup>3</sup>/s (0.225 m<sup>3</sup>/s), 5,750 acre-ft/yr (7.09 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 259 ft<sup>3</sup>/s (7.33 m<sup>3</sup>/s) Aug. 8 (gage height, 2.70 ft or 0.823 m); minimum, 0.81 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/s) Dec. 9, result of freezeup.

Period of record: Maximum discharge, 259 ft<sup>3</sup>/s (7.33 m<sup>3</sup>/s) Aug. 8, 1975 (gage height, 2.70 ft or 0.823 m); maximum gage height, 3.50 ft (1.067 m) May 20, 1973 (backwater from debris); minimum discharge, 0.16 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s) Jan 31, 1972, result of freezeup.

REMARKS.--Records good. No diversions above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.9	1.8	1.3	2.5	2.6	3.4	20	27	9.6	5.0	2.8
2	1.9	2.9	2.1	1.7	2.4	2.7	3.6	21	25	9.8	4.8	2.8
3	1.9	3.0	2.2	1.6	2.3	2.8	3.7	24	25	9.5	4.5	2.9
4	1.9	2.8	2.2	1.5	2.6	2.8	4.3	30	25	9.7	4.5	8.1
5	2.0	2.8	2.2	1.7	2.5	3.1	5.0	35	25	9.7	4.3	14
6	2.2	2.9	2.3	1.7	1.7	3.3	6.0	35	24	9.2	4.3	9.6
7	2.7	2.8	2.3	1.7	2.3	3.1	6.7	32	23	8.7	4.1	7.3
8	2.7	2.7	2.3	1.8	2.8	3.1	5.8	31	23	9.9	9.7	6.4
9	2.5	3.1	1.3	1.9	2.6	3.3	6.0	34	23	11	7.1	5.9
10	2.7	3.1	1.8	1.7	2.6	3.2	5.7	37	24	10	6.9	5.8
11	3.6	2.9	2.2	1.5	2.6	3.2	5.2	46	23	10	6.1	5.9
12	3.7	2.8	2.2	1.3	2.4	3.1	4.9	54	22	9.4	7.4	11
13	4.0	2.8	2.2	1.7	2.7	3.1	4.8	49	20	8.7	6.6	10
14	3.6	2.9	2.1	2.2	2.6	2.9	4.7	57	19	8.3	6.3	9.3
15	3.3	2.8	2.2	2.1	2.6	3.2	5.0	59	18	9.0	5.5	8.0
16	3.0	2.8	2.0	2.1	2.6	3.1	6.4	56	17	8.0	5.0	7.1
17	2.9	2.6	2.0	2.1	2.6	2.9	9.0	55	16	8.0	4.8	6.5
18	2.7	2.8	2.0	2.1	2.6	2.6	11	53	16	8.7	4.3	6.1
19	2.6	2.8	2.0	2.1	2.3	2.9	10	50	15	7.7	3.9	5.7
20	2.6	2.4	1.8	2.1	2.6	3.2	9.9	48	14	7.1	4.1	5.5
21	2.5	2.5	1.9	2.1	2.6	3.6	12	46	14	6.9	5.0	5.6
22	2.6	2.6	1.5	2.0	2.4	3.7	15	45	13	6.6	4.8	5.5
23	2.6	2.6	1.4	1.7	2.3	3.5	19	43	12	6.9	4.1	5.3
24	2.6	2.4	1.5	1.9	2.5	3.3	22	37	12	6.9	3.9	5.0
25	2.5	2.4	1.5	2.0	2.7	3.7	27	35	11	6.6	3.7	5.1
26	2.4	2.4	2.2	2.2	2.6	3.9	30	34	11	6.1	3.5	5.0
27	2.7	2.1	1.9	2.0	2.4	3.3	28	35	11	5.8	3.3	4.9
28	2.9	2.2	1.9	2.2	2.5	3.3	22	35	10	5.5	3.5	4.7
29	2.9	1.9	1.7	2.0	---	3.4	20	34	9.8	5.5	3.3	4.7
30	3.4	1.5	1.6	2.5	---	3.4	19	33	9.5	5.8	3.1	4.6
31	3.1	---	1.5	2.6	---	3.4	---	31	---	5.2	2.9	---
TOTAL	84.7	79.2	59.8	50.1	64.9	98.7	335.4	1234	537.3	249.8	150.3	191.1
MEAN	2.73	2.64	1.93	1.91	2.50	3.18	11.2	39.8	17.9	8.06	4.85	6.37
MAX	4.0	3.1	2.3	2.6	2.8	3.9	30	59	27	11	9.7	14
MIN	1.9	1.5	1.3	1.3	1.7	2.6	3.6	20	9.5	5.2	2.9	2.8
AC-FT	168	157	119	117	139	196	666	2450	1070	495	298	379

CAL YR 1974 TOTAL 1555.6 MEAN 4.26 MAX 16 MIN 1.3 AC-FT 3090  
WTR YR 1975 TOTAL 3149.5 MEAN 4.63 MAX 59 MIN 1.3 AC-FT 6250

PEAK DISCHARGE (BASE, 25 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0300	1.91	32	5-15	0045	2.13	63
5-6	0145	1.97	39	8-8	1415	2.70	259



## 08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, N. MEX.

LOCATION.--Lat 36°22'39", long 105°40'05", Taos County, in Gijosa Grant, on left bank 1.9 mi (3.1 km) southwest of Los Cordovas, 2.5 mi (4.0 km) downstream from Rio Grande del Rancho, and at mile 5.1 (8.2 km).

DRAINAGE AREA.--380 mi<sup>2</sup> (984 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Concrete control since July 16, 1963. Datum of gage is 6,652 ft (2,028 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 47.3 ft<sup>3</sup>/s (1.340 m<sup>3</sup>/s), 34,270 acre-ft/yr (42.3 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 360 ft<sup>3</sup>/s (10.2 m<sup>3</sup>/s) Sept. 11 (gage height, 3.27 ft or 0.997 m); maximum gage height, 3.42 ft (1.042 m) Jan. 24 (ice jam); minimum discharge, 5.8 ft<sup>3</sup>/s (0.16 m<sup>3</sup>/s) Dec. 25, result of freezeup.  
Period of record: Maximum discharge, 2,380 ft<sup>3</sup>/s (67.4 m<sup>3</sup>/s) Aug. 24, 1957 (gage height, 5.80 ft or 1.768 m), from rating curve extended above 900 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s); minimum, 1.9 ft<sup>3</sup>/s (0.054 m<sup>3</sup>/s) July 31, Aug. 1, 1972.

REMARKS.--Records good except those for December and January, which are poor. Diversions for irrigation of about 12,000 acres (48.6 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1732: 1957(M). WSP 1923: 1957(P), 1958.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	21	20	18	36	41	33	69	115	26	12	12
2	8.9	19	21	20	31	43	31	66	107	25	10	13
3	8.9	21	23	18	27	41	32	65	109	27	7.9	13
4	8.9	24	23	17	28	36	32	77	115	32	8.3	31
5	8.8	22	26	18	28	36	33	103	116	30	8.8	47
6	8.6	21	27	20	25	43	36	117	133	28	8.8	30
7	12	21	25	22	28	38	45	117	138	25	8.4	26
8	10	20	24	23	32	35	41	105	134	23	12	24
9	10	23	20	25	33	63	42	110	126	27	17	24
10	15	21	20	23	34	44	40	118	144	28	13	23
11	15	21	21	20	31	44	40	161	128	35	12	35
12	12	20	22	15	28	43	39	250	116	37	11	49
13	12	20	22	18	30	40	40	280	104	31	14	36
14	12	20	20	20	31	35	40	274	99	32	15	34
15	12	20	21	25	28	35	37	299	100	33	13	33
16	13	20	22	30	28	34	34	330	103	30	13	31
17	14	20	22	35	28	28	48	318	102	29	12	29
18	14	20	22	40	27	27	71	292	95	28	11	28
19	14	20	22	38	26	27	60	281	90	24	11	27
20	14	19	20	35	27	28	50	273	82	22	13	26
21	14	20	19	33	27	31	55	264	70	22	20	26
22	14	20	23	30	23	30	76	263	65	23	19	25
23	14	20	23	25	23	29	98	245	58	21	16	25
24	14	20	18	28	26	26	110	189	52	20	13	23
25	14	21	15	30	32	29	122	157	50	19	14	23
26	14	21	20	35	35	31	151	151	45	19	13	22
27	18	20	22	38	36	32	137	164	40	17	13	22
28	18	20	23	40	40	29	106	176	39	16	13	22
29	19	21	21	34	---	32	86	176	34	15	12	21
30	27	20	20	44	---	32	72	161	28	15	11	21
31	23	---	19	48	---	33	---	132	---	12	13	---
TOTAL	421.2	616	667	865	828	1095	1837	5783	2737	771	389.2	801
MEAN	13.6	20.5	21.5	27.9	29.6	35.3	61.2	187	91.2	24.9	12.5	26.7
MAX	27	24	27	48	40	63	151	330	144	37	20	49
MIN	8.6	19	15	15	23	26	31	65	28	12	7.9	12
AC-FT	835	1220	1320	1720	1640	2170	3640	11470	5430	1530	770	1590

CAL YR 1974 TOTAL 8197.3 MEAN 22.5 MAX 69 MIN 4.5 AC-FT 16260  
WTR YR 1975 TOTAL 16809.4 MEAN 46.1 MAX 330 MIN 7.9 AC-FT 33340

PEAK DISCHARGE (BASE, 230 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-16	0445	3.29	355	9-11	2215	3.27	360

## 08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, N. MEX.

LOCATION.--Lat 36°19'12", long 105°45'14", in NW¼NE¼ sec.15, T.24 N., R.11 E., Taos County, on left bank 1.7 mi (2.7 km) downstream from bridge on State Highway 96, 2.0 mi (3.2 km) downstream from Rio Pueblo de Taos, 11.8 mi (19.0 km) southwest of Taos, and at mile 1,657.7 (2,667.2 km).

DRAINAGE AREA.--9,730 mi<sup>2</sup> (25,200 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1930 monthly discharge only, published in WSP 1312. Published as "at Taos Junction Bridge, near Taos" prior to 1934.

GAGE.--Water-stage recorder. Datum of gage is 6,050.3 ft (1,844.1 m) above mean sea level. Prior to Apr. 14, 1934, at bridge 1.7 mi (2.7 km) upstream at different datum.

AVERAGE DISCHARGE.--50 years, 724 ft<sup>3</sup>/s (20.50 m<sup>3</sup>/s); 524,500 acre-ft/yr (647 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,950 ft<sup>3</sup>/s (83.5 m<sup>3</sup>/s) June 18 (gage height, 6.22 ft or 1.896 m); minimum, 175 ft<sup>3</sup>/s (4.96 m<sup>3</sup>/s) part of each day Oct. 1-6.

Period of record: Maximum discharge, 9,730 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) June 7, 1948 (gage height, 9.18 ft or 2.798 m), and June 22, 1949 (gage height, 9.23 ft or 2.813 m); minimum, 155 ft<sup>3</sup>/s (4.39 m<sup>3</sup>/s) Sept. 21, 1956.

Maximum flood stage at least 1888, about 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s) June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s) occurred June 9, 1905, May 28, 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

REMARKS.--Records geom. conversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 30,000 acres (121 km<sup>2</sup>) in New Mexico. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 788: 1934(M). WSP 828: Drainage area. WSP 1392: 1931-32, 1935, 1937, 1945, 1950.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	245	264	340	459	533	543	648	1880	1510	812	578
2	180	240	340	340	425	526	541	570	1670	1710	871	559
3	175	245	370	350	424	538	535	535	1820	1780	736	540
4	180	267	352	355	444	530	528	570	1900	1930	672	579
5	180	284	357	355	449	503	519	731	2060	1940	678	639
6	180	275	362	360	431	514	530	843	2190	1830	684	596
7	184	270	408	360	427	578	554	892	2370	1640	675	601
8	184	270	411	365	441	595	586	715	2520	1710	663	612
9	188	275	370	372	448	629	641	723	2420	1650	638	596
10	206	285	375	366	450	646	676	739	2000	1580	642	609
11	211	290	353	360	448	657	656	811	1840	1740	626	602
12	225	285	370	360	438	672	636	1000	2350	1930	709	665
13	240	280	370	360	446	645	610	1220	2650	1980	699	626
14	240	275	370	360	441	606	590	1510	2660	2040	704	637
15	240	280	364	370	457	611	572	1920	2630	2000	719	681
16	245	275	370	380	458	564	555	2310	2780	1940	740	715
17	240	270	366	390	458	551	556	2600	2880	1760	698	722
18	245	270	367	400	462	548	590	2710	2870	1530	671	700
19	250	270	362	400	455	547	625	2820	2820	1480	637	648
20	245	275	358	400	457	549	657	2790	2480	1420	627	609
21	235	273	358	395	464	556	666	2620	2120	1180	641	586
22	235	266	364	390	493	572	647	2600	1980	1070	616	562
23	235	288	364	389	476	598	681	2500	1810	1170	586	543
24	235	298	358	383	380	625	745	2380	1860	1220	574	534
25	230	292	342	386	476	596	812	2070	2120	1040	597	528
26	230	318	340	388	441	569	867	1720	2180	965	604	511
27	240	342	330	391	475	581	934	1800	2130	965	637	501
28	240	361	325	380	515	589	1050	2230	2080	957	650	482
29	245	329	348	382	---	566	918	2470	1840	830	630	469
30	260	289	334	401	---	564	771	2420	1550	760	604	467
31	255	---	330	433	---	565	---	2180	---	793	590	---
TOTAL	6853	4482	11072	11661	12606	17943	19791	51647	66460	45990	28630	17697
MFAN	221	283	357	376	450	579	660	1666	2215	1484	665	590
MAX	260	361	411	433	515	672	1050	2820	2880	2040	871	722
MIN	175	240	264	340	380	503	519	535	1550	760	574	467
AC-FT	13590	16820	21960	23130	25000	35590	39266	102400	131800	91220	40920	35100
CAL YR 1974 TOTAL	133150		MEAN 365	MAX 980	MIN 172	AC-FT 264100						
WTR YR 1975 TOTAL	290832		MEAN 797	MAX 2880	MIN 175	AC-FT 576900						

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-19	0600	6.20	2,900	6-9	0130	6.00	2,590
5-30	0215	6.01	2,600	6-18	2000	6.22	2,950

## 08279000 EMBUDO CREEK AT DIXON, N. MEX.

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼SE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, on right bank 750 ft (230 m) upstream from U.S. Highway 64, 0.5 mi (0.8 km) upstream from mouth, 0.5 mi (0.8 km) east of Embudo Post Office, and 1.7 mi (2.7 km) northwest of Dixon.

DRAINAGE AREA.--305 mi<sup>2</sup> (790 km<sup>2</sup>).

PERIOD OF RECORD.--October 1923 to February 1926, October 1926 to September 1955, annual maximum, water years 1956-62, September 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 6-25, 1932, published in WSP 733, and maximum discharges for water years 1931-33, 1935, 1937-38, 1941, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,858.60 ft (1,785.701 m) above mean sea level. Prior to Nov. 30, 1938, at site about 1 mi (2 km) upstream at different datums. Nov. 30, 1938 to Aug. 1, 1941, at site about 0.9 mi (1.4 km) upstream at datum about 59.9 ft (18.26 m) higher. Aug. 2, 1941 to Sept. 1, 1971 at site 750 ft (230 m) downstream at datum 9.10 ft (2.774 m) lower. April 1956 to Sept. 21, 1962, crest-stage gage.

AVERAGE DISCHARGE.--44 years (1923-25, 1926-55, 1962-75), 77.1 ft<sup>3</sup>/s (2.183 m<sup>3</sup>/s), 55,860 acre-ft/yr (68.9 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,830 ft<sup>3</sup>/s (51.8 m<sup>3</sup>/s) July 10 (gage height, 5.29 ft or 1.612 m); minimum, 5.5 ft<sup>3</sup>/s (0.16 m<sup>3</sup>/s) Oct. 3, 4, 5, 6.

Period of record: Maximum discharge determined, 2,280 ft<sup>3</sup>/s (64.6 m<sup>3</sup>/s) Aug. 4, 1967 (gage height, 7.6 ft or 2.32 m), from rating curve extended above 410 ft<sup>3</sup>/s (11.6 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.06 ft<sup>3</sup>/s (0.002 m<sup>3</sup>/s) June 26, 27, 1950.

REMARKS.--Records good. Diversions above station for irrigation of about 6,500 acres (26.3 km<sup>2</sup>), a small part of which is below gage. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1931-32, 1941, 1947(M). See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	27	28	23	30	35	42	133	209	66	32	13
2	5.9	26	34	28	23	41	34	135	201	63	30	13
3	5.8	28	38	24	23	45	31	153	211	59	28	21
4	5.7	30	36	24	29	39	40	190	239	62	27	82
5	5.6	31	41	29	29	39	49	233	255	74	25	193
6	5.9	30	42	28	15	46	60	240	264	70	22	168
7	7.2	31	35	31	22	43	59	211	282	62	18	146
8	8.1	24	33	30	33	43	48	193	275	81	29	137
9	8.1	34	21	32	28	48	44	199	273	143	37	129
10	31	31	22	29	29	42	46	202	348	247	30	119
11	40	29	26	26	26	45	44	252	305	137	31	124
12	32	30	28	26	23	38	43	328	272	139	32	234
13	33	31	26	26	26	37	44	361	232	40	40	208
14	28	30	25	28	29	34	45	334	220	89	44	198
15	27	30	25	29	27	38	43	355	220	88	37	178
16	23	29	27	28	26	33	55	394	230	78	30	164
17	22	28	26	29	24	37	77	379	241	60	27	158
18	22	29	30	29	26	31	90	339	236	62	23	147
19	20	30	28	28	22	35	76	348	229	53	20	138
20	19	28	27	27	28	44	75	368	212	51	19	128
21	19	25	29	26	30	54	85	361	194	50	31	130
22	19	27	32	24	22	48	106	375	176	47	32	122
23	21	30	35	23	22	42	130	350	154	47	28	113
24	21	27	29	26	25	31	163	300	129	43	24	107
25	22	25	20	28	29	40	201	274	123	44	20	101
26	21	29	26	29	20	49	261	275	111	45	18	94
27	22	28	31	30	28	40	221	301	101	43	17	92
28	22	31	29	30	20	35	172	314	47	39	14	85
29	22	33	20	27	---	35	152	311	78	36	16	81
30	29	27	31	32	---	33	130	275	67	38	16	76
31	30	---	27	35	---	35	---	234	---	36	14	---
TOTAL	603.4	472	516	464	732	1235	2651	8708	6176	2244	815	3703
MEAN	19.5	29.1	24.5	27.9	20.1	39.8	88.4	281	206	72.5	26.3	123
MAX	40	34	42	35	33	54	241	394	344	247	44	234
MIN	5.6	25	20	23	15	31	31	133	67	36	14	13
AC-FT	1200	1730	1820	1710	1450	2450	5260	17270	12250	4460	1620	7340

CAL YR 1974 TOTAL 10390.9 MEAN 24.5 MAX 45 MIN 5.6 AC-FT 20610  
WTR YR 1975 TOTAL 24523.4 MEAN 30.9 MAX 394 MIN 5.6 AC-FT 58560

PEAK DISCHARGE (BASE, 800 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-10	1645	5.29	1,830	7-12	0100	4.73	1,120

## 08279500 RIO GRANDE AT EMBUDO, N. MEX.

LOCATION.--Lat 36°12'20", long 105°57'49", in SW¼SW¼ sec.23, T.23 N., R.9 E., Rio Arriba County, on right bank 0.2 mi (0.3 km) downstream from bridge at Embudo, 2.8 mi (4.5 km) downstream from Embudo Creek, and at mile 1,643.1 (2,643.7 km).

DRAINAGE AREA.--10,400 mi<sup>2</sup> (26,940 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--January 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Oct. 4 to Nov. 30, 1896, published in WSP 358, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,789.14 ft (1,764.530 m) above mean sea level. Jan. 1 to Feb. 28, 1889, nonrecording gage 1.2 mi (1.9 km) upstream at different datum. March 1889 to December 1903, nonrecording gage 1,300 ft (400 m) upstream at different datum. September 1912 to June 1914, water-stage recorder on downstream end of bridge pier at site 200 ft (61 m) upstream at present datum.

AVERAGE DISCHARGE.--86 years, 999 ft<sup>3</sup>/s (28.29 m<sup>3</sup>/s), 723,800 acre-ft/yr (892 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,700 ft<sup>3</sup>/s (105 m<sup>3</sup>/s) July 10 (gage height, 7.28 ft or 2.219 m); maximum gage height, 8.15 ft (2.484 m) Jan. 15 (backwater from ice); minimum discharge, 192 ft<sup>3</sup>/s (5.44 m<sup>3</sup>/s) Oct. 1, 2, 3, 4, 5.

1889-1903, 1912-75: Maximum discharge, 16,200 ft<sup>3</sup>/s (459 m<sup>3</sup>/s) June 19, 1903 (gage height, about 15.9 ft or 4.85 m); minimum daily, 130 ft<sup>3</sup>/s (3.68 m<sup>3</sup>/s) June 30, 1902.

A flood of about 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/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.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 40,000 acres (162 km<sup>2</sup>) in New Mexico.

REVISIONS (WATER YEARS).--WSP 358: 1900-1902. WSP 828: Drainage area. WSP 878: 1915-16. WSP 1512: 1892-99, 1904, 1916, 1931-32, 1939, 1944-45, 1950. WSP 1712: 1903(4). See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	271	281	340	447	579	607	839	2080	1510	802	585
2	195	266	326	350	418	576	601	764	1850	1640	859	571
3	195	269	382	360	412	593	585	731	1950	1730	763	564
4	194	284	366	340	438	556	585	791	2050	1840	670	671
5	196	305	373	360	453	529	585	984	2200	1910	669	893
6	149	300	391	360	418	554	612	1110	2310	1810	685	801
7	203	295	413	350	418	603	640	1150	2480	1640	674	762
8	202	291	419	360	440	643	657	975	2620	1680	705	763
9	203	299	389	372	441	677	709	960	2580	1730	675	754
10	227	305	359	367	452	694	745	986	2310	1860	660	740
11	274	305	364	359	441	709	739	1070	2070	1790	701	735
12	254	305	369	350	429	713	715	1330	2410	2040	685	938
13	273	301	372	360	434	705	686	1530	2660	1970	785	859
14	267	296	373	360	454	651	663	1770	2710	2000	753	839
15	265	294	366	370	453	655	640	2100	2660	1990	747	859
16	267	295	372	390	452	621	635	2460	2770	1920	764	875
17	264	289	366	390	449	604	657	2710	2870	1790	722	877
18	262	286	373	390	453	593	703	2800	2860	1570	692	850
19	263	287	365	387	445	596	721	2920	2840	1470	653	789
20	260	289	359	385	447	606	757	2930	2570	1480	634	740
21	254	285	360	387	442	625	793	2790	2240	1290	668	716
22	252	279	369	385	443	632	793	2760	2050	1120	649	688
23	253	299	377	380	430	656	835	2680	1910	1160	610	656
24	252	310	365	375	368	674	943	2550	1860	1220	588	638
25	251	302	337	372	454	674	1030	2290	2090	1090	604	628
26	249	325	335	340	481	640	1130	1980	2150	973	610	604
27	257	343	315	384	475	651	1180	2000	2120	948	639	588
28	263	301	330	378	509	657	1250	2360	2040	981	659	563
29	262	345	345	379	---	629	1120	2590	1880	861	643	543
30	286	322	340	390	---	623	974	2580	1580	765	613	532
31	279	---	335	447	---	629	---	2350	---	793	597	---
TOTAL	7516	9023	11206	11547	12420	19537	23290	57830	68770	46591	21178	21621
MEAN	242	301	361	372	444	630	776	1865	2292	1503	683	721
MAX	286	381	419	447	509	713	1250	2930	2870	2040	859	938
MIN	194	266	281	340	368	529	585	731	1580	765	588	532
AC-FT	14910	17900	22230	22900	24640	38750	46200	114700	136400	92410	42010	42890

CAL YR 1974 TOTAL 142254 MEAN 390 MAX 1020 MIN 182 AC-FT 282200  
WTR YR 1975 TOTAL 310529 MEAN 851 MAX 2930 MIN 194 AC-FT 615900

PEAK DISCHARGE (BASE, 2,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-20	0900	6.54	3,020	7-12	0200	6.52	3,020
6-18	2400	6.44	2,930	8-11	2230	5.33	2,040
7-10	1630	7.28	3,700				

## 08281100 RIO GRANDE ABOVE SAN JUAN PUEBLO, N. MEX.

LOCATION.--Lat 36°03'58", long 106°04'34", in NE¼Sec. 10, T.21 N., R.8 E., Rio Arriba County, in San Juan Pueblo Grant, on left bank 0.8 mi (1.3 km) upstream from bridge on State Highway 74, 1.0 mi (1.6 km) northwest of San Juan Pueblo, 1.8 mi (2.9 km) upstream from Rio Chama, 5.1 mi (8.2 km) north of Española, and at mile 1,630.1 (2,622.8 km).

DRAINAGE AREA.--10,550 mi<sup>2</sup> (27,320 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,630 ft (1,716 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 691 ft<sup>3</sup>/s (19.57 m<sup>3</sup>/s), 500,600 acre-ft/yr (617 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,490 ft<sup>3</sup>/s (98.8 m<sup>3</sup>/s) July 10 (gage height, 4.18 ft or 1.274 m); minimum, 137 ft<sup>3</sup>/s (3.88 m<sup>3</sup>/s) Oct. 3, 4.

Period of record: Maximum discharge, 6,310 ft<sup>3</sup>/s (179 m<sup>3</sup>/s) May 22, 1973 (gage height, 5.86 ft or 1.786 m); minimum, 96 ft<sup>3</sup>/s (2.72 m<sup>3</sup>/s) Aug. 1, 1963.

For years of outstanding floods see records for Rio Grande at Embudo (sta 08279500).

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 42,000 acres (170 km<sup>2</sup>) in New Mexico. San Juan lateral and San Juan Pueblo ditch, both on left bank, and Guique ditch, on right bank, bypass gage for irrigation of several hundred acres below station. See tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation.

DISCHARGE\* IN CUBIC FEET PER SECOND\* WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	269	294	352	448	590	611	791	2140	1520	769	541
2	155	273	309	388	440	589	610	693	1850	1660	814	527
3	147	274	393	400	422	602	591	659	1900	1750	752	502
4	145	286	380	367	443	563	592	698	2010	1840	636	634
5	153	303	386	400	458	544	593	868	2190	1930	624	901
6	177	300	399	400	432	545	616	1050	2320	1820	618	812
7	191	294	422	389	428	605	651	1100	2520	1650	604	756
8	195	291	431	405	445	664	675	941	2730	1650	673	758
9	190	294	411	393	450	681	727	885	2720	1750	651	762
10	209	309	365	405	464	694	776	911	2420	1910	632	743
11	284	315	388	400	457	726	783	990	2130	1810	643	735
12	263	314	372	394	445	728	768	1260	2450	2060	717	936
13	280	313	383	396	447	727	740	1470	2770	2000	765	886
14	272	311	383	400	474	673	716	1710	2850	2010	739	847
15	270	309	381	410	469	667	696	2000	2810	2000	729	852
16	264	305	381	411	463	641	694	2410	2940	1930	737	862
17	263	294	381	417	456	617	716	2730	3060	1840	699	874
18	258	290	382	405	464	601	775	2870	3040	1590	666	857
19	250	290	378	400	461	597	808	3010	3050	1470	603	788
20	251	291	374	400	457	607	849	3070	2760	1450	582	741
21	253	290	368	400	481	627	899	2920	2350	1330	626	711
22	250	287	380	395	460	638	902	2860	2110	1100	625	675
23	254	297	389	390	446	663	934	2790	1960	1110	591	626
24	251	322	380	395	384	680	1050	2660	1850	1200	557	597
25	245	310	370	400	449	690	1150	2350	2100	1110	558	596
26	243	323	359	400	495	645	1220	2000	2170	978	551	568
27	255	343	360	396	489	665	1250	1980	2140	920	569	546
28	262	381	363	390	516	655	1260	2340	2070	971	590	533
29	260	353	348	389	---	633	1130	2650	1940	849	579	515
30	280	344	371	397	---	633	952	2690	1600	735	552	492
31	275	---	339	467	---	638	---	2430	---	759	537	---
TOTAL	7201	9175	11620	12351	12743	19828	24734	57786	70950	46702	19988	21173
MEAN	232	306	375	398	455	640	824	1864	2365	1507	645	706
MAX	284	381	431	467	516	728	1260	3070	3060	2060	814	936
MIN	145	269	294	352	384	544	591	659	1600	735	537	492
AC-FT	14280	18200	23050	24500	25280	39330	49060	114600	140700	92630	39650	42000
(†)	5.7	-	-	-	-	-	-	146	129	0	0	0
(††)	97	-	-	-	-	-	52	514	438	396	381	573
(††)	142	88	-	-	-	-	0	145	599	419	357	269

CAL YR 1974 TOTAL 132748 MEAN 364 MAX 999 MIN 127 AC-FT 263300  
WTR YR 1975 TOTAL 314251 MEAN 861 MAX 3070 MIN 145 AC-FT 623300

PEAK DISCHARGE (BASE, 2,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-20	0930	3.99	3,170	6-17	0830	3.97	3,150
5-30	0715	3.78	2,840	7-10	1915	4.18	3,490
6-8	1030	3.77	2,820				

† Diversion, in acre-feet, by San Juan lateral.  
†† Diversion, in acre-feet, by San Juan Pueblo ditch.  
‡ Diversion, in acre-feet, by Guique ditch.  
NOTE.--San Juan lateral was closed for rehabilitation on July 2; no flow for the remainder of the season.

## 08284100 RIO CHAMA NEAR LA PUENTE, N. MEX.

LOCATION.--Lat 36°39'45", long 106°37'57", Rio Arriba County, in Tierra Amarilla Grant, on right bank 0.7 mi (1.1 km) downstream from Rito de Tierra Amarilla, 3.1 mi (5.0 km) southwest of La Puente, 6.7 mi (10.8 km) upstream from flow line of El Vado Reservoir, and at mile 91.4 (147.1 km).

DRAINAGE AREA.--480 mi<sup>2</sup> (1,200 km<sup>2</sup>) approximately.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 9, 1965. Altitude of gage is 7,083 ft (2,159 m) from river-profile map.

AVERAGE DISCHARGE.--20 years, 311 ft<sup>3</sup>/s (8,808 m<sup>3</sup>/s), 225,300 acre-ft/yr (278 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,500 ft<sup>3</sup>/s (156 m<sup>3</sup>/s) May 22 (gage height, 5.44 ft or 1.658 m); minimum, 15 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) Oct. 5.  
 Period of record: Maximum discharge, 9,540 ft<sup>3</sup>/s (270 m<sup>3</sup>/s) May 19, 1973 (gage height, 6.12 ft or 1.865 m); minimum, 4.0 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Sept. 19, 1956.  
 A discharge of about 9,000 ft<sup>3</sup>/s (255 m<sup>3</sup>/s) occurred Apr. 16, 1937, based on flow of Rio Chama at Park View with allowance for tributary inflow. A peak on May 21 or 22, 1926, may have exceeded 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s).

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 10,300 acres (41.7 km<sup>2</sup>) above station (1962 determination).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	62	36	41	50	58	89	646	2080	399	95	46
2	17	69	37	41	45	62	81	723	2350	390	82	43
3	16	74	40	40	43	65	85	946	2470	446	71	45
4	16	67	39	38	45	65	137	1300	2410	413	65	78
5	17	61	38	39	50	70	235	1390	2270	392	58	121
6	19	56	37	39	48	75	343	831	2140	374	53	78
7	19	56	36	40	50	75	346	667	1950	336	49	64
8	18	53	35	40	52	80	229	792	1770	310	49	61
9	17	66	36	42	54	85	198	1260	1740	360	78	86
10	19	62	35	40	55	90	208	1650	1700	391	88	80
11	21	55	34	35	53	80	271	2220	1280	439	128	71
12	23	51	33	35	50	70	260	2620	1120	572	131	159
13	23	54	32	35	50	68	210	2760	1070	525	132	119
14	22	55	30	38	52	72	202	3150	1080	393	117	110
15	22	55	30	40	50	76	294	3670	1070	369	95	102
16	21	56	32	42	50	73	501	3530	1070	355	82	91
17	21	49	35	44	48	72	633	3920	1030	405	70	85
18	19	53	34	45	48	66	538	4260	946	304	63	74
19	20	56	34	45	45	73	337	4020	1170	275	58	67
20	20	44	34	45	48	92	382	3870	854	248	59	61
21	21	37	38	45	50	123	642	3860	756	417	103	65
22	28	43	40	42	50	115	941	3750	669	265	137	67
23	41	57	38	40	45	97	1060	2610	623	229	102	60
24	54	46	35	42	48	87	1080	2440	602	199	83	50
25	48	40	30	45	50	109	1390	3140	612	187	73	49
26	43	39	32	48	52	124	1570	3280	567	182	68	47
27	50	36	35	50	54	101	1210	3380	517	146	63	45
28	57	35	40	55	56	91	739	3020	472	134	64	45
29	63	35	40	50	---	82	591	2240	446	120	61	43
30	72	35	40	50	---	83	510	1860	418	157	55	42
31	66	---	40	55	---	85	---	1920	---	127	51	---
TOTAL	933	1557	1105	1326	1391	2564	15312	75725	37252	9859	2483	2154
MEAN	30.1	51.9	35.6	42.8	49.7	82.7	510	2443	1242	318	80.1	71.8
MAX	72	74	40	55	56	124	1570	4260	2470	572	137	159
MIN	16	35	30	35	43	58	81	646	418	120	49	42
AC-FT	1850	3090	2190	2630	2760	5090	30370	150200	73890	19560	4930	4270
CAL YR 1974	TOTAL	62638.6	MEAN 172	MAX 1920	MIN	8.8	AC-FT 124200					
WTR YR 1975	TOTAL	151661.0	MEAN 416	MAX 4260	MIN	16	AC-FT 300800					

PEAK DISCHARGE (BASE, 2,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0100	4.48	2,160	6-2	2400	4.78	2,940
5-22	0030	5.44	5,500				

## 08284160 AZOTEA TUNNEL AT OUTLET, NEAR CHAMA, N. MEX.

LOCATION.--Lat 36°51'12", Long 106°40'18", Rio Arriba County, in Tierra Amarilla Grant, on left bank at south portal, 0.2 mi (0.3 km) upstream from Azotea Creek, and 6.2 mi (10.0 km) 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 (2,292.056 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--5 years, 128 ft<sup>3</sup>/s (3.625 m<sup>3</sup>/s), 92,740 acre-ft/yr (114 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft<sup>3</sup>/s (30.6 m<sup>3</sup>/s) May 13 (gage height, 7.46 ft or 2.274 m); minimum daily, 0.23 ft<sup>3</sup>/s (0.007 m<sup>3</sup>/s) Sept. 11.

Period of record: Maximum discharge, 1,080 ft<sup>3</sup>/s (30.6 m<sup>3</sup>/s) May 13, 1975 (gage height, 7.46 ft or 2.274 m); no flow many days most years.

REMARKS.--Records represent regulated diversions from Rio Blanco, Little Navajo River, and Navajo River in San Juan River Basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE\* IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	22	.56	.69	.84	.84	.84	254	673	897	226	5.7
2	.44	23	.56	.69	.84	.84	.84	242	874	879	186	5.4
3	.44	21	.56	.69	.84	.84	.84	304	954	769	149	4.7
4	.44	14	.56	.69	.84	.84	.84	511	950	799	114	20
5	.44	12	.56	.69	.84	.84	.84	501	973	770	103	43
6	.44	11	.56	.69	.84	.99	25	272	976	775	100	16
7	.44	9.0	.56	.69	.84	.99	84	193	960	717	95	14
8	.44	12	.56	.69	.84	.99	45	223	952	702	95	14
9	.44	18	.56	.69	.84	.99	31	394	985	682	101	.84
10	.44	11	.56	.69	.84	.99	27	627	968	637	108	.33
11	.44	9.4	.56	.69	.84	.99	27	762	858	765	97	.23
12	.44	.61	.56	.69	.84	.99	27	795	844	837	100	.84
13	.44	1.9	.56	.69	.84	.99	22	888	920	885	97	.33
14	.44	.69	.56	.69	.84	1.2	19	899	959	699	96	.33
15	.44	.69	.56	.69	.84	1.2	35	891	960	533	70	12
16	.44	.69	.56	.69	.84	1.2	104	959	946	519	60	15
17	.44	.69	.56	.69	.84	1.2	149	952	967	511	52	12
18	.44	.69	.56	.69	.84	1.2	109	968	978	415	45	34
19	.44	.69	.56	.69	.84	1.3	66	974	894	348	37	23
20	.44	.69	.56	.69	.84	1.5	113	990	801	331	43	20
21	.44	.69	.56	.69	.84	6.7	233	962	726	559	65	21
22	.44	.69	.56	.69	.84	5.4	386	883	750	392	56	15
23	.44	.69	.56	.69	.84	2.4	450	698	795	300	42	12
24	.44	.69	.56	.69	.84	.99	497	620	907	240	32	9.5
25	.44	.94	.56	.69	.84	.99	661	825	959	279	27	8.4
26	.44	3.1	.56	.69	.84	1.9	682	926	950	246	21	6.9
27	.44	.69	.56	.69	.84	.99	488	961	922	204	12	5.4
28	24	.69	.56	.69	.84	.99	302	942	922	175	16	3.6
29	24	.69	.56	.69	---	.99	237	747	915	208	13	2.3
30	19	.69	.56	.69	---	.99	234	589	880	390	9.3	1.5
31	18	---	.56	.69	---	.99	---	580	---	322	7.0	---
TOTAL	96.88	179.30	17.36	21.39	23.52	44.25	5061.20	21332	27118	16826	2286.3	327.30
MEAN	3.13	5.98	.56	.69	.84	1.43	169	688	904	543	73.8	10.9
MAX	24	23	.56	.69	.84	6.7	682	990	985	897	226	43
MIN	.44	.61	.56	.69	.84	.84	.84	193	673	176	7.0	.23
AC-FT	192	356	34	42	47	88	10040	42310	53790	33370	4530	649
CAL YR 1974 TOTAL	23811.10			MEAN 65.2	MAX 504	MIN 0	AC-FT 47230					
WTR YR 1975 TOTAL	73333.50			MEAN 201	MAX 990	MIN .23	AC-FT 145500					

## 08284200 WILLOW CREEK ABOVE HERON RESERVOIR, NEAR PARK VIEW, N. MEX.

LOCATION.--Lat 36°44'33", long 106°37'34", Rio Arriba County, in Tierra Amarilla Grant, on right bank 200 ft (61 m) downstream from bridge, 0.2 mi (0.3 km) downstream from Iron Spring Creek, 3.3 mi (5.3 km) west of Park View, and at mile 9.7 (15.6 km).

DRAINAGE AREA.--112 mi<sup>2</sup> (290 km<sup>2</sup>).

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since June 6, 1963. Datum of gage is 7,196.29 ft (2,193.429 m) above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 1, 1971, at site 900 ft (270 m) downstream at lower datum.

AVERAGE DISCHARGE.--8 years (1962-70), 10.5 ft<sup>3</sup>/s (0.297 m<sup>3</sup>/s), 7,610 acre-ft/yr (9.38 km<sup>3</sup>/yr), prior to completion of Azotea tunnel; 5 years (1970-75), 141 ft<sup>3</sup>/s (3.993 m<sup>3</sup>/s), 102,200 acre-ft/yr (126 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,360 ft<sup>3</sup>/s (38.5 m<sup>3</sup>/s) Apr. 16 (gage height, 5.45 ft or 1.661 m); minimum daily, 0.23 ft<sup>3</sup>/s (0.007 m<sup>3</sup>/s) Jan. 2.

Period of record: Maximum discharge, 1,600 ft<sup>3</sup>/s (45.3 m<sup>3</sup>/s) Aug. 11, 1967 (gage height, 3.88 ft or 1.183 m, site and datum then in use), prior to completion of Azotea tunnel; no flow at times most years prior to 1971.

REMARKS.--Records represent inflow to Heron Reservoir and since Nov. 17, 1970, include San Juan River water imported through Azotea tunnel (see sta 08284160).

COOPERATION.--Records furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	20	.49	.27	2.4	.59	22	305	678	976	222	6.4
2	.27	28	.56	.23	1.4	.56	20	322	882	904	182	5.0
3	.27	29	.84	.26	1.4	.81	38	360	974	789	149	4.8
4	.42	20	.76	.24	1.3	.88	157	572	982	800	120	23
5	.80	15	.80	.32	1.4	1.1	337	599	990	801	103	52
6	.80	10	1.3	.88	1.1	1.2	464	329	1000	768	98	19
7	1.2	11	.96	1.1	1.1	1.2	333	227	978	718	98	14
8	1.4	11	.80	.96	1.4	1.2	140	234	964	700	93	15
9	2.0	17	.52	.88	1.0	9	147	392	010	682	100	6.8
10	2.9	15	.59	.81	1.0	8.2	244	621	990	624	112	1.5
11	3.6	9.5	.59	.80	1.2	3.6	240	800	876	758	103	133
12	4.1	4.7	.52	.80	.88	4.6	179	844	848	848	108	43
13	4.6	1.4	.49	.90	.59	3.6	158	939	938	899	109	6.0
14	3.9	1.8	.38	.76	.63	3.2	167	920	978	717	102	2.2
15	3.4	.63	.42	1.8	.72	3.6	355	934	976	542	77	1.3
16	2.9	.56	.45	3.2	.80	4.2	584	994	969	532	62	22
17	2.3	.42	.36	2.4	.80	4.8	593	987	979	522	60	3.2
18	2.0	.40	.45	1.3	.88	4.0	344	998	1000	432	49	35
19	1.8	.36	.56	1.0	.76	5.6	206	990	923	362	38	30
20	1.6	.32	.45	2.7	.80	12	316	1020	844	325	39	23
21	1.4	.27	.42	4.1	.00	31	484	998	752	521	71	23
22	2.0	.27	.52	3.6	.63	51	632	920	774	419	81	17
23	2.8	.36	.59	1.2	.56	37	680	744	799	299	53	13
24	2.5	.40	.67	1.2	.52	38	628	650	916	251	36	10
25	2.2	.34	.63	1.4	.46	67	843	828	979	281	26	9.5
26	2.2	.88	.59	1.6	.59	79	837	936	972	254	20	7.8
27	2.5	1.7	.56	1.5	.59	48	612	985	944	208	14	6.0
28	21	.88	.56	1.2	.59	42	349	968	938	185	12	4.6
29	28	.88	.52	.8	---	34	286	788	932	179	14	2.6
30	28	.56	.40	.1	---	29	300	632	897	382	10	1.7
31	21	---	.32	5.1	---	26	---	603	---	322	8.3	---
TOTAL	154.15	202.63	18.07	44.0	26.73	566.94	10695	22439	27682	16950	2369.3	541.8
MEAN	4.97	6.75	.58	1.4	.95	18.3	357	724	923	547	76.4	18.1
MAX	28	29	1.3	5.1	2.8	75	843	1020	1010	926	222	133
MIN	.27	.27	.32	.23	.49	.59	20	227	678	179	8.3	1.3
AC-FT	306	402	36	87	53	1120	21210	44510	54910	33620	4700	1070
CAL YR 1974	TOTAL	25767.70	MEAN	70.6	MAX	496	MIN	.18	AC-FT	51110		
WTR YR 1975	TOTAL	41688.66	MEAN	224	MAX	1020	MIN	.23	AC-FT	162700		



08284300 HORSE LAKE CREEK ABOVE HERON RESERVOIR, NEAR PARK VIEW, N. MEX.

LOCATION.--Lat 36°42'24", long 106°44'42", Rio Arriba County, in Tierra Amarilla Grant, on right bank 3.7 mi (6.0 km) northwest of Heron Dam, 7.8 mi (12.6 km) downstream from Horse Lake, and 9.9 mi (15.9 km) west of Park View.

DRAINAGE AREA.--45 mi<sup>2</sup> (120 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year. No winter records subsequent to 1973.

GAGE.--Water-stage recorder. Concrete control since June 10, 1963. Datum of gage is 7,188.85 ft (2,191.161 m) above mean sea level (levels by Bureau of Reclamation). Prior to July 1, 1971, at site 1,100 ft (340 m) upstream at higher datums.

AVERAGE DISCHARGE.--11 years (1962-73), 1.10 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s), 797 acre-ft/yr (0.983 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, about 121 ft<sup>3</sup>/s (3.43 m<sup>3</sup>/s) Apr. 16 (gage height, 2.64 ft or 0.805 m), from rating curve extended above 37 ft<sup>3</sup>/s (1.05 m<sup>3</sup>/s); no flow many days.

Period of record: Maximum discharge, 3,960 ft<sup>3</sup>/s (112 m<sup>3</sup>/s) July 30, 1968 (gage height, 4.9 ft or 1.49 m, site and datum then in use), from rating curve extended above 37 ft<sup>3</sup>/s (1.05 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 3.20 ft (0.975 m) and 4.9 ft (1.49 m); no flow most of time.

REMARKS.--Diversions above station for irrigation of meadows and for off-channel stock tanks.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0				---	4.4	4.0	.04	.90	0	0
2	0	.47				---	4.9	3.4	.03	1.2	0	0
3	0	.13				---	16	3.0	.02	1.4	0	.02
4	0	.02				---	51	2.8	.02	1.5	0	1.5
5	0	.01				---	64	2.8	.02	1.6	0	1.2
6	0	0				---	62	2.4	.02	1.8	0	.05
7	0	0				---	41	1.7	.02	1.7	0	.03
8	0	0				---	17	1.4	.02	1.9	0	.02
9	0	---				---	18	1.1	.02	2.5	0	.02
10	0	---				---	16	.92	.02	3.0	.02	.02
11	0	---				---	17	.76	.02	3.4	1.6	.08
12	0	---				---	17	.64	0	3.0	.08	.82
13	0	---				---	27	.54	0	7.4	.02	.06
14	0	---				---	19	.48	0	3.4	0	.04
15	0	---				---	40	.48	0	1.9	0	.03
16	0	---				---	58	.48	0	1.6	0	.02
17	0	---				---	41	.48	0	1.4	0	.02
18	0	---				---	17	.48	0	.88	0	.02
19	0	---				2.8	9.4	.42	0	.45	0	.01
20	0	---				8.4	13	.26	0	0.1	0	.01
21	0	---				38	12	.14	.04	8.6	.02	.02
22	0	---				20	15	.09	.33	1.3	0	.01
23	0	---				4.8	18	.06	.33	.76	0	0
24	0	---				9.4	17	.06	.45	.28	0	0
25	0	---				27	22	.04	.51	.10	0	0
26	0	---				18	18	.03	.45	.06	0	0
27	0	---				5.6	13	.02	.26	.03	0	0
28	0	---				4.1	6.6	.02	.06	.02	0	0
29	.08	---				2.2	5.6	.03	.24	.02	0	0
30	.27	---				1.8	3.9	.04	.45	.02	0	0
31	.02	---				3.4	---	.07	---	.02	0	---
TOTAL	.37	-	-	-	-	-	683.8	29.14	3.37	60.24	1.74	4.00
MEAN	.012	-	-	-	-	-	22.8	.94	.11	1.94	.056	.13
MAX	.27	-	-	-	-	-	64	4.0	.51	8.6	1.6	1.5
MIN	0	-	-	-	-	-	3.9	.02	0	.02	0	0
AC-Ft	.7	-	-	-	-	-	1360	58	6.7	119	3.5	7.9

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-4	1800	2.62	about 119	4-16	1800	2.64	about 121

## 08284510 HERON RESERVOIR NEAR PARK VIEW, N. MEX.

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, in Tierra Amarilla Grant, at Heron Dam on Willow Creek, 0.2 mi (0.3 km) upstream from Rio Chama, 5.1 mi (8.2 km) northeast of El Vado Dam, and 8.7 mi (14.0 km) southwest of Park View.

DRAINAGE AREA.--193 mi<sup>2</sup> (500 km<sup>2</sup>).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Mar. 24, 1971, non-recording gage.

EXTREMES.--Current year: Maximum contents, 252,800 acre-ft (312 hm<sup>3</sup>) Sept. 12 (elevation, 7,157.59 ft or 2,181.633 m); minimum, 125,900 acre-ft (155 hm<sup>3</sup>) Apr. 30 (elevation, 7,123.36 ft or 2,171.200 m).

Period of record: Maximum contents, 252,800 acre-ft (312 hm<sup>3</sup>) Sept. 12, 1975 (elevation, 7,157.59 ft or 2,181.633 m); no storage prior to Oct. 21, 1970.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 21, 1970. Total capacity 401,300 acre-ft (495 hm<sup>3</sup>) at elevation 7,186.1 ft (2,190.32 m), low point on crest of uncontrolled spillway, including 1,340 acre-ft (1.65 hm<sup>3</sup>) of dead storage at elevation 7,003.0 ft (2,134.51 m), invert of gate sill of outlet tunnel. Reservoir is used for storage of transmountain water from San Juan River basin and for recreation. Figures given herein represent total storage.

COOPERATION.--Records furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)  
(Based on survey by Bureau of Reclamation in 1971)

7,120	116,500	7,150	219,800
7,130	146,000	7,160	263,900
7,140	180,400		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190600	190200	189500	149900	150200	150700	151300	126500	168100	220300	249800	252100
2	190500	190400	188300	149900	150200	150700	151300	127100	169800	222000	250000	252000
3	190500	190400	186200	149900	150200	150800	151400	127700	171500	223500	250300	252000
4	190400	190400	184100	149900	150200	150800	151900	128800	173600	225000	250500	252300
5	190400	190400	182000	149900	150200	150800	152900	129900	175500	226600	250600	252300
6	190400	190400	179700	149900	150200	150900	154000	130300	177500	228100	250800	252300
7	190300	190400	177700	150000	150200	151000	153300	130700	179300	229400	250800	252200
8	190300	190400	175600	150000	150200	151100	150500	131000	181100	230700	250800	252200
9	190300	190400	173500	150100	150300	151200	147700	131600	183000	231900	251100	252200
10	190400	190400	171500	150100	150400	151400	145000	132600	184900	233000	251300	252200
11	190300	190300	169300	150100	150400	151600	142400	134000	186500	234400	251700	252700
12	190400	190100	167000	150100	150400	151600	139800	135500	188200	236200	251900	252800
13	190300	190000	164700	150100	150400	151700	137000	137200	189900	238000	252000	252700
14	190300	189900	162300	150100	150400	151800	134200	138900	191700	239400	252100	252700
15	190300	189800	160000	150100	150500	151800	132400	140700	193500	240400	252200	252600
16	190300	189800	157700	150100	150600	151900	132600	142600	195300	241500	252200	252600
17	190200	189800	155400	150100	150600	151900	133900	144400	197100	242500	252200	252300
18	190200	189800	153100	150100	150600	152000	132500	146300	199000	243200	252200	252400
19	190200	189800	151000	150100	150600	152000	131700	148200	200800	243800	252200	252300
20	190100	189700	149800	150100	150600	152100	131100	150100	202200	244400	252100	252300
21	190100	189700	149800	150100	150800	152500	131300	152000	203400	245100	252400	252200
22	190000	189700	148800	150100	150800	152700	131000	153600	204800	245600	252600	252200
23	190000	189700	149000	150100	150800	152800	130200	155000	206200	246100	252600	252100
24	190000	189600	149800	150100	150800	152900	129500	156800	207900	246400	252600	252100
25	190000	189600	149400	150100	150700	153000	129500	157500	209700	247000	252500	252100
26	189900	189600	149700	150100	150700	153100	129600	159300	211500	247400	252500	252000
27	190000	189500	149800	150100	150700	152800	129200	161200	213200	247800	252400	251900
28	190000	189600	149900	150100	150700	152500	128800	163200	215000	248100	252300	251900
29	190200	189500	149900	150100	---	152100	126800	164700	216700	248200	252200	251800
30	190300	189500	149800	150200	---	151700	125900	165800	218500	248900	252100	251700
31	190300	---	149800	150200	---	151400	---	166900	---	249400	252100	---
MAX	190600	190600	189500	150200	150800	153100	154000	166900	218500	249400	252600	252800
MIN	189900	189500	149800	149900	150200	150700	125900	126500	168100	220300	249800	251700
(†)	7142.61	7142.41	7131.19	7131.30	7131.47	7131.66	7123.36	7136.24	7149.68	7156.85	7157.44	7157.35
(‡)	-300	-800	-39700	+400	+500	+700	-25500	+41000	+51600	+30900	+2700	-400

CAL YR 1974 MAX 193600 MIN 149800 ‡ -6,200  
WTR YR 1975 MAX 252800 MIN 125900 ‡ +61,100

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

## 08284520 WILLOW CREEK BELOW HERON DAM, N. MEX.

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, in Tierra Amarilla Grant, in outlet conduits of Heron Dam, 0.2 mi (0.3 km) upstream from Rio Chama, 5.1 mi (8.2 km) northeast of El Vado Dam, and 8.7 mi (14.0 km) southwest of Park View.

DRAINAGE AREA.--193 mi<sup>2</sup> (500 km<sup>2</sup>).

PERIOD OF RECORD.--January 1971 to current year.

GAGE.--Totalizing flowmeters in each of two outlet conduits in Heron Dam.

EXTREMES.--Current year: Maximum discharge, 1,650 ft<sup>3</sup>/s (46.7 m<sup>3</sup>/s) Apr. 8; no flow many days.

Period of record: Maximum daily discharge, 2,220 ft<sup>3</sup>/s (62.9 m<sup>3</sup>/s) Dec. 12, 1973; no flow many days each year.

REMARKS:--Flow regulated by Heron Dam (see sta 08284510) since Oct. 21, 1970. Outlet conduits are 14-in (0.356 m) and 120-in (3.048 m) in diameter.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0			0	88	20	44	3.3	0	0
2	0	0	553			0	22	40	28	16	0	0
3	0	0	1030			0	40	40	0	22	0	0
4	0	0	1030			0	40	40	0	22	0	0
5	0	0	1030			0	40	60	0	22	0	0
6	0	0	1030			0	40	79	8.8	30	26	0
7	0	0	1030			0	772	78	15	40	18	0
8	0	0	1030			0	1540	78	15	40	0	0
9	0	0	1030			0	1600	78	22	40	0	0
10	0	0	1000			0	1590	79	32	19	0	0
11	0	31	1060			0	1590	79	34	0	4.8	0
12	0	49	1120			0	1590	79	35	0	27	0
13	0	50	1140			0	1590	79	41	0	35	0
14	0	31	1140			0	1590	61	49	0	14	0
15	0	7.2	1140			0	1360	45	49	0	0	12
16	0	0	1130			0	623	45	49	0	0	21
17	0	0	1130			0	485	45	49	0	0	39
18	0	0	1090			0	635	45	49	0	0	19
19	0	0	1060			0	636	45	49	0	40	0
20	0	0	556			0	636	45	49	0	33	0
21	41	0	0			0	443	45	50	235	0	0
22	65	0	0			0	884	46	50	171	0	0
23	32	0	0			0	1110	46	50	21	0	0
24	0	0	0			0	1010	46	50	20	0	0
25	0	0	0			42	904	46	25	20	0	0
26	0	0	0			134	825	25	9.3	20	27	0
27	0	0	0			210	825	0	4.3	20	23	0
28	0	0	0			231	824	0	0	20	0	0
29	0	0	0		---	231	975	26	0	20	0	0
30	0	0	0		---	231	719	44	0	8.0	0	0
31	0	---	0		---	230	---	44	---	0	0	---
TOTAL	138	168.2	19329	0	0	1309	25026	1528	856.4	809.3	247.8	91
MEAN	4.45	5.61	624	0	0	42.2	834	49.3	28.5	26.1	7.99	3.03
MAX	65	50	1140	0	0	231	1600	79	50	235	40	39
MIN	0	0	0	0	0	0	22	0	0	0	0	0
AC-FT	274	334	38340	0	0	2600	49640	3030	1700	1610	492	180
CAL YR 1974	TOTAL	24964.50	MEAN	68.4	MAX	1140	MIN	0	AC-FT	49520		
WTR YR 1975	TOTAL	49502.70	MEAN	136	MAX	1600	MIN	0	AC-FT	98190		

## 08285000 EL VADO RESERVOIR NEAR TIERRA AMARILLA, N. MEX.

LOCATION.—Lat 36°35'39", long 106°44'00", Rio Arriba County, in Tierra Amarilla Grant, at outlet tower of dam on Rio Chama, at village of El Vado, 12.4 mi (20.0 km) southwest of Tierra Amarilla, and at mile 77.7 (125.0 km).

DRAINAGE AREA.—873 mi<sup>2</sup> (2,261 km<sup>2</sup>), of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) probably is noncontributing.

PERIOD OF RECORD.—January 1935 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1967, contents at about 0730 hrs.

GAGE.—Water-stage recorder. Prior to October 1967, nonrecording gage only below gage height 6,879.3 ft (2,096.81 m). Datum of gage is 8.21 ft (2,502 m) above mean sea level.

EXTREMES.—Current year: Maximum contents, 179,400 acre-ft (221 hm<sup>3</sup>) July 13 (gage height 6,896.8 ft or 2,102.14 m); minimum, 62,260 acre-ft (76.8 hm<sup>3</sup>) Nov. 13 (gage height, 6,845.7 ft or 2,086.57 m).

Period of record: Maximum contents, 204,900 acre-ft (253 hm<sup>3</sup>) June 4, 5, 1948 (gage height, 6,904.2 ft or 2,104.40 m), of which 7,400 acre-ft (9.12 hm<sup>3</sup>) was uncontrolled storage; no storage at times prior to December 1966.

REMARKS.—Reservoir is formed by rockfill dam, steel faced. Storage began in January 1935. Capacity 196,500 acre-ft (242 hm<sup>3</sup>) between gage heights 6,759.0 ft (2,060.14 m) and 6,902.0 ft (2,103.73 m), top of spillway gate. Dead storage, 1,060 acre-ft (1.31 hm<sup>3</sup>) below 6,775.0 ft (2,065.02 m), 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 ft<sup>3</sup>/s (49.6 m<sup>3</sup>/s) to about 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s).

COOPERATION.—Records furnished by Bureau of Reclamation.

Capacity table (gage height, in feet, and contents, in acre-feet)  
(Based on Survey by Bureau of Reclamation in 1966)

6,840	53,770
6,860	86,770
6,880	130,800
6,900	189,800

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63670	62420	62570	86400	87520	88850	97300	130100	142800	177500	177500	164400
2	63520	62420	63670	86400	87520	88850	97300	129100	143900	177800	177200	163500
3	63360	62420	65740	86400	87520	89040	97710	129100	147500	178100	177200	162600
4	63360	62420	67840	86400	87520	89040	97910	129600	152100	178100	177200	162300
5	63040	62420	69820	86580	87710	89230	98730	130100	156400	178400	177200	162600
6	63040	62420	72000	86580	87710	89420	99760	129300	160200	178800	176800	162600
7	62890	62420	74040	86580	87710	89610	100600	128600	163800	178800	176200	162600
8	62730	62420	76120	86580	87710	89800	101000	128300	167200	178800	175000	162600
9	62570	62420	78200	86580	87710	90190	101200	128600	170300	178800	174000	162900
10	62420	62420	80180	86770	87900	90380	101400	129600	173400	178800	172300	162900
11	62420	62420	82350	86770	87900	90570	102100	130800	175600	178800	172100	163200
12	62420	62420	84540	86770	87900	90760	102500	131600	177500	179100	171500	163200
13	62420	62260	86650	86770	87900	90760	102900	131600	177800	179100	171200	163500
14	62420	62420	88650	86770	88090	90960	103100	132400	177800	178800	171200	163500
15	62420	62420	89440	86770	88090	91150	103300	134000	177800	178400	171200	163800
16	62420	62420	86030	86960	88280	91350	104400	135300	177800	178100	171200	163800
17	62420	62420	86400	86960	88280	91350	106600	136900	177800	177800	171200	164200
18	62570	62420	86210	86960	88280	91540	109000	138800	177800	177500	170900	164200
19	62570	62570	86210	86960	88280	91730	110800	140400	177800	177500	170300	164200
20	62570	62570	86210	86960	88280	91930	112600	141500	177500	177200	170000	164200
21	62570	62570	86210	87150	88470	92320	114000	142800	177200	177500	170300	164200
22	62730	62570	86210	87150	88470	92710	115600	143700	176200	177500	170300	164200
23	62730	62570	86210	87150	88470	92910	118000	147800	176200	177500	170300	164200
24	62420	62570	86210	87150	88660	93100	120100	142000	176800	177200	170600	164400
25	62420	62570	86210	87150	88660	93300	123000	144100	177500	177500	170000	164200
26	62420	62570	86210	87150	88660	94090	126000	143900	177800	177500	169300	164200
27	62570	62570	86210	87150	88660	94680	128600	144500	177800	177500	168700	164200
28	62730	62570	86210	87340	88660	95280	129800	146200	177500	177500	167800	163800
29	62730	62570	86400	87340	---	95680	131100	143400	177500	177500	167200	163800
30	62420	62570	86400	87340	---	96290	131600	143100	177500	177500	166300	163800
31	62420	---	86400	87340	---	96890	---	142800	---	177500	165400	---
MAX	63670	62570	86400	87340	88660	96890	131400	144500	177800	179100	177500	164400
MIN	62420	62260	62570	86400	87520	88850	97100	128300	142800	177200	165400	162300
(†)	6845.8	6845.9	6859.8	6860.3	6861.0	6865.2	6880.3	6884.5	6896.2	6896.2	6892.3	6891.8
(‡)	-1410	+150	+23830	+940	+1320	+8230	+34710	+11200	+34700	0	-12100	-1600
CAL YR 1974	MAX	173700	MIN	62260	‡	-39,900						
WTR YR 1975	MAX	179100	MIN	62260	‡	+99,970						

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

‡ Change in contents, in acre-feet.

## 08285500 RIO CHAMA BELOW EL VADO DAM, N. MEX.

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, in Tierra Amarilla Grant, on left bank 1.5 mi (2.4 km) downstream from El Vado Dam, 2.8 mi (4.5 km) upstream from Rio Nuevas, 13 mi (21 km) southwest of Tierra Amarilla, and at mile 76.2 (122.6 km).

DRAINAGE AREA.--877 mi<sup>2</sup> (2,271 km<sup>2</sup>), of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--October 1913 to November 1915, April to November 1916, March, April 1920, September 1920 to August 1924, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River" prior to 1935, as "near Tierra Amarilla" 1913-14, 1935-47, as "near El Vado" 1915-16, and as "at El Vado" 1920-24.

GAGE.--Water-stage recorder. Datum of gage is 6,696.12 ft (2,040.977 m) above mean sea level. Prior to October 1935, at site 1.5 mi (2.4 km) upstream at different datum. October 1935 to September 1938 at site 1.1 mi (1.8 km) upstream at datum 30.34 ft (9.248 m) higher.

AVERAGE DISCHARGE.--5 years (1913-15, 1920-23) 448 ft<sup>3</sup>/s (12.69 m<sup>3</sup>/s), 324,600 acre-ft/yr (400 hm<sup>3</sup>/yr), prior to completion of El Vado Dam; 35 years (1935-70), 373 ft<sup>3</sup>/s (10.56 m<sup>3</sup>/s), 270,200 acre-ft/yr (333 hm<sup>3</sup>/yr), prior to release of trans-mountain water; 5 years (1970-75), 324 ft<sup>3</sup>/s (9.176 m<sup>3</sup>/s), 234,700 acre-ft/yr (289 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,280 ft<sup>3</sup>/s (92.9 m<sup>3</sup>/s) May 26 (gage height, 5.57 ft or 1.698 m); minimum, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/s) Oct. 14-20.

Period of record: Maximum discharge, 9,000 ft<sup>3</sup>/s (255 m<sup>3</sup>/s) May 22, 1920 (gage height, 12 ft or 3.7 m), site and datum then in use), from rating curve extended above 3,500 ft<sup>3</sup>/s (99.1 m<sup>3</sup>/s); no flow Mar. 25, 26, 31, 1955. Maximum discharge since construction of El Vado Dam in 1935, 6,010 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) May 17, 1941 (gage height, 6.89 ft or 2.100 m).

Flood of Oct. 4 or 5, 1911, was greater than floods in September 1904 and May 1920, from information by local residents.

REMARKS.--Records good. Flow regulated since 1935 by El Vado Reservoir (see sta 08285000). Since June 1971 flow affected by release of transmountain water from Heron Reservoir (see sta 08284510). Diversions for irrigation of about 10,600 acres (42.9 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1312: 1914, 1949. WSP 1392: 1949.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	63	38	29	29	30	31	1300	2020	373	96	451
2	86	63	38	29	29	33	30	1210	1690	323	84	486
3	86	65	38	29	29	31	30	968	644	299	88	528
4	86	65	38	29	29	31	30	968	94	289	69	257
5	86	65	38	27	27	31	30	1180	94	289	115	40
6	86	65	38	27	27	31	30	1270	94	289	166	26
7	86	65	38	27	27	31	738	1070	94	333	361	26
8	86	63	38	27	27	33	1570	968	94	364	553	24
9	86	63	38	27	27	38	1640	1020	94	364	553	24
10	86	63	38	27	27	31	1640	1160	94	364	553	24
11	65	89	38	27	27	31	1640	1560	94	385	553	24
12	18	113	38	27	27	30	1640	2250	284	450	441	24
13	18	107	598	27	29	30	1640	3180	854	540	221	24
14	16	71	1060	27	30	29	1640	3200	1070	540	91	24
15	16	37	1060	27	30	29	1450	3210	1070	540	71	24
16	16	37	1060	27	30	29	655	3220	1070	540	71	24
17	16	37	1060	27	30	29	96	3220	1080	540	71	35
18	16	37	1100	29	30	30	96	3240	1080	412	213	35
19	16	37	1120	29	30	31	96	3240	1080	323	348	24
20	16	37	708	29	30	31	96	3240	1080	323	211	24
21	54	37	31	29	30	31	478	3240	1080	428	63	24
22	99	37	30	27	30	31	1020	3260	1080	450	53	24
23	101	37	30	27	30	31	968	2970	641	309	63	35
24	99	38	30	27	30	31	936	2630	323	226	63	52
25	63	38	30	27	30	31	888	2630	323	153	423	67
26	22	38	30	27	30	31	840	2930	396	136	418	65
27	22	38	30	29	30	31	840	3260	462	136	428	54
28	22	38	30	29	30	31	840	3260	462	121	380	54
29	78	38	29	29	---	31	961	2640	462	107	401	43
30	150	38	29	29	---	31	1090	2020	389	107	451	38
31	113	---	29	29	---	31	---	2020	---	107	451	---
TOTAL	1896	1619	8550	863	811	960	23679	71534	19392	10110	8137	2604
MEAN	61.2	54.0	276	27.8	29.0	31.0	789	2308	646	326	262	86.8
MAX	150	113	1120	29	30	38	1640	3260	2020	540	553	528
MIN	16	37	29	27	27	29	30	968	94	107	63	24
AC-FT	3760	3210	16960	1710	1610	1900	46970	141900	38460	20050	16140	5170
CAL YR 1974	TOTAL	104307	MEAN 286	MAX 1120	MIN 16	AC-FT 206900						
WTR YR 1975	TOTAL	150155	MEAN 411	MAX 3260	MIN 16	AC-FT 297800						



## 08286900 ABIQUIU RESERVOIR NEAR ABIQUIU, N. MEX.

LOCATION.--Lat 36°14'24", long 106°25'44", Rio Arriba County in Piedra Lumbre Grant, in operations building at Abiquiu Dam on Rio Chama, 6.6 mi (10.6 km) northwest of Abiquiu, and at mile 32.1 (51.6 km).

DRAINAGE AREA.--2,146 mi<sup>2</sup> (5,558 km<sup>2</sup>), of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--February 1963 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1969, contents at 2400 hours.

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

EXTREMES.--Current year: Maximum contents, 110,300 acre-ft (136 hm<sup>3</sup>) June 3 (elevation, 6,193.86 ft or 1,887.889 m); minimum, 3,780 acre-ft (4.66 hm<sup>3</sup>) Oct. 8 (elevation 6,115.91 ft or 1,864.129 m).

Period of record: Maximum contents, 205,300 acre-ft (253 hm<sup>3</sup>) June 22, 1973 (elevation, 6,219.93 ft or 1,895.835 m); no storage at times prior to May 1968.

REMARKS.--Reservoir is formed by earthfill dam, completed Feb. 5, 1963. Capacity, 1,216,000 acre-ft (1.50 km<sup>3</sup>) between elevations 6,060 ft (1,847 m), invert of outlet tunnel, and 6,350 ft (1,935 m), crest of spillway, based on capacity table effective Jan. 1, 1974. No dead storage. Reservoir is normally used for flood control. A desilting pool of about 2,000 acre-ft (2.47 hm<sup>3</sup>) was maintained from May 1968 to 1974, when it was increased to 4,000 acre-ft (4.93 hm<sup>3</sup>).

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)  
(Based on survey by Corps of Engineers in 1973)

6,115	3,460	6,140	16,820	6,170	52,610
6,120	5,410	6,150	25,250	6,180	73,710
6,130	10,470	6,160	36,680	6,200	129,800

CONTENTS, IN ACRE-FeET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3840	4180	4020	18310	18250	18300	18300	18380	108900	52920	15500	15460
2	3840	3970	4020	18310	18230	18350	18320	18570	109900	50400	15530	15490
3	3820	4070	4060	18280	18230	18390	18300	18600	110300	47950	15510	15340
4	3800	3980	4090	18300	18240	18470	18290	18440	108900	45520	15510	15540
5	3800	3980	4110	18320	18250	18550	18440	19090	106100	42910	15530	15640
6	3810	4010	4010	18330	18270	18390	18590	19660	103300	40470	15530	15420
7	3840	4040	4010	18300	18290	18370	18500	19660	100400	37990	15600	15360
8	3800	4050	4020	18280	18300	18390	19170	19210	97420	35490	15690	15260
9	3880	4060	4010	18250	18300	18210	19810	18730	94580	33200	15680	15280
10	3980	4050	3970	18250	18310	18500	20150	19070	91730	30890	15600	15280
11	4260	4020	4030	18180	18270	18190	20500	19930	88850	28660	15550	15170
12	4030	3980	4060	18160	18250	18100	20930	22350	85950	26440	15580	15290
13	3960	4050	4070	18190	18270	18140	21460	27170	83240	24550	15760	15100
14	4010	3980	4530	18230	18410	18210	21890	32830	81560	22620	15380	15010
15	4050	4030	7080	18280	18310	18250	22380	38400	80480	21130	15420	14960
16	4030	3980	9060	18300	18310	18310	22530	44290	79380	19640	15450	14970
17	4010	4010	10990	18300	18300	18330	21730	50310	78300	18180	15620	14970
18	4010	4040	12910	18290	18280	18350	19760	56100	77230	17650	15500	14970
19	4040	4050	14830	18280	18240	18310	18420	62140	76110	17760	15580	14970
20	4060	4050	16760	18260	18280	18350	18310	68060	75050	17770	15510	14980
21	4050	4040	18260	18270	18310	18340	18350	73890	73820	17740	15370	14980
22	4000	4030	18310	18280	18370	18530	18940	79730	72680	17950	15440	14980
23	4050	4030	18310	18260	18390	18460	19260	85190	76520	17840	15480	14990
24	4060	4030	18290	18270	18380	18140	19080	88770	69670	16650	15420	14990
25	4010	4020	18280	18290	18380	18130	18830	91410	67140	15750	15410	14990
26	4070	4020	18280	18310	18370	18220	18720	94050	64530	15610	15530	15010
27	3980	4040	18290	18310	18330	18390	19380	97450	62030	15570	15610	15020
28	4020	4030	18330	18370	18300	18280	19250	101000	59760	15420	15480	15000
29	4020	4050	18350	18280	---	18300	18440	104700	57490	15570	15440	14980
30	4110	4050	18350	18250	---	18350	18140	106800	55240	15550	15460	14810
31	4090	---	18330	18280	---	18320	---	107900	---	15470	15470	---
MAX	4260	4180	18350	18330	18390	18970	22530	107900	110300	52920	15760	15640
MIN	3800	3970	3970	18160	18230	18100	18140	18380	55240	15420	15370	14810
(†)	6116.76	6116.65	6142.03	6141.95	6141.99	6142.01	6141.77	6193.06	6171.38	6138.10	6138.10	6137.13
(‡)	+250	-40	+14280	-50	+20	+20	-180	+89760	-52660	-39770	0	-660

CAL YR 1974 MAX 42420 MIN 3800 † a -26120  
WLN YR 1975 MAX 110300 MIN 3800 ‡ +10970

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

a Computed on basis of revised capacity table put in use Jan. 1, 1974.

## 08287000 RIO CHAMA BELOW ABIQUIU DAM, N. MEX.

LOCATION.--Lat 36°14'12", long 106°24'59", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.8, T.23 N., R.5 E., Rio Arriba County, on right bank 0.8 mi (1.3 km) downstream from Abiquiu Dam, 5.9 mi (9.5 km) northwest of Abiquiu, and at mile 31.3 (50.4 km).

DRAINAGE AREA.--2,147 mi<sup>2</sup> (5,561 km<sup>2</sup>), of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--October 1961 to current year (monthly discharge only, October 1961).

GAGE.--Water-stage recorder. Concrete control since Jan. 25, 1966. Altitude of gage is 6,040 ft (1,841 m) from topographic map. Prior to Jan. 25, 1966, at datum 1.60 ft (0.488 m) lower.

AVERAGE DISCHARGE.--9 years (1961-70), 384 ft<sup>3</sup>/s (10.87 m<sup>3</sup>/s), 278,200 acre-ft/yr (343 hm<sup>3</sup>/yr), prior to release of transmountain water; 5 years (1970-75), 380 ft<sup>3</sup>/s (10.76 m<sup>3</sup>/s), 275,300 acre-ft/yr (339 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft<sup>3</sup>/s (51.5 m<sup>3</sup>/s) July 8 (gage height 4.80 ft or 1.463 m); minimum, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Mar. 5.

Period of record: Maximum discharge, 2,990 ft<sup>3</sup>/s (84.7 m<sup>3</sup>/s) July 1, 1965 (gage height, 6.69 ft or 2.039 m, site and datum then in use); maximum gage height, 7.29 ft (2.222 m) Jan. 14, 1967 (backwater from ice); minimum discharge, about 0.5 ft<sup>3</sup>/s (0.01 m<sup>3</sup>/s) Mar. 17, 1966, Jan. 28, 1972.

REMARKS.--Records good. Flow controlled by El Vado Reservoir (see sta 08285000) 46.4 mi (74.7 km) upstream and Abiquiu Reservoir (see sta 08286900) 0.8 mi (1.3 km) upstream. Since June 1971 flow affected by release of transmountain water from Heron Reservoir (see sta 08284510) 54.5 mi (87.7 km) upstream. Diversions for irrigation of about 17,600 acres (71.2 km<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	160	44	38	57	40	66	1420	1650	1690	108	466
2	93	114	38	39	52	40	66	1590	1650	1700	106	523
3	95	109	41	31	44	205	62	1560	1670	1700	100	566
4	92	108	48	23	35	464	54	1280	1720	1710	89	532
5	89	70	80	24	30	409	116	1310	1740	1690	79	388
6	93	70	67	40	30	354	254	1510	1730	1680	108	112
7	111	68	49	53	32	338	336	1600	1730	1690	209	108
8	87	75	49	52	37	380	915	1600	1720	1710	472	64
9	57	81	47	53	43	364	1480	1470	1710	1700	642	77
10	85	86	33	56	58	412	1510	1270	1700	1690	642	103
11	257	85	29	43	61	306	1480	1070	1690	1690	659	111
12	216	86	44	23	45	109	1470	758	1690	1700	644	180
13	67	126	44	10	32	58	1480	672	1690	1670	640	133
14	17	119	45	10	45	62	1480	755	1700	1650	333	90
15	37	102	47	14	54	64	1490	684	1700	1640	100	56
16	39	53	48	32	54	66	1480	535	1690	1630	81	41
17	30	41	49	38	53	80	1460	540	1680	1290	122	41
18	24	44	50	38	54	85	1210	547	1680	704	116	39
19	17	49	73	38	40	70	536	554	1680	407	277	38
20	27	52	76	38	32	120	283	560	1680	406	437	34
21	43	42	41	38	32	234	326	566	1680	390	202	33
22	63	52	41	37	35	255	961	679	1690	533	98	32
23	114	52	41	35	35	273	1530	1200	1690	830	116	32
24	138	52	32	29	45	146	1570	1450	1700	910	88	38
25	116	49	27	30	54	41	1570	1460	1690	516	71	49
26	91	44	27	34	57	60	1280	1460	1690	255	254	61
27	70	44	27	37	61	141	1260	1580	1710	250	474	74
28	56	44	27	55	54	94	1500	1660	1700	149	480	74
29	59	45	27	67	---	49	1420	1600	1690	133	405	126
30	128	47	31	45	---	60	1260	1620	1690	179	435	74
31	180	---	38	52	---	66	---	1650	---	142	480	---
TOTAL	2689	2179	1360	1153	1261	5445	29905	36210	50830	34034	9067	4303
MEAN	86.7	72.6	43.9	37.2	45.0	176	997	1168	1694	1098	292	143
MAX	257	160	80	67	61	464	1570	1660	1740	1710	659	566
MIN	17	41	27	10	30	40	54	535	1650	133	71	32
AC-FT	5330	4320	2700	2290	2500	10900	59320	71820	100800	67510	17980	8530
CAL YR 1974 TOTAL	125295		MEAN 343	MAX 1110	MIN 17	AC-FT 248500						
WTR YR 1975 TOTAL	178436		MEAN 489	MAX 1740	MIN 10	AC-FT 353900						



## 08289000 RIO OJO CALIENTE AT LA MADERA, N. MEX.

LOCATION.--Lat 36°20'59", long 106°02'37", in NW 1/4 sec. 1, T.24 N., R.8 E., Rio Arriba County, on left bank 400 ft (120 m) upstream from bridge on State Highway 96, 2.4 mi (3.9 km) south of La Madera, 2.6 mi (4.2 km) downstream from confluence of Rio Vallecitos and Rio Tusas, 3.1 mi (5.0 km) north of Ojo Caliente, and at mile 19.9 (32.0 km).

DRAINAGE AREA.--419 mi<sup>2</sup> (1,085 km<sup>2</sup>).

PERIOD OF RECORD.--April 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,358.84 ft (1,938.174 m) above mean sea level. Prior to Apr. 23, 1934, at site about 2.6 mi (4.2 km) upstream at different datum. Apr. 23, 1934 to Apr. 21, 1936, at datum 12.58 ft (3.834 m) lower and Apr. 22, 1936 to Oct. 26, 1956, at datum 13.84 ft (4.218 m) lower, both at site 1,400 ft (430 m) downstream.

AVERAGE DISCHARGE.--43 years, 67.1 ft<sup>3</sup>/s (1,900 m<sup>3</sup>/s), 48,610 acre-ft/yr (59.9 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft<sup>3</sup>/s (40.8 m<sup>3</sup>/s) May 15 (gage height, 6.09 ft or 1.856 m); minimum, 2.0 ft<sup>3</sup>/s (0.057 m<sup>3</sup>/s) Sept. 3-4.

Period of record: Maximum discharge, 3,140 ft<sup>3</sup>/s (88.9 m<sup>3</sup>/s) Apr. 21, 1958 (gage height, 6.42 ft or 1.957 m), from rating curve extended above 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s); maximum gage height, 7.25 ft (2.210 m), from floodmarks, June 19, 1966; minimum discharge, 0.2 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s) Aug. 17, 1956.

The flood of Apr. 21, 1958, may have been exceeded by a flood in May 1920, from information by local resident.

REMARKS.--Records good except those for June, August, and September, which are poor. Diversions above station for irrigation of about 3,500 acres (14.2 km<sup>2</sup>), 1962 determination.

REVISIONS (WATER YEARS).--WSP 1712: 1959.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	15	13	13	19	26	41	307	212	7.4	8.7	2.9
2	5.0	17	15	13	17	37	36	317	217	8.0	8.5	2.4
3	5.4	19	16	13	17	46	34	427	213	10	8.9	2.2
4	5.5	20	14	13	17	40	42	516	191	9.6	10	7.6
5	5.7	18	16	13	19	38	93	579	172	9.2	10	39
6	6.2	18	16	14	18	44	169	392	142	8.8	9.5	30
7	6.8	18	14	15	19	37	209	294	124	7.9	8.9	17
8	7.0	17	17	15	20	37	93	330	106	7.5	9.1	13
9	6.7	20	12	15	21	48	74	475	101	7.5	9.8	10
10	6.9	19	13	13	22	52	67	608	110	9.4	9.0	12
11	7.6	19	14	13	21	42	67	847	98	12	8.4	11
12	8.6	18	15	13	19	38	66	1010	69	34	120	24
13	8.0	18	14	15	20	35	65	1050	65	32	25	21
14	7.6	18	12	15	21	32	61	1070	61	45	15	20
15	7.6	18	12	15	21	36	87	1150	56	38	14	19
16	7.5	18	12	15	21	34	236	1040	54	29	13	15
17	7.2	17	12	15	20	36	296	972	50	27	12	10
18	7.2	16	12	15	20	33	259	912	48	26	11	7.2
19	7.2	14	12	15	19	36	159	802	44	18	8.5	6.1
20	7.4	14	11	15	19	48	193	756	43	14	7.9	5.9
21	7.6	14	11	14	21	73	299	736	41	14	6.5	6.4
22	8.6	15	11	15	19	69	428	656	36	14	7.6	6.7
23	9.3	16	11	14	18	50	502	426	31	12	8.6	7.3
24	8.8	14	9.9	15	20	38	495	359	28	14	8.6	7.2
25	8.2	14	10	15	21	44	598	435	23	48	7.6	7.1
26	8.3	15	12	16	23	59	674	433	18	23	6.1	7.1
27	10	14	12	15	21	53	540	425	16	15	5.3	7.4
28	9.5	13	12	16	23	40	321	385	15	14	4.9	6.8
29	12	15	14	17	---	40	318	287	12	13	4.5	6.6
30	16	13	14	19	---	34	254	219	8.3	12	4.1	6.2
31	15	---	13	20	---	38	---	215	---	9.3	3.5	---
TOTAL	249.1	494	401.9	459	556	1313	6776	18430	2404.3	548.6	394.5	344.1
MEAN	8.04	16.5	13.0	14.8	19.9	42.4	226	595	80.1	17.7	12.7	11.5
MAX	16	20	17	20	23	73	674	1150	217	48	120	39
MIN	4.7	13	9.9	13	17	26	34	215	8.3	7.4	3.5	2.2
AC-FT	494	980	797	910	1100	2600	13440	36560	4770	1090	782	683

CAL YR 1974 TOTAL 8935.5 MEAN 24.5 MAX 300 MIN 3.0 AC-FT 17720  
WTR YR 1975 TOTAL 32370.5 MEAN 88.7 MAX 1150 MIN 2.2 AC-FT 64210

PEAK DISCHARGE (BASE, 600 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0245	5.48	936	5-15	0230	6.09	1,440
5-5	0245	5.09	664	8-12	1715	about 5.7	1,110

## 08290000 RIO CHAMA NEAR CHAMITA, N. MEX.

LOCATION:--Lat 36°04'26", long 106°06'40", in NE 1/4 sec. 8, T. 21 N., R. 8 E., Rio Arriba County, San Juan Pueblo Grant; at downstream end of pier nearest left bank of bridge on U.S. Highway 285, 0.5 mi (0.8 km) west of Chamita, 2.5 mi (4.0 km) northwest of San Juan Pueblo, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--3,144 mi<sup>2</sup> (8,143 km<sup>2</sup>), of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Chama River near Chamita prior to 1928, and Chama River at Chamita 1929-30.

GAGE.--Water-stage recorder. Concrete control since Jan. 1, 1964. Datum of gage is 5,653.61 ft (1,723.220 m) above mean sea level. Prior to Oct. 4, 1933, at railroad bridge 2.3 mi (3.7 km) downstream at different datums. Oct. 4, 1933 to Mar. 1, 1942, at site 50 ft (15 m) downstream at datum 0.22 ft (0.067 m) higher. Mar. 2, 1942 to Dec. 31, 1963, at site 200 ft (61 m) downstream; present datum.

AVERAGE DISCHARGE.--58 years (1912-70), 541 ft<sup>3</sup>/s (15.32 m<sup>3</sup>/s), 392,000 acre-ft/yr (483 hm<sup>3</sup>/yr), prior to release of trans-mountain water; 5 years (1970-75), 426 ft<sup>3</sup>/s (12.06 m<sup>3</sup>/s), 308,600 acre-ft/yr (381 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,790 ft<sup>3</sup>/s (79.0 m<sup>3</sup>/s) Apr. 26 (gage height, 5.84 ft or 1.780 m); minimum, 15 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) Aug. 19.

Period of record: Maximum discharge, 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s) May 22, 1920, from rating curve extended above 2,300 ft<sup>3</sup>/s (65.1 m<sup>3</sup>/s); maximum gage height, 10.45 ft (3.185 m) Aug. 22, 1961; no flow at times.

The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s). Another major flood occurred in 1884, from newspaper accounts.

REMARKS.--Records good. Diversions above station for irrigation of about 27,600 acres (112 km<sup>2</sup>). Chamita ditch, on left bank, and Hernandez ditch, on right bank, bypass gage for irrigation of several hundred acres below station; see tabulation below for monthly diversion. Flow partly regulated by El Vado Reservoir (see sta 08285000) and Abiquiu Reservoir (see sta 08286900), 74.9 mi (120.5 km) and 29.3 mi (47.1 km) upstream, respectively. Since June 1971 flow affected by release of transmountain water from Heron Reservoir (see sta 08284510) 83.0 mi (133.5 km) upstream. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	183	79	55	110	115	136	1550	1790	1580	99	382
2	74	193	86	60	100	105	134	1830	1760	1560	88	387
3	74	132	-	50	94	123	129	1910	1800	1560	65	485
4	78	160	94	45	85	411	124	1860	1820	1570	51	716
5	75	129	94	50	77	567	131	1830	1840	1560	45	570
6	79	110	128	70	58	378	269	1820	1780	1570	40	224
7	105	103	105	80	66	360	444	1800	1750	1550	75	166
8	121	96	95	75	82	427	622	1790	1760	1590	218	144
9	80	109	80	80	80	463	1380	1960	1740	1630	558	121
10	69	110	79	70	89	427	1550	1870	1730	1640	589	159
11	121	113	72	60	97	500	1580	2070	1720	1660	579	150
12	328	110	70	45	97	272	1530	1990	1680	1720	720	295
13	157	113	81	30	82	167	1530	1700	1670	1680	606	209
14	93	148	69	30	67	138	1520	1830	1670	1620	559	154
15	39	134	80	35	86	145	1510	2000	1660	1600	155	128
16	47	126	91	50	100	145	1570	1620	1650	1670	108	101
17	50	81	90	60	95	145	1650	1600	1630	1440	128	66
18	42	66	87	60	92	163	1570	1530	1620	862	130	54
19	38	67	88	65	89	158	894	1450	1630	357	84	64
20	32	75	113	65	75	145	386	1360	1630	345	347	69
21	35	74	106	65	68	264	448	1340	1650	373	387	68
22	45	65	85	60	72	313	866	1310	1650	378	174	54
23	75	71	77	55	79	336	1930	1430	1650	621	158	37
24	132	71	56	50	83	300	2060	1680	1640	1000	122	37
25	146	66	45	55	100	160	2150	1760	1630	599	83	38
26	113	66	45	65	109	131	2180	1810	1620	281	57	38
27	124	71	45	70	115	170	1780	1810	1610	239	345	50
28	100	72	45	90	119	217	1760	2080	1600	210	431	48
29	95	76	45	115	---	145	1730	1870	1580	117	341	47
30	117	77	45	100	---	120	1510	1780	1580	134	322	99
31	191	---	50	105	---	133	---	1810	---	145	411	---
TOTAL	2951	3067	2397	1970	2467	7643	35073	54050	50540	32861	8075	5160
MEAN	95.2	102	77.3	63.5	88.1	247	1169	1744	1685	1060	260	172
MAX	328	193	128	115	119	567	2180	2080	1840	1720	720	716
MIN	32	65	45	30	59	105	124	1310	1580	117	40	37
AC-FT	5850	6080	4750	3910	4890	15160	69570	107200	100200	65180	16020	10230
(†)	233	-	-	-	-	-	276	747	1010	902	956	471
(‡)	355	-	-	-	-	-	798	952	1430	1070	664	388
CAL YR 1974	TOTAL	129295	MEAN 354	MAX 1150	MIN 32	AC-FT 256500						
WTR YR 1975	TOTAL	206254	MEAN 565	MAX 2180	MIN 30	AC-FT 409100						

† Diversion, in acre-ft, by Chamita ditch.

‡ Diversion, in acre-ft, by Hernandez ditch.

## Diversions from Rio Chama

During the irrigation season records of discharge are collected on all 17 ditches and 2 pumps which divert from Rio Chama below El Vado Dam. All measuring devices consist of totalizing type flowmeters. All ditches are also equipped with Parshall flumes. In most cases meters on ditches are located below the most downstream wasteway and above any irrigated land. Flows tabulated represent water that is delivered to each ditch or portion thereof and may include waste water from another ditch. No attempt is made to credit for water returned to Rio Chama or delivered to another ditch.

- 08286300 MONASTERY PUMP NEAR ALIRE, N. MEX.--Lat 36°22'45", long 106°40'55", in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.24, T.25 N., R.2 E., Rio Arriba County, in Santa Fe National Forest, totalizing flowmeter on discharge pipe of pump on left bank of Rio Chama, at Christ of the Desert Monastery, 8.8 mi (14.2 km) southwest of Alire, and 24 mi (39 km) northwest of Abiquiu. Period of record, April 1972 to current year.
- 08287020 ABEYTA TRUJILLO DITCH NEAR ABIQUIU, N. MEX.--Lat 36°14'03", long 106°23'22", Rio Arriba County, in Carson National Forest, totalizing flowmeter and Parshall flume on left bank 0.9 mi (1.4 km) downstream from heading located on left bank of Rio Chama, and 4.5 mi (7.2 km) northeast of Abiquiu. Period of record, April 1972 to current year.
- 08287040 WINFIELD MORTON PUMP NEAR ABIQUIU, N. MEX.--Lat 36°12'40", long 106°20'48", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter on discharge pipe of pump on left bank of Jose Pablo Gonzales ditch 700 ft (210 m) downstream from ditch heading located on left bank of Rio Chama, and 1.4 mi (2.3 km) west of Abiquiu. Period of record, April 1972 to current year.
- 08287060 JOSE PABLO GONZALES DITCH NEAR ABIQUIU, N. MEX.--Lat 36°12'25", long 106°20'35", Rio Arriba County, in Town of Abiquiu Grant, totalizing flowmeter and Parshall flume on left bank, 0.5 mi (0.8 km) downstream from Winfield Morton pump, 0.6 mi (1.0 km) downstream from heading located on left bank of Rio Chama, and 1.2 mi (1.9 km) west of Abiquiu. Period of record, April 1972 to current year.
- 08287150 GONZALES DITCH AT ABIQUIU, N. MEX.--Lat 36°12'46", long 106°19'16", Rio Arriba County, in Town of Abiquiu Grant, totalizing flowmeter and Parshall flume on right bank, 0.2 mi (0.3 km) downstream from heading located on right bank of Rio Chama, and 0.4 mi (0.6 km) northwest of Abiquiu. Period of record, April 1972 to current year.
- 08287200 LA PUENTE DITCH NEAR ABIQUIU, N. MEX.--Lat 36°12'52", long 106°16'27", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on left bank, 100 ft (30 m) downstream from culvert on U.S. Highway 84, 0.4 mi (0.6 km) downstream from heading located on right bank of Rio Chama, and 2.5 mi (4.0 km) east of Abiquiu. Period of record, April 1972 to current year.
- 08287250 QUINTANA DITCH NEAR ABIQUIU, N. MEX.--Lat 36°12'55", long 106°16'26", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank, 100 ft (30 m) upstream from culvert on U.S. Highway 84, 0.2 mi (0.3 km) downstream from heading located on right bank of Rio Chama, and 2.6 mi (4.2 km) east of Abiquiu. Period of record, April 1972 to current year.
- 08287270 VALENTINE MARTINEZ DITCH NEAR ABIQUIU, N. MEX.--Lat 36°12'55", long 106°16'12", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank on north side of U.S. Highway 84, 0.2 mi (0.3 km) downstream from heading located on left bank of Quintana ditch (see sta 08287250), and 2.8 mi (4.5 km) east of Abiquiu. Period of record, April 1972 to current year.
- 08287300 MARIANO DITCH NEAR ABIQUIU, N. MEX.--Lat 36°13'05", long 106°16'09", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on left bank 0.5 mi (0.8 km) downstream from heading located on left bank of Rio Chama, and 2.9 mi (4.7 km) east of Abiquiu. Period of record, April 1972 to current year.
- 08287400 FERRAN DITCH NEAR ABIQUIU, N. MEX.--Lat 36°12'57", long 106°14'34", Rio Arriba County, in Carson National Forest, totalizing flowmeter and Parshall flume on left bank just downstream from siphon, 40 ft (12 m) upstream from forest boundary, 0.2 mi (0.3 km) downstream from culvert on State Highway 96, 0.4 mi (0.6 km) downstream from tail of Mariano ditch (see sta 08287300), 0.9 mi (1.4 km) downstream from heading located on left bank of Rio Chama, and 4.4 mi (7.1 km) east of Abiquiu. Period of record, April 1972 to current year.
- 08287600 TIERRA AZUL DITCH NEAR MEDANALES, N. MEX.--Lat 36°12'06", long 106°14'11", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank 1.1 mi (1.8 km) downstream from heading located on right bank of Rio Chama, and 3.5 mi (5.6 km) northwest of Medanales. Period of record, April 1972 to current year.
- 08288050 JOSE V. MARTINEZ DITCH NEAR MEDANALES, N. MEX.--Lat 36°11'44", long 106°13'39", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on left bank 0.1 mi (0.2 km) downstream from heading located on left bank of Rio Chama, and 2.9 mi (4.7 km) northwest of Medanales. Period of record, April 1972 to current year.
- 08288100 MANZANARES AND MONTOYA DITCH NEAR MEDANALES, N. MEX.--Lat 36°11'13", long 106°12'35", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank, 0.2 mi (0.3 km) downstream from heading located on right bank of Rio Chama, and 1.7 mi (2.7 km) northeast of Medanales. Period of record, April 1972 to current year.
- 08288150 RIO DE CHAMA DITCH NEAR MEDANALES, N. MEX.--Lat 36°11'13", long 106°12'02", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter, water-stage recorder, and Parshall flume on left bank, 0.5 mi (0.8 km) downstream from tail of Jose V. Martinez ditch (see sta 08288050), 0.7 mi (1.1 km) downstream from heading located on left bank of Rio Chama, and 1.3 mi (2.1 km) northwest of Medanales. Period of record, April 1972 to current year.
- 08288200 MARTINEZ AND DURANES DITCH (UPPER) NEAR MEDANALES, N. MEX.--Lat 36°10'55", long 106°11'59", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank, 300 ft (91 m) downstream from tail of Manzanares and Montoya ditch (see sta 08288100), 0.7 mi (1.1 km) downstream from heading located on right bank of Rio Chama, and 1.1 mi (1.8 km) northwest of Medanales. Period of record, April 1972 to current year.
- 08288250 MARTINEZ AND DURANES DITCH (LOWER) NEAR MEDANALES, N. MEX.--Lat 36°09'26", long 106°10'24", Rio Arriba County, in Juan Jose Lobato Grant, totalizing flowmeter and Parshall flume on right bank, 0.9 mi (1.4 km) downstream from culvert on State Highway 233, 1.4 mi (2.3 km) south of Medanales, 2.5 mi (4.0 km) downstream from "upper" gage (see sta 08288200), and 3.2 mi (5.1 km) downstream from heading located on right bank of Rio Chama. Period of record, April 1972 to current year.
- 08288300 CHILI DITCH NEAR HERNANDEZ, N. MEX.--Lat 36°07'00", long 106°09'11", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.24, T.22 N., R.7 E., Rio Arriba County, totalizing flowmeter and Parshall flume on left bank, 0.4 mi (0.6 km) downstream from heading located on right bank of Rio Chama, 0.5 mi (0.8 km) upstream from siphon under Rio del Oso, and 4.1 mi (6.6 km) northwest of Hernandez. Period of record, April 1972 to current year.

## RIO GRANDE BASIN

## Diversions from Rio Chama - Continued

08289500 CHAMITA DITCH NEAR CHAMITA, N. MEX.—Lat 36°04'57", long 106°06'54", in SW¼NE¼ sec.5, T.21 N., R.8 E., in Rio Arriba County, in San Juan Pueblo Grant, totalizing flowmeter, water-stage recorder, and Parshall flume on left bank, 30 ft (9 m) upstream from flume over Arroyo de la Penita, 0.7 mi (1.1 km) downstream from heading located on left bank of Rio Chama, and 1.0 mi (1.6 km) northwest of Chamita. Period of record, March 1936 to April 1941, February 1963 to current year (records furnished by Bureau of Reclamation August 1966 to December 1972).

08289800 HERNANDEZ DITCH AT HERNANDEZ, N. MEX.—Lat 36°04'52", long 106°07'16", Rio Arriba County, in Bartolome Sanchez Grant, totalizing flowmeter, water-stage recorder, and Parshall flume on right bank, 0.7 mi (1.1 km) downstream from heading located on right bank of Rio Chama, 1.1 mi (1.8 km) north of Hernandez, and 1.3 mi (2.1 km) northwest of Chamita. Period of record, March 1963 to current year (records furnished by Bureau of Reclamation July 1965 to December 1971).

08290100 SALAZAR DITCH AT HERNANDEZ, N. MEX.—Lat 36°03'44", long 106°06'31", in SE¼SE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, in San Juan Pueblo Grant, totalizing flowmeter and Parshall flume on right bank, 0.1 mi (0.2 km) downstream from heading located on right bank of Rio Chama, and 0.6 mi (1.0 km) east of Hernandez. Period of record, April 1972 to current year.

## Diversions from Rio Chama, in acre-feet, irrigation season 1975

Diversion	APR	MAY	JUN	JUL	AUG	SEP	OCT
08286300 Monastery pump	0	0.6	0.6	1.2	5.8	0.5	0
08287020 Abeyta Trujillo ditch	69	366	392	259	227	20	33
08287040 Winfield Norton pump	35	162	a129	88	105	11	25
08287060 Jose Pablo Gonzales ditch	334	949	828	538	b600	220	269
08287150 Gonzales ditch	c90	c161	c194	c198	c275	c46	c128
08287200 La Puente ditch	0	193	238	133	178	12	20
08287250 Quintana ditch	49	105	62	27	34	8.0	13
08287270 Valentine Martinez ditch	1.9	20	16	4.6	10	0	0
08287300 Mariano ditch	147	116	427	187	157	29	169
08287400 Ferran ditch	c18	c112	c131	c29	0	0	0
08287600 Tierra Azul ditch	90	601	903	274	421	41	31
08288050 Jose V. Martinez ditch	b200	343	289	94	154	b60	37
08288100 Manzanares and Montoya ditch	2.8	13	8.1	12	14	0	0
08288150 Rio de Chama ditch	154	929	966	694	463	487	822
08288200 Martinez and Duranes ditch (upper)	335	937	1,080	654	439	171	271
08288250 Martinez and Duranes ditch (lower)	991	114	470	b680	0	b0	0
08288300 Chili ditch	100	308	323	314	168	16	15
08289500 Chamita ditch	276	747	1,010	902	956	471	652
08289800 Hernandez ditch	798	952	1,430	1,070	664	388	245
08290100 Salazar ditch	2.0	d	d	529	522	150	394

a Estimate; spalling meter not operating properly.

b Record estimated.

c Parshall flume submerged; record partially estimated.

d No record.

## 08291000 SANTA CRUZ RIVER AT CUNDIYO, N. MEX.

LOCATION.--Lat 35°57'53", long 105°54'14", in SE¼NW¼ sec.17, T.20 N., R.10 E., Santa Fe County, on left bank 135 ft (41 m) downstream from bridge on State Highway 4, 200 ft (61 m) downstream from confluence of Rio Medio and Rio Prioles, 0.6 mi (1.0 km) northwest of Cundiyo, 1.8 mi (2.9 km) upstream from Santa Cruz Dam, and at mile 11.9 (19.1 km).

DRAINAGE AREA.--86 mi<sup>2</sup> (220 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Rio Santa Cruz at Cundiyo.

GAGE.--Water-stage recorder. Concrete control since Jan. 3, 1954. Altitude of gage is 6,460 ft (1,969 m) from topographic map. Sept. 1, 1930 to Aug. 12, 1932, water-stage recorder at site about 1 mi (2 km) downstream at different datum. Aug. 13, 1932 to Oct. 29, 1934, water-stage recorder at site 35 ft (11 m) upstream at datum 0.42 ft (0.128 m) higher. Oct. 30, 1934 to Jan. 2, 1954, water-stage recorder at present site at datum 0.64 ft (0.195 m) lower.

AVERAGE DISCHARGE.--45 years, 28.7 ft<sup>3</sup>/s (0.813 m<sup>3</sup>/s), 20,790 acre-ft/yr (25.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 116 ft<sup>3</sup>/s (3.29 m<sup>3</sup>/s) May 21, June 10 (gage height, 2.51 ft or 0.765 m); maximum gage height, 2.62 ft (0.799 m) Dec. 28, backwater from ice; minimum discharge, 0.87 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Feb. 19, result of freezeup. Period of record: Maximum discharge, 2,420 ft<sup>3</sup>/s (68.5 m<sup>3</sup>/s) Sept. 24, 1931 (gage height, 7.8 ft or 2.38 m, site and datum then in use), from rating curve extended above 170 ft<sup>3</sup>/s (4.81 m<sup>3</sup>/s); minimum, 0.19 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s) Mar. 13, 1954, result of freezeup.

REMARKS.--Records good except those for December and January, which are fair. Diversions for irrigation of about 1,000 acres (4.05 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1392: 1931(M), 1932-33, 1934-39(M), 1942, 1943(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	10	8.0	8.2	7.6	7.7	15	39	41	42	19	9.9
2	4.4	11	10	8.2	7.1	9.4	13	42	42	46	17	9.4
3	5.4	11	11	8.0	8.2	11	13	48	44	42	15	9.1
4	6.1	11	10	7.8	8.1	11	16	58	48	42	16	4.9
5	7.5	7.8	8.7	8.3	6.5	10	24	66	93	40	18	4.1
6	10	12	8.5	8.8	6.6	12	32	61	105	36	15	5.7
7	16	10	8.0	8.8	7.4	11	29	56	106	34	15	4.6
8	11	9.0	7.5	8.8	7.9	12	24	53	102	36	17	4.2
9	9.4	12	7.0	8.4	7.6	13	21	55	101	42	23	4.4
10	13	11	7.0	7.8	7.2	12	20	57	109	37	21	4.0
11	15	10	7.5	7.0	7.1	13	18	67	101	40	23	4.5
12	14	9.0	8.0	6.8	7.2	12	17	78	86	36	20	8.2
13	14	8.5	8.5	9.4	7.8	12	17	82	78	33	21	6.0
14	13	8.4	8.5	9.2	7.2	12	16	84	78	31	18	5.2
15	11	8.4	8.5	9.1	7.1	13	17	92	79	32	17	4.5
16	10	8.4	8.5	8.5	6.9	13	24	100	80	39	17	4.0
17	9.8	8.0	9.0	7.7	7.1	14	40	102	88	37	16	3.7
18	9.8	7.5	7.7	7.1	6.6	12	44	101	80	34	14	3.4
19	9.4	7.0	7.5	6.7	7.5	14	36	100	78	32	13	3.1
20	9.0	7.0	7.0	6.7	8.2	20	35	100	76	34	15	3.0
21	9.4	6.9	6.7	6.4	6.6	28	43	101	71	31	23	3.2
22	9.8	9.0	6.6	8.0	6.4	26	56	106	66	30	23	3.0
23	11	9.1	6.5	5.9	6.5	20	62	94	60	29	16	2.7
24	10	5.2	6.0	6.7	8.8	17	66	85	58	28	15	2.6
25	9.8	6.0	6.0	7.1	8.3	18	75	83	55	32	14	2.4
26	9.4	6.1	6.0	7.5	7.5	18	79	84	52	31	13	2.3
27	11	7.4	6.0	7.4	7.2	15	63	89	49	27	14	2.2
28	12	7.5	6.5	7.7	7.3	13	52	99	45	23	13	2.1
29	12	7.0	8.0	8.5	---	14	44	95	43	22	11	1.9
30	13	7.5	8.0	8.8	---	13	39	87	41	23	10	1.8
31	12	---	7.5	8.0	---	15	---	85	---	20	10	---
TOTAL	321.3	258.7	240.2	240.3	205.5	441.1	1050	2449	2307	1041	513	1085.3
MEAN	10.4	8.62	7.75	7.75	7.34	14.2	35.0	79.0	76.9	33.6	16.5	36.2
MAX	16	12	11	9.2	8.8	28	79	106	109	46	23	8.2
MIN	4.1	5.2	6.0	5.9	6.4	7.7	13	39	41	20	10	9.1
AC-FT	637	513	476	477	408	975	2080	4660	4580	2060	1020	2150
CAL YR 1974 TOTAL	4988.7											
WTR YR 1975 TOTAL	10152.4											
MEAN 13.7												
MAX 48												
MIN 3.4												
AC-FT 9900												
WTR YR 1975 TOTAL	10152.4											
MEAN 27.8												
MAX 109												
MIN 4.1												
AC-FT 20140												

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-21	2145	2.51	116	7-20	1600	2.46	106
5-27	2130	2.46	106	9-5	0500	2.45	108
6-10	1700	2.51	116	9-12	0230	2.44	103

## 08294300 RIO NAMBE AT NAMBE FALLS, NEAR NAMBE, N. MEX.

LOCATION.--Lat 35°50'46", long 105°54'29", in NW¼Sec.29, T.19 N., R.10 E., Santa Fe County, in Nambé Indian Reservation, on left bank 800 ft (240 m) downstream from Nambé Falls, 2.4 mi (3.9 km) upstream from confluence of Rio Nambé and Rio En Medio, 4.2 mi (6.8 km) southeast of Nambé Pueblo and 5.2 mi (8.4 km) southeast of Nambé.

DRAINAGE AREA.--25.1 mi<sup>2</sup> (65.0 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,513.7 ft (1,985.38 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--12 years, 10.7 ft<sup>3</sup>/s (0.303 m<sup>3</sup>/s), 7,750 acre-ft/yr (9.56 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 72 ft<sup>3</sup>/s (2.04 m<sup>3</sup>/s) July 25 (gage height, 1.49 ft or 0.454 m); minimum discharge not determined.

Period of record: Maximum discharge, 1,090 ft<sup>3</sup>/s (30.9 m<sup>3</sup>/s) Aug. 8, 1967 (gage height, about 6.0 ft or 1.83 m, from flood-marks), from rating curve extended above 44 ft<sup>3</sup>/s (1.25 m<sup>3</sup>/s) on basis of field estimate of peak flow; minimum determined, 0.50 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) Mar. 19, 1971, but may have been less during periods of ice effect.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	6.8	4.1	4.0	4.5	3.7	4.9	13	30	25	9.1	5.2
2	2.7	6.1	4.5	4.0	4.3	3.9	4.9	14	30	22	8.7	5.2
3	2.7	6.1	5.1	4.0	4.5	4.1	5.5	16	34	22	8.3	5.4
4	2.7	6.4	5.0	4.0	4.5	3.9	5.2	18	35	23	9.1	25
5	2.7	6.0	4.8	3.9	3.9	4.1	6.4	18	33	22	9.1	34
6	3.8	5.4	4.5	3.8	4.2	4.1	7.3	18	35	22	7.9	24
7	6.8	5.4	4.2	3.7	5.2	4.1	6.4	18	34	22	7.6	19
8	4.5	5.6	4.0	3.6	4.5	4.5	7.0	19	34	22	8.0	16
9	4.0	5.8	3.8	3.6	4.1	4.7	7.2	19	36	22	9.1	15
10	4.5	5.4	3.8	3.5	3.9	4.5	6.1	22	36	18	12	14
11	8.0	5.2	3.8	3.5	3.7	4.3	5.5	27	35	19	12	17
12	7.8	5.0	3.8	3.4	3.5	4.1	5.2	28	34	18	11	25
13	7.4	4.9	3.8	3.4	3.7	4.3	5.2	30	34	16	9.9	21
14	7.2	4.8	3.7	3.3	3.3	4.3	5.2	31	34	16	8.7	20
15	7.2	4.7	3.6	3.3	3.3	4.3	6.4	34	37	18	7.9	19
16	7.2	4.5	3.4	3.2	3.3	4.3	7.9	33	39	19	7.6	17
17	7.2	4.2	3.2	3.2	3.1	4.5	9.9	30	37	18	7.3	16
18	6.8	3.9	3.0	3.5	3.1	4.4	10	28	34	16	7.0	15
19	6.8	3.8	2.9	3.3	3.3	4.7	9.1	28	34	16	7.0	14
20	6.8	3.7	3.8	3.5	3.5	5.5	11	27	34	15	7.9	14
21	6.8	3.8	4.0	3.5	3.3	5.5	12	27	33	15	12	15
22	7.2	4.2	4.0	3.5	3.3	5.8	15	26	31	13	10	13
23	7.6	4.6	3.8	3.7	3.5	5.2	16	27	30	13	8.3	13
24	7.6	4.4	4.0	3.9	4.1	6.0	17	31	30	13	7.3	12
25	7.6	3.9	3.9	3.7	3.9	5.8	22	32	29	16	6.7	11
26	6.8	3.5	3.8	3.9	3.7	5.5	23	34	28	14	6.7	11
27	8.0	3.3	3.8	3.9	3.7	4.7	20	36	27	13	6.7	11
28	7.7	3.3	3.5	3.9	3.7	5.5	17	36	25	12	6.7	10
29	9.0	3.5	4.2	3.9	---	5.2	15	32	25	11	6.1	9.5
30	6.8	3.8	3.8	4.5	---	5.6	12	30	24	11	5.8	9.1
31	6.8	---	3.8	4.5	---	5.2	---	30	---	9.9	5.5	---
TOTAL	191.6	142.0	121.4	114.6	106.6	146.3	305.3	812	971	531.9	257.0	455.4
MEAN	6.18	4.73	3.92	3.70	3.81	4.72	10.2	26.2	32.4	17.2	8.29	15.2
MAX	9.0	6.8	5.1	4.5	5.2	6.0	23	36	39	25	12	34
MIN	2.7	3.3	2.9	3.2	3.1	3.7	4.9	13	24	9.9	5.5	5.2
AC-FT	380	282	241	227	211	290	606	1610	1930	1060	510	903

CAL YR 1974 TOTAL 2454.6 MEAN 6.72 MAX 21 MIN 1.6 AC-FT 4870  
WTR YR 1975 TOTAL 4155.1 MEAN 11.4 MAX 39 MIN 2.7 AC-FT 8240

PEAK DISCHARGE (BASE, 40 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-27	2000	1.26	43	9-4	0530	1.38	55
6-10	0430	1.26	43	9-5	0300	1.25	46
7-25	1800	1.49	72				

## 08312600 POJOAQUE RIVER AT SAN ILDEFONSO PUEBLO, N. MEX.

LOCATION.--Lat 35°53'51", long 106°06'24", Santa Fe County, in San Ildefonso Pueblo Grant, on right bank 0.7 mi (1.1 km) northeast of San Ildefonso Pueblo, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--184 mi<sup>2</sup> (477 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--May 1972 to current year (operated as a miscellaneous measurement site and high-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 5,560 ft (1,695 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,550 ft<sup>3</sup>/s (43.9 m<sup>3</sup>/s) Aug. 9 (gage height, 4.97 ft or 1.515 m); no flow many days.  
Period of record: Maximum discharge, 6,100 ft<sup>3</sup>/s (173 m<sup>3</sup>/s) Aug. 19, 1972 (gage height, 6.80 ft or 2.073 m, from floodmarks), from rating curve extended above 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.12 ft (1.561 m) and 6.80 ft (2.073 m); no flow many days most years.

REMARKS.--Records poor. Diversions for irrigation of about 4,900 acres (19.8 km<sup>2</sup>), 1973 determination, above station. Mean daily discharge computed only when flow exceeds about 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s). See table below for results of discharge measurements made during year.

## DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 10	0	Dec. 24	*1.0	May 16	13.8	July 28	*5.0
11	*2.5	Feb. 13	*3.2	June 11	27.5	Aug. 12	*1.2
21	.20	24	*2.0	24	*1.0	22	3.99
Nov. 12	*2.5	Mar. 26	5.65	July 7	*.50	25	*.50
25	*2.7	Apr. 10	4.67	15	16.3	Sept. 9	*18
Dec. 10	*6.2	May 6	0	17	22.4	25	*7.0

\*Estimated

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										-	-	-
2										-	-	-
3										-	-	-
4										-	-	-
5										-	-	-
6										-	-	-
7										-	-	-
8										-	-	95
9										-	45	80
10										-	-	-
11										-	-	-
12										-	-	-
13										-	-	-
14										60	-	-
15										-	-	-
16										-	-	-
17										-	-	-
18										-	-	-
19										-	-	-
20										-	-	-
21										-	-	-
22										-	-	-
23										-	-	-
24										-	-	-
25										100	-	-
26										-	-	-
27										-	-	-
28										-	-	-
29										-	-	-
30										-	-	-
31										-	-	-

PEAK DISCHARGE (BASE, 500 FT<sup>3</sup>/S, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1900	-	about 900	8- 9	2000	4.97	1,550
7 -14	1730	4.61	1,010	9- 8	1600	4.90	1,430
7 -25	1930	4.82	1,300	9- 9	1930	4.35	720

## 08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, in San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft (120 m) downstream from bridge on State Highway 4, 1.8 mi (2.9 km) southwest of San Ildefonso Pueblo, 2.5 mi (4.0 km) downstream from Pojoaque River, 6.8 mi (10.9 km) west of Pojoaque, and at mile 1,614.2 (2,597.2 km).

DRAINAGE AREA.--14,300 mi<sup>2</sup> (37,040 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--February 1895 to December 1905, June 1909 to current year. Monthly discharge only for some periods, published in WSP 1312. In early reports this record was published as "at Water Tank," as "at Rio Grande," and as "near Buckman."

GAGE.--Water-stage recorder. Datum of gage is 5,488.48 ft (1,672.889 m) above mean sea level. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

AVERAGE DISCHARGE.--76 years (1895-1905, 1909-75), 1,506 ft<sup>3</sup>/s (42.65 m<sup>3</sup>/s), 1,091,000 acre-ft/yr (1.35 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,070 ft<sup>3</sup>/s (144 m<sup>3</sup>/s) May 19 (gage height, 6.26 ft or 1.908 m); minimum, 240 ft<sup>3</sup>/s (6.80 m<sup>3</sup>/s) Oct. 2, 3.

Period of record: Maximum discharge, 24,400 ft<sup>3</sup>/s (691 m<sup>3</sup>/s) May 23, 1920; maximum gage height, 14.5 ft (4.42 m) Sept. 29, 1904 (present site and datum); minimum daily discharge, 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) July 4, 5, 1902.

The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeo's file on floods.

REMARKS.--Records good. Flow partly regulated by Heron, El Vado and Abiquiu Reservoirs (see sta 08284510, 08285000, 08286900) on Rio Chama which contributes about 40 percent of total flow. Since April 1972 flow affected by release of transmountain water from Heron Reservoir. Diversions above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and 75,000 acres (304 km<sup>2</sup>) in New Mexico. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 828: Drainage area. WSP 1512: 1895-99, 1904-06, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	498	380	375	576	733	820	2390	3890	3110	896	974
2	256	480	381	443	584	725	818	2640	3580	3210	905	939
3	250	443	473	430	545	749	796	2640	3600	3330	873	1040
4	251	443	476	410	548	929	798	2680	3720	3430	790	1530
5	266	460	479	442	555	1190	800	2780	3870	3550	740	1780
6	289	428	512	480	513	1010	931	2960	3970	3460	685	1230
7	338	415	534	480	508	1050	1190	3050	4130	3300	663	991
8	328	411	524	490	543	1159	1270	2810	4380	3290	771	1160
9	307	420	507	490	547	1240	2280	2900	4400	3450	1400	1150
10	413	439	446	490	564	1280	2380	2790	4250	3600	1390	972
11	456	447	467	480	568	1330	2390	3040	3960	3640	1310	995
12	625	448	439	470	562	1090	2410	3210	4150	3950	1720	1530
13	494	447	466	450	551	981	2390	3240	4440	3830	1580	1230
14	417	470	455	428	559	881	2300	3700	4540	3860	1480	1100
15	352	460	443	443	580	872	2270	4190	4490	3780	965	1060
16	346	451	462	467	581	861	2330	4300	4550	3750	892	1030
17	350	411	463	469	566	827	2400	4550	4660	3530	863	1010
18	343	388	468	490	573	823	2450	4640	4630	2700	817	997
19	323	385	463	488	568	831	1870	4670	4640	1950	749	930
20	313	390	470	477	553	830	1320	4570	4390	1870	894	864
21	315	391	442	475	568	938	1390	4360	4030	1900	1080	819
22	317	389	464	460	550	1050	1700	4150	3770	1580	912	783
23	341	385	462	453	543	1080	2910	4200	3620	1790	778	724
24	382	409	435	464	502	1080	3030	4400	3420	2280	729	680
25	402	401	385	484	537	962	3250	4190	3640	2120	659	678
26	384	396	412	494	617	855	3530	3840	3730	1470	629	653
27	390	414	436	498	626	903	3210	3760	3760	1190	852	639
28	401	447	400	509	651	954	3280	4300	3670	1250	1080	611
29	367	455	387	510	---	879	3150	4470	3580	1080	1000	589
30	459	430	401	546	---	825	2690	4430	3220	925	911	597
31	466	---	384	604	---	821	---	4170	---	924	987	---
TOTAL	11195	12860	13961	14674	15744	29649	62353	114070	120680	83099	30000	29290
MEAN	361	429	450	473	562	956	2078	3680	4023	2681	968	976
MAX	625	498	534	609	651	1330	3530	4670	4660	3950	1720	1780
MIN	250	385	380	375	502	725	796	2390	3220	924	629	589
AC-FT	22210	25510	27690	29110	31230	58810	123700	226300	239400	164800	59500	58100
CAL YR 1974	TOTAL	278607	MEAN	763	MAX	1720	MIN	216	AC-FT	552600		
WTR YR 1975	TOTAL	537575	MEAN	1473	MAX	4670	MIN	250	AC-FT	1066000		

PEAK DISCHARGE (BASE, 5,200 FT<sup>3</sup>/S).--No peak above base.



## 08315500 MCCLURE RESERVOIR NEAR SANTA FE, N. MEX.

LOCATION.--Lat 35°41'18", long 105°50'06", in NE¼SW¼ sec.24, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at McClure Dam on Santa Fe River, 2.1 mi (3.4 km) upstream from Nichols Reservoir, 5.8 mi (9.3 km) east of Santa Fe, and at mile 34.0 (54.7 km).

DRAINAGE AREA.--17.4 mi<sup>2</sup> (45.1 km<sup>2</sup>).

PERIOD OF RECORD.--September 1929, July to October 1930, April 1931 to June 1946, September 1947 to current year. Prior to October 1947, published in WSP 1312. Prior to October 1965, monthend contents only.

GAGE.--Water-stage recorder. Altitude of gage is 7,788 ft (2,374 m) 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 (50.57 m) lower.

EXTREMES.--Current year: Maximum contents, 2,640 acre-ft (3.26 hm<sup>3</sup>) Apr. 23-28, May 4 to June 21, July 15-16, Sept. 6-9, 12-16; maximum gage height, 97.0 ft (29.57 m) Apr. 26, May 16-20, June 6-10; minimum contents, 1,800 acre-ft (2.22 hm<sup>3</sup>) Jan. 1-15; minimum gage height, 84.2 ft (25.66 m) Jan. 1-10.

Period of record: Maximum contents, 3,140 acre-ft (3.87 hm<sup>3</sup>) June 25, 1960 (gage height, 103.7 ft or 31.61 m); no contents Jan. 25 to May 8, 1951.

REMARKS.--Reservoir is formed by earthfill dam, completed in 1926 (capacity, 561 acre-ft or 692,000 m<sup>3</sup>, revised), raised 3 ft (0.9 m), revised, in 1935 (capacity, 650 acre-ft or 801,000 m<sup>3</sup>), and raised 36.5 ft (11.13 m) more in 1947 (capacity, 2,615 acre-ft or 3.22 hm<sup>3</sup> at gage height 96.6 ft or 29.44 m, 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 (3.70 hm<sup>3</sup>). Radial gates were removed during 1972 (capacity, 2,615 acre-ft or 3.22 hm<sup>3</sup>). No dead storage. Water is for municipal use of city of Santa Fe.

COOPERATION.--Supplementary stage readings and capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and contents, in acre-feet)  
(Based on survey by Public Service Co. of New Mexico in 1947)

84	1,780
88	2,030
92	2,290
97	2,640

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1610	1740	1800	1830	1900	2290	2630	2640	2620	2620	2460
2	1470	1620	1750	1800	1830	1930	2300	2630	2640	2620	2620	2450
3	1460	1630	1750	1800	1830	1920	2310	2630	2640	2620	2610	2440
4	1460	1640	1750	1800	1830	1930	2310	2640	2640	2620	2610	2490
5	1460	1640	1750	1800	1830	1940	2320	2640	2640	2620	2600	2590
6	1460	1650	1760	1800	1830	1960	2330	2640	2640	2620	2600	2540
7	1460	1660	1760	1800	1840	1970	2340	2640	2640	2620	2590	2640
8	1460	1670	1760	1800	1840	1980	2340	2640	2640	2620	2590	2640
9	1460	1670	1760	1800	1840	2000	2350	2640	2640	2620	2590	2640
10	1460	1680	1770	1800	1840	2010	2360	2640	2640	2620	2590	2630
11	1460	1680	1770	1800	1840	2020	2360	2640	2640	2620	2590	2630
12	1470	1680	1770	1800	1840	2040	2370	2640	2640	2620	2580	2640
13	1470	1690	1770	1800	1850	2050	2370	2640	2640	2620	2580	2640
14	1480	1700	1770	1800	1850	2060	2370	2640	2640	2620	2570	2640
15	1480	1700	1770	1800	1850	2070	2380	2640	2640	2640	2560	2640
16	1480	1700	1770	1810	1850	2080	2400	2640	2640	2640	2560	2640
17	1480	1710	1770	1810	1860	2090	2440	2640	2640	2630	2550	2630
18	1480	1710	1770	1810	1860	2100	2480	2640	2640	2630	2550	2630
19	1480	1710	1780	1810	1860	2120	2510	2640	2640	2630	2540	2630
20	1480	1720	1780	1820	1860	2140	2540	2640	2640	2630	2540	2630
21	1480	1720	1780	1820	1860	2160	2560	2640	2640	2630	2540	2630
22	1480	1720	1780	1820	1860	2180	2600	2640	2630	2630	2540	2630
23	1490	1730	1780	1820	1860	2200	2640	2640	2630	2630	2530	2630
24	1500	1730	1780	1830	1870	2210	2640	2640	2630	2620	2520	2620
25	1500	1730	1780	1830	1870	2230	2640	2640	2630	2620	2520	2620
26	1510	1740	1780	1830	1870	2250	2640	2640	2630	2620	2510	2620
27	1520	1740	1790	1830	1880	2250	2640	2640	2630	2620	2500	2620
28	1540	1740	1790	1830	1890	2260	2640	2640	2620	2620	2490	2620
29	1560	1740	1790	1830	---	2270	2630	2640	2620	2620	2490	2620
30	1580	1740	1790	1830	---	2290	2630	2640	2620	2620	2480	2620
31	1600	---	1790	1830	---	2290	---	2640	---	2620	2470	---
MAX	1600	1740	1790	1830	1890	2290	2640	2640	2640	2640	2620	2640
MIN	1460	1610	1740	1800	1830	1900	2290	2630	2620	2620	2470	2440
(†)	80.8	83.3	84.1	84.8	85.7	91.9	96.8	96.9	96.7	96.7	94.5	96.7
(‡)	+130	+140	+50	+40	+60	+400	+340	+10	-20	0	-150	+150

CAL YR 1974 MAX 2110 MIN 1380 ‡ -70  
WTR YR 1975 MAX 2640 MIN 1460 ‡ +1,150

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

‡ Change in contents, in acre-feet.



## 08316500 NICHOLS RESERVOIR NEAR SANTA FE, N. MEX.

LOCATION:--Lat 35°41'24", long 105°52'46", in SE¼NE¼ sec.21, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at Nichols Dam on Santa Fe River, 0.6 mi (1.0 km) east of Twomile Reservoir, 3.3 mi (5.3 km) east of Santa Fe, and at mile 31.0 (49.9 km).

DRAINAGE AREA:--22.8 mi<sup>2</sup> (59.1 km<sup>2</sup>).

PERIOD OF RECORD:--March 1943 to September 1965 (monthend contents only), October 1965 to current year.

GAGE:--Water-stage recorder. Datum of gage is 7,313.2 ft (2,229.06 m) above mean sea level.

EXTREMES:--Current year: Maximum contents, 704 acre-ft (868,000 m<sup>3</sup>) Sept. 12-14 (gage height, 167.6 ft or 51.08 m); minimum 127 acre-ft (157,000 m<sup>3</sup>) Apr. 6 (gage height, 138.8 ft or 42.31 m).

Period of record: Maximum contents, 836 acre-ft (1.03 km<sup>3</sup>) June 8, 1952 (gage height, 171.8 ft or 52.36 m); minimum, 16 acre-ft (19,700 m<sup>3</sup>) Feb. 11 to Mar. 10, 1944, Feb. 1-19, 1948.

REMARKS:--Reservoir is formed by earthfill dam. No storage prior to Mar. 16, 1943. Capacity, 685 acre-ft (845,000 m<sup>3</sup>) between gage heights 121.2 ft (36.94 m), bottom of lower operational gate and 167.0 ft (50.90 m), crest of spillway. Dead storage, 14 acre-ft (17,300 m<sup>3</sup>). Water is for municipal use of city of Santa Fe.

COOPERATION:--Supplementary stage readings and survey to compute capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and contents, in acre-feet)  
(Based on survey by Public Service Co. of New Mexico in 1943)

138	119
140	139
150	279
160	491
170	776

CONTENTS IN ACRE-Feet. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	329	313	298	315	286	160	442	695	655	601	290
2	259	329	315	298	315	295	149	452	698	661	587	286
3	262	329	315	298	315	286	140	454	698	658	574	336
4	265	329	315	298	315	286	135	477	698	655	547	472
5	270	329	313	300	317	286	130	489	698	652	523	523
6	271	329	310	300	317	288	127	502	701	652	499	582
7	276	329	310	300	317	288	128	515	698	652	482	625
8	281	329	306	300	319	290	129	528	698	649	458	664
9	286	329	300	302	319	294	131	544	695	649	440	692
10	294	329	292	302	319	298	133	558	695	649	424	698
11	300	327	290	302	321	300	135	579	692	652	412	701
12	308	327	290	304	321	296	136	612	692	655	403	704
13	313	325	290	304	321	294	138	649	692	661	391	704
14	321	325	295	304	321	298	147	682	692	664	380	704
15	325	327	299	306	321	288	155	701	692	676	371	701
16	331	329	298	306	321	295	163	701	698	682	362	698
17	336	331	290	306	321	283	174	701	685	679	352	698
18	342	333	292	306	323	274	187	701	682	676	344	698
19	348	335	292	308	323	266	194	701	685	673	336	695
20	352	333	294	308	321	262	202	701	685	658	331	695
21	354	325	294	308	321	257	205	701	688	679	327	695
22	356	321	294	310	321	251	200	701	692	692	327	695
23	356	319	294	310	317	242	206	698	676	692	323	692
24	348	317	294	310	318	234	246	698	673	692	319	688
25	342	315	294	312	302	223	286	698	667	685	315	682
26	338	313	294	312	298	211	335	698	664	676	312	676
27	335	313	296	312	292	205	373	701	661	664	310	673
28	333	313	296	313	288	198	400	701	655	652	306	673
29	333	313	296	313	---	190	421	698	655	640	302	673
30	331	313	296	313	---	182	433	698	658	628	298	670
31	331	---	298	313	---	169	---	695	---	614	294	---
MAX	356	335	315	313	321	309	433	701	701	692	601	704
MIN	256	313	290	298	294	164	127	442	655	614	294	286
(†)	152.7	151.8	151.0	151.8	150.5	142.4	157.5	167.3	166.1	164.6	150.8	166.5
(‡)	+78	-18	-15	+15	-25	-119	+264	+262	-37	-44	-320	+376

CAL YR 1974 MAX 477 MIN 243 † -184  
WTR YR 1975 MAX 704 MIN 127 ‡ +417

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

## 08317200 SANTA FE RIVER ABOVE COCHITI LAKE, N. MEX.

LOCATION.--Lat 35°32'49", long 106°13'41", in NW 1/4 sec. 8, T.15 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 mi (8.0 km) upstream from Cochiti Dam, 6.3 mi (10.1 km) east of Peña Blanca, and at mile 8.2 (13.2 km).

DRAINAGE AREA.--231 mi<sup>2</sup> (598 km<sup>2</sup>).

PERIOD OF RECORD.--March 1970 to current year. Published as "above Cochiti Reservoir" prior to October 1970.

GAGE.--Water-stage recorder. Altitude of gage is 5,505 ft (1,678 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 8.62 ft<sup>3</sup>/s (0.244 m<sup>3</sup>/s), 6,250 acre-ft/yr (7.71 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 702 ft<sup>3</sup>/s (19.9 m<sup>3</sup>/s) Sept. 5 (gage height, 3.53 ft or 1.076 m), from rating curve extended above 120 ft<sup>3</sup>/s (3.40 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.69 ft (1.734 m) and 9.58 ft (2.920 m); minimum, 0.39 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) July 3.

Period of record: Maximum discharge, 11,400 ft<sup>3</sup>/s (323 m<sup>3</sup>/s) July 26, 1971 (gage height, 9.58 ft or 2.920 m), from rating curve extended above 120 ft<sup>3</sup>/s (3.40 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.69 ft (1.734 m) and 9.58 ft (2.920 m); no flow July 16-18, 1971.

REMARKS.--Records good. Surface and ground-water diversions and returns for municipal supply of city of Santa Fe in upper part of basin. Diversions for irrigation of about 400 acres (1.6 km<sup>2</sup>) above 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 (0.6 km) upstream and bypasses gage; ditch flow not included in record.

REVISIONS (WATER YEARS).--WRD N. Mex., 1971: 1970(F).

## DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 17	0	Feb. 4	0	June 3	*1.0	Aug. 22	*0.20
Nov. 11	0	Mar. 6	0	25	*.33	Sept. 9	0
Dec. 12	0	Apr. 2	*.10	July 17	0	18	0
Jan. 8	0	28	.98	25	*.25		

\*Estimated

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.7	8.8	7.4	11	8.6	6.8	3.6	10	4.9	5.5	2.6
2	4.5	8.0	9.2	9.2	10	8.4	7.3	3.6	8.1	1.1	8.1	1.4
3	4.8	7.7	9.2	8.1	9.9	8.3	8.2	4.2	5.4	1.1	1.4	1.5
4	5.7	7.4	9.1	10	9.8	8.2	8.0	3.9	4.2	1.7	1.3	9.2
5	5.0	6.3	9.7	7.9	9.7	8.2	7.2	4.3	6.0	1.5	8.4	12.3
6	7.7	7.7	9.3	8.3	8.8	8.4	7.3	3.9	6.0	1.9	1.3	1.3
7	17	7.7	8.4	9.5	9.4	8.6	7.5	4.2	6.0	2.5	1.2	8.3
8	7.8	8.0	8.6	10	9.7	8.6	7.4	4.2	8.8	5.2	1.8	7.1
9	6.5	8.6	6.8	11	9.6	12	7.9	4.0	9.9	3.4	1.3	7.1
10	6.3	8.3	7.5	11	9.8	10	8.5	3.8	1.3	5.6	2.0	7.3
11	13	7.8	8.1	6.8	9.6	10	8.0	3.9	1.3	5.6	1.5	2.8
12	14	7.7	8.0	6.0	8.6	9.8	9.0	3.6	8.8	5.2	1.2	1.7
13	8.3	8.1	8.0	6.7	8.7	9.7	11	3.3	5.5	5.0	3.0	1.3
14	7.5	7.9	7.8	8.8	9.0	9.2	9.7	3.3	3.9	3.3	3.0	1.0
15	7.3	8.2	7.6	9.2	10	9.1	7.4	3.5	3.7	3.6	2.2	1.3
16	7.2	8.1	7.7	9.9	9.8	9.2	7.1	3.6	3.7	1.5	2.8	1.3
17	6.9	7.8	7.7	10	9.6	8.8	7.8	3.3	2.7	5.2	2.0	1.1
18	7.0	7.4	7.9	11	9.1	8.5	6.8	4.1	2.8	4.2	2.1	1.0
19	7.3	7.0	8.4	11	9.2	8.0	6.3	3.6	1.7	4.9	1.3	8.9
20	6.9	7.0	8.5	11	8.5	7.6	6.2	3.4	2.3	5.2	6.3	8.0
21	6.7	8.3	9.1	10	8.4	7.4	5.7	8.6	2.1	7.1	5.4	9.9
22	6.5	8.2	8.9	9.4	8.0	7.6	5.0	11	2.6	4.7	8.8	7.1
23	9.3	8.0	8.8	9.0	8.6	7.7	4.3	1.3	2.7	4.4	6.8	6.0
24	8.3	7.6	8.4	9.8	9.8	7.7	4.4	11	2.5	3.7	3.4	5.8
25	7.7	7.2	7.2	11	9.4	7.8	4.7	8.6	2.3	3.9	2.4	4.2
26	7.5	7.2	7.4	11	9.3	6.6	4.4	7.5	1.8	3.4	2.1	3.9
27	24	7.7	8.9	10	9.2	6.7	5.1	7.1	1.8	3.5	1.0	4.4
28	9.1	7.8	7.2	11	9.2	6.9	5.4	8.3	1.0	1.0	4.4	4.4
29	7.7	7.9	9.5	10	7.1	1.0	1.3	1.0	1.0	1.2	2.6	4.2
30	17	8.6	8.5	13	---	7.5	4.8	1.6	1.9	1.2	2.9	4.4
31	8.0	---	9.2	13	---	7.2	---	1.5	---	6.5	3.4	---
TOTAL	267.2	232.9	259.4	300.0	262.5	259.4	203.6	194.4	147.2	117.74	96.00	445.5
MFAN	8.62	7.66	8.37	9.68	9.34	8.37	6.70	6.27	4.91	3.89	3.10	14.9
MAX	24	8.6	9.7	13	11	12	11	16	13	16	16	12.3
MIN	4.5	6.3	6.8	6.0	8.0	6.6	3.9	3.3	1.7	6.5	5.5	1.4
AC-FT	530	462	515	595	521	515	404	386	292	234	199	984
CAL YP 1974	TOTAL	2404.15	MFAN 6.59	MAX 12.7	MIN .55	AC-FT 4770						
WTR YP 1975	TOTAL	2785.84	MFAN 7.63	MAX 12.3	MIN .55	AC-FT 5530						

PEAK DISCHARGE (BASE, 300 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
9- 5	1030	3.33	595	9- 5	0345	3.53	702

## 08317300 COCHITI LAKE NEAR COCHITI PUEBLO, N. MEX.

LOCATION (revised).--Lat 35°37'01", long 106°18'58", in NW¼SW¼ sec.16, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, in control tower at Cochiti Dam, 1.7 mi (2.7 km) northeast of Cochiti Pueblo, and at mile 1,588.1 (2,555.3 km). Prior to Apr. 15, 1975, at site 1.3 mi (2.1 km) upstream.

DRAINAGE AREA.--14,900 mi<sup>2</sup> (38,590 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Apr. 15, 1975, at site 1.3 mi (2.1 km) upstream at same datum.

EXTREMES.--Current year: Maximum contents, about 39,200 acre-ft (48.3 hm<sup>3</sup>) Sept. 13; minimum, 3,520 acre-ft (4.34 hm<sup>3</sup>) Feb. 25 (elevation, 5,259.87 ft or 1,603.208 m).

Period of record: Maximum contents, about 39,200 acre-ft (48.3 hm<sup>3</sup>) Sept. 13, 1975; no storage prior to Nov. 12, 1973.

REMARKS.--Lake is formed by an earthfill dam on Rio Grande and Santa Fe River. Storage began on Nov. 12, 1973. Capacity 498,100 acre-ft (614.0 hm<sup>3</sup>) between elevation 5,190.0 ft (1,581.91 m) and 5,450.0 ft (1,661.16 m), crest of service spillway. Dead storage 2,220 acre-ft (2.74 hm<sup>3</sup>) below elevation 5,255.0 ft (1,601.72 m), invert of outlet structure. Lake was created primarily for flood and sediment control. A 50,000 acre-ft (61.6 hm<sup>3</sup>) permanent pool is authorized for recreational purposes.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)  
(Based on survey by Corps of Engineers in 1972)

5,255	2,220	5,290	18,430
5,260	3,560	5,300	25,980
5,270	7,250	5,320	46,010
5,280	12,230		

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3640	4720	4620	4240	5640	3920	4000	11860	11690	38020	38380	38360
2	3640	4730	4560	4370	5590	3930	4000	11980	11500	38460	38240	38110
3	3630	4720	4660	4390	5460	3960	3970	12000	11840	38550	38200	38060
4	3640	4660	4760	4380	4640	4150	3960	11960	12660	38460	38050	38370
5	3650	4700	4800	4410	3830	4510	3960	11940	14200	38300	38070	38520
6	3730	4660	4870	4500	3630	4380	4070	12040	15530	38180	38100	38080
7	3850	4620	4990	4700	3590	4390	4450	11940	16800	38140	38120	38230
8	3910	4600	5040	4730	3620	4490	4620	11920	18190	38210	38120	38850
9	3950	4590	5040	4900	3630	4610	5950	12150	20090	38470	38480	38830
10	3890	4620	4900	4840	3650	4960	6950	11960	22810	38290	38620	38410
11	4270	4650	4910	4640	3660	5380	8230	11780	25560	38410	38270	38320
12	4600	4680	4840	4490	3670	5280	9700	11980	27900	38340	38640	38900
13	4720	4690	4850	4500	3640	4630	11320	12120	30440	38320	38450	39200
14	4630	4710	4830	4520	3640	4270	12980	12000	32450	38400	38380	38800
15	4430	4770	4820	4560	3670	4120	14630	12250	33520	38170	38160	38200
16	4320	4770	4840	4570	3680	4090	16450	12560	34360	38410	38270	38040
17	4290	4700	4850	4610	3660	4020	18340	12660	35360	38620	38230	38130
18	4270	4620	4870	4720	3670	4000	20460	12860	36120	38200	38030	38210
19	4220	4540	4870	4810	3660	4000	21710	13220	36200	38120	38140	38120
20	4170	4510	4860	4850	3640	4000	21950	13120	36800	38240	38210	38130
21	4160	4500	4920	4850	3670	4080	22040	12620	38020	38470	38330	38140
22	4120	4500	4910	4750	3650	4280	22120	12120	38250	38690	38220	38130
23	4140	4480	4890	4670	3630	4370	21370	12150	38120	35640	38200	38090
24	4200	4510	4820	4680	3570	4390	19330	12180	37590	36690	38370	38090
25	4290	4540	4870	4830	3570	4290	17860	12000	37610	38130	38220	38110
26	4350	4540	4520	4980	3710	4120	16560	11730	38250	38580	38140	38080
27	4350	4570	4580	5100	3750	4090	15160	11890	38240	38360	38200	38090
28	4420	4630	4570	5200	3810	4170	13670	12500	38090	38560	38260	38140
29	4420	4720	4490	5270	---	4140	12290	12540	38110	38360	38170	38160
30	4520	4710	4440	5400	---	4040	11610	12480	37890	38200	38140	38130
31	4560	---	4410	5610	---	4000	---	12140	---	38390	38320	---
MAX	4720	4770	5040	5610	5040	5380	22120	13220	38250	38620	38640	39200
MIN	3630	4480	4410	4260	3570	3920	3960	11730	11600	35640	38030	38040
(†)	5263.05	5263.49	5262.61	5265.96	5260.80	5261.40	5278.89	5279.82	5312.71	5313.18	5313.12	5312.94
(‡)	+930	+150	-300	+1200	-1800	+190	+7610	+520	+25760	+500	-70	-190
CAL YR 1974	MAX	5730	MIN	3120	‡	-1,360						
WTR YR 1975	MAX	39200	MIN	3570	‡	+34,500						

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

NOTE.--No gage height record Sept. 12-15.

## 08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.

LOCATION.--Lat 35°37'04", long 106°19'26", in SW¼NE¼ sec.17, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, on upstream end of pier near left bank, 1,000 ft (300 m) downstream from Cochiti Dam, 1.4 mi (2.3 km) northeast of Cochiti Pueblo, and at mile 1,587.6 (2,554.4 km), corrected.

DRAINAGE AREA.--14,900 mi<sup>2</sup> (38,590 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,224.29 ft (1,592.364 m) above mean sea level (Corps of Engineers bench mark). Prior to Nov. 14, 1973, at site 2.4 mi (3.9 km) downstream at altitude 5,210 ft (1,588 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 5,140 ft<sup>3</sup>/s (146 m<sup>3</sup>/s) June 19 (gage height, 5.97 ft or 1.820 m); maximum gage height, 6.04 ft (1.841 m) Apr. 23; minimum discharge, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Oct. 21.  
Period of record: Maximum discharge 10,300 ft<sup>3</sup>/s (292 m<sup>3</sup>/s) July 26, 1971 (gage height, 7.90 ft or 2.408 m), from rating curve extended above 2,600 ft<sup>3</sup>/s (73.6 m<sup>3</sup>/s); minimum, 8.1 ft<sup>3</sup>/s (0.23 m<sup>3</sup>/s) Nov. 12, 1973, result of closure of Cochiti Dam.  
The flood of May 15, 1941, reached a discharge of 23,400 ft<sup>3</sup>/s (663 m<sup>3</sup>/s) at a nearby site upstream from mouth of Santa Fe River. The flood of May 23, 1920, probably exceeded 23,400 ft<sup>3</sup>/s (663 m<sup>3</sup>/s), and is likely the highest since 1905.

REMARKS.--Records good except those for April, which are fair. 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 above station for irrigation of about 620,000 acres (2,510 km<sup>2</sup>) in Colorado and about 81,000 acres (328 km<sup>2</sup>) 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 (24.3 km<sup>2</sup>) below station; see tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	98	435	458	368	669	638	632	2080	4210	2810	709	690		
2	96	451	438	356	668	675	631	2270	3730	2750	733	734		
3	100	459	447	380	647	637	622	2400	3470	3110	667	701		
4	99	444	466	380	886	652	600	2430	3300	3310	608	980		
5	99	445	481	375	871	845	597	2500	3090	3520	474	1350		
6	134	444	493	385	610	927	615	2810	3270	3390	439	1200		
7	233	435	513	419	520	877	812	2850	3430	3240	426	663		
8	210	427	529	447	515	865	1010	2640	3540	3130	483	620		
9	157	427	531	472	531	959	1330	2430	3350	3100	470	836		
10	152	428	521	486	539	860	1700	2660	2770	3410	1100	998		
11	227	437	502	457	551	886	1460	2800	2360	3580	1130	753		
12	296	444	493	414	551	963	1320	2850	2530	3810	1130	898		
13	337	449	483	400	544	1050	1250	2920	2770	3640	1270	768		
14	329	452	483	399	535	858	1200	3440	3190	3630	1120	1010		
15	298	466	475	402	546	731	1140	3610	3640	3700	433	1080		
16	251	471	475	398	562	585	1190	3860	3820	3390	570	872		
17	222	465	483	424	559	658	1140	4180	3860	3350	642	723		
18	219	448	488	442	552	637	1120	4260	3950	2780	624	737		
19	212	431	494	468	551	630	1090	4280	4340	1800	489	769		
20	205	419	492	484	551	640	978	4430	3870	1550	523	656		
21	206	418	498	488	543	646	1010	4450	3160	1640	707	610		
22	202	418	501	481	564	770	1230	4350	3410	2200	768	612		
23	202	418	496	456	550	848	2320	4240	3460	2050	543	572		
24	206	419	489	442	527	882	3700	4350	3470	1290	444	509		
25	223	428	449	463	500	859	3610	4310	3350	1020	504	494		
26	242	428	414	494	545	751	3610	4090	3150	1300	431	498		
27	256	425	420	520	588	691	3610	3720	3530	1130	496	440		
28	259	434	428	545	595	723	3550	4930	3510	833	750	415		
29	262	458	411	567	---	773	3570	4440	3390	993	761	417		
30	268	464	402	589	---	801	2820	4500	3190	802	637	415		
31	330	---	394	630	---	672	---	4450	---	624	593	---		
TOTAL	6630	13187	14637	14031	16370	24089	49967	108330	102160	76942	21274	22011		
MEAN	214	440	472	453	585	777	1666	3495	3405	2482	686	734		
MAX	337	471	531	630	886	1050	3700	4500	4340	3810	1270	1350		
MIN	96	418	394	356	500	630	597	2080	2360	624	426	415		
AC-FT	13150	26160	29030	27830	32470	47780	99110	214900	202600	152600	42200	43660		
(†)	6480	0	0	0	0	5170	7190	8200	8160	8370	8400	7100		
(‡)	2500	0	0	0	0	1630	2540	3290	3230	3380	3550	2850		
CAL YR 1974	TOTAL	234698	MEAN	643	MAX	1690	MIN	55	AC-FT	465500	†	58630	‡	20060
WTR YR 1975	TOTAL	469628	MEAN	1287	MAX	4500	MIN	96	AC-FT	931500	†	59060	‡	22970

† Diversion, in acre-feet, by Cochiti eastside main canal at head.

‡ Diversion, in acre-feet, by Sili main canal at head.

## 08317850 GALISTEO CREEK ABOVE GALISTEO RESERVOIR, N. MEX.

LOCATION.--Lat 35°26'58", long 106°09'08", in NE¼NW¼ sec.13, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at site of former railroad bridge at Waldo, 800 ft (240 m) downstream from Waldo Gulch, 1.8 mi (2.9 km) northwest of Gerrillos, 4.0 mi (6.4 km) upstream from Galisteo Dam, and at mile 15.8 (25.4 km).

DRAINAGE AREA.--567 mi<sup>2</sup> (1,469 km<sup>2</sup>).

PERIOD OF RECORD.--May 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,595 ft (1,705 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 7.88 ft<sup>3</sup>/s (0.223 m<sup>3</sup>/s), 5,710 acre-ft/yr (7.04 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft<sup>3</sup>/s (64.6 m<sup>3</sup>/s) Sept. 11 (gage height, 5.23 ft or 1.594 m), from rating curve extended above 80 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/s); minimum, 0.03 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) June 14.  
Period of record: Maximum discharge, 7,460 ft<sup>3</sup>/s (211 m<sup>3</sup>/s) July 26, 1971 (gage height, 8.00 ft or 2.438 m), from rating curve extended above 200 ft<sup>3</sup>/s (5.66 m<sup>3</sup>/s); no flow part of each day June 6-8, 18, Sept. 2-9, 24, 1973, Sept. 7, 8, 1974.

REMARKS.--Records poor. Diversions for irrigation of about 50 acres (202,000 m<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	4.7	1.4	1.3	2.9	.95	1.1	1.2	.35	.12	.19	.47
2	.29	3.2	1.6	1.8	2.0	.81	.88	.81	.27	.12	.19	.43
3	.29	2.9	1.6	1.3	2.0	.91	.95	.88	.27	.15	.15	.52
4	.42	2.4	1.6	1.3	1.6	4.9	.88	.74	.27	.12	.15	141
5	.37	1.7	1.6	1.3	1.1	2.6	.81	.68	.23	.09	.12	90
6	2.1	1.6	1.5	1.6	1.0	2.0	.95	.62	.19	.12	.09	15
7	9.7	1.6	1.4	2.0	1.6	1.5	1.1	.68	.27	.30	.09	4.9
8	2.1	1.7	1.2	1.8	1.8	6.0	1.0	.68	.23	.85	.09	67
9	1.1	2.1	1.1	1.5	1.6	13	1.0	.68	.23	.39	4.9	12
10	.98	1.7	1.0	1.5	1.8	16	1.5	.62	.67	1.8	4.0	3.3
11	93	1.4	1.1	1.3	1.1	14	1.6	.62	.31	9.0	.75	255
12	31	1.6	1.1	1.1	.88	13	5.3	.57	.27	16	14	93
13	3.5	1.4	1.1	1.2	.88	8.6	4.5	.57	.19	15	11	25
14	1.4	1.4	1.0	1.4	1.8	5.6	2.7	.57	.15	2.2	.95	13
15	.88	1.6	1.1	1.6	1.8	5.6	2.8	.57	.12	11	.75	3.1
16	.79	1.6	1.4	1.3	1.6	4.5	39	.62	.12	24	.46	2.4
17	.71	1.6	1.6	1.3	1.3	3.3	46	.81	.12	24	.34	2.2
18	.79	1.7	1.3	1.6	.95	2.4	30	.81	.12	3.7	.31	2.2
19	.64	1.6	1.6	1.8	.95	2.2	15	.57	.15	1.0	.31	1.3
20	.71	1.6	1.6	2.2	.95	1.8	7.9	.47	.12	2.4	.88	1.2
21	3.1	1.7	2.1	1.8	1.0	2.2	2.4	.39	.12	.73	182	1.6
22	.98	1.8	2.1	1.3	1.2	2.6	1.5	.62	.12	.73	25	1.2
23	61	1.6	1.3	1.5	1.0	4.1	2.4	.68	.12	.68	2.7	1.8
24	2.6	1.5	1.0	2.4	1.5	2.6	3.3	.47	.12	.47	1.1	.95
25	1.2	1.6	1.0	3.7	1.6	2.7	2.7	.39	.12	.42	.81	.95
26	1.1	1.6	1.1	3.1	1.5	2.4	1.8	.39	.12	.31	.68	.95
27	64	1.6	1.2	2.7	1.0	2.4	2.6	.39	.14	.12	.57	.95
28	19	1.4	1.4	2.7	.95	2.2	3.1	.43	.15	.09	.74	.95
29	5.3	1.1	1.6	2.4	---	2.2	2.6	.74	.19	2.2	.62	.88
30	18	1.2	1.7	4.1	---	1.6	1.3	.57	.19	.96	.52	.81
31	8.5	---	1.3	3.3	---	1.3	---	.39	---	.31	.52	---
TOTAL	335.84	54.2	42.7	59.2	39.36	135.97	188.67	19.23	6.04	119.38	254.98	743.26
MEAN	10.8	1.81	1.38	1.91	1.41	4.39	6.29	.62	.20	3.85	8.23	24.8
MAX	93	4.7	2.1	4.1	2.9	16	46	1.2	.67	24	182	255
MIN	.29	1.1	1.0	1.1	.88	.81	.81	.39	.12	.09	.09	.43
AC-FT	666	108	85	117	78	270	374	38	12	237	506	1470

CAL YR 1974 TOTAL 1546.91 MEAN 4.24 MAX 157 MIN .01 AC-FT 3070  
WTR YR 1975 TOTAL 1998.83 MEAN 5.48 MAX 255 MIN .09 AC-FT 3960

PEAK DISCHARGE (BASE, 2,500 FT<sup>3</sup>/S).--No peak above base.

## 08317900 GALISTEO RESERVOIR NEAR CERRILLOS, N. MEX.

LOCATION.--Lat 35°27'44", long 106°12'30", in NW¼ sec.9, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, at Galisteo Dam on Galisteo Creek, 5.0 mi (8.0 km) northwest of Cerrillos, and at mile 11.8 (19.0 km).

DRAINAGE AREA.--596 mi² (1,544 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder above elevation 5,500.3 ft (1,676.49 m), nonrecording below. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 194 acre-ft (239,000 m³) Aug. 21 (elevation, 5,507.40 ft or 1,678.656 m); no storage most of time.

Period of record: Maximum contents, 2,510 acre-ft (3.09 hm³) July 26, 1971 (elevation, 5,517.00 ft or 1,681.582 m); no storage most of time.

REMARKS.--Reservoir is formed by an earthfill dam, completed Oct. 11, 1970. Capacity 88,990 acre-ft (110 hm³) between elevations 5,496.0 ft (1,675.18 m), sill of ungated outlet conduit, and 5,608.0 ft (1,709.32 m), crest of uncontrolled spillway. No dead storage. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	0
2											0	0
3											0	0
4											0	0
5											0	0
6											0	0
7											0	0
8											0	0
9											0	0
10											0	0
11											0	26
12											0	0
13											0	0
14											0	0
15											0	0
16											0	0
17											0	0
18											0	0
19											0	0
20											0	0
21											80	0
22											0	0
23											0	0
24											0	0
25											0	0
26											0	0
27											0	0
28											0	0
29											0	0
30											0	0
31		---					---		---		0	---
MAX	0	0	0	0	0	0	0	0	0	0	80	26
MIN	0	0	0	0	0	0	0	0	0	0	0	0
(†)	-	-	-	-	-	-	-	-	-	-	-	-
(‡)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1974 MAX 0 MIN 0 † 0  
WTR YR 1975 MAX 80 MIN 0 ‡ 0

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



## 08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.

LOCATION.--Lat 35°27'56", long 106°12'57", in SE¼SE¼ sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank, 0.6 mi (1.0 km) downstream from Galisteo Dam, 5.5 mi (8.8 km) northwest of Cerrillos, and at mile 11.2 (18.0 km).

DRAINAGE AREA.--597 mi<sup>2</sup> (1,546 km<sup>2</sup>).

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,450 ft (1,661 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 8.16 ft<sup>3</sup>/s (0.231 m<sup>3</sup>/s), 5,910 acre-ft/yr (7.29 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft<sup>3</sup>/s (28.6 m<sup>3</sup>/s) Aug. 21 (gage height, 5.39 ft or 1.643 m); no flow many days.

Period of record: Maximum discharge, 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s) July 27, 1971 (gage height, 7.00 ft or 2.134 m); maximum gage height, 7.33 ft (2.234 m) July 20, 1971; no flow for many days each year.

REMARKS.--Records poor. Flow regulated by Galisteo Reservoir 0.6 mi (1.0 km) upstream. Diversions for irrigation of about 50 acres (202,000 m<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	7.1	.40	.56	.77	.23	0	.01		0	0	0
2	0	4.3	.50	.64	.74	.12	.01	0		0	0	0
3	0	3.2	.50	.68	.66	.06	.05	0		0	0	0
4	0	2.9	.50	.70	.60	5.8	.03	0		0	0	171
5	0	2.9	.50	.70	.54	3.4	0	0		0	0	72
6	1.1	1.3	.47	.76	.50	1.6	0	0		0	0	2.4
7	12	.98	.45	.78	1.4	.40	.08	0		0	0	2.4
8	3.7	1.1	.42	.80	1.6	4.0	.06	0		0	0	64
9	1.5	1.6	.40	.80	1.4	10	.10	0		.02	6.9	23
10	1.0	.98	.40	.70	1.6	13	.21	0		2.7	4.9	7.2
11	84	.72	.43	.60	.85	13	.23	0		3.5	.18	264
12	40	.61	.42	.62	.40	14	6.7	0		32	16	122
13	3.0	.72	.40	.64	.61	9.8	4.7	0		80	8.8	19
14	1.5	.61	.37	.70	1.4	6.3	1.1	0		9.8	.33	4.3
15	1.2	.61	.40	.77	1.6	5.6	.43	0		18	0	1.7
16	1.0	.61	.45	.69	1.3	7.1	20	0		58	0	.85
17	.85	.50	.50	.69	1.1	4.3	26	0		43	0	.40
18	.23	.50	.45	.72	.85	2.0	15	0		3.0	0	.16
19	.13	.40	.50	.78	.50	.72	14	0		.40	0	.04
20	.10	.40	.50	.85	.50	.13	11	0		37	12	0
21	1.5	.50	.60	.72	.50	0	2.0	0		8.0	171	.48
22	1.6	.72	.60	.60	.72	0	.72	0		8.0	80	.10
23	56	.50	.43	.54	.56	0	.50	0		.50	.27	.04
24	9.0	.50	.33	.79	.78	2.0	1.1	0		0	0	0
25	2.0	.49	.23	1.0	.90	2.9	.90	0		0	0	0
26	1.0	.48	.35	.96	.80	.61	.19	0		0	0	0
27	50	.47	.40	.89	.61	1.7	.09	0		0	0	0
28	20	.44	.40	.85	.50	2.7	1.2	0		0	0	0
29	7.1	.30	.45	.74	---	2.2	.62	0		.83	0	0
30	19	.35	.48	1.1	---	1.4	.11	0		.13	0	0
31	12	---	.40	.90	---	.14	---	0	---	0	0	---
TOTAL	340.51	36.79	13.63	23.17	24.29	115.21	107.13	.01	0	304.88	300.38	755.07
MEAN	11.0	1.23	.44	.75	.87	3.72	3.57	.0003	0	9.83	9.69	25.2
MAX	84	7.1	.60	1.1	1.6	14	26	.01	0	80	171	264
MIN	0	.30	.23	.52	.40	0	0	0	0	0	0	0
AC-FT	675	73	27	46	48	229	212	.02	0	605	596	1500
CAL YR 1974	TOTAL	1291.50	MEAN	3.54	MAX	147	MIN	0	AC-FT	2560		
WTR YR 1975	TOTAL	2021.07	MEAN	5.54	MAX	264	MIN	0	AC-FT	4010		

## RIO GRANDE BASIN

08319000 RIO GRANDE AT SAN FELIPE, N. MEX.

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼NW¼ sec.17, T.14 N., R.5 E., Sandoval County, in San Felipe Grant, on right bank 200 ft (61 m) downstream from Tonque Arroyo, 1,700 ft (520 m) upstream from steel highway bridge, 0.8 mi (1.3 km) upstream from San Felipe Pueblo, 11 mi (18 km) northeast of Bernalillo, and at mile 1,572.7 (2,530.5 km).

DRAINAGE AREA.--16,100 mi<sup>2</sup> (41,670 km<sup>2</sup>); approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 5,115.73 ft (1,559.275 m) above mean sea level. Prior to Sept. 27, 1957, at site 1,800 ft (550 m) downstream at datum 5.35 ft (1.63 m) lower, except period May 16, 1945 to Sept. 30, 1946 when it was 5.94 ft (1.81 m) lower than present datum.

AVERAGE DISCHARGE.--48 years (1926-73), 1,374 ft<sup>3</sup>/s (38.91 m<sup>3</sup>/s), 995,500 acre-ft/yr (1.23 km<sup>3</sup>/yr) prior to completion of Cochiti Dam.

EXTREMES.--Current year: Maximum discharge, 4,710 ft<sup>3</sup>/s (133 m<sup>3</sup>/s) May 29 (gage height, 5.73 ft or 1.747 m); minimum, 141 ft<sup>3</sup>/s (3.99 m<sup>3</sup>/s) Oct. 2.

Period of record: Maximum discharge, 27,300 ft<sup>3</sup>/s (773 m<sup>3</sup>/s) June 26, 1937 (gage height, 11.13 ft or 3.392 m, site and datum then in use), from rating curve extended above 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s); minimum, 32 ft<sup>3</sup>/s (0.906 m<sup>3</sup>/s) July 7, 1934. Other major floods occurred in 1874, 1884, and 1904.

REMARKS.--Records good. Flow completely regulated since November 1973 by Cochiti Dam 17 mi (27 km) upstream. Prior to November 1973 flow partly regulated by El Vado Reservoir (see sta 08285000) and Abiquiu Reservoir (see sta 08286900). Since April 1972 flow affected by release of transmountain water from Heron Reservoir (see sta 08284510). Diversions for irrigation of about 705,000 acres (2,850 km<sup>2</sup>) above station, some of which is irrigated below by Cochiti eastside main canal and San Felipe eastside acequia, which bypass station.

REVISIONS (WATER YEARS).--WSP 1312: 1926-30, WSP 1392: 1937(M), WSP 1512: 1931-32, 1933(M), 1934-36, 1938(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	465	488	399	738	715	808	2510	4390	2880	843	760
2	149	464	467	374	730	776	814	2390	7930	2740	946	924
3	156	498	453	388	722	742	808	2700	3610	2960	834	855
4	167	490	478	349	762	762	789	2620	3510	3170	770	1200
5	159	477	554	410	1090	790	780	2730	3230	3270	594	1480
6	185	484	515	410	762	1110	783	2780	3350	3340	513	1580
7	280	468	542	432	620	1040	894	2930	3450	3160	509	1000
8	302	458	569	484	585	1040	1100	2930	3550	3140	529	743
9	234	449	580	508	592	1170	1290	2690	3440	3120	736	953
10	247	444	579	540	606	1130	1670	2810	3070	3400	1210	1170
11	273	467	551	546	606	1070	1690	2950	2560	3570	1480	1110
12	465	466	543	490	613	1190	1560	3000	2680	3780	1370	1160
13	426	461	529	472	606	1230	1520	3050	2870	3860	1420	1070
14	426	469	531	449	606	1170	1420	3370	3090	3730	1380	1120
15	400	479	517	460	606	990	1380	3690	3450	3420	1130	1270
16	356	487	508	472	620	920	1360	3830	3620	3810	757	1190
17	305	484	518	484	620	896	1490	4080	3670	3710	680	924
18	288	471	526	508	606	854	1310	4180	3720	3500	823	869
19	272	449	528	546	613	881	1460	4230	3960	2650	575	927
20	269	432	528	572	606	834	1220	4320	3890	2260	573	834
21	267	424	524	572	613	837	1310	4420	3170	2250	791	730
22	265	422	533	572	627	926	1400	4370	3280	2380	978	729
23	262	427	531	546	620	1040	2290	4250	3370	2740	790	704
24	286	422	527	526	599	1070	3580	4370	3330	2090	861	645
25	281	432	494	546	566	1080	3640	4390	3400	1980	625	609
26	302	434	448	572	585	1000	3740	4320	3070	1790	535	602
27	353	435	438	572	655	891	3810	4060	3410	1800	505	584
28	352	498	443	606	670	883	3720	3990	3410	1500	784	450
29	344	471	432	634	---	917	3660	4490	3330	1380	932	396
30	348	491	421	652	---	955	3280	4560	3290	1190	810	494
31	388	---	410	692	---	857	---	4510	---	798	720	---
TOTAL	8958	13818	15655	15843	18252	29858	54576	111520	101920	85884	25762	27110
MEAN	289	461	505	511	652	963	1419	3597	3347	2771	831	904
MAX	465	498	580	692	1090	1230	3818	4560	4300	3920	1480	1580
MIN	149	422	410	374	566	715	780	2390	2560	798	505	396
AC-FT	17770	27419	31050	31420	36200	59220	108300	221200	202200	170400	51100	53770
(+)	2290	0	0	0	0	2790	3560	4030	3960	3640	3890	4210
CAL YR 1974	TOTAL	270211	MEAN	740	MAX	1730	MIN	129	AC-FT	536000		
WTH YR 1975	TOTAL	509160	MEAN	1395	MAX	4560	MIN	149	AC-FT	1010000		

(+) MONTHLY DIVERSION, IN ACRE-FT, OF COCHITI EASTSIDE CANAL; RECORD OF THIS FLOW IS FURNISHED BY BUREAU OF RECLAMATION.

## 08321500 JEMEZ RIVER BELOW EAST FORK, NEAR JEMEZ SPRINGS, N. MEX.

LOCATION.--Lat 35°49'39", Long 106°38'52", in NW¼ sec.5, T.18 N., R.3 E., Sandoval County, on left bank 0.4 mi (0.6 km) downstream from East Fork and boundary of Santa Fe National Forest, 5.3 mi (8.5 km) northeast of Jemez Springs, and at mile 43.0 (69.2 km).

DRAINAGE AREA.--173 mi<sup>2</sup> (448 km<sup>2</sup>).

PERIOD OF RECORD.--July 1949 to October 1950 (gaged separately above East Fork), May 1951 to September 1957 (irrigation seasons only), March 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,702.7 ft (2,042.98 m) above mean sea level. Prior to May 1951, at sites 3,000 ft (900 m) upstream, at different datums and on separate channels.

AVERAGE DISCHARGE.--18 years (1949-50, 1958-75), 28.4 ft<sup>3</sup>/s (0.804 m<sup>3</sup>/s), 20,580 acre-ft/yr (25.4 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,700 ft<sup>3</sup>/s (48.1 m<sup>3</sup>/s) Apr. 25 (gage height, 4.60 ft or 1.402 m); minimum, 4.0 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Nov. 27.

Period of record: Maximum discharge recorded, 2,500 ft<sup>3</sup>/s (71.4 m<sup>3</sup>/s) Apr. 21, 1958 (gage height, 7.35 ft or 2.240 m), from rating curve extended above 1,100 ft<sup>3</sup>/s (31.2 m<sup>3</sup>/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.91 ft<sup>3</sup>/s (0.026 m<sup>3</sup>/s) Jan. 24, 1969, result of freezeup.

REMARKS.--Records good except for winter months, which are poor. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1512: 1951-54(M), 1955, 1956(M). WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	25	10	12	12	19	27	446	61	16	18	14
2	12	23	12	12	11	20	20	471	55	16	17	13
3	12	26	14	10	13	21	26	406	53	16	16	14
4	12	19	12	10	13	20	32	389	49	18	15	31
5	12	21	11	12	13	20	42	315	46	20	15	64
6	16	21	11	11	12	22	58	188	43	21	16	48
7	26	19	11	12	13	22	66	154	41	20	16	26
8	19	18	10	12	13	24	46	150	40	19	17	22
9	14	26	8.0	12	13	28	51	156	38	22	17	27
10	14	29	9.0	12	13	24	48	147	38	31	24	30
11	23	19	10	11	11	22	45	150	41	47	27	28
12	23	17	10	9.0	11	20	35	153	37	40	24	54
13	26	16	10	10	13	22	34	153	32	37	43	44
14	21	15	9.5	12	14	21	37	144	30	37	34	29
15	17	15	9.0	12	13	23	46	140	27	40	23	25
16	15	15	10	12	14	21	65	137	26	31	18	22
17	14	13	10	12	14	23	106	134	25	28	17	21
18	14	13	10	13	13	21	126	133	24	26	16	19
19	13	13	10	13	16	26	102	116	27	22	15	19
20	13	11	9.5	12	18	31	148	107	27	21	16	18
21	13	11	9.5	12	15	35	259	97	23	21	18	19
22	17	12	10	12	14	35	434	96	22	25	23	20
23	26	13	9.5	12	20	28	809	105	21	28	19	19
24	22	10	8.0	13	21	26	1030	87	19	22	16	18
25	17	10	8.5	13	15	31	1040	75	18	27	15	17
26	16	11	9.0	12	15	36	815	69	17	28	15	17
27	21	8.0	10	13	16	26	563	66	16	23	14	16
28	29	9.5	10	13	18	28	234	66	16	21	15	15
29	38	8.5	10	12	---	32	346	82	16	22	15	15
30	52	8.0	10	11	---	28	316	84	16	21	14	15
31	35	---	10	13	---	26	---	68	---	19	14	---
TOTAL	613	475.0	310.5	367.0	397	781	7006	5084	944	785	582	739
MEAN	19.8	15.8	10.0	11.8	14.2	25.2	234	164	31.5	25.3	18.8	24.6
MAX	52	29	14	13	21	36	1040	471	61	47	43	64
MIN	12	8.0	8.0	9.0	11	19	20	66	16	16	14	13
AC-FI	1220	942	616	728	787	1550	13900	10080	1870	1560	1150	1470

CAL YR 1974 TOTAL 7317.6 MEAN 20.0 MAX 143 MIN 8.0 AC-FI 14510  
WTR YR 1975 TOTAL 18083.5 MEAN 49.5 MAX 1040 MIN 8.0 AC-FI 35870

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S).--APR. 25 (1130) 1700 FT<sup>3</sup>/S (4.60 FT.)

## 08323000 RIO GUADALUPE AT BOX CANYON, NEAR JEMEZ, N. MEX.

LOCATION.--Lat 35°43'52", long 106°45'44", Sandoval County, in Cañon de San Diego Grant, on left bank at downstream end of Guadalupe Box Canyon, 4.8 mi (7.7 km) upstream from mouth, 5 mi (8 km) southwest of Jemez Springs, and 7 mi (11 km) north of Jemez.

DRAINAGE AREA.--235 mi<sup>2</sup> (609 km<sup>2</sup>).

PERIOD OF RECORD.--May 1951 to September 1957 (irrigation seasons only), May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,015.5 ft (1,833.52 m) above mean sea level.

AVERAGE DISCHARGE.--17 years (1958-75), 36.3 ft<sup>3</sup>/s (1.028 m<sup>3</sup>/s), 26,300 acre-ft/yr (32.4 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 742 ft<sup>3</sup>/s (21.0 m<sup>3</sup>/s) Apr. 26 (gage height, 6.20 ft or 1.890 m); minimum daily, 7.0 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Jan. 5, 6, 12.

Period of record: Maximum discharge determined, 1,440 ft<sup>3</sup>/s (40.8 m<sup>3</sup>/s) Apr. 21, 1958 (gage height, 7.6 ft or 2.32 m, from floodmarks), from rating curve extended above 750 ft<sup>3</sup>/s (21.2 m<sup>3</sup>/s) on basis of slope-area measurements of peak flow; minimum, 2.8 ft<sup>3</sup>/s (0.079 m<sup>3</sup>/s) Dec. 9, 1967.

The flood of May 13 or 14, 1941, exceeded all other observed floods at this location. The discharge for that flood was computed to be 3,190 ft<sup>3</sup>/s (90.3 m<sup>3</sup>/s) at a downstream station, Rio Guadalupe near Jemez Springs (drainage area, 239 mi<sup>2</sup> or 619 km<sup>2</sup>).

REMARKS.--Records good except those for winter period, which are poor. Flow regulated to some extent since October 1958 by San Gregorio Reservoir on Clear Creek, 24 mi (39 km) upstream (capacity, 345 acre-ft or 0.425 hm<sup>3</sup>), and by transmountain diversion into Rio Puerco Basin for irrigation of about 300 acres (1.21 km<sup>2</sup>) in vicinity of Cuba.

REVISIONS.--WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	20	13	10	13	15	43	260	148	25	17	9.4
2	7.5	20	14	10	13	18	39	287	156	25	17	10
3	7.5	21	15	10	12	20	40	308	162	30	16	9.9
4	7.5	19	15	8.0	13	20	50	356	164	30	16	17
5	7.5	18	16	7.0	13	21	68	380	162	28	17	42
6	9.4	20	16	7.0	10	23	90	320	160	26	17	30
7	14	18	15	8.0	10	26	100	254	138	25	16	20
8	17	17	16	9.0	11	29	86	248	120	26	15	17
9	12	19	10	9.0	11	45	74	299	116	26	14	19
10	12	19	12	10	12	33	74	332	111	29	20	29
11	13	17	13	9.0	12	29	70	380	99	41	30	22
12	16	16	13	7.0	12	25	66	422	87	46	30	31
13	21	16	12	8.0	13	25	65	438	80	49	33	31
14	19	16	11	9.0	13	22	67	456	74	43	33	23
15	14	16	11	10	13	25	82	506	74	36	25	19
16	12	16	13	10	12	25	150	514	72	32	19	16
17	10	15	13	11	12	20	230	498	66	31	18	14
18	10	16	13	11	11	26	215	482	61	31	16	13
19	9.2	16	12	12	12	30	156	386	59	26	15	12
20	8.9	15	10	12	17	45	168	332	54	24	15	12
21	8.9	14	12	11	14	58	215	326	40	28	15	12
22	9.7	15	13	11	13	56	305	308	43	26	16	13
23	12	16	13	11	13	51	353	239	39	23	17	13
24	15	14	9.0	9.0	21	43	377	203	34	21	14	12
25	15	13	10	10	15	50	430	212	34	21	12	11
26	12	13	11	11	14	58	474	215	32	23	12	11
27	15	13	11	13	14	45	396	215	30	25	11	10
28	19	13	12	13	14	43	296	239	29	21	12	10
29	22	12	12	13	---	45	248	230	27	21	11	9.9
30	27	11	11	10	---	39	248	198	26	21	10	9.7
31	24	---	11	12	---	41	---	174	---	18	9.9	---
TOTAL	415.1	484	388.0	311.0	363	1079	5275	10019	2511	877	541.9	507.9
MEAN	13.4	16.1	12.5	10.0	13.0	34.2	176	323	83.7	28.3	17.5	16.4
MAX	27	21	16	13	21	58	474	514	164	49	33	42
MIN	7.5	11	9.0	7.0	10	15	39	174	26	16	9.9	9.4
AC-FT	823	960	770	617	720	2100	10460	19870	4980	1740	1070	1010

CAL YR 1974 TOTAL 7827.3 MEAN 21.4 MAX 117 MIN 6.2 AC-FT 15530  
WTR YR 1975 TOTAL 22751.0 MEAN 62.3 MAX 514 MIN 7.0 AC-FT 45130

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S).--APR. 26 (0100) 742 FT<sup>3</sup>/S (6.20 FT.).

## 08324000 JEMEZ RIVER NEAR JEMEZ, N. MEX.

LOCATION.--Lat 35°39'42", long 106°44'34", Sandoval County, in Cañon de San Diego Grant, on left bank 0.7 mi (1.1 km) downstream from Rio Guadalupe, 3.5 mi (5.6 km) north of Jemez, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--470 mi<sup>2</sup> (1,220 km<sup>2</sup>).

PERIOD OF RECORD.--June 1936 to May 1941, August 1949 to October 1950, May 1951 to September 1952 (irrigation seasons only), March 1953 to current year. Monthly discharge only for some periods, published in WSP 1732. Published as Jemez Creek near Jemez, 1936-41.

GAGE.--Water-stage recorder. Concrete control since Dec. 6, 1965. Datum of gage is 5,622.3 ft (1,713.68 m) above mean sea level. June 22, 1936 to Mar. 11, 1937, at site 60 ft (20 m) upstream at datum 0.50 ft (0.152 m) higher. Mar. 12, 1937, to July 8, 1938, at present site at datum 0.7 ft (0.21 m) higher. July 9, 1938, to May 6, 1941, at site 60 ft (20 m) upstream at datum 0.70 ft (0.213 m) higher.

AVERAGE DISCHARGE.--27 years (1936-40, 1949-50, 1953-75), 69.2 ft<sup>3</sup>/s (1.960 m<sup>3</sup>/s), 50,140 acre-ft/yr (61.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft<sup>3</sup>/s (73.1 m<sup>3</sup>/s) Apr. 26 (gage height, 8.50 ft or 2.591 m); minimum, 8.4 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s) Dec. 24.

Period of record: Maximum discharge, 5,900 ft<sup>3</sup>/s (167 m<sup>3</sup>/s) Apr. 21, 1958, from rating curve extended above 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s) on basis of contracted-opening measurement; maximum gage height, 8.6 ft or 2.62 m, May 6, 1941, present datum; minimum, 4.2 ft<sup>3</sup>/s (0.12 m<sup>3</sup>/s) Jan. 5, 1972, result of freezeup.

Maximum flood since at least 1890 occurred between May 6 and 15, 1941, after gage was destroyed (discharge probably exceeded 6,000 ft<sup>3</sup>/s or 170 m<sup>3</sup>/s), from information by local residents.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 300 acres (1.21 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1712: Drainage area. WSP 1923, Vol. 2: 1957-58.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	50	21	19	29	37	73	807	243	30	27	23
2	14	44	23	27	25	42	60	803	239	29	26	23
3	12	45	27	22	27	47	58	741	241	35	25	25
4	12	41	39	27	29	44	74	763	236	36	25	42
5	14	39	28	27	30	45	100	752	227	40	26	66
6	15	42	28	27	22	50	134	571	211	41	24	67
7	27	40	25	27	25	50	163	486	184	39	25	52
8	31	37	23	27	31	59	132	465	165	36	28	39
9	25	46	16	27	29	92	119	491	156	37	27	42
10	142	47	19	24	30	72	118	520	152	46	30	58
11	39	40	23	24	27	61	112	554	141	72	36	58
12	38	34	25	22	24	52	110	568	118	75	45	67
13	42	32	23	27	28	54	96	590	106	76	61	67
14	41	31	22	27	32	46	106	599	100	75	61	62
15	34	31	20	27	33	57	126	624	97	71	46	50
16	29	30	21	27	32	48	201	629	91	63	35	42
17	26	29	22	26	33	57	385	620	87	48	32	39
18	24	30	22	27	33	47	417	595	78	50	30	39
19	24	31	21	26	28	55	325	525	76	42	27	39
20	22	29	19	25	30	74	363	466	78	36	26	35
21	22	27	19	25	36	91	496	447	68	37	30	35
22	25	29	21	25	33	96	827	416	65	35	32	36
23	41	31	24	23	24	87	1130	375	65	38	31	36
24	37	28	15	27	30	66	1350	328	53	33	28	33
25	33	26	19	26	33	78	1600	318	41	34	26	31
26	30	25	25	26	34	98	1710	315	37	40	25	29
27	32	22	23	26	32	76	1190	315	33	37	25	28
28	41	23	25	26	35	61	678	321	34	34	25	28
29	50	29	25	25	---	78	701	336	30	32	25	26
30	68	17	22	24	---	62	667	322	30	32	24	25
31	61	---	22	31	---	66	---	280	---	29	23	---
TOTAL	1065	1005	787	796	834	1948	13621	15942	3482	1358	956	1242
MEAN	34.4	33.5	22.8	25.7	29.8	62.8	454	514	116	43.8	30.8	41.4
MAX	142	50	39	31	36	98	1710	807	243	76	61	67
MIN	12	17	15	19	22	37	58	280	30	29	25	23
AC-FT	2110	1990	1400	1580	1650	3860	27020	31620	6910	2690	1900	2460

CAL YR 1974 TOTAL 13955 MEAN 38.2 MAX 171 MIN 11 AC-FT 27680  
WTR YR 1975 TOTAL 42956 MEAN 118 MAX 1710 MIN 12 AC-FT 85200

PEAK DISCHARGE (BASE, 1000 FT<sup>3</sup>/S).-- OCT. 10 (1700) 1680 FT<sup>3</sup>/S (7.50 FT.); APR. 26 (0200) 2580 FT<sup>3</sup>/S 8.50 FT.

## 08328500 JEMEZ CANYON RESERVOIR NEAR BERNALILLO, N. MEX.

LOCATION.--Lat 35°23'40", long 106°32'50", in SW¼SW¼ sec.32, T.14 N., R.4 E., Sandoval County, at corner of outlet works control tower of Jemez Canyon Dam on Jemez River, 2.8 mi (4.5 km) upstream from mouth, and 6 mi (10 km) north of Bernalillo.

DRAINAGE AREA.--1,034 mi<sup>2</sup> (2,678 km<sup>2</sup>).

PERIOD OF RECORD.--October 1953 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 4,560 acre-ft (5.62 hm<sup>3</sup>) Apr. 28 (elevation, 5,166.95 ft or 1,574.886 m); no contents most of year.

Period of record: Maximum contents, 71,220 acre-ft (87.8 hm<sup>3</sup>) June 8, 1958 (elevation, 5,213.36 ft or 1,589.032 m); no storage most of time.

REMARKS.--Reservoir is formed by earthfill dam, completed October 19, 1953. Capacity, 176,200 acre-ft (217 hm<sup>3</sup>), from capacity table put into use Jan. 1, 1975, between elevations 5,125.0 ft (1,562.10 m) sill of outlet gates and 5,252.3 ft (1,600.90 m) operating deck of spillway. Maximum controlled capacity, 106,100 acre-ft (130 hm<sup>3</sup>) at elevation 5,232.0 ft or 1,594.71 m (floor of spillway which is located about 0.8 mi or 1.3 km south of dam). Capacity by original survey was 189,100 acre-ft (233 hm<sup>3</sup>). Original plan for reservoir operation was to desilt all flow about 30 ft<sup>3</sup>/s (0.85 m<sup>3</sup>/s) by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande.

COOPERATION.--Records furnished by Corps of Engineers.

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

Oct. 1 to Dec. 31				Jan. 1 to Sept. 30			
5,135	1	5,145	75	5,137	1	5,150	179
5,136	2	5,150	400	5,138	2	5,155	811
5,138	7	5,155	1,310	5,140	6	5,160	1,980
5,140	16			5,142	13	5,170	6,180
				5,146	30		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0					0	0	1930	480	0	0	0
2	0					0	0	1160	418	0	0	0
3	0					0	0	1000	413	0	0	0
4	0					0	0	703	419	0	0	0
5	0					0	0	582	422	0	0	267
6	0					0	0	967	411	0	0	341
7	0					0	9,0	939	375	0	0	302
8	0					0	31	792	324	0	0	219
9	0					7,0	44	633	250	0	0	194
10	0					2,0	43	638	242	0	0	185
11	552					0	47	589	278	0	0	276
12	173					0	58	600	320	0	0	364
13	0					0	194	683	330	381	0	574
14	0					0	262	774	308	336	442	619
15	0					0	183	998	260	215	305	607
16	0					0	122	1480	208	145	271	494
17	0					0	224	2250	176	97	231	164
18	0					0	405	2980	143	17	183	10
19	0					0	482	3640	21	0	129	0
20	0					0	403	4150	0	0	76	0
21	0					0	373	4450	0	0	35	0
22	0					0	523	4250	0	0	173	0
23	0					0	888	3200	0	0	142	0
24	96					0	1330	1930	0	0	113	0
25	0					0	2000	1060	0	0	74	0
26	0					0	3010	792	0	0	30	0
27	0					0	4090	461	0	0	8,0	0
28	0					0	4560	302	0	0	0	0
29	0					0	3940	343	0	0	0	0
30	25					0	3090	448	0	0	0	0
31	0	---				0	---	488	---	0	0	---
MAX	552	0	0	0	0	7,0	4560	4450	480	381	442	619
MIN	0	0	0	0	0	0	0	302	0	0	0	0
(†)	-	-	-	-	-	-	5163.40	5153.00	-	-	-	-
(‡)	0	0	0	0	0	0	+3090	-2600	-488	0	0	0

CAL YR 1974 MAX 552 MIN 0 (†) 0  
WTR YR 1975 MAX 4560 MIN 0 (‡) 0

(†) Elevation, in feet, at end of month.  
(‡) Change in contents, in acre-feet.

## 08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec.5, T.13 N., R.4 E., Sandoval County, on right bank 0.8 mi (1.3 km) downstream from Jemez Canyon Dam, 2.0 mi (3.2 km) upstream from mouth, and 6 mi (9.6 km) north of Bernalillo.

DRAINAGE AREA.--1,038 mi<sup>2</sup> (2,688 km<sup>2</sup>).

PERIOD OF RECORD.--March 1936 to January 1938, March 1943 to current year. Published as "Jemez Creek" prior to 1948, and as "near Bernalillo" prior to 1954.

GAGE.--Water-stage recorder. Datum of gage is 5,095.60 ft (1,553.139 m) above mean sea level from Corps of Engineers bench mark. Prior to Apr. 24, 1951, at site 0.8 mi (1.3 km) upstream at datum 24.51 ft (7.471 m) higher. Apr. 24, 1951, to June 25, 1958, at site 37 ft (11 m) upstream at datum 4.40 ft (1.341 m) above present datum. Supplementary water-stage recorder at gages on Jemez Canyon Dam at datum 5,125.00 ft (1,562.100 m) above mean sea level (Corps of Engineers bench mark) used at times since January 1953.

AVERAGE DISCHARGE.--33 years (1936-37, 1943-75), 54.8 ft<sup>3</sup>/s (1,552 m<sup>3</sup>/s), 39,700 acre-ft/yr (49.0 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft<sup>3</sup>/s (49.6 m<sup>3</sup>/s) Apr. 30 (gage height, 8.16 ft or 2,487 m); no flow at times. Period of record: Maximum discharge, 16,300 ft<sup>3</sup>/s (462 m<sup>3</sup>/s) Aug. 29, 1943 (gage height, 5.62 ft or 1.713 m, site and datum then in use), from rating curve extended above 3,000 ft<sup>3</sup>/s (85.0 m<sup>3</sup>/s); no flow for many days most years. A flood in 1900 was probably less than 16,000 ft<sup>3</sup>/s (453 m<sup>3</sup>/s), but highest observed outside period of record.

REMARKS.--Records poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (see sta 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres (12.1 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	39	13	6.0	40	30	47	1600	248	.07	6.0	.15
2	0	36	12	7.0	27	33	50	1220	206	.13	2.0	.09
3	.71	34	13	7.0	26	36	50	1020	169	.13	1.0	.16
4	6.1	34	12	8.0	24	44	53	1000	166	.11	0	.72
5	9.0	34	15	8.0	23	49	56	790	169	.11	0	1.00
6	11	32	12	8.0	14	45	64	644	174	.11	0	1.07
7	28	32	13	7.5	15	45	77	645	176	.11	0	1.09
8	25	31	12	8.0	18	63	97	640	176	3.1	0	1.16
9	22	33	11	8.0	22	106	110	626	110	5.8	0	1.23
10	23	33	9.0	8.0	17	109	118	623	88	5.2	0	.71
11	56	34	8.2	7.5	16	83	116	621	78	12	0	.46
12	50	34	12	7.5	16	77	108	624	72	84	9.5	.41
13	31	33	12	7.5	15	72	127	606	70	186	131	.36
14	30	32	11	7.5	23	68	162	585	69	146	87	.32
15	28	33	12	7.5	29	69	189	570	68	105	30	.51
16	26	32	6.0	8.0	30	60	167	408	68	81	25	1.58
17	25	31	8.0	8.5	34	50	208	178	68	72	18	1.45
18	24	32	14	9.0	25	44	254	171	117	40	14	.48
19	22	31	12	9.0	23	49	258	109	90	27	16	.20
20	20	28	14	9.0	19	49	299	142	50	36	18	.22
21	17	29	17	10	20	62	334	211	40	70	24	.23
22	18	29	16	15	20	65	436	689	30	38	26	.23
23	27	27	12	20	24	73	701	1260	20	21	28	.23
24	40	26	11	25	20	65	867	1360	11	15	29	.23
25	30	25	11	30	30	58	943	898	9.3	15	32	.20
26	29	23	11	45	30	69	956	550	8.4	10	30	.18
27	38	16	11	41	29	68	944	550	3.8	7.4	14	9.8
28	38	16	11	45	29	60	1050	503	.90	4.6	1.1	3.3
29	39	16	11	41	---	53	1280	363	.20	7.6	.50	2.6
30	48	17	7.0	51	---	56	1510	285	.07	10	.30	4.0
31	43	---	6.0	49	---	50	---	266	---	10	.20	---
TOTAL	803.81	882	355.2	528.5	658	1860	11631	19757	2555.67	1012.47	542.60	1447.10
MEAN	25.9	29.4	11.5	17.0	23.5	60.0	388	637	85.2	32.7	17.5	48.2
MAX	56	39	17	51	40	109	1510	1600	248	186	131	158
MIN	0	16	6.0	6.0	14	30	47	109	.07	.07	0	.09
AC-FI	1590	1750	705	1050	1310	3690	23070	39190	5070	2010	1080	2870
CAL YR 1974	TOTAL	8939.51	MEAN	24.5	MAX	265	MIN	0	AC-FI	17730		
WTR YR 1975	TOTAL	42033.35	MEAN	115	MAX	1600	MIN	0	AC-FI	83370		

## 08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, N. MEX.

LOCATION.--Lat 35°11'58", long 106°35'53", Bernalillo County, in Elena Gallegos Grant, on left bank 0.5 mi (0.8 km) upstream from Edith Blvd., 1.1 mi (1.8 km) upstream from mouth, and 1.2 mi (1.9 km) northeast of Alameda.

PERIOD OF RECORD.--July 1968 to current year (no winter records).

GAGE.--Water-stage recorder and concrete lined channel. Altitude of gage is 5,015 ft (1,529 m) from Corps of Engineers plan and profile map.

EXTREMES.--Current year: Maximum discharge, 2,360 ft<sup>3</sup>/s (66.8 m<sup>3</sup>/s) Aug. 12 (gage height, 3.85 ft or 1.173 m); no flow most of time.  
Period of record: Maximum discharge, 5,000 ft<sup>3</sup>/s (142 m<sup>3</sup>/s) July 26, 1971 (gage height, 6.30 ft or 1.920 m) from rating curve extended above 2,900 ft<sup>3</sup>/s (82.1 m<sup>3</sup>/s); no flow most of time.

REMARKS.--Records good. Floodway channel intercepts flow of numerous arroyos in northeast Albuquerque and discharges into the Rio Grande at a point 1.6 mi (2.6 km) north of Alameda.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.7				0	0	0		0	0	0
2	0	2.7				0	0	0		0	0	0
3	0	7.3				0	0	0		0	0	0
4	2.9	5.4				0	0	0		0	0	230
5	50.	4.5				0	0	0		0	0	57
6	82	4.5				0	0	0		0	0	0
7	59	3.6				0	0	0		19	0	40
8	3.6	2.7				98	0	0		182	41	20
9	1.8	48				97	0	0		4.6	5.3	10
10	24	21				0	0	0		5.8	0	0
11	32	2.7				0	0	0		121	0	0
12	40	2.7				0	19	0		58	237	131
13	1.90	2.7				0	10	0		64	55	0
14	3.2	2.7				0	0	0		0	2.9	0
15	1.90	1.8				66	0	0		0	0	0
16	0	1.8				15	0	0		0	0	0
17	0	1.8				7.2	0	34		0	0	0
18	0	2.4				1.6	0	9.0		0	0	0
19	0	1.64				0	0	0		0	0	0
20	0	1.3				0	0	0		105	115	15
21	0	2.7				0	0	0		37	12	0
22	28	1.8				0	0	0		5.4	0	0
23	63	1.8				0	0	16		0	0	0
24	1.8	1.8				0	0	12		13	0	0
25	1.8	1.8				0	0	0		15	0	0
26	0	1.8				0	0	0		94	0	0
27	79	1.8				0	0	0		0	0	0
28	7.2	3.6				0	0	0		0	7.6	0
29	45	3.6				0	0	53		0	0	0
30	12	4.5				0	0	14		0	0	0
31	3.6	---				0	---	0		0	0	---
TOTAL	541.70	148.14				284.8	29	138.0	0	630.74	475.8	503
MEAN	17.5	4.94				9.19	.97	4.45	0	20.3	15.3	16.8
MAX	82	48				98	19	53	0	182	237	230
MIN	0	1.64				0	0	0	0	0	0	0
AC-F1	1070	294				565	58	274	0	1250	944	998



## 08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, in Atrisco Grant, at downstream side of Old Town Bridge on U.S. Highway 66 at Albuquerque, and at mile 1,540.0 (2,477.9 km).

DRAINAGE AREA.--17,440 mi<sup>2</sup> (45,170 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gages is 4,946.16 ft (1,507.590 m) above mean sea level. Prior to Sept. 18, 1947, at various sites at datum about 2.00 ft (0.610 m) higher; Sept. 18, 1947, to Apr. 12, 1959, at site 550 ft (170 m) to the left of present site; Apr. 13, 1959, to June 29, 1960, at site 150 ft (46 m) to right of present site. Supplemental water-stage recorders at sites 75 ft (23 m) and 150 ft (46 m) to right of present site used at various times since 1964.

AVERAGE DISCHARGE.--32 years (1942-73), 1,068 ft<sup>3</sup>/s (30.25 m<sup>3</sup>/s), 773,800 acre-ft/yr (954 hm<sup>3</sup>/yr) prior to completion of Cochiti Dam.

EXTREMES.--Current year: Maximum discharge, 6,160 ft<sup>3</sup>/s (174 m<sup>3</sup>/s) May 24 (gage height, 6.96 ft or 2.121 m); maximum gage height, 7.02 ft or 2.140 m, Apr. 24; minimum discharge, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Oct. 2-4.

Period of record: Maximum discharge, 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) Apr. 24, 1942, from rating curve extended above 13,900 ft<sup>3</sup>/s (394 m<sup>3</sup>/s); maximum gage height, 7.82 ft or 2.384 m Aug. 10, 1967; no flow at times.

REMARKS.--Records fair. Flow completely regulated since November 1973 by Cochiti Dam 50 mi (80 km) upstream. Possible regulation by operation of reservoirs on Rio Chama and by flood-and-silt-detention reservoirs on Galiseo Creek and Jemez River (see sta 08285000, 08286900, 08317900, 08328500). Since April 1972 flow affected by release of transmountain water from Heron Reservoir (sta 08284510). Diversions above station for irrigation of about 718,000 acres (2,919 km<sup>2</sup>), several hundred of which are below station. Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records for Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals furnished by Middle Rio Grande Conservancy District.

REVISIONS (WATER YEARS).--WSP 1312: 1946(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	285	453	332	645	675	428	3650	4570	2540	470	347
2	20	317	447	332	660	850	465	2800	4340	2350	425	367
3	30	365	433	332	660	890	417	3100	3650	2570	470	464
4	40	405	440	190	645	740	495	2750	3340	2850	364	906
5	35	408	500	160	1090	675	450	3060	2780	3240	354	1570
6	50	416	540	362	830	1010	406	2640	2920	3410	265	1850
7	61	396	540	384	675	1140	540	2890	3310	2800	244	1490
8	81	433	574	510	555	1190	1030	3340	3660	3200	244	985
9	97	532	586	660	525	1350	1380	2780	3830	2850	244	916
10	120	425	574	570	600	1290	2080	2710	3030	3200	244	1120
11	137	424	540	439	630	1090	2470	3100	2140	3060	471	1150
12	350	458	490	465	630	1190	1720	3310	2320	3240	493	1400
13	276	465	510	406	645	1310	1660	3270	2820	3870	1720	1250
14	171	439	440	439	810	1340	1400	3450	2680	3270	1500	1010
15	183	464	406	395	850	1250	1580	4080	3020	3410	1390	1140
16	144	489	406	417	750	990	1660	4360	3520	3130	981	1249
17	114	500	470	450	750	810	1690	4320	3520	3200	636	1140
18	115	510	470	525	660	615	1600	4530	3660	3240	587	824
19	116	500	480	600	585	545	1750	4320	4010	2020	584	677
20	116	440	490	690	585	480	1750	4250	4220	1070	376	694
21	126	423	518	770	570	495	1690	4720	3200	2350	578	640
22	135	406	563	630	660	495	1400	4880	2960	1840	495	535
23	160	389	544	540	645	690	1870	5560	3340	2800	871	484
24	136	393	488	570	630	790	4430	5800	3030	1970	564	454
25	227	403	445	570	555	850	4290	5640	3200	1380	374	378
26	182	420	475	660	480	850	4150	4880	2750	1200	351	335
27	254	420	401	585	570	645	4390	4430	3200	1410	263	331
28	330	431	382	480	675	480	4460	3800	3660	1100	227	305
29	313	437	406	540	---	570	4530	4530	3410	758	400	273
30	365	446	449	630	---	720	4640	4800	3270	906	532	243
31	316	---	431	600	---	690	---	4840	---	710	445	---
TOTAL	4829	12839	14891	15233	18565	26855	60821	122660	99250	75134	18097	24422
MEAN	156	428	480	491	663	866	2027	3957	3308	2424	584	817
MAX	365	532	586	770	1090	1380	4640	5800	4570	3870	1720	1850
MIN	20	285	382	160	480	480	406	2640	2140	710	227	243
AC-FT	9580	25470	29540	30219	36820	53270	120600	243300	195900	149000	35000	48640
(+)	11870	994	922	984	889	8850	12280	15000	14740	13850	16260	11590
CAL YR 1974	TOTAL	205683.0	MEAN	564	MAX	1950	MIN	5.0	AC-FT	408000	(+)	103000
WTR YR 1975	TOTAL	493696.0	MEAN	1353	MAX	5800	MIN	20	AC-FT	979200	(+)	108200

(+) COMBINED FLOW, IN ACRE-FT, OF ALBUQUERQUE RIVERSIDE DRAIN AND ARENAL, ARMILJO, AND ARTISCO CANALS. THIS FLOW WHICH BYPASSES RIVER GAGE, CAN BE ADDED TO RIVER RECORDS TO GET ENTIRE SURFACE FLOW IN VALLEY CROSS-SECTION.

## 08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, in Sevilleta or Belen Grant, 0.2 mi (0.3 km) south of U.S. Highway 60, 1.8 mi (2.9 km) east of Bernardo, about 3 mi (5 km) upstream from Floodway, and 4 mi (6 km) 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 with concrete control. Datum of gage is 4,720.00 ft (1,438.656 m) above mean sea level. Prior to October 1964, 0.2 mi (0.3 km) upstream at various datums.

EXTREMES.--Period of record: Maximum daily discharge, 2,220 ft<sup>3</sup>/s (62.9 m<sup>3</sup>/s) Apr. 22, 1958; no flow many days most years.

REMARKS.--Records good. Conveyance channel is 1 of 4 channels (see sta 08332010, 08332030, and 08332050) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry flows up to about 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/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 sta 08332010. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	273	277	28	29	24	25	29	21	8.9	1.0	.59
2	48	283	276	28	28	25	24	26	19	8.9	.87	.57
3	46	269	247	27	27	25	24	25	18	8.9	.78	.69
4	47	287	148	28	26	26	23	25	16	8.9	.73	2.6
5	33	301	67	28	26	26	25	23	15	10	.68	2.9
6	27	306	64	27	25	26	27	22	12	9.4	.61	3.0
7	31	291	62	28	26	26	24	22	14	12	.52	3.4
8	98	286	61	28	25	26	23	22	13	12	.26	3.5
9	91	299	60	28	24	27	25	21	13	11	.26	3.8
10	123	300	57	27	23	29	28	22	13	10	.59	4.1
11	146	295	55	27	23	29	27	21	12	12	.97	4.3
12	144	269	52	27	24	28	35	21	7.8	12	1.2	8.8
13	216	280	49	27	24	35	32	31	8.0	11	1.2	5.2
14	266	288	45	25	24	37	31	25	8.3	11	1.9	4.9
15	246	297	42	24	25	33	31	21	8.9	9.4	1.2	4.5
16	225	306	37	26	26	31	30	22	10	8.9	1.2	4.4
17	225	306	36	26	25	27	31	24	11	10	1.2	4.4
18	211	316	34	28	24	25	34	31	9.9	9.4	1.2	4.0
19	175	319	33	29	24	24	31	23	9.8	7.2	.96	5.3
20	161	319	32	30	24	24	32	22	11	4.5	1.4	7.7
21	167	303	31	30	24	26	33	20	11	3.6	2.3	13
22	166	282	31	31	24	24	31	20	9.4	3.2	2.4	4.6
23	212	283	29	32	23	22	28	20	8.7	2.8	2.2	3.2
24	210	289	28	31	24	23	31	21	8.4	2.5	2.1	2.9
25	175	287	28	31	24	24	37	21	9.4	2.1	1.9	6.0
26	158	293	27	29	24	24	37	21	9.4	3.0	1.9	11
27	219	283	26	30	24	25	37	21	8.4	1.3	2.1	3.6
28	260	281	27	30	24	29	37	21	8.9	1.4	1.1	2.8
29	242	279	27	30	---	40	34	20	8.9	1.4	1.8	2.8
30	253	278	27	30	---	42	33	21	10	1.3	2.2	5.6
31	253	---	27	29	---	35	---	20	---	1.2	.72	---
TOTAL	4935	8748	2042	879	693	867	900	704	343.2	219.2	39.45	134.15
MEAN	159	292	65.9	28.4	24.8	28.0	30.0	22.7	11.4	7.07	1.27	4.47
MAX	266	319	277	32	29	42	37	31	21	12	2.4	13
MIN	27	269	26	24	23	22	23	20	7.8	1.2	.26	.57
AC-FT	9790	17350	4050	1740	1370	1720	1790	1400	681	435	78	266
CAL YR 1974 TOTAL	126436.78			MEAN 346	MAX 1570	MIN 0	AC-FT 250800					
WTR YR 1975 TOTAL	20504.00			MEAN 56.2	MAX 319	MIN .26	AC-FT 40670					

## 08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.

LOCATION:--Lat 34°25'01", long 106°48'00", Socorro County, in Belen or Sevilleta Grant on downstream side of bridge on U.S. Highway 60, 5 mi (8 km) downstream from heading of conveyance channel, 2 mi (3 km) east of Bernardo, and at mile 1,487.2 (2,392.9 km).

DRAINAGE AREA:--19,230 mi<sup>2</sup> (49,810 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD:--June 1936 to January 1939, October 1941 to current year. Monthly discharge only October 1942 to June 1943 published in WSP 1312, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Published as "Rio Grande near Bernardo" prior to October 1964. Prior to October 1952, flow of Bernardo interior drain was included only when it carried river overflow, the entire flow has been included from October 1952 to September 1964. Flow in the conveyance channel, formerly San Francisco Riverside drain, has been included in record prior to October 1964.

GAGE:--Water-stage recorder. Datum of gage is 4,722.55 ft (1,439.433 m) above mean sea level.

AVERAGE DISCHARGE:--19 years (1936-38, 1941-58), 1,125 ft<sup>3</sup>/s (31.86 m<sup>3</sup>/s), 815,100 acre-ft/yr (1,000 hm<sup>3</sup>/yr). Includes flow of floodway, conveyance channel, and Bernardo interior drain.  
15 years (1958-73) 898 ft<sup>3</sup>/s (25.43 m<sup>3</sup>/s), 605,600 acre-ft/yr (747 hm<sup>3</sup>/yr), includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain. Prior to completion of Cochiti Dam.

EXTREMES:--Current year: Maximum discharge, 8,160 ft<sup>3</sup>/s (231 m<sup>3</sup>/s) Sept. 12 (gage height, 6.26 ft or 1.908 m); no flow at times. 1936-39, 1941 to current year: Maximum discharge, 21,000 ft<sup>3</sup>/s (595 m<sup>3</sup>/s) Apr. 25, 1942 (gage height, 6.90 ft or 2.103 m); no flow for many days most years.

REMARKS:--Records poor. Since November 1973 flow completely regulated by Cochiti Dam 100 mi (161 km) upstream (see sta 08317300). Floodway is 1 of 4 channels (see sta 08331990, 08332030, and 08332050) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 ft<sup>3</sup>/s or 56.6 m<sup>3</sup>/s) is exceeded. Diversions for irrigation of about 740,000 acres (2,990 km<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1		0	187	424	692	728	581	4060	4320	2280	307	86		
2		0	196	432	547	692	376	2780	4140	1890	138	68		
3		0	232	408	669	658	210	2570	3700	1560	54	38		
4		0	344	350	647	640	196	2860	3650	1920	54	202		
5		55	440	300	647	636	200	2780	3450	2770	54	522		
6		110	416	250	865	592	174	2880	3060	2650	38	1640		
7		140	448	230	788	647	216	2850	3270	2830	31	1990		
8		148	464	448	570	969	272	3270	3560	2590	26	1520		
9		148	498	516	543	1170	376	3000	3850	2960	28	1520		
10		160	440	525	543	1340	543	2430	3570	3100	28	1600		
11		210	489	597	614	1050	906	2930	3100	3140	29	1890		
12		164	507	450	625	1050	1670	3540	2400	3350	42	1750		
13		164	543	370	692	743	865	3610	2560	3410	34	976		
14		169	480	344	658	995	1010	3710	2620	3480	336	1080		
15		196	480	368	716	1020	752	3510	2710	3490	706	920		
16		196	507	392	839	930	740	3400	2620	3380	706	976		
17		205	472	368	852	752	764	3300	2830	3180	538	1170		
18		227	464	384	878	625	647	4110	2830	3080	320	1270		
19		244	472	408	740	552	600	4150	2650	2890	203	831		
20		244	489	440	716	448	620	4180	3080	1860	208	613		
21		232	440	464	692	400	650	4600	3060	1900	214	873		
22		222	489	498	764	314	675	4220	2380	2290	276	740		
23		232	489	516	776	290	728	4970	2680	1830	307	573		
24		222	480	456	728	392	2640	5240	2430	2130	586	479		
25		210	480	424	728	456	3770	5510	2300	1550	433	433		
26		216	480	498	639	416	3470	5060	2320	1270	214	363		
27		232	480	603	592	692	3940	4390	1750	920	136	263		
28		238	480	647	647	558	4360	4150	2280	920	125	167		
29		232	432	570	---	448	4050	3839	2280	803	94	147		
30		205	416	570	---	472	4330	4430	2400	400	66	121		
31		---	432	647	---	543	---	4230	---	307	46	---		
TOTAL	0	5025	13706	13807	14507	21558	40331	116550	87850	70130	6377	24821		
MEAN	0	168	442	445	697	695	1344	3760	2928	2262	206	827		
MAX	0	244	543	647	878	1340	4360	5510	4320	3490	706	1990		
MIN	0	0	187	230	543	290	174	2430	1750	307	26	38		
AC-FT	0	9970	27190	27390	38690	42760	80080	231200	174300	139100	12650	49230		
(+)	18380	32570	36410	34180	44410	55680	93310	245600	186900	151800	22900	59340		
CAL YR 1974	TOTAL	19862.00	MEAN	54	MAX	543	MIN	0	AC-FT	39400	(?) MEAN	544	AC-FT	394000
4TH YR 1975	TOTAL	419662.00	MEAN	1150	MAX	5510	MIN	0	AC-FT	832400	(?) MEAN	1356	AC-FT	981400

† COMBINED FLOW, IN ACRE-FT AND MEAN, IN FT<sup>3</sup>/S, OF FLOODWAY, CONVEYANCE CHANNEL, BERNARDO INTERIOR DRAIN, AND LOWER SAN JUAN RIVERSIDE DRAIN.

## 08332030 LOWER SAN JUAN RIVERSIDE DRAIN NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'51", long 106°47'34", in SE¼NW¼ sec.12, T.2 N., R.1 E., Socorro County, on right bank, 1,400 ft (430 m) downstream from bridge on U.S. Highway 60, and 2.5 mi (4.0 km) east of Bernardo.

PERIOD OF RECORD.--June 1936 to September 1937, August 1954 to September 1975 (publication discontinued). Monthly discharge only August 1955 to September 1960, published in WSP 1732, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Records collected under name of "La Joya Eastside drain" are equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,722.35 ft (1,439.372 m) above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 205 ft<sup>3</sup>/s (5.81 m<sup>3</sup>/s) May 24, 26, 1973; no flow for several days during 1963.

REMARKS.--This drain is 1 of 4 channels (see sta 08331990, 08332010 and 08332050) carrying flow in valley cross section. For combined flow in acre-ft of this drain, conveyance channel, floodway, and Bernardo interior drain see tabulation below daily table for station 08332010.

COOPERATION.--Since July 1958 records for this station or La Joya Eastside drain (records equivalent) furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	60	58	58	56	105	104	144	208	152	128	126
2	92	58	58	59	56	105	105	136	193	154	132	125
3	109	57	58	59	55	102	96	144	197	158	128	127
4	114	56	58	58	56	105	92	162	190	175	112	153
5	100	56	58	59	55	101	94	139	187	184	98	135
6	103	58	58	56	55	123	114	144	188	181	125	138
7	128	58	58	57	55	107	124	165	174	187	113	141
8	112	58	58	56	55	128	108	150	178	202	101	140
9	99	58	58	56	54	114	121	152	171	188	80	137
10	122	58	58	57	54	119	106	150	155	194	78	134
11	126	58	58	55	55	125	151	144	178	196	96	135
12	124	57	58	55	55	139	160	144	168	174	97	179
13	96	58	58	55	55	159	148	139	175	120	105	140
14	90	58	58	55	54	144	153	137	169	156	121	130
15	82	58	58	55	56	145	154	139	179	154	144	129
16	89	58	58	55	52	155	161	137	164	149	198	121
17	99	58	58	56	53	160	148	167	142	168	166	121
18	102	60	58	56	53	142	159	177	133	172	161	116
19	103	60	58	57	52	140	156	177	158	157	140	110
20	116	58	58	55	51	143	155	172	152	176	155	89
21	120	58	58	54	51	131	146	177	143	156	172	84
22	115	58	58	56	50	145	126	196	148	157	173	87
23	119	58	58	57	50	149	106	177	151	135	179	134
24	127	58	58	55	49	149	108	181	136	133	182	149
25	114	53	58	57	52	154	132	180	133	115	174	140
26	110	57	58	56	50	149	136	188	154	113	171	145
27	119	58	58	58	47	151	161	172	123	134	158	126
28	111	58	58	57	49	161	144	167	119	120	135	122
29	113	58	58	55	---	173	149	199	151	133	142	198
30	105	58	58	55	---	148	161	194	146	122	133	141
31	82	---	58	55	---	134	---	194	---	128	132	---
TOTAL	3324	1739	1798	1741	1485	4224	3964	5064	4865	4863	4229	3955
MEAN	107	58.0	58.0	56.2	53.0	136	132	163	162	157	136	132
MAX	128	60	58	59	56	173	161	199	208	202	198	198
MIN	82	56	58	54	47	101	90	136	119	113	78	84
AC-F1	6590	3450	3570	3450	2950	8380	7864	10040	9650	9650	8390	7840
CAL YR 1974	TOTAL	33173	MEAN	90.9	MAX	181	MIN	48	AC-F1	65800		
WTR YR 1975	TOTAL	41251	MEAN	113	MAX	208	MIN	47	AC-F1	81420		

## 08332050 BERNARDO INTERIOR DRAIN NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'56", long 106°49'15", Socorro County, on downstream side of bridge on U.S. Highway 60, and 1.0 mi (1.6 km) 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. Datum of gage is 4,713.99 ft (1,436.824 m) above mean sea level. June 4, 1936 to May 17, 1937, nonrecording gage 150 ft (46 m) downstream at datum 2.77 ft (0.844 m) higher.

EXTREMES.--Period of record: Maximum daily discharge, 187 ft<sup>3</sup>/s (5.30 m<sup>3</sup>/s) Aug. 7, 1970; no flow at times. Prior to 1952, drain was subject to overflow from floodway.

REMARKS.--Records good. This drain is 1 of 4 channels (see sta 08331990, 08332010, and 08332030) carrying flow in valley cross section. For combined monthly flow in acre-ft of this drain, conveyance channel, floodway, and Lower San Juan Riverside drain see tabulation below daily table for sta 08332010.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	31	29	27	24	28	70	57	51	26	20	40
2	44	31	28	28	24	28	52	51	45	27	23	33
3	36	31	28	28	24	28	44	58	88	37	27	30
4	35	31	27	28	24	28	45	49	46	40	19	49
5	32	31	26	28	23	29	48	54	46	39	18	31
6	33	31	26	27	23	30	57	48	37	56	18	29
7	32	31	25	27	24	43	50	56	43	63	15	29
8	34	31	25	26	24	46	52	56	46	52	15	30
9	33	31	24	27	24	49	60	56	43	45	18	30
10	37	31	24	27	24	45	69	48	46	49	19	28
11	29	31	24	27	24	53	72	56	45	57	23	39
12	30	31	25	26	24	59	69	53	38	65	20	31
13	31	31	25	26	24	61	77	40	41	56	23	30
14	31	31	25	26	25	52	72	35	43	55	26	29
15	30	31	25	26	25	56	78	36	45	46	32	52
16	30	31	25	26	26	46	71	39	32	50	34	57
17	31	30	25	25	26	45	71	40	31	40	43	28
18	31	30	25	25	26	41	66	48	29	40	39	28
19	32	30	25	25	26	54	57	52	27	50	35	34
20	31	30	26	25	26	59	55	44	28	57	32	35
21	31	30	26	25	27	56	59	51	31	41	42	30
22	32	30	26	26	27	44	55	47	30	46	31	28
23	30	30	27	26	27	49	63	53	30	36	36	30
24	30	30	26	25	27	43	60	57	30	31	50	34
25	30	29	27	25	27	63	62	40	32	29	38	35
26	30	29	27	25	27	54	57	36	28	36	38	37
27	30	29	27	25	27	36	59	37	28	32	33	36
28	33	29	27	25	27	39	59	42	28	29	28	32
29	31	29	27	25	---	51	66	54	33	27	28	28
30	33	29	27	25	---	49	71	58	32	22	37	26
31	31	---	27	24	---	58	---	59	---	20	36	---
TOTAL	1010	910	806	806	706	1422	1846	1510	1152	1299	896	1008
MEAN	32.6	30.3	26.0	26.0	25.2	45.9	61.5	48.7	38.4	41.9	28.9	33.6
MAX	47	31	29	28	27	63	78	59	88	65	50	57
MIN	29	29	24	24	23	28	44	35	27	20	15	26
AC-FT	2000	1800	1600	1600	1400	2820	3660	3000	2280	2580	1780	2000

CAL YR 1974 TOTAL 19171 MEAN 52.5 MAX 134 MIN 20 AC-FT 38030  
WTR YR 1975 TOTAL 13371 MEAN 36.6 MAX 88 MIN 15 AC-FT 26520

## 08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, N. MEX.

LOCATION.--Lat 35°38'08", long 107°09'56", in SW¼ sec.21, T.16 N., R.3 W., Sandoval County, on right bank 1.6 mi (2.6 km) upstream from Arroyo Chico, 5.5 mi (8.8 km) northeast of village of Guadalupe, and at mile 106.8 (171.8 km).

DRAINAGE AREA.--420 mi<sup>2</sup> (1,090 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,950 ft (1,813.6 m) above mean sea level. Prior to July 14, 1966 at datum 1.01 ft (0.308 m) higher.

AVERAGE DISCHARGE.--24 years, 13.8 ft<sup>3</sup>/s (0.391 m<sup>3</sup>/s), 10,000 acre-ft/yr (12.3 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 820 ft<sup>3</sup>/s (23.2 m<sup>3</sup>/s) Mar. 3 (gage height, 5.50 ft or 1.676 m); no flow for many days.  
Period of record: Maximum discharge, 6,940 ft<sup>3</sup>/s (197 m<sup>3</sup>/s) July 29, 1967 (gage height, 13.53 ft or 4.124 m), from rating curve extended above 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 7.75 ft (2.362 m) and 10.60 ft (3.231 m); no flow for many days most years.  
Flood of June 29, 1943, probably exceeded 5,000 ft<sup>3</sup>/s (142 m<sup>3</sup>/s) based on records for stations above and below.

REMARKS.--Records poor. Diversions for irrigation of about 3,700 acres (15.0 km<sup>2</sup>) above station in past years, but present diversion negligible.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.3	.05	0	38	97	14	16	54	0	0	0
2	0	2.4	.06	0	23	302	12	15	52	0	0	0
3	0	1.6	.06	0	20	338	8.2	17	57	0	0	.68
4	0	1.4	.07	0	20	148	7.3	39	58	0	0	57
5	0	1.4	.03	0	16	43	7.0	32	60	0	0	51
6	0	1.1	.40	0	10	15	7.0	42	54	0	0	.96
7	0	.72	.20	0	7.3	9.8	8.7	34	54	0	0	.10
8	0	.40	.20	0	6.9	7.0	31	29	54	0	0	.50
9	0	.47	.20	0	6.0	27	15	25	52	0	0	43
10	50	.28	.20	0	10	14	10	35	47	0	0	23
11	60	.10	.10	0	4.0	1.2	4.8	42	47	.01	0	4.8
12	30	.07	.10	0	4.0	4.3	9.2	53	32	0	12	64
13	5.0	.10	.10	0	3.0	2.0	14	57	25	7.1	23	13
14	3.0	.15	.20	0	3.0	1.8	17	62	23	.04	6.2	5.0
15	2.0	.15	.20	0	3.0	1.8	16	67	21	.03	.15	2.0
16	0	.15	.20	0	2.0	3.3	14	83	19	0	.02	.62
17	0	.15	.20	0	2.0	2.0	16	87	17	40	0	.23
18	0	.19	.20	0	2.0	2.0	20	81	15	.54	0	.18
19	0	.19	.20	0	2.0	1.6	22	79	13	0	0	.05
20	0	.23	.20	0	2.0	6.5	17	74	11	2.0	0	.05
21	1.0	.23	.20	0	2.0	9.2	16	70	8.5	42	2.9	.01
22	10	.19	.20	0	2.0	12	23	66	6.5	8.5	0	0
23	30	.19	.20	0	2.0	13	33	67	5.6	.06	0	0
24	3.0	.19	.10	0	2.0	13	29	55	1.6	0	0	0
25	2.0	.19	.05	0	2.0	13	43	57	.05	0	0	0
26	1.0	.19	.05	.10	2.0	12	32	61	.01	.52	0	0
27	20	.19	.05	.15	12	13	42	61	0	.34	0	0
28	3.0	.19	.05	.10	29	16	33	64	0	0	0	0
29	2.0	.10	.05	.23	---	14	24	79	0	0	0	0
30	30	.06	.05	.15	---	16	16	83	0	0	0	0
31	10	---	.05	33	---	14	---	60	---	0	0	---
TOTAL	262.0	17.27	4.22	33.73	237.2	1172.5	561.2	1683	787.26	101.14	44.27	266.10
MEAN	8.45	.58	.14	1.09	8.47	37.8	18.7	54.3	26.2	3.26	1.43	8.87
MAX	60	4.3	.40	33	38	338	43	87	60	42	23	64
MIN	0	.06	.03	0	2.0	1.2	4.8	15	0	0	0	0
AC-FI	520	34	8.4	67	470	2330	1110	3340	1560	201	88	528

CAL YR 1974 TOTAL 682.77 MEAN 1.87 MAX 60 MIN 0 AC-FI 1350  
WTR YR 1975 TOTAL 5169.89 MEAN 14.2 MAX 338 MIN 0 AC-FI 10250

PEAK DISCHARGE (BASE, 1000 FT<sup>3</sup>/S).--NO PEAK ABOVE BASE.

## 08340500 ARROYO CHICO NEAR GUADALUPE, N. MEX.

LOCATION.—Lat 35°35'33", long 107°11'19", in NE¼ sec.30, T.16 N., R.3 W., Sandoval County, on left bank 0.2 mi (0.3 km) upstream from mouth, 4.1 mi (6.6 km) northwest of Guadalupe, and 5.5 mi (8.8 km) southwest of Cabezón.

DRAINAGE AREA.—1,390 mi<sup>2</sup> (3,600 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—November 1943 to current year.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 5,921 ft (1,804.7 m) above mean sea level. Prior to June 21, 1968 at site 500 ft (150 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.—32 years, 22.6 ft<sup>3</sup>/s (0.640 m<sup>3</sup>/s), 16,370 acre-ft/yr (20.2 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 3,260 ft<sup>3</sup>/s (92.3 m<sup>3</sup>/s) Sept. 12 (gage height, 7.76 ft or 2.365 m); no flow for many days. Period of record: Maximum discharge, 15,200 ft<sup>3</sup>/s (430 m<sup>3</sup>/s) Sept. 12, 1972 (gage height, 17.5 ft or 5.33 m, from floodmarks), from rating curve extended above 2,900 ft<sup>3</sup>/s (82.1 m<sup>3</sup>/s) on basis of slope-measurements at gage heights 11.6 ft (3.536 m) and 14.8 ft (4.511 m); no flow for many days each year.

REMARKS.—Records poor. Diversions for irrigation of about 100 acres (40 hm<sup>2</sup>) above station.

REVISIONS (WATER YEARS).—WSP 1282: 1944-50.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	14	.15	.10	8.0	220	.41			0	0	0
2	0	5.0	.15	0	9.0	144	.41			0	0	0
3	0	3.0	.15	0	8.0	71	.30			0	0	2.6
4	0	1.0	.15	0	10	30	.30			0	0	668
5	0	.57	.33	0	6.8	10	.30			0	0	140
6	.42	.49	.65	0	5.0	5.0	.30			0	0	21
7	94	.41	.37	0	3.3	4.0	.30			18	0	74
8	18	.37	.30	0	3.6	20	.30			.53	0	120
9	4.1	.41	.33	0	5.0	29	.30			.19	0	494
10	156	.30	.30	0	3.8	15	.30			36	.01	233
11	275	.17	.20	0	4.4	5.0	.27			23	85	57
12	100	.13	.20	0	6.0	6.0	1.4			1.0	2.0	805
13	109	.15	.20	0	12	5.0	23			340	78	104
14	26	.13	.30	0	6.4	4.0	8.2			10	5.0	20
15	3.0	.13	.40	0	5.0	4.0	3.6			0	2.0	10
16	0	.13	.45	0	3.3	6.0	.80			39	0	5.4
17	0	.13	.45	0	3.3	5.0	.45			65	0	.99
18	0	.13	.41	0	2.8	5.0	.40			10	0	.57
19	0	.11	.37	0	2.7	1.0	.40			1.0	0	.37
20	0	.11	.37	0	2.6	.13	.40			0	0	.30
21	2.0	.11	.24	0	2.6	.05	.30			36	41	.99
22	25	.11	.24	0	2.6	2.9	.10			6.4	38	.99
23	197	.11	.27	0	2.6	6.4	0			5.4	3.0	.53
24	5.0	.15	.33	0	2.6	1.4	0			5.4	0	.33
25	1.0	.17	.30	0	2.6	.99	0			160	0	.24
26	0	.17	.30	.50	6.4	1.1	0			254	0	.19
27	138	.19	.30	1.0	23	.70	0			60	0	.17
28	10	.17	.20	1.0	127	.49	0			20	0	.13
29	163	.19	.20	1.5	---	.57	0			5.0	0	0
30	127	.15	.20	2.0	---	.70	0			45	0	0
31	49	---	.20	10	---	.53	---			2.0	0	---
TOTAL	1502.52	28.39	9.01	16.10	280.4	604.96	42.54	0	0	1142.92	254.01	2759.80
MEAN	48.5	.95	.29	.52	10.0	19.5	1.42	0	0	36.9	8.19	92.0
MAX	275	14	.65	10	127	220	23	0	0	340	85	805
MIN	0	.11	.15	0	2.6	.05	0	0	0	0	0	0
AC-FT	2980	56	18	32	556	1200	84	0	0	2270	504	5470

CAL YR 1974 TOTAL 3060.77 MEAN 8.39 MAX 972 MIN 0 AC-FT 6070

WTR YR 1975 TOTAL 6640.65 MEAN 18.2 MAX 805 MIN 0 AC-FT 13170

PEAK DISCHARGE (BASE, 2500 FT<sup>3</sup>/S).--SEPT. 12 (0330) 3260 FT<sup>3</sup>/S (7.76 FT.).

## 08341400 BLUEWATER LAKE NEAR BLUEWATER, N. MEX.

LOCATION.--Lat 35°17'31", long 108°06'40", in SE¼ sec.9, T.12 N., R.12 W., Valencia County, at left end of Bluewater Dam on Bluewater Creek, and 9.5 mi (15.2 km) west of Bluewater.

DRAINAGE AREA.--201 mi<sup>2</sup> (521 km<sup>2</sup>).

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 (2,238.930 m) above mean sea level. July 1958 to January 1961, nonrecording gage at nearby site, same datum. Gage heights have been converted to sea-level elevations.

EXTREMES.--Current year: Maximum contents, 25,990 acre-ft (32.0 hm<sup>3</sup>) May 5 (elevation, 7,394.4 ft or 2,253.81 m); minimum, 12,920 acre-ft (15.9 hm<sup>3</sup>) Feb. 10 (elevation, 7,382.5 ft or 2,250.19 m).

Period of record: Maximum contents determined, 47,100 acre-ft (58.1 hm<sup>3</sup>) Apr. 30, 1941. Contents may have been greater on Apr. 28, 1941 when peak discharge of 800 ft<sup>3</sup>/s (22.7 m<sup>3</sup>/s) occurred at station 8 mi (13 km) downstream; no storage at times prior to 1947.

REMARKS.--Records fair. Reservoir is formed by concrete arch dam. Storage began in 1927. Capacity, 38,500 acre-ft (47.5 hm<sup>3</sup>) at elevation 7,402.6 ft (2,256.31 m) crest of uncontrolled siphon spillway which is vented to avoid drawdown below crest, and 44,200 acre-ft (54.5 hm<sup>3</sup>) at elevation 7,405.6 ft (2,257.23 m) crest of ungated spillway over dam. Dead storage, 3.4 acre-ft (4,190 m<sup>3</sup>) at elevation 7,345.4 ft (2,238.88 m) sill of lower outlet tube. Lake not usually drawn below conservation pool level (elevation, 7,365.36 ft or 2,244.962 m), 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.

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
SEPT. 30.....	7,383.3	13,590	-
OCT. 31.....	7,383.3	13,590	0
NOV. 30.....	7,383.0	13,330	-260
DEC. 31.....	7,382.8	13,160	-170
CAL YR 1974	-	-	-13,490
JAN. 31.....	7,382.6	13,000	-160
FEB. 28.....	7,382.7	13,080	+80
MAR. 31.....	7,387.7	17,800	+4,720
APR. 30.....	7,393.2	24,430	+6,630
MAY 31.....	7,393.0	24,170	-260
JUNE 30.....	7,390.6	21,180	-2,990
JULY 31.....	7,389.5	19,850	-1,330
AUG. 31.....	7,387.5	17,580	-2,270
SEPT. 30.....	7,387.0	17,050	-530
WTR YR 1975	-	-	+3,460



## 08343000 RIO SAN JOSE AT GRANTS, N. MEX.

LOCATION.--Lat 35°09'16", long 107°52'11", in SW¼NW¼ sec.26, T.11 N., R.10 W., Valencia County, on right bank at bridge on State Highway 53 at Grants, 0.2 mi (0.3 km) south of U.S. Highway 66, and at mile 67.8 (109.1 km).

DRAINAGE AREA.--1,020 mi<sup>2</sup> (2,640 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1912 to February 1914, June 1914, October 1914 to February 1915, May 1915 to June 1921, September 1921 to June 1923, October 1923 to May 1926, September to December 1926, May 1949 to September 1966, June 1968 to current year. Monthly discharge only for some periods published in WSP 1312. Prior to October 1967, published as "Bluewater Creek at Grants".

GAGE.--Water-stage recorder. Datum of gage is 6,468.34 ft (1,971.550 m) above mean sea level (levels by Corps of Engineers). See WSP 1732 or 1923 for history of changes prior to Jan. 1, 1926.

AVERAGE DISCHARGE.--34 years (1912-13, 1914-20, 1921-22, 1923-25, 1949-66, 1968-75), 3.54 ft<sup>3</sup>/s (0.100 m<sup>3</sup>/s), 2,560 acre-ft/yr (3.16 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 329 ft<sup>3</sup>/s (9.32 m<sup>3</sup>/s) Oct. 12 (gage height, 3.66 ft or 1.116 m); no flow most of time. 1949-66, 1968-75: Maximum discharge recorded, 1,760 ft<sup>3</sup>/s (49.8 m<sup>3</sup>/s) Aug. 28, 1952 (gage height, 5.35 ft or 1.631 m), from rating curve extended above 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) on basis of velocity-area studies; no flow for long periods. Maximum flood observed occurred Sept. 6 or 7, 1909, when Bluewater Dam washed out. A flood in July 1919 probably exceeded the one in 1952.

REMARKS.--Records fair. Flow partly regulated by Bluewater Lake 24 mi (39 km) upstream (see sta 08341400). Diversions and ground-water withdrawals for irrigation of about 4,500 acres (18.2 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1512: 1913-14. WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	.02	0
2	0									0	0	0
3	0									0	0	0
4	0									0	0	.89
5	0									0	0	.28
6	0									0	0	0
7	0									0	0	0
8	0									0	0	6.1
9	0									0	0	4.8
10	0									0	0	0
11	0									0	0	0
12	28									0	0	0
13	3.7									.01	0	0
14	.36									0	0	0
15	.01									0	0	0
16	0									0	0	0
17	0									0	0	0
18	0									0	0	0
19	0									0	0	0
20	0									0	0	0
21	0									0	0	0
22	0									0	0	0
23	0									0	0	0
24	0									0	0	0
25	0									0	0	0
26	0									0	0	0
27	0									0	0	0
28	0									0	0	0
29	0									0	0	0
30	0									.15	0	0
31	0	---			---		---		---	.49	0	---
TOTAL	32.07	0	0	0	0	0	0	0	0	.65	.02	12.07
MEAN	1.03	0	0	0	0	0	0	0	0	.021	.0006	.40
MAX	28	0	0	0	0	0	0	0	0	.49	.02	6.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	64	0	0	0	0	0	0	0	0	1.3	.04	24

CAL YR 1974 TOTAL 44.76 MEAN .12 MAX 28 MIN 0 AC-FT 89  
WTR YR 1975 TOTAL 44.81 MEAN .12 MAX 28 MIN 0 AC-FT 89

PEAK DISCHARGE (BASE, 200 FT<sup>3</sup>/S).--OCT. 12 (1900) 329 FT<sup>3</sup>/S (3.66 FT.).

08343100 GRANTS CANYON AT GRANTS, N. MEX.

LOCATION.--Lat 35°09'39", long 107°50'15", in NE¼NE¼ sec.25, T.11 N., R.10 W., Valencia County, at Roosevelt Avenue, in the town of Grants, 0.2 mi (0.3 km) east of intersection of Roosevelt and First Avenue, and 1.1 mi (1.8 km) upstream from confluence with Rio San Jose (formerly Bluewater Creek).

DRAINAGE AREA.--13.0 mi<sup>2</sup> (33.7 km<sup>2</sup>).

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 6,450 ft (1,966.0 m) from topographic map.

AVERAGE DISCHARGE.--14 years, 0.190 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s), 138 acre-ft/yr (170,200 m<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 348 ft<sup>3</sup>/s (9.86 m<sup>3</sup>/s) July 25 (gage height, 2.24 ft or 0.683 m); no flow most of time. Period of record: Maximum discharge, 1,550 ft<sup>3</sup>/s (43.9 m<sup>3</sup>/s) Aug. 26, 1963, (gage height, 5.10 ft or 1.554 m), from rating curve extended above 220 ft<sup>3</sup>/s (6.23 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 3.17 ft (0.966 m), 5.10 ft (1.554 m), and 5.38 ft (1.640 m); maximum gage height, 5.38 ft (1.640 m) Sept. 8, 1967; no flow for most of time.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	0
2										0	0	0
3										0	0	1.1
4										0	0	1.2
5										0	0	1.1
6										0	0	0
7										0	0	0
8										0	0	.79
9										0	0	6.6
10										0	0	0
11										0	0	0
12										0	0	5.7
13										.28	0	0
14										0	0	0
15										0	0	0
16										0	0	0
17										0	0	0
18										0	0	0
19										0	0	0
20										0	0	0
21										0	0	0
22										0	.41	0
23										0	0	0
24										.12	0	0
25										10	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29										0	0	0
30										0	0	0
31		---			---		---		---	0	0	---
TOTAL	0	0	0	0	0	0	0	0	0	10.40	.41	16.49
MEAN	0	0	0	0	0	0	0	0	0	.34	.013	.55
MAX	0	0	0	0	0	0	0	0	0	10	.41	6.6
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	21	.8	33
CAL YR 1974 TOTAL	1.77	MEAN .0050	MAX 1.1	MIN 0	AC-FT 3.5							
WTR YR 1975 TOTAL	27.30	MEAN .075	MAX 10	MIN 0	AC-FT 54							

PEAK DISCHARGE (BASE, 175 FT<sup>3</sup>/S).--JULY 25 (1930) 348 FT<sup>3</sup>/S (2.24 FT.); SEPT. 9 (1930) 192 FT<sup>3</sup>/S (1.67 FT.).

08343500 RIO SAN JOSE NEAR GRANTS, N. MEX.

LOCATION.--Lat 35°04'27", long 107°45'01", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.23, T.10 N., R.9 W., Valencia County, on right bank at west boundary of Acoma Pueblo Grant, 8.5 mi (13.7 km) southeast of Grants, and at mile 57.4 (92.4 km).

DRAINAGE AREA.--2,300 mi<sup>2</sup> (5,960 km<sup>2</sup>), approximately, of which 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as "San Jose River near Grants".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,269.47 ft (1,910.934 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 6.50 ft<sup>3</sup>/s (0.184 m<sup>3</sup>/s), 4,710 acre-ft/yr (5.81 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 595 ft<sup>3</sup>/s (16.9 m<sup>3</sup>/s) Sept. 8 (gage height, 3.60 ft or 1.097 m); minimum, 3.4 ft<sup>3</sup>/s (0.096 m<sup>3</sup>/s) Dec. 9.

Period of record: Maximum discharge, 1,400 ft<sup>3</sup>/s (39.6 m<sup>3</sup>/s) Sept. 20, 1963 (gage height, 4.87 ft or 1.484 m), from rating curve extended above 450 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 3.19 ft (0.972 m) and 4.87 ft (1.484 m); minimum, 1.9 ft<sup>3</sup>/s (0.054 m<sup>3</sup>/s) Feb. 21, 1973.

Maximum flood probably occurred Sept. 6 or 7, 1909, following destruction of Bluewater dam. The peak of Sept. 20, 1963 may have been exceeded by those of July 1919, August and September 1929, and August 1935.

REMARKS.--Records good except those for October, which are poor. Flow partly regulated by Bluewater Lake, 34 mi (55 km) upstream (see sta 08341400). Diversions and ground-water withdrawal for irrigation of about 5,100 acres (20.6 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 898: 1936-39(M). WSP 1512: 1943. WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	5.2	4.5	4.4	7.3	4.6	4.9	4.6	5.3	5.8	6.7	5.4
2	4.6	5.3	4.5	4.4	6.9	4.6	4.9	4.5	4.6	6.1	6.2	5.4
3	4.6	5.5	4.5	4.7	6.7	4.6	5.0	4.7	4.6	6.1	6.1	6.8
4	4.6	5.5	4.5	5.1	6.6	4.6	5.1	4.8	4.6	6.5	6.1	40
5	4.6	5.5	4.6	4.6	5.9	5.4	5.0	4.7	4.9	7.0	6.2	27
6	4.6	5.8	4.5	4.6	5.4	4.8	5.0	4.8	4.6	7.0	6.4	20
7	5.4	6.0	4.3	4.6	6.1	4.8	5.0	4.8	4.6	7.5	6.6	11
8	12	6.1	3.9	5.1	7.2	4.9	5.2	4.8	4.8	7.5	7.1	112
9	10	6.3	3.9	5.3	7.0	6.4	5.3	4.8	4.4	7.5	7.7	205
10	5.3	6.1	4.1	4.8	7.0	6.3	5.5	5.1	4.4	9.0	7.9	72
11	6.7	5.8	4.2	4.7	6.1	5.1	4.9	4.7	4.2	9.5	9.1	16
12	8.0	5.9	4.1	4.9	5.7	4.9	5.1	4.7	4.3	10	14	68
13	20	5.9	4.3	4.9	6.1	4.7	5.5	4.7	4.4	15	22	34
14	13	5.9	4.3	5.2	6.1	4.6	5.6	4.8	4.5	13	8.5	9.4
15	9.0	5.8	4.0	5.4	6.2	4.6	5.5	4.7	4.4	12	6.9	7.4
16	7.0	5.9	4.1	5.4	6.6	4.5	5.6	4.9	4.5	11	6.8	7.3
17	6.8	5.9	4.4	5.5	6.1	4.5	5.8	4.9	4.6	11	8.4	6.7
18	5.5	5.8	4.5	6.0	5.6	4.3	6.0	5.4	4.7	12	7.3	6.6
19	5.0	5.7	4.5	6.5	5.7	4.6	6.1	5.4	4.8	12	6.8	6.6
20	4.5	5.3	4.6	6.4	6.0	4.7	6.3	5.5	4.7	11	9.3	6.8
21	5.2	5.2	5.2	6.9	6.1	4.7	6.0	5.0	4.8	8.0	11	6.9
22	7.0	5.4	5.7	6.2	5.1	4.6	5.7	4.9	5.0	8.0	8.7	6.9
23	10	5.3	4.8	5.3	5.1	4.7	5.5	5.0	5.3	8.0	37	7.0
24	11	5.0	4.2	5.2	6.2	4.6	5.6	5.3	5.5	8.0	20	7.0
25	7.0	4.9	4.1	7.5	6.2	4.8	5.5	5.2	5.3	8.5	7.6	7.1
26	6.0	5.0	4.2	9.1	5.2	4.9	5.2	5.3	5.4	11	5.8	6.9
27	5.5	4.8	4.4	7.2	5.1	5.1	5.0	5.4	5.8	12	5.5	6.4
28	5.5	4.9	4.4	7.4	4.9	5.0	4.7	5.4	5.8	7.0	5.3	5.6
29	5.5	4.6	4.7	7.1	---	5.0	4.5	5.8	5.4	7.0	5.0	5.6
30	5.5	4.5	4.6	8.2	---	4.9	4.5	5.5	5.8	8.7	5.3	5.6
31	5.3	---	4.5	7.8	---	5.0	---	5.7	---	8.0	5.3	---
TOTAL	218.5	164.8	137.1	180.4	170.2	150.8	159.5	155.8	146.0	280.7	282.6	738.4
MEAN	7.05	5.49	4.42	5.82	6.08	4.86	5.32	5.03	4.87	9.05	9.12	24.6
MAX	20	6.3	5.7	9.1	7.3	6.4	6.3	5.8	5.8	15	37	205
MIN	4.5	4.5	3.9	4.4	4.9	4.3	4.5	4.5	4.2	5.8	5.0	5.4
AC-FI	433	327	272	358	338	299	316	309	290	557	561	1460

CAL YR 1974 TOTAL 1958.9 MEAN 5.37 MAX 20 MIN 3.0 AC-FI 3890  
WTR YR 1975 TOTAL 2784.8 MEAN 7.63 MAX 205 MIN 3.9 AC-FI 5520

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S).--SEPT. 8 (2100) 595 FT<sup>3</sup>/S (3.60 FT.); SEPT. 12 (1600) 167 FT<sup>3</sup>/S (2.52 FT.).

## 08350500 RIO SAN JOSE NEAR LAGUNA, N. MEX.

LOCATION.--Lat 35°01'25", long 107°19'32", in SW 1/4 sec. 12, T.9 N., R.5 W., Valencia County, on right bank, at diversion dam of Mesita ditch, 3 mi (5 km) downstream from Rio Pagueate 3.5 mi (5.6 km) east of Laguna, and at mile 24.8 (39.3 km).

DRAINAGE AREA.--3,040 mi<sup>2</sup> (7,870 km<sup>2</sup>), approximately, of which about 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1937 to September 1941, August 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,640 ft (1,719 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 12.2 ft<sup>3</sup>/s (0.346 m<sup>3</sup>/s), 8.840 acre-ft/yr (10.9 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 958 ft<sup>3</sup>/s (27.1 m<sup>3</sup>/s) July 10 (gage height, 5.06 ft or 1.542 m); no flow for many days.  
Period of record: Maximum discharge, 3,400 ft<sup>3</sup>/s (96.3 m<sup>3</sup>/s) Aug. 1, 1973 (gage height, 5.50 ft or 1.676 m, datum then in use) on basis of computation of peak flow over dam; no flow for many days.

REMARKS.--Records poor. Flow regulated to some extent since 1927 by Bluewater Lake 67 mi (108 km) upstream (see sta 08341400).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	19	8.7	6.0	11	5.8	6.1	4.2		0	14	5.8
2	0	14	8.7	6.0	9.1	5.6	5.3	2.6		0	5.3	5.0
3	0	12	9.1	5.0	7.7	4.0	5.0	1.7		0	2.9	4.4
4	0	9.8	8.7	5.0	7.0	3.3	5.6	2.9		0	1.4	24
5	0	8.7	6.7	5.0	5.8	4.2	4.7	2.2		0	.85	57
6	0	5.0	6.1	5.0	6.6	4.7	4.2	1.6		0	.42	35
7	.44	4.0	6.2	4.0	7.4	4.2	3.7	1.4		0	.63	20
8	2.2	2.0	6.0	3.0	8.4	7.3	2.9	1.4		0	6.4	19
9	1.6	2.4	5.0	2.7	8.4	17	3.5	1.4		0	12	36
10	60	1.3	5.5	2.7	8.7	13	5.0	3.1		73	9.5	120
11	52	.63	6.0	2.7	8.7	11	6.1	3.1		20	6.4	236
12	58	1.0	6.0	2.7	8.7	10	15	2.6		10	2.6	246
13	360	1.9	7.0	2.7	8.0	8.7	14	1.4		7.0	16	53
14	138	2.4	7.0	3.0	10	7.3	9.5	.56		6.0	23	26
15	83	3.1	7.5	3.0	13	5.8	7.3	.35		5.0	10	19
16	30	2.6	7.5	2.0	14	6.1	5.8	.42		5.0	8.0	11
17	14	2.0	8.0	2.0	13	5.8	34	.63		10	5.0	9.7
18	4.4	3.3	8.0	2.2	11	6.1	15	1.3		5.0	3.7	9.0
19	1.3	4.4	8.5	2.4	10	6.4	13	.85		4.4	1.9	8.6
20	1.0	5.0	8.5	3.0	9.0	5.6	11	.35		1.6	2.4	8.6
21	.50	5.8	9.0	2.6	8.7	5.3	9.0	0		11	21	7.7
22	8.2	6.4	9.5	2.4	8.4	5.0	8.0	0		26	58	7.6
23	142	6.4	8.5	2.4	8.0	4.0	7.0	0		2.6	42	7.4
24	43	5.8	7.5	2.4	8.4	4.7	6.0	0		1.6	22	6.8
25	20	5.6	7.0	2.6	10	5.8	5.3	0		1.3	14	6.7
26	15	6.7	6.5	10	9.5	7.3	6.7	0		.70	11	6.5
27	14	8.0	6.5	10	7.7	8.7	7.7	0		.56	10	5.9
28	15	9.8	7.0	10	8.0	9.8	7.0	0		.85	9.1	5.8
29	34	7.0	7.0	12	---	8.0	5.8	0		11	8.0	5.7
30	84	10	6.5	14	---	8.0	4.7	0		17	7.3	5.2
31	35	---	6.5	14	---	6.7	---	0	---	56	6.4	---
TOTAL	1216.64	176.03	226.2	152.5	254.2	215.2	243.9	34.06	0	275.61	341.20	1018.4
MEAN	39.2	5.87	7.30	4.92	9.08	6.94	8.13	1.10	0	8.89	11.0	33.9
MAX	360	19	9.5	14	14	17	34	4.2	0	73	58	246
MIN	0	.63	5.0	2.0	5.8	3.3	2.9	0	0	0	.42	4.4
AC-FT	2410	349	449	302	504	427	484	68	0	547	677	2020
CAL YR 1974	TOTAL	2535.46	MEAN	6.95	MAX	360	MIN	0	AC-FT	5030		
WTR YR 1975	TOTAL	4153.94	MEAN	11.4	MAX	360	MIN	0	AC-FT	8240		

08351500 RIO SAN JOSE AT CORREO, N. MEX.

LOCATION.--Lat 34°58'05", long 107°11'11", in NE¼ sec.31, T.9 N., R.3 W., Valencia County, on right bank 0.7 mi (1.1 km) upstream from State Highway 6, 0.8 mi (1.3 km) northwest of Correo, and 14 mi (23 km) upstream from mouth.

DRAINAGE AREA.--3,660 mi<sup>2</sup> (9,480 km<sup>2</sup>), approximately, of which about 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as "San Jose River at Correo".

GAGE.--Water-stage recorder. Datum of gage is 5,492.43 ft (1,674.093 m) above mean sea level. Prior to Oct. 1, 1958, water-stage recorder and concrete control at site 1 mi (1.6 km) downstream at datum 17.55 ft (5.349 m) lower.

AVERAGE DISCHARGE.--32 years, 12.1 ft<sup>3</sup>/s (0.343 m<sup>3</sup>/s), 8,770 acre-ft/yr (10.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft<sup>3</sup>/s (48.7 m<sup>3</sup>/s) Oct. 13 (gage height, 4.08 ft or 1.244 m), from rating curve extended above 700 ft<sup>3</sup>/s (19.8 m<sup>3</sup>/s) on basis of slope-area measurement at a gage height of 4.28 ft (1.305 m); no flow for many days.

Period of record: Maximum discharge, 7,150 ft<sup>3</sup>/s (202 m<sup>3</sup>/s) Aug. 11, 1955; maximum gage height, 20.7 ft (6.31 m), Aug. 22, 1958, backwater from dam (site and datum then in use); no flow for many days.

A flood which probably occurred Aug. 21, 1935, reached a stage of 15.4 ft (4.69 m), from floodmarks, former site and datum (discharge, about 11,000 ft<sup>3</sup>/s or 312 m<sup>3</sup>/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.

REMARKS.--Records poor. Flow regulated to some extent since 1927 by Bluewater Lake 78 mi (126 km) upstream (see sta 08341400).

REVISIONS (WATER YEARS).--WSP 1442: 1944, 1945(M), 1946-48, 1949(M), 1950, 1951(P), 1952. WSP 1732: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.5	4.0	4.0	7.4	6.8	4.8			0	1.0	4.0
2	0	4.0	3.5	5.0	8.0	6.2	5.7			0	0	3.0
3	0	3.5	3.5	6.0	6.2	5.7	4.4			0	0	3.0
4	0	3.0	3.8	7.5	6.8	4.4	4.0			0	0	7.1
5	0	2.8	4.0	7.0	7.4	4.8	4.0			0	0	11.8
6	0	3.0	3.5	6.0	7.4	4.8	3.6			0	0	1.8
7	0	2.9	3.0	5.0	8.0	4.8	3.6			0	0	1.2
8	0	2.8	2.5	4.0	8.0	5.7	3.6			0	0	8.8
9	0	2.5	2.7	3.0	8.8	9.6	3.6			0	0	7.8
10	26	1.7	2.9	3.0	8.0	7.4	3.6			2.9	0	25.0
11	364	1.3	3.2	3.0	8.0	6.8	4.4		59.8	0	0	20.0
12	54	1.7	3.4	3.0	8.0	6.8	6.2		135	0	0	65.0
13	717	2.2	3.7	3.0	8.8	6.2	8.8		77	0	0	5.0
14	496	3.0	4.0	5.7	7.4	5.2	6.8		25	5.6	0	2.0
15	117	4.0	3.5	3.6	8.0	4.8	5.7		9.0	0	0	1.5
16	50	5.0	3.3	5.7	8.8	4.4	4.0		3.0	0	0	1.0
17	41	4.5	3.6	10	8.0	3.6	8.0		9.0	0	0	8.0
18	28	5.0	3.5	14	9.6	3.6	1.2		1.1	0	0	7.0
19	16	6.0	3.5	16	6.2	4.0	6.8		9.0	0	0	6.0
20	8.0	7.0	3.5	18	6.8	4.0	4.8		5.0	0	1.7	6.0
21	7.0	6.0	3.7	18	6.2	2.5	2.8		5.0	5.0	0	5.0
22	5.0	5.0	4.0	16	4.0	2.5	2.5		6.2	11.1	0	5.0
23	594	4.5	3.7	16	11	2.5	2.8		1.3	8.6	0	4.0
24	60	4.8	3.3	16	6.0	2.8	2.5		1.0	4.4	0	4.0
25	20	4.7	3.0	16	11	2.8	1.7		5.0	1.5	0	4.0
26	10	4.6	2.8	18	10	4.6	9.0		4.0	1.0	0	3.0
27	80	4.5	2.9	16	8.8	8.8	2.4		3.0	9.0	0	3.0
28	50	4.7	2.8	17	8.0	7.4	0		2.0	8.0	0	2.0
29	46	4.4	3.0	18	---	8.0	0		1.0	7.0	0	2.0
30	10	4.2	3.2	16	---	6.8	0		6.4	6.0	0	2.0
31	5.0	---	3.0	15	---	5.2	---		---	16	5.0	---
TOTAL	2804.0	117.8	104.0	314.5	220.6	163.7	121.84	0	0	981.60	357.77	1571.8
MEAN	90.5	3.93	3.35	10.1	7.88	5.28	4.06	0	0	31.7	11.5	52.4
MAX	717	7.0	4.0	18	11	9.6	1.2	0	0	59.8	11.1	65.0
MIN	0	1.3	2.5	3.0	4.0	2.5	0	0	0	0	0	2.0
AC-FT	5560	234	206	624	438	325	242	0	0	1950	710	3120

CAL YR 1974 TOTAL 3883.13 MEAN 10.6 MAX 717 MIN 0 AC-FT 7700  
WTR YR 1975 TOTAL 6757.61 MEAN 18.5 MAX 717 MIN 0 AC-FT 13400

PEAK DISCHARGE (BASE, 800 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-13	UNKNOWN	4.08	1720	7-11	0230	3.88	1430
10-23	UNKNOWN	4.08	1680	9-12	UNKNOWN	4.60	1550
10-29	2115	3.27	825				

## 08352300 RIO PUERCO AT RIO PUERCO, N. MEX.

LOCATION.--Lat 34°47'38", long 106°59'20", in NW¼ sec. 31, T.7 N., R.1 W., Valencia County, in San Clemente Grant, on downstream end of pier nearest left abutment of the Atchison, Topeka and Santa Fe Railway Co. bridge, 7 mi (11 km) downstream from Rio San Jose, and at mile 36.2 (58.2 km).

DRAINAGE AREA.--6,590 mi<sup>2</sup> (17,070 km<sup>2</sup>), approximately, of which at least 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1909 to December 1912 (records fragmentary, gage heights only), March 1934 to current year. Records for January 1913 to December 1914 published in WSP 358, 388, and 408 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,008.59 ft (1,526.618 m) above mean sea level.

AVERAGE DISCHARGE.--41 years (1934-75), 58.0 ft<sup>3</sup>/s (1.643 m<sup>3</sup>/s), 42,020 acre-ft/yr (51.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,600 ft<sup>3</sup>/s (159 m<sup>3</sup>/s) Sept. 13 (gage height, 3.57 ft or 1.088 m); no flow for many days.

Period of record: Maximum discharge, 28,000 ft<sup>3</sup>/s (793 m<sup>3</sup>/s) Aug. 21, 1935 (gage height, 7.24 ft or 2.207 m), by computation of peak flow over dam; no flow many days.

The damaging flood of Sept. 23, 1929, is the greatest since about 1880; it reached a stage of 18 ft (5.5 m) conditions prior to destruction of railroad bridge. Discharge, 37,700 ft<sup>3</sup>/s (1,070 m<sup>3</sup>/s), by weir formula, from reports of State Engineer. The flood of Aug. 12, 1929, reached a stage of about 16 ft or 4.9 m (discharge, 31,300 ft<sup>3</sup>/s or 886 m<sup>3</sup>/s, by weir formula, from reports of State Engineer). A flood on Oct. 4, 1913, reached a stage of 9.5 ft or 2.90 m (discharge not determined) prior to construction of the concrete control.

REMARKS.--Records fair. Diversions for irrigation of about 11,500 acres (46.5 km<sup>2</sup>) above station (includes 3,700 acres or 15.0 km<sup>2</sup> irrigated partly or entirely from wells).

REVISIONS (WATER YEARS).--WSP 1512: 1937 (calendar year figures only), 1941, 1944. WSP 1712: 1958. WSP 1732: Drainage area. See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	128	2.4	2.5	15	125	5.3	13	35	0	29	3.0
2	0	85	3.5	2.0	15	384	4.9	10	11	0	2.0	3.0
3	0	20	4.3	1.0	16	402	5.1	5.2	6.1	0	0	3.0
4	0	9.0	4.9	1.0	15	264	4.9	3.0	6.1	0	0	89
5	0	7.0	4.5	1.5	14	116	4.4	2.1	15	0	0	1720
6	0	5.0	4.4	1.5	13	49	4.5	2.2	13	0	0	360
7	2.2	4.0	4.1	1.5	6.7	32	4.6	15	6.1	0	0	88
8	2.7	3.0	4.0	2.0	7.5	21	4.5	19	3.8	0	0	120
9	3.1	2.6	1.1	2.4	6.8	35	4.4	12	3.5	0	.19	366
10	2.6	2.4	.20	2.3	6.6	30	4.5	8.4	14	0	16	1170
11	506	2.2	.17	2.2	6.2	68	5.7	6.4	17	229	.95	1060
12	403	1.7	.07	2.1	6.1	26	9.3	6.8	18	216	0	1060
13	828	1.1	.57	2.1	5.7	20	16	22	16	916	151	500
14	561	1.4	2.2	2.0	5.7	15	35	40	6.2	235	116	300
15	136	1.8	1.6	2.0	6.0	12	49	60	1.9	35	50	150
16	40	2.1	1.4	1.4	6.4	10	38	68	.19	18	22	92
17	32	2.4	1.3	1.1	12	8.5	27	84	0	7.6	9.3	60
18	21	2.2	2.9	.82	13	7.0	35	108	0	16	1.2	40
19	14	2.2	2.4	1.2	7.2	6.0	32	96	0	29	.35	27
20	9.6	2.9	2.1	2.1	6.1	5.2	22	88	0	8.9	.03	22
21	5.3	3.6	2.8	3.4	3.0	4.5	16	76	0	55	21	17
22	4.1	3.9	4.5	4.9	2.7	3.8	13	57	0	75	140	13
23	399	3.7	4.1	4.8	1.8	3.3	9.3	64	0	27	264	21
24	297	4.3	2.0	3.1	2.9	2.8	5.7	68	0	9.1	144	11
25	94	4.0	2.0	5.8	3.7	2.3	6.1	15	0	5.2	50	6.8
26	50	3.8	.16	13	7.2	2.0	13	11	0	24	25	4.8
27	57	3.8	1.4	16	6.4	3.8	43	10	0	245	10	2.7
28	180	3.1	2.1	20	3.7	5.1	30	12	0	51	5.0	1.0
29	106	3.8	1.5	19	---	5.1	38	14	0	20	4.5	.03
30	708	3.5	3.0	18	---	5.8	22	7.6	0	10	4.0	0
31	237	---	3.3	17	---	5.4	---	27	---	20	3.5	---
TOTAL	4696.37	323.5	74.97	159.72	221.4	1679.6	512.2	1030.7	172.89	2251.8	1069.02	7310.33
MEAN	151	10.8	2.42	5.15	7.91	54.2	17.1	33.2	5.76	72.6	34.5	244
MAX	828	128	4.9	20	16	402	49	108	35	916	264	1720
MIN	0	1.1	.07	.82	1.8	2.0	4.4	2.1	0	0	0	0
AC-FT	9320	642	149	317	439	3330	1020	2040	343	4470	2120	14500
CAL YR 1974 TOTAL	7926.32											
WTR YR 1975 TOTAL	19502.50											
MEAN	21.7											
MAX	1070											
MIN	0											
AC-FT	15720											
AC-FT	38680											

PEAK DISCHARGE (BASE, 2500 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-13	1515	3.55	5000	9-13	0030	3.57	5600
9-5	0800	3.44	4800				

## 08353000 RIO PUECO NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, on bridge on former U.S. Highway 85 and 0.2 mi (0.3 km) upstream from Interstate Highway 25, 1.2 mi (1.9 km) southwest of Bernardo, 3 mi (4.8 km) upstream from mouth, and 18 mi (29 km) south of Belen.

DRAINAGE AREA.--7,350 mi<sup>2</sup> (19,040 km<sup>2</sup>), approximately, of which at least 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--November 1939 to current year. Fragmentary gage height record and footnotes concerning no flow for the period September 1910 to August 1914, published in WSP 358 and 388, are in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,722.34 ft (1,439.369 m) above mean sea level. Prior to Jan. 24, 1969, at datum 3.10 ft (0.945 m) higher.

AVERAGE DISCHARGE.--35 years (1940-75), 50.2 ft<sup>3</sup>/s (1.422 m<sup>3</sup>/s), 36,370 acre-ft/yr (44.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,520 ft<sup>3</sup>/s (99.7 m<sup>3</sup>/s) Sept. 12; maximum gage height, 10.93 ft (3.331 m) Sept. 6; no flow for extended periods.

Period of record: Maximum discharge, 18,800 ft<sup>3</sup>/s (532 m<sup>3</sup>/s) Sept. 23, 1941, from rating curve extended above 7,800 ft<sup>3</sup>/s (221 m<sup>3</sup>/s); maximum gage height, 16.9 ft (5.15 m) present datum, Aug. 12, 1955; no flow for extended periods.

The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 ft<sup>3</sup>/s or 991 m<sup>3</sup>/s, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge, 30,600 ft<sup>3</sup>/s or 867 m<sup>3</sup>/s, by slope-area method, from reports of State Engineer).

REMARKS.--Records fair. Diversions for irrigation of about 11,500 acres (46.5 km<sup>2</sup>) above station (includes 3,700 acres or 15.0 km<sup>2</sup> irrigated wholly or partly from wells). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1941-42, 1944-45, 1946(P), 1947-49. WSP 1632: 1957. WSP 1732: Drainage area. See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	178	0	12	0	0	24	26	0	12	0	0
2	0	77	0	11	327	0	15	15	0	26	0	0
3	0	52	0	11	562	0	5.0	7.3	0	13	0	0
4	0	20	0	10	614	0	3.0	4.1	0	8.2	2.8	0
5	0	10	0	10	170	0	1.0	1.5	0	0	1210	0
6	0	1.0	0	7.6	88	0	0	2.6	0	0	1060	0
7	.11	0	0	5.3	51	0	0	7.8	0	0	246	0
8	0	0	0	3.8	42	0	5.2	13	0	0	137	0
9	0	0	0	2.7	36	0	38	12	0	0	190	0
10	0	0	0	1.9	30	0	8.7	20	1.9	0	685	0
11	112	0	0	.80	41	0	7.0	17	3.2	0	1430	0
12	679	0	0	0	53	0	6.0	17	250	0	1530	0
13	354	0	0	0	15	0	5.0	14	84	15	1560	0
14	965	0	0	0	12	0	12	13	885	124	750	0
15	265	0	0	0	10	0	34	6.4	119	68	349	0
16	92	0	0	0	8.5	0	52	2.6	88	26	112	0
17	15	0	0	0	7.0	0	60	1.1	47	13	45	0
18	2.0	0	0	0	6.0	2.5	68	0	40	6.0	18	0
19	0	0	0	0	5.0	2.0	78	0	48	1.0	6.4	0
20	0	0	0	0	3.5	1.5	74	0	32	0	1.0	0
21	0	0	0	0	2.5	1.0	70	0	63	1.2	0	0
22	3.0	0	0	0	1.6	.50	55	0	41	27	0	0
23	8.0	0	0	1.0	.60	0	53	0	125	143	0	0
24	448	0	0	.50	0	0	56	0	19	83	0	0
25	65	0	0	.20	0	0	42	0	6.1	40	0	0
26	3.0	0	0	.10	0	0	27	0	3.5	15	0	0
27	0	0	0	0	0	0	15	0	124	3.5	0	0
28	0	0	0	0	0	12	12	0	116	2.4	0	0
29	134	0	3.0	---	0	23	12	0	41	.80	0	0
30	239	0	3.5	---	0	30	16	0	20	0	0	0
31	582	---	8.0	---	0	---	24	---	12	0	---	0
TOTAL	3966.11	338.0	0	14.5	77.90	2085.70	72.50	877.9	180.4	2168.7	628.10	9332.2
MEAN	128	11.3	0	.47	2.78	67.3	2.42	28.3	6.01	70.0	20.3	311
MAX	965	178	0	8.0	12	614	30	78	26	885	143	1560
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FI	7870	670	0	29	155	4140	144	1740	358	4300	1250	18510
CAL YR 1974	TOTAL	7377.21	MEAN	20.2	MAX	1140	MIN	0	AC-FI	14630		
WTR YR 1975	TOTAL	19742.01	MEAN	54.1	MAX	1560	MIN	0	AC-FI	39160		

PEAK DISCHARGE (BASE FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-14	0300	9.88	2060	9-12	0130	10.77	3520
9-6	0030	10.93	2880				

## 08354000 RIO SALADO NEAR SAN ACACIA, N. MEX.

LOCATION.--Lat 34°17'50", long 106°53'59", in NW¼ sec.24, T.1 N., R.1 W., Socorro County, at former bridge site 0.3 mi (0.5 km) upstream from bridge on Interstate Highway 25, 3.1 mi (5.0 km) upstream from mouth, 2.9 mi (4.7 km) north of San Acacia, and 15 mi (24 km) north of Socorro.

DRAINAGE AREA.--1,380 mi<sup>2</sup> (3,570 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,765 ft (1,452.4 m) from topographic map. Prior to Sept. 14, 1966, at site 1.7 mi (2.7 km) downstream at different datum.

AVERAGE DISCHARGE.--28 years, 16.4 ft<sup>3</sup>/s (0.464 m<sup>3</sup>/s), 11,880 acre-ft/yr (14.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 15,400 ft<sup>3</sup>/s (436 m<sup>3</sup>/s) Aug. 21 (gage height, 4.50 ft or 1.372 m); no flow most of time. Period of record: Maximum discharge, 36,200 ft<sup>3</sup>/s (1,030 m<sup>3</sup>/s) July 31, 1965 (gage height, 5.54 ft or 1.689 m, from floodmarks, present site and datum), from rating curve extended above 900 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow most of time. Another flood occurred Aug. 12, 1929 (discharge, 27,400 ft<sup>3</sup>/s or 776 m<sup>3</sup>/s, by slope-area method), from reports of State Engineer.

REMARKS.--Records poor. Diversions for irrigation of about 100 acres (40.5 hm<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1948-49, 1955. WSP 1632: 1953.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	.05	0
2	0									0	0	0
3	0									0	0	0
4	0									0	0	.42
5	0									0	0	606
6	0									0	0	185
7	2.4									0	0	10
8	3.3									0	0	50
9	0									0	0	391
10	0									3.6	0	765
11	0									.10	0	271
12	.50									.50	7.1	2190
13	13									0	7.2	20
14	7.2									0	2.0	15
15	0									0	0	11
16	0									0	0	2.8
17	0									2.0	0	1.0
18	0									20	0	.50
19	0									16	0	.30
20	0									12	0	.10
21	0									8.0	4.8	.1
22	9.4									5.5	289	0
23	29									4.0	22	0
24	33									1.0	2.0	0
25	1.0									88	0	0
26	1.0									82	0	0
27	6.0									36	0	0
28	9.1									17	0	0
29	1.1									21	0	0
30	19									27	0	0
31	1.0	---			---		---		---	.60	0	---
TOTAL	136.00	0	0	0	0	0	0	0	0	347.30	882.15	4559.90
MEAN	4.39	0	0	0	0	0	0	0	0	11.2	28.5	152
MAX	33	0	0	0	0	0	0	0	0	88	488	2190
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FI	270	0	0	0	0	0	0	0	0	689	1750	9040

CAL YR 1974 TOTAL 1158.17 MEAN 3.17 MAX 457 MIN 0 AC-FI 2300  
WTR YR 1975 TOTAL 5925.35 MEAN 16.2 MAX 2190 MIN 0 AC-FI 11750

PEAK DISCHARGE (BASE, 3,000 FT<sup>3</sup>/S).--AUG. 21 (2100) 15400 FT<sup>3</sup>/S (4.50 FT.); SEPT. 12 (0200) 14000 FT<sup>3</sup>/S (4.40 FT.).



## 08354500 SOCORRO MAIN CANAL NORTH AT SAN ACACIA, N. MEX.

LOCATION.--Lat 34°15'17", long 106°53'43', in SE¼NW¼ sec.1, T.1 S., R.1 W., Socorro County, on right bank at San Acacia, and 0.5 mi (0.8 km) downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft (1,420.417 m) above mean sea level. Prior to Mar. 8, 1958, at site 300 ft (90 m) upstream (in old channel) at datum 0.42 ft (0.128 m) lower.

EXTREMES.--Period of record: Maximum daily discharge, 251 ft<sup>3</sup>/s (7.11 m<sup>3</sup>/s) July 30, 1965; no flow at times.

REMARKS.--Records poor. This canal is 1 of 3 channels (see sta 08354800, 08354900) carrying flow in valley cross section. For combined monthly flow in acre-ft of this canal, conveyance channel, and floodway, see tabulation below daily table for sta 08354900. Canal diverts water from right bank of Rio Grande for irrigation of about 8,000 acres (32.4 km<sup>2</sup>). Alamillo Acequia and 3 other smaller ditches divert water from canal above station for irrigation of about 400 acres (1.62 km<sup>2</sup>). Discharge records collected at the canal heading from October 1964 to September 1965 indicate that 7,770 acre-ft (9.58 hm<sup>3</sup>) or 9% of the initial canal flow was diverted before reaching the regular gaging station.

REVISIONS (WATER YEARS).--WSP 1242: 1951.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129					0	169	189	195	231	205	102
2	133					13	155	171	198	233	199	111
3	144					101	169	195	205	238	181	114
4	138					127	180	199	221	229	152	50
5	92					141	184	200	218	231	130	0
6	64					173	191	166	229	211	125	0
7	106					151	193	210	227	196	116	0
8	96					132	215	215	215	231	111	0
9	91					139	224	217	208	247	96	0
10	50					155	219	215	169	243	85	0
11	62					151	200	210	186	207	90	0
12	60					170	215	224	218	147	86	0
13	67					134	207	237	231	163	108	0
14	73					155	215	244	209	166	79	0
15	60					149	191	240	215	155	67	0
16	65					118	199	242	213	138	81	0
17	72					123	221	239	217	159	80	0
18	71					144	218	232	234	160	80	0
19	80					140	224	217	223	175	81	0
20	105					141	219	227	217	182	83	0
21	108					141	224	241	194	191	73	0
22	69					144	221	250	210	207	57	0
23	13					134	246	208	214	220	81	0
24	18					136	251	135	229	228	78	0
25	44					132	227	12	249	204	106	0
26	80					128	229	7.1	241	219	111	0
27	69					69	212	123	227	224	141	0
28	48					162	196	205	225	217	161	0
29	42				---	155	184	198	214	215	161	0
30	19				---	151	166	199	226	218	103	0
31	22	---			---	158	---	183	---	212	88	---
TOTAL	2326	0	0	0	0	4107	6192	6052.1	6477	6302	3337	377
MEAN	75.0	0	0	0	0	132	206	196	216	203	108	12.6
MAX	144	0	0	0	0	173	251	250	249	248	205	114
MIN	13	0	0	0	0	0	155	7.1	169	138	57	0
AC-FI	4610	0	0	0	0	8150	12250	12020	12850	12500	6620	748
CAL YR 1974	TOTAL	34749.00	MEAN	95.2	MAX	249	MIN	0	AC-FI	63423		
WTR YR 1975	TOTAL	35180.10	MEAN	94.4	MAX	251	MIN	0	AC-FI	69780		

LOCATION,--lat 34°14'54", long 106°54'04", in SW 1/4 sec.1, T.1 S., R.1 W., Socorro County, in right bank 75 ft (23 m) upstream from railway crossing, 0.5 mi (0.8 km) south of San Acacia, and 1.2 mi (1.9 km) downstream from San Acacia diversion dam.

PERIOD OF RECORD.—October 1958 to September 1964 included in composite flow of station "08355000 Rio Grande at San Acacia," October 1960 to September 1964 (monthly discharge published in WSP 1923 with records for station 08355000), October 1964 to current year. Daily records 1958-64 are available in files at district office.

GAGE.—Water-stage recorder. Datum of gage is 4,652.5 ft (1,418.08 m) above mean sea level (Bureau of Reclamation datum).

EXTREMES.--Period of record: Maximum daily discharge, 1,950 ft<sup>3</sup>/s (55.2 m<sup>3</sup>/s) May 12, 13, 1966; no flow at times.

REMARKS.--Records fair. Conveyance channel, constructed in 1958, is 1 of 3 channels (See sta 08354500, 08354900) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry all flows up to about 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/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. Water quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	542	540	578	775	752	587	555	433	508	196	1.3
2	15	484	540	555	777	846	510	553	414	516	119	1.8
3	16	440	552	522	815	1120	304	493	369	611	30	1.5
4	22	419	571	500	822	1120	264	471	380	729	10	1.8
5	100	459	564	489	828	914	214	438	490	756	3.6	2.0
6	92	517	576	447	877	743	204	414	414	790	2.9	2.3
7	70	558	593	428	1120	679	215	430	391	844	2.3	2.3
8	147	569	622	485	870	812	215	412	387	1060	3.0	2.6
9	153	604	618	534	756	908	287	423	352	1150	3.0	2.6
10	205	609	661	586	715	1100	395	411	394	1140	3.0	3.0
11	237	685	669	611	709	1050	573	374	397	1050	1.5	3.3
12	681	657	666	562	738	1110	1270	342	368	919	2.1	3.7
13	551	638	656	517	736	969	1020	350	398	921	.53	3.3
14	985	629	649	535	759	991	1040	356	411	913	.02	3.7
15	617	628	645	552	801	939	882	362	400	922	.02	3.7
16	351	616	649	552	864	1050	718	376	405	949	.13	3.7
17	280	616	629	549	857	882	695	377	378	953	.10	3.3
18	255	606	636	559	851	670	707	389	372	945	.21	3.3
19	196	596	654	575	854	585	834	445	388	965	.25	3.0
20	167	593	663	597	807	518	721	429	369	966	.38	3.7
21	145	593	664	636	783	487	864	370	379	958	.40	3.7
22	221	566	664	651	822	440	581	346	430	905	.46	3.7
23	413	567	664	679	841	441	562	353	400	955	.41	4.1
24	686	554	684	652	816	499	709	346	371	933	.40	4.5
25	496	535	691	627	800	563	1290	295	368	902	.51	4.5
26	251	542	701	623	775	559	1180	319	369	757	.53	3.7
27	321	532	698	644	749	718	1180	402	374	502	.73	4.5
28	410	548	666	690	732	783	903	426	382	599	.83	4.1
29	521	542	631	706	---	642	557	386	416	652	1.0	4.1
30	531	540	595	694	---	597	543	403	439	360	1.0	4.1
31	733	---	589	729	---	598	---	361	---	198	1.3	---
TOTAL	9907	16984	19600	18064	22649	24085	20024	12407	11838	25328	385.61	96.4
MEAN	320	566	632	583	809	777	667	400	395	817	12.4	3.23
MAX	985	685	701	729	1120	1120	1290	555	490	1150	196	4.5
MIN	15	419	540	428	709	440	204	295	352	198	.02	1.3
AC-FY	19650	33690	38880	35830	44920	47770	39720	24610	23480	50240	765	192
CAL YR 1974	TOTAL	158113.78	MEAN	433	MAX	1780	MIN	.50	AC-FY	313600		
WTR YR 1975	TOTAL	181368.51	MEAN									

## 08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, in Sevilleta Grant, 0.2 mi (0.3 km) below San Acacia diversion dam, 0.3 mi (0.5 km) east of San Acacia, 2 mi (3 km) downstream from Rio Salado, and at mile 1,472.6 (2,369.4 km).

DRAINAGE AREA.--26,770 mi<sup>2</sup> (69,330 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--April 1936 to September 1958 (prior to construction of conveyance channel), October 1958 to September 1964 (flow in conveyance channel included), October 1964 to current year. Prior to October 1964 published as "08355000 Rio Grande at San Acacia" and records are not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft (1,418.692 m) above mean sea level. Aug. 19, 1965 to Aug. 15, 1967 at same site at datum 1.89 ft (0.576 m) higher. Prior to Mar. 19, 1953, at several sites 0.1 mi (0.2 km) upstream at different datums. Mar. 19, 1953 to Aug. 19, 1965, at site 0.4 mi (0.6 km) downstream at datum 3.60 ft (1.097 m) higher. Floodway is bypassed by Socorro main canal north and since Oct. 1958, by conveyance channel.

AVERAGE DISCHARGE.--22 years (1937-58), 1,192 ft<sup>3</sup>/s (33.76 m<sup>3</sup>/s), 863,000 acre-ft/yr (1,060 hm<sup>3</sup>/yr), prior to construction of conveyance channel; does not include Socorro main canal north.  
17 years (1959-75), 929 ft<sup>3</sup>/s (26.22 m<sup>3</sup>/s), 670,900 acre-ft/yr (827 hm<sup>3</sup>/yr), combined flow of floodway, conveyance channel and Socorro main canal north.

EXTREMES.--Current year: Maximum discharge, 14,200 ft<sup>3</sup>/s (402 m<sup>3</sup>/s) Sept. 12 (gage height, 12.26 ft or 3.737 m); minimum, 0.43 ft<sup>3</sup>/s (0.012 m<sup>3</sup>/s) Nov. 4.  
Period of record: maximum discharge, 27,400 ft<sup>3</sup>/s (776 m<sup>3</sup>/s) Aug. 5, 1936 (gage height, 10.75 ft or 3.277 m, site and datum then is used); no flow at times.

REMARKS.--Records poor. Floodway is 1 of 3 channels (see sta 08354500, 08354800) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, and Socorro main canal north see tabulation below. Normal plan is for floodway to carry flow when combined capacities of conveyance channel (about 2,000 ft<sup>3</sup>/s or 56.6 m<sup>3</sup>/s) and Socorro main canal north (about 200 ft<sup>3</sup>/s or 5.66 m<sup>3</sup>/s) is exceeded, during periods of silt sluicing, and when river silt load is excessive. Diversions above station for irrigation of about 760,000 acres (3,080 km<sup>2</sup>); this includes Socorro main canal north which bypasses station and irrigates about 8,000 acres (32.4 km<sup>2</sup>). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1951. WSP 1732: 1958(M). WRD 1969: 1967.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	10	2.3	1.8	2.4	8.0	18	3470	3860	1670	45	118
2	19	3.5	3.0	1.7	2.3	19	11	2230	3990	1310	18	103
3	26	1.2	4.0	2.1	1.4	37	10	1940	3640	1050	13	76
4	25	2.3	3.0	3.4	1.4	30	11	2410	3150	1140	12	235
5	40	3.9	2.5	4.3	2.2	9.5	18	2340	2900	1610	7.1	2250
6	16	3.0	2.5	9.4	7.7	33	14	2480	2430	1740	5.2	3270
7	32	2.0	2.3	8.4	33	5.0	14	2310	2630	2140	5.2	2920
8	15	2.0	2.0	6.6	1.4	14	4.4	2460	2820	1430	5.2	2170
9	9.4	2.0	3.7	5.6	1.5	23	16	2390	3000	1310	5.2	2340
10	8.9	2.0	3.5	5.1	1.2	60	26	1880	3110	1280	5.5	2740
11	7.4	1.5	2.7	6.0	1.1	31	27	2110	2350	2050	5.5	2910
12	95	1.5	2.2	11	1.3	34	46	2480	1460	2980	5.5	5080
13	5.6	1.5	1.2	5.5	1.4	11	33	2460	1510	2680	55	3120
14	78	1.6	2.0	4.2	1.7	26	39	2560	1760	3590	204	2370
15	7.4	1.6	2.6	2.2	2.1	33	15	2420	1970	2360	652	1840
16	2.6	1.7	3.9	1.1	2.3	26	28	3340	2460	2850	786	1650
17	3.1	1.7	5.8	1.6	2.6	14	26	3590	2710	2450	705	1650
18	4.5	1.8	4.0	2.3	3.1	13	17	4100	2430	2360	454	1390
19	1.7	1.8	3.5	1.8	8.4	15	38	4090	2650	2150	187	753
20	9.4	1.8	3.0	1.7	7.9	14	15	3700	3040	887	135	603
21	10	5.0	2.6	1.9	7.4	25	18	3250	3070	843	880	736
22	11	2.5	2.4	1.7	6.3	17	41	3560	1960	1270	1640	816
23	16	2.5	2.1	1.8	6.0	14	72	3530	2130	517	1130	600
24	61	2.5	1.9	2.0	5.6	18	584	4020	2340	870	935	735
25	7.6	2.3	1.9	2.3	5.5	20	2420	5650	2090	444	600	766
26	7.6	2.3	1.8	2.3	8.0	25	2050	5350	2300	122	354	745
27	44	2.3	1.8	2.6	9.4	61	2610	4500	1710	295	395	586
28	8.9	2.3	1.9	2.0	8.7	16	3500	3490	2010	136	266	430
29	17	2.5	2.0	3.5	---	7.6	3430	3260	1990	68	197	347
30	15	2.5	1.9	4.1	---	13	3700	3610	1880	20	141	294
31	203	---	1.4	3.2	---	14	---	3600	---	39	122	---
TOTAL	824.5	95.1	81.8	113.2	142.72	636.2	18895.4	74970	75490	43211	9988.4	43673
MEAN	26.7	3.17	2.64	3.65	5.10	22.5	630	3193	2513	1394	322	1456
MAX	203	30	5.8	11	37	61	3700	5650	3990	3530	1640	5080
MIN	1.7	1.2	1.2	1.1	1.2	6.0	4.4	1880	1460	20	5.2	76
AC-FT	1640	189	162	225	283	1380	37480	196300	149500	85710	19310	86630
(+)	25900	33880	39040	36060	45200	57300	89480	232900	185800	148400	27200	87570
CAL YR 1974 TOTAL	5074.54	MEAN 22.1	MAX 625	MIN 7.79	AC-FT 16020	(+)	MEAN 551	AC-FT 398600				
WTR YR 1975 TOTAL	292085.32	MEAN 800	MAX 5650	MIN 9.2	AC-FT 577400	(+)	MEAN 1394	AC-FT 1009000				

(+) COMBINED FLOW, IN ACRE-FT AND MEAN IN FT<sup>3</sup>/S, OF FLOODWAY, CONVEYANCE CHANNEL, AND SOCORRO MAIN CANAL NORTH.

08355300 ARROYO DE LA MATANZA AT SOCORRO, N. MEX.

LOCATION.--Lat 34°01'51", long 106°54'04", Socorro County, in Town of Socorro Grant, on left abutment of former highway bridge, and 1.9 mi (3.1 km) south of Socorro.

DRAINAGE AREA.--46.0 mi<sup>2</sup> (119 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,760 ft (1,451 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 0.530 ft<sup>3</sup>/s (.015 m<sup>3</sup>/s), 384 acre-ft/yr (473,500 m<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 590 ft<sup>3</sup>/s (16.7 m<sup>3</sup>/s) Sept. 12 (gage height, 4.83 ft or 1.472 m); no flow most of time.  
Period of record: Maximum discharge, 1,580 ft<sup>3</sup>/s (44.7 m<sup>3</sup>/s) July 28, 1970 (gage height, 6.20 ft or 1.890 m), from rating curve extended above 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Record poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	0
2	0									0	0	0
3	0									0	0	0
4	0									0	0	4.6
5	0									0	0	3.0
6	.09									1.9	0	0
7	2.6									4.5	0	0
8	0									.23	0	0
9	.23									0	0	.88
10	17									0	0	.11
11	1.2									0	0	2.0
12	2.3									0	0	17
13	0									0	2.3	0
14	0									0	.35	11
15	0									0	0	1.0
16	0									0	0	0
17	0									1.4	0	0
18	0									.19	0	0
19	0									0	0	13
20	0									0	0	6.1
21	0									0	.50	0
22	3.9									0	1.8	0
23	13									0	.23	0
24	.94									0	0	0
25	0									0	0	0
26	0									0	0	0
27	6.6									.70	0	0
28	.02									.30	0	0
29	0									0	0	0
30	0									0	0	0
31	0	---					---		---	0	0	---
TOTAL	47.88	0	0	0	0	0	0	0	0	9.22	5.18	58.69
MEAN	1.54	0	0	0	0	0	0	0	0	.30	.17	1.96
MAX	17	0	0	0	0	0	0	0	0	4.5	2.3	17
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-Ft	95	0	0	0	0	0	0	0	0	18	10	116
CAL YR 1974	TOTAL 72.71	MEAN .20	MAX 17	MIN 0	AC-Ft 144							
WTR YR 1975	TOTAL 120.97	MEAN .33	MAX 17	MIN 0	AC-Ft 240							

PEAK DISCHARGE (BASE, 175 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1700	4.30	335	9-12	0030	4.83	590
7-8	1900	4.04	261	9-15	1830	4.80	575

## 08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.

LOCATION.--Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaria Grant No. 34, on right bank 0.4 mi (0.6 km) northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mi (1.6 km) southwest of former site of San Marcial, 3.5 mi (5.6 km) downstream from railroad bridge near Tiffany siding, and 51 mi (82 km) downstream from heading at San acacia.

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 (sta 08358500).

GAGE.--Water-stage recorder. Datum of gage is 4,454.00 ft (1,357.579 m) above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft (1.277 m) higher.

EXTREMES.--1954-75: Maximum daily discharge, 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s) May 14, 1966; no flow at times.

REMARKS.--Records poor. Original design and plan was for conveyance channel to carry all flows up to about 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s). Conveyance channel is 1 of 2 channels (see sta 08358400) carrying flow in valley cross section. For combined monthly flow in acre-ft of this channel and floodway see tabulation below daily table for sta 08358400. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0				0	684	808	764	844	337	153
2		0				0	621	804	792	884	318	120
3		0				0	480	772	764	888	305	125
4		0				0	399	792	744	1050	295	140
5		0				0	354	768	788	1090	267	178
6		0				0	321	688	792	1070	239	158
7		0				0	351	692	732	1100	211	162
8		0				0	370	677	732	1280	183	171
9		0				0	408	712	728	1460	155	162
10		0				0	468	692	740	1430	127	175
11		15				0	600	700	744	1460	97	203
12		45				0	1070	659	120	1270	77	240
13		0				0	1390	649	712	1240	71	265
14		0				0	1050	663	736	1250	120	242
15		0				0	1110	663	756	1160	140	223
16		0				0	792	670	760	1220	122	200
17		0				16	796	680	740	1290	108	191
18		0				25	784	700	712	1250	119	185
19		0				19	836	724	724	1280	121	176
20		0				18	984	744	704	1240	128	220
21		0				234	932	677	724	1250	144	218
22		0				504	864	666	752	1170	182	211
23		0				492	684	649	712	1170	187	216
24		0				510	684	688	700	1130	187	214
25		0				586	1430	540	696	1180	184	212
26		0				589	1370	617	700	1040	189	212
27		0				728	1370	575	673	824	187	209
28		0				864	1340	673	692	816	160	200
29		0			---	808	732	700	740	888	159	189
30		0			---	716	768	732	760	696	148	185
31		---			---	716	---	752	---	432	152	---
TOTAL	0	60	0	0	0	6825	24042	21526	22093	34352	5419	5755
MEAN	0	2.00	0	0	0	220	801	694	736	1108	175	192
MAX	0	45	0	0	0	864	1430	808	792	1460	337	265
MIN	0	0	0	0	0	0	321	540	673	432	71	120
AC-FT	0	119	0	0	0	13540	47690	42700	43820	68140	10750	11420
CAL YR 1974	TOTAL	127667.60	MEAN 350	MAX 1770	MIN 0	AC-FT 253200						
WTR YR 1975	TOTAL	120072.00	MEAN 329	MAX 1460	MIN 0	AC-FT 238200						

## 08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, in Pedro Armendaris Grant No. 33 on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 mi (1.8 km) downstream from former site of San Marcial, 18.5 mi (29.8 km) southwest of San Antonio, and at mile 1,425.2 (2,293.1 km).

DRAINAGE AREA.--27,700 mi<sup>2</sup> (71,740 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--October 1964 to current year. Records collected at this site January 1895 to September 1964 represented total flow of the river and were published as Rio Grande at San Marcial (sta 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 (1,357.942 m) above mean sea level.

AVERAGE DISCHARGE.--11 years (1965-75), 246 ft<sup>3</sup>/s (6.967 m<sup>3</sup>/s), 178,200 acre-ft/yr (220 hm<sup>3</sup>/yr).

Total flow of river.--80 years (1895-75), 1,250 ft<sup>3</sup>/s (35.40 m<sup>3</sup>/s), 905,600 acre-ft/yr (1,120 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 6,680 ft<sup>3</sup>/s (189 m<sup>3</sup>/s) Sept. 12 (gage height, 15.30 ft or 4.663 m); no flow for most of time.

Period of record: Maximum discharge since January 1895 about 50,000 ft<sup>3</sup>/s (1,420 m<sup>3</sup>/s) Oct. 11, 1904.

REMARKS.--Records poor. Floodway is 1 of 2 channels (see sta 08358300) carrying flow in valley cross section. Prior to 1950 all flow was in floodway channel. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 ft<sup>3</sup>/s or 56.6 m<sup>3</sup>/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 (3,140 km<sup>2</sup>) above station (includes about 13,800 acre-ft or 17.0 hm<sup>3</sup> diverted from conveyance channel, as based on weekly measurements, data furnished by Bureau of Reclamation). Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	777	485	610	688	664	0	3590	3470	1380	0	0
2	90	590	485	646	694	676	0	2580	3510	1050	0	0
3	73	514	494	575	694	904	0	1890	3320	830	0	0
4	73	460	494	450	760	1180	0	1960	2590	615	0	0
5	85	440	440	450	754	1250	0	1800	2320	800	0	994
6	112	465	475	385	790	888	0	2070	1870	1250	0	2670
7	110	506	475	332	1100	712	0	1720	1940	1550	0	2110
8	120	514	518	348	1040	724	0	1860	2050	1320	0	1930
9	208	542	514	410	796	886	0	2090	2210	911	0	1220
10	214	494	542	410	706	1060	0	1690	2320	884	0	2400
11	334	530	582	480	676	1200	0	1670	1870	1240	0	2180
12	390	534	554	560	756	1110	0	2020	1340	1980	0	4860
13	525	510	550	440	718	1040	0	2120	1030	2170	0	3310
14	570	522	542	430	724	910	0	2090	1170	2880	0	2950
15	714	518	578	480	730	966	0	2090	1310	2290	85	1780
16	590	542	582	455	808	1050	0	2500	1700	2050	288	1160
17	400	534	578	460	850	1010	0	2470	1960	1970	257	1120
18	346	570	554	440	820	826	0	2730	1850	1970	165	1060
19	342	546	554	460	832	676	0	2930	1870	1760	138	866
20	278	546	566	505	760	570	0	2860	1960	1020	40	685
21	282	542	554	530	730	361	0	2520	2410	505	66	545
22	266	514	550	570	778	0	0	2970	1700	460	1230	575
23	355	510	542	595	820	0	0	3300	1460	716	648	470
24	485	514	562	628	820	0	0	3530	1620	278	505	271
25	560	518	610	540	760	0	364	4030	1540	470	535	203
26	420	490	598	535	772	0	1240	4120	1540	250	250	162
27	360	514	598	550	676	0	1410	3720	1380	41	99	134
28	520	506	570	590	670	0	2120	4210	1170	1.2	80	114
29	475	502	580	628	---	0	3020	2820	1460	43	30	69
30	495	494	570	610	---	0	3320	3070	1490	30	0	57
31	515	---	586	616	---	0	---	3470	---	1.2	0	---
TOTAL	10467	15758	16922	15718	21672	18583	11474	82490	57430	32715.4	4416	33899
MEAN	338	525	546	507	774	599	382	2661	1914	1055	142	1130
MAX	714	777	610	646	1100	1250	3320	4210	3510	2480	1230	4860
MIN	73	440	475	332	670	0	0	1670	1030	1.2	0	0
AC-FT	20760	31260	33560	31180	42990	36860	22760	163600	113900	54890	8760	67240
(*)	20760	31380	33560	31180	42990	50400	70450	206300	157700	133000	19510	78660
CAL YR 1974 TOTAL	50532.64			MEAN 138	MAX 777	MIN 0	AC-FT 100200	(*)	MEAN 488	AC-FT 353500		
WTR YR 1975 TOTAL	321544.40			MEAN 881	MAX 4860	MIN 0	AC-FT 637800	(*)	MEAN 1210	AC-FT 875900		

(\*) COMBINED FLOW, IN ACRE-FT AND MEAN, IN FT<sup>3</sup>/S, OF FLOODWAY AND CONVEYANCE CHANNEL.

08358550 MILLIGAN GULCH NEAR SAN MARCIAL, N. MEX.

LOCATION.--Lat 33°39'37", long 107°05'25", in SE¼NE¼ sec.36, T.7 S., R.3 W., on left upstream side of bridge on Highway 85, and 7.2 mi (11.6 km) southwest of San Marcial.

DRAINAGE AREA.--413 mi<sup>2</sup> (1,070 km<sup>2</sup>).

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,720 ft (1,439 m) from topographic map. Prior to July 1, 1971, gage located on downstream side of bridge.

AVERAGE DISCHARGE.--7 years, 0.632 ft<sup>3</sup>/s (0.018 m<sup>3</sup>/s), 458 acre-ft/yr (565,000 m<sup>3</sup>/yr).

EXTREMES.--Maximum discharges for the water years 1972-75 are contained in the following table:

Water Year	Date	Maximum Discharge (ft <sup>3</sup> /s)	Gage height (feet)
1972	Sept. 11, 1972	14,000	9.22
1973	Oct. 12, 1972	51	2.13
1974	Aug. 22, 1974	0.8	1.43
1975	Sept. 12, 1975	632	3.07

Period of record: Maximum discharge, 14,000 ft<sup>3</sup>/s Sept. 11, 1972 (gage height, 9.22 ft or 2.810 m) from rating curve extended above 3 ft<sup>3</sup>/s (.08 m<sup>3</sup>/s) basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Records poor.

## DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1971 TO SEPTEMBER 1975

June 16, 1972.....	25	August 21, 1972.....	.50	August 22, 1974.....	.02
July 27, 1972.....	42	August 29, 1972.....	119	September 15, 1974.....	.10
July 28, 1972.....	4.0	September 11, 1972.....	597	October 10, 1974.....	.23
August 2, 1972.....	8.6	September 12, 1972.....	100	August 22, 1975.....	1.5
August 9, 1972.....	12	September 19, 1972.....	1.9	September 9, 1975.....	.11
August 16, 1972.....	.01	October 12, 1972.....	2.3	September 10, 1975.....	1.4
August 17, 1972.....	8.6	August 2, 1973.....	.07	September 11, 1975.....	10
August 20, 1972.....	5.2	August 31, 1973.....	.07	September 12, 1975.....	7.3

Month	cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
June 1972.....	25.0	25	0	0.83	50
July.....	46.0	42	0	1.48	91
August.....	153.91	119	0	4.96	305
September.....	698.9	597	0	23.3	1,390
October.....	2.3	2.3	0	.074	4.6
WTR 1972.....	923.81	597	0	2.52	1,830
CAL 1972.....	926.11	597	0	2.53	1,840
August 1973.....	.14	.07	0	.005	.3
WTR 1973.....	2.44	2.3	0	.007	4.8
CAL 1973.....	.14	.07	0	.0004	.3
August 1974.....	.02	.02	0	.0006	.04
September.....	.10	.10	0	.003	.2
October.....	.23	.23	0	.007	.5
WTR 1974.....	.12	.10	0	.0003	.2
CAL 1974.....	.35	.23	0	.001	.7
August 1975.....	1.5	1.5	0	.048	3.0
September.....	18.81	10	0	.63	37
WTR 1975.....	20.54	10	0	.056	41
CAL 1975.....	20.31	10	0	.056	40

PEAK DISCHARGE (Base, 50 ft<sup>3</sup>/s).--June 16, 1972 (Unknown) 936 ft<sup>3</sup>/s (3.30 ft); July 27, 1972 (2230) 1,040 ft<sup>3</sup>/s (3.38 ft); August 2, 1972 (1630) 169 ft<sup>3</sup>/s (2.52 ft); August 9, 1972 (0300) 124 ft<sup>3</sup>/s (2.42 ft); August 17, 1972 (0100) 65 ft<sup>3</sup>/s (2.20 ft); August 20, 1972 (2200) 92 ft<sup>3</sup>/s (2.31 ft); August 29, 1972 (1630) 3,420 ft<sup>3</sup>/s (4.65 ft); September 11, 1972 (2100) 14,000 ft<sup>3</sup>/s (9.22 ft); October 12, 1972 (2200) 51 ft<sup>3</sup>/s (2.13 ft); September 12, 1975 (0030) 632 ft<sup>3</sup>/s (3.07 ft).

NOTE.--Flow occurred only on days listed above.

## RÍO GRANDE BASIN

## 08360500 ELEPHANT BUTTE RESERVOIR AT ELEPHANT BUTTE, N. MEX.

LOCATION.--Lat 33°09'15", long 107°11'28", in NW¼ sec.30, T.13 S., R.3 W., Sierra County, at dam on Rio Grande, 1 mi (1.6 km) west of Elephant Butte, 4 mi (6 km) northeast of Truth or Consequences (Hot Springs), N. Mex., and at mile 1,383.2 (2,225.6 km).

DRAINAGE AREA.--29,445 mi<sup>2</sup> (76,260 km<sup>2</sup>), approximately including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--March 1915 to December 1939 (monthend contents only published in WSP 1312), January 1940 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.4 ft (13.20 m) above mean sea level. Oct. 16, 1939, to May 2, 1940, and prior to September 1930, nonrecording gages.

EXTREMES.--Current year: Maximum daily contents, 490,800 acre-ft (605 hm<sup>3</sup>) July 21 (gage height, 4,336.68 ft or 1,321.820 m); minimum daily, 321,100 acre-ft (396 hm<sup>3</sup>) Oct. 1 (gage height, 4,329.50 ft or 1,319.632 m).

Period of record: Maximum daily contents, 2,302,800 acre-ft (2,840 hm<sup>3</sup>) June 16-18, 1942 (gage height, 4,409.19 ft or 1,343.921 m); minimum daily after initial filling, 9,900 acre-ft (12.2 hm<sup>3</sup>) Aug. 6, 1954 (gage height, 4,258.03 ft or 1,297.848 m).

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,109,000 acre-ft (2.60 km<sup>3</sup>) survey of 1974 at gate height 4,407.0 ft (1,343.25 m) crest of spillway. Capacity by original survey was 2,638,900 acre-ft (3.25 km<sup>3</sup>). 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. Figures given herein represent usable contents and are computed from mean daily gate heights. Water is used for power development and irrigation on Rio Grande Project of Bureau of Reclamation. Lake is major recreational area.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1442: 1954(m). WSP 1632: Drainage area.

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

4,270	26.02	4,290	89.90	4,310	216.1	4,330	409.4	4,350	679.0
4,275	37.81	4,295	115.0	4,315	258.5	4,335	469.6	4,355	760.2
4,280	51.76	4,300	144.2	4,320	304.2	4,340	534.3	4,360	848.6
4,285	68.82	4,305	177.7	4,325	354.1	4,345	604.0	4,365	944.1

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321000	344300	371500	403600	429200	464600	423300	374200	438900	469100	477100	410000
2	321100	345500	372400	404400	430500	465700	420700	377000	442900	469400	474700	408400
3	321200	346600	373300	405300	432000	466800	417800	379100	447100	469300	471800	406400
4	321300	347200	374300	405800	433300	468100	415100	380200	450200	468300	468700	405000
5	321700	348000	375000	406600	434700	469400	411900	380900	452600	467200	465800	403800
6	322400	349000	375900	407500	435900	470400	408700	381400	454700	466900	463000	403400
7	322700	349800	377000	408200	437100	469400	405700	381900	455700	467200	459600	405700
8	323300	350500	378000	409400	438900	468200	402500	382400	456800	468100	456300	408400
9	323500	351100	378900	410200	440700	466900	399900	383100	459300	469100	453200	410900
10	323900	351800	379900	411600	442200	465800	397300	383800	459800	469600	450900	412600
11	324500	352500	381000	412500	443400	464700	394500	384200	461500	469800	448500	416200
12	325700	353500	382100	413100	444300	464300	392100	384500	462400	470700	445900	423900
13	326400	354300	383300	413900	445400	463300	390000	385000	462800	472700	443000	430400
14	327300	355800	384300	414500	446400	462400	388800	385800	462100	475100	440500	436900
15	328200	357100	385200	415500	447600	461900	387200	386900	462000	478500	437900	442400
16	329300	358200	386300	416800	448300	461000	385700	388000	462000	481300	435800	446000
17	330400	359200	387200	418000	449600	460700	384100	389400	462200	483400	433900	448700
18	331500	359800	388200	418700	451000	459300	381900	391200	463300	485400	431800	450900
19	332400	360600	389300	419800	452400	457800	379000	393700	464500	487600	429600	453400
20	332900	361300	390300	420600	453700	456400	377400	396800	465200	489800	427400	455800
21	333500	362200	391600	421800	455300	453600	375100	399900	466100	490800	425200	458200
22	334100	363100	392600	422900	456400	450800	373300	402600	467300	489900	424000	458600
23	336180	364400	393600	423500	457500	447500	371200	405400	468300	489700	423300	459500
24	337600	365900	394800	423600	459000	444700	368900	408800	468400	489400	422200	459600
25	338300	367000	395600	423600	459900	441400	366800	412300	468800	488600	421100	459800
26	338800	367600	396800	423600	461200	438500	365600	416500	469200	487600	419600	459900
27	340500	368200	397800	423500	462500	435300	362900	420900	469200	486600	417800	460600
28	341000	369200	399000	424100	463700	432800	367000	425500	468900	485200	416100	461100
29	341600	369800	400300	425400	---	430600	368800	429100	468600	483300	414800	461600
30	342700	370500	401300	426600	---	428400	371300	431700	468800	481400	413300	462100
31	343600	---	402500	427800	---	425800	---	434800	---	479700	411900	---
MAX	343600	370500	402500	427800	463700	470400	423300	434800	469200	490800	477100	462100
MIN	321000	344300	371500	403600	429200	425800	365600	374200	438900	466900	411900	403400
(+)	4, 323.99	4, 326.53	4, 329.40	4, 331.57	4, 334.53	4, 331.40	4, 326.61	4, 332.16	4, 334.94	4, 335.81	4, 330.22	4, 334.40
(#)	+22,700	+26,900	+32,000	+25,300	+35,900	-37,900	-54,500	+63,500	+34,000	+10,900	-67,800	+50,200
CAL YR 1974	MAX	866,000	MIN	315,700	(+)	-366,600						
WTR YR 1975	MAX	490,800	MIN	321,000	(#)	+141,200						
(+) GAGE HEIGHT, IN FEET, AT END OF MONTH.												
# CHANGE IN CONTENTS, IN ACRE-FEET.												



## 08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, N. MEX.

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, in Pedro Armendaris Grant, on left bank 1.0 mi (1.6 km) downstream from dam, 1.5 mi (2.4 km) upstream from Cuchillo Negro River, and at mile 1,382.2 (2,224.0 km).

DRAINAGE AREA.--29,450 mi<sup>2</sup> (76,280 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

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.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,242.09 ft (1,292.989 m) above mean sea level. See WSP 1732 for history of changes prior to Apr. 24, 1942.

AVERAGE DISCHARGE.--60 years, 988 ft<sup>3</sup>/s (27.98 m<sup>3</sup>/s), 715,800 acre-ft/yr (883 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,360 ft<sup>3</sup>/s (66.8 m<sup>3</sup>/s) May 13 (gage height, 7.19 ft or 2.192 m); minimum, 3.7 ft<sup>3</sup>/s (0.105 m<sup>3</sup>/s) Dec. 5, 6, 8.

Period of record: Maximum daily discharge, 8,220 ft<sup>3</sup>/s (233 m<sup>3</sup>/s) May 22, 1942; no flow at times prior to 1929.

REMARKS.--Records fair. Flow regulated by Elephant Butte Reservoir (see sta 08360500). Diversion for irrigation of about 800,000 acres (3,240 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1562: 1920. WSP 1632: Drainage area. WSP 1732: 1917, 1920. See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	11	5.0	7.0	5.5	13	2170	1740	1890	1830	1660	1140
2	8.7	11	5.0	9.9	5.5	13	2160	1650	1900	1850	1660	1180
3	8.1	10	5.0	9.8	5.9	13	2160	1680	1850	1780	1590	1330
4	8.1	10	5.0	9.9	6.8	13	2160	1690	1780	1640	1680	1280
5	8.1	9.9	4.7	9.9	7.6	13	1890	1720	1800	1640	1680	1260
6	8.3	10	4.7	8.6	7.6	1220	1870	1740	1830	1650	1670	1250
7	15	10	4.9	6.6	7.6	1330	1880	1760	1830	1660	1680	1200
8	10	9.2	4.5	6.3	8.1	1330	1870	1800	1830	1650	1390	1150
9	12	8.7	5.0	6.0	8.1	1340	1860	1830	1830	1650	1450	1120
10	16	8.7	19	6.0	8.5	1330	1860	1860	1800	1630	1110	985
11	18	8.7	11	6.0	17	1350	1840	1890	1810	1660	1350	664
12	20	8.7	16	6.0	139	1340	1840	1900	1800	1650	1360	233
13	18	8.7	11	6.0	12	1340	1850	1920	1780	1650	1360	15
14	11	9.0	9.9	6.0	11	1340	1860	1930	1780	1650	1420	16
15	11	9.3	11	5.6	10	1330	1870	1950	1770	1650	1330	15
16	13	9.3	9.5	5.5	11	1330	1870	2000	1780	1660	1340	12
17	15	9.3	8.7	5.5	12	1350	1870	1950	1880	1630	1350	11
18	15	8.7	8.7	5.5	10	1330	1850	1950	1800	1650	1370	11
19	15	8.7	8.7	5.1	8.7	1330	1820	1970	1790	1640	1370	11
20	15	8.1	8.7	5.0	8.3	1720	1810	1970	1820	1590	1370	10
21	14	8.1	8.1	4.6	15	2140	1770	1950	1800	1630	1370	8.8
22	16	8.1	8.1	3.7	14	2160	1750	1950	1790	1640	1380	8.1
23	21	8.1	8.1	164	12	2160	1730	1970	1790	1640	1390	344
24	16	8.1	8.1	656	12	2160	1710	2020	1780	1640	1390	439
25	11	7.0	8.1	660	15	2160	1700	1900	1790	1640	1400	303
26	10	6.0	7.5	666	19	2150	1700	1900	1830	1640	1430	24
27	9.9	5.5	7.5	670	16	2160	1650	1930	1830	1640	1430	16
28	11	5.5	7.5	27	14	2170	1910	1960	1840	1640	1020	16
29	10	5.5	7.5	6.2	---	2170	1880	1920	1860	1640	1020	15
30	11	5.0	7.0	5.6	---	2170	1850	1900	1870	1610	1050	14
31	11	---	7.0	5.0	---	2170	---	1880	---	1650	1100	---
TOTAL	395.5	253.9	250.5	3004.3	501.9	44145	56010	58180	54530	51420	43170	14080.9
MEAN	12.8	8.46	8.08	96.9	17.9	1424	1867	1877	1818	1659	1393	469
MAX	21	11	19	670	139	2170	2170	2020	1900	1850	1680	1330
MIN	8.1	5.0	4.5	3.7	5.5	13	1650	1650	1770	1590	1020	8.1
AC-FT	784	504	497	5960	996	87560	111100	115400	108200	102000	85630	27930
CAL YR 1974 TOTAL	339053.6			MEAN 929	MAX 2350	MIN 4.5	AC-FT 672500					
WTR YR 1975 TOTAL	325942.0			MEAN 893	MAX 2170	MIN 3.7	AC-FT 646500					

## 08362000 CABALLO RESERVOIR NEAR ARREY, N. MEX.

LOCATION.--Lat 32°53'47", long 107°17'30", in SE 1/4 sec. 19, T. 16 S., R. 4 W., Sierra County, in control tower of Caballo Dam on Rio Grande, 0.5 mi (0.8 km) downstream from mouth of Apache Canyon, 0.9 mi (1.4 km) upstream from Bojarquez Bridge, 2 mi (3 km) upstream from Percha diversion dam, 3.5 mi (5.6 km) northeast of Arrey, 5.2 mi (8.4 km) south of Caballo, and at mile 1,356.6 (2,182.8 km).

DRAINAGE AREA.--30,700 mi<sup>2</sup> (79,510 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--February 1938 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft (13.20 m) above mean sea level.

EXTREMES.--Current year: Maximum daily contents, 96,120 acre-ft (119 hm<sup>3</sup>) June 3 (gage height, 4,152.93 ft or 1,265.813 m); minimum daily, 23,620 acre-ft (29.1 hm<sup>3</sup>) Oct. 1 (gage height, 4,134.04 ft or 1,260.055 m).  
Period of record: Maximum daily contents, 347,000 acre-ft (428 hm<sup>3</sup>) Mar. 4, 1942 (gage height, 4,182.06 ft or 1,274.692 m); minimum daily, 118 acre-ft (0.145 hm<sup>3</sup>), Oct. 14, 1938 (gage height, 4,108.1 ft or 1,252.15 m).

REMARKS.--Reservoir is formed by earthfill dam, completed Sept. 19, 1938. Storage began Feb. 8, 1938. Capacity by 1958 survey, 344,000 acre-ft (424 hm<sup>3</sup>) between gage heights 4,104 ft (1,250.9 m) bottom of tunnel entrance of gates and 4,182 ft (1,274.7 m) gage height above which spillway gates operate automatically. No dead storage. Storage held for flood control, 100,000 acre-ft (123 hm<sup>3</sup>). Figures given herein represent usable contents and are computed from mean daily gage heights. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande project for Bureau of Reclamation.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISION (WATER YEARS).--WSP 978: 1942. WSP 1632: Drainage area.

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

4,122	3.41	4,130	14.70	4,138	34.19	4,146	62.50	4,154	102.2
4,124	5.47	4,132	18.88	4,140	40.31	4,148	71.28	4,156	114.5
4,126	8.00	4,134	23.52	4,142	47.03	4,150	80.76	4,158	127.7
4,128	11.06	4,136	28.61	4,144	54.42	4,152	91.03	4,160	141.7

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23620	33160	36200	39120	40710	42970	49120	79750	95080	86990	91410	58050
2	23750	33330	36280	39180	40800	41760	50240	80760	95680	86150	91080	56550
3	23850	33450	36300	39280	41130	40510	50900	81870	96120	85640	90610	54730
4	23970	33500	36380	39340	41430	39090	51620	82870	95900	84980	90300	53850
5	24100	33680	36520	39400	41760	37180	52830	83930	95400	84780	90400	53400
6	24320	33820	36580	39440	42020	35600	53890	85380	95080	84630	90290	53170
7	25590	33930	36670	39470	42050	36280	54810	86470	94920	84080	89980	56870
8	26030	34100	36850	39530	42210	37500	56270	87520	94810	83930	89510	60230
9	26240	34220	37060	39660	42310	38680	57620	88460	94860	84030	88930	63970
10	26420	34370	37150	39780	42380	40060	59110	89250	94810	84280	87360	65860
11	26710	34460	37180	39940	42640	41070	60350	90030	94700	84400	85940	68060
12	27390	34490	37210	40000	42710	41890	61590	90870	94640	85080	84780	74910
13	27930	34550	37310	40120	42940	42380	62890	91740	94590	85640	83220	79170
14	28450	34700	37370	40190	43070	42770	64100	92230	94590	85840	81420	82570
15	28720	34790	37430	40250	43170	43360	65260	92670	94640	86200	79650	84330
16	29020	34850	37500	40280	43230	43870	66510	93050	94640	86360	77530	85330
17	29260	34880	37560	40310	43300	44070	67840	93380	94370	86780	75840	85840
18	29480	35030	37780	40310	43460	43900	69000	93710	93600	86940	73980	86260
19	29670	35090	37810	40340	43490	43070	69720	94090	92780	87360	72310	86420
20	29810	35300	37840	40410	43530	41890	70570	94310	92120	87780	70660	85330
21	29970	35360	37900	40510	43590	41720	71560	94530	91690	88140	69400	83730
22	30110	35420	37930	40640	43660	41920	72540	94810	91250	89460	68060	81770
23	30650	35540	38090	40800	43730	42080	73280	95080	90710	89720	67610	80330
24	31790	35600	38340	41070	43800	42380	74070	95240	90350	89770	67170	79220
25	32160	35660	38430	41460	43830	42900	74770	95350	89770	89820	66810	78200
26	32280	35840	38180	41660	43940	43170	75510	95410	89190	89820	66640	76710
27	32420	35990	38560	41760	44000	43560	76170	95520	88620	89930	66030	74540
28	32530	36020	38720	41760	44000	44350	76800	95240	88100	90300	65090	72120
29	32730	36110	38780	41360	---	45170	77670	95020	87830	90560	63540	69720
30	32850	36160	38810	40710	---	46340	78780	94590	87410	91030	61840	68550
31	33050	---	39090	40410	---	47970	---	94700	---	91410	59980	---
MAX	33050	36160	39090	41760	44000	47970	78780	95520	96120	91410	91410	86420
MIN	23620	33160	36200	39120	40710	35600	49120	79750	87410	83930	59980	53170
(+)	4,137.60	4,138.66	4,139.61	4,140.03	4,141.12	4,142.26	4,149.59	4,152.67	4,151.31	4,152.07	4,145.39	4,147.39
(+)	+9,250	+3,110	+2,930	+1,320	+3,590	+3,970	+30,810	+15,920	-7,290	+4,000	-31,430	+8,570
CAL YR 1974	MAX	109,200	MIN	18,990	(+)	-880	-	-	-	-	-	-
WTR YR 1975	MAX	96,120	MIN	23,620	(+)	+44,750	-	-	-	-	-	-

(+) GAGE HEIGHT, IN FEET, AT END OF MONTH.

(+) CHANGE IN CONTENTS, IN ACRE-FEET.

## 08362500 RIO GRANDE BELOW CABALLO DAM, N. MEX.

LOCATION.--Lat 32°53'05", long 107°17'31", in NE¼ sec. 30, T.16 S., R.4 W., Sierra County, on left bank 2,000 ft (600 m) upstream from Interstate Highway 25, 4,200 ft (1,300 m) downstream from Caballo Dam, 1.2 mi (1.9 km) downstream from Apache Canyon, 1.3 mi (2.1 km) upstream from Percha diversion dam, 3 mi (5 km) northeast of Arrey, 5 mi (8 km) south of Caballo, and at mile 1,355.6 (2,181.2 km).

DRAINAGE AREA.--30,700 mi<sup>2</sup> (79,510 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--January 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,140.9 ft (1,262.15 m) above mean sea level. Prior to Oct. 7, 1938, at datum 7.0 ft (2.13 m) higher, Oct. 7-12, 1938, at datum 6.0 ft (1.83 m) higher, and Oct. 13, 1938, to Dec. 31, 1945, at datum 5.0 ft (1.52 m) higher than present datum.

AVERAGE DISCHARGE.--37 years, 862 ft<sup>3</sup>/s (24.41 m<sup>3</sup>/s), 624,500 acre-ft/yr (770 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum daily discharge, 2,220 ft<sup>3</sup>/s (62.9 m<sup>3</sup>/s) Aug. 15; minimum daily, 0.9 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Dec. 18-31.

Period of record: Maximum daily discharge, 7,650 ft<sup>3</sup>/s (217 m<sup>3</sup>/s) May 20, 1942; minimum daily, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955, Feb. 15-29, 1972.

REMARKS.--Records good. Flow regulated by Caballo Reservoir capacity, 344,000 acre-ft (424 km<sup>3</sup>), 1958 survey and Elephant Butte Reservoir capacity, 2,109,000 acre-ft (2.60 km<sup>3</sup>), 1974 survey. Diversions for irrigation of about 800,000 acres (3,240 km<sup>2</sup>) above station. Figures of daily discharge do not include Bonita ditch which diverts from Caballo Dam and bypasses station for irrigation below. See monthly table below for record of ditch.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.2	1.4	1.4	203	653	1310	1030	1390	1890	1640	1560
2	2.2	1.9	1.3	1.4	87	654	1500	1080	1310	1910	1750	1640
3	2.2	1.8	1.3	1.4	3.3	655	1620	1100	1500	1780	1770	1730
4	2.2	1.6	1.3	1.4	1.6	726	1400	1050	1740	1640	1580	1400
5	2.2	1.6	1.3	1.4	1.5	880	1160	865	1780	1680	1540	1420
6	2.5	1.6	1.2	1.5	1.4	791	1240	937	1680	1750	1660	1300
7	3.0	1.6	1.2	1.7	1.4	666	1200	1060	1630	1630	1740	1110
8	2.2	1.6	1.2	1.5	1.4	702	992	1110	1560	1580	1700	1070
9	2.2	1.6	1.2	1.6	1.4	712	1080	1220	1500	1480	1630	927
10	2.2	1.6	1.1	1.5	1.4	773	943	1280	1640	1480	1640	925
11	5.0	1.6	1.1	1.5	1.4	921	1000	1100	1720	1500	1630	801
12	4.0	1.6	1.1	1.4	1.4	1020	1030	1050	1590	1440	1790	61
13	2.5	1.6	1.1	1.4	1.4	1130	1030	1350	1560	1340	1960	5.6
14	2.2	1.6	1.0	1.5	1.4	968	1110	1380	1560	1350	2130	2.4
15	2.2	1.6	1.0	1.4	1.4	987	1020	1350	1550	1470	2220	2.1
16	2.2	1.5	1.0	1.7	1.4	1110	928	1540	1530	1480	2160	2.1
17	2.2	1.5	1.0	1.8	1.4	1150	1050	1470	1760	1410	2040	1.9
18	2.2	1.5	.90	1.5	1.3	1470	1270	1370	1950	1390	2020	1.8
19	2.2	1.5	.90	1.4	1.3	1660	1290	1340	1930	1370	2040	485
20	2.2	1.5	.90	1.4	1.3	1670	1190	1370	1820	1340	2010	982
21	2.2	1.5	.90	1.5	1.3	1660	1020	1450	1750	1350	1900	865
22	2.2	1.5	.90	1.6	1.3	1860	1230	1440	1720	1480	1710	713
23	4.0	1.5	.90	1.5	1.2	1810	1310	1520	1700	1570	1450	809
24	2.5	1.5	.90	1.3	1.3	1550	1370	1590	1790	1530	1420	866
25	2.2	1.5	.90	464	1.4	1560	1320	1530	1880	1590	1270	846
26	2.2	1.5	.90	500	1.4	1790	1320	1440	1860	1500	1430	1020
27	2.2	1.5	.90	518	1.4	1670	1310	1690	1840	1400	1460	1120
28	2.2	1.4	.90	473	270	1590	1260	1750	1670	1400	1630	1100
29	2.2	1.4	.90	419	---	1530	1170	1820	1700	1380	1670	874
30	2.2	1.4	.90	337	---	1230	1110	1650	1700	1360	1700	170
31	2.2	---	.90	203	---	1140	---	1370	---	1470	1690	---
TOTAL	76.3	47.3	32.40	3041.4	602.4	36688	35723	41352	50270	46940	53980	23832.1
MEAN	2.46	1.58	1.03	99.4	21.5	1183	1191	1334	1676	1514	1741	794
MAX	5.0	2.2	1.4	518	270	1860	1620	1820	1950	1910	2220	1730
MIN	2.2	1.4	.90	1.4	1.2	653	928	865	1310	1340	1270	1.0
AC-FT	171	94	64	6110	1196	72770	70861	82020	97710	93110	107100	47270
(#)	0	0	0	0	0	81	53	78	117	106	96	86
CAL YR 1974	TOTAL 323128.20	MEAN 885	MAX 2660	MIN .60	AC-FT 640900	(#) 1090						
WTR YR 1975	TOTAL 292624.90	MEAN 802	MAX 2220	MIN .60	AC-FT 580400	(#) 618						

† DIVERSION, IN ACRE-FEET, BY BONITA DITCH. BONITA DITCH DIVERTS DIRECTLY FROM CABALLO DAM AND THIS DIVERSION IS NOT INCLUDED IN THE RIVER RECORDS.

## 08364000 RIO GRANDE AT EL PASO, TEX.

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, on downstream side of first pier from left abutment of Courchesne Bridge at El Paso, 1.7 mi (2.7 km) upstream from American Dam, 5.6 mi (9.0 km) upstream from Santa Fe Street-Juarez Avenue Bridge between El Paso and Cd. Juarez, Chihuahua, and at mile 1,249.9 (2,011.1 km).

DRAINAGE AREA.--32,207 mi<sup>2</sup> (83,415 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--January 1889 to current year. October 1960 to September 1965 in bulletins of International Boundary and Water Commission. Monthly discharges only for some periods published in WSP 1312 or 1732.

GAGE.--Water-stage recorder. Datum of gage is 3,722.30 ft (1,134.557 m) above mean sea level (U.S.C. & G.S. datum). See WSP 1312 or 1732 for history of changes prior to Aug. 4, 1938.

AVERAGE DISCHARGE.--38 years (1937-75), 515 ft<sup>3</sup>/s (14.58 m<sup>3</sup>/s), 373,100 acre-ft/yr (460 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,880 ft<sup>3</sup>/s (167 m<sup>3</sup>/s) Sept. 12 (gage height, 6.74 ft or 2,054 m); minimum daily, 54.5 ft<sup>3</sup>/s (1.54 m<sup>3</sup>/s) Mar. 3.

Period of record: Maximum discharge, 24,000 ft<sup>3</sup>/s (680 m<sup>3</sup>/s) June 12, 1905; no flow at times. Maximum discharge since construction of Elephant Butte Dam in 1915, 13,500 ft<sup>3</sup>/s (382 m<sup>3</sup>/s) Sept. 3, 1925.

REMARKS.--Daily discharges were computed by adding discharges of American Canal at El Paso and Rio Grande below American Dam at El Paso. Reservoirs, diversions and drainage returns modify the river flow at this station.

COOPERATION.--Records furnished by International Boundary and Water Commission, United States and Mexico.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	232	155	120	353	55.7	729	634	906	828	544	933
2	329	224	117	117	325	55.0	620	671	659	730	610	988
3	303	215	124	113	271	54.5	632	604	850	765	707	797
4	305	200	119	113	259	391	599	529	746	797	963	715
5	310	210	123	113	227	419	597	613	700	800	1,030	929
6	295	204	132	112	172	428	522	548	886	776	862	846
7	279	194	111	112	136	410	523	493	850	946	667	960
8	251	191	111	113	109	390	636	419	843	1,030	658	1,220
9	255	194	104	114	105	294	617	422	849	902	712	937
10	290	192	107	113	105	355	477	498	845	773	746	850
11	447	309	123	110	93.7	351	503	637	692	669	781	833
12	452	350	122	106	54.3	343	474	734	728	762	940	2,770
13	730	212	119	103	55.1	378	583	736	856	856	891	1,820
14	625	232	115	104	51.5	415	651	552	755	933	820	1,020
15	625	199	117	93.7	77.3	477	650	610	796	781	835	736
16	356	193	110	93.5	74.6	433	645	624	877	723	998	647
17	300	193	110	97.7	59.9	458	556	538	938	693	1,200	456
18	275	195	108	99.5	57.1	576	473	692	837	775	1,300	401
19	250	195	104	99.4	57.0	558	614	795	794	708	1,260	378
20	256	198	113	98.4	63.0	698	631	752	801	760	1,060	371
21	247	197	113	104	66.9	891	772	680	828	839	1,000	362
22	311	194	112	103	60.1	595	745	629	890	777	1,050	451
23	432	192	110	104	60.1	728	682	686	932	747	1,250	773
24	419	191	104	104	50.0	977	632	741	964	782	1,290	597
25	499	179	108	104	58.7	867	735	773	867	750	1,080	428
26	359	179	114	104	56.7	646	786	980	758	745	981	483
27	325	169	121	96.0	56.7	600	790	862	758	960	852	518
28	277	170	125	379	57.3	708	829	740	820	823	720	499
29	258	169	131	443		680	776	830	893	803	632	483
30	252	158	131	455		893	780	835	828	714	707	492
31	256		123	431		1,100		900		702	878	
TOTAL	11,158	6,122	3,645	4,573.0	3,793.3	16,206.2	19,361	20,904	25,126	24,777	28,024	23,716
MEAN	360	204	118	148	121	523	645	674	837	799	904	790
MAX	825	350	158	455	393	1,100	829	900	982	1,030	1,300	2,770
MIN	247	168	104	93.5	56.7	54.5	473	419	692	669	544	362
AC-FT	22,132	12,143	7,230	9,070	6,703	32,145	38,402	41,462	49,837	49,144	55,585	47,040
CAL YR 1974	TOTAL 193,072.6	MEAN 529	MAX 997	MIN 67.3	AC-FT 382,952							
WTR YR 1975	TOTAL 186,991.5	MEAN 512	MAX 1,300	MIN 54.5	AC-FT 370,893							

08377900 RIO MORA NEAR TERRERO, N. MEX.  
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E1/4 sec.22, T.18 N., R.12 E., San Miguel County, in Santa Fe National Forest, on left bank 450 ft (140 m) upstream from bridge on State Highway 63, 600 ft (180 m) upstream from mouth, and 2.6 mi (4.2 km) north of Terrero.

DRAINAGE AREA.--53.2 mi<sup>2</sup> (137.8 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,890 ft (2,405 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 28.4 ft<sup>3</sup>/s (0.804 m<sup>3</sup>/s), 20,580 acre-ft/yr (25.4 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 239 ft<sup>3</sup>/s (6.77 m<sup>3</sup>/s) May 21 (gage height, 2.68 ft or 0.817 m); minimum recorded, 3.6 ft<sup>3</sup>/s (0.10 m<sup>3</sup>/s) Nov. 20, 24, but may have been less during period of ice effect.

Period of record: Maximum discharge, 726 ft<sup>3</sup>/s (20.6 m<sup>3</sup>/s) May 21, 1973 (gage height, 3.68 ft or 1.122 m); minimum determined, 0.90 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Jan. 12-14, 1964, but may have been less during periods of ice effect.

Greatest flood since 1886 probably occurred Sept. 29, 1904 (based on statement for Pecos River near Pecos and history of that flood period).

REMARKS.--Records good except those for winter period, which are poor. About 90 percent of the drainage is in the Pecos Wilderness Area and not subject to development, watershed management, or the building of highways; there is limited cattle grazing by permit. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	18	7.5	6.5	5.7	7.9	9.8	46	136	32	18	10
2	7.3	18	8.0	7.0	4.6	11	9.7	51	143	29	17	10
3	7.2	17	8.5	6.5	4.6	14	11	63	154	27	16	11
4	8.0	17	9.0	6.2	5.3	13	13	80	176	30	16	58
5	7.3	16	9.5	6.2	5.2	12	19	90	185	30	16	98
6	9.5	18	9.0	6.5	4.2	12	23	80	192	27	18	74
7	17	16	8.4	6.3	5.2	11	20	70	188	25	15	60
8	13	16	8.4	6.0	5.2	10	19	70	176	25	15	53
9	10	17	8.0	6.1	5.1	9.9	16	79	171	30	21	47
10	10	15	7.5	5.0	5.2	9.2	14	86	174	34	19	43
11	12	14	7.5	6.2	5.2	8.7	12	113	153	34	17	45
12	16	15	8.0	6.0	5.2	8.7	7.7	142	138	30	16	74
13	18	15	8.0	6.0	5.4	8.3	13	156	126	28	17	65
14	20	14	7.5	6.0	5.4	6.6	13	161	121	30	16	60
15	19	14	7.8	6.1	5.4	7.6	14	170	117	35	14	56
16	18	14	8.0	6.2	5.3	7.0	22	171	114	35	14	51
17	17	12	8.5	6.0	5.2	8.1	32	174	107	31	14	47
18	17	14	8.5	6.1	5.0	7.8	32	176	99	29	12	44
19	16	13	8.0	6.2	5.1	9.0	26	185	91	28	12	41
20	16	10	8.0	6.1	5.2	14	26	194	83	26	15	38
21	16	14	8.5	6.0	5.2	18	33	210	75	35	32	38
22	16	12	9.0	5.6	4.9	15	42	216	67	30	25	34
23	17	11	9.0	5.6	5.0	12	45	189	61	31	18	32
24	17	9.0	8.0	5.6	5.2	12	55	173	56	29	16	29
25	17	12	7.0	5.7	5.8	11	74	180	52	26	14	27
26	17	12	7.0	5.8	6.0	11	85	193	47	25	14	26
27	20	10	7.0	6.0	6.5	7.7	66	198	43	23	13	24
28	19	8.0	7.5	6.1	6.7	10	51	202	40	23	13	23
29	21	7.0	7.8	5.9	---	9.0	46	189	37	23	12	22
30	21	7.0	7.5	5.9	---	9.6	43	162	34	21	11	21
31	19	---	7.5	5.9	---	9.8	---	143	---	19	11	---
TOTAL	465.8	405.0	249.4	187.3	148.0	320.9	892.2	4412	3356	880	497	1261
MEAN	15.0	13.5	8.05	6.04	5.29	10.4	29.7	142	112	28.4	16.0	42.0
MAX	21	18	9.5	7.0	6.7	18	85	216	192	35	32	98
MIN	7.2	7.0	7.0	5.0	4.2	6.6	7.7	46	34	19	11	10
AC-FT	924	803	495	372	294	637	1770	8750	6660	1750	986	2500

CAL YR 1974 TOTAL 4734.9 MEAN 13.0 MAX 62 MIN 4.0 AC-FT 9390  
WTR YR 1975 TOTAL 13074.6 MEAN 35.8 MAX 216 MIN 4.2 AC-FT 25930

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-21	2200	2.68	239	6- 7	0045	2.56	206
5-28	0100	2.60	217	9- 5	0500	2.19	115

08378500 PECOS RIVER NEAR PECOS, N. MEX.

LOCATION.—Lat 35°42'30", long 105°40'55", in NE 1/4 sec. 17, T.17 N., R.12 E., San Miguel County, in Santa Fe National Forest, on left bank at downstream side of bridge on private road, 300 ft (91 m) upstream from Indian Creek, 2.4 mi (3.9 km) downstream from Holy Ghost Creek, 9.0 mi (14.5 km) north of Pecos, and at mile 896.6 (1,422.6 km).

DRAINAGE AREA.—189 mi<sup>2</sup> (490 km<sup>2</sup>).

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.

GAGE.—Water-stage recorder. Datum of gage is 7,502.94 ft (2,286.896 m) above mean sea level.

AVERAGE DISCHARGE.—56 years, 97.3 ft<sup>3</sup>/s (2.756 m<sup>3</sup>/s), 70,490 acre-ft/yr (86.9 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 504 ft<sup>3</sup>/s (14.3 m<sup>3</sup>/s) May 21 (gage height, 3.38 ft or 1.030 m); minimum 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Feb. 19 result of freezeup.

Period of record: Maximum discharge, about 4,500 ft<sup>3</sup>/s (127 m<sup>3</sup>/s) Sept. 21 or 22, 1929 (gage height, 6.2 ft or 1.89 m, from floodmark), from rating curve extended above 1,600 ft<sup>3</sup>/s (45.3 m<sup>3</sup>/s); minimum 2.0 ft<sup>3</sup>/s (0.057 m<sup>3</sup>/s) Mar. 19, 1971, result of freezeup.

Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

REMARKS.—Records good except those for winter period, which are poor. Diversions for irrigation of about 75 acres (304,000 m<sup>2</sup>), 1959 determination, above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 898: Drainage area. WSP 1312: 1932(M).

DISCHARGE\* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	50	25	20	22	27	27	120	330	153	72	39
2	26	55	26	21	22	32	27	134	346	150	68	39
3	25	50	28	20	23	34	24	162	370	150	65	39
4	26	45	30	20	24	35	29	202	418	148	62	234
5	25	38	32	20	21	33	37	232	437	150	63	364
6	30	47	31	21	22	32	47	212	455	139	65	232
7	55	41	29	22	23	31	43	196	455	126	57	180
8	50	38	26	22	23	32	37	189	432	126	57	150
9	45	44	25	22	23	32	36	212	437	145	74	139
10	40	42	23	20	23	28	31	225	450	174	68	128
11	41	37	23	19	23	28	31	292	405	174	65	136
12	44	37	24	17	24	27	32	350	375	150	62	215
13	50	41	24	19	25	29	33	375	346	134	70	186
14	60	37	23	21	23	26	37	375	342	139	62	165
15	55	38	24	22	24	26	34	396	346	165	53	148
16	50	37	25	24	25	27	53	409	354	177	55	134
17	48	34	26	24	26	25	79	423	346	153	50	123
18	45	37	26	23	27	26	81	409	330	136	47	116
19	43	36	25	22	24	28	62	423	315	128	45	106
20	40	29	25	21	30	35	62	437	299	126	55	103
21	40	35	26	21	26	41	74	455	281	142	123	116
22	40	35	27	20	25	37	99	460	259	123	96	101
23	43	35	27	20	26	32	108	409	238	118	65	92
24	43	27	23	21	29	34	134	379	228	113	56	83
25	43	32	20	21	27	31	177	392	218	106	50	79
26	43	32	20	22	26	29	205	414	205	96	48	76
27	50	27	20	22	25	26	162	432	189	88	47	74
28	48	25	21	23	26	34	131	437	177	85	45	70
29	65	23	22	24	---	29	120	423	168	92	43	67
30	60	23	21	24	---	27	113	383	159	85	42	68
31	55	---	20	23	---	27	---	346	---	76	41	---
TOTAL	1354	1107	767	661	687	940	2165	10303	9710	4067	1871	3802
MEAN	43.7	36.9	24.7	21.3	24.5	30.3	72.2	332	324	131	60.4	127
MAX	65	55	32	24	30	41	205	460	455	177	123	364
MIN	25	23	20	17	21	25	24	120	159	76	41	39
AC-FT	2690	2200	1520	1310	1360	1860	4290	20440	19260	8070	3710	7540
CAL YR 1974 TOTAL	16133											
WTR YR 1975 TOTAL	37434											
MEAN	44.2											
MAX	171											
MIN	20											
AC-FT	32000											
WTR YR 1975 TOTAL	74250											

PEAK DISCHARGE (BASE, 310 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-21	2330	3.38	504	9-5	0430	3.36	465

08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.

LOCATION.--Lat 35°10'44", Long 105°06'30", Guadalupe County, in Anton Chico Grant, on right bank 2.1 mi (3.4 km) upstream from Canon Blanco, 2.3 mi (3.7 km) southeast of Anton Chico, 9.7 mi (15.6 km) downstream from Tecolote Creek, and at mile 816.8 (1,314.2 km).

DRAINAGE AREA.--1,050 mi<sup>2</sup> (2,720 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--April 1910 to May 1916, October 1916 to September 1924, August to December 1925, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 5,130 ft (1,564 m) from river-profile map. See WSP 1312 for history of changes prior to June 21, 1951.

AVERAGE DISCHARGE.--62 years (1910-15, 1916-24, 1926-75), 132 ft<sup>3</sup>/s (3,738 m<sup>3</sup>/s), 95,630 acre-ft/yr (118 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 8,920 ft<sup>3</sup>/s (253 m<sup>3</sup>/s) July 12 (gage height, 11.00 ft or 3.353 m); minimum 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) Dec. 11, Sept. 2, 3.

Period of record: Maximum discharge, 40,300 ft<sup>3</sup>/s (1,140 m<sup>3</sup>/s) June 1, 1937 (gage height, 20.34 ft or 6.200 m, from floodmarks), at site and datum then in use, by slope-area measurement; no flow at times.

The greatest flood since 1879 occurred Sept. 29, 1904, discharge about 73,000 ft<sup>3</sup>/s (207 m<sup>3</sup>/s), from information by a local resident.

REMARKS.--Records poor. Diversions above station for irrigation of about 4,900 acres (1,980 hm<sup>2</sup>), 1959 determination, above and below station. Acequia del Bodo Juan Paiz (see table below) diverts water about 8 mi (12.9 km) above gage and bypasses this station on left bank; ditch flow not included in record. Discharge measurements made at point opposite regular gage. A portion of this flow may be returned to the river about 5.0 mi (8.0 km) downstream.

REVISIONS (WATER YEARS).--WSP 1342: 1951(M), 1952-53. WSP 1512: 1912-14, 1931, 1933(M), 1935-36(M), 1938(P), 1939-40, 1941-42(P), 1945(M), 1946(P), 1949(P). WSP 1712: 1942(P).

Discharge measurements, in cubic feet per second, of Acequia del Bodo Juan Paiz, Water Year 1975

Oct. 17	42	Feb. 13	0	May 14	33	June 25	21	Aug. 27	6.1
Dec. 19	0	Apr. 9	29	May 2	36	July 9	16	Sept. 25	38

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	38	7.0	45	43	40	59	168	325	75	38	2.9
2	11	29	5.5	40	40	48	46	167	304	55	30	2.2
3	11	37	9.0	42	32	57	17	165	306	50	20	3.6
4	11	64	13	45	30	69	15	187	319	53	10	6.4
5	10	58	11	40	31	74	13	227	352	49	8.0	200
6	12	57	12	40	27	72	16	265	361	54	5.3	401
7	16	18	12	43	17	73	31	245	380	54	5.4	228
8	7.6	19	11	45	22	74	50	227	390	41	55	163
9	7.4	16	21	33	38	88	50	211	408	50	22	146
10	9.2	16	9.0	30	39	131	56	226	487	54	15	128
11	42	17	7.0	28	33	110	58	224	470	163	9.7	117
12	37	14	9.0	25	33	96	66	288	393	1190	6.1	215
13	63	12	11	40	28	86	73	354	339	492	27	245
14	27	11	13	55	29	75	79	409	305	180	16	202
15	20	13	12	60	30	73	111	415	289	239	15	178
16	17	13	15	45	23	74	166	440	277	219	12	156
17	13	11	25	28	24	68	187	467	279	265	33	136
18	10	5.2	30	30	23	63	252	483	277	250	13	121
19	7.5	6.7	25	31	22	60	253	472	255	191	5.9	108
20	7.3	8.5	26	27	24	60	195	447	245	169	16	100
21	8.0	9.1	36	23	21	69	170	430	222	121	8.8	90
22	8.9	8.8	38	30	50	88	177	439	201	124	44	95
23	24	6.2	30	35	40	96	209	448	181	151	69	95
24	89	9.5	24	30	30	88	224	396	164	189	33	80
25	13	11	66	37	38	77	240	357	143	228	6.4	71
26	11	9.9	50	40	41	90	292	364	125	130	4.7	65
27	37	8.5	60	36	39	81	325	396	115	108	4.0	58
28	63	9.4	90	34	38	79	274	438	102	81	124	50
29	36	10	75	34	---	69	221	450	96	66	16	43
30	31	7.5	25	39	---	70	193	439	83	76	11	39
31	41	---	60	40	---	63	---	376	---	57	11	---
TOTAL	710.9	553.3	837.5	1150	885	2361	4118	10620	8193	5228	694.3	3545.1
MEAN	22.9	18.4	27.0	37.1	31.6	76.2	137	343	273	169	22.4	118
MAX	89	64	90	60	50	131	325	483	487	1190	124	401
MIN	7.3	5.2	5.5	23	17	40	13	165	83	41	4.0	2.2
AC-FT	1410	1100	1660	2280	1760	4680	8170	21060	16250	10170	1380	7030
CAL YR 1974 TOTAL	9263.14											
WTR YR 1975 TOTAL	38896.10											
MEAN	25.4											
MAX	1100											
MIN	4.0											
AC-FT	18370											
WTR YR 1975 TOTAL	77150											

PEAK DISCHARGE (BASE, 3,000 FT<sup>3</sup>/S).--July 12 (2100) 8,920 ft<sup>3</sup>/s (11.00 ft).

## 08380500 GALLINAS CREEK NEAR MONTEZUMA, N. MEX.

LOCATION.--Lat 35°39'07", long 105°19'06", San Miguel County, in Las Vegas Grant, on left bank 2.4 mi (3.9 km) west of Montezuma, 6.9 mi (11.1 km) northwest of Las Vegas, and at mile 62.4 (100.4 km).

DRAINAGE AREA.--84 mi<sup>2</sup> (220 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--March to September 1915, June 1916 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1964, published as Gallinas River near Montezuma.

GAGE.--Water-stage recorder. Altitude of gage is 6,875 ft (2,096 m) from topographic map. Prior to Sept. 21, 1934, at different datum.

AVERAGE DISCHARGE.--59 years, 19.7 ft<sup>3</sup>/s (0.558 m<sup>3</sup>/s), 14,270 acre-ft/yr (17.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 114 ft<sup>3</sup>/s (3.23 m<sup>3</sup>/s) June 9 (gage height, 2.01 ft or 0.613 m); minimum, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) Dec. 7, result of freezeup.

Period of record: Maximum discharge, 7,120 ft<sup>3</sup>/s (202 m<sup>3</sup>/s) Aug. 2, 1966 (gage height, 9.7 ft or 2.96 m, from floodmarks), from rating curve extended above 500 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.25 ft (1.600 m), 8.25 ft (2.515 m), and 9.7 ft (2.96 m); minimum, 0.20 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s), Oct. 6-9, 1922, Sept. 21, Oct. 9-14, 1956, Dec. 13, 1964.

The greatest flood since about 1900 occurred the night of Sept. 29, 1904 (discharge not determined), from information by local residents and G. B. Monk's report on floods.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 80 acres (324,000 m<sup>2</sup>), 1959 determination, above station.

REVISIONS (WATER YEARS).--WSP 898: Drainage area. WSP 1562: 1951(P), 1952(M), 1955(P), 1957. WSP 1632: 1931-32, 1933(M), 1934, 1935(M), 1938, 1939-40(M), 1941-42, 1945, 1949-50(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	12	3.7	4.3	5.9	14	13	40	34	5.9	9.7	4.1
2	3.4	11	3.9	4.3	4.9	18	11	40	32	5.6	9.0	4.2
3	3.3	11	4.1	4.3	5.6	21	9.5	44	32	5.5	10	4.3
4	3.3	11	4.2	4.5	5.6	19	11	51	34	5.8	10	16
5	3.6	9.6	4.4	4.8	5.6	18	13	59	34	6.0	8.7	55
6	3.6	9.7	4.2	5.2	5.5	19	17	56	36	6.2	8.7	44
7	5.8	9.4	4.0	5.0	5.7	18	17	50	36	5.7	8.5	28
8	5.7	8.9	4.0	4.9	6.0	18	15	44	34	7.7	8.0	21
9	4.7	9.6	3.9	4.5	5.0	22	14	44	40	9.8	9.5	18
10	4.4	9.0	3.8	4.0	5.4	20	14	45	54	25	9.0	15
11	4.9	8.4	3.8	5.0	4.9	19	13	55	40	50	8.2	16
12	16	7.7	4.0	5.0	4.7	16	10	68	32	49	7.3	36
13	23	7.7	4.0	5.0	5.3	15	14	76	27	48	9.7	35
14	21	7.1	3.8	5.0	5.4	14	15	74	24	54	8.8	31
15	17	7.0	3.9	5.2	5.4	15	27	74	21	48	7.3	25
16	14	6.4	4.0	5.0	5.6	13	61	76	21	50	8.9	22
17	11	6.4	4.2	5.0	5.7	14	84	75	20	57	7.7	19
18	9.1	6.4	4.2	5.0	5.1	13	77	72	18	45	7.1	16
19	7.5	6.0	4.0	5.0	5.2	13	55	70	17	34	6.2	15
20	6.8	5.5	4.0	5.0	5.6	17	47	69	15	25	5.8	13
21	6.3	5.5	4.2	4.7	5.0	23	47	68	13	21	8.1	14
22	5.9	5.4	4.5	4.7	4.5	23	55	66	12	19	8.4	14
23	7.2	5.4	4.5	4.7	5.0	21	57	59	11	20	7.4	12
24	6.8	4.9	4.3	4.7	6.0	17	61	52	11	21	6.5	11
25	6.7	4.6	4.0	4.7	7.5	18	68	48	9.9	23	5.9	10
26	7.2	4.9	4.0	4.7	9.0	18	76	49	8.3	18	5.3	9.6
27	8.7	4.3	4.0	4.9	9.8	15	67	50	7.9	15	5.6	9.1
28	12	4.0	4.2	4.7	12	14	54	54	7.2	14	5.4	8.8
29	11	3.8	4.5	4.5	---	15	47	54	6.5	14	5.0	8.5
30	15	3.5	4.4	4.9	---	13	41	47	6.0	11	4.5	8.2
31	14	---	4.3	5.9	---	13	---	41	---	11	4.3	---
TOTAL	272.3	216.6	127.0	149.1	166.9	526	1110.5	1770	693.8	730.2	234.5	542.8
MEAN	8.78	7.22	4.10	4.81	5.96	17.0	37.0	57.1	23.1	23.6	7.56	18.1
MAX	23	12	4.5	5.9	12	23	84	76	54	57	10	55
MIN	3.3	3.5	3.7	4.0	4.5	13	9.5	40	6.0	5.5	4.3	4.1
AC-FT	540	430	252	296	331	1040	2200	3510	1380	1450	465	1080

CAL YR 1974 TOTAL 2190.2 MEAN 6.00 MAX 40 MIN 1.6 AC-FT 4340  
WTR YR 1975 TOTAL 6539.7 MEAN 17.9 MAX 84 MIN 3.3 AC-FT 12970

PEAK DISCHARGE (BASE, 200 FT<sup>3</sup>/S).--No peak above base.



## 08382500 GALLINAS RIVER NEAR COLONIAS, N. MEX.

LOCATION.--35°10'55", long 104°53'59", Guadalupe County, in Anton Chico and Preston Beck Grants, on right bank 2.3 mi (3.7 km) south of San Miguel-Guadalupe County line, 2.4 mi (3.9 km) upstream from mouth, 5.8 mi (9.3 km) northwest of Colonias, and 9.0 mi (14.5 km) east of Dilia. Mouth at Pecos River mile 798.2 (1,284.3 km).

DRAINAGE AREA.--610 mi<sup>2</sup> (1,580 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,944 ft (1,507 m) from topographic map.

AVERAGE DISCHARGE.--24 years, 17.6 ft<sup>3</sup>/s (0.498 m<sup>3</sup>/s), 12,750 acre-ft/yr (15.7 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 514 ft<sup>3</sup>/s (14.6 m<sup>3</sup>/s) Apr. 15 (gage height, 5.38 ft or 1.640 m); no flow many days. Period of record: Maximum discharge, 9,360 ft<sup>3</sup>/s (263 m<sup>3</sup>/s) June 16, 1963 (gage height, 16.65 ft or 5.075 m), from rating curve extended above 1,900 ft<sup>3</sup>/s (53.8 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 8.64 ft (2.633 m), 12.74 ft (3.883 m), 16.65 ft (5.075 m), and 27.2 ft (8.291 m); no flow most of time. Flood of about June 1, 1937, reached a stage of about 27.2 ft (8.29 m); discharge determined as 26,700 ft<sup>3</sup>/s (756 m<sup>3</sup>/s) by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29-30, 1904.

REMARKS.--Records fair. Diversions for irrigation of about 7,000 acres (2,830 hm<sup>2</sup>) 1959 determination, above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	5.5	1.9	.80	3.8	13	3.0	3.4	14	0	.01	0
2	0	4.4	1.8	.70	7.4	17	2.8	3.2	8.8	0	0	0
3	0	4.2	1.7	1.0	8.0	18	2.2	2.6	6.6	0	0	0
4	0	4.6	1.8	1.5	6.4	13	1.9	2.2	5.5	0	0	0
5	0	4.6	1.9	1.0	5.3	10	1.6	1.8	5.9	0	0	0
6	0	14	1.9	.80	4.6	8.0	1.3	1.6	4.8	0	0	0
7	0	14	1.8	1.5	2.9	6.4	1.2	.75	3.2	0	0	0
8	0	13	1.7	1.8	2.4	5.0	1.4	.04	2.6	0	0	0
9	21	12	1.2	2.5	2.8	6.6	1.6	0	2.2	0	0	0
10	11	12	1.8	1.3	2.8	23	1.9	0	78	0	0	0
11	4.6	11	1.2	1.0	2.6	35	2.8	0	38	0	0	50
12	7.6	7.7	1.0	.80	2.4	19	5.9	0	33	24	0	72
13	6.9	5.9	1.2	1.0	1.6	14	15	0	19	205	0	15
14	11	4.8	.75	1.3	1.2	14	78	0	12	66	0	17
15	6.6	4.4	.80	1.4	1.2	9.8	273	0	9.5	22	0	9.5
16	3.5	4.2	.90	1.5	1.5	9.5	237	0	6.9	11	0	4.2
17	2.1	4.0	1.0	1.8	1.7	8.3	71	0	5.5	5.9	0	3.1
18	.75	3.5	.75	2.0	1.8	8.3	32	0	4.4	45	0	2.8
19	.28	3.2	.64	2.0	2.0	7.2	27	0	3.7	30	0	1.9
20	.02	3.1	1.1	1.7	2.2	5.9	17	0	2.6	8.0	0	1.7
21	0	2.9	1.2	1.6	2.4	4.8	13	0	1.4	4.8	0	1.6
22	0	2.8	1.6	.80	1.5	4.2	10	0	1.5	3.5	22	9.1
23	0	2.9	1.0	.80	1.8	4.0	8.5	.01	.14	3.4	7.3	11
24	12	2.9	.80	1.0	2.0	3.8	7.2	.82	0	7.2	1.3	6.6
25	13	2.9	.60	2.0	3.7	3.4	5.9	1.3	0	4.4	.11	3.7
26	5.9	2.9	.50	2.0	4.8	2.9	5.3	.96	0	1.8	0	2.3
27	5.3	2.6	.40	2.1	11	3.4	4.8	.52	0	4.8	0	1.6
28	109	2.4	.50	1.6	12	3.7	4.6	1.4	0	2.6	4.5	1.3
29	29	2.3	.50	2.3	---	3.8	4.0	16	0	1.2	2.5	1.1
30	15	2.3	1.0	3.5	---	3.8	2.9	24	0	.36	.14	.82
31	8.3	---	.90	3.7	---	3.5	---	24	---	.16	0	---
TOTAL	272.85	167.0	35.84	48.80	103.8	292.3	843.8	84.60	269.24	451.12	37.86	216.32
MEAN	8.80	5.57	1.16	1.57	3.71	9.43	28.1	2.73	8.97	14.6	1.22	7.21
MAX	109	14	1.9	3.7	12	35	273	24	78	205	22	72
MIN	0	2.3	.40	.70	1.2	2.9	1.2	0	0	0	0	0
AC-FT	541	331	71	97	206	580	1670	168	534	895	75	429

CAL YR 1974 TOTAL 2719.51 MEAN 7.45 MAX 396 MIN 0 AC-FT 5340  
WTR YR 1975 TOTAL 2823.53 MEAN 7.74 MAX 273 MIN 0 AC-FT 5600

PEAK DISCHARGE (BASE, 1,700 FT<sup>3</sup>/S).--No peak above base.

08382700 PECOS RIVER NEAR COLONIAS, N. MEX.

LOCATION.--Lat 35°03'26", long 104°45'20", in SW¼SE¼SW¼ sec 30, T.10 N., R.21 E., Guadalupe County, at edge of left bank, on south boundary of Preston Beck Grant, 1.2 mi (1.9 km) upstream from River Ranch, 6.5 mi (10.5 km) southeast of Colonias, and 8.8 mi (14.2 km) northwest of Santa Rosa, and at mile 779.6 (1,254.4 km).

DRAINAGE AREA.--2,340 mi<sup>2</sup> (6,060 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--July 1970 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,758 ft (1,450 m) from topographic map.

EXTREMES.--Current year: Maximum discharge not determined; minimum, 7.8 ft<sup>3</sup>/s (0.22 m<sup>3</sup>/s) February 20.  
Period of record: Maximum discharge not determined; minimum, 5.6 ft<sup>3</sup>/s (0.16 m<sup>3</sup>/s) July 3, 16, 17, 1971.

REMARKS.--Records poor. Diversions and ground-water withdrawals above station for irrigation of about 12,000 acres (4,860 km<sup>2</sup>), 1959 determination. Base flow is from springs in a 4 mi (6 km) reach upstream from gage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	11	11	9.8	9.2	8.9	103	237	17	16	15
2	12	31	11	11	9.8	8.9	8.6	89	191	16	16	15
3	12	25	11	11	9.8	9.2	8.6	75	166	16	16	16
4	12	32	11	10	9.5	9.2	8.6	60	163	16	16	17
5	13	29	11	10	9.5	8.9	8.6	71	191	29	16	16
6	14	28	11	10	9.5	8.9	8.6	125	206	17	16	121
7	15	27	11	10	9.5	12	8.6	153	221	15	16	258
8	14	17	11	10	9.2	13	8.4	134	269	15	16	151
9	14	17	11	10	9.5	20	8.6	112	282	15	16	115
10	---	14	11	10	9.2	23	9.5	91	412	15	16	119
11	33	12	11	10	9.2	92	10	106	365	15	16	---
12	19	12	11	9.8	9.2	67	20	98	311	267	17	---
13	22	11	11	9.8	8.9	51	35	156	249	---	17	377
14	39	11	11	10	8.6	35	41	233	191	234	16	299
15	20	12	11	10	8.9	25	273	265	174	134	16	203
16	15	12	11	9.8	8.9	25	398	286	144	117	16	142
17	13	11	11	10	8.9	19	268	311	137	109	16	103
18	12	11	10	9.8	8.6	15	278	333	153	131	15	72
19	12	11	10	9.8	8.6	11	321	333	140	177	15	57
20	11	11	11	9.8	8.4	11	235	303	125	86	15	57
21	11	11	11	9.8	8.6	10	140	273	112	64	32	58
22	11	11	11	10	9.2	10	104	277	86	47	16	42
23	12	12	11	9.8	8.9	11	129	307	66	39	15	51
24	11	12	11	9.8	8.9	22	178	277	56	68	14	46
25	35	11	11	9.5	8.6	22	178	191	39	107	15	30
26	20	11	11	9.5	8.9	15	214	177	23	111	15	20
27	12	11	11	9.8	9.2	18	306	188	20	33	15	19
28	68	11	11	9.8	9.2	18	281	257	18	21	15	18
29	63	11	11	10	---	19	200	298	18	18	27	17
30	41	11	11	10	---	14	134	320	17	17	15	16
31	28	---	11	10	---	11	---	286	---	16	15	---
TOTAL	-	477	339	309.8	255.0	643.3	3830.0	6288	4782	-	513	-
MEAN	-	15.9	10.9	9.99	9.11	20.8	128	203	159	-	16.5	-
MAX	-	32	11	11	9.8	92	398	333	412	-	32	-
MIN	-	11	10	9.5	8.4	8.9	8.4	60	17	-	14	-
AC-FT	-	946	672	614	506	1280	7600	12470	9490	-	1020	-

08382800 PECOS RIVER ABOVE LOS ESTEROS DAMSITE, NEAR SANTA ROSA, N. MEX.

LOCATION.--Lat 35°02'26", long 104°40'52", Guadalupe County, in Jose Perea Grant, on left bank, 1.3 mi (2.1 km) downstream from Catfish Falls, 1.6 mi (2.6 km) southwest from mouth of Esteros Creek, and 7.2 mi (11.6 km) north of Santa Rosa, and at mile 767.8 (1,235.4 km).

DRAINAGE AREA.--2,430 mi<sup>2</sup> (6,290 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1965 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,630 ft (1,410 m) from topographic map.

EXTREMES.--Current year: Maximum not determined; minimum, 5.0 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) February 22.  
Period of record: Maximum not determined; minimum daily discharge, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Jan. 5, 6, 1971.

REMARKS.--Records poor. Diversions for irrigation of about 12,000 acres (4,860 hm<sup>2</sup>), 1959 determination, above station.

DISCHARGE\* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	31	12	12	10	9.4	11	112	254	15	22	14
2	9.8	34	12	13	10	9.0	9.0	89	200	16	16	14
3	9.8	31	12	12	9.5	9.0	9.0	80	182	18	16	16
4	9.8	33	12	11	9.5	9.0	8.3	63	176	18	16	17
5	9.4	33	12	11	9.5	9.0	7.9	68	182	26	16	13
6	10	30	12	11	8.5	8.6	7.9	104	198	39	16	23
7	13	29	12	11	9.0	8.6	7.9	151	203	20	16	178
8	11	23	12	10	9.5	11	8.3	140	215	17	16	126
9	10	19	14	10	8.5	15	8.3	119	213	16	15	180
10	---	17	13	9.0	9.5	18	8.6	101	311	16	15	108
11	225	15	13	9.0	10	49	9.8	107	369	14	15	290
12	81	14	13	8.0	9.0	63	13	101	336	146	16	460
13	60	13	13	8.0	8.6	46	20	147	268	---	17	268
14	54	14	12	10	9.0	36	27	222	200	---	17	215
15	31	14	10	12	9.0	24	130	266	170	135	16	168
16	22	14	11	10	8.0	24	252	282	151	135	30	130
17	17	13	11	9.8	9.4	19	232	305	133	97	16	104
18	15	12	11	9.4	9.4	17	205	321	131	124	15	78
19	14	12	12	9.0	9.0	12	240	326	128	159	15	65
20	14	12	13	9.4	9.0	10	213	310	110	91	16	56
21	14	11	11	9.0	9.4	11	142	288	90	70	22	70
22	14	11	10	8.0	8.0	11	108	282	75	50	30	48
23	14	11	11	9.0	7.0	10	107	305	60	37	16	50
24	14	12	10	8.6	9.0	16	144	298	36	44	15	45
25	30	11	10	8.5	10	22	155	240	27	71	15	32
26	20	11	12	8.5	9.8	18	178	207	15	103	16	22
27	19	11	10	9.0	9.4	15	240	213	13	41	16	20
28	35	11	13	9.5	9.4	19	235	254	13	27	26	19
29	88	11	11	9.0	---	20	184	348	12	22	18	18
30	47	11	11	10	---	19	135	334	12	18	20	18
31	34	---	11	9.0	---	13	---	315	---	16	15	---
TOTAL	-	524	362	302.7	255.9	580.6	3056.0	6498	4483	-	546	2865
MEAN	-	17.5	11.7	9.76	9.14	18.7	102	210	149	-	17.6	95.5
MAX	-	34	14	13	10	63	252	348	369	-	30	460
MIN	-	11	10	8.0	7.0	8.6	7.9	63	12	-	15	13
AC-FT	-	1040	718	600	508	1150	6060	12890	8890	-	1080	5680

## 08383000 PECOS RIVER AT SANTA ROSA, N. MEX.

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, on left bank 0.6 mi (1.0 km) upstream from bridge on U.S. Highway 66 in Santa Rosa, 1.9 mi (3.1 km) upstream from El Rito Creek, and at mile 756.5 (1,217.2 km).  
DRAINAGE AREA.--2,650 m<sup>2</sup> (6,860 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--May 1903 to December 1905 (gage heights only), January to December 1906, February 1910 to July 1911, September 1912 to December 1924, March to May 1927, July 1927, January 1928 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Apr. 5-20, May 4-7, 11, Aug. 13, 16-18, 24, Sept. 7-9, 11, 13, 19, 21, 23, 25, 27, Oct. 1-31, Nov. 3, 4, 9, 11, 20, 22, 1910, and Feb. 1 to Mar. 31, June 1 to July 31, 1911, published in WSP 358 are unreliable and should not be used.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,537.56 ft (1,383.048 m) above mean sea level. For history of changes prior to July 1, 1958, see WSP 1732, July 1, 1958, to Sept. 30, 1963, water-stage recorder at site 800 ft (244 m) downstream at datum 4.16 ft (1.268 m) lower. Supplemental water-stage recorder at site 800 ft (244 m) downstream Oct. 1, 1963, to Sept. 13, 1967, at datum 4.16 ft (1.268 m) lower than primary gage.

AVERAGE DISCHARGE.--59 years (1912-24, 1928-75), 138 ft<sup>3</sup>/s (3,908 m<sup>3</sup>/s), 99,980 acre-ft/yr (123 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 4,610 ft<sup>3</sup>/s (131 m<sup>3</sup>/s) Oct 10 (gage height, 5.10 ft or 1.554 m); minimum, 4.7 ft<sup>3</sup>/s (0.133 m<sup>3</sup>/s) January 4.

1930-75: Maximum discharge, 55,200 ft<sup>3</sup>/s (1,560 m<sup>3</sup>/s) June 2, 1937 (gage height, 25.7 ft or 7.83 m), site and datum then in use, from rating curve extended above 32,000 ft<sup>3</sup>/s (906 m<sup>3</sup>/s); minimum 0.28 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/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 (7.53 m), site and datum then in use, discharge, 45,000 ft<sup>3</sup>/s (1,290 m<sup>3</sup>/s), by Kutter's formula. Flood of June 9, 1903, reached a stage of 21.1 ft (6.43 m), same site and datum as in 1904, discharge, 34,000 ft<sup>3</sup>/s (963 m<sup>3</sup>/s), by comparison with 1904 flood.

REMARKS.--Records poor. Diversions for irrigation of about 12,000 acres (48.6 km<sup>2</sup>), 1959 determination, above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15. See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	37	16	14	16	13	19	116	276	18	24	16
2	13	44	16	16	14	12	16	97	221	25	25	16
3	14	41	16	11	14	12	14	82	173	31	22	17
4	14	41	16	12	14	12	13	69	168	29	20	18
5	14	39	16	12	13	13	13	64	164	55	19	16
6	14	37	16	16	13	13	13	91	202	44	17	16
7	19	35	16	22	14	13	14	156	226	25	16	200
8	20	33	16	19	16	16	14	151	276	20	16	150
9	17	27	16	20	14	22	14	134	299	19	17	160
10	635	24	19	16	14	25	17	101	337	20	17	120
11	282	20	17	12	14	39	20	108	408	25	17	250
12	61	20	17	10	13	88	22	104	349	94	19	410
13	46	19	16	14	13	58	37	130	330	1110	22	310
14	41	17	14	24	13	48	51	211	259	312	25	240
15	37	17	13	20	13	33	124	270	202	130	24	180
16	29	16	16	18	16	27	312	281	182	134	51	140
17	24	16	17	17	17	27	264	312	168	116	27	115
18	20	16	14	17	16	22	221	336	164	138	24	80
19	20	16	14	16	16	20	287	342	134	151	22	70
20	19	16	14	14	14	16	287	330	123	119	22	60
21	19	16	19	14	13	14	221	312	108	101	26	75
22	19	14	17	12	10	13	173	305	90	61	43	52
23	19	16	14	14	10	12	143	318	79	41	25	50
24	19	17	14	13	14	14	168	349	54	54	20	51
25	24	17	10	14	16	25	164	259	25	69	17	35
26	37	16	14	13	14	25	156	226	19	113	17	25
27	24	16	17	13	13	17	232	216	16	64	16	21
28	24	16	16	13	13	22	270	281	16	41	26	21
29	107	16	24	13	---	27	211	308	14	27	20	21
30	64	14	22	14	---	29	143	375	14	22	25	20
31	46	---	19	16	---	24	---	362	---	20	18	---
TOTAL	1754	689	501	469	390	751	3653	6876	5087	3228	699	2955
MEAN	56.6	23.0	16.2	15.1	13.4	24.2	122	222	170	104	22.5	98.5
MAX	635	44	24	24	17	88	312	388	408	1110	51	410
MIN	13	14	10	10	10	12	13	64	14	18	16	16
AC-FT	3480	1370	994	930	774	1490	7250	13640	10090	6400	1390	5860
CAL YR 1974	TOTAL	12024.2	MEAN	32.9	MAX	1390	MIN	8.0	AC-FT	23850		
WTR YR 1975	TOTAL	27052.0	MEAN	74.1	MAX	1110	MIN	10	AC-FT	53660		

PEAK DISCHARGE (BASE, 4,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	2000	5.10	4,610	07-13	0700	4.60	3,850

## 08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.

LOCATION.—Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, on left bank 9 mi (14.5 km) southeast of Puerto de Luna, 15.8 mi (25.4 km) upstream from Sumner Dam, and at mile 726.2 (1,168.5 km).

DRAINAGE AREA.—3,970 mi<sup>2</sup> (10,280 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.—April 1938 to current year.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 4,311.34 ft (1,314.096 m) above mean sea level. Prior to Apr. 15, 1954, at datum 1 ft (0.30 m) higher.

AVERAGE DISCHARGE.—37 years, 213 ft<sup>3</sup>/s (6,032 m<sup>3</sup>/s), 154,300 acre-ft/yr (190 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 5,340 ft<sup>3</sup>/s (151 m<sup>3</sup>/s) Oct. 10 (gage height 5.30 ft or 1.615 m); minimum, 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) Sept. 2.

Period of record: Maximum discharge, 48,600 ft<sup>3</sup>/s (1,380 m<sup>3</sup>/s) Sept. 1, 1942 (gage height, 17.00 ft or 5.182 m), from rating curve extended above 7,400 ft<sup>3</sup>/s (210 m<sup>3</sup>/s) on basis of flow at Santa Rosa; minimum, 11 ft<sup>3</sup>/s (0.31 m<sup>3</sup>/s) Jan. 31, 1951. Maximum flood since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 ft<sup>3</sup>/s (1,560 m<sup>3</sup>/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.

REMARKS.—Records good. Diversions for irrigation of about 12,500 acres (5,060 hm<sup>2</sup>), 1959 determination, above station.

Discharge represents inflow to Lake Sumner, capacity, 110,700 acre-ft (136 hm<sup>3</sup>). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 1512: 1939.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	127	104	104	94	79	82	178	345	73	191	66
2	86	119	104	101	92	81	76	165	290	78	137	64
3	84	131	108	104	92	79	76	142	225	79	96	65
4	83	146	106	101	92	81	77	130	194	78	88	81
5	85	128	104	99	90	79	74	116	188	74	85	81
6	87	127	101	101	90	80	67	112	206	202	70	81
7	106	122	101	106	88	78	69	158	224	116	69	86
8	100	122	106	108	88	80	75	201	235	101	73	240
9	96	116	106	106	88	85	75	180	255	93	68	285
10	819	107	104	104	90	85	73	159	250	94	69	513
11	1140	104	111	97	88	89	82	143	412	94	67	211
12	351	100	111	85	90	119	84	152	401	133	66	692
13	222	98	104	92	88	138	88	141	353	1030	66	385
14	155	97	99	99	90	122	91	204	302	594	73	320
15	145	97	99	99	91	116	97	276	238	405	73	276
16	126	99	99	99	99	106	253	299	206	226	88	228
17	113	100	101	96	92	97	352	316	187	217	118	200
18	109	104	99	96	93	96	253	334	167	215	89	172
19	107	100	99	94	89	92	272	350	169	216	83	154
20	107	98	99	94	87	85	297	348	169	245	77	145
21	104	98	101	92	88	81	256	333	162	187	75	141
22	104	98	104	92	97	76	197	319	158	251	117	164
23	114	97	99	86	91	72	171	325	136	135	95	132
24	105	100	99	86	94	74	166	343	134	217	73	118
25	99	99	99	86	94	78	210	310	106	129	67	128
26	111	97	101	86	88	88	215	262	88	141	66	117
27	116	98	101	86	86	86	246	236	76	181	71	100
28	152	96	101	86	84	81	320	263	75	141	76	96
29	125	96	106	90	---	92	273	325	72	113	76	93
30	194	101	111	96	---	93	211	424	80	89	70	85
31	139	---	111	96	---	91	---	386	---	78	75	---
TOTAL	5572	3222	3198	2967	2533	2779	4878	7630	6103	6025	2606	5519
MEAN	180	107	103	95.7	90.5	89.6	163	246	203	194	84.1	184
MAX	1140	146	111	108	99	138	352	424	412	1030	191	692
MIN	83	96	99	85	84	72	67	112	72	73	65	64
AC-FT	11050	6390	6340	5890	5020	5510	9680	15130	12110	11950	5170	10950

CAL YR 1974 TOTAL 40112 MEAN 110 MAX 2150 MIN 52 AC-FT 79560  
WTR YR 1975 TOTAL 53032 MEAN 145 MAX 1140 MIN 64 AC-FT 105200

PEAK DISCHARGE (BASE, 5,500 FT<sup>3</sup>/S).—No peak above base.

08384000 LAKE SUMNER NEAR FORT SUMNER, N. MEX.  
(Formerly published as Alamogordo Reservoir near Fort Sumner, N. Mex.)

LOCATION.--Lat 34°36'30", long 104°23'04", in SE¼Sec. 34, T.5 N., R.24 E., DeBaca County, near center of dam on Pecos River, 5.0 mi (8.0 km) northeast of Guadalupe, 12.2 mi (19.6 km) northwest of Fort Sumner, and at mile 711.0 (1,144.0 km).

DRAINAGE AREA.--4,390 mi<sup>2</sup> (11,370 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--December 1938 to September 1965 (monthend contents only), October 1965 to current year. Monthend elevations September 1937 to November 1938 published in reports of Pecos River Commission.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (Bureau of Reclamation datum). Gage heights read to nearest 0.1 ft (0.03 m). April 1, 1946, to Sept. 30, 1957, water-stage recorder above elevation 4,234.25 ft (1,290.599 m), non-recording gage below.

EXTREMES.--Current year: Maximum contents, 63,340 acre-ft (78.1 hm<sup>3</sup>) June 4, elevation, 4,262.4 ft (1,299.18 m); minimum, 4,000 acre-ft (4.93 hm<sup>3</sup>) July 4, 5, elevation, 4,225.6 ft (1,287.96 m).

Period of record: Maximum contents, 138,300 acre-ft (171 hm<sup>3</sup>) 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 (1,303.020 m); maximum elevation 4,276.10 ft (1,303.355 m) June 3, Sept. 8, 1958; no storage July 28 to Aug. 2, 1951, elevation 4,200.70 ft (1,280.373 m).

REMARKS.--Reservoir is formed by earthfill dam, completed and storage began in August 1937. Capacity, 110,700 acre-ft (136 km<sup>3</sup>) at elevation 4,275.0 ft (1,303.020 m), top of spillway gates. No dead storage. No storage allocated for flood control.

Reservoir is used to store water for irrigation. Figures given herein represent contents computed from elevations at 0800 hours.

COOPERATION.--Elevation record and capacity table furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1732: 1939-54. WSP 1923: 1939-53(M) (m).

CONTENTS. IN ACRF-FFFI. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12800	23790	30480	36400	41670	46450	48210	53810	61830	10600	14530	14650
2	13010	24110	30480	36500	41900	46700	48210	53810	62430	7610	15220	14650
3	13010	24270	30480	36600	41900	46700	48210	54090	63040	4540	15570	14420
4	13010	24920	30660	36700	42130	46950	48210	54090	63340	4000	15690	14420
5	13010	25080	30850	36810	42360	46950	48210	54090	61540	4000	15570	14310
6	13010	25410	31230	36910	42590	47200	47960	54090	59770	4110	15460	14310
7	13220	25570	31420	37120	42820	47200	47960	54090	57750	4480	15460	14310
8	13540	25910	31610	37330	42820	47450	47700	54370	55770	4600	15340	14200
9	13980	26080	31800	37540	43040	47450	47700	54650	54090	4660	15220	14650
10	14200	26240	31990	37750	43270	47700	47700	54650	52180	4720	15110	15460
11	16900	26410	32180	37750	43510	47960	47700	54930	50560	4850	14990	15810
12	19120	26750	32370	37960	43510	48210	47700	55210	48990	4980	14880	16660
13	19810	26920	32560	38170	43760	48470	47700	55210	47700	5050	14760	18720
14	20230	27090	32750	38380	43760	48730	47960	55210	45940	7770	14650	19520
15	20790	27260	32940	38380	44000	48990	48210	55490	44480	9050	14530	19810
16	20930	27440	33140	38590	44240	49250	48470	55770	42820	9760	14420	20370
17	21230	27790	33330	38800	44480	49250	48730	56040	40770	10040	14530	20790
18	21370	27960	33520	39020	44480	49250	48990	56610	38800	10410	14650	20930
19	21520	28140	33720	39240	44720	49250	49780	56900	36910	10700	14650	20930
20	21520	28320	33910	39460	44720	49250	50560	57470	34890	10990	14650	21080
21	21520	28490	34110	39680	44960	49250	50820	58040	32750	11380	14650	21230
22	21520	28670	34300	39900	44960	48990	51360	58040	30850	12180	14760	21370
23	21520	28840	34490	39900	45210	48730	51360	58610	29020	13010	14760	21820
24	22110	29020	34690	40120	45450	48730	51630	58900	26920	13220	14880	21820
25	22260	29380	35090	40120	45690	48730	51900	59480	24920	13540	14880	21960
26	22410	29570	35290	40330	45940	48470	52180	59770	22410	13650	14760	21820
27	22710	29750	35500	40550	46190	48470	52450	60060	20370	13870	14760	21820
28	22710	29930	35700	40770	46190	48470	52450	60360	18180	14090	14760	21820
29	23020	30120	35900	40990	---	48470	52490	60360	15810	14310	14760	21820
30	23180	30300	36100	41220	---	48470	53530	60950	13430	14310	14760	21820
31	23480	---	36300	41450	---	48210	---	61540	---	14420	14650	---
MAX	23480	30300	36300	41450	46190	49250	53530	61540	63340	14420	15690	21960
MIN	12800	23790	30480	36400	41670	46450	47700	53810	13430	4000	14420	14200
(t)	+10.890	+6.820	+6.000	+5.150	+4.740	+2.020	+5.320	+8.010	-48.110	+990	+230	+7.170

CAL YR 1974 MAX 102,200 MIN 3,280 CHANGE IN CONTENTS -57,980

WTR YR 1975 MAX 63340 MIN 4000 CHANGE IN CONTENTS +9,230

+ Change in contents. In acre-feet.

08384000 LAKE SUMNER NEAR FORT SUMNER, N. MEX.--CONTINUED

ELEVATION, IN FEET ABOVE MEAN SEA LEVEL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4236.40	4244.90	---	---	4254.30	4256.30	4257.00	4259.10	4261.90	4234.20	4238.00	4238.10
2	4236.60	4245.10	4248.80	4251.90	4254.40	4256.40	4257.00	4259.10	4262.10	4230.80	4238.60	4238.10
3	4236.60	4245.20	---	---	4254.40	4256.40	4257.00	4259.20	4262.30	4226.50	4238.90	4237.90
4	4236.60	4245.60	4248.90	4252.00	4254.50	4256.50	4257.00	4259.20	4262.40	4225.60	4239.00	4237.90
5	4236.60	4245.70	---	---	4254.60	4256.50	4257.00	4259.20	4261.80	4225.60	4238.90	4237.80
6	4236.60	4245.90	4249.20	4252.10	4254.70	4256.60	4256.90	4259.20	4261.20	4225.80	4238.80	4237.80
7	4236.80	4246.00	4249.30	4252.20	4254.80	4256.60	4256.90	4259.20	4260.50	4226.40	4238.80	4237.80
8	4237.10	4246.20	4249.40	4252.30	4254.80	4256.70	4256.80	4259.30	4259.80	4226.60	4238.70	4237.70
9	4237.50	4246.30	4249.50	4252.40	4254.90	4256.70	4256.80	4259.40	4259.20	4226.70	4238.60	4238.10
10	4237.70	4246.40	4249.60	4252.50	4255.00	4256.80	4256.80	4259.40	4258.50	4226.80	4238.50	4238.80
11	4240.00	4246.50	4249.70	4252.50	4255.10	4256.90	4256.80	4259.50	4257.90	4227.00	4238.40	4239.10
12	4241.70	4246.70	4249.80	4252.60	4255.10	4257.00	4256.80	4259.60	4257.30	4227.20	4238.30	4239.80
13	4242.20	4246.80	4249.90	4252.70	4255.20	4257.10	4256.80	4259.60	4256.80	4227.30	4238.20	4241.40
14	4242.50	4246.90	4250.00	4252.80	4255.20	4257.20	4256.90	4259.60	4256.10	4221.00	4238.10	4242.00
15	4242.90	4247.00	4250.10	4252.80	4255.30	4257.30	4257.00	4259.70	4256.50	4232.50	4238.00	4242.20
16	4243.00	4247.10	4250.20	4252.90	4255.40	4257.40	4257.10	4259.80	4254.80	4233.30	4237.90	4242.60
17	4243.20	4247.30	4250.30	4253.00	4255.50	4257.40	4257.20	4259.90	4253.90	4233.60	4238.00	4242.90
18	4243.30	4247.40	4250.40	4253.10	4255.50	4257.40	4257.30	4260.10	4253.00	4234.00	4238.10	4243.00
19	4243.40	4247.50	4250.50	4253.20	4255.60	4257.40	4257.60	4260.20	4252.10	4234.30	4238.10	4243.00
20	4243.40	4247.60	4250.60	4253.30	4255.60	4257.40	4257.90	4260.40	4251.10	4234.60	4238.10	4243.10
21	4243.40	4247.70	4250.70	4253.40	4255.70	4257.40	4258.00	4260.60	4250.00	4235.00	4238.10	4243.20
22	4243.40	4247.80	---	4253.50	4255.70	4257.30	4258.20	4260.60	4249.00	4235.80	4238.20	4243.30
23	4243.40	4247.90	---	4253.50	4255.80	4257.20	4258.20	4260.80	4248.00	4236.60	4238.20	4243.60
24	4243.80	4248.00	4251.00	4253.60	4255.90	4257.20	4258.30	4260.90	4246.80	4236.80	4238.30	4243.60
25	4243.90	4248.20	---	4253.60	4256.00	4257.20	4258.40	4261.10	4245.60	4237.10	4238.30	4243.70
26	4244.00	4248.30	4251.30	4253.70	4256.10	4257.10	4258.50	4261.20	4244.00	4237.20	4238.20	4243.60
27	4244.20	4248.40	---	4253.80	4256.20	4257.10	4258.60	4261.30	4242.60	4237.40	4238.20	4243.60
28	4244.20	4248.50	4251.50	4253.90	4256.20	4257.10	4258.60	4261.40	4241.00	4237.60	4238.20	4243.60
29	4244.40	4248.60	---	4254.00	---	4257.10	4258.80	4261.40	4239.10	4237.80	4238.20	4243.60
30	4244.50	4248.70	---	4254.10	---	4257.10	4259.00	4261.60	4237.00	4237.80	4238.20	4243.60
31	4244.70	---	4251.80	4254.20	---	4257.00	---	4261.80	---	4237.90	4238.10	---
MEAN	4241.23	4247.01	-	-	4255.27	4256.99	4257.51	4260.1	4253.38	4232.15	4238.33	4241.15
MAX	4244.70	4248.70	-	-	4256.20	4257.40	4259.00	4261.80	4262.40	4237.90	4239.00	4243.70
MIN	4236.40	4244.90	-	-	4254.30	4256.30	4256.80	4259.10	4237.00	4225.60	4237.90	4237.70





LOCATION.--34°30'30", long 104°16'40", in SW<sub>1</sub>SW<sub>4</sub> sec.1, T.3 N., R.25 E., DeBaca County, on right bank of concrete canal, 200 ft (60 m) downstream from diversion dam on Pecos River, 3.0 mi (4.8 km) northwest of Fort Sumner, and at Pecos River mile 694.1 (1,116.8 km).

PERIOD OF RECORD.--March 1939 to February 1943 (published in WSP 1732), April 1954 to current year (monthly discharge only prior to October 1965).

GAGE.--Water-stage recorder. Datum of gage is 4,034.7 ft (1,229.78 m) above mean sea level (Bureau of Reclamation bench mark). Prior to March 1954 at site 2.4 mi (3.9 km) downstream at different datum. April 1954 to March 1965 at site 1.1 mi (1.8 km) downstream at datum 1.7 ft (0.52 m) lower.

AVERAGE DISCHARGE.--24 years (1939-42, 1954-75), 48.6 ft<sup>3</sup>/s (1.376 m<sup>3</sup>/s), 35,210 acre-ft/yr (43.4 km<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum daily discharge, 117 ft<sup>3</sup>/s (3.31 m<sup>3</sup>/s) June 7; no flow many days.  
Period of record: Maximum daily discharge, 174 ft<sup>3</sup>/s (4.93 m<sup>3</sup>/s) July 22, 1941; no flow many days each year.

REMARKS.--Records good. Canal diverts water from Pecos River for irrigation of about 6,600 acres (2,670 hm<sup>2</sup>), 1961 determination, by the Fort Sumner Irrigation District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0					0	86	83	97	102	0	72
2	0					0	87	84	97	102	0	85
3	29					0	87	83	96	101	0	85
4	61					0	88	84	100	111	48	84
5	62					0	88	81	96	108	93	81
6	68					0	88	81	103	108	97	95
7	43					0	86	80	117	104	93	85
8	9.0					0	83	80	111	93	92	84
9	5.6					0	83	82	113	90	94	85
10	4.3					0	85	79	115	89	93	103
11	7.2					0	85	79	115	83	94	98
12	26					0	84	80	116	98	94	31
13	9.9					0	76	82	105	88	97	0
14	3.0					0	39	106	98	77	96	0
15	0					0	0	114	98	87	89	34
16	0					0	0	110	104	88	107	74
17	0					46	0	109	108	90	104	75
18	32					89	.20	111	107	91	95	77
19	65					91	1.8	112	107	90	78	75
20	63					89	2.0	110	102	89	76	76
21	67					88	28	110	100	95	76	99
22	64					89	69	112	100	106	77	79
23	31					91	70	113	104	92	72	76
24	0					91	72	112	106	86	72	54
25	0					88	73	114	105	79	72	87
26	0					91	76	112	104	72	72	82
27	0					91	69	114	104	74	74	71
28	39					91	72	112	105	73	72	72
29	65				---	92	89	108	103	71	71	73
30	27				---	90	80	105	102	70	70	92
31	0	---			---	91	---	96	---	31	72	---
TOTAL	781.0	0	0	0	0	1308	1847.00	3038	3143	2738	2340	2184
MEAN	25.2	0	0	0	0	42.2	61.6	98.0	105	88.3	75.5	72.8
MAX	68	0	0	0	0	92	89	114	117	111	107	103
MIN	0	0	0	0	0	0	0	79	96	31	0	0
AC-FT	1550	0	0	0	0	2590	3660	6030	6230	5430	4640	4330
CAL YR 1974	TOTAL	17304.10	MEAN	47.4	MAX	112	MIN	0	AC-FT	34320		
WTR YR 1975	TOTAL	17379.00	MEAN	47.6	MAX	117	MIN	0	AC-FT	34470		

## RIO GRANDE BASIN

08386000 PECOS RIVER NEAR ACME, N. MEX.

LOCATION.--Lat 33°32'10", long 104°22'34", in SW¼NW¼ sec.14, T.9 S., R.25 E., Chaves County, on right bank 3.0 mi (4.8 km) downstream from U.S. Highway 70, 3.7 mi (6.0 km) downstream from Salt Creek, 4.7 mi (7.6 km) southwest of Acme, 14 mi (22.5 km) northeast of Roswell, and at mile 591.2 (951.2 km).

DRAINAGE AREA.--11,380 mi<sup>2</sup> (29,470 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--September 1921 to June 1923, July 1937 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 3,507 ft (1,069 m), from topographic map. Prior to Nov. 1, 1938, at site on highway bridge 3 mi (4.8 km) upstream at various datums. Since Oct. 25, 1963, supplemental water-stage recorder at site opposite base gage at same datum.

AVERAGE DISCHARGE.--38 years (1937-75), 194 ft<sup>3</sup>/s (5.494 m<sup>3</sup>/s), 140,600 acre-ft/yr (173 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,850 ft<sup>3</sup>/s (80.7 m<sup>3</sup>/s) July 22 (gage height, 6.75 ft or 2.057 m); no flow at times.

Period of record: Maximum discharge, 45,000 ft<sup>3</sup>/s (1,270 m<sup>3</sup>/s) Sept. 23, 1941 (gage height, 13.71 ft or 4.179 m), from rating curve extended above 26,000 ft<sup>3</sup>/s (736 m<sup>3</sup>/s); no flow at times.

The flood of May 28, 1937, reached a discharge of 53,000 ft<sup>3</sup>/s (1,500 m<sup>3</sup>/s) (gage height, 14.82 ft or 4.517 m, from floodmarks), site and datum then in use, by slope-area method, but may have been exceeded by the flood of Oct. 1, 1904.

REMARKS.--Records fair except those below 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s), which are poor. Flow regulated by Lake Sumner (see sta 08384000). Diversions for irrigation of about 20,000 acres (8,090 km<sup>2</sup>), 1959 determination, above station. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	77	18	33	15	16	10	1.5	0	844	45	0
2	18	77	19	34	21	14	10	1.9	0	844	39	0
3	17	61	19	30	26	11	10	3.7	0	833	50	0
4	16	61	20	26	26	10	10	4.3	0	888	47	0
5	16	52	20	23	22	10	13	4.6	0	616	31	0
6	19	44	19	20	19	8.5	14	3.7	0	182	24	0
7	21	41	19	20	17	7.5	14	3.7	457	277	17	0
8	19	40	21	19	16	7.0	12	3.4	670	191	10	0
9	21	40	21	18	14	7.5	9.0	2.5	780	112	6.4	0
10	30	39	20	16	13	7.5	9.5	3.4	877	77	3.8	0
11	61	37	19	12	13	7.5	13	4.6	910	56	2.2	0
12	663	33	17	10	11	8.0	16	5.5	770	75	1.0	26
13	350	33	17	11	10	8.5	21	4.6	855	103	.17	25
14	196	31	17	10	10	8.5	24	4.6	790	51	.51	132
15	105	29	15	13	10	7.5	30	3.1	800	42	4.6	98
16	70	30	15	13	11	7.0	39	1.3	811	28	35	52
17	54	30	15	14	11	6.5	25	1.1	833	24	48	29
18	48	29	15	19	10	5.5	16	1.1	780	21	14	20
19	45	28	16	21	9.5	4.6	13	1.6	790	17	5.5	13
20	40	26	16	18	10	4.6	10	2.8	822	16	2.4	7.0
21	36	25	16	16	10	3.4	9.0	1.3	888	16	.34	28
22	38	24	16	14	8.0	2.5	8.5	.82	855	1110	0	19
23	258	23	16	13	10	1.5	8.0	.59	855	1320	0	36
24	249	21	15	10	21	1.2	7.5	.33	921	282	0	32
25	175	21	15	8.5	25	.71	7.0	.03	866	129	0	37
26	123	20	16	8.0	22	.42	6.0	0	833	83	0	28
27	98	19	17	8.5	26	.28	4.0	.03	790	73	0	23
28	140	19	17	8.5	20	.47	3.1	.05	790	68	0	20
29	85	18	18	8.0	---	4.0	2.2	0	855	97	0	17
30	79	18	25	9.5	---	8.0	1.6	0	855	87	0	22
31	63	---	33	14	---	9.5	---	0	---	56	0	---
TOTAL	3172	1046	562	498.0	436.5	199.18	375.4	66.15	19453	8618	386.92	664.0
MEAN	102	34.9	18.1	16.1	15.6	6.43	12.5	2.13	648	278	12.5	22.1
MAX	663	77	33	34	26	16	39	5.5	921	1320	50	132
MIN	16	18	15	8.0	8.0	.28	1.6	0	0	16	0	0
AC-FT	6290	2070	1110	988	866	395	745	131	38590	17090	767	1320
CAL YR 1974 TOTAL	50141.16											
MEAN	137											
MAX	965											
MIN	0											
AC-FT	99450											
WTR YR 1975 TOTAL	35477.15											
MEAN	97.2											
MAX	1320											
MIN	0											
AC-FT	70370											

PEAK DISCHARGE (BASE, 2,500 FT<sup>3</sup>/S).--July 22 (2330) 2,850 ft<sup>3</sup>/s (6.75 ft).

LOCATION.--Lat 33°19'35", long 105°36'50", in NE¼NE¼ sec.30, T.11 S., R.14 E., Lincoln County, on left bank, at upstream end of flume over Grapevine Canyon, 1.0 mi (1.6 km) below point of diversion, 0.7 mi (1.1 km) east of Hollywood, and junction of U.S. Highway 70 and State Highway 37, point of diversion at Rio Ruidoso mile 24.5 (39.4 km).

PERIOD OF RECORD.--May 1960 to current year. (Monthly acre-ft only prior to January 1973, published as a supplement to sta 08387000).

GAGE.--Water stage recorder and concrete control. Altitude of gage is 6,432 ft (1,960.5 m) from Topographic Division. Prior to Mar. 20, 1962, at site 315 ft (96 m) downstream at datum 12.79 ft (3.898 m) lower.

EXTREMES.--Current year: Maximum daily discharge, 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/s) May 1, 2; no flow many days.

Period of record: Maximum daily discharge, 6.6 ft<sup>3</sup>/s (0.19 m<sup>3</sup>/s) June 15, 1961; no flow many days each year.

REMARKS.--Records poor. Water is diverted from Rio Ruidoso 1.0 mi (1.6 km) upstream for irrigation below sta 08387000.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0		0			0	1.2	.08	.15	.72	.08
2	0	0					0	1.2	.02	.42	.62	.05
3	0	.21		0			0	1.1	.04	.42	.59	0
4	0	.01		0			0	.67	.14	.45	.72	.05
5	.14	0		0			0	0	.10	.66	.62	0
6	.02	0		0			0	0	.09	1.1	.53	.06
7	.01	0		0			0	0	.06	1.0	.47	.01
8	0	0		0			0	0	.11	0	.45	0
9	0	.02		0			0	0	.10	.12	.32	.10
10	0	.03		0			0	0	.11	.46	.28	0
11	.12	.03		0			.05	.02	.06	1.0	.17	.04
12	.37	.04		0			.13	0	.03	1.1	.17	.36
13	.20	.03		0			.08	.34	.03	1.1	.20	.01
14	.33	0		0			.16	.37	.13	.94	.22	0
15	.16	.01		0			.47	.40	.30	.76	.47	0
16	.13	0		0			.86	.83	.53	.62	.50	0
17	.04	0		0			.83	.86	.59	1.0	.40	0
18	.03	0		0			.69	.37	.59	1.1	.42	0
19	.01	.01		0			.37	.28	.40	.97	.35	0
20	0	0		0			.30	.28	.24	.80	.50	0
21	.02	0		0			.32	.16	.20	.91	.42	0
22	.12	0		0			.40	.10	.14	.59	.13	0
23	.28	0		0			.47	.07	.13	.80	0	0
24	0	0		0			.40	.07	.09	1.1	0	0
25	0	0		0			.47	.10	.06	.97	.08	0
26	0	0		0			.90	.19	.03	1.0	.13	0
27	0	0		0			.97	.20	.08	1.1	.12	0
28	.02	0		0			.90	.28	.16	1.1	.16	0
29	.01	0		0	---		.97	.40	.11	1.1	0	0
30	.12	0		.02	---		1.1	.35	.12	.86	.05	0
31	0	---		.01	---		---	.17	---	.72	.09	---
TOTAL	2.13	.39	0	.03	0	0	10.84	10.01	4.87	24.42	9.90	.76
MEAN	.069	.013	0	.001	0	0	.36	.32	.16	.79	.32	.025
MAX	.37	.21	0	.02	0	0	1.1	1.2	.59	1.1	.72	.36
MIN	0	0	0	0	0	0	0	0	.02	0	0	0
AC-FT	4.2	.8	0	.06	0	0	22	20	9.7	48	20	1.5
WTR YR 1974	TOTAL	75.57	MEAN	.21	MAX	.86	MIN	0	AC-FT	150		
CAL YR 1975	TOTAL	63.35	MEAN	.17	MAX	1.2	MIN	0	AC-FT	126		

## 08387000 RIO RUIDOSO AT HOLLYWOOD, N. MEX.

LOCATION.--Lat 33°19'43", long 105°36'34", in SW¼SE¼NE¼ sec.30, T.11 S., R.14 E., Lincoln County, on right upstream bridge abutment on road leading to Ruidoso Downs race track, 0.2 mi (0.3 km) north of U.S. Highway 70, 1.1 mi (1.8 km) east of the Hollywood Post Office, 1.2 mi (1.9 km) downstream from the Ruidoso sewage disposal plant, 1.8 mi (2.9 km) downstream from Gavilan Canyon, 2.8 mi (4.5 km) downstream from Carrizo Creek, and at mile 23.4 (37.7 km).

DRAINAGE AREA.--120 mi<sup>2</sup> (310 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,365.42 ft (1,940.180 m) above mean sea level. Prior to Oct. 14, 1961, at datum 0.30 ft (0.091 m) higher. Oct. 14, 1961, to Mar. 8, 1962, at datum 0.60 ft (0.183 m) higher. Mar. 9, 1962, to June 18, 1965, at datum 1.0 ft (0.305 m) higher.

AVERAGE DISCHARGE.--22 years, 13.2 ft<sup>3</sup>/s (0.376 m<sup>3</sup>/s), 9,560 acre-ft/yr (11.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge 212 ft<sup>3</sup>/s (6.00 m<sup>3</sup>/s) Sept. 12 (gage height, 2.76 ft or 0.841 m); minimum, 4.9 ft<sup>3</sup>/s (0.139 m<sup>3</sup>/s) June 27, 28, 30.

Period of record: Maximum discharge, 1,340 ft<sup>3</sup>/s (37.9 m<sup>3</sup>/s) June 17, 1965, (gage height, 9.05 ft or 2.758 m), from rating curve extended above 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.30 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Jan. 1, 1962, May 8-9, 1964.

The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

REMARKS.--Records good. Figures of discharge do not include F. Herrera ditch-S. (see sta 08386900), which diverts from right bank 1.5 mi (2.4 km) upstream and bypasses station for irrigation of 75 acres (30.4 hm<sup>2</sup>), 1959 determination. Village of Ruidoso diverts from right bank 7 mi (11.3 km) upstream for municipal use and returns a portion of this river as effluent from sewage disposal plant 1.2 mi (1.9 km) upstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	33	12	9.0	50	18	19	48	22	7.4	12	13
2	16	31	10	7.5	42	22	18	51	22	6.9	12	13
3	15	38	11	6.5	37	28	17	51	23	7.0	12	12
4	13	33	14	7.5	33	29	18	53	24	8.5	14	15
5	18	32	15	8.0	29	30	20	54	21	9.7	14	12
6	22	32	13	8.1	26	30	24	50	21	13	12	12
7	19	30	13	8.0	21	29	26	43	21	22	12	14
8	17	30	12	7.9	20	30	24	38	22	12	11	17
9	16	49	12	7.9	18	35	26	37	21	10	9.5	30
10	15	64	12	8.2	17	31	25	40	20	12	9.0	55
11	25	58	11	7.5	17	28	23	41	16	12	7.9	71
12	66	50	12	7.0	16	28	22	46	14	19	7.7	181
13	89	42	10	8.5	16	24	21	53	12	14	7.7	181
14	94	40	9.6	10	16	23	24	51	11	12	10	116
15	82	36	9.0	10	16	21	24	51	10	11	17	80
16	73	30	9.3	10	16	19	27	49	10	11	16	59
17	67	28	9.1	11	14	19	42	49	13	14	15	46
18	54	24	9.1	11	13	18	54	44	12	17	17	39
19	42	22	8.4	12	13	18	48	42	9.9	16	16	34
20	37	21	8.2	12	13	19	44	39	9.1	14	19	29
21	33	19	8.3	12	13	23	49	35	8.6	13	22	27
22	33	19	9.5	11	11	23	55	33	8.3	12	20	24
23	66	20	9.8	10	10	24	55	30	7.8	13	22	21
24	69	20	8.0	12	13	23	59	28	7.0	12	22	20
25	63	18	8.5	14	13	22	61	25	6.7	11	20	18
26	56	18	9.8	13	13	23	58	24	6.1	12	17	17
27	49	17	9.0	14	14	23	62	25	5.8	13	17	16
28	42	15	9.8	14	16	23	55	27	5.9	15	18	15
29	39	13	12	16	---	23	52	28	5.8	13	16	14
30	42	12	11	44	---	21	49	26	5.6	15	15	14
31	36	---	10	58	---	20	---	23	---	13	14	---
TOTAL	1327	894	325.4	395.6	546	747	1101	1234	401.6	390.5	453.8	1215
MEAN	42.8	29.8	10.5	12.8	19.5	24.1	36.7	39.8	13.4	12.6	14.6	40.5
MAX	94	64	15	58	50	35	62	54	24	22	22	181
MIN	13	12	8.0	6.5	10	18	17	23	5.6	6.9	7.7	12
AC-FT	2630	1770	645	785	1080	1480	2180	2450	797	775	900	2410

CAL YR 1974 TOTAL 5003.9 MEAN 13.7 MAX 153 MIN 2.3 AC-FT 4930  
WTR YR 1975 TOTAL 9030.9 MEAN 24.7 MAX 181 MIN 5.6 AC-FT 17910

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-14	0845	2.11	121	08-21	1600	2.32	137
07-07	1615	2.21	108	09-12	1945	2.76	212

08387600 EAGLE CREEK BELOW SOUTH FORK, NEAR ALTO, N. MEX.

LOCATION.--Lat 33°23'33", long 105°43'16", in SE¼SW¼ sec.31, T.10 S., R.13 E., Lincoln County, at right bank, 100 ft (30 m) downstream from culvert under State Road No. 532, 0.1 mi (0.2 km) downstream from South Fork, and 2.4 mi (3.9 km) west of Alto. Mouth at Rio Ruidoso mile 11.3 (18.2 km).

DRAINAGE AREA.--8.14 mi<sup>2</sup> (21.08 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,600 ft (2,316 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 2.93 ft<sup>3</sup>/s (0.0829 m<sup>3</sup>/s), 2,120 acre-ft/yr (2.61 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 83 ft<sup>3</sup>/s (2.35 m<sup>3</sup>/s), Sept. 12 (gage height, 3.36 ft or 1.024 m), from rating curve extended above 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s); minimum, 0.73 ft<sup>3</sup>/s (0.021 m<sup>3</sup>/s) June 23.

Period of record: Maximum discharge, 107 ft<sup>3</sup>/s (3.03 m<sup>3</sup>/s) Oct. 20, 1972 (gage height, 3.49 ft or 1.064 m), from rating curve extended above 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s); minimum, 0.05 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) June 30, July 3, 4, 1974.

REMARKS.--Records good except those during the winter months which are poor. No diversions for irrigation above station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	9.0	3.1	1.5	19	6.3	6.5	9.2	3.1	.84	1.2	1.2
2	3.9	8.6	3.1	1.2	14	7.1	6.2	9.5	3.2	.81	1.2	1.1
3	3.6	8.6	3.0	.90	12	8.1	6.2	9.7	3.3	.77	1.2	1.1
4	3.2	8.4	2.8	1.2	11	8.5	6.6	9.7	3.4	1.5	1.2	1.5
5	3.4	7.6	3.0	1.6	8.9	8.2	7.2	9.7	3.3	1.9	1.2	1.2
6	5.0	7.4	2.9	1.8	8.1	8.4	8.1	8.8	2.8	1.7	1.0	1.3
7	8.2	7.1	2.7	2.0	7.3	8.2	8.5	7.7	2.8	1.5	.93	1.4
8	6.9	7.3	2.4	2.0	6.7	9.0	7.8	6.9	2.7	1.3	1.3	1.7
9	7.0	8.6	2.8	1.7	6.2	11	7.2	6.8	2.5	1.2	1.9	2.7
10	6.5	10	2.9	1.2	5.9	11	6.9	7.2	2.3	1.2	1.4	4.5
11	10	10	2.5	.90	5.6	9.7	6.6	7.0	2.2	1.3	.99	13
12	25	9.2	2.6	.90	5.3	9.4	6.3	7.5	1.9	2.1	1.1	66
13	34	8.6	2.4	1.4	5.0	8.8	6.0	8.7	1.8	1.9	1.1	35
14	41	8.0	2.3	1.8	5.0	8.0	5.9	8.2	1.6	1.6	1.3	15
15	36	7.2	2.3	2.1	4.9	7.4	5.7	7.9	1.5	1.4	1.4	10
16	25	6.6	2.3	2.2	4.8	6.9	6.1	7.5	1.5	1.2	1.2	7.3
17	18	6.0	2.3	2.3	4.3	6.7	8.8	7.2	1.4	3.5	1.4	5.7
18	13	5.6	2.2	2.4	3.8	6.4	12	6.8	1.3	3.8	2.7	4.6
19	11	5.2	2.1	2.6	3.5	6.4	11	6.5	1.2	3.1	2.0	4.0
20	9.3	4.7	2.1	2.8	3.9	6.6	9.8	6.3	1.2	2.3	1.9	3.4
21	8.2	4.2	2.2	2.9	4.0	7.4	10	5.6	1.1	2.0	1.7	3.5
22	9.1	4.4	2.1	2.5	3.2	7.8	11	5.1	1.0	2.1	2.6	3.0
23	26	4.1	2.1	3.0	2.5	7.8	11	4.7	.93	2.4	2.1	2.7
24	29	3.9	1.9	3.2	3.0	7.2	12	4.3	.91	2.0	2.0	2.4
25	23	3.8	1.7	3.1	4.4	6.8	12	4.0	.85	1.6	1.7	2.2
26	18	3.7	1.5	3.1	5.2	6.7	12	4.0	.84	1.8	1.5	2.0
27	15	3.5	1.4	3.2	5.4	6.8	13	4.1	.81	1.7	1.6	1.9
28	12	3.5	1.6	3.6	5.7	6.8	12	4.3	.81	1.5	1.6	1.8
29	11	3.3	2.0	4.5	---	5.9	10	4.4	.81	1.5	1.5	1.7
30	11	3.1	2.4	28	---	6.2	9.6	4.0	.87	1.4	1.4	1.7
31	10	---	2.0	25	---	6.5	---	3.5	---	1.3	1.3	---
TOTAL	446.5	191.2	72.7	116.50	178.6	238.0	262.0	206.8	53.93	54.22	46.62	204.6
MEAN	14.4	6.37	2.35	3.76	6.38	7.68	8.73	6.67	1.80	1.75	1.50	6.82
MAX	41	10	3.1	28	19	11	13	9.7	3.4	3.8	2.7	66
MIN	3.2	3.1	1.4	.80	2.5	5.9	5.7	3.5	.81	.77	.93	1.1
AC-FT	886	379	144	231	354	472	520	410	107	108	92	406

CAL YR 1974 TOTAL 1237.97 MEAN 3.39 MAX 58 MIN .06 AC-FT 2460  
WTR YR 1975 TOTAL 2071.67 MEAN 5.68 MAX 66 MIN .77 AC-FT 4110

PEAK DISCHARGE (BASE, 25 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-14	0830	3.14	49	01-30	0615	3.10	44
10-23	0545	3.04	38	09-12	0715	3.36	83

08387800 EAGLE CREEK NEAR ALTO, N. MEX.

LOCATION.--Lat 33°23'29", long 105°36'39", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.31, T.10 S., R.14 E., Lincoln County, on left bank 200 ft (60 m) north of Lincoln National Forest boundary, 500 ft (152 m) northeast of windmill, and 4.0 mi (6.4 km) east of Alto. Mouth at Rio Ruidoso mile 11.3 (18.2 km).

DRAINAGE AREA.--15.7 mi<sup>2</sup> (40.7 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,838 ft (2,084 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 1.78 ft<sup>3</sup>/s (0.0504 m<sup>3</sup>/s), 1,290 acre-ft/yr (1.59 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 34 ft<sup>3</sup>/s (0.963 m<sup>3</sup>/s) Sept. 12 (gage height, 1.57 ft or 0.479 m); no flow many days.  
Period of record: Maximum discharge, 47 ft<sup>3</sup>/s (1.33 m<sup>3</sup>/s) Sept. 22, 1974 (gage height, 1.76 ft or 0.536 m); no flow most of time.

REMARKS.--Records good. Discharge at this station is affected by Alto Reservoir and municipal water supply diversions for Ruidoso and Capitan.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	11	2.2	.14	19	7.0	8.4	8.6	.48	0	0	0
2	.85	11	1.8	.11	16	8.1	7.8	8.9	.28	0	0	0
3	.42	11	.69	.10	14	8.9	6.8	9.2	.26	0	0	0
4	.01	11	.52	.10	13	9.8	5.4	9.2	.28	0	0	0
5	.32	10	.60	.09	11	8.4	7.0	9.2	.22	0	0	0
6	2.4	9.8	.97	.09	9.8	6.3	8.9	8.6	.16	0	0	0
7	6.3	9.2	1.4	.08	9.2	6.1	9.8	7.5	0	0	0	0
8	6.2	9.2	1.4	.07	8.4	6.6	8.6	6.1	0	0	0	0
9	5.9	10	1.5	.06	8.1	9.8	8.1	5.2	0	0	0	0
10	5.2	11	1.7	.05	7.5	9.8	7.5	6.1	0	.05	0	0
11	8.1	11	2.0	.05	7.0	9.5	7.3	5.9	0	0	0	0
12	18	8.6	1.4	.03	6.8	9.5	7.3	5.9	0	.07	0	29
13	24	8.1	.64	.15	6.3	8.4	6.1	7.5	0	0	0	25
14	.28	8.6	.40	.45	6.3	8.6	4.6	7.8	0	0	0	14
15	27	8.2	.27	.56	6.1	8.1	4.0	6.8	0	0	0	9.2
16	22	7.7	.30	.13	5.9	7.5	4.2	6.6	0	0	0	5.2
17	18	7.3	.28	.10	5.4	7.5	6.8	6.3	0	.10	0	.76
18	14	7.0	.26	.09	3.0	6.8	11	5.4	0	1.8	0	.21
19	11	6.6	.18	.06	4.0	5.9	11	4.8	0	1.7	.02	.67
20	8.1	5.9	.23	.12	4.6	5.9	9.5	4.0	0	.52	.47	.48
21	10	3.0	.39	1.0	4.6	7.0	9.5	3.3	0	0	0	.79
22	10	2.4	.12	.50	3.5	7.5	11	2.4	0	0	.08	.39
23	23	3.8	.09	.40	3.0	7.8	12	2.2	0	.12	0	0
24	24	3.3	.10	.42	3.5	7.3	13	1.6	0	.40	0	0
25	22	3.0	.11	.20	4.5	6.6	13	1.1	0	.99	0	0
26	19	2.4	.13	.60	5.9	6.8	14	.97	0	0	0	0
27	18	2.0	.12	1.1	6.1	7.3	15	.91	0	0	0	0
28	15	2.1	.26	1.9	6.3	6.6	13	.91	0	0	0	0
29	13	2.0	.34	2.4	---	5.4	10	1.2	0	.01	0	0
30	14	1.9	.39	19	---	5.4	9.5	1.2	0	0	0	0
31	13	---	.24	23	---	7.8	---	.91	---	0	0	---
TOTAL	388.40	208.1	21.03	53.15	208.8	234.0	270.1	156.30	1.68	5.76	.57	85.70
MEAN	12.5	6.94	.68	1.71	7.46	7.55	9.00	5.04	.056	.19	.018	2.86
MAX	28	11	2.2	23	19	9.8	15	9.2	.48	1.8	.47	29
MIN	.01	1.9	.09	.03	3.0	5.4	4.0	.91	0	0	0	0
AC-FT	770	413	42	105	414	464	536	310	3.3	11	1.1	170
CAL YR 1974 TOTAL	784.53											
WTR YR 1975 TOTAL	1633.59											
MEAN 2.15												
MAX 39												
MIN 0												
AC-FT 1560												
MEAN 4.48												
MAX 29												
MIN 0												
AC-FT 3240												

PEAK DISCHARGE (BASE, 25 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-14	1330	1.55	32	09-12	0830	1.57	34

## 08390500 RIO HONDO AT DIAMOND A RANCH, NEAR ROSWELL, N. MEX.

LOCATION.--Lat 33°20'57", long 104°51'05", in NE¼NE¼ sec.20, T.11 S., R.21 E., Chaves County, on right bank 15 ft (5 m) downstream from county road bridge at Diamond A Ranch, 1.3 mi (2.1 km) south of U.S. Highway 70-380, 13 mi (21 km) upstream from Two Rivers Reservoir, 21 mi (34 km) upstream from mouth of Rocky Arroyo, 18 mi (29 km) west of Roswell, and at mile 44.7 (71.9 km).

DRAINAGE AREA.--947 mi<sup>2</sup> (2,450 km<sup>2</sup>), contributing area.

PERIOD OF RECORD.--May 1908 to August 1909, May 1939 to current year. Monthly discharge only for 1908-9, published in Technical Report No. 7, State of New Mexico, Streamflow and Reservoir Content 1888-1954.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,190 ft (1,277 m), from topographic map. Prior to Nov. 11, 1965, at site on opposite bank at same datum. Supplemental water-stage recorder on opposite bank Nov. 11, 1965 to December 1972, at same datum.

AVERAGE DISCHARGE.--36 years (1939-75) 22.6 ft<sup>3</sup>/s (0.640 m<sup>3</sup>/s), 16,370 acre-ft/yr (20.2 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft<sup>3</sup>/s (30.6 m<sup>3</sup>/s) Oct. 23 (gage height, 14.11 ft or 4.301 m); no flow many days. Period of record: Maximum discharge, 54,800 ft<sup>3</sup>/s (1,550 m<sup>3</sup>/s) June 18, 1965 (gage height, 26.40 ft or 8.047 m), from rating curve extended above 3,000 cfs (85.0 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; maximum gage height, 28.78 ft (8.772 m), Sept. 22, 1941; no flow most of time.

A flood on June 1, 1937, reached a discharge of 24,900 ft<sup>3</sup>/s (705 m<sup>3</sup>/s) at Riverside about 13 mi (21 km) upstream. Other major floods occurred Oct. 31, 1901, Sept. 29, 30, 1904, and July 25, 1905.

REMARKS.--Records fair. Diversions and ground-water withdrawals above station for irrigation above and below station of about 6,500 acres (2,630 hm<sup>2</sup>), 1959 determination.

REVISIONS (WATER YEARS).--WSP 1392: Drainage area. WSP 1512: 1939-40(P), 1941, 1942-43(P), 1946(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	79	26	7.9	44	1.8	9.1	41			0	0
2	0	76	25	10	73	1.8	6.4	36			0	0
3	0	75	24	9.1	71	1.9	3.4	32			0	0
4	0	82	16	8.3	58	2.4	2.4	32			0	0
5	0	75	9.5	7.5	43	3.4	1.3	43			0	0
6	0	71	5.9	6.7	36	4.6	.33	34			0	0
7	0	66	5.6	6.7	32	5.1	.37	31			0	.05
8	0	62	6.4	6.7	29	4.6	2.5	24			0	0
9	0	61	7.1	7.1	27	2.9	2.5	18			0	0
10	0	71	7.5	7.5	26	3.4	1.5	17			0	0
11	10	86	8.3	7.5	19	5.9	1.4	22			0	.09
12	82	88	8.3	6.5	9.1	6.2	1.2	25			0	.30
13	81	83	8.3	10	6.2	6.7	4.3	16			0	134
14	162	78	6.7	8.7	3.7	6.4	4.8	14			0	133
15	130	75	6.7	8.3	3.9	5.4	2.7	13			0	97
16	132	69	7.9	8.3	3.7	4.0	1.8	13			0	71
17	115	60	7.9	8.7	3.4	4.6	.73	12			0	57
18	98	57	8.7	7.9	2.5	6.2	0	21			0	46
19	82	50	8.7	7.1	4.0	7.5	1.1	26			0	39
20	72	45	9.5	7.1	4.8	3.4	12	19			0	32
21	64	42	8.7	7.1	.50	2.0	11	17			0	32
22	89	36	7.9	7.1	.50	2.2	8.7	13			0	29
23	427	35	7.5	7.5	.30	1.9	6.4	12			19	23
24	171	32	7.5	7.5	2.5	2.9	9.1	6.7			11	19
25	132	31	7.9	7.5	4.6	3.5	15	3.0			4.6	8.7
26	124	30	8.7	6.4	4.0	2.2	30	2.5			.13	4.0
27	126	28	7.1	5.9	3.0	2.4	38	.44			.48	2.5
28	102	28	8.0	3.9	2.1	3.7	51	0			0	1.5
29	90	27	7.9	2.9	---	6.4	51	0			0	.82
30	82	26	7.5	.34	---	10	42	0			0	0
31	84	---	7.5	0	---	12	---	0	---		0	---
TOTAL	2455	1724	300.2	213.74	516.20	137.4	322.03	543.64	0	0	35.21	729.96
MEAN	79.2	57.5	9.68	6.89	18.4	4.43	10.7	17.5	0	0	1.14	24.3
MAX	427	88	26	10	73	12	51	43	0	0	19	134
MIN	0	26	5.6	0	.30	1.8	0	0	0	0	0	0
AC-FT	4870	3020	595	424	1020	273	639	1080	0	0	70	1450

CAL YR 1974 TOTAL 5428.29 MEAN 14.9 MAX 427 MIN 0 AC-FT 10770

WTR YR 1975 TOTAL 6977.38 MEAN 19.1 MAX 427 MIN 0 AC-FT 13840

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/S).--October 23 (0930) 1,080 ft<sup>3</sup>/s (14.11 ft).

## 08390600 TWO RIVERS RESERVOIR NEAR ROSWELL, N. MEX.

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, near center of Diamond A Dam on Rio Hondo, 13 mi (20.9 km) southwest of Roswell at mile 33.4 (53.7 km); 08390620 Rocky Arroyo Reservoir: Lat 33°16'20", long 104°43'20", in NW¼SE¼NE¼ sec.16, T.12 S., R.22 E., Chaves County, at left end of Rocky Dam on Rocky Arroyo, and 14 mi (22.5 km) southwest of Roswell.

DRAINAGE AREA.--1,027 mi<sup>2</sup> (2,660 km<sup>2</sup>); Rio Hondo, 963 mi<sup>2</sup> (2,494 km<sup>2</sup>); Rocky Arroyo, 64 mi<sup>2</sup> (166 km<sup>2</sup>).

PERIOD OF RECORD.--July 1963 to current year. Prior to October 1965 (monthend contents only).

GAGE.--Water-stage recorders. Datum of gages is mean sea level.

EXTREMES.--Current year: Maximum contents at 2400 hours of Rio Hondo Reservoir, 361 acre-ft (445,000 m<sup>3</sup>) Oct. 23, elevation, 3,981.80 ft (1,213.653 m); no contents most of time. Maximum contents at 2400 hours for Rocky Arroyo Reservoir, 1,230 acre-ft (1.52 hm<sup>3</sup>) Oct. 23, elevation, 3,959.70 ft (1,206.917 m); no contents most of time.

Period of record: Maximum contents at 0800 hours of Rio Hondo Reservoir, 1,260 acre-ft (1.55 hm<sup>3</sup>) July 29, 1965, elevation, 3,985.7 ft (1,214.84 m); Rocky Arroyo Reservoir at 0800 hours, 6,090 acre-ft (7.51 hm<sup>3</sup>) June 18, 1965, elevation, 3,970.7 ft (1,210.27 m); no contents both reservoirs most of time.

REMARKS.--Two Rivers Reservoir, completed July 16, 1963, is formed by earthfill dams on Rio Hondo, which forms Rio Hondo Reservoir; and Rocky Arroyo which forms Rocky Arroyo Reservoir. Above elevation 3,980.0 ft (1,213.10 m) the pools of the two reservoirs combine to form Two Rivers Reservoir with a total capacity of 166,200 acre-ft (205 hm<sup>3</sup>) at elevation 4,032.0 ft (1,228.95 m) crest of ungated spillway. Capacity of Rio Hondo Reservoir, 181 acre-ft (223,000 m<sup>3</sup>) between elevations 3,957.0 ft (1,206.09 m), sill of outlet gate, and 3,980.0 ft (1,213.10 m). Capacity of Rocky Arroyo Reservoir, 13,410 acre-ft (16.5 hm<sup>3</sup>) between elevations 3,945.0 ft (1,202.44 m), sill of outlet gate, and 3,980.0 ft (1,213.10 m). 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 effective Jan. 1, 1972, (in table, reservoirs separated as indicated).

COOPERATION.--Records furnished by Corps of Engineers.

## ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET, AT 2400 HOURS, WATER YEAR 1975

RIO HONDO RESERVOIR			ROCKY RESERVOIR	
DATE	ELEVATION	CONTENTS	ELEVATION	CONTENTS
Oct.	1	3,974.00	22	0
	2	3,973.00	14	0
	3	3,972.50	11	0
	4	3,972.00	8.0	0
	5	3,971.50	6.0	0
	6	3,971.00	4.0	0
	13	-	0	123
	14	3,970.70	4.0	258
	15	3,971.00	4.0	26
	16	3,968.00	1.0	0
	23	3,981.80	361	1,230
	24	3,969.00	2.0	304
	25	-	0	4.0
27	3,975.00	33	-	0

NOTE.--Storage at 2400 hours, only on days listed above.



08390800 RIO HONDO BELOW DIAMOND A DAM, NEAR ROSWELL, N. MEX.

LOCATION.--Lat 33°18'05", long 104°43'12", in NE¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, on left bank, 500 ft (152 m) downstream from outlet conduit of Diamond A dam (Two Rivers Reservoir), 13 mi (20.9 km) southwest of Roswell, and at mile 33.3 (53.6 km).

DRAINAGE AREA.--963 mi<sup>2</sup> (2,490 km<sup>2</sup>), contributing area.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,949.68 ft (1,203.862 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--12 years, 9.07 ft<sup>3</sup>/s (0.257 m<sup>3</sup>/s), 6,570 acre-ft/yr (8.10 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 357 ft<sup>3</sup>/s (10.1 m<sup>3</sup>/s) Oct. 24 (gage height, 3.65 ft or 1.113 m); no flow most of time.  
Period of record: Maximum discharge, 659 ft<sup>3</sup>/s (18.7 m<sup>3</sup>/s) July 29, 1965 (gage height, 4.91 ft or 1.497 m); no flow most of time.

REMARKS.--Records fair. Diversions and ground-water withdrawals for irrigation of about 6,500 acres (2,630 hm<sup>2</sup>), 1959 determination, above station. This record represents the outflow from Two Rivers Reservoir through Diamond A Dam.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	62	20	.90	8.5		.03	22		0		0
2	0	57	19	.70	53		0	19		0		0
3	0	61	12	4.0	57		0	21		0		0
4	0	70	11	5.0	47		0	14		0		0
5	0	64	3.6	5.0	32		0	31		0		0
6	0	57	1.4	4.0	25		0	22		0		0
7	1.8	46	.24	3.2	20		0	18		0		0
8	0	38	3.3	.99	19		0	9.5		0		0
9	0	34	6.9	2.1	19		0	3.8		0		0
10	0	41	6.9	.12	18		0	.07		1.2		0
11	1.9	55	7.2	0	15		0	4.6		2.5		0
12	36	62	7.6	0	5.5		0	10		0		0
13	89	65	4.0	0	2.1		0	1.2		0		58
14	154	61	1.0	1.6	.24		0	0		0		100
15	118	62	0	1.1	0		0	0		0		89
16	133	55	0	.14	0		0	0		0		65
17	111	45	0	0	0		0	0		0		39
18	94	42	0	0	0		0	0		0		20
19	74	39	0	0	0		0	2.0		0		13
20	58	34	0	0	0		0	5.7		0		8.0
21	49	31	.47	0	0		.32	.02		0		18
22	62	28	.16	0	0		0	0		2.9		16
23	233	25	.58	0	0		0	0		0		8.7
24	291	24	.06	0	0		0	0		0		.99
25	158	22	1.2	0	0		0	0		0		2.3
26	116	22	2.0	0	0		.63	0		0		0
27	116	21	3.5	0	0		.54	0		0		0
28	106	20	4.5	0	0		24	0		0		0
29	59	20	.82	0	---		35	0		0		0
30	72	20	2.3	0	---		27	0		0		0
31	65	---	1.0	0	---		---	0		0		---
TOTAL	2197.7	1283	120.73	29.85	321.34	0	87.52	185.89	0	6.6	0	437.99
MEAN	70.9	42.8	3.89	.96	11.5	0	2.92	6.00	0	.21	0	14.6
MAX	291	70	20	6.0	57	0	35	31	0	2.9	0	100
MIN	0	20	0	0	0	0	0	0	0	0	0	0
AC-FT	4360	2540	239	59	637	0	174	369	0	13	0	869
CAL YR 1974 TOTAL	4108.74			MEAN 11.3	MAX 291	MIN 0	AC-FT 8150					
WTR YR 1975 TOTAL	4670.62			MEAN 12.8	MAX 291	MIN 0	AC-FT 9260					

## 08393200 ROCKY ARROYO ABOVE TWO RIVERS RESERVOIR, NEAR ROSWELL, N. MEX.

LOCATION.--Lat 33°17'07", long 104°47'47", in NE¼SW¼ sec.11, T.12 S., R.21½ E., Chaves County, on left bank, 2.1 mi (3.4 km) upstream from mouth of Buchanan Draw, 5.2 mi (8.4 km) upstream from Rocky Dam (Two Rivers Reservoir), and 17 mi (27.4 km) southwest of Roswell.

DRAINAGE AREA.--31 mi<sup>2</sup> (80 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,059.17 ft (1,237.235 m) above mean sea level (Corps of Engineers datum). Prior to Dec. 7, 1968, at site on opposite bank at datum 3.72 ft (1.134 m) lower.

AVERAGE DISCHARGE.--12 years, 1.08 ft<sup>3</sup>/s (0.0306 m<sup>3</sup>/s), 782 acre-ft/yr (964,000 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,540 ft<sup>3</sup>/s (71.9 m<sup>3</sup>/s) Oct. 23 (gage height, 6.30 ft or 1.920 m); no flow most of time. Period of record: Maximum discharge, 12,000 ft<sup>3</sup>/s (340 m<sup>3</sup>/s) July 5, 1968 (gage height, 11.53 ft or 3.514 m, from floodmarks, present datum), from rating curve extended above 350 ft<sup>3</sup>/s (9.91 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 5.92 ft (1.804 m), 7.14 ft (2.176 m), and 11.53 ft (3.514 m), present datum; no flow most of time.

REMARKS.--Records good. No diversions above station. Flow past station represents inflow to Two Rivers Reservoir.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0											
2	0											
3	0											
4	0											
5	0											
6	0											
7	0											
8	0											
9	0											
10	0											
11	67											
12	2.6											
13	.01											
14	139											
15	8.0											
16	.01											
17	0											
18	0											
19	0											
20	0											
21	0											
22	5.5											
23	501											
24	3.0											
25	0											
26	0											
27	0											
28	0											
29	0											
30	0											
31	0	---			---		---		---			---
TOTAL	726.12	0	0	0	0	0	0	0	0	0	0	0
MEAN	23.4	0	0	0	0	0	0	0	0	0	0	0
MAX	501	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1440	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1974 TOTAL	1414.03	MEAN 3.87	MAX 501	MIN 0	AC-FT 2800							
WTR YR 1975 TOTAL	726.12	MEAN 1.99	MAX 501	MIN 0	AC-FT 1440							

PEAK DISCHARGE (BASE, 90 FT<sup>3</sup>/s)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	0530	3.20	255	10-23	0900	6.30	2,540
10-14	1030	3.81	525				

08393300 ROCKY ARROYO BELOW ROCKY DAM, NEAR ROSWELL, N. MEX.

LOCATION.--Lat 33°16'11", long 104°43'13", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.16, T.12 S., R.22 E., Chaves County, on left bank, 300 ft (90 m) downstream from outlet structure in Rocky Dam (Two Rivers Reservoir) and 13.5 mi (21.7 km) southwest of Roswell.

DRAINAGE AREA.--64 mi<sup>2</sup> (166 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,935.66 ft (1,199.589 m) above mean sea level (Corps of Engineers bench mark). Prior to Jan. 12, 1972, at site 1.4 mi (2.3 km) downstream at datum 28.76 ft (8.766 m) lower.

AVERAGE DISCHARGE.--12 years, 1.87 ft<sup>3</sup>/s (0.0530 m<sup>3</sup>/s), 1,350 acre-ft/yr (1.66 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 202 ft<sup>3</sup>/s (5.72 m<sup>3</sup>/s) Oct 24 (gage height 2.79 ft or 0.850 m); no flow most of time.  
Period of record: Maximum discharge, 548 ft<sup>3</sup>/s (15.5 m<sup>3</sup>/s) Aug. 21, 1966 (gage height, 4.57 ft or 1.393 m), site and datum then in use, from rating curve extended above 260 ft<sup>3</sup>/s (7.36 m<sup>3</sup>/s); no flow most of time.

REMARKS.--Records good. No diversions above station. This record represents the outflow from Two Rivers Reservoir through Rocky Dam. Outlet conduits in Rocky Dam have fixed openings.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		
2	0									0		
3	0									0		
4	0									0		
5	0									0		
6	0									0		
7	0									0		
8	0									0		
9	0									0		
10	0									0		
11	4.7									0		
12	.06									0		
13	0									0		
14	105									0		
15	100									0		
16	6.9									0		
17	0									0		
18	0									0		
19	0									0		
20	0									0		
21	0									0		
22	.01									3.5		
23	152									.01		
24	167									0		
25	42									0		
26	20									0		
27	.01									0		
28	0									0		
29	0				---					0		
30	0				---					0		
31	0	---			---		---		---	0		---
TOTAL	597.68	0	0	0	0	0	0	0	0	3.51	0	0
MEAN	19.3	0	0	0	0	0	0	0	0	.11	0	0
MAX	167	0	0	0	0	0	0	0	0	3.5	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1190	0	0	0	0	0	0	0	0	7.0	0	0
CAL YR 1974	TOTAL 875.97	MEAN 2.40	MAX 167	MIN 0	AC-FT 1740							
WTR YR 1975	TOTAL 601.19	MEAN 1.65	MAX 167	MIN 0	AC-FT 1190							

08393600 NORTH SPRING RIVER AT ROSWELL, N. MEX.

LOCATION.--Lat 33°23'47", long 104°32'53", in NW¼SW¼SE¼ sec.31, T.10 S., R.24 E., Chaves County, in Roswell Municipal Golf Course, on left bank 2,400 ft (730 m) upstream from Montana Avenue, and 2 blocks north of West Second Street, Roswell.

DRAINAGE AREA.--19.5 mi<sup>2</sup> (31.4 km<sup>2</sup>).

PERIOD OF RECORD.--May 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,575 ft (1,090 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 0.047 ft<sup>3</sup>/s (0.0013 m<sup>3</sup>/s), 34 acre-ft/yr (41,900 m<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 15 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) July 22 (gage height, 2.65 ft or 0.808 m); no flow most of time.  
Period of record: Maximum discharge, 387 ft<sup>3</sup>/s (11.0 m<sup>3</sup>/s) June 13, 1964 (gage height, 4.65 ft or 1.417 m), from rating curve extended above 80 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/s) on basis of slope-area measurement; no flow most of time.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		0
2	0									0		0
3	0									0		0
4	0									0		0
5	0									0		0
6	0									0		0
7	0									0		0
8	0									0		0
9	0									0		0
10	0									0		0
11	0									0		0
12	3.3									0		.10
13	0									0		0
14	1.9									0		0
15	.09									0		0
16	0									0		0
17	0									0		0
18	0									0		0
19	0									0		0
20	0									0		0
21	0									0		0
22	0									.60		0
23	1.3									0		0
24	0									0		0
25	0									0		0
26	0									0		0
27	0									0		0
28	0									0		0
29	0				---					0		0
30	0				---					0		0
31	0	---			---		---		---	0		---
TOTAL	6.59	0	0	0	0	0	0	0	0	.60	0	.10
MEAN	.21	0	0	0	0	0	0	0	0	.019	0	.003
MAX	3.3	0	0	0	0	0	0	0	0	.60	0	.10
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	13	0	0	0	0	0	0	0	0	1.2	0	.2

CAL YR 1974 TOTAL 10.40 MEAN .029 MAX 3.3 MIN 0 AC-FT 21  
WTR YR 1975 TOTAL 7.29 MEAN .020 MAX 3.3 MIN 0 AC-FT 14

PEAK DISCHARGE (BASE, 25 FT<sup>3</sup>/S).-- No peak above base.

## 08394100 PECOS RIVER NEAR HAGERMAN, N. MEX.

LOCATION.--Lat 33°10'08", long 104°18'24", in SE¼SW¼SE¼ sec.23, T.13 S., R.26 E., Chaves County, on left bank 3.4 mi (5.5 km) upstream from Rio Felix, 4.9 mi (7.9 km) north of Hagerman, and at mile 548.3 (882.2 km).

DRAINAGE AREA.--13,630 mi<sup>2</sup> (35,300 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--February 1968 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 3,390 ft (1,033 m), from topographic map.

EXTREMES.--Current year: Maximum discharge not determined; minimum 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Sept. 1 or 2, from recorded range-in stage.  
Period of record: Maximum discharge not determined; no flow at times in 1971, 1974.

REMARKS.--Records fair. Flow partly regulated by Lake Sumner (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 80,000 acres (324 km<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	136	78	73	35	52	20	14	12	782	74	3.0
2	54	146	78	79	42	49	22	14	11	770	64	3.0
3	49	150	79	78	51	45	26	14	11	788	58	5.0
4	47	134	76	78	86	42	28	17	11	891	54	6.0
5	47	127	73	72	108	39	28	12	10	820	65	6.0
6	46	123	70	67	97	38	28	10	10	319	46	7.0
7	49	114	65	52	80	33	31	11	9.2	200	39	5.0
8	51	108	65	48	72	34	32	10	665	288	29	6.0
9	52	106	70	48	66	34	33	9.6	733	146	23	5.0
10	48	103	66	47	52	33	35	14	806	114	19	5.0
11	52	97	66	45	50	33	33	17	1030	105	15	7.0
12	314	90	65	42	44	34	36	16	852	86	12	9.0
13	974	87	64	34	41	35	40	16	788	94	13	25
14	434	85	62	34	40	36	42	17	832	94	13	24
15	222	67	60	38	40	35	42	14	858	73	12	140
16	188	65	58	37	44	33	42	10	820	53	11	90
17	163	65	56	38	42	31	46	10	846	46	12	60
18	150	72	56	39	41	28	48	13	800	35	56	45
19	140	73	56	40	42	27	38	12	794	31	36	36
20	116	72	56	44	42	22	31	12	806	35	22	28
21	106	73	55	46	40	21	27	12	782	34	13	28
22	114	72	55	44	44	22	25	12	826	233	10	24
23	---	72	55	45	46	23	23	13	820	2150	8.6	38
24	---	69	54	46	45	21	21	13	917	847	7.9	34
25	425	66	54	42	47	21	20	10	826	216	7.2	41
26	260	79	55	40	54	19	19	12	800	138	4.5	43
27	183	80	57	36	54	18	21	11	782	112	4.5	41
28	229	80	58	33	51	17	18	12	788	104	4.2	36
29	188	76	58	31	---	18	17	13	800	92	6.5	32
30	174	76	64	31	---	20	15	12	794	108	4.7	28
31	160	---	66	32	---	19	---	12	---	121	4.0	---
TOTAL	-	2763	1950	1459	1486	932	887	394.6	18839.2	9925	748.1	860.0
MEAN	-	92.1	62.9	47.1	53.1	30.1	29.6	12.7	628	320	24.1	28.7
MAX	-	150	79	79	108	52	48	17	1030	2150	74	140
MIN	-	65	54	31	35	17	15	9.6	9.2	31	4.0	3.0
AC-FT	-	5480	3870	2890	2950	1850	1760	783	37370	19690	1480	1710

08394500 RIO FELIX AT OLD HIGHWAY BRIDGE, NEAR HAGERMAN, N. MEX.

LOCATION.--Lat 33°07'30", long 104°20'40", in SW¼SW¼SE¼ sec.4, T.14 S., R.26 E., Chaves County, near left bank on downstream side of abandoned bridge pier, 0.6 mi (1.0 km) upstream from alternate U.S. Highway 285, 1.3 mi (2.1 km) northwest of Hagerman, and 2.7 mi (4.3 km) upstream from mouth. Mouth at Pecos River mile 544.9 (876.7 km).

DRAINAGE AREA.--932 mi<sup>2</sup> (2,410 km<sup>2</sup>), contributing area.

PERIOD OF RECORD.--April 1939 to current year. March 1932 to April 1939 at site 1 mi (1.6 km) downstream; records for periods of low flow not equivalent, owing to inflow between sites.

GAGE.--Water-stage recorder. Datum of gage is 3,403.40 ft (1,037.356 m) above mean sea level.

AVERAGE DISCHARGE.--36 years, 16.0 ft<sup>3</sup>/s (0.453 m<sup>3</sup>/s), 11,590 acre-ft/yr (14.3 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 10,100 ft<sup>3</sup>/s (286 m<sup>3</sup>/s) Oct. 23 (gage height, 17.40 ft or 5.304 m); no flow most of time.

Period of record: Maximum discharge, 74,000 ft<sup>3</sup>/s (2,100 m<sup>3</sup>/s) Oct. 7, 1954 (gage height, 27.5 ft or 8.38 m, from floodmarks), from rating curve extended above 12,000 ft<sup>3</sup>/s (340 m<sup>3</sup>/s) on basis of slope-area measurement at point 5.5 mi (8.8 km) upstream from gage (adjusted for channel storage); no flow for many periods.

Flood in 1954 is the highest since 1894 (information from local residents). Flood of Oct. 1, 1904, is probably second highest. Another major flood occurred in April 1915.

REMARKS.--Records fair. Diversions for irrigation of about 350 acres (142 hm<sup>2</sup>), 1959 determination, above station.

REVISIONS (WATER YEARS).--WSP 928: 1940(M). WSP 1562: 1939-40, 1941(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	0		0	3.5	6.1				0		
2	3.8	0		0	5.5	6.5				0		
3	0	0		0	16	0.07				0		
4	0	0		0	24	0				0		
5	0	0		0	3.8	0				0		
6	0	0		0	.01	0				0		
7	0	0		0	0	0				0		
8	0	0		0	0	0				0		
9	0	0		0	0	0				0		
10	0	0		0	0	0				0		
11	0	0		0	0	0				0		
12	2.8	0		0	0	0				0		
13	5.4	0		0	0	0				0		
14	10	0		4.1	0	0				0		
15	7.2	0		3.3	0	0				0		
16	2.0	9.2		1.1	0	0				0		
17	.32	9.9		1.0	0	0				0		
18	.05	2.8		.94	0	0				0		
19	0	2.7		1.2	0	0				0		
20	0	3.0		1.0	0	0				0		
21	0	9.1		1.2	0	0				0		
22	2.0	9.6		1.9	.05	0				25		
23	1720	9.9		1.4	5.4	0				13		
24	1390	8.0		2.3	5.1	0				7.7		
25	22	6.3		2.1	4.9	0				6.3		
26	3.0	2.3		.60	2.7	0				5.9		
27	1.0	0		.82	2.8	0				4.7		
28	0	0		.58	5.2	0				2.1		
29	0	0		.17	---	0				.01		
30	0	0		2.6	---	0				0		
31	0	---		2.8	---	0	---		---	0		---
TOTAL	3176.97	72.8	0	29.11	78.96	12.67	0	0	0	64.71	0	0
MEAN	102	2.43	0	.94	2.82	.41	0	0	0	2.09	0	0
MAX	1720	9.9	0	4.1	24	6.5	0	0	0	25	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	6300	144	0	58	157	25	0	0	0	128	0	0
CAL YR 1974 TOTAL	20680.25			MEAN 56.7	MAX 5630	MIN 0	AC-FT 41020					
WTR YR 1975 TOTAL	3435.22			MEAN 9.41	MAX 1720	MIN 0	AC-FT 6810					

PEAK DISCHARGE (BASE, 500 FT<sup>3</sup>/S).--October 23 (2130) 10,100 ft<sup>3</sup>/s (17.40 ft).

08395500 PECOS RIVER NEAR LAKE ARTHUR, N. MEX.

LOCATION.--Lat 32°59'18", long 104°19'20", in SW¼NE¼ sec.27, T.15 S., R.26 E., Chaves County, on left bank 400 ft (120 m) upstream from county bridge, 2.5 mi (4.0 km) east of Lake Arthur, 7 mi (11.3 km) upstream from Cottonwood Creek, 11 mi (17.7 km) northeast of Artesia, and at mile 525.1 (844.9 km).

DRAINAGE AREA.--14,760 mi<sup>2</sup> (38,230 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--August 1938 to current year.

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,327.07 ft (1,014.091 m) above mean sea level.

AVERAGE DISCHARGE.--37 years, 248 ft<sup>3</sup>/s (7.023 m<sup>3</sup>/s), 179,700 acre-ft/yr (222 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,250 ft<sup>3</sup>/s (149 m<sup>3</sup>/s) Oct. 24 (gage height, 11.06 ft or 3.371 m; minimum 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Sept. 20.

Period of record: Maximum discharge, 49,600 ft<sup>3</sup>/s (1,410 m<sup>3</sup>/s) Sept. 24, 1941 (gage height, 21.90 ft or 6.675 m), from rating curve extended above 16,100 ft<sup>3</sup>/s (456 m<sup>3</sup>/s) on basis of slope-area measurement at gage height 21.77 ft (6.635 m); no flow at times in 1947, 1953-4, 1962, 1964.

Flood of May 30, 1937, reached a stage of 21.77 ft (6.635 m), discharge, 51,500 ft<sup>3</sup>/s (1,460 m<sup>3</sup>/s), on basis of slope-area measurement of peak flow.

REMARKS.--Records good. Flow partly regulated by Lake Sumner (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 124,000 acres (50,180 hm<sup>2</sup>), 1959 determination, above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	175	92	81	48	70	15	17	10	746	100	3.2
2	78	161	93	91	53	71	13	15	10	781	62	3.7
3	74	175	92	93	63	66	14	13	14	798	46	2.9
4	67	160	93	93	87	55	15	12	10	897	36	5.1
5	63	150	90	91	127	52	14	12	9.7	894	44	4.3
6	64	145	88	86	123	50	22	12	6.1	520	43	5.1
7	62	140	84	82	111	47	23	8.7	9.5	237	24	5.2
8	66	130	82	67	93	43	31	6.9	312	220	16	4.4
9	66	125	82	64	79	39	34	9.4	602	178	12	5.6
10	67	120	87	63	72	39	28	10	647	135	8.0	4.8
11	62	115	82	63	64	40	36	16	749	138	6.0	4.7
12	81	110	81	61	62	43	37	21	740	119	6.0	6.7
13	595	107	80	56	55	44	34	18	683	101	5.7	10
14	501	105	78	52	51	41	39	14	715	98	5.7	21
15	385	101	78	54	50	39	39	13	740	98	6.0	21
16	248	85	74	59	49	37	39	13	774	63	9.2	93
17	199	93	73	55	54	44	40	9.2	784	49	8.4	51
18	150	98	72	56	51	33	43	13	790	52	14	25
19	135	95	70	56	50	32	49	14	743	43	31	17
20	118	96	71	57	49	24	48	11	758	39	18	6.8
21	97	96	72	63	48	19	43	9.8	760	48	11	9.3
22	93	107	71	63	53	23	34	6.9	800	58	9.1	23
23	514	108	70	61	55	21	29	6.6	801	1220	6.2	8.7
24	2810	103	70	64	59	21	28	5.9	864	1100	5.6	20
25	723	97	69	62	62	20	24	8.4	788	352	5.8	26
26	481	95	73	60	61	13	27	9.6	746	201	5.9	37
27	315	102	71	56	72	12	29	10	752	146	4.5	40
28	278	100	73	54	71	11	33	18	724	120	6.6	40
29	223	96	75	51	---	20	24	13	738	107	5.4	36
30	189	92	78	48	---	33	20	13	750	96	3.4	30
31	184	---	81	47	---	27	---	11	---	125	2.7	---
TOTAL	9079	3482	2445	2009	1872	1129	904	370.4	16829.3	9779	567.2	570.5
MEAN	293	116	78.9	64.8	66.9	36.4	30.1	11.9	561	315	18.3	19.0
MAX	2810	175	93	93	127	71	49	21	864	1220	100	93
MIN	62	85	69	47	48	11	13	5.9	6.1	39	2.7	2.9
AC-FT	18010	6910	4850	3980	3710	2240	1790	735	33380	19400	1130	1130

CAL YR 1974 TOTAL 70964.8 MEAN 194 MAX 5770 MIN 1.6 AC-FT 140800

WTR YR 1975 TOTAL 49036.4 MEAN 134 MAX 2810 MIN 2.7 AC-FT 97260

PEAK DISCHARGE (BASE, 2,500 FT<sup>3</sup>/S--October 24 (1000) 5,250 ft<sup>3</sup>/s (11.06 ft).

## 08396500 PECOS RIVER NEAR ARTESIA, N. MEX.

LOCATION.--Lat 32°50'25", Long 104°19'23", in NW¼ sec.18, T.17 S., R.27 E., Eddy County, near left bank on downstream end of bridge pier on State Highway 83, 4.3 mi (6.9 km) east of Artesia, 7.0 mi (11.3 km) upstream from Rio Pecos, 17 mi (27.4 km) upstream from McMillan Dam, and at mile 503.9 (810.8 km, corrected).

DRAINAGE AREA.--15,300 mi<sup>2</sup> (39,630 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--September 1905 to June 1909, August 1909 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1712. Records for Aug. 22-31, 1934 and October 1936 to April 1937, published in WSP 763 and 828, respectively are not reliable and should not be used. Prior to February 1936, published as "near Dayton."

Gage.--Water-stage recorder. Datum of gage is 3,291.92 ft or 1,003.376 m (corrected) above mean sea level. Prior to Aug. 27, 1914, nonrecording gage and Aug. 27, 1914, to Feb. 20, 1936, water-stage recorder at site 6.5 mi (10.5 km) downstream at different datum. Feb. 21, 1936, to Apr. 4, 1941, water-stage recorder at site 600 ft (183 m) downstream at different datum.

AVERAGE DISCHARGE.--30 years (1905-8, 1909-36), 365 ft<sup>3</sup>/s (10.34 m<sup>3</sup>/s), 264,400 acre-ft/yr (326 hm<sup>3</sup>/yr), prior to completion of Lake Sumner; 39 years (1936-75), 265 ft<sup>3</sup>/s (7.505 m<sup>3</sup>/s), 192,000 acre-ft/yr (237 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, about 4,300 ft<sup>3</sup>/s (122 m<sup>3</sup>/s) Oct. 24 (gage height, 12.20 ft or 3.719 m, flow bypassing gage); minimum recorded, 3.3 ft<sup>3</sup>/s (0.093 m<sup>3</sup>/s) Sept. 2, but may have been less during period of no gage-height record Aug. 2-26. Period of record: Maximum discharge probably occurred May 30, 1937, when a discharge of 51,500 ft<sup>3</sup>/s (1,460 m<sup>3</sup>/s) was measured by slope-area method at a point 15 mi (24.1 km) upstream (gage height, 14.7 ft or 4.48 m), site and datum then in use; no flow at times in 1934, 1946-47, 1953-54, 1957, 1964-65.

Greatest flood since at least 1893 occurred Oct. 2, 1904, discharge not determined; the peak inflow to Lake McMillan, which includes Rio Pecos and Fourmile Draw, was estimated at 82,000 ft<sup>3</sup>/s (2,320 m<sup>3</sup>/s). The second highest flood occurred July 25, 1905, discharge below Rio Pecos, 50,300 ft<sup>3</sup>/s (1,420 m<sup>3</sup>/s), based on gain in storage and spill from Lake McMillan. The floods in August 1893 and October 1904 damaged McMillan Dam and washed out Avalon Dam.

REMARKS.--Records fair except those for discharges below 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s), and periods of overflow Oct. 24-25, which are poor. Flow partly regulated by Lake Sumner (see sta 08384000) since August 1937. Diversions and ground-water withdrawals for irrigation of about 154,000 acres (623 km<sup>2</sup>), 1959 determination, above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312 and 1512: 1913, 1915, 1917-18(M), 1920, 1923, 1931-36. WSP 1712: 1906(M), 1908-11(M), 1919, 1921-23(M), 1929, 1931-32(M), 1935-36(M), 1937, 1939(M), 1941(M). See also PERIOD OF RECORD.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	217	106	88	58	78	29	21	15	765	92	4.0
2	111	185	104	96	68	80	23	19	14	770	52	3.8
3	98	185	104	102	74	77	21	17	14	777	37	4.4
4	88	190	104	102	83	72	21	16	16	813	37	4.4
5	83	170	104	102	116	65	23	14	14	849	80	4.7
6	88	163	98	98	137	62	25	14	12	698	55	5.9
7	83	158	97	96	125	58	29	13	10	283	26	6.5
8	81	151	96	87	111	57	33	12	10	172	20	6.5
9	83	146	91	76	98	54	32	11	552	219	15	4.9
10	83	141	91	74	90	50	32	13	623	129	11	5.9
11	80	134	96	73	83	51	39	14	683	160	8.0	6.2
12	96	130	91	73	76	53	41	19	777	130	8.0	7.8
13	453	125	90	70	72	59	40	21	693	125	9.0	9.0
14	458	122	88	68	65	53	37	20	703	111	8.5	11
15	390	119	87	60	62	51	40	18	724	98	7.0	23
16	291	109	87	65	60	48	43	17	753	85	5.0	41
17	278	103	87	65	60	48	42	17	746	53	8.5	64
18	234	111	84	67	63	48	43	16	787	48	9.0	32
19	203	109	83	65	60	43	44	17	763	51	10	17
20	185	106	81	65	60	41	49	17	779	42	25	15
21	161	108	84	68	57	32	48	16	767	40	8.0	12
22	160	112	84	72	63	28	42	15	787	59	10	13
23	748	116	83	72	64	27	32	11	811	615	10	23
24	3200	116	80	74	67	27	28	12	866	1260	7.0	12
25	1300	112	81	74	72	27	27	10	847	446	6.5	19
26	576	109	87	73	72	21	25	12	791	238	6.0	25
27	348	112	85	69	76	21	25	14	787	151	6.8	35
28	270	114	84	67	83	19	27	20	772	130	6.5	41
29	298	109	85	64	---	19	28	21	779	100	7.1	41
30	236	106	88	63	---	23	23	17	777	80	6.5	35
31	228	---	90	59	---	30	---	16	---	80	4.7	---
TOTAL	11115	3988	2800	2347	2175	1422	991	490	16732	9577	602.1	533.0
MEAN	359	133	90.3	75.7	77.7	45.9	33.0	15.8	558	309	19.4	17.8
MAX	3200	217	106	102	137	80	49	21	866	1260	92	64
MIN	80	103	80	59	57	19	21	10	40	40	4.7	3.8
AC-FT	22050	7910	5550	4660	4310	2820	1970	972	33190	19000	1190	1060

CAL YR 1974 TOTAL 72445.0 MEAN 198 MAX 5600 MIN 2.6 AC-FT 143700  
WTR YR 1975 TOTAL 52772.1 MEAN 145 MAX 3200 MIN 3.8 AC-FT 104700

PEAK DISCHARGE (BASE, 2,000 FT<sup>3</sup>/S).--October 24 (about 1600) about 4,300 ft<sup>3</sup>/s (12.20 ft).

NOTE.--Peak discharge includes overflow through other channels.  
No gage-height record Aug. 2-26.



08398500 RIO PENASCO AT DAYTON, N. MEX.

LOCATION.--Lat 32°44'36", long 104°24'49", in NE¼SE¼SE¼ sec.18, T.18 S., R.26 E., Eddy County, on left bank 1.2 mi (1.9 km) upstream from U.S. Highway 285, 1.9 mi (3.1 km) northwest of old Dayton railway station, 7.0 mi (11.3 km) south of Artesia and at mile 5.6 (9.0 km). Mouth at Pecos River mile 496.4 (798.7 km).

DRAINAGE AREA.--1,060 mi<sup>2</sup> (2,745 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1953, published as "near Dayton."

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,385.19 ft (1,031.806 m) above mean sea level. Prior to May 9, 1968, at site 2.4 mi (3.9 km) downstream, at datum 44.30 ft (13.503 m) lower. May 9, 1968, to June 12, 1975, at present site at datum 1.98 ft (0.604 m) higher.

AVERAGE DISCHARGE.--24 years, 6.32 ft<sup>3</sup>/s (0.179 m<sup>3</sup>/s), 4,580 acre-ft/yr (5.65 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,350 ft<sup>3</sup>/s (66.6 m<sup>3</sup>/s) Oct. 24 (gage height, 3.6 ft or 1.10 m, from floodmarks); no flow most of time.

Period of record: Maximum discharge, 29,800 ft<sup>3</sup>/s (844 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 16.4 ft or 5.00 m, from floodmarks), present site and datum, from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s), on basis of slope-area measurements at gage heights 6.82 ft (2.079 m) and 7.90 ft (2.408 m) at previous site and datum; no flow most of time.

Flood of about Sept. 22, 1941, reached a stage of about 9 ft (2.7 m) previous site and datum (from old logs), and peak discharge for station "near Dunken", at river mile 66.8 (107 km, revised), was 70,000 ft<sup>3</sup>/s (1,980 m<sup>3</sup>/s), as determined for that station in 1956, from floodmarks and rating curve extended above 36,300 ft<sup>3</sup>/s (1,030 m<sup>3</sup>/s).

REMARKS.--Records poor. Diversions and ground-water withdrawals for irrigation of about 3,000 acres (1,214 hm<sup>2</sup>), 1959 determination, above station.

REVISIONS (WATER YEARS).--WSP 1242: 1951(M). WSP 1512: 1956. WSP 1923: 1955.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	.03									
2	0	.01	.03									
3	0	.01	.03									
4	0	.01	.03									
5	0	.01	.03									
6	0	.01	.03									
7	0	.01	.03									
8	0	.01	.03									
9	0	.01	.03									
10	0	.01	.03									
11	0	.03	.01									
12	0	.03	.01									
13	0	.03	.01									
14	0	.03	.01									
15	0	.03	.01									
16	0	.03	.01									
17	0	.03	.01									
18	0	.03	.01									
19	0	.03	.01									
20	0	.03	.01									
21	0	.05	.01									
22	5.0	.05	.01									
23	50	.05	.01									
24	300	.05	.01									
25	2.0	.05	.01									
26	.50	.05	.01									
27	.10	.05	.01									
28	.10	.05	.01									
29	0	.05	.01									
30	0	.05	.01									
31	0	---	.01		---		---		---			---
TOTAL	357.70	.90	.51	0	0	0	0	0	0	0	0	0
MEAN	11.5	.030	.017	0	0	0	0	0	0	0	0	0
MAX	300	.05	.03	0	0	0	0	0	0	0	0	0
MIN	0	.01	.01	0	0	0	0	0	0	0	0	0
AC-FT	709	1.8	1.0	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 11826.11 MEAN 32.4 MAX 5200 MIN 0 AC-FT 23460

WTR YR 1975 TOTAL 359.11 MEAN .98 MAX 300 MIN 0 AC-FT 712

PEAK DISCHARGE (BASE, 750 FT<sup>3</sup>/S).--October 24 (time unknown) 2,350 ft<sup>3</sup>/s (3.6 ft. from floodmark).

NOTE.--No gage-height record October 1 to December 31.

## 08399500 PECOS RIVER (KAISER CHANNEL) NEAR LAKEWOOD, N. MEX.

LOCATION.--Lat 32°41'22", long 104°17'53", in NW¼SE¼ sec.5, T.19 S., R.27 E., Eddy County, on left bank 3.0 mi (4.8 km) upstream from high-water line of Lake McMillan, 6.0 mi (9.7 km) northeast of Lakewood, 7.0 mi (11.3 km) northeast of gates in McMillan Dam, 12 mi (19.3 km) southeast of Artesia, and at mile 492.1 (791.8 km).

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1954, published as Kaiser Lake-McMillan Channel near Lakewood.

GAGE.--Water-stage recorder. Datum of gage is 3,268.53 ft (996.248 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Mar. 23, 1955, at site 3.0 mi (4.8 km) downstream at datum 7.83 ft (2.387 m) lower. Mar. 23, 1955, to Sept. 30, 1963, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--25 years, 157 ft<sup>3</sup>/s (4.446 m<sup>3</sup>/s), 113,700 acre-ft/yr (140 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,570 ft<sup>3</sup>/s (44.5 m<sup>3</sup>/s) Oct. 25; no flow Sept. 2-14.

Period of record: Maximum daily discharge, 2,920 ft<sup>3</sup>/s (82.7 m<sup>3</sup>/s) July 12, 1960; no flow at times in most years.

REMARKS.--Records fair. Flow partly regulated by Lake Sumner (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 170,000 acres (688 km<sup>2</sup>), 1959 determination, above station: Above about 1,500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) flow will begin bypassing station and, depending on the magnitude and duration of flow, may reach Lake McMillan (see sta 08400500).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	300	106	91	58	79	33	24	14	712	98	39
2	220	260	106	93	60	78	26	21	12	699	63	0
3	187	250	106	98	70	79	24	20	12	736	40	0
4	158	250	106	98	73	77	22	19	11	763	32	0
5	142	229	107	98	89	70	23	18	13	807	30	0
6	140	208	104	97	117	63	28	16	10	725	45	0
7	129	195	101	95	114	60	30	18	9.9	378	50	0
8	121	185	101	89	107	61	34	16	8.7	180	15	0
9	118	175	97	79	95	58	34	16	328	218	12	0
10	116	167	93	75	86	53	33	16	525	135	7.5	0
11	108	162	97	74	82	51	38	16	616	145	5.5	0
12	119	153	95	70	73	52	42	16	791	125	5.5	0
13	451	144	94	70	71	59	42	20	701	116	5.8	0
14	568	137	93	67	67	55	41	19	671	96	5.8	0
15	553	135	91	65	63	52	42	18	694	86	4.8	1.0
16	339	127	87	65	62	49	44	15	716	84	4.2	9.3
17	308	113	88	69	61	49	44	16	701	50	5.0	55
18	243	119	86	66	62	49	42	16	723	38	4.2	33
19	220	118	85	66	64	45	44	15	697	40	5.0	14
20	204	113	83	66	63	42	50	16	701	35	15	6.2
21	185	113	82	66	61	35	49	15	712	29	16	6.8
22	180	114	85	67	62	32	46	14	705	42	10	4.0
23	1200	121	83	68	64	29	38	12	743	402	7.2	9.6
24	1470	118	82	69	64	28	33	12	814	1350	5.5	12
25	1570	114	81	69	67	28	32	10	807	486	3.6	5.0
26	966	112	85	69	69	27	30	11	730	259	3.0	12
27	568	110	86	67	70	23	28	12	725	167	2.8	28
28	459	113	85	65	77	21	28	14	716	132	3.4	32
29	473	110	85	64	---	22	32	17	712	105	2.8	37
30	378	107	88	63	---	22	27	16	712	80	3.0	32
31	322	---	91	61	---	28	---	14	---	75	2.8	---
TOTAL	12475	4672	2861	2319	2071	1476	1059	498	15330.6	9295	513.4	297.29
MEAN	402	156	92.3	74.8	74.0	47.6	35.3	16.1	511	300	16.6	9.91
MAX	1570	300	107	98	117	79	50	24	814	1350	28	55
MIN	108	107	81	61	58	21	22	10	8.7	29	2.8	0
AC-FT	24740	9270	5670	4600	4110	2930	2100	988	30410	18440	1020	590
CAL YR 1974	TOTAL	66866.36	MEAN	183	MAX	2100	MIN	0	AC-FT	132600		
WTR YR 1975	TOTAL	52867.29	MEAN	145	MAX	1570	MIN	0	AC-FT	104900		

08400000 FOURMILE DRAIN NEAR LAKEWOOD, N. MEX.

LOCATION.--Lat 32°40'20", long 104°22'07", in SW¼NW¼SE¼ sec.10, T.19 S., R.26 E., Eddy County, in left side of channel 360 ft (110 m) downstream from ford on Lakewood-Dayton road, 1.9 mi (3.1 km) downstream from U.S. Highway 285, 2.8 mi (4.5 km) north of Lakewood, 11.5 mi (18.5 km) south of Artesia and at mile 3.8 (6.1 km). Mouth at Pecos River mile 490.6 (789.4 km).

DRAINAGE AREA.--265 mi<sup>2</sup> (686 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,299.14 ft (1,005.578 m) above mean sea level. Oct. 1, 1951, to June 19, 1962, at site 1.8 mi (2.9 km) upstream at datum 30.61 ft (9.330 m) higher. June 19, 1962, to Oct. 12, 1966, at site 410 ft (125 m) upstream at datum 6.08 ft (1.853 m) higher.

AVERAGE DISCHARGE.--24 years, 4.28 ft<sup>3</sup>/s (0.121 m<sup>3</sup>/s) 3,100 acre-ft/yr (3.82 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 335 ft<sup>3</sup>/s (9.49 m<sup>3</sup>/s), Oct. 22 (gage height, 2.80 ft or 0.853 m) from recorded range-in stage; no flow most of time.

Period of record: Maximum discharge, 29,300 ft<sup>3</sup>/s (830 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 19.9 ft or 6.07 m, from floodmarks), present datum from rating curve extended above 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/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.

REMARKS.--Records good. No surface diversions above station.

REVISIONS (WATER YEARS).--WRD 1968: 1967.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0											
2	0											
3	0											
4	0											
5	0											
6	0											
7	0											
8	0											
9	0											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0											
21	0											
22	20											
23	90											
24	5.0											
25	0											
26	0											
27	0											
28	0											
29	0											
30	0											
31	0	---			---		---		---			---
TOTAL	115.0	0	0	0	0	0	0	0	0	0	0	0
MEAN	3.71	0	0	0	0	0	0	0	0	0	0	0
MAX	90	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	228	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 12908.59 MEAN 35.4 MAX 4780 MIN 0 AC-FT 25600  
WTR YR 1975 TOTAL 115.00 MEAN 3.71 MAX 90 MIN 0 AC-FT 228

PEAK DISCHARGE (BASE, 200 FT<sup>3</sup>/s).--October 22 (time unknown) 335 ft<sup>3</sup>/s (2.80 ft).

NOTE.--No gage-height record October 5 to November 1.

## RIO GRANDE BASIN

08400500 LAKE MCMILLAN NEAR LAKEWOOD, N. MEX.

LOCATION.--Lat 32°35'42", long 104°20'49", in NE¼NE¼ sec.11, T.20 S., R.26 E., Eddy County, near outlet gates of McMillan Dam on Pecos River, 3.4 mi (5.5 km) southeast of Lakewood, and at mile 484.3 (779.2 km, corrected).

DRAINAGE AREA.--16,990 mi<sup>2</sup> (44,000 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend contents only), October 1965 to current year. Monthend gage heights January 1918 to December 1938 in files of Pecos River Commission.

GAUGE.--Non-recording gage. Gage read to nearest 0.05 ft (0.02 m). Datum of gage is 3,241.6 ft (988.04 m) above mean sea level (Bureau of Reclamation datum).

EXTREMES.--Current year: Maximum contents, 35,030 acre-ft (43.2 hm<sup>3</sup>) Oct. 23, gage height, 26.35 ft (8.031 m); minimum 4,330 acre-ft (5.34 hm<sup>3</sup>), June 9, gage height, 18.00 ft (5.49 m).

Period of record: Maximum contents observed, 68,500 acre-ft (84.5 hm<sup>3</sup>) Sept. 26, 1941, gage height, 29.95 ft (9.129 m); no storage for periods in 1944-54, 1957, 1964, 1965, 1974.

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 (33.7 hm<sup>3</sup>) between gage heights 0.0 ft (sill of outlet gate) and 24.9 ft (7.59 m), crest of spillway 2. Flashboards may be used to increase this capacity. Maximum capacity without spill, 33,620 acre-ft (41.5 hm<sup>3</sup>) at gage height 26.1 ft (7.96 m) crest of spillway 1. No dead storage. No storage allocated to flood control. Figures given herein represent usable contents and are computed from daily readings at 0800 hours. Gage heights may be affected by variable drawdown due to flow through gates. Water is used for irrigation by Carlsbad Irrigation District.

COOPERATION.--Gage-height record and capacity table furnished by Carlsbad Irrigation District.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30640	32790	32790	32790	32250	32250	29340	13620	6200	24380	30900	15300
2	30640	32520	32790	32250	32250	29080	13460	5960	25340	30640	30640	14960
3	30640	31980	32790	32520	32250	27800	13140	5740	26300	30380	30380	14620
4	30900	31980	32790	32520	32520	32250	27050	12980	5630	27300	30120	14280
5	30900	32250	32790	32520	32520	32250	26300	12820	5410	28560	29600	13940
6	30900	32520	32790	32520	32520	32250	25580	12660	5080	29600	29080	13780
7	30900	32520	32790	32520	32520	32250	24860	12510	4860	30380	28560	13620
8	31170	31980	32790	32520	32520	31980	24140	12360	4540	30380	27550	13460
9	31170	31980	32790	32520	32520	31980	23440	12360	4330	30380	26800	13140
10	31170	32250	32790	32520	32520	31980	22750	12210	4750	30380	25820	12820
11	31170	32250	32790	32520	32520	31710	22060	12360	5300	30120	24860	12510
12	31170	32250	32790	32520	32520	31710	21620	12210	5740	30380	24140	12360
13	31440	32520	32790	32520	32520	31710	21400	11910	6310	30380	23670	12060
14	31980	32520	32790	32520	32520	31440	21180	11610	7000	30120	22980	11910
15	33060	32520	32790	32520	32520	31440	20960	11310	7840	29860	22520	11910
16	33900	32520	32790	32520	32520	31440	20530	11020	8590	29600	22290	11910
17	33060	32520	32790	32250	32520	31440	20320	10740	9500	29600	21840	11760
18	32520	32520	32790	32250	32520	30900	19480	10460	10180	29340	21620	11760
19	32790	32520	32790	32250	32520	30900	18680	10180	11160	29080	21180	11610
20	33340	32520	32790	32520	32520	30900	17880	9760	12060	29080	20530	11160
21	33620	32520	32790	32520	32520	30900	17500	9500	12980	28560	19900	10880
22	33620	32520	32790	32520	32520	30900	16930	9110	13940	28560	19480	10740
23	35030	32520	32790	32520	32520	30380	16560	8850	14960	28300	18880	10740
24	34180	32520	32790	32520	32750	30380	16200	8590	16200	29600	18280	10600
25	32520	32790	32790	32520	32250	30120	15840	8200	17310	31440	18080	10040
26	33060	32790	32790	32520	32250	30120	15300	7960	18680	31980	17690	9370
27	32520	32790	32790	32250	32250	29860	14960	7720	19900	31980	17120	9110
28	32520	32790	32790	32250	32250	29860	14620	7360	20960	31710	16740	8590
29	32790	32790	32790	32250	---	29600	14280	7120	22060	31710	16380	8330
30	32790	32790	33060	32250	---	29600	13940	6770	23210	31440	16020	8080
31	32790	---	33060	32250	---	29340	---	6420	---	31170	15660	---
MAX	35030	32790	33060	32790	32520	32250	29340	13620	23210	31980	30900	15300
MIN	30640	31980	32790	32250	32250	29340	13940	6420	4330	24380	15660	8080
(t)	+2,410	0	+270	-810	0	-2,910	-15,400	-7,520	+16,790	+7,960	-15,510	-7,580

CAL YR 1974 MAX 35,030 MIN 0 CHANGE IN CONTENTS +22,180

WTR YR 1975 MAX 35,030 MIN 4,330 CHANGE IN CONTENTS -22,300

+ Change in contents, in acre-feet.

08400500 LAKE MCILLAN NEAR LAKEWOOD, N. MEX.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.55	25.95	25.95	25.95	25.85	25.85	25.30	21.60	18.85	24.30	25.60	22.10
2	25.55	25.90	25.95	25.95	25.85	25.85	25.25	21.55	18.75	24.50	25.55	22.00
3	25.55	25.80	25.95	25.90	25.85	25.85	25.00	21.45	18.65	24.70	25.50	21.90
4	25.60	25.80	25.95	25.90	25.90	25.85	24.85	21.40	18.60	24.90	25.45	21.80
5	25.60	25.85	25.95	25.90	25.90	25.85	24.70	21.35	18.50	25.15	25.35	21.70
6	25.60	25.90	25.95	25.90	25.90	25.85	24.55	21.30	18.35	25.35	25.25	21.65
7	25.60	25.90	25.95	25.90	25.90	25.85	24.40	21.25	18.25	25.50	25.15	21.60
8	25.65	25.80	25.95	25.90	25.90	25.80	24.25	21.20	18.10	25.50	24.95	21.55
9	25.65	25.80	25.95	25.90	25.90	25.80	24.10	21.20	18.00	25.50	24.80	21.45
10	25.65	25.85	25.95	25.90	25.90	25.80	23.95	21.15	18.20	25.50	24.60	21.35
11	25.65	25.85	25.95	25.90	25.90	25.75	23.80	21.20	18.45	25.45	24.40	21.25
12	25.65	25.85	25.95	25.90	25.90	25.75	23.70	21.15	18.65	25.50	24.25	21.20
13	25.70	25.90	25.95	25.90	25.90	25.75	23.65	21.05	18.90	25.50	24.15	21.10
14	25.80	25.90	25.95	25.90	25.90	25.70	23.60	20.95	19.20	25.45	24.00	21.05
15	26.00	25.90	25.95	25.90	25.90	25.70	23.55	20.85	19.55	25.40	23.90	21.05
16	26.15	25.90	25.95	25.90	25.90	25.70	23.45	20.75	19.85	25.35	23.85	21.05
17	26.00	25.90	25.95	25.85	25.90	25.70	23.40	20.65	20.20	25.35	23.75	21.00
18	25.90	25.90	25.95	25.85	25.90	25.60	23.20	20.55	20.45	25.30	23.70	21.00
19	25.95	25.90	25.95	25.85	25.90	25.60	23.00	20.45	20.80	25.25	23.60	20.95
20	26.05	25.90	25.95	25.90	25.90	25.60	22.80	20.30	21.10	25.25	23.45	20.80
21	26.10	25.90	25.95	25.90	25.90	25.60	22.70	20.20	21.40	25.15	23.30	20.70
22	26.10	25.90	25.95	25.90	25.90	25.60	22.55	20.05	21.70	25.15	23.20	20.65
23	26.35	25.90	25.95	25.90	25.90	25.60	22.45	19.95	22.00	25.10	23.05	20.65
24	26.20	25.90	25.95	25.90	25.85	25.50	22.35	19.85	22.35	25.35	22.90	20.60
25	25.90	25.95	25.95	25.90	25.85	25.45	22.25	19.70	22.65	25.70	22.85	20.40
26	26.00	25.95	25.95	25.90	25.85	25.45	22.10	19.60	23.00	25.80	22.75	20.15
27	25.90	25.95	25.95	25.85	25.85	25.40	22.00	19.50	23.30	25.80	22.60	20.05
28	25.90	25.95	25.95	25.85	25.85	25.40	21.90	19.35	23.55	25.75	22.50	19.85
29	25.95	25.95	25.95	25.85	---	25.35	21.80	19.25	23.80	25.75	22.40	19.75
30	25.95	25.95	26.00	25.85	---	25.35	21.70	19.10	24.05	25.70	22.30	19.65
31	25.95	---	26.00	25.85	---	25.30	---	18.95	---	25.65	22.20	---
MEAN	25.84	25.89	25.95	25.89	25.89	25.65	23.41	20.54	20.31	25.34	23.91	21.00
MAX	26.35	25.95	26.00	25.95	25.90	25.85	25.30	21.60	24.05	25.80	25.60	22.10
MIN	25.55	25.80	25.95	25.85	25.85	25.30	21.70	18.95	18.00	24.30	22.20	19.65

WTR YR 1975 MEAN 24.14 MAX 26.35 MIN 18.00

## RIO GRANDE BASIN

08401000 PECOS RIVER BELOW MCMILLAN DAM, N. MEX.

LOCATION.—Lat 32°35'40", long 104°20'59", in NW¼ sec.11, T.20 S., R.26 E., Eddy County, on left bank 700 ft (210 m) downstream from gates in McMillan Dam, 3.4 mi (5.5 km) southeast of Lakewood, and at mile 484.1 (778.9 km, corrected).

DRAINAGE AREA.—16,990 mi<sup>2</sup> (44,000 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1908, January 1909 to December 1911, August 1939 to December 1940, December 1946 to current year (January 1906 to January 1910 to December 1911, gage heights and discharge measurements only). Published as "near Lakewood" 1906-11, and as "below McMillan Dam, near Lakewood" 1939-40.

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,238.21 ft (987,006 m) above mean sea level. See WSP 1732 for history of changes prior to Mar. 12, 1957. Supplemental water-stage recorders on McMillan Dam spillways, No. 1 and 2, Apr. 6, 1960, to Sept. 30, 1970.

AVERAGE DISCHARGE.--30 years (1906-7, 1939-40, 1947-75), 103 ft<sup>3</sup>/s (2.917 m<sup>3</sup>/s), 74,620 acre-ft/yr (92.0 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 2,690 ft<sup>3</sup>/s (76.2 m<sup>3</sup>/s) Oct. 23 (gage height, 7.62 ft or 2.323 m); no flow at times. 1939-40, 1947-75: Maximum discharge, 16,500 ft<sup>3</sup>/s (467 m<sup>3</sup>/s) Aug. 23, 1966, includes flow of spillways; no flow for many days. Flood of Oct. 2, 1904, may have reached 60,000 ft<sup>3</sup>/s (1,700 m<sup>3</sup>/s). The flood of Aug. 3, 1893, damaged McMillan Dam, then under construction, and destroyed Avalon Dam (this flood was described as "highest in 50 years", at Carlsbad).

REMARKS.—Records good. Flow regulated by Lake Sumner and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 171,000 acres (692 km<sup>2</sup>), 1959 determination, above station.

REVISIONS (WATER YEARS).--WSP 1512: 1909.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	326	0	58	.58	1.1	182	68	108	78	71	80
2	5.8	326	0	58	.69	.95	329	66	86	78	70	80
3	6.2	106	0	25	.69	.95	296	66	63	108	70	79
4	7.0	4.4	0	3.0	.58	.81	280	27	65	125	71	79
5	6.2	4.1	.01	3.0	.58	.95	278	3.2	71	94	89	78
6	4.4	226	.11	3.0	.49	1.1	278	3.0	108	75	185	79
7	2.5	323	.15	2.8	.81	1.3	276	3.0	109	75	227	80
8	2.3	125	.35	2.8	.81	1.1	276	3.2	108	74	294	80
9	2.3	2.5	.41	2.8	.81	1.1	276	3.0	108	74	294	79
10	2.3	2.8	.58	2.1	.81	1.1	246	3.0	128	74	294	79
11	2.8	2.5	.69	1.1	1.1	1.1	193	27	199	74	294	78
12	3.0	2.3	.69	.41	1.1	1.1	116	107	227	72	276	79
13	2.5	2.5	.69	.30	1.3	1.1	116	106	242	71	255	43
14	1.3	1.9	.69	.26	1.5	.95	116	104	188	28	170	7.9
15	104	1.5	.58	.20	1.5	.95	116	102	160	6.5	95	7.9
16	239	.35	.41	55	1.5	.95	116	102	162	6.9	82	7.4
17	193	.17	.41	27	1.7	.95	195	102	132	6.9	80	7.4
18	89	.15	.69	.81	1.7	.81	317	104	120	6.9	90	49
19	1.9	.17	86	.58	1.5	.58	283	104	121	6.5	164	100
20	.81	.11	49	.41	1.5	.49	208	104	123	31	185	116
21	.95	.09	1.3	.41	1.9	.49	180	106	125	139	183	88
22	61	.05	1.1	.30	1.3	.49	164	106	125	100	183	31
23	1140	.05	1.1	.26	.95	.49	162	106	127	70	181	35
24	1690	0	.95	.26	.95	.49	162	104	92	70	111	162
25	1440	0	.81	.23	.95	.49	162	104	78	70	72	225
26	1540	0	.95	.26	1.1	.58	130	106	79	70	113	166
27	662	0	1.1	.26	1.1	.81	116	106	80	70	164	215
28	326	0	1.1	.30	1.1	.95	116	104	80	70	106	158
29	326	0	1.1	.26	---	.95	116	134	79	70	83	128
30	326	0	37	.30	---	.95	93	120	79	71	80	128
31	326	---	58	.49	---	1.1	---	108	---	71	80	---
TOTAL	8520.06	1457.64	245.97	249.90	30.60	27.23	5894	2411.4	3572	2035.7	4712	2624.6
MEAN	275	48.6	7.93	8.06	1.09	.88	196	77.8	119	65.7	152	87.5
MAX	1690	326	86	58	1.9	1.3	329	134	242	139	294	225
MIN	.81	0	0	.20	.49	.49	93	3.0	63	6.5	70	7.4
AC-FT	16900	2890	488	496	61	54	11690	4780	7090	4040	9350	5210
WTR YR 1974	TOTAL	50065.27	MEAN	137	MAX	3140	MIN	0	AC-FT	99300		
CAL YR 1975	TOTAL	31781.10	MEAN	87.1	MAX	1690	MIN	0	AC-FT	63040		

## 08401100 PECOS RIVER ABOVE SEVEN RIVERS, NEAR LAKEWOOD, N. MEX.

LOCATION.--Lat 32°34'42", long 104°22'42", in NE¼NE¼NE¼ sec.16, T.20 S., R.26 E., Eddy County, 0.5 mi (0.80 km) upstream from mouth of Seven Rivers, 2.6 mi (4.2 km) downstream from Lake McMillan, and 3.6 mi (5.8 km) south of Lakewood, and at mile 481.4 (774.6 km, corrected).

DRAINAGE AREA.--17,000 mi<sup>2</sup> (44,030 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--May 1974 to current year. (Operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 3,226 ft (983.3 m), from topographic map.

EXTREMES.--Maximum discharge not determined; no flow for many days.

REMARKS.--Records good. Flow regulated by Lake Summer and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 171,000 acres (69,200 km<sup>2</sup>), 1959 determination, above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	314	1.0	50			163	62	98	69	64	78
2	---	314	1.0	50			331	62	79	69	62	78
3	---	106	1.0	24			287	62	56	98	62	79
4	---	1.0	1.0	2.2			272	40	56	115	62	79
5	---	1.0	1.0	2.0			272	1.0	60	87	74	79
6	---	186	1.0	1.9			272	.90	92	64	174	79
7	---	298	1.0	1.4			272	.90	95	62	227	76
8	---	133	1.0	1.4			277	.90	95	60	282	76
9	---	1.5	1.0	1.2			277	.90	95	60	282	76
10	---	1.5	1.0	1.1			241	0	112	62	282	76
11	---	1.5	1.0	1.0			191	11	187	69	282	76
12	---	1.5	1.0	1.0			109	104	218	64	266	76
13	---	1.5	1.0	.50			109	104	232	62	246	45
14	---	1.5	1.0	0			109	101	179	28	166	6.4
15	---	1.5	1.0	0			109	101	147	.90	90	6.0
16	---	1.5	1.0	38			109	101	150	2.2	74	5.5
17	---	1.5	1.0	32			187	104	122	2.2	74	5.5
18	---	1.5	1.0	.90			314	101	106	2.2	79	41
19	---	1.5	60	.20			287	104	106	2.2	150	95
20	---	1.5	48	0			209	101	109	15	179	109
21	---	1.5	1.5	0			179	101	109	137	179	87
22	---	1.0	1.5	0			162	101	109	106	179	31
23	---	1.0	1.5	0			162	101	109	62	179	24
24	---	1.0	1.5	0			166	98	84	62	106	154
25	---	1.0	1.5	0			166	95	69	62	69	218
26	2080	1.0	1.5	0			132	98	69	62	106	166
27	889	1.0	1.5	0			112	95	69	62	162	209
28	314	1.0	1.5	0			109	95	69	62	106	154
29	314	1.0	1.5	0	---		106	122	69	62	79	122
30	314	1.0	25	0	---		84	112	69	62	78	122
31	314	---	50	0	---		---	98	---	62	78	---
TOTAL	-	1381.5	214.5	200.80	0	0	5775	2278.60	3219	1794.70	4498	2528.4
MEAN	-	46.1	6.92	6.48	0	0	193	73.5	107	57.9	145	84.3
MAX	-	314	60	50	0	0	331	122	232	137	282	218
MIN	-	1.0	1.0	0	0	0	84	0	56	.90	62	5.5
AC-FT	-	2740	425	398	0	0	11450	4520	6380	3560	8920	5020

## 08401200 SOUTH SEVEN RIVERS NEAR LAKEWOOD, N. MEX.

LOCATION.--Lat 32°35'19", long 104°25'17", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T.20 S., R.26 E., Eddy County, on downstream side of center pier of bridge on U.S. Highway 285, 0.4 mi (0.6 km) south of Seven Rivers, 4.0 mi (6.4 km) southwest of Lakewood, and at mile 2.6 (4.2 km). Mouth at Pecos River mile 480.9 (773.8 km).

DRAINAGE AREA.--220 mi<sup>2</sup> (570 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,276 ft (999 m), from topographic map. Prior to July 8, 1965, at site 400 ft (120 m) upstream at datum 0.57 ft (0.174 m) higher.

AVERAGE DISCHARGE.--12 years, 5.91 ft<sup>3</sup>/s (0.167 m<sup>3</sup>/s), 4,280 acre-ft/yr (5.28 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 808 ft<sup>3</sup>/s (22.9 m<sup>3</sup>/s) Oct. 22 (gage height, 7.62 ft or 2.323 m); no flow most of year. Period of record: Maximum discharge, 25,500 ft<sup>3</sup>/s (722 m<sup>3</sup>/s) May 30, 1965 (gage height, 20.0 ft or 6.10 m, from floodmarks), present site and datum, from rating curve extended above 5,700 ft<sup>3</sup>/s (161 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 18.15 ft (5.532 m) and 20.0 ft (6.10 m); no flow most of time. Maximum discharge since at least 1941, about 30,000 ft<sup>3</sup>/s (850 m<sup>3</sup>/s) (gage height, 22.8 ft or 6.95 m, from old debris on left bank former site and datum), from rating curve extended above 5,700 ft<sup>3</sup>/s (161 m<sup>3</sup>/s) on basis of slope-area measurement at gage height 21.8 ft (6.64 m). Probable date of flood, Oct. 7, 1954.

REMARKS.--Records poor. No surface diversions above station, ground-water withdrawals for 240 acres (971,300 m<sup>2</sup>), above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		
2	0									0		
3	0									0		
4	0									0		
5	0									0		
6	0									0		
7	0									0		
8	0									0		
9	0									0		
10	0									0		
11	0									2.4		
12	0									.17		
13	0									0		
14	.13									0		
15	0									0		
16	0									0		
17	0									0		
18	0									0		
19	0									0		
20	0									0		
21	0									2.3		
22	.63									0		
23	.58									0		
24	.02									0		
25	0									0		
26	0									0		
27	0									0		
28	0									0		
29	0				---					0		
30	0				---					0		
31	0	---			---		---		---	0		---
TOTAL	121.15	0	0	0	0	0	0	0	0	4.87	0	0
MEAN	3.91	0	0	0	0	0	0	0	0	.16	0	0
MAX	.63	0	0	0	0	0	0	0	0	2.4	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	240	0	0	0	0	0	0	0	0	9.7	0	0

CAL YR 1974 TOTAL 1227.23 MEAN 19.4 MAX 2620 MIN 0 AC-FT 14340  
WTR YR 1975 TOTAL 126.02 MEAN .35 MAX .63 MIN 0 AC-FT 250

PEAK DISCHARGE (BASE. 450 FT<sup>3</sup>/S).--October 22 (2130) 808 ft<sup>3</sup>/s (7.62 ft).



## 08401500 PECOS RIVER BELOW MAJOR JOHNSON SPRINGS NEAR CARLSBAD, N. MEX.

LOCATION.--Lat 32°31'54", long 104°22'40", in SW 1/4 sec. 27, T.20 S., R.26 E., Eddy County, on left bank, at mouth of Willow Draw 2.4 mi (3.9 km) downstream from South Seven Rivers, 4.2 mi (6.8 km) southeast of Seven Rivers, 6.0 mi (9.7 km) south of Lakewood, 11.5 mi (18.5 km) northwest of Carlsbad, and at mile 478.6 (770.1 km, corrected).

DRAINAGE AREA.--17,650 mi<sup>2</sup> (45,710 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--October 1971 to current year (operated as a low-flow station only). Records for January 1947 to September 1950 at site 0.5 mi (0.8 km) upstream not equivalent owing to spring inflow between sites.

GAGE.--Water-stage recorder. Altitude of gage is 3,202 ft (976 m) from topographic map.

EXTREMES.--Current year: Maximum discharge not determined; minimum, 46 ft<sup>3</sup>/s (1.30 m<sup>3</sup>/s) May 6.  
Period of record: Maximum discharge not determined; minimum, 8.3 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s) Aug. 18, 19, 1974.

REMARKS.--Records good. Flow regulated by Lake Sumner and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawal for irrigation of about 173,000 acres (70,010 hm<sup>2</sup>), 1959 determination, above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	408	100	141	80	76	204	116	144	116	136	127
2	72	408	97	131	80	76	388	116	131	115	136	127
3	73	244	95	110	78	76	359	115	101	139	136	127
4	76	113	97	81	77	74	340	110	100	164	136	126
5	80	107	97	80	77	74	340	55	94	143	145	124
6	78	278	102	80	86	74	340	51	136	118	244	126
7	76	402	101	78	77	74	340	50	136	118	275	124
8	76	259	118	81	76	74	340	50	134	119	340	124
9	76	98	110	78	80	73	340	50	134	119	340	123
10	76	97	110	81	77	73	310	52	141	121	337	123
11	77	95	110	81	77	73	235	51	209	134	337	123
12	78	94	108	112	77	73	180	146	231	126	329	124
13	80	94	106	82	77	73	175	151	251	126	303	104
14	90	108	110	81	76	72	173	151	209	99	239	56
15	188	107	110	78	84	68	170	151	183	66	159	55
16	359	108	108	110	86	68	170	151	185	66	139	54
17	315	107	100	120	77	66	240	151	166	66	139	54
18	221	104	102	78	77	66	365	151	148	66	139	78
19	126	102	149	86	77	66	365	150	148	66	209	132
20	127	91	156	77	76	65	270	148	150	72	237	150
21	131	91	89	84	74	63	244	148	151	197	235	131
22	---	91	86	95	87	63	218	148	151	182	233	85
23	---	97	87	80	74	65	218	148	153	134	233	55
24	---	106	90	83	76	70	214	148	131	134	182	179
25	---	94	86	78	76	66	214	146	112	134	126	253
26	---	97	84	76	74	60	181	146	112	134	151	199
27	829	97	83	74	76	59	160	146	113	136	214	248
28	408	108	83	76	76	58	160	144	115	136	164	201
29	405	116	84	77	---	58	160	166	115	136	132	162
30	411	98	103	78	---	58	144	164	116	136	131	162
31	408	---	143	78	---	57	---	146	---	138	129	---
TOTAL	-	4419	3204	2725	2185	2111	7557	3816	4404	3756	6385	3856
MEAN	-	147	103	87.9	78.0	68.1	252	123	147	121	206	129
MAX	-	408	156	141	87	76	388	166	251	197	340	253
MIN	-	91	83	74	74	57	144	50	98	66	126	54
AC=FT	-	8770	6360	5410	4330	4190	14990	7570	8740	7450	12660	7650

## 08401900 ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, N. MEX.

LOCATION.--Lat 32°30'23", long 104°22'28", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.3, T.21 S., R.25 E., Eddy County, at downstream at end of bridge pier nearest left bank on U.S. Highway 285, 10 mi (16.1 km) northwest of Carlsbad, and at mile 2.1 (3.4 km). Mouth at Pecos River mile 475.2 (764.6 km).

DRAINAGE AREA.--285 mi (738 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,248 ft (990 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 10.6 ft<sup>3</sup>/s (0.300 m<sup>3</sup>/s) 7,680 acre-ft/yr (9.47 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 19,800 ft<sup>3</sup>/s (561 m<sup>3</sup>/s) Oct. 23 (gage height, 12.90 ft or 3.932 m) from rating curve extended as explained below; no flow most of time.

Period of record: Maximum discharge, 31,600 ft<sup>3</sup>/s (895 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 15.35 ft or 4.679 m), from rating curve extended above 8,500 ft<sup>3</sup>/s (156 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow most of time.

Since about 1941 the maximum discharge probably occurred Oct. 7, 1954, discharge 63,600 ft<sup>3</sup>/s (1,800 m<sup>3</sup>/s) (gage height, 19.2 ft or 5.85 m, from highwater marks on downstream end of bridge pier), by slope-area measurement at site 5 mi (8.0 km) upstream.

REMARKS.--Records good. Diversions for irrigation of 220 acres (890,300 m<sup>2</sup>), above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	13	2.1	.97								
2	5.5	12	1.6	0								
3	5.0	12	1.1	0								
4	4.0	11	1.1	0								
5	801	11	.99	0								
6	289	11	.88	0								
7	23	11	.77	0								
8	14	10	.99	0								
9	11	11	1.6	0								
10	9.2	9.7	.99	0								
11	8.1	9.2	.88	0								
12	8.6	9.2	.66	0								
13	15	8.6	.44	0								
14	19	8.1	.33	0								
15	9.2	8.1	.33	0								
16	7.6	7.6	.33	0								
17	7.1	7.1	.33	0								
18	6.5	7.1	.22	0								
19	6.0	7.1	.20	0								
20	5.5	6.0	.10	0								
21	5.0	6.0	.10	0								
22	1010	5.5	0	0								
23	3180	4.5	0	0								
24	100	4.0	0	0								
25	42	4.0	0	0								
26	30	4.0	.16	0								
27	26	4.0	.44	0								
28	21	3.6	.11	0								
29	18	2.6	.05	0	---							
30	16	2.1	.05	0	---							
31	14	---	.55	0	---		---		---			---
TOTAL	5722.8	230.1	17.40	.07	0	0	0	0	0	0	0	0
MEAN	185	7.67	.56	.002	0	0	0	0	0	0	0	0
MAX	3180	13	2.1	.07	0	0	0	0	0	0	0	0
MIN	4.0	2.1	0	0	0	0	0	0	0	0	0	0
AC-FT	11350	456	35	.1	0	0	0	0	0	0	0	0
CAL YR 1974 TOTAL	16010.90		MEAN 43.9	MAX 6040	MIN 0	AC-FT 31760						
WTR YR 1975 TOTAL	5970.37		MEAN 16.4	MAX 3180	MIN 0	AC-FT 11840						

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/s)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-05	1800	9.75	6.710	10-23	0030	12.90	19,800

## 08402000 PECOS RIVER AT DAMSITE 3, NEAR CARLSBAD, N. MEX.

LOCATION.--Lat 32°30'40", Long 104°19'58", in lot 14, sec.6, T.21 S., R.26 E., Eddy County, on right bank at damsite 3 of Carlsbad project of Bureau of Reclamation, about 1 mi (1.6 km) upstream from flow line of Lake Avalon, 1.3 mi (2.1 km) downstream from Rocky Arroyo, 8.0 mi (12.9 km) northwest of Carlsbad, and at mile 473.8 (762.3 km).

DRAINAGE AREA.--17,980 mi<sup>2</sup> (46,570 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--August 1939 to December 1940, August 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,171.31 ft (966.615 m) above mean sea level (Bureau of Reclamation datum). Prior to Aug. 10, 1944, at site 1,000 ft (305 m) downstream, at datum 1.00 ft (0.305 m) higher. Aug. 10, 1944, to Dec. 31, 1966, at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--32 years (1939-40, 1944-75), 168 ft<sup>3</sup>/s (4.758 m<sup>3</sup>/s) 121,700 acre-ft/yr (150 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 13,400 ft<sup>3</sup>/s (379 m<sup>3</sup>/s) Oct. 23 (gage height, 12.63 ft or 3.85 m); minimum, 46 ft<sup>3</sup>/s (1.30 m<sup>3</sup>/s) May 5.

Period of record: Maximum discharge, 69,000 ft<sup>3</sup>/s (1,950 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 21.32 ft or 6.194 m, present datum from floodmark), from rating curve extended above 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) on basis of slope-area measurement at gage height 19.53 ft (5.953 m) present datum; minimum, 4.3 ft<sup>3</sup>/s (0.12 m<sup>3</sup>/s) Aug. 5, 1954.

Peaks which probably exceeded 40,000 ft<sup>3</sup>/s (1,130 m<sup>3</sup>/s) occurred in August 1893, Oct. 2, 1904, July 25, 1905, Apr. 17, 1915, Aug. 7, 1916, and May 30, 1937, based primarily on records for station "at Carlsbad." Peak of May 22, 1941, was estimated at 60,000 ft<sup>3</sup>/s (1,700 m<sup>3</sup>/s). Floods of 1893 and 1904 originated above McMillan Dam and contributed to the two failures of Avalon Dam.

REMARKS.--Records good. Flow regulated by Lake Sumner and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 173,000 acres (70,010 hm<sup>2</sup>), 1959 determination, above station. Discharge represents inflow to Lake Avalon.

REVISIONS (WATER YEARS).--WSP 1512: 1946-47(M), 1948(P), 1949, 1950(P). WSP 1712: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	421	89	146	76	71	135	115	142	113	132	121
2	72	417	87	132	81	71	361	113	135	113	132	121
3	72	286	87	117	81	71	354	110	98	128	132	121
4	74	108	87	83	79	71	326	96	96	162	128	120
5	571	104	87	81	76	71	326	56	94	154	130	119
6	553	229	90	81	87	69	326	52	123	117	222	121
7	92	402	94	78	79	67	319	52	132	117	259	119
8	78	299	106	78	78	69	315	55	132	117	326	119
9	76	100	96	78	81	67	315	54	137	119	332	119
10	76	96	94	78	78	67	298	55	135	121	332	119
11	76	94	94	79	76	69	266	56	199	130	332	121
12	78	94	94	106	76	69	174	128	225	137	322	119
13	87	92	94	81	76	72	172	154	247	126	295	108
14	92	98	98	78	76	72	169	154	216	113	244	55
15	162	100	94	76	76	66	166	152	174	71	156	52
16	357	102	98	90	83	64	164	152	174	71	130	52
17	332	102	92	128	80	64	193	152	164	71	130	50
18	249	104	89	79	75	64	346	152	142	71	128	60
19	128	100	113	81	73	64	350	149	147	71	185	117
20	126	92	154	79	72	62	256	146	142	72	228	142
21	130	90	81	78	72	62	234	146	144	176	228	132
22	816	89	76	102	79	61	208	144	146	212	228	92
23	4840	90	76	81	81	61	205	146	146	135	228	50
24	1960	106	79	81	72	66	205	146	135	130	191	145
25	1510	94	79	81	72	67	202	144	108	130	132	240
26	1470	94	78	74	72	61	182	144	108	130	149	208
27	890	92	78	72	72	58	154	144	108	132	216	228
28	472	92	78	72	71	58	156	144	108	132	188	213
29	428	115	78	74	---	58	154	156	110	132	123	162
30	428	90	89	74	---	60	146	166	110	132	123	159
31	424	---	135	74	---	58	---	144	---	135	123	---
TOTAL	16753	4392	2864	2692	2150	2030	7177	3777	4272	3770	6204	3704
MEAN	540	146	92.4	86.8	76.8	65.5	239	122	142	122	200	123
MAX	4840	421	154	146	87	72	361	166	247	212	332	240
MIN	72	89	76	72	71	58	135	52	94	71	123	50
AC-FT	33230	8710	5680	5340	4260	4030	14240	7490	8470	7480	12310	7350

CAL YR 1974 TOTAL 89022.8 MEAN 244 MAX 11000 MIN 7.8 AC-FT 176600  
WTR YR 1975 TOTAL 59785.0 MEAN 164 MAX 4840 MIN 50 AC-FT 118600

PEAK DISCHARGE (BASE, 1,700 FT<sup>3</sup>/s)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-06	0030	6.92	3,260	10-23	0430	12.63	13,400

## 08403500 CARLSBAD MAIN CANAL AT HEAD, NEAR CARLSBAD, N. MEX.

LOCATION.--Lat 32°29'25", long 104°15'08", in N<sub>2</sub>SW<sub>4</sub>SW<sub>4</sub> sec.12, T.21 S., R.26 E., Eddy County, on right bank 220 ft (67 m) downstream from headgates in Avalon Dam, and 5.0 mi (8.0 km) north of Carlsbad. Pecos River mile 467.2 or 751.7 km.

PERIOD OF RECORD.--July 1939 to current year (monthly discharge only July 1939 to September 1965). January 1941 to March 1951 published in WSP 1732.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,156.50 ft (962.101 m) above mean sea level (Bureau of Reclamation datum). Prior to March 1951 at site 20 ft (6.1 m) upstream at datum 0.9 ft (0.274 m) higher.

AVERAGE DISCHARGE.--36 years, 108 ft<sup>3</sup>/s (3.059 m<sup>3</sup>/s), 78,250 acre-ft/yr (96.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum daily discharge, 339 ft<sup>3</sup>/s (9.60 m<sup>3</sup>/s) August 11; no flow many days.

Period of record: Maximum daily discharge, 526 ft<sup>3</sup>/s (14.9 m<sup>3</sup>/s) Sept. 15, 16, 1946; no flow for many days each year.

REMARKS.--Records good. Carlsbad main canal diverts water from Lake Avalon for irrigation of about 25,000 acres (10,120 hm<sup>2</sup>) of Carlsbad Irrigation District. About 1,600 acres (648 hm<sup>2</sup>) most of it above gaging station 08405200 Pecos River below Dark Canyon at Carlsbad irrigated on the left bank. The remaining acreage (most of which is downstream from sta 08405200) is on right bank.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20			0	21	194	98	90	132	146	80
2	0	.20			0	.20	236	54	88	131	132	104
3	0	.20			0	0	268	58	116	169	113	119
4	0	0			0	0	288	52	121	134	140	142
5	.17	0			0	20	304	81	132	81	203	169
6	43	0			0	37	278	131	121	61	236	134
7	68	0			0	42	300	162	100	74	218	86
8	67	0			0	40	300	135	94	96	274	131
9	61	0			0	11	276	134	140	113	274	156
10	43	0			0	11	243	124	175	135	262	129
11	43	0			0	51	224	94	222	116	339	124
12	43	0			0	37	207	107	211	87	302	86
13	48	0			0	0	207	123	180	56	270	51
14	61	0			0	.20	200	131	156	48	236	31
15	54	0			0	22	237	159	116	69	203	54
16	42	0			0	49	249	164	126	107	209	72
17	42	0			0	64	262	146	134	123	157	76
18	35	0			0	92	234	115	164	108	166	75
19	30	0			0	127	198	146	159	104	182	94
20	29	0			0	123	198	126	137	111	198	86
21	36	0			9.0	129	157	124	102	161	205	104
22	57	0			30	126	173	144	96	119	213	107
23	35	0			24	118	191	151	121	108	198	146
24	34	0			24	142	191	139	84	94	157	131
25	21	0			11	205	187	146	76	76	171	135
26	.40	0			15	228	157	154	119	58	173	142
27	.20	0			23	207	149	151	104	58	187	194
28	0	0			23	205	152	146	92	104	104	171
29	26	0			---	169	152	162	93	162	81	191
30	41	0			---	110	144	132	102	184	71	213
31	19	---			---	123	---	100	---	154	74	---
TOTAL	978.77	.60	0	0	159.0	2509.40	6556	3889	3771	3333	5894	3533
MEAN	31.6	.020	0	0	5.68	80.9	219	125	126	108	190	118
MAX	68	.20	0	0	30	228	304	164	222	184	339	213
MIN	0	0	0	0	0	0	144	52	76	48	71	31
AC-FT	1940	1.2	0	0	315	4980	13000	7710	7480	6610	11690	7010
CAL YR 1974	TOTAL	27036.57	MEAN	74.1	MAX	442	MIN	0	AC-FT	53630		
WTR YR 1975	TOTAL	30623.77	MEAN	83.9	MAX	339	MIN	0	AC-FT	60740		

## 08403800 LAKE AVALON NEAR CARLSBAD, N. MEX.

LOCATION.--Lat 32°29'27", long 104°15'05", in NW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, on headwall at outlet gate of dam on Pecos River, 5.0 mi (8.0 km) north of Carlsbad, and at mile 467.2 (751.7 km, corrected).

DRAINAGE AREA.--18,070 mi<sup>2</sup> (46,800 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend contents only). October 1965 to current year. Monthend gage heights January 1919 to December 1938 in files of Pecos River Commission.

GAUGE.--Nonrecording gage. Gage read to nearest 0.05 ft (0.02 m). Datum of gage is 3,157.0 ft (962.25 m) above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 6,170 acre-ft (7.61 hm<sup>3</sup>) Oct. 23, gage height, 21.60 ft (6.584 m); minimum, 494 acre-ft (609,000 m<sup>3</sup>) Sept. 24.

Period of record: Maximum contents, 11,000 acre-ft (13.6 hm<sup>3</sup>) May 22, 1941, gage height, 25.0 ft (7.62 m); no storage at times when natural flow was passing through reservoir.

REMARKS.--Lake is formed by Avalon Dam, an earthfill structure. The original Eddy (Avalon) Dam was completed and storage began in 1891. The dam was destroyed by flood of August 3, 1893; repaired immediately. The dam was destroyed again October 2, 1904; construction of present dam commenced on June 1, 1906, and was 88 percent complete June 30, 1907. Capacity, 4,970 acre-ft (6.1 hm<sup>3</sup>) between gage heights 0.0 (sill of outlet gates) and 20.4 ft (6.22 m), crest of spillway 2. No dead storage. No storage allocated to flood control. Figures given herein represent usable contents and are computed from daily readings at 0800 hours. Water is used by Carlsbad Irrigation District.

COOPERATION.--Capacity table based on data furnished by Carlsbad Irrigation District.

REVISIONS (WATER YEARS).--WSF 898: 1939.

CONTENTS. IN ACRE-FEET. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4970	5570	5020	5070	5070	5020	1440	2160	1100	1130	1160	1190
2	4970	5570	5020	5070	5070	5020	1440	2160	1190	1040	1130	1220
3	4970	5570	5020	5070	5070	5020	1670	2160	1190	955	1100	1190
4	4970	5470	5070	5070	5070	5020	1770	2330	1100	872	1100	1190
5	4970	5170	5020	5070	5070	5020	1770	2300	1010	955	1010	1100
6	5520	5170	5020	5070	5070	5020	1840	2190	900	1070	845	1010
7	5170	5420	5020	5070	5070	4970	1880	1910	900	1190	845	1070
8	5020	5520	5020	5070	5070	4880	1880	1700	900	1190	845	1100
9	5020	5020	5020	5070	5070	4880	1910	1510	928	1190	1010	1010
10	4920	5020	5020	5070	5070	4970	1940	1250	928	1130	1130	900
11	4920	5020	5020	5070	5070	4920	2050	1160	791	1100	1190	900
12	4920	5020	5020	5070	5070	4920	2080	1040	712	1220	1190	955
13	4970	5020	5020	5070	5070	4920	2020	1070	791	1320	1190	1010
14	5020	5020	5020	5070	5070	4920	1910	1130	928	1480	1250	1100
15	4970	5020	5020	5070	5070	4970	1770	1130	1040	1440	1250	1130
16	5070	5020	5020	5070	5070	4970	1610	1070	1130	1380	1130	1070
17	5370	5020	5020	5070	5070	4970	1380	1040	900	1190	955	955
18	5320	5020	5020	5070	5070	4880	1350	1070	1190	1070	900	900
19	5220	5020	5020	5070	5070	4700	1640	1130	1100	1010	818	872
20	5020	5020	5120	5070	5070	4520	1910	1100	1010	955	845	955
21	5120	5020	5120	5070	5070	4300	2080	1130	1010	764	900	1010
22	5120	5020	5120	5070	5070	4120	2190	1160	1100	955	900	1070
23	6170	5020	5070	5070	5020	3940	2220	1160	1130	1040	900	955
24	5870	5020	5070	5070	5020	3730	2220	1070	1190	1100	1040	494
25	5770	5020	5070	5070	5020	3490	2190	1130	1250	1160	955	845
26	5570	5020	5070	5070	5020	3090	2220	1130	1250	1250	845	1070
27	5670	5020	5070	5070	5020	2700	2220	1040	1190	1380	738	1130
28	4970	5070	5070	5070	5020	2360	2220	1010	1190	1440	872	1220
29	5470	5070	5070	5070	---	2020	2190	900	1130	1440	955	1250
30	5520	5070	5070	5070	---	1770	2160	1010	1160	1350	1040	1130
31	5520	---	5070	5070	---	1670	---	982	---	1220	1130	---
MAX	6170	5570	5120	5070	5070	5020	2220	2330	1250	1480	1250	1250
MIN	4920	5020	5020	5070	5020	1670	1350	900	712	764	738	494
(1)	-550	-450	0	0	-50	-3,350	4490	-1,178	+178	+60	-90	0

CAL YR 1974 MAX 6,170 MIN 364 CHANGE IN CONTENTS +2,950  
WTR YR 1975 MAX 6,170 MIN 494 CHANGE IN CONTENTS -3,840

† Change in contents, in acre-feet.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
 INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.40	21.00	20.45	20.50	20.50	20.45	15.90	16.95	15.35	15.40	15.45	15.50
2	20.40	21.00	20.45	20.50	20.50	20.45	15.90	16.95	15.50	15.25	15.40	15.55
3	20.40	21.00	20.45	20.50	20.50	20.45	16.25	16.95	15.50	15.10	15.35	15.50
4	20.40	20.90	20.45	20.50	20.50	20.45	16.40	17.20	15.35	14.95	15.35	15.50
5	20.40	20.60	20.45	20.50	20.50	20.45	16.40	17.15	15.20	15.10	15.20	15.35
6	20.95	20.60	20.45	20.50	20.50	20.45	16.50	17.00	15.00	15.30	14.90	15.20
7	20.60	20.85	20.45	20.50	20.50	20.40	16.55	16.60	15.00	15.50	14.90	15.30
8	20.45	20.95	20.45	20.50	20.50	20.30	16.55	16.30	15.00	15.50	14.90	15.35
9	20.45	20.45	20.45	20.50	20.50	20.30	16.60	16.00	15.05	15.50	15.20	15.20
10	20.35	20.45	20.45	20.50	20.50	20.40	16.65	15.60	15.05	15.40	15.40	15.00
11	20.35	20.45	20.45	20.50	20.50	20.35	16.80	15.45	14.80	15.35	15.50	15.00
12	20.35	20.45	20.45	20.50	20.50	20.35	16.85	15.25	14.65	15.55	15.50	15.10
13	20.40	20.45	20.45	20.50	20.50	20.35	16.75	15.30	14.80	15.70	15.50	15.20
14	20.45	20.45	20.45	20.50	20.50	20.35	16.60	15.40	15.05	15.95	15.60	15.35
15	20.40	20.45	20.45	20.50	20.50	20.40	16.40	15.40	15.25	15.90	15.60	15.40
16	20.50	20.45	20.45	20.50	20.50	20.40	16.15	15.30	15.40	15.80	15.40	15.30
17	20.80	20.45	20.45	20.50	20.50	20.40	15.80	15.25	15.00	15.50	15.10	15.10
18	20.75	20.45	20.45	20.50	20.50	20.30	15.75	15.30	15.50	15.30	15.00	15.00
19	20.65	20.45	20.45	20.50	20.50	20.10	16.20	15.40	15.35	15.20	14.85	14.95
20	20.45	20.45	20.55	20.50	20.50	19.90	16.60	15.35	15.20	15.10	14.90	15.10
21	20.55	20.45	20.55	20.50	20.50	19.65	16.85	15.40	15.20	14.75	15.00	15.20
22	20.55	20.45	20.55	20.50	20.50	19.45	17.00	15.45	15.35	15.10	15.00	15.30
23	21.60	20.45	20.50	20.50	20.45	19.25	17.05	15.45	15.40	15.25	15.00	15.10
24	21.30	20.45	20.50	20.50	20.45	19.00	17.05	15.30	15.50	15.35	15.25	14.20
25	21.20	20.45	20.50	20.50	20.45	18.70	17.00	15.40	15.60	15.45	15.10	14.90
26	21.00	20.45	20.50	20.50	20.45	18.20	17.05	15.40	15.60	15.60	14.90	15.30
27	21.10	20.45	20.50	20.50	20.45	17.70	17.05	15.25	15.50	15.80	14.70	15.40
28	20.40	20.50	20.50	20.50	20.45	17.25	17.05	15.20	15.50	15.90	14.95	15.55
29	20.90	20.50	20.50	20.50	---	16.75	17.00	15.00	15.40	15.90	15.10	15.60
30	20.95	20.50	20.50	20.50	---	16.40	16.95	15.20	15.45	15.75	15.25	15.40
31	20.95	---	20.50	20.50	---	16.25	---	15.15	---	15.55	15.40	---
MEAN	20.66	20.57	20.47	20.50	20.49	19.54	16.59	15.75	15.25	15.44	15.18	15.23
MAX	21.60	21.00	20.55	20.50	20.50	20.45	17.05	17.20	15.60	15.95	15.60	15.60
MIN	20.35	20.45	20.45	20.50	20.45	16.25	15.75	15.00	14.65	14.75	14.70	14.20

WTR YR 1975 MEAN 17.95 MAX 21.60 MIN 14.20

LOCATION.--Lat 32°28'55", long 104°35'47", in SW 1/4 sec.14, T.21 S., R.26 E., Eddy County, on right bank 4,800 ft (1,460 m) below Avalon Dam, 4.5 mi (7.2 km) northwest of Carlsbad, and at mile 466.3 (750.3 km, corrected).

PERIOD OF RECORD.--January 1906 to March 1907, (published as "at Avalon"), June 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,130 ft (954 m), from topographic map. January 1906 to March 1907 nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--24 years (1951-75) 38.8 ft<sup>3</sup>/s (1.099 m<sup>3</sup>/s) 28,110 acre-ft/yr (34.7 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 13,700 ft<sup>3</sup>/s (388 m<sup>3</sup>/s) Oct. 23 (gage height, 13.00 ft or 3.962 m); no flow most of time.

Period of record: Maximum discharge, 55,500 ft<sup>3</sup>/s (1,570 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 26.4 ft or 8.05 m, from floodmarks), from rating curve extended above 33,000 ft<sup>3</sup>/s (935 m<sup>3</sup>/s) on basis of computation of peak flow over Tansill Dam 5.8 mi (9.3 km) downstream; no flow most of time.

Flood of Oct. 2, 1904, caused in part, by failure of Avalon Dam, probably exceeded 90,000 ft<sup>3</sup>/s (2,550 m<sup>3</sup>/s) and is probably 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 ft<sup>3</sup>/s (1,980 m<sup>3</sup>/s) at site 6.5 mi (10.5 km) downstream.

REMARKS.---Records good. Flow regulated by Lake Sumner, Lake McMillan, and Lake Avalon (see sta 08384000, 09400500, 08403800). Diversions and ground-water withdrawals above station for irrigation of about 198,000 acres (801 km<sup>2</sup>), 1959 determination. Station bypassed by Carlsbad main canal (see sta 08403500).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	330	50	96	34	11						
2	14	341	50	100	53	14						
3	14	299		92	53	22						
4	15	137	51	69	45	26						
5	120	78	52	53	41	23						
6	800	84	50	48	35	14						
7	75	250	57	48	34	3.0						
8	20	306	66	42	40	1.4						
9	.80	149	66	47	37	1.1						
10	0	81	64	41	38	.72						
11	0	60	60	38	37	3.5						
12	0	58	62	44	37	.73						
13	0	54	60	52	37	.11						
14	0	50	59	47	34	10						
15	0	60	59	44	30	21						
16	32	54	60	42	37	5.4						
17	177	60	60	73	39	.50						
18	172	62	56	65	31	.07						
19	47	62	59	47	32	0						
20	56	56	103	45	37	0						
21	42	52	83	45	32	0						
22	496	51	64	42	24	0						
23	6160	50	52	45	27	0						
24	1900	52	47	44	20	0						
25	1760	50	50	42	18	0						
26	1470	48	55	38	21	0						
27	1130	48	51	35	16	0						
28	253	50	50	35	13	0						
29	303	54	48	35	---	0						
30	322	55	56	32	---	0						
31	314	---	72	32	---	0						
TOTAL	15760.80	3151	1817	1558	253	157.67			0	0	0	0
MEAN	508	105	58.0	50.3	34.4	5.04			0	0	0	0
MAX	6160	341	103	100	53	26			0	0	0	0
MIN	0	48	47	32	13	0			0	0	0	0
AC-FI	31260	6250	3608	3090	1840	313			0	0	0	0
CAL YR 1974	TOTAL 54106.80	MEAN 148	MAX 12400	MIN 0	AC-FI 187300							
CAL YR 1975	TOTAL 23397.47	MEAN 64.1	MAX 5160	MIN 0	AC-FI 45410							

08405150 DARK CANYON AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'24", long 104°13'34", in NE¼NW¼SE¼ sec.7, T.22 S., R.27 E., Eddy County, in downstream side of U.S. Highway 62-285 (Canal Street) bridge in Carlsbad, and 0.6 mi (1.0 km) upstream from mouth. Mouth at Pecos River mile 459.2 (738.9 km, corrected).

DRAINAGE AREA.--451 mi<sup>2</sup> (1,168 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 3,088.21 ft (941.286 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 14,200 ft<sup>3</sup>/s (402 m<sup>3</sup>/s) Oct. 23 (gage height, 10.80 ft or 3.29 m<sup>3</sup>/s); no flow most of time.

Period of record: Maximum discharge, 14,200 ft<sup>3</sup>/s (402 m<sup>3</sup>/s) Oct. 23 (gage height, 10.80 ft or 3.29 m<sup>3</sup>/s); no flow most of time.

The flood of Aug. 23, 1966, reached a discharge of 66,000 ft<sup>3</sup>/s (1,870 m<sup>3</sup>/s) as determined by slope-area method at site 1.2 mi (1.9 km) 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.

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 above station for irrigation of approximately 2,100 acres (850 hm<sup>2</sup>), 1973 determination, and for municipal supply for Carlsbad.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0											
2	0											
3	0											
4	0											
5	18											
6	296											
7	23											
8	6.5											
9	.90											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0											
21	0											
22	825											
23	4260											
24	540											
25	48											
26	24											
27	16											
28	11											
29	3.2											
30	.14											
31	0	---			---		---		---			---
TOTAL	6071.74	0	0	0	0	0	0	0	0	0	0	0
MEAN	196	0	0	0	0	0	0	0	0	0	0	0
MAX	4260	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	12040	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1974	TOTAL	10150.50	MEAN	27.8	MAX	4260	MIN	0	AC-FT	20130		
WTR YR 1975	TOTAL	6071.74	MEAN	16.6	MAX	4260	MIN	0	AC-FT	12040		

PEAK DISCHARGE (BASE, 500 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-06	0530	6.40	975	10-23	0245	10.80	14,200



## 08405200 PECOS RIVER BELOW DARK CANYON, AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'37", long 104°12'58", in NE¼SW¼NW¼ sec.8, T.22 S., R.27 E., Eddy County, on left bank, 700 ft (210 m) downstream from mouth of Dark Canyon, 0.3 mi (0.5 km) downstream from lower Tansill Dam and Bataan recreational area, 0.8 mi (1.3 km) downstream from bridge on U.S. Highway 62-180 in Carlsbad, and at mile 459.1 (738.7 km).

DRAINAGE AREA.--18,550 mi<sup>2</sup> (48,040 km<sup>2</sup>), approximately (contributing area.)

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,075.19 ft (937.318 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 72.5 ft<sup>3</sup>/s (2.053 m<sup>3</sup>/s), 52,530 acre-ft/yr (64.8 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 23,700 ft<sup>3</sup>/s (671 m<sup>3</sup>/s) Oct. 23 (gage height, 13.1 ft or 3.99 m, from floodmarks); minimum 0.58 ft<sup>3</sup>/s (0.016 m<sup>3</sup>/s) Mar. 24-26.

Period of record: Maximum discharge, 23,700 ft<sup>3</sup>/s (671 m<sup>3</sup>/s) Oct. 23, 1974 (gage height, 13.1 ft or 3.99 m from floodmarks); no flow at times.

The flood of Aug. 23, 1966, reached a stage of about 22 ft (6.7 m), discharge not determined. (For dates of other historical floods see sta 08404000.)

REMARKS.--Records good. Flow regulated by Lake Sumner, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and at low stages by power plant above station. Gage is bypassed on left bank by Carlsbad main canal east which irrigates several hundred acres adjacent to and below gage site, and on right bank by Carlsbad main canal south, which with supplemental ground-water withdrawals irrigates about 23,000 acres (93.1 km<sup>2</sup>) below. Diversions and ground-water withdrawals above station for irrigation of about 200,000 acres (810 km<sup>2</sup>), 1959 determination. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	388	109	142	84	56	25	35	33	16	24	18
2	39	392	107	153	116	55	26	37	26	19	24	18
3	34	375	104	146	99	58	27	35	25	21	22	22
4	36	209	106	131	90	60	28	35	22	36	22	21
5	111	147	106	114	81	60	30	35	22	25	22	19
6	1160	145	108	104	78	126	30	33	21	22	22	27
7	153	300	105	101	87	146	35	33	22	19	22	21
8	45	380	116	99	84	745	28	33	22	19	22	22
9	30	220	119	100	81	85	31	33	24	19	22	19
10	31	140	116	98	82	55	36	37	24	19	20	21
11	31	117	114	97	82	54	37	33	21	32	17	24
12	31	105	113	80	82	52	41	31	21	33	16	30
13	39	102	112	128	86	50	41	31	22	22	16	24
14	39	81	108	109	92	49	43	31	22	22	17	24
15	30	114	107	77	95	61	43	31	24	22	16	24
16	33	110	107	102	88	64	44	31	22	21	17	24
17	194	109	109	111	89	106	42	33	19	21	17	22
18	200	109	93	125	84	50	41	31	18	21	17	24
19	142	112	100	108	86	19	37	31	18	22	17	21
20	81	109	146	96	85	45	36	30	16	21	17	21
21	79	102	142	96	81	30	35	30	16	56	18	21
22	940	92	116	96	92	1.8	37	30	14	42	18	21
23	10600	89	96	93	74	2.6	43	28	16	31	17	19
24	2360	98	90	93	69	1.2	42	28	14	30	16	19
25	1880	114	93	92	63	.73	43	28	14	25	15	19
26	1490	104	116	91	68	.73	43	25	15	24	15	21
27	1260	109	106	89	64	4.4	40	26	15	25	17	21
28	363	109	102	55	60	49	34	31	15	25	18	21
29	358	106	102	76	---	66	35	28	16	25	17	21
30	358	113	76	79	---	24	33	30	16	25	17	22
31	367	---	129	77	---	4.3	---	33	---	22	17	---
TOTAL	22547	4800	3373	3158	2322	1680.76	1086	976	595	782	574	651
MEAN	727	160	109	102	82.9	54.2	36.2	31.5	19.8	25.2	18.5	21.7
MAX	10600	392	146	153	116	245	44	37	33	56	24	30
MIN	30	81	76	55	60	.73	25	25	14	16	15	18
AC-FT	44720	9520	6690	6260	4610	3330	2150	1940	1180	1550	1140	1290

CAL YR 1974 TOTAL 69813.45 MEAN 191 MAX 14300 MIN 0 AC-FT 134500  
 WTH YR 1975 TOTAL 42544.76 MEAN 117 MAX 10600 MIN .73 AC-FT 84390

08405500 BLACK RIVER ABOVE MALAGA, N. MEX.

LOCATION.--Lat 32°13'44", long 104°09'02", in SW¼NW¼SW¼ sec.12, T.24 S., R.27 E., Eddy County, on right bank 0.6 mi (1.0 km) upstream from Black River diversion dam, 4.6 mi (7.4 km) west of Malaga, and at mile 7.1 (11.4 km, corrected). Mouth at Pecos River mile 436.3 (702.0 km).

DRAINAGE AREA.--343 mi<sup>2</sup> (888 km<sup>2</sup>).

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,070 ft (936 m), from topographic map. March to December 1940 water-stage recorder and Cippoletti weir at site 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--28 years (1947-75), 13.9 ft<sup>3</sup>/s (0.394 m<sup>3</sup>/s), 10,070 acre-ft/yr (12.4 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 301 ft<sup>3</sup>/s (8.52 m<sup>3</sup>/s) Aug. 27 (gage height, 2.53 ft or 0.771 m); minimum, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Sept. 10.

Period of record: Maximum discharge, 74,600 ft<sup>3</sup>/s (2,110 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 21.7 ft or 6.61 m, from floodmarks), from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 12.60 and 21.7 ft (3.840 and 6.61 m); minimum, 0.73 ft<sup>3</sup>/s (0.021 m<sup>3</sup>/s) June 25, 1969.

The flood of Aug. 23, 1966, exceeded the previous maximum stage which occurred in 1908 by about 1.0 ft (0.30 m), information from local resident. Flood of Sept. 20 or 21, 1941, reached a stage of 19.0 ft (5.79 m), determined in 1947 from well-defined floodmarks, discharge, 33,000 ft<sup>3</sup>/s (935 m<sup>3</sup>/s), from rating curve extended above 1,400 ft<sup>3</sup>/s (39.6 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 8.41 and 12.60 ft (2.563 and 3.840 m).

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres (405 hm<sup>2</sup>), 1959 determination, above station.

REVISIONS (WATER YEARS).--WSP 1632: 1948, 1949-50(P).

DISCHARGE\* IN CUBIC FEET PER SECOND\* WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	6.6	12	18	19	5.9	10	10	6.6	5.6	8.0	5.6
2	9.9	9.5	12	18	19	5.9	11	12	9.1	7.6	7.6	5.1
3	10	11	12	18	19	5.6	11	12	9.1	8.0	7.6	4.0
4	10	11	12	18	18	5.6	11	12	9.1	9.5	7.6	3.1
5	14	11	12	18	18	5.6	12	11	8.7	10	7.2	2.4
6	29	11	12	18	17	5.6	12	11	8.7	8.7	7.2	2.8
7	12	12	12	18	17	5.4	13	11	8.7	8.7	7.2	2.8
8	11	12	13	17	17	5.6	12	11	8.7	9.5	7.2	2.2
9	11	12	13	17	17	5.6	12	12	9.5	12	6.9	2.0
10	11	12	13	17	17	5.6	12	20	9.5	9.5	6.9	1.8
11	9.9	12	13	17	15	5.4	12	28	9.9	8.7	7.2	2.2
12	7.2	11	13	18	12	5.4	12	19	9.5	9.1	7.2	30
13	8.3	11	13	18	12	5.6	13	14	9.5	8.7	7.2	13
14	11	11	13	18	11	5.6	14	13	9.1	8.0	7.2	8.0
15	6.9	11	13	18	11	5.6	14	12	9.1	8.0	7.2	6.9
16	5.6	11	13	18	10	5.4	14	12	9.1	8.0	6.6	8.7
17	5.1	11	13	18	10	5.4	14	12	8.7	8.3	5.4	9.1
18	4.8	12	13	18	9.9	5.1	12	14	8.7	8.3	4.3	9.1
19	4.8	12	13	18	10	5.4	13	17	8.7	7.6	3.3	9.1
20	4.5	12	13	18	9.9	5.4	13	11	8.7	7.2	4.5	9.1
21	4.5	12	13	18	7.6	5.4	14	6.9	8.3	22	5.4	9.5
22	16	12	13	18	7.2	5.4	14	5.6	8.0	29	4.5	9.9
23	22	12	14	18	6.6	5.1	13	4.8	9.1	11	4.3	9.5
24	32	12	14	18	6.2	5.1	13	4.5	9.5	10	4.3	9.5
25	17	12	15	18	6.6	5.1	13	4.3	8.7	8.7	4.3	9.5
26	9.9	12	16	18	6.6	5.1	13	4.0	8.3	8.3	4.0	9.5
27	8.3	12	18	18	6.6	4.8	13	3.8	8.0	9.1	28	8.7
28	7.9	12	20	18	6.2	4.8	12	3.8	7.2	8.7	9.8	5.9
29	7.6	12	19	18	---	4.8	12	3.5	4.5	8.3	6.2	4.8
30	7.2	12	18	18	---	4.8	7.6	3.5	3.8	8.3	6.2	4.5
31	6.9	---	18	19	---	5.6	---	3.8	---	8.0	5.9	---
TOTAL	335.2	342.1	431	555	342.4	166.7	371.6	322.5	254.1	302.4	216.4	218.3
MEAN	10.8	11.4	13.9	17.9	12.2	5.38	12.4	10.4	8.47	9.75	6.98	7.28
MAX	32	12	20	19	19	5.9	14	28	9.9	29	28	30
MIN	4.5	6.6	12	17	6.2	4.8	7.6	3.5	3.8	5.6	3.3	1.8
AC-FT	665	679	855	1100	679	331	737	640	504	600	429	433

CAL YR 1974 TOTAL 4080.4 MEAN 11.2 MAX 515 MIN 1.1 AC-FT 8090  
WTR YR 1975 TOTAL 3857.7 MEAN 10.6 MAX 32 MIN 1.8 AC-FT 7650

PEAK DISCHARGE (BASE. 450 FT<sup>3</sup>/S).--No peak above base.

## 08406500 PECOS RIVER NEAR MALAGA, N. MEX.

LOCATION.--Lat 32°12'26", long 104°01'22", in SW¼NE¼ sec.19, T.24 S., R.29 E., Eddy County, on right bank 3.1 mi (5.0 km) southeast of Malaga, 4.3 mi (6.9 km) downstream from Black River, and at mile 432.2 (695.4 km).

DRAINAGE AREA.--19,190 mi<sup>2</sup> (49,700 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--May 1920 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 2,895.64 ft (882.591 m) above mean sea level. May 1, 1920, to Mar. 24, 1949, at datum 3 ft (0.91 m) higher.

AVERAGE DISCHARGE.--16 years (1920-36), 274 ft<sup>3</sup>/s (7.760 m<sup>3</sup>/s), 198,400 acre-ft/yr (245 hm<sup>3</sup>/yr), prior to completion of Lake Sumner; 39 years (1936-75) 196 ft<sup>3</sup>/s (5.531 m<sup>3</sup>/s), 142,000 acre-ft/yr (175 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 18,900 ft<sup>3</sup>/s (535 m<sup>3</sup>/s) Oct. 23 (gage height, 22.12 ft or 6.742 m); minimum, 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s) Aug. 14-16.

Period of Record: Maximum discharge, 120,000 ft<sup>3</sup>/s (3,400 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 42.1 ft or 12.83 m, from flood-marks), from rating curve extended above 36,000 ft<sup>3</sup>/s (1,020 m<sup>3</sup>/s), on basis of slope-area measurement at gage height 42.1 ft (12.83 m); minimum, 5.0 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Mar. 9, 1965.

The flood of Aug. 23, 1966, exceeded all known floods at this location. A major flood occurred in 1904, discharge not determined. Flood of Aug. 7, 1916, reached a discharge of 70,000 ft<sup>3</sup>/s (1,980 m<sup>3</sup>/s) at Carlsbad, 27 mi (43.4 km) upstream. Flood in September 1919 reached a stage of 29.4 ft (8.96 m), present datum, discharge, 40,400 ft<sup>3</sup>/s (1,140 m<sup>3</sup>/s).

REMARKS.--Records good. Flow regulated by storage in Lake Sumner, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (81,800 hm<sup>2</sup>), 1959 determination. Harroun canal bypasses gage on left bank and irrigates approximately 1,000 acres (405 hm<sup>2</sup>) adjacent to and below gage. This bypass is not gaged. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1632: 1925, 1932-37.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	424	153	158	111	71	55	32	29	28	37	27
2	92	441	154	192	118	68	46	34	31	26	37	28
3	82	444	151	204	150	66	37	37	32	25	35	27
4	67	395	148	196	139	66	48	35	32	25	31	28
5	61	270	150	180	121	75	51	32	32	38	31	32
6	818	218	146	155	108	75	52	30	31	59	30	44
7	349	204	155	117	102	100	52	30	31	45	28	50
8	157	365	152	105	102	139	57	29	28	35	27	38
9	84	395	165	102	103	246	52	28	26	31	25	36
10	50	277	170	101	102	135	44	85	26	29	24	32
11	41	220	167	100	102	87	51	65	25	34	23	29
12	39	193	163	100	99	86	55	58	26	37	25	41
13	39	183	162	93	97	85	59	56	28	47	25	53
14	58	176	160	119	94	87	69	56	30	53	22	61
15	70	167	158	135	92	79	63	51	29	42	21	57
16	59	172	155	97	96	80	48	48	29	38	23	50
17	52	180	155	120	99	86	44	46	28	38	27	38
18	179	180	157	128	99	94	42	47	30	39	25	35
19	195	178	141	150	95	105	43	50	29	39	25	34
20	136	175	142	133	90	60	44	40	33	37	24	32
21	110	172	195	128	88	44	44	39	28	49	24	32
22	89	166	197	124	90	65	42	34	25	80	26	32
23	7870	146	163	125	98	52	38	32	33	98	25	33
24	3170	135	146	126	90	37	38	33	81	60	24	32
25	2590	142	134	128	87	31	40	32	45	55	23	32
26	1500	158	149	124	82	27	38	31	36	53	24	32
27	1830	149	167	125	74	27	36	32	31	48	26	32
28	663	154	157	126	77	25	34	32	29	48	65	31
29	339	149	154	97	---	26	34	33	25	47	52	31
30	416	147	157	115	---	31	33	33	27	43	37	30
31	418	---	138	121	---	74	---	31	---	40	30	---
TOTAL	21739	6775	4861	4024	2813	2329	1389	1251	945	1366	901	1089
MEAN	701	226	157	130	100	75.1	46.3	40.4	31.5	44.1	29.1	36.3
MAX	7870	444	197	204	158	246	69	85	81	98	65	61
MIN	39	135	134	93	74	25	33	28	25	25	21	27
AC-FT	43120	13440	9640	7980	5580	4620	2760	2486	1870	2710	1790	2160

CAL YR 1974 TOTAL 79189.3 MEAN 217 MAX 13700 MIN 9.7 AC-FT 157100

WTR YR 1975 TOTAL 49482.0 MEAN 136 MAX 7870 MIN 21 AC-FT 98150

PEAK DISCHARGE (BASE, 1,800 FT<sup>3</sup>/s).--October 23 (1400) 18,900 ft<sup>3</sup>/s (22.12 ft).

## 08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.

LOCATION.--Lat 32°11'19", long 103°58'43", in SW 1/4 Sec. 27, T.24 S., R.29 E., Eddy County, on right bank 550 ft (168 m) upstream from Pierce Canyon Crossing, and 6.0 mi (9.7 km) southeast of Malaga, and at mile 425.7 (685.0 km).

DRAINAGE AREA.--19,260 mi<sup>2</sup> (49,880 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--July 1938 to September 1941, August 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,889.18 ft (880.622 m) above mean sea level. July 1938 to September 1941 at datum 1.19 ft (0.363 m) higher.

AVERAGE DISCHARGE.--27 years (1938-41, 1951-75), 156 ft<sup>3</sup>/s (4.418 m<sup>3</sup>/s) 113,000 acre-ft/yr (139 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge not determined; minimum, 17 ft<sup>3</sup>/s (0.48 m<sup>3</sup>/s) June 23.

Period of record: Maximum gage height, 31.6 ft (9.63 m) from floodmarks, Aug. 23, 1966, (discharge not determined); minimum discharge, 0.54 ft<sup>3</sup>/s (0.015 m<sup>3</sup>/s) May 30, 1965.

REMARKS.--Records good. Flow regulated by storage in Lake Sumner, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (81,750 hm<sup>2</sup>), 1959 determination. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 898: 1938(M). WSP 1712: 1959.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	447	147	145	115	80	62	34	31	27	41	28
2	105	462	151	183	112	76	52	33	31	25	40	28
3	88	465	148	199	143	71	41	37	31	25	39	28
4	76	431	147	194	142	69	42	41	33	25	37	28
5	60	300	148	184	126	75	53	36	33	30	34	31
6	676	231	139	163	111	80	52	32	32	49	34	37
7	593	206	154	134	102	85	52	32	31	50	32	50
8	232	351	149	113	101	120	56	31	30	38	31	41
9	133	428	156	107	103	209	54	30	27	32	30	37
10	76	312	163	107	102	159	45	60	26	30	29	35
11	55	231	160	103	104	98	47	90	26	40	27	31
12	52	193	157	104	102	93	53	65	25	38	27	39
13	51	178	155	101	98	90	54	60	26	42	29	47
14	60	170	154	108	96	90	63	58	28	53	28	60
15	89	163	153	138	98	87	63	53	27	46	25	58
16	80	155	152	114	95	83	50	50	28	40	27	53
17	66	174	151	116	104	90	44	49	24	41	38	44
18	156	172	152	129	101	91	42	48	26	41	28	37
19	250	172	147	151	101	112	41	57	27	42	28	35
20	206	171	136	141	97	82	44	44	30	42	28	35
21	154	167	168	132	93	51	44	41	27	53	27	36
22	110	163	195	129	95	63	44	37	22	67	29	37
23	6920	143	166	128	99	65	40	34	23	97	29	37
24	4430	134	150	129	104	47	38	34	69	76	28	36
25	3070	136	138	130	92	38	40	33	48	60	26	34
26	1730	149	148	126	91	33	41	32	36	58	26	35
27	1900	145	163	125	83	30	38	32	31	51	30	34
28	878	152	161	127	81	28	36	33	28	51	49	34
29	410	147	156	110	---	27	36	33	24	51	57	33
30	438	144	159	103	---	27	35	35	23	46	42	34
31	446	---	156	120	---	64	---	33	---	42	32	---
TOTAL	23727	6892	4779	4093	2691	2413	1402	1317	905	1408	1007	1132
MEAN	765	230	154	132	103	77.8	46.7	42.5	30.2	45.4	32.5	37.7
MAX	6920	465	195	199	143	209	63	90	69	97	57	60
MIN	51	134	136	101	41	27	35	30	22	25	25	28
AC-FT	47060	13670	9480	8120	5730	4790	2780	2610	1800	2790	2000	2250
CAL YR 1974 TOTAL	80840.8				13700		4.1		158800			
WTR YR 1975 TOTAL	51966.0				6920		22		103100			

## 08407500 PECOS RIVER AT RED BLUFF, N. MEX.

LOCATION.--Lat 32°04'30", long 104°02'21", in SW 1/4 sec. 1, T.26 S., R.28 E., Eddy County, on right bank at Red Bluff, 0.2 mi (0.3 km) downstream from Red Bluff Draw, 1.6 mi (2.6 km) northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 mi (8.4 km) north of the New Mexico-Texas state line, 5.5 mi (8.8 km) upstream from Delaware River, and at mile 411.2 (661.6 km).

DRAINAGE AREA.--19,540 mi<sup>2</sup> (50,600 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,850.05 ft (868.695 m) above mean sea level.

AVERAGE DISCHARGE.--38 years, 187 ft<sup>3</sup>/s (5.296 m<sup>3</sup>/s), 135,500 acre-ft/yr (167 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 14,800 ft<sup>3</sup>/s (419 m<sup>3</sup>/s) Oct. 23 (gage height, 17.51 ft or 5.337 m); minimum, 22 ft<sup>3</sup>/s (0.62 m<sup>3</sup>/s) Aug. 16.

Period of record: Maximum discharge, 111,000 ft<sup>3</sup>/s (3,140 m<sup>3</sup>/s) Aug. 23, 1966 (gage height, 33.32 ft or 10.156 m), from rating curve extended above 30,000 ft<sup>3</sup>/s (850 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.19 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s) Aug. 1, 1966.

The flood of Aug. 23, 1966, exceeded all known floods at this location. Flood in October 1904 reached a stage of 28.0 ft (8.53 m), from information by Panhandle and Santa Fe Railway Co. (For dates of other historical floods see sta 08405000, 08406500.)

REMARKS.--Records good for the period October to April; fair thereafter. Flow regulated by storage in Lake Sumner, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (818 km<sup>2</sup>), 1959 determination. Water quality records for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	477	150	140	127	86	70	37	35	28	41	31
2	146	489	154	175	122	82	56	37	33	29	41	29
3	124	493	152	196	132	78	47	37	34	28	40	31
4	114	477	152	198	154	76	40	40	35	27	38	30
5	100	348	150	191	135	78	49	39	35	40	36	32
6	151	257	146	173	122	85	52	35	35	38	35	35
7	975	218	152	154	114	85	53	34	35	56	32	44
8	294	286	154	125	111	112	54	31	35	46	30	48
9	178	448	156	118	110	164	57	30	34	38	28	40
10	120	355	162	114	111	185	53	39	30	35	27	39
11	95	254	165	113	111	117	46	134	31	47	24	35
12	88	208	160	111	110	98	53	72	30	44	23	35
13	86	189	158	111	106	96	56	56	30	45	24	42
14	101	180	158	108	105	93	60	58	30	50	26	51
15	103	171	156	136	106	93	67	57	31	51	24	55
16	108	158	156	136	100	88	62	54	30	45	22	52
17	98	175	156	113	106	91	49	63	30	42	37	47
18	101	173	156	131	105	95	46	70	28	42	29	40
19	234	175	156	146	105	110	44	117	30	42	24	36
20	221	173	140	150	100	105	46	52	30	42	25	34
21	171	171	156	138	96	67	47	45	34	57	25	36
22	140	169	198	132	99	57	47	43	29	80	25	35
23	4420	154	178	131	98	75	46	38	46	84	26	35
24	7720	142	158	131	105	59	42	37	130	88	26	35
25	2550	136	148	132	96	48	42	37	57	65	25	33
26	1980	144	152	131	96	39	44	35	41	58	24	32
27	1570	152	158	129	91	35	43	34	35	54	26	33
28	1300	154	169	131	86	34	41	35	31	49	33	32
29	521	152	160	127	---	29	39	35	30	51	57	30
30	452	148	162	108	---	30	38	35	27	48	46	30
31	489	---	167	125	---	39	---	35	---	43	36	---
TOTAL	24928	7226	4895	4254	3059	2529	1489	1501	1101	1492	955	1117
MEAN	804	241	158	137	109	81.6	49.6	48.4	36.7	48.1	30.8	37.2
MAX	7720	493	198	198	154	185	70	134	130	88	57	55
MIN	86	136	140	108	86	29	38	30	27	27	22	29
AC-FT	49440	14330	9710	8440	6070	5020	2950	2980	2180	2960	1890	2220

CAL YR 1974 TOTAL 83529.1 MEAN 229 MAX 16700 MIN 3.3 AC-FT 165700  
WTR YR 1975 TOTAL 54546.0 MEAN 149 MAX 7720 MIN 22 AC-FT 108200

PEAK DISCHARGE (BASE, 1,800 FT<sup>3</sup>/S).--October 23 (2115) 14,800 ft<sup>3</sup>/s (17.51 ft).

## 08408500 DELAWARE RIVER NEAR RED BLUFF, N. MEX.

LOCATION.--Lat 32°01'23", long 104°03'15", in NE1/4 sec. 23, T.26 S., R.28 E., Eddy County, near center of channel on downstream side of pier of bridge on U.S. Highway 285, 2.1 mi (3.4 km) northwest of the New Mexico-Texas state line, 3.6 mi (5.8 km) southwest of Red Bluff, 14 mi (22.5 km) south of Malaga, and at mile 3.7 (6.0 km). Mouth at Pecos River mile 405.6 (652.6 km).

DRAINAGE AREA.--689 mi<sup>2</sup> (1,785 km<sup>2</sup>).

PERIOD OF RECORD.--April 1912 to September 1913, May 1914 to June 1915, October 1937 to current year. Published as "near Malaga" 1912-13, and as "near Angeles, Tex." 1914-15.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,900.66 ft (884.121 m) above mean sea level. Prior to May 1914, at site 3.0 mi (4.8 km) upstream at different datum. May 1914 to June 1915 at site 2.5 mi (4.0 km) downstream at different datum.

AVERAGE DISCHARGE.--38 years (1937-75), 13.6 ft<sup>3</sup>/s (0.385 m<sup>3</sup>/s), 9,850 acre-ft/yr (12.1 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,850 ft<sup>3</sup>/s (80.7 m<sup>3</sup>/s) July 24 (gage height, 5.88 ft or 1.792 m); no flow June 18-21. Period of record: Maximum discharge, 81,400 ft<sup>3</sup>/s (2,310 m<sup>3</sup>/s) Oct. 2, 1955 (gage height, 27.0 ft or 8.23 m, from floodmarks), from rating curve extended above 1,500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 8.65 ft (2.637 m), 12.84 ft (3.914 m), 18.00 ft (5.486 m), and 27.0 ft (8.230 m); no flow many days most years. Maximum stage known since at least 1911 is that of Oct. 2, 1955.

REMARKS.--Records fair. One small upstream diversion.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	5.7	3.4	4.1	4.2	3.8	3.8	2.4	.90	.03	2.6	1.1
2	7.4	4.9	3.6	4.0	4.4	3.9	3.6	2.5	.96	.03	2.2	.77
3	6.5	4.4	3.6	3.9	4.3	3.8	3.6	2.5	.85	.01	8.3	.68
4	6.3	4.1	3.6	3.9	4.1	3.8	3.4	2.4	.71	52	4.5	.70
5	5.8	4.1	3.6	3.6	3.9	3.6	3.4	2.2	.65	13	2.3	.69
6	5.4	3.6	3.6	3.6	3.6	3.6	3.3	2.1	.56	8.0	1.7	.74
7	5.0	4.2	3.6	3.5	3.6	3.6	3.3	2.1	.50	4.0	1.5	.88
8	4.8	4.3	3.8	3.4	3.7	3.4	3.1	2.1	.47	1.4	1.3	.74
9	4.9	4.9	3.9	3.2	3.6	3.5	3.1	2.2	.41	.74	1.2	.67
10	4.5	4.8	3.9	3.1	3.6	3.5	3.1	3.0	.42	.71	1.1	.60
11	4.3	4.2	3.7	3.1	3.6	3.4	3.1	6.0	.40	.57	1.0	.60
12	4.1	3.9	3.6	3.0	3.4	3.6	3.4	3.6	.45	.57	1.0	29
13	5.3	4.3	3.6	2.9	3.4	3.9	3.4	2.3	.46	.83	1.1	29
14	8.1	3.8	3.6	2.9	3.4	3.6	3.5	2.1	.38	.63	1.1	13
15	4.5	3.9	3.6	2.9	3.5	3.6	3.5	2.0	.26	.42	.99	7.1
16	4.0	3.9	3.6	2.9	3.4	3.5	3.4	1.9	.13	.26	.96	4.2
17	3.8	3.6	3.6	2.9	3.3	3.2	3.2	21	.05	.22	.97	3.1
18	3.7	3.6	3.5	3.1	3.3	3.1	2.8	3.3	0	.28	.92	2.2
19	3.5	3.6	3.6	3.1	3.4	3.2	2.7	5.3	0	.35	.77	1.7
20	3.7	3.5	3.4	3.1	3.4	3.2	2.6	2.5	0	.34	.60	1.5
21	3.6	3.7	3.5	3.1	3.5	3.2	2.6	1.6	0	.63	1.5	1.6
22	3.6	3.6	3.5	2.9	3.8	3.2	2.7	1.2	20	.98	.91	2.0
23	6.3	3.5	3.4	3.0	3.6	3.1	2.7	1.1	13	.49	.61	2.0
24	16	3.4	3.3	3.4	3.6	3.1	2.6	1.0	17	323	.46	1.8
25	17	3.4	3.5	3.4	3.6	3.1	2.6	.98	.87	22	.39	1.6
26	8.9	3.4	4.1	3.3	3.8	3.2	2.6	.88	.57	21	.27	1.4
27	6.7	3.5	4.7	3.3	3.8	3.2	2.6	.85	.24	7.9	13	1.3
28	14	3.6	4.3	3.3	3.8	3.3	2.3	.88	.12	21	11	1.2
29	26	3.4	4.1	3.3	---	3.3	2.3	.89	.08	11	19	1.2
30	9.4	3.4	4.4	3.6	---	3.4	2.3	.84	.04	5.1	4.9	1.1
31	7.1	---	4.2	3.9	---	3.6	---	.88	---	3.3	1.7	---
TOTAL	222.8	114.2	115.4	102.7	102.6	106.5	90.6	84.60	60.48	646.32	89.85	114.17
MEAN	7.19	3.94	3.72	3.31	3.66	3.44	3.02	2.73	2.02	20.8	2.90	3.81
MAX	26	5.7	4.7	4.1	4.4	3.9	3.8	21	20	323	19	29
MIN	3.5	3.4	3.3	2.9	3.3	3.1	2.3	.84	0	.01	.27	.60
AC-FT	442	234	229	204	204	211	180	168	120	1280	178	226

CAL YR 1974 TOTAL 3978.10 MEAN 10.9 MAX 1160 MIN 0 AC-FT 7890  
WTR YR 1975 TOTAL 1854.22 MEAN 5.08 MAX 323 MIN 0 AC-FT 3680

PEAK DISCHARGE (BASE, 1,700 FT<sup>3</sup>/S).--July 24 (0215) 2,850 ft<sup>3</sup>/s (5.88 ft).

## 08410000 RED BLUFF RESERVOIR NEAR ORLA, TEX.

LOCATION.--Lat 31°54'06", long 103°54'42", Reeves County, at right end of Red Bluff Dam on Pecos River, 3 mi (4.8 km) upstream from Salt (Screwbeem) Draw, and 4.5 mi (7.2 km) north of Orla.

DRAINAGE AREA.--20,720 mi<sup>2</sup> (53,660 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read at irregular intervals. Datum of gage is 0.43 ft (0.131 m), below mean sea level.

EXTREMES.--Current year: Maximum contents observed, 177,900 acre-ft (219 hm<sup>3</sup>) Mar. 7-26 (gage height, 2,828.4 ft or 862.10 m); minimum observed, 109,000 acre-ft (134 hm<sup>3</sup>) Oct. 1-3 (gage height, 2,817.9 ft or 858.90 m).

Period of record: Maximum contents observed, 352,000 acre-ft (434 hm<sup>3</sup>) Sept. 27-28, 1941 (gage height, 2,846.2 ft or 867.52 m, observed on nonrecording gage at service spillway, affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft (13.7 hm<sup>3</sup>) May 13, 1948 (gage height, 2,781.4 ft or 847.77 m).

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft (2,800 m) long. Dam completed and storage began in September 1936. The concrete service spillway is equipped with 12 tainter gates 25 ft (7.6 m) wide by 15 ft (4.6 m) high. The emergency spillway, located on the right bank, is 790 ft (241 m) long. Water is used for power development and irrigation from Mentone to Grandfalls. Inflow partly regulated by major reservoirs above station include Lake Sumner, Lake McMillan, and Lake Avalon, with a total combined capacity of 154,400 acre-ft (190 hm<sup>3</sup>). Also several small diversion dams divert water for power and irrigation. Contents computed from intermittent gage readings; figures given herein represent total contents. Data regarding dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of emergency spillway .....	2,845.0	340,000
Top of tainter gates (top of conservation storage) .....	2,842.0	310,000
Crest of service spillway .....	2,827.0	166,500
Bottom of two 7.0 by 9.0-foot conduits .....	2,764.0	3,000

COOPERATION.--Gage-height records and capacity curve furnished by Red Bluff Water Power and Control District. Capacity curve based on Geological Survey topographic map, survey of 1925.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109000	151400	159800	166500	172100	177000	175400	168100	153400	145500	141000	132400
2	109000	151400	159800	166500	172900	177000	175400	168100	152700	145500	141000	131200
3	109000	152000	159800	166500	172900	177000	174500	168100	152700	144800	140300	130600
4	109500	152700	160500	167300	173700	177000	174500	166500	152700	144800	140300	130000
5	109500	154100	160500	167300	173700	177000	174500	165800	152000	144800	139600	129400
6	109500	154100	160500	167300	173700	177000	173700	164200	152000	144800	139600	128200
7	111200	154800	160500	168100	173700	177900	173700	162800	152000	144200	139000	127600
8	111700	154800	160500	168100	173700	177900	173700	162600	151400	144200	139000	127000
9	111700	155500	161200	168100	173700	177900	172900	161200	151400	143600	138400	125800
10	111700	155500	161200	168100	174500	177900	172900	160500	150700	142900	138400	125200
11	111700	156200	161200	168900	174500	177900	172900	159800	150700	142900	137800	124600
12	111700	156900	161200	168900	174500	177900	172900	159000	150700	142900	137800	123400
13	112200	156900	162000	168900	174500	177900	172100	158300	150700	142900	137200	122800
14	112200	156900	162000	168900	175400	177900	172100	157600	150000	142900	137200	122200
15	112200	157600	162000	168900	175400	177900	172100	156900	150000	142200	136600	121600
16	112200	157600	162000	168900	175400	177900	172100	156900	149400	141600	136600	121000
17	112800	157600	162800	168900	175400	177900	172100	156200	148800	141600	136600	119800
18	112800	158300	162800	169700	175400	177900	171300	156900	148800	141000	136600	119200
19	112800	158300	162800	169700	175400	177900	171300	156900	148800	141000	136000	119200
20	112800	158300	163500	169700	175400	177900	170500	156900	148100	141000	136000	118600
21	113400	158300	163500	169700	175400	177900	170500	156200	148100	141000	135400	118600
22	113400	159000	163500	169700	175400	177900	170500	156200	147400	140300	135400	118600
23	113400	159000	164200	170500	175400	177900	170500	155500	147400	141000	134800	118000
24	128200	159000	164200	170500	176200	177900	169700	155500	147400	142200	134800	118000
25	136600	159000	165000	170500	176200	177900	169700	155500	147400	142200	134800	118000
26	141000	159000	165000	171300	176200	177900	169700	155500	147400	142200	134200	117400
27	144200	159800	165000	171300	176200	177900	169700	154800	147400	142200	134200	117400
28	147400	159800	165000	171300	176200	177900	169700	154800	146800	142200	134800	117400
29	149400	159800	165800	171300	---	176200	168900	154100	146800	141600	134200	117400
30	150000	159800	165800	172100	---	176200	168900	154100	146200	141600	133600	116900
31	150700	---	165800	172100	---	176200	---	153400	---	141000	133000	---
MAX	150700	159800	165800	172100	176200	177900	175400	168100	153400	145500	141000	132400
MIN	109000	151400	159800	166500	172100	176200	168900	153400	146200	140300	133000	116800
(†)	2824.8	2826.1	2826.9	2827.7	2828.2	2828.2	2827.3	2825.2	2824.1	2823.3	2822.0	2819.3
(‡)	+41740	+9100	+6000	+6300	+4100	0	-7300	-15500	-7200	-5200	-8000	-16200

CAL YR 1974 MAX 165800 MIN 22250 † +109300  
WTR YR 1975 MAX 177900 MIN 109000 ‡ +7800

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

08412500 PECOS RIVER NEAR ORLA, TEX.

LOCATION.--Lat 31°52'21", long 103°49'52", Reeves County, on right bank at bridge on Farm Road 652, 5.5 mi (8.8 km) downstream from Salt (Screwbean) Draw, 5.9 mi (9.5 km) northeast of Orla, and 8.5 mi (13.7 km) downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 mi<sup>2</sup> (54,930 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--May 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,730.86 ft (832.366 m) above mean sea level. Prior to Nov. 16, 1969, at site 6.9 mi (11.1 km) downstream at datum 12.81 ft (3.904 m) lower.

AVERAGE DISCHARGE.--38 years, 181 ft<sup>3</sup>/s (5.126 m<sup>3</sup>/s), 131,100 acre-ft/yr (162 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 549 ft<sup>3</sup>/s (15.5 m<sup>3</sup>/s) May 17; maximum gage height, 5.89 ft (1.795 m) July 24; minimum discharge, 12 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) Mar. 24.

Period of record.--Maximum discharge, 23,700 ft<sup>3</sup>/s (671 m<sup>3</sup>/s) Sept. 29, 1941 (gage height, 20.74 ft or 6.322 m, site and datum then in use); no flow at times in 1946 and 1965.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (see sta 08410000) and reservoirs above Carlsbad, N. Mex. Occasional runoff from draws between dam and station. Many diversions above Red Bluff Reservoir for irrigation. Water quality records for the current year are published in Part 2 of report for Texas.

REVISIONS (WATER YEARS).--WSP 928: 1937.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	20	16	17	15	15	99	98	97	94	77	387
2	24	21	16	17	15	15	97	98	95	94	77	383
3	23	19	16	14	14	15	98	234	96	93	77	383
4	24	19	16	17	14	15	97	479	96	93	77	383
5	24	19	16	17	14	17	98	471	94	93	77	383
6	22	18	16	17	15	25	98	469	93	93	77	383
7	21	18	16	17	15	24	98	469	93	93	77	385
8	21	19	16	17	15	24	97	469	92	131	77	385
9	21	21	17	17	15	25	97	471	92	97	77	385
10	21	24	17	17	14	25	96	475	93	95	74	385
11	21	22	18	17	14	22	96	479	166	95	74	375
12	21	19	18	15	13	22	97	475	94	94	74	404
13	27	19	18	14	14	25	98	473	94	94	74	406
14	46	19	18	15	13	23	98	471	94	94	74	399
15	32	19	17	16	13	23	97	462	94	94	74	402
16	25	18	17	17	13	22	94	103	94	94	74	387
17	22	18	17	17	14	21	99	169	94	93	74	385
18	21	18	17	16	14	21	98	157	94	93	74	350
19	21	19	16	14	14	17	97	98	94	93	74	104
20	20	18	15	14	14	14	99	94	93	93	75	496
21	20	18	14	14	13	14	96	95	93	93	75	89
22	20	18	14	13	14	13	97	95	93	93	75	86
23	21	17	13	13	14	13	97	95	103	98	74	85
24	22	17	13	15	15	13	96	95	98	220	74	83
25	25	16	14	14	14	13	96	95	95	194	74	83
26	23	16	14	16	15	14	97	95	95	85	74	84
27	21	16	17	14	14	35	97	95	94	79	103	85
28	47	16	19	15	14	98	98	96	94	78	106	92
29	30	16	17	14	---	98	97	97	94	77	87	93
30	23	16	17	14	---	99	96	97	94	77	375	92
31	21	-----	17	14	---	99	---	97	---	77	396	---
TOTAL	756	553	502	512	427	425	2415	7733	2852	2964	3015	8022
MEAN	24.4	18.4	16.2	16.2	13.3	24.8	97.2	249	95.1	95.6	97.3	267
MAX	47	24	19	17	19	99	99	479	108	220	390	406
MIN	20	16	13	14	13	13	95	97	92	77	74	83
AC-FT	1,500	1,100	996	996	647	1,430	5780	15,340	5660	5440	5920	15910
CAL YR 1974	TOTAL	27234.9	MEAN	74.6	MAX	1850	MIN	4.7	AC-FT	54020		
WTR YR 1975	TOTAL	31167	MEAN	85.4	MAX	479	MIN	13	AC-FT	61820		



## 08477000 MIMBRES RIVER NEAR MIMBRES, N. MEX.

LOCATION.--Lat 32°52'28", long 107°59'05", in SE¼NW¼ sec.33, T.16 S., R.11 W., Grant County, on left bank 0.7 mi (1.1 km) downstream from Bear Canyon, 1.5 mi (2.4 km) northwest of Mimbres, and at mile 74.8 (120.4 km).

DRAINAGE AREA.--152 mi<sup>2</sup> (394 km<sup>2</sup>).

PERIOD OF RECORD.--June 1921 to September 1930 (fragmentary), October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 5,972 ft (1,820.3 m) above mean sea level. Prior to Sept. 12, 1923, at site 10 ft (3 m) downstream at datum 0.3 ft (0.09 m) higher. Sept. 12, 1923, to Jan. 17, 1934, at datum of 0.1 ft (0.03 m) lower.

AVERAGE DISCHARGE.--45 years, 11.2 ft<sup>3</sup>/s (0.317 m<sup>3</sup>/s), 8,110 acre-ft/yr (10.0 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 957 ft<sup>3</sup>/s (27.1 m<sup>3</sup>/s) Sept. 13 (gage height, 4.92 ft or 1.500 m); minimum, 3.7 ft<sup>3</sup>/s (0.10 m<sup>3</sup>/s) Aug. 6.

Period of record: Maximum discharge determined, 3,370 ft<sup>3</sup>/s (95.4 m<sup>3</sup>/s) Oct. 20, 1972 (gage height, 7.49 ft or 2.283 m), from rating curve extended above 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 6.20 ft (1.890 m) and 7.49 ft (2.283 m); minimum, 0.7 ft<sup>3</sup>/s (0.020 m<sup>3</sup>/s) Aug. 10, 1951.

REMARKS.--Records good except those for July through September which are fair. Some regulation by Bear Canyon Reservoir 1.3 mi (2.1 km) upstream capacity, 700 acre-ft (863,000 m<sup>3</sup>). Diversions for irrigation of about 300 acres (1.21 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1282: Drainage area. WSP 1512: 1931, 1933(M), 1935(M), 1938, 1939-40(M), 1941, 1942-43(M), 1944, 1945(M), 1946, 1947(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	20	13	11	104	22	40	42	13	15	7.5	6.8
2	10	20	13	11	75	24	38	41	12	14	7.3	8.9
3	9.7	20	13	10	57	25	38	39	12	14	7.1	12
4	9.9	20	13	10	46	27	40	37	12	14	6.9	18
5	11	19	12	10	40	27	43	36	11	14	6.2	52
6	11	18	12	9.7	34	26	46	34	11	14	5.7	147
7	11	17	13	9.7	30	30	50	33	11	14	4.3	200
8	13	18	13	9.5	28	29	48	30	10	12	4.6	178
9	23	18	13	9.8	27	89	44	29	10	12	4.9	111
10	23	16	13	9.5	27	93	43	28	10	11	4.7	104
11	20	16	13	9.4	26	81	41	27	9.0	19	4.5	293
12	33	15	12	9.2	25	74	40	25	9.0	14	4.8	424
13	35	14	12	9.3	24	62	38	24	9.0	12	5.5	520
14	33	14	12	9.4	24	61	35	25	8.0	11	5.5	255
15	26	14	11	9.4	24	58	34	24	8.0	11	5.3	176
16	22	14	11	9.4	24	56	35	23	7.0	10	5.0	128
17	19	14	11	9.3	23	52	41	22	7.0	9.2	5.1	90
18	18	15	11	9.1	21	47	50	21	6.9	9.2	4.9	63
19	17	14	11	9.6	20	46	50	20	6.5	8.2	4.8	51
20	16	14	11	9.5	20	45	46	19	5.9	8.0	4.0	43
21	13	14	12	9.5	19	45	46	18	6.0	8.4	4.3	35
22	20	14	12	9.4	19	47	48	17	7.1	7.0	4.1	32
23	39	15	12	9.3	18	47	53	16	7.2	7.1	4.9	29
24	33	15	12	9.1	18	44	53	15	6.7	9.4	4.9	27
25	26	15	12	9.1	17	42	55	15	5.7	9.9	5.1	26
26	22	14	13	9.1	19	44	60	14	5.9	9.1	4.9	25
27	22	13	12	9.1	20	43	61	14	11	8.7	5.4	23
28	20	13	12	9.1	21	43	55	14	14	8.6	5.7	21
29	20	13	12	13	---	43	50	13	15	8.5	6.1	21
30	20	13	12	186	---	40	45	13	15	8.4	6.1	21
31	20	---	11	201	---	39	---	14	---	7.6	6.4	---
TOTAL	625.6	469	375	667.5	850	1451	1366	742	281.9	338.3	166.5	3140.7
MEAN	20.2	15.6	12.1	21.5	30.4	46.8	45.5	23.9	9.40	10.9	5.37	105
MAX	39	20	13	201	104	93	61	42	15	19	7.5	520
MIN	9.7	13	11	9.1	17	22	34	13	5.7	7.0	4.0	6.8
AC-FT	1240	930	744	1320	1690	2880	2710	1470	559	671	330	6230

CAL YR 1974 TOTAL 3453.3 MEAN 9.46 MAX 110 MIN 2.1 AC-FT 6850  
WTR YR 1975 TOTAL 10473.5 MEAN 28.7 MAX 520 MIN 4.0 AC-FT 20770

PEAK DISCHARGE (BASE, 290 FT<sup>3</sup>/S).--JAN 30 (2215) 448 FT<sup>3</sup>/S (4.14 FT.); SEPT. 13 (0330) 957 FT<sup>3</sup>/S (4.92).

## RIO GRANDE BASIN

08481500 RIO TULAROSA NEAR BENT, N. MEX.

LOCATION.--Lat 33°08'41", long 105°53'50", in SE¼NW¼ sec.32, T.13 S., R.11 E., Otero County, on right bank 50 ft (15 m) downstream from bridge on U.S. Highway 70, 2.6 mi (4.2 km) west of Bent, and 8.5 mi (13.7 km) northeast of Tularosa, and at mile 19.4 (31.2 km).

DRAINAGE AREA.--120 mi<sup>2</sup> (310 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,450 ft (1,660 m), from topographic map.

AVERAGE DISCHARGE.--27 years (1948-75), 9.49 ft<sup>3</sup>/s (0.269 m<sup>3</sup>/s), 6,880 acre-ft/yr (8.48 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 197 ft<sup>3</sup>/s (5.58 m<sup>3</sup>/s) July 26 (gage height 2.73 ft or 0.832 m); from rating extended as explained below; minimum, 1.6 ft<sup>3</sup>/s (0.045 m<sup>3</sup>/s) June 29.

Period of record: Maximum discharge 4,280 ft<sup>3</sup>/s (121 m<sup>3</sup>/s) June 18, 1965 (gage height, 5.02 ft or 1.530 m), from rating curve extended above 160 ft<sup>3</sup>/s (4.53 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow May 14, 1955, result of unusual regulation.

A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 ft<sup>3</sup>/s (273 m<sup>3</sup>/s) was computed for station near Tularosa. Another flood may have occurred July 2, 1914.

REMARKS.--Records poor. Diversion for irrigation of about 1,000 acres (405 hm<sup>2</sup>), 1959 determination, above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1949(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.2	12	12	14	12	15	11	7.7	6.9	8.0	10
2	9.5	8.9	12	12	13	12	13	10	7.7	8.0	7.5	11
3	9.2	11	12	12	14	12	14	10	8.3	8.3	7.5	11
4	8.9	13	12	12	13	12	11	6.0	8.3	8.3	7.5	13
5	9.6	12	12	11	13	12	11	8.4	7.5	8.0	7.0	11
6	9.8	12	12	10	12	12	10	12	8.6	9.9	7.2	12
7	9.5	12	11	11	13	12	10	12	8.6	10	7.7	13
8	9.3	12	11	11	12	12	9.6	12	9.2	9.5	7.2	12
9	9.7	12	11	12	12	13	10	12	6.7	9.5	6.9	21
10	10	12	11	12	12	12	11	12	6.2	9.5	6.4	13
11	13	12	11	11	13	13	11	13	7.7	9.9	6.4	13
12	9.3	12	11	12	12	13	12	11	7.2	9.5	7.5	40
13	6.4	12	11	11	12	13	10	11	7.2	9.2	8.0	14
14	8.8	12	11	12	11	13	10	13	7.7	8.9	12	12
15	9.0	12	11	12	11	14	11	13	6.0	8.9	9.5	12
16	7.1	12	11	12	11	13	11	11	6.4	8.9	8.3	11
17	6.0	12	11	12	11	13	11	13	6.9	9.9	7.7	11
18	4.2	12	11	12	11	14	11	8.6	8.3	9.9	7.2	13
19	4.9	12	11	12	11	14	11	9.4	8.0	10	11	12
20	4.9	12	12	12	12	14	11	10	7.7	9.9	12	15
21	4.9	12	12	12	12	14	12	10	8.0	8.9	12	17
22	5.5	12	12	12	12	15	10	11	7.7	8.9	9.5	11
23	20	12	12	12	9.5	14	12	11	6.4	8.6	10	12
24	5.9	12	12	12	11	13	12	11	5.2	7.7	12	13
25	7.9	11	12	12	12	15	12	11	6.2	5.6	12	12
26	11	11	12	12	12	15	11	9.9	6.0	11	12	12
27	12	11	12	12	12	15	11	10	6.0	8.0	12	11
28	12	11	12	12	12	15	11	11	5.6	8.0	12	10
29	13	12	13	12	---	16	10	12	3.7	7.7	10	9.2
30	14	12	13	14	---	15	9.5	12	4.1	9.2	9.9	8.0
31	14	---	12	13	---	16	---	11	---	9.0	9.9	---
TOTAL	289.3	350.1	361	368	335.5	418	334.1	338.3	210.8	275.5	283.8	395.2
MEAN	9.33	11.7	11.6	11.9	12.0	13.5	11.1	10.9	7.03	8.89	9.15	13.2
MAX	20	13	13	14	14	16	15	13	9.2	11	12	40
MIN	4.2	8.9	11	10	9.5	12	9.5	6.0	3.7	5.6	6.4	8.0
AC-FT	574	694	716	730	669	829	663	671	418	546	563	784

CAL YR 1974 TOTAL 4053.0 MEAN 11.1 MAX 123 MIN 3.6 AC-FT 8040  
WTR YR 1975 TOTAL 3959.6 MEAN 10.8 MAX 40 MIN 3.7 AC-FT 7850

PEAK DISCHARGE (BASE, 125 FT<sup>3</sup>/s)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-26	1545	2.73	197	09-09	1545	2.45	136
08-19	1745	2.44	131				

## SAN JUAN RIVER BASIN

09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, on right bank just upstream from flow line of Navajo Reservoir, 3 mi (5 km) northwest of Carracas, 7.2 mi (11.6 km) upstream from Piedra River, and at mile 332.8 (535.5 km).

DRAINAGE AREA.--1,230 mi<sup>2</sup> (3,190 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (1,856 m) from river-profile map.

AVERAGE DISCHARGE.--14 years, 609 ft<sup>3</sup>/s (17.25 m<sup>3</sup>/s), 441,200 acre-ft/yr (544 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 5,120 ft<sup>3</sup>/s (145 m<sup>3</sup>/s) June 7 (gage height, 6.20 ft or 1.890 m); minimum daily, 56 ft<sup>3</sup>/s (1.59 m<sup>3</sup>/s) Dec. 10.

Period of record: Maximum discharge, 9,730 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) Sept. 6, 1970 (gage height, 8.34 ft or 2.542 m), from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, about 5 ft<sup>3</sup>/s (0.1 m<sup>3</sup>/s) Dec. 10, 1961, result of freezeup.

Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres (44.5 km<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	256	100	80	96	175	338	1250	2330	2320	626	140
2	76	302	102	76	96	250	274	1430	2760	2280	536	120
3	76	318	135	80	94	350	342	1430	3510	2240	465	108
4	109	242	132	88	98	450	620	1740	3970	2220	430	115
5	149	235	132	86	105	640	1030	2020	4120	2090	390	156
6	126	193	130	84	92	700	1430	1570	4220	1970	342	150
7	115	182	115	88	94	1060	1320	1340	4600	1810	324	120
8	114	176	98	83	98	1110	614	1240	4100	1740	310	118
9	116	193	100	87	102	800	490	1470	3520	1720	279	172
10	111	196	56	80	104	572	680	1820	3080	1900	357	207
11	113	172	86	74	96	400	1010	2350	2120	1790	400	202
12	136	168	90	82	96	302	988	2960	2000	1750	319	693
13	136	176	86	85	102	278	996	2920	2280	1690	462	699
14	142	179	76	88	105	278	964	3080	2760	1600	378	425
15	133	190	86	90	110	310	1000	3490	3300	1450	310	420
16	127	182	86	85	108	314	2100	3520	3680	1490	282	290
17	118	172	90	86	105	370	2730	3490	3610	1360	260	249
18	113	168	95	86	104	326	2080	3540	3610	1220	249	193
19	112	165	96	86	104	440	1210	3350	3350	1050	235	179
20	111	147	92	87	100	656	1630	2920	2560	1040	232	165
21	115	122	87	89	105	1180	2150	2600	2290	1430	381	168
22	223	128	88	86	106	860	2420	2330	2330	1010	332	179
23	270	141	97	87	100	465	2640	1990	2380	860	263	172
24	276	128	96	90	104	342	2290	1780	2560	772	236	162
25	230	104	87	90	106	400	2470	2030	3010	728	215	162
26	210	100	80	89	110	608	2690	2390	2760	704	206	150
27	222	115	78	93	120	405	2070	2980	2540	638	187	147
28	266	138	81	85	140	338	1400	3010	2510	602	167	147
29	380	147	83	94	---	278	1200	2680	2390	560	171	153
30	380	125	90	97	---	270	1080	2180	2290	1150	159	139
31	301	---	84	96	---	302	---	2260	---	734	150	---
TOTAL	5195	5260	2934	2677	2900	15229	42256	73160	90540	43918	9653	6500
MEAN	168	175	94.6	86.4	104	491	1409	2360	3018	1417	311	217
MAX	380	318	135	97	140	1180	2730	3540	4600	2320	626	699
MIN	76	100	56	74	92	175	274	1240	2000	560	150	108
AC-FT	10300	10430	5820	5310	5750	30210	83810	145100	179600	87110	19150	12890

CAL YR 1974 TOTAL 110998 MEAN 304 MAX 1560 MIN 28 AC-FT 220200

WTR YR 1975 TOTAL 300222 MEAN 823 MAX 4600 MIN 56 AC-FT 595500

PEAK DISCHARGE (BASE, 2,500 FT<sup>3</sup>/S).--JUNE 7 (0900) 5,120 FT<sup>3</sup>/S (6.20 FT.).

09349800 PIEDRA RIVER NEAR ARBOLES, COLO.

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, on left bank 3 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--629 mi<sup>2</sup> (1,629 km<sup>2</sup>).

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-1899, 1910-1927 at a site 7.5 mi (12.1 km) downstream at altitude 6,000 ft (1,830 m). Low flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft (1,873.764 m) above mean sea level from Colorado State Highway Department bench mark.

AVERAGE DISCHARGE.--13 years, 358 ft<sup>3</sup>/s (10.14 m<sup>3</sup>/s), 259,400 acre-ft/yr (320 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 4,940 ft<sup>3</sup>/s (140 m<sup>3</sup>/s) Apr. 26 (gage height, 5.44 ft or 1.658 m); minimum daily, 38 ft<sup>3</sup>/s (1.08 m<sup>3</sup>/s) Dec. 10.

Period of record: Maximum discharge, 8,370 ft<sup>3</sup>/s (237 m<sup>3</sup>/s) Sept. 6, 1970 (gage height, 6.38 ft or 1.945 m recorded, 7.55 ft or 2.301 m from floodmarks), from rating curve extended above 3,300 ft<sup>3</sup>/s (93 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 11 ft<sup>3</sup>/s (0.31 m<sup>3</sup>/s) Dec. 9, 1963, Oct. 1, 1966.  
Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,800 acres (11.3 km<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	129	59	40	56	84	196	1770	1710	1870	260	86
2	53	138	62	40	56	103	172	1830	2200	1950	235	78
3	53	150	70	41	54	117	193	1750	2540	1930	216	78
4	56	123	60	45	56	112	265	2360	2880	1990	196	80
5	64	118	57	44	60	110	413	2350	3050	1930	184	84
6	60	114	59	43	52	116	601	1490	3020	1970	175	84
7	57	109	53	45	56	131	718	1090	2750	1920	163	80
8	57	108	53	44	57	130	496	953	2630	1910	163	80
9	57	115	46	45	58	250	435	1200	2450	1730	163	110
10	59	109	38	43	59	208	382	1510	2190	1530	166	128
11	63	102	43	40	58	171	442	2170	1640	1550	172	136
12	66	97	54	43	58	150	428	2710	1610	1390	166	206
13	75	103	43	44	62	139	506	2880	1860	1250	184	203
14	79	105	41	46	64	139	547	3050	2230	1110	181	208
15	77	103	41	45	65	150	622	3360	2540	1070	184	217
16	73	102	41	46	64	151	837	3570	2730	1300	163	179
17	70	98	46	46	64	166	684	3270	2500	1320	145	184
18	70	99	47	46	64	155	814	3110	2410	1110	139	170
19	66	98	45	45	64	188	605	3040	1910	899	133	169
20	65	89	42	47	62	246	734	2810	1490	751	126	166
21	65	80	44	46	65	416	1340	2630	1280	716	133	153
22	81	85	46	45	64	376	1750	2260	1290	586	137	159
23	114	93	47	45	56	241	2190	1850	1380	500	140	147
24	122	82	43	46	52	197	2300	1490	1560	445	126	105
25	108	77	40	47	54	209	3010	1720	1930	417	116	79
26	105	70	40	50	58	233	3510	2070	1890	396	109	74
27	117	70	41	52	76	200	2730	2360	1860	349	104	71
28	138	74	41	54	77	175	1690	2490	1890	320	100	73
29	186	65	43	55	---	160	1530	2050	1840	301	98	71
30	177	67	41	56	---	151	1320	1670	1770	316	96	70
31	145	---	40	57	---	193	---	1700	---	292	90	---
TOTAL	2631	2972	1466	1431	1691	5567	31460	68563	63030	35118	4763	3728
MEAN	84.9	99.1	47.3	46.2	60.4	180	1049	2212	2101	1133	154	124
MAX	186	150	70	57	77	416	3510	3570	3050	1990	260	217
MIN	53	65	38	40	52	84	172	953	1280	292	90	70
AC-FT	5220	5890	2910	2840	3350	11040	62400	136000	125000	69660	9450	7390

CAL YR 1974 TOTAL 59435 MEAN 163 MAX 961 MIN 33 AC-FT 117900  
WTR YR 1975 TOTAL 222420 MEAN 609 MAX 3570 MIN 38 AC-FT 441200

PEAK DISCHARGE (BASE, 1,500 FT<sup>3</sup>/S).--APR. 26 (0230) 4,940 FT<sup>3</sup>/S (5.44 FT.).

LOCATION (revised).---Lat 37°00'34", long 107°35'56", in NE¼ sec.22, T.32 N., R.7 W., La Plata County, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Vallecito Reservoir 24 mi (39 km) upstream since April 1941. (see sta 09353000). Diversions for irrigation of about 33,000 acres (134 km<sup>2</sup>) above station.

CAL YR 1974	TOTAL	39577	MEAN	108	MAX	453	MIN	39	AC-FT	78500
WTR YR 1975	TOTAL	140980	MEAN	386	MAX	1800	MIN	36	AC-FT	279600

## 09355000 SPRING CREEK AT LA BOCA, COLO.

LOCATION (revised).--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, on right bank in an excavated channel, 0.2 mi (0.3 km) upstream from mouth, and 0.2 mi (0.3 km) east of La Boca.

DRAINAGE AREA.--58 mi<sup>2</sup> (150 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (1,878 m) from topographic map.

AVERAGE DISCHARGE.--25 years, 29.8 ft<sup>3</sup>/s (0.844 m<sup>3</sup>/s), 21,590 acre-ft/yr (26.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 414 ft<sup>3</sup>/s (11.7 m<sup>3</sup>/s) Mar. 9 (gage height, 2.36 ft or 0.719 m); minimum daily, 2.1 ft<sup>3</sup>/s (0.059 m<sup>3</sup>/s) Feb. 22, 23.

Period of record: Maximum discharge, 1,980 ft<sup>3</sup>/s (56.1 m<sup>3</sup>/s) Sept. 6, 1970 (gage height, 4.62 ft or 1.408 m), from rating curve extended above 160 ft<sup>3</sup>/s (4.53 m<sup>3</sup>/s) on basis of field estimate of peak flow; maximum gage height, 5.98 ft (1.823 m) Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 ft<sup>3</sup>/s (0.017 m<sup>3</sup>/s) Nov. 27, 1959.

REMARKS.--Records good except those for winter period, which are poor. Part of flow is return waste from irrigation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	11	4.7	3.5	2.9	4.2	10	12	70	65	62	80
2	20	13	4.7	3.4	2.8	4.9	14	15	69	62	57	82
3	20	16	4.8	3.1	2.9	5.4	6.4	16	68	65	60	79
4	22	8.1	4.9	3.2	2.8	5.2	10	20	65	66	64	79
5	20	5.9	4.7	3.3	2.4	5.3	20	34	63	70	59	85
6	18	5.5	4.8	3.0	2.5	6.3	23	66	61	65	56	82
7	21	5.1	4.5	3.0	2.7	20	25	52	63	63	55	82
8	20	5.1	4.3	3.0	3.1	6.9	8.0	21	72	63	56	97
9	20	6.7	4.2	2.8	2.6	21.9	6.0	20	67	67	59	110
10	21	5.9	4.0	2.6	2.8	12.8	9.5	21	66	63	67	85
11	22	5.1	4.0	2.4	2.6	4.4	6.9	26	70	64	73	94
12	27	5.1	3.9	2.5	2.6	3.1	14	36	68	70	70	154
13	26	5.5	3.8	2.5	2.6	2.9	6.7	28	67	70	73	90
14	21	5.1	3.9	2.6	3.0	4.0	8.3	36	63	75	72	95
15	18	5.1	3.9	2.7	2.7	5.2	5.1	57	62	86	70	72
16	19	4.7	3.9	2.6	2.5	3.7	4.7	42	63	81	74	70
17	16	4.7	4.0	2.6	2.3	4.3	3.6	50	59	89	71	64
18	12	4.7	3.8	2.6	2.4	3.6	1.8	55	62	78	72	63
19	10	4.7	3.9	2.5	2.3	3.7	1.1	55	65	75	69	62
20	10	4.7	4.0	2.6	2.6	4.7	1.5	58	65	75	79	56
21	9.9	5.1	3.8	2.5	2.3	5.0	2.5	53	68	83	95	54
22	12	5.1	3.7	2.4	2.1	3.4	3.2	63	68	75	81	51
23	24	5.1	3.5	2.6	2.3	1.6	3.7	56	67	70	76	48
24	16	5.1	3.3	2.8	2.3	1.4	3.0	57	62	67	75	47
25	9.3	5.1	3.6	3.1	2.6	1.3	3.7	55	61	67	78	49
26	5.9	5.1	3.4	3.1	3.1	1.5	4.2	51	64	70	78	45
27	4.3	5.0	3.5	3.1	3.6	1.7	4.0	46	66	64	74	46
28	12	4.8	3.8	2.8	3.7	1.5	2.0	62	62	69	77	50
29	60	4.5	3.6	2.9	---	1.6	1.6	76	66	67	75	49
30	25	4.7	3.7	2.9	---	1.4	1.1	74	68	63	71	41
31	12	---	3.6	3.0	---	1.0	---	70	---	60	73	---
TOTAL	614.1	181.3	124.2	87.7	74.9	1077.3	766.8	1383	1960	2167	2171	2161
MEAN	19.8	6.04	4.01	2.83	2.68	34.8	25.6	44.6	65.3	69.9	70.0	72.0
MAX	60	16	4.9	3.5	3.7	219	83	76	72	89	95	154
MIN	5.9	4.5	3.3	2.4	2.1	4.2	5.5	12	59	60	55	41
AC-FT	1220	360	246	174	149	2140	1520	2740	3890	4300	4310	4290
CAL YR 1974 TOTAL	9420.4											
WTR YR 1975 TOTAL	12768.3											
MEAN 25.8												
MAX 126												
MIN 2.3												
AC-FT 18690												
MEAN 35.0												
MAX 219												
MIN 2.1												
AC-FT 25330												

PEAK DISCHARGE (BASE, 180 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-9	2215	2.36	414	9-12	0145	2.15	354

## 09355100 NAVAJO RESERVOIR NEAR ARCHULETA, N. MEX.

LOCATION.--Lat 36°48'28", long 107°36'31", in SW $\frac{1}{4}$  sec. 18, T.30 N., R.7 W., San Juan County, in gage shaft of outlet works structure near right abutment of Navajo Dam on San Juan River, 5.5 mi (8.8 km) east of Archuleta, 33 mi (53 km) east of Farmington, and at mile 298.6 (480.4 km).

DRAINAGE AREA.--3,230 mi<sup>2</sup> (8,370 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1968 dead storage included.

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

EXTREMES.--Current year: Maximum daily contents, 1,528,000 acre-ft (1.88 km<sup>3</sup>) July 21 (elevation, 6,073.70 ft or 1,851.264 m); minimum daily, 935,000 acre-ft (1.15 km<sup>3</sup>) Feb. 28, Mar. 1 (elevation, 6,022.67 ft or 1,835.710 m).  
Period of record: Maximum daily contents, 1,731,000 acre-ft (2.13 km<sup>3</sup>) July 2-4, 1973 (elevation, 6,087.25 ft or 1,855.394 m); minimum daily after June 1964 (initial filling period), 234,300 acre-ft (289 hm<sup>3</sup>) Mar. 10, 11, 1965 (elevation, 5,906.36 ft or 1,800.259 m).

REMARKS.--Reservoir is formed by earth-rock-fill dam, completed in June 1963; storage began June 27, 1962. Capacity, 1,708,600 acre-ft (2.11 km<sup>3</sup>) between elevation 5,720 ft (1,743 m) upstream toe of dam and 6,085 ft (1,855 m) crest of spillway. Usable capacity 1,696,000 acre-ft (2.09 km<sup>3</sup>) above elevation 5,774.9 ft (1,760.19 m) minimum operating level. Dead storage below elevation 5,774.9 ft (1,760.19 m) is 12,600 acre-ft (15.5 hm<sup>3</sup>). Figures given herein are usable contents. Reservoir is used for irrigation storage, river regulation, desilting, flood control, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

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	1,696.9
6,030	1,006.0	6,050	1,221.6	6,070	1,475.8	6,090	1,775.7

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1009000	1000000	990400	969700	948000	935000	968600	1086000	1245000	1458000	1506000	1437000
2	1008000	1001000	989800	969000	947700	935300	968800	1090000	1250000	1464000	1502000	1435000
3	1006000	1001000	989300	968300	947100	935600	969200	1094000	1257000	1471000	1499000	1433000
4	1006000	1001000	988900	967500	946500	936300	970400	1100000	1267000	1478000	1496000	1431000
5	1005000	1000000	988500	966800	946100	936500	973600	1106000	1274000	1484000	1493000	1429000
6	1005000	1000000	987900	965900	945500	937000	978500	1109000	1289000	1490000	1488000	1427000
7	1004000	999900	987500	965200	944900	937800	983200	1111000	1302000	1494000	1486000	1425000
8	1004000	999500	986900	964600	944400	939100	985300	1112000	1313000	1499000	1482000	1424000
9	1003000	999300	986100	964000	943900	943300	986800	1114000	1323000	1504000	1478000	1423000
10	1003000	999100	985300	963100	943700	946800	987300	1115000	1330000	1508000	1475000	1421000
11	1002000	998700	984700	962200	943300	948300	988100	1120000	1336000	1512000	1473000	1421000
12	1002000	998200	984300	961300	942700	949000	989600	1127000	1340000	1516000	1474000	1421000
13	1002000	997700	983400	960500	942200	949600	990800	1134000	1347000	1518000	1472000	1421000
14	1001000	997500	982800	959800	942000	950100	992900	1141000	1354000	1520000	1471000	1421000
15	1001000	997100	982000	959200	941600	950700	994900	1150000	1363000	1521000	1469000	1420000
16	1000000	996800	981400	958500	941200	951500	998700	1160000	1372000	1524000	1467000	1419000
17	1000000	996400	980500	957700	940800	952100	1004000	1168000	1380000	1525000	1466000	1418000
18	999500	996200	979800	956900	940300	952700	1007000	1178000	1390000	1527000	1464000	1416000
19	998800	996300	979200	956300	939800	953600	1008000	1186000	1397000	1527000	1462000	1414000
20	998200	996100	978500	955600	939100	955700	1011000	1194000	1401000	1527000	1460000	1412000
21	997600	995600	977700	954900	938700	960200	1016000	1200000	1405000	1528000	1459000	1411000
22	997400	995100	976900	954000	938200	963400	1022000	1206000	1409000	1527000	1458000	1409000
23	997900	994800	976200	953100	937500	964200	1029000	1209000	1413000	1526000	1456000	1407000
24	998100	994400	975600	952200	936800	964900	1037000	1212000	1417000	1524000	1454000	1405000
25	997800	993800	974700	951500	936300	966000	1048000	1215000	1423000	1522000	1452000	1403000
26	997500	993400	973900	950900	935800	967500	1061000	1219000	1429000	1520000	1450000	1401000
27	997900	992800	973300	950500	935300	967900	1073000	1224000	1435000	1518000	1448000	1398000
28	998200	992200	972700	950100	935000	968200	1078000	1231000	1441000	1516000	1446000	1396000
29	999600	991600	972000	949400	---	968300	1080000	1235000	1447000	1513000	1444000	1394000
30	1000000	991000	971200	948100	---	968400	1083000	1239000	1452000	1511000	1442000	1392000
31	1000000	---	970400	948600	---	968400	---	1242000	---	1509000	1440000	---
MAX	1009000	1001000	990400	969700	948000	968400	1083000	1242000	1452000	1528000	1506000	1437000
MIN	997400	991000	970400	948600	935000	935000	968600	1086000	1245000	1458000	1440000	1392000
(+)	6,029.42	6,028.49	6,026.38	6,024.10	6,022.67	6,026.17	6,037.52	6,051.73	6,068.27	6,072.38	6,067.36	6,063.78
(+)	-10.0	-9.0	-20.6	-21.8	-13.6	+33.4	+114.6	+159.0	+210.0	+57.0	-69.0	-48.0
CAL YR 1974	MAX 1111000	MIN 970400	(+)	-142.6	(+)	ELEVATION, IN FEET, AT END OF MONTH.						
WTR YR 1975	MAX 1528000	MIN 935000	(+)	+385.0	(+)	CHANGE IN CONTENTS, IN THOUSANDS OF ACRE-FEET.						

## 09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.

LOCATION.--Lat 36°48'05", long 107°41'51", in N½ sec.20, T.30 N., R.8 W., San Juan County, on left bank 0.5 mi (0.8 km) upstream from Gobernador Canyon, 0.8 mi (1.3 km) northeast of Archuleta, 7.2 mi (11.6 km) downstream from Navajo Dam, and at mile 291.4 (468.9 km).

DRAINAGE AREA.--3,260 mi<sup>2</sup> (8,440 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--December 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,655 ft (1,723.6 m) from river-profile survey. Prior to Dec. 29, 1959, at site 5.0 mi (8.0 km) upstream at altitude 55 ft (17 m) higher. Dec. 29, 1959 to Dec. 15, 1964, at site 0.4 mi (0.6 km) upstream at altitude 5 ft (1.5 m) higher.

AVERAGE DISCHARGE.--7 years (1956-62), 1,304 ft<sup>3</sup>/s (36.93 m<sup>3</sup>/s), 944,700 acre-ft/yr (1,160 hm<sup>3</sup>/yr) prior to completion of Navajo Dam.

13 years (1963-75), 1,071 ft<sup>3</sup>/s (30.33 m<sup>3</sup>/s), 775,900 acre-ft/yr (957 hm<sup>3</sup>/yr) since completion of Navajo Dam.

EXTREMES.--Current year: Maximum discharge, 2,840 ft<sup>3</sup>/s (80.4 m<sup>3</sup>/s) Aug. 9 (gage height, 5.26 ft or 1.603 m); minimum, 330 ft<sup>3</sup>/s (9.33 m<sup>3</sup>/s) Apr. 9.

Period of record: Maximum discharge, 18,900 ft<sup>3</sup>/s (535 m<sup>3</sup>/s) July 27, 1957 (gage height, 11.00 ft or 3.353 m, site and datum then in use); minimum determined, 8 ft<sup>3</sup>/s (0.23 m<sup>3</sup>/s) Feb. 28, 1963.

REMARKS.--Records good. Flow completely regulated by Navajo Dam (see sta 09355100) except for minor inflow from 30 mi<sup>2</sup> (78 km<sup>2</sup>) intervening drainage area. Diversions above station for irrigation of about 47,000 acres (190 km<sup>2</sup>). Water quality records for the current year are published in Part 2 of this report.

CORRECTION.--In WSP 1733, the yearly discharge for 1958 water year is listed in error: it should be 1,455,000 acre-ft (1,790 hm<sup>3</sup>).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	474	486	504	462	474	546	2060	2620	2290	2520	1550
2	708	480	486	510	468	480	528	2050	2580	2290	2520	1550
3	708	480	474	516	474	474	528	2030	2520	2280	2520	1550
4	624	480	474	516	486	480	528	2050	2520	2260	2500	1570
5	540	480	474	516	492	480	528	2060	2520	2260	2480	1580
6	540	480	474	516	486	480	528	2050	2520	2280	2480	1570
7	522	480	474	528	486	480	528	2050	2460	2290	2480	1570
8	504	486	474	528	486	480	510	2050	2440	2280	2480	1580
9	504	492	474	528	486	480	508	2260	2440	2260	2560	1580
10	504	492	474	534	492	492	764	2440	2440	2360	2480	1580
11	504	498	474	534	492	504	1530	2470	2440	2520	1990	1580
12	498	498	474	534	486	504	1570	2480	2410	2520	633	1550
13	504	498	480	534	486	504	1570	2470	2410	2520	1520	1540
14	504	498	480	540	492	504	1680	2480	2410	2520	1530	1540
15	492	498	486	540	492	504	2140	2500	2410	2520	1530	1540
16	492	498	492	546	492	504	2170	2540	2420	2520	1530	1540
17	492	498	492	546	498	504	2180	2540	2420	2520	1530	1540
18	486	443	462	546	473	504	2110	2500	2420	2520	1530	1540
19	486	246	496	552	474	504	2080	2520	2440	2520	1530	1540
20	486	363	504	552	480	504	2160	2560	2440	2520	1530	1540
21	480	462	510	552	480	516	2160	2560	2420	2520	1530	1540
22	486	468	504	564	480	516	2160	2560	2420	2520	1530	1540
23	486	474	510	564	480	528	2160	2560	2390	2520	1530	1540
24	450	468	510	522	480	528	2160	2560	2320	2520	1530	1540
25	468	474	510	492	480	528	1760	2560	2320	2520	1540	1540
26	474	480	516	492	480	546	498	2560	2320	2520	1550	1540
27	492	486	516	492	480	546	498	2600	2320	2560	1550	1540
28	480	486	516	498	480	552	1170	2620	2300	2560	1550	1540
29	480	486	516	492	---	546	2060	2600	2300	2540	1550	1540
30	480	480	522	498	---	552	2080	2600	2300	2540	1550	1540
31	480	---	522	480	---	552	---	2600	---	2540	1550	---
TOTAL	16062	14126	15256	16266	13523	15750	41392	74540	72690	75910	56833	46530
MEAN	518	471	492	525	483	508	1380	2405	2423	2449	1833	1551
MAX	708	498	522	564	498	552	2180	2620	2620	2560	2560	1580
MIN	450	246	462	480	462	474	498	2030	2300	2260	633	1540
AC-FT	31860	28020	30260	32260	26820	31240	82100	147900	144200	150600	112700	92290
CAL YR 1974	TOTAL	300676	MEAN	824	MAX	2000	MIN	246	AC-FT	596400		
WTR YR 1975	TOTAL	458878	MEAN	1257	MAX	2620	MIN	246	AC-FT	910200		



## 09363500 ANIMAS RIVER NEAR CEDAR HILL, N. MEX.

LOCATION.--Lat 37°02'17", Long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, on right bank 0.8 mi (1.3 km) downstream from Florida River, 2.5 mi (4.0 km) upstream from Colorado-New Mexico State line, and 8.5 mi (13.7 km) north of Cedar Hill.

DRAINAGE AREA.--1,090 mi<sup>2</sup> (2,820 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (1,817 m) from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft (0.46 m) and 1.36 ft (0.41 m) higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft (0.41 m) higher.

AVERAGE DISCHARGE.--42 years, 897 ft<sup>3</sup>/s (25.40 m<sup>3</sup>/s), 649,900 acre-ft/yr (801 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 8,020 ft<sup>3</sup>/s (227 m<sup>3</sup>/s) June 16 (gage height, 9.54 ft or 2.908 m); minimum, 159 ft<sup>3</sup>/s (4.50 m<sup>3</sup>/s) Feb. 20.

Period of record: Maximum discharge, 13,100 ft<sup>3</sup>/s (371 m<sup>3</sup>/s) June 19, 1949 (gage height, 11.45 ft or 3.490 m); minimum, 63 ft<sup>3</sup>/s (1.78 m<sup>3</sup>/s) Jan. 21, 1935.

A flood in October 1911 exceeded all other known floods at this location.

REMARKS.--Records good except those for April, May, June and winter period, which are poor. Diversions for irrigation of about 20,000 acres (80.9 km<sup>2</sup>) above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam about 30 mi (48 km) upstream on Florida River since November 1963 (capacity, 40,100 acre-ft or 49.4 hm<sup>3</sup>). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1563: 1940 and 1946 (monthly figures only).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	295	216	220	180	290	350	1200	2960	5270	1140	464
2	217	355	212	220	195	340	350	1180	3730	5530	1110	452
3	217	414	220	220	200	365	360	1300	4420	5840	1080	429
4	212	370	230	230	190	330	380	1500	5020	5910	1010	458
5	217	325	234	215	195	365	390	1690	6860	5440	920	452
6	212	285	238	220	200	330	640	1670	7130	5120	872	440
7	215	275	234	230	190	304	760	1600	6860	4940	848	440
8	212	270	216	225	185	360	690	1350	6080	4800	856	512
9	208	270	212	220	190	711	610	1350	5650	4620	840	530
10	215	310	189	210	190	590	550	1440	5270	4530	824	512
11	236	265	202	210	185	396	580	2230	4340	4540	848	536
12	261	256	216	220	190	340	610	2470	4060	4260	960	676
13	274	248	216	230	190	282	610	2980	4610	3560	1230	683
14	274	280	215	230	187	290	800	3500	5610	3270	1090	704
15	274	252	218	230	198	340	1100	4100	6450	2990	976	620
16	279	252	230	230	190	335	1300	4200	7370	2910	904	620
17	274	248	230	230	188	345	1100	4300	6860	3350	832	603
18	268	261	230	220	184	340	1000	4150	6010	3170	753	578
19	258	275	230	210	187	402	850	4000	4690	2760	697	548
20	261	270	230	215	187	608	800	3980	3330	2490	683	525
21	263	261	230	210	201	785	1000	3830	2840	2250	690	521
22	443	256	224	200	219	990	1200	3380	2780	2050	676	501
23	414	261	213	210	220	800	1400	2750	3200	1880	655	477
24	381	261	210	200	208	540	1600	2300	3590	1760	641	457
25	335	248	200	210	212	460	1900	2460	4570	1650	602	443
26	330	244	190	210	241	470	2450	3020	4560	1490	548	431
27	550	238	230	200	205	490	2400	4000	4610	1380	518	426
28	345	238	230	190	250	450	2000	4060	4920	1290	530	412
29	606	244	230	190	---	400	1800	3580	5060	1190	542	393
30	305	230	230	195	---	370	1300	3020	5050	1230	512	391
31	270	---	225	190	---	360	---	2980	---	1230	494	---
TOTAL	9043	8257	6830	6640	5557	13778	30880	85570	148490	102700	24881	15234
MEAN	292	275	220	214	198	444	1029	2760	4950	3313	803	508
MAX	606	414	238	230	250	990	2450	4300	7370	5910	1230	704
MIN	208	230	189	190	180	282	350	1180	2780	1190	494	391
AC-FT	17940	16380	13550	13170	11020	27330	61250	169700	294500	203700	49350	30220

CAL YR 1974 TOTAL 179777 MEAN 493 MAX 2380 MIN 124 AC-FT 356600  
WTR YR 1975 TOTAL 457860 MEAN 1254 MAX 7370 MIN 180 AC-FT 908200

PEAK DISCHARGE (BASE, 4,000 FT<sup>3</sup>/S).--JUNE 16 (1800) 8,020 FT<sup>3</sup>/S (9.54 FT.).

## SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.

LOCATION.—Lat 36°43'17", long 108°12'05", in SW¼SW¼ sec.15, T.29 N., R.13 W., San Juan County, in Boyd City Park, on right bank 900 ft (274 m) upstream from bridge on former State Highway 17, 0.4 mi (0.6 km) downstream from bridge on State Highway 17, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.—1,360 mi<sup>2</sup> (3,520 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—June 1904 to October 1905 (published as "near Farmington"), September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.—Water-stage recorder. Altitude of gage is 5,280 ft (1,609 m) from topographic map. Prior to Nov. 1, 1905, non-recording gage at old bridge 0.1 mi (0.2 km) upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.8 mi (1.3 km) downstream at lower datums (datum lowered 2.0 ft or 0.61 m Aug. 15, 1927, and raised 0.2 ft or 0.06 m Dec. 16, 1929). Prior to Nov. 1, 1973 at site 900 ft (274 m) downstream at datum 1.74 ft (0.53 m) lower.

AVERAGE DISCHARGE.—64 years, 924 ft<sup>3</sup>/s (26.17 m<sup>3</sup>/s), 669,400 acre-ft/yr (825 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 7,940 ft<sup>3</sup>/s (225 m<sup>3</sup>/s) June 7 (gage height, 9.05 ft or 2.758 m); minimum, 72 ft<sup>3</sup>/s (2.04 m<sup>3</sup>/s) Oct. 9.

Period of record: Maximum discharge, about 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) June 29, 1927 (gage height, 8.5 ft or 2.59 m, site and datum then in use), from rating curve extended above 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s); minimum, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Aug. 11, 1972. Maximum flood occurred Oct. 6, 1911, when a stage of about 16.5 ft (5.03 m) was reached (present site and datum). Flood of Sept. 6, 1909, reached a stage of 11.1 ft (3.38 m), 1904-5 site and datum (discharge, about 19,000 ft<sup>3</sup>/s or 538 m<sup>3</sup>/s).

REMARKS.—Records good except those for November, August and winter period, which are poor. Diversions for irrigation of about 30,000 acres (121 km<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 1243: 1931. WSP 1313: 1913.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	430	248	230	220	345	360	1080	3220	4570	1060	270
2	106	450	244	230	224	480	375	1070	3860	4900	1050	264
3	106	480	268	232	220	493	355	1080	5070	5260	1040	234
4	104	430	272	238	216	355	380	1280	5550	5410	1020	237
5	94	380	288	250	224	504	522	1630	6150	5120	1000	254
6	91	325	280	250	202	734	654	1650	7040	4640	970	234
7	81	300	256	242	192	794	782	1290	7300	4590	890	234
8	87	280	260	248	206	863	689	1030	6740	4520	800	275
9	81	290	248	250	236	814	612	897	6280	4380	720	435
10	114	320	228	245	232	750	546	924	5910	4320	660	405
11	199	300	220	232	228	591	558	1250	4690	4360	640	455
12	213	270	224	232	220	591	633	2300	3830	4220	700	706
13	252	260	220	240	224	577	619	2940	3980	3600	910	662
14	220	290	213	240	236	570	766	3360	4830	3110	800	650
15	206	270	228	248	244	734	978	4080	5860	2840	720	710
16	206	260	210	250	248	640	1210	4650	6560	2660	650	638
17	202	260	216	250	228	654	978	4780	6850	3060	570	590
18	196	280	236	250	213	522	838	4750	5820	3190	490	530
19	192	290	224	250	210	510	750	4350	5080	2750	440	485
20	176	280	224	250	216	626	758	4280	3360	2410	410	465
21	176	260	252	248	232	734	879	4200	2760	2200	410	440
22	195	260	244	245	232	1000	1090	3620	2540	1980	440	465
23	556	270	216	240	236	710	1300	2800	2790	1820	420	400
24	414	260	196	242	206	546	1430	2260	3240	1660	425	380
25	345	245	182	238	240	474	1740	2080	3940	1500	395	352
26	308	236	176	220	244	474	2260	2500	4220	1430	360	316
27	639	240	228	220	288	498	2220	3600	4020	1270	310	307
28	504	244	228	220	284	480	1800	4250	4340	1160	306	290
29	817	244	248	210	---	414	1360	4000	4570	1050	303	269
30	742	244	228	220	---	390	1150	3280	4540	976	296	249
31	500	---	220	230	---	375	---	3080	---	1060	289	---
TOTAL	8240	8948	7225	7390	6401	18242	28592	84341	144940	96016	19494	12201
MEAN	266	298	233	238	229	588	953	2721	4831	3097	629	407
MAX	817	480	288	250	288	1000	2760	4780	7300	5410	1060	710
MIN	81	236	176	210	192	345	355	897	2540	976	289	234
AC-FT	16340	17750	14330	14660	12700	36180	56710	167300	287500	190400	38670	24200
CAL YR 1974 TOTAL	154610.0			424	MAX 2220	MIN	6.4	AC-FT 306700				
WTR YR 1975 TOTAL	442030.0			MEAN 1211	MAX 7300	MIN	81	AC-FT 876800				

-4K DISCHARGE (BASE 4,000 FT<sup>3</sup>/S).--JUNE 7 (0030) 7,940 FT<sup>3</sup> (9.05 FT.).

## 09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.

LOCATION.--Lat 36°43'22", long 108°13'30", in SE¼ sec.17, T.29 N., R.13 W., San Juan County, on left bank 360 ft (110 m) downstream from highway bridge, 4,000 ft (1,200 m) downstream from Animas River, 1 mi (2 km) west of Farmington, and at mile 251.4 (404.5 km).

DRAINAGE AREA.--7,240 mi<sup>2</sup> (18,750 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--June to December 1904, January 1905 to September 1906 (gage heights and discharge measurements only), September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Discharge records for January to December 1905, published in WSP 175, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,230.37 ft (1,594.217 m) above mean sea level. See WSP 1313 or 1733 for history of changes prior to Nov. 19, 1933.

AVERAGE DISCHARGE.--63 years (1912-75), 2,406 ft<sup>3</sup>/s (68.14 m<sup>3</sup>/s), 1,743,000 acre-ft/yr (2.15 km<sup>3</sup>/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 12,300 ft<sup>3</sup>/s (348 m<sup>3</sup>/s) July 11 (gage height, 7.08 ft or 2.158 m); minimum, 500 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s) Oct. 8, 9.

Period of record: Maximum discharge, about 68,000 ft<sup>3</sup>/s (1,930 m<sup>3</sup>/s) June 29, 1927 (gage height, 10.2 ft or 3.109 m, site and datum then in use), from rating curve extended above 37,000 ft<sup>3</sup>/s (1,050 m<sup>3</sup>/s); minimum, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Aug. 22, 1939.

Maximum flood occurred Oct. 6, 1911. Flood of Sept. 6, 1909, reached a stage of about 12.3 ft (3.75 m), site and datum in use May to September 1906.

REMARKS.--Records good. Since June 1962 flow is partly controlled by operation of Navajo Reservoir 50 mi (80 km) upstream. (See sta 09355100). Diversions above station for irrigation of about 86,000 acres (348 km<sup>2</sup>), 4,000 of which is irrigated by Farmers Mutual ditch which diverts from Animas River and bypasses this station; ditch flow not included in record. At times this ditch may be supplied partly or entirely by diversion from San Juan River below this station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1119: Drainage area. WSP 1243: 1938. WSP 1313: 1905, 1914. See also PERIOD OF RECORD.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	993	815	874	824	1440	978	3110	5010	6550	3180	1610
2	669	1030	800	891	820	1740	978	3110	5420	6840	3130	1580
3	692	1250	801	880	822	2050	923	3080	6170	7260	3090	1570
4	714	1110	752	926	815	1680	934	3270	7010	7440	3050	1580
5	566	1030	756	962	804	1340	1040	3710	8140	7260	2980	1680
6	530	982	765	934	775	1270	1160	3700	9100	6600	2900	1590
7	566	942	780	940	790	1430	1350	3440	9270	6690	2860	1610
8	531	913	780	938	827	1460	1280	3230	8730	6520	2780	1710
9	507	912	791	958	844	1940	1150	3200	8080	6380	2770	2620
10	618	923	805	947	861	2350	1060	3510	7760	6260	2800	1960
11	788	923	783	921	857	1610	2030	3890	6590	7080	2850	2250
12	984	920	778	881	853	1380	2240	4670	5370	6500	1350	3270
13	1450	906	772	912	852	1240	2240	4960	5430	5440	1800	2310
14	721	911	769	936	857	1130	2310	5230	6420	4930	2320	2280
15	674	900	789	949	891	1200	2780	5910	7580	5140	2170	2280
16	668	889	792	968	873	1220	3040	6460	8540	4520	2060	2210
17	663	889	830	967	856	1220	2850	6460	9120	5780	1960	2110
18	666	880	839	971	858	1150	2780	6450	8000	4930	1930	2030
19	646	740	840	957	847	1220	2680	6090	7190	4610	1820	1990
20	637	600	846	956	860	1330	2810	6120	5300	4430	1750	1950
21	646	634	848	968	859	1540	2850	5990	4490	4140	1830	1930
22	881	696	857	948	840	1800	3090	5620	4100	3900	1840	1930
23	1330	733	856	931	858	1440	3290	4960	4360	3730	1780	1870
24	1280	766	849	916	831	1210	3460	4520	5050	3700	1760	1840
25	851	786	843	853	849	1160	3580	4430	5970	3650	1710	1820
26	822	799	847	855	815	1100	2970	4980	6360	3610	1680	1790
27	2260	816	872	836	820	1070	2590	5610	6090	3560	1680	1760
28	1380	813	887	839	886	1000	2320	5990	6400	3480	1710	1750
29	1440	810	878	825	---	945	3040	5730	6720	3310	1660	1740
30	1560	810	895	848	---	978	3100	5090	6620	3200	1650	1700
31	1050	---	890	893	---	978	---	4880	---	3260	1620	---
TOTAL	27490	26306	25405	28380	23544	42621	66903	147320	200390	160700	68470	58340
MEAN	887	877	820	915	841	1375	2230	4752	6680	5184	2209	1945
MAX	2260	1250	895	971	891	2350	3580	6460	9270	7440	3180	3270
MIN	507	600	752	825	775	945	923	3080	4100	3200	1350	1570
AC-FT	54530	52180	50390	56290	46700	84540	132700	292200	397500	318700	135800	115700

CAL YR 1974 TOTAL 428428 MEAN 1174 MAX 2730 AC-FT 849800  
WTR YR 1975 TOTAL 875869 MEAN 2400 MAX 9270 AC-FT 1737000

PEAK DISCHARGE (BASE, 5,000 FT<sup>3</sup>/S).--JUNE 6 (2330) 9,970 FT<sup>3</sup>/S (6.34 FT.); JULY 11 (2215) 12,300 FT<sup>3</sup>/S (7.08 FT.).

## SAN JUAN RIVER BASIN

## 09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼ sec.10, T.32 N., R.13 W., La Plata County, Colorado, on right bank at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, 4.8 mi (7.7 km) north of La Plata, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--331 mi<sup>2</sup> (857 km<sup>2</sup>).

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.—Water-stage recorder. Datum of gage is 5,975.15 ft (1,821.226 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

AVERAGE DISCHARGE.—55 years, 34.0 ft<sup>3</sup>/s (0.963 m<sup>3</sup>/s), 24,630 acre-ft/yr (30.4 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 548 ft<sup>3</sup>/s (15.5 m<sup>3</sup>/s) May 15 (gage height, 3.30 ft or 1.006 m); maximum gage height, 3.45 ft (1.052 m) July 11; minimum daily, 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/s) Oct. 2, 3.

Period of record: Maximum discharge, 4,750 ft<sup>3</sup>/s (135 m<sup>3</sup>/s) Aug. 24, 1927 (gage height, 11.06 ft or 3.463 m, present datum), from rating curve extended above 750 ft<sup>3</sup>/s (21 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.—Records good except those for winter period, which are fair. Diversions above station for irrigation of about 15,000 acres (60.7 km<sup>2</sup>), mostly above station.

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

REVISIONS (WATER YEARS).--WSP 1313: 1934 (M), 1936 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	8.5	5.8	5.5	7.0	142	34	202	108	82	23	4.6
2	1.2	15	7.0	5.5	7.0	79	29	204	134	78	16	3.8
3	1.2	15	5.8	5.5	7.0	55	30	240	258	120	13	3.2
4	1.6	12	6.2	5.5	7.0	38	36	280	365	104	11	3.8
5	1.6	8.0	7.0	5.5	7.0	31	64	312	400	62	9.6	3.8
6	1.6	6.2	7.0	5.5	6.5	26	135	250	425	74	11	3.5
7	1.8	5.4	7.0	6.0	6.5	24	176	198	365	69	13	4.3
8	2.1	5.1	7.0	6.0	7.5	27	97	175	320	71	13	8.1
9	1.8	7.0	7.0	6.0	7.5	62	77	176	300	94	13	11
10	1.8	5.4	7.0	6.0	8.0	67	67	182	260	128	12	10
11	2.4	5.1	7.5	5.0	7.5	44	77	254	159	232	18	26
12	2.9	5.1	5.4	4.5	8.5	39	84	338	114	143	30	45
13	3.8	5.1	7.5	5.0	9.5	28	74	365	143	90	33	18
14	3.2	5.1	5.8	5.5	9.5	29	82	402	206	67	19	13
15	2.9	5.1	6.5	6.0	9.5	29	91	449	260	78	11	10
16	2.4	5.1	7.5	6.5	9.0	24	140	458	278	70	10	9.3
17	1.8	5.1	6.5	6.5	9.5	22	182	375	224	93	11	8.2
18	1.8	5.1	6.0	6.5	7.5	20	123	335	178	65	9.6	7.6
19	1.6	5.1	7.0	6.5	7.0	19	103	280	99	40	10	6.8
20	1.6	5.1	7.0	6.5	9.0	24	118	234	45	35	11	6.8
21	1.4	5.1	8.0	6.0	8.0	39	171	210	25	45	12	7.9
22	5.9	5.4	7.0	6.0	9.5	63	232	180	21	51	11	6.8
23	9.0	5.8	6.5	6.0	8.5	47	258	132	26	38	8.6	6.5
24	4.8	5.4	6.5	6.5	12	41	254	95	51	30	7.2	6.5
25	3.2	5.1	6.5	7.0	11	40	320	110	71	32	6.2	6.2
26	3.5	5.1	7.0	7.0	20	45	413	190	62	30	5.5	6.2
27	17	5.1	6.5	7.0	24	40	422	305	53	23	6.2	6.2
28	5.1	5.1	7.0	7.0	96	32	278	292	58	23	6.5	5.8
29	66	5.1	7.0	6.5	---	30	232	220	47	32	3.5	5.5
30	16	4.8	6.0	6.5	---	30	194	162	51	32	2.8	5.2
31	10	---	6.0	6.5	---	33	---	126	---	29	4.0	---
TOTAL	182.4	190.6	207.5	187.5	346.5	1269	4593	7731	5106	2160	370.7	269.6
MEAN	5.88	6.35	6.69	6.05	12.4	40.9	153	249	170	69.7	12.0	8.99
MAX	66	15	8.0	7.0	96	142	422	458	425	232	33	45
MIN	1.2	4.8	5.4	4.5	6.5	19	29	95	21	23	2.8	3.2
AC-FT	362	378	412	372	687	2520	9110	15330	10130	4280	735	535
CAL YR 1974	TOTAL	4129.47	MEAN	11.3	MAX	82	MIN	1.0	AC-FT	8190		
WTR YR 1975	TOTAL	22613.80	MEAN	62.0	MAX	458	MIN	1.2	AC-FT	44850		

09367500 LA PLATA RIVER NEAR FARMINGTON, N. MEX.

LOCATION.--Lat 36°44'23", long 108°14'51", in SW¼ sec.7, T.29 N., R.13 W., San Juan County, on right bank 1,300 ft (400 m) upstream from bridge on U.S. Highway 550, 1,800 ft (550 m) upstream from mouth, and 2.5 mi (4.0 km) northwest of Farmington.

DRAINAGE AREA.--583 mi<sup>2</sup> (1,510 km<sup>2</sup>).

PERIOD OF RECORD.--March 1938 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,215 ft (1,589.5 m) from river-profile map.

AVERAGE DISCHARGE.--37 years, 25.0 ft<sup>3</sup>/s (0.708 m<sup>3</sup>/s), 18,110 acre-ft/yr (22.3 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 1,410 ft<sup>3</sup>/s (39.9 m<sup>3</sup>/s) Oct. 29 (gage height, 4.58 ft or 1.396 m), from rating curve extended above 450 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s) on basis of slope-area measurement at gage height 5.93 ft (1.807 m); minimum, 0.01 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) at times.

Period of record: Maximum gage height, 6.03 ft (1.838 m) Sept. 10, 1939 (discharge not determined); no flow for long period in some years.

Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911.

REMARKS.--Records poor. Diversions for irrigation of about 24,000 acres (97.1 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1243: 1944-45. WSP 1313: 1943-44(M), 1946-50(M). WSP 1733: 1951(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	8.3	2.3	7.0	10	190	29	157	20	1.8	2.8	.90
2	.01	24	2.5	7.2	10	80	28	151	30	7.8	1.8	.80
3	.01	40	2.5	6.8	10	60	29	172	79	14	1.6	.74
4	.01	2.5	2.3	6.5	11	46	28	202	199	20	1.6	.68
5	.01	2.0	2.5	6.0	12	38	39	262	290	14	1.6	.68
6	.01	1.8	2.6	7.0	11	26	93	211	325	5.2	1.2	.68
7	.01	1.6	2.7	7.0	10	23	150	142	290	2.8	.90	.68
8	.01	1.2	2.9	7.0	10	18	82	106	240	2.0	.80	9.0
9	.01	2.0	3.0	7.5	12	65	70	92	214	1.4	.50	21
10	.01	1.8	4.0	8.0	13	72	60	92	181	25	.38	5.2
11	.01	1.6	6.0	7.0	16	48	62	145	96	108	.38	22
12	.01	1.4	8.0	7.5	14	50	80	241	62	120	.44	113
13	.01	1.2	10	7.5	13	51	76	280	50	54	1.6	17
14	.02	1.2	15	7.5	11	45	74	295	93	32	13	23
15	.02	1.2	20	8.0	12	52	80	350	156	29	2.8	15
16	.02	1.2	24	8.5	18	46	107	395	203	26	1.2	9.0
17	.02	1.2	23	9.0	16	32	162	300	169	42	.90	5.0
18	.02	1.2	22	8.5	13	26	121	250	121	34	.80	3.5
19	.02	1.2	15	9.0	11	19	94	200	70	25	.74	2.5
20	.02	1.2	10	9.5	14	17	94	150	35	20	.74	2.0
21	.02	1.4	9.0	9.0	14	25	139	120	20	20	.80	6.0
22	9.8	1.6	8.0	8.5	14	42	204	90	15	20	.90	5.2
23	31	2.0	7.6	9.5	11	42	231	60	6.6	17	1.0	4.0
24	54	1.6	7.4	10	14	30	223	38	3.2	11	.90	1.2
25	6.3	1.6	7.0	12	14	30	283	30	6.6	6.6	.74	1.2
26	5.1	1.6	7.4	13	18	36	371	39	9.6	7.2	.74	1.5
27	86	1.6	8.0	11	49	38	488	134	4.4	5.2	.74	1.5
28	43	1.6	8.0	10	57	38	270	178	2.4	3.2	.80	1.4
29	380	1.8	8.0	11	---	28	170	145	2.4	2.8	.80	1.4
30	58	2.0	8.0	11	---	30	157	74	2.4	11	.90	1.2
31	10	---	7.0	11	---	30	---	46	---	5.2	.90	---
TOTAL	683.49	114.6	265.7	268.0	438	1373	4094	5147	2995.6	693.2	45.00	276.96
MEAN	22.0	3.82	8.57	8.65	15.6	44.3	136	166	99.9	22.4	1.45	9.23
MAX	380	40	24	13	57	190	488	395	325	120	13	113
MIN	.01	1.2	2.3	6.0	10	17	28	30	2.4	1.4	.38	.68
AC-FT	1360	227	527	532	869	2720	8120	10210	5940	1370	89	549
CAL YR 1974 TOTAL	2917.76		MEAN 7.99	MAX 380	MIN .01	AC-FT 5790						
WTR YR 1975 TOTAL	16394.55		MEAN 44.9	MAX 488	MIN .01	AC-FT 32520						

## 09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.

LOCATION.--Lat 36°46'24", long 108°26'26", in SE¼NW¼ sec.32, T.30 N., R.15, W, San Juan County, on right bank, 0.6 mi (1.0 km) downstream from Westwater Arroyo, 0.7 mi (1.1 km) upstream from highway to San Juan Power Plant, and 14 mi (22 km) west of Farmington.

DRAINAGE AREA.--73.8 mi<sup>2</sup> (191 km<sup>2</sup>).

PERIOD OF RECORD.--September 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5.140 ft (1.567 m) from topographic map.

EXTREMES.--Current year, maximum discharge, 295 ft<sup>3</sup>/s (8.35 m<sup>3</sup>/s) Sept. 16 (gage-height 2.20 ft or 0.671 m) from rating curve extended above 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s); no flow at times.

Period of record: Maximum discharge, 295 ft<sup>3</sup>/s (8.35 m<sup>3</sup>/s) Sept. 16, 1975, (gage height, 2.20 ft or 0.671 m) from rating curve extended above 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s); no flow at times.

REMARKS.--Records fair except those above 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) and those during winter period, which are poor.

## DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER 1974

Sept. 11.....	Sept. 16.....0.40	Sept. 21.....1.6	Sept. 26.....1.6
12.....0	17.....4.7	22.....1.6	27.....2.0
13.....0	18.....4.7	23.....1.6	28.....2.0
14.....0	19.....2.9	24.....1.4	29.....2.0
15.....2.0	20.....1.4	25.....1.4	30......70

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.0	.43	.10	.24	0	.73	.73	.53	.15	.13	.07
2	1.6	3.0	.39	.10	.21	.01	.53	.73	.43	.13	.15	.18
3	1.6	4.0	.21	.10	.20	.40	.53	1.2	.45	.13	.13	.15
4	.40	2.0	.09	.05	.47	.20	.81	.89	.35	.13	.18	.11
5	.07	1.0	.21	.03	.40	.30	.97	.81	.27	.13	.35	.24
6	.25	.85	.27	.05	.47	.47	.81	1.8	.31	.11	.18	.21
7	.80	.62	.65	.05	.47	.81	.47	1.2	.24	.09	.18	.18
8	.40	.80	.35	.04	.18	1.3	.43	1.8	.24	.07	.13	.27
9	.20	.80	.43	.02	.59	.65	.43	1.2	.24	.05	.18	.59
10	.10	.57	.24	0	.81	.47	.47	.97	.18	.09	.15	.59
11	1.6	.34	.24	0	.81	.47	.59	1.0	.21	.13	.15	8.0
12	.70	.19	.15	0	2.1	.35	.59	.89	.39	.07	.18	5.0
13	1.6	.34	.15	0	1.6	.27	.47	1.2	.24	.13	1.5	3.0
14	1.4	.19	.13	0	1.6	.39	.35	1.2	.31	.15	.13	27
15	1.2	.34	.13	0	.47	.47	.35	.81	.35	.13	.13	25
16	1.6	.24	.13	.12	.43	.39	.65	.59	.24	.24	.13	50
17	1.2	.24	.18	.13	.39	.35	.13	.81	.27	.18	.11	5.0
18	.30	.19	.18	.11	.34	.35	.11	.97	.15	.15	.13	.53
19	.30	.19	.18	0	.39	.59	.04	.97	.13	.21	.11	.65
20	.10	.29	.13	0	.43	.59	.31	1.2	.13	.24	.15	.73
21	.13	.48	.09	0	.47	.81	.39	.97	.18	.27	.15	.47
22	.46	.85	.13	.03	.59	.89	.47	.31	.15	.31	.21	.21
23	.40	1.0	.13	.21	.50	1.0	.53	.39	.18	.31	.15	.31
24	.68	1.2	.01	.31	.73	.89	.81	.65	.15	.27	.18	.18
25	.10	1.2	0	.43	.47	.81	1.6	.39	.09	.31	.18	.18
26	.13	.80	.02	.35	.27	.53	.73	.81	.21	.24	.15	.21
27	4.2	.59	.13	.18	.10	.53	.81	.59	.11	.35	.13	.07
28	.80	.47	.09	.24	0	.73	.65	.39	.18	.39	.11	.05
29	4.9	.43	.11	.13	---	.53	1.0	.81	.18	.39	.05	.05
30	2.0	.43	.39	.18	---	.39	1.0	.53	.09	.21	.05	.04
31	2.0	---	.13	.18	---	.73	---	.65	---	.15	.11	---
TOTAL	32.62	25.64	6.10	3.14	15.73	16.67	17.76	27.46	7.18	5.91	5.95	129.27
MEAN	1.05	.85	.20	.10	.56	.54	.59	.89	.24	.19	.19	4.31
MAX	4.9	4.0	.65	.43	2.1	1.3	1.6	1.8	.53	.39	1.5	50
MIN	.07	.19	0	0	0	0	.04	.31	.09	.05	.05	.04
AC-FT	65	51	12	6.2	31	33	35	54	14	12	12	256
WTR YR 1975	TOTAL 293.43	MEAN .80	MAX	50	MIN 0	AC-FT 582						

09367930 HUNTER WASH AT BISTI TRADING POST, N. MEX.

LOCATION.--Lat 36°16'37", long 108°15'12", in NW¼NW¼ sec.32, T.24 N., R.13 W., San Juan County, on right bank 150 ft (46 m) upstream from road crossing at Bisti Trading Post and 35 mi (56 km) south of Farmington.

DRAINAGE AREA.--45.6 mi<sup>2</sup> (118.1 km<sup>2</sup>).

PERIOD OF RECORD.--March to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 5,770 ft (1,758.7 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,360 ft<sup>3</sup>/s (38.5 m<sup>3</sup>/s) sometime during period Oct. 27-29 (gage height, 5.86 ft or 1.786 m), from rating curve extended above 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD MARCH 1975 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	0	0		0	0	0
2						---	0	0		0	0	0
3						---	0	0		0	0	.79
4						---	0	0		0	0	2.7
5						---	0	0		0	0	.08
6						---	0	0		0	0	0
7						---	0	0		0	0	2.8
8						---	0	0		0	0	40
9						---	0	0		.10	0	2.8
10						---	0	0		17	0	.06
11						---	.39	0		31	0	29
12						---	3.1	0		1.2	.19	7.4
13						---	6.2	0		.42	0	.13
14						---	.16	0		.10	0	0
15						---	0	0		.78	0	0
16						---	0	0		96	0	0
17						---	0	0		7.0	0	0
18						---	0	0		0	0	0
19						---	0	0		0	0	0
20						---	0	0		0	0	0
21						---	0	0		0	0	0
22						---	0	0		0	0	0
23						---	0	0		0	0	0
24						---	0	0		0	0	0
25						---	0	0		0	0	0
26						---	0	0		0	0	0
27						---	0	0		0	0	0
28						---	0	10		0	0	0
29						---	0	5.0		0	0	0
30						---	0	7.0		0	0	0
31						---	0	---	---	0	0	---
TOTAL							9.85	22.0	0	153.60	.19	85.76
MEAN							.33	.71	0	4.95	.006	2.86
MAX							6.2	10	0	96	.19	40
MIN							0	0	0	0	0	0
AC-FT							20	44	0	305	.4	170

## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.

LOCATION.--Lat 36°47'32", long 108°43'54", in NW¼ sec.27, T.30 N., R.18 W., San Juan County, on left bank 3 mi (5 km) west of Shiprock, 6 mi (10 km) downstream from Chaco River, and at mile 215.0 (345.9 km).

DRAINAGE AREA.--12,900 mi<sup>2</sup> (33,400 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--January to October 1911, February 1927 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,848.68 ft (1,477.878 m) above mean sea level from river-profile survey. Prior to Apr. 6, 1922, nonrecording gage and Apr. 7, 1922, to Oct. 25, 1933, water-stage recorder, at site 3 miles (5 km) upstream at different datum. Oct. 26, 1933, to Sept. 30, 1936, water-stage recorder at present site at datum 3.31 ft (1.01 m) higher and Oct. 1, 1936, to Sept. 30, 1932, at datum 1.77 ft (0.54 m) higher. Supplementary water-stage recorders at nearby sites, same datum, used at times.

AVERAGE DISCHARGE.--49 years (1926-75), 2,216 ft<sup>3</sup>/s (62.76 m<sup>3</sup>/s), 1,605,000 acre-ft/yr (1.98 km<sup>3</sup>/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 12,900 ft<sup>3</sup>/s (365 m<sup>3</sup>/s) July 12 (gage height, 6.88 ft or 2.097 m); minimum, 287 ft<sup>3</sup>/s (8.12 m<sup>3</sup>/s) Oct. 10.

1927-75: Maximum discharge, about 80,000 ft<sup>3</sup>/s (2,270 m<sup>3</sup>/s) Aug. 11, 1929 (gage height, 5.7 ft or 1.73 m, site datum then in use); minimum daily, 8 ft<sup>3</sup>/s (0.23 m<sup>3</sup>/s) Aug. 25, 26, 1939.

Maximum flood occurred Oct. 6, 1911, and reached a stage of 22 ft (6.7 m), site and datum then in use.

REMARKS.--Records fair. Since 1962 flow partly regulated by Navajo Reservoir (see sta 09355100). Diversions for irrigation of about 118,000 acres (478 km<sup>2</sup>) above station. Ungaged canals bypass station on both right and left bank, though some of bypass flow is returned to river below gage. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1931, 1934-38, 1951. WSP 1313: 1911, 1933.

DISCHARGE\* IN CUBIC FEET PER SECOND\* WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	1240	794	888	842	1300	993	3100	4260	6010	3270	1370
2	620	1220	806	938	835	1910	998	2980	4460	6370	3310	1350
3	580	1530	836	842	795	2150	964	2880	5480	6820	3190	1370
4	605	1160	848	867	770	1880	938	2820	6980	7450	3080	1440
5	620	1040	881	902	784	1360	978	3550	9030	7700	3070	1710
6	540	962	954	895	751	1170	1230	3680	10700	6540	2900	1710
7	498	916	909	909	754	1230	1460	3440	11300	6540	2900	1680
8	353	854	938	946	793	1270	1570	3060	10000	6340	2780	1840
9	318	867	874	962	854	1640	1310	2660	8110	6300	2810	3640
10	307	962	902	954	850	2650	1200	2810	8000	6220	3050	2740
11	605	842	895	888	834	1840	1940	3480	6410	6620	3250	2510
12	540	818	916	888	870	1480	2780	4120	4610	8350	2080	4680
13	1520	800	895	881	879	1270	3080	5180	4390	6380	1020	3440
14	1330	824	867	923	882	1140	2730	5320	4920	5350	2340	2500
15	686	923	909	954	911	1230	3200	5860	6030	5600	2280	2190
16	652	909	867	1010	930	1240	4110	6800	7130	5000	2100	2100
17	642	902	836	1050	890	1240	3520	6900	8650	6900	1960	1970
18	625	895	874	1060	869	1170	3220	7010	7110	5660	1860	1910
19	600	874	842	1050	835	1110	3080	6260	6310	4440	1810	1790
20	585	674	830	994	835	1170	2820	5900	4670	4170	1650	1730
21	610	722	842	986	857	1370	2950	5610	3940	3830	1810	1780
22	686	818	881	962	890	1700	2920	5120	3780	3640	1940	1790
23	1320	848	888	946	895	1620	3180	4340	4080	3750	1970	1720
24	1720	842	895	946	874	1310	3550	3810	4710	4080	1960	1690
25	1060	848	888	902	842	1190	3700	3580	5510	3900	1730	1670
26	867	830	881	860	854	1170	3400	4000	5650	4000	1550	1640
27	2460	812	840	848	888	1220	2900	4860	5410	3990	1490	1600
28	5000	800	860	830	902	1160	2570	5790	5750	3730	1580	1570
29	1840	830	860	788	---	1130	2880	5790	6140	3430	1440	1560
30	2120	800	860	788	---	1070	3150	4820	6210	3310	1460	1520
31	1360	---	860	867	---	1000	---	4250	---	3300	1420	---
TOTAL	31889	27362	27020	28524	23765	43390	73421	139780	189730	165720	69060	60210
MFAN	1029	912	872	920	849	1400	2447	4509	6324	5346	2228	2007
MAX	5000	1530	954	1060	930	2650	4110	7010	11300	8350	3310	4680
MIN	307	674	744	788	751	1000	238	2460	3780	3300	1020	1350
AC-FT	63250	54270	53590	56580	47140	86060	145600	277300	376300	328700	137000	119400

CAL YR 1974 TOTAL 410588 MEAN 1125 MAX 5000 MIN 112 AC-FT 814400  
WTR YR 1975 TOTAL 879871 MEAN 2411 MAX 11300 MIN 307 AC-FT 1745000

PEAK DISCHARGE (BASE, 6,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-28	0015	6.68	11,900	7-12	0430	6.88	12,900
6-7	0700	6.94	12,200	9-12	0800	6.42	8,400



## 09379500 SAN JUAN RIVER NEAR BLUFF, UTAH

Location.--Lat 37°08'49", long 109°51'51", in SW¼NE¼NW¼ sec.7, T.42 S., R.19 E., San Juan County, on left bank 1,600 ft (490 m) downstream from Gypsum Creek, 1,800 ft (550 m) upstream from highway bridge, 20 mi (32 km) southwest of Bluff, and at mile 113.5 (182.6 km).

DRAINAGE AREA.--23,000 mi<sup>2</sup> (60,000 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,048 ft (1,234 m) from levels of Topographic Division, USGS. Prior to Mar. 16, 1927, chain gages at sites about 1,700 ft (520 m) downstream at different datums.

AVERAGE DISCHARGE.--61 years, 2,586 ft<sup>3</sup>/s (73.24 m<sup>3</sup>/s), 1,874,000 acre-ft/yr (2.31 km<sup>3</sup>/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 11,900 ft<sup>3</sup>/s (337 m<sup>3</sup>/s) July 13 (gage height, 11.30 ft or 3.444 m); minimum daily, 370 ft<sup>3</sup>/s (10.5 m<sup>3</sup>/s) Oct. 10, 11.

1914-17, 1927-75: Maximum discharge, 70,000 ft<sup>3</sup>/s (1,980 m<sup>3</sup>/s) Sept. 10, 1927 (gage height, 32.0 ft or 9.75 m), from rating curve extended above 31,000 ft<sup>3</sup>/s (889 m<sup>3</sup>/s) and slope-area measurement at gage height 26.62 ft (8.114 m); no flow July 3-13, 1934, Aug. 24-27, 29, 1939.

Flood of Oct. 6, 1911, which is greatest known at Shiprock, N. Mex., probably exceeded that of Sept. 10, 1927 at this station but stage was not accurately determined.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions for irrigation of approximately 200,000 acres (809 km<sup>2</sup>) above station. No diversions between station and mouth of river. Flow regulated by Navajo Reservoir since June 28, 1962 (see sta 09355100).

REVISIONS (WATER YEARS).--WSP 1213: 1940. WSP 1313: 1917, 1929. WSP 1343: 1945.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	733	1820	892	939	940	977	1090	3240	5160	6260	3610	1500
2	733	1680	851	914	940	1460	1090	3110	5220	6230	3540	1460
3	692	2740	859	900	900	3020	1100	3080	5460	6500	3430	1450
4	660	2260	859	960	850	3020	1040	3220	6360	6840	3400	1430
5	680	1570	892	1000	840	2430	1030	3510	7230	7010	3110	1440
6	680	1440	914	1000	820	2020	1050	4090	8380	7010	3110	1520
7	600	1210	947	960	800	1880	1410	3910	9050	6480	3040	1690
8	500	1180	972	1000	800	1660	1670	3290	9460	6570	2920	1620
9	450	1300	964	1000	880	2310	1770	2960	9110	6520	2870	1720
10	370	1190	964	1000	930	2880	1390	2810	9590	6960	2840	3630
11	370	1180	897	1000	930	3000	1290	3280	8290	6750	2910	2470
12	600	1100	914	950	940	3110	2500	3880	7100	7300	2930	2570
13	700	1040	914	930	960	2280	2340	5010	6040	8320	3040	5940
14	1100	1010	930	950	960	1560	2650	5460	5910	6570	2570	4250
15	1400	951	889	1000	1020	1690	3200	5680	6570	5060	2100	3220
16	1400	1020	914	1000	1040	1790	4100	6130	7360	8320	2160	2590
17	800	980	939	1000	1020	1740	3900	6650	8040	6810	2030	2310
18	720	1010	873	1000	985	1450	3900	6760	8560	7970	1960	2150
19	700	934	866	1000	934	1390	3900	6750	7590	6440	1830	2050
20	700	968	867	1000	892	1260	3900	6230	7010	5650	1750	1970
21	700	917	851	950	859	1260	3600	6000	5440	5310	1680	2000
22	700	775	843	940	851	1470	3400	5880	4790	4970	2100	1980
23	1000	843	866	1000	859	1880	3630	5540	4430	4670	2030	1900
24	1500	925	881	1000	867	1710	3800	4940	4570	4360	1900	1890
25	2360	925	897	1000	892	1400	3880	4480	4680	4260	1610	1810
26	1550	925	930	950	875	1260	4150	4220	5520	4190	1730	1760
27	1910	917	900	920	892	1280	3770	4660	5940	4200	1630	1740
28	2950	900	900	850	934	1360	3470	5540	5740	4080	1590	1710
29	4670	844	900	850	---	1240	2980	6320	5970	4020	1620	1690
30	2960	867	900	850	---	1190	3400	6290	6240	3950	1520	1670
31	2880	---	930	850	---	1140	---	5570	---	4020	1510	---
TOTAL	31788	35491	27915	29663	25430	50337	90100	144510	200410	182200	74270	65130
MEAN	1214	1183	900	957	908	1617	2974	4791	6670	5877	2396	2171
MAX	4670	2740	972	1000	1040	3110	4150	6760	9460	8320	3610	5940
MIN	370	775	843	850	800	977	1030	2810	4430	3950	1510	1430
AC-FT	74950	70400	55370	58840	50440	111700	158900	294600	396900	361400	147300	129200
CAL YR 1974	TOTAL	432914	MEAN	1186	MAX	4670	MIN	190	AC-FT	858700		
WTR YR 1975	TOTAL	962944	MEAN	2638	MAX	9460	MIN	370	AC-FT	1910000		

PEAK DISCHARGE (BASE, 8,000 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-8	0400	10.49	9,530	7-13	0400	11.30	11,900
6-18	0700	10.04	8,600	7-18	0700	9.78	9,070

09386900 RIO NUTRIA NEAR RAMAH, N. MEX.

LOCATION.--Lat 35°16'57", long 108°33'10", in NW¼SW¼ sec.8, T.12 N., R.16 W., McKinley County, on Zuni Indian Reservation, at mouth of Nutria Canyon, 0.9 mi (1.4 km) upstream from Nutria Diversion Dam, 1.3 mi (2.1 km) northeast of Upper Nutria, and 10.4 mi (16.7 km) northwest of Ramah.

DRAINAGE AREA.--71.4 mi<sup>2</sup> (185 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,000 ft (2,133 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 4.63 ft<sup>3</sup>/s (0.131 m<sup>3</sup>/s), 3,350 acre-ft/yr (4.13 km<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 174 ft<sup>3</sup>/s (4.93 m<sup>3</sup>/s) Mar. 9 (gage height, 3.44 ft or 1.049 m); minimum discharge, 0.02 ft<sup>3</sup>/s (0.0006 m<sup>3</sup>/s) at times.

Period of record: Maximum discharge, 782 ft<sup>3</sup>/s (22.1 m<sup>3</sup>/s) Apr. 14, 1973 (gage height, 4.58 ft or 1.396 m), from rating curve extended above 470 ft<sup>3</sup>/s (13.3 m<sup>3</sup>/s); no flow Oct. 1-20, 1969.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.26	.32	.10	.08	9.4	19	2.3	.35	.10	.07	.06
2	.03	.20	.32	.10	.08	16	9.8	1.9	.26	.07	.07	.07
3	.04	.22	.32	.10	.07	12	30	1.7	.23	.08	.07	.07
4	.05	.19	.28	.10	.08	6.7	64	1.6	.21	.13	.07	.12
5	.05	.14	.29	.08	.07	8.4	64	1.4	.19	.11	.07	.08
6	.11	.12	.28	.08	.06	18	59	1.3	.16	.10	.07	.08
7	.30	.11	.28	.08	.08	24	50	1.1	.10	.08	.07	.10
8	.17	.10	.25	.09	.08	61	23	.88	.10	.08	.07	.49
9	.09	.12	.25	.10	.08	79	19	.79	.09	.08	.07	.18
10	1.7	.10	.25	.10	.08	28	30	.68	.09	.08	.07	.09
11	5.2	.10	.25	.10	.08	16	26	.97	.08	.10	.07	.08
12	3.3	.10	.20	.10	.08	12	44	1.9	.08	.16	1.0	.26
13	.78	.10	.20	.10	.08	9.0	47	1.6	.08	11	.19	.09
14	.33	.12	.20	.08	.08	10	44	1.4	.08	1.1	.08	.41
15	.24	.12	.19	.08	.08	13	60	1.3	.08	.67	.07	.10
16	.14	.12	.16	.08	.08	7.9	75	1.3	.08	.25	.07	.09
17	.11	.16	.16	.08	.08	18	63	1.4	.08	.21	.07	.08
18	.10	.16	.16	.08	.08	6.8	37	3.0	.08	.17	.07	.08
19	.10	.16	.16	.08	.08	19	26	1.0	.08	.10	.07	.15
20	.09	.16	.12	.08	.08	50	26	.71	.07	.09	.10	.09
21	.09	.16	.12	.08	.08	91	24	.44	.07	.09	.10	.09
22	.10	.16	.14	.08	.08	61	22	.47	.09	.16	.08	.08
23	.16	.20	.17	.08	.08	29	16	.39	.18	.13	.07	.08
24	.11	.20	.12	.08	.08	19	11	.34	.10	.08	.07	.08
25	.10	.20	.11	.08	.08	47	8.8	.30	.08	.08	.07	.08
26	.10	.23	.12	.09	.12	54	6.7	.25	.09	.08	.07	.08
27	.45	.22	.10	.08	.28	11	5.6	.17	.09	.08	.07	.08
28	.18	.28	.08	.07	.48	14	5.2	.17	.11	.08	.07	.08
29	1.4	.28	.08	.06	---	9.4	4.3	.29	.13	.08	.06	.08
30	2.2	.28	.08	.07	---	8.3	3.0	.78	.12	.08	.06	.08
31	.46	---	.08	.08	---	15	---	.52	---	.08	.06	---
TOTAL	18.30	5.07	5.84	2.64	2.84	774.9	922.4	32.35	3.63	15.78	3.27	3.58
MEAN	.59	.17	.19	.085	.10	25.0	30.7	1.04	.12	.51	.11	.12
MAX	5.2	.28	.32	.10	.48	91	75	3.0	.35	11	1.0	.49
MIN	.02	.10	.08	.06	.06	6.7	3.0	.17	.07	.07	.06	.06
AC-FT	36	10	12	5.2	5.6	1540	1830	64	7.2	31	6.5	7.1

CAL YR 1974 TOTAL 411.82 MEAN 1.13 MAX 42 MIN .01 AC-FT 817  
WTR YR 1975 TOTAL 1790.60 MEAN 4.91 MAX 91 MIN .02 AC-FT 3550

PEAK DISCHARGE (BASE, 30 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	1745	3.00	109	7-13	0230	3.42	47
3-9	0015	3.44	174				

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

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

DRAINAGE AREA.—810 mi<sup>2</sup> (2,100 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—October 1969 to current year.

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

AVERAGE DISCHARGE.—6 years, 10.2 ft<sup>3</sup>/s (0.289 m<sup>3</sup>/s), 7,390 acre-ft/yr (9.11 hm<sup>3</sup>/yr).

EXTREMES.—Current year: Maximum discharge, 535 ft<sup>3</sup>/s (15.2 m<sup>3</sup>/s) Oct. 12 (gage height, 4.60 ft or 1.402 m), from rating curve extended as explained below; no flow for many days.

Period of record: Maximum discharge, 5,200 ft<sup>3</sup>/s (147 m<sup>3</sup>/s) Aug. 4, 1974 (gage height, 6.61 ft or 2.015 m), from rating curve extended above 670 ft<sup>3</sup>/s (19.0 m<sup>3</sup>/s) on basis of slope-area measurements at gage heights 4.05 ft (1.234 m), 3.94 ft (1.201 m), 5.16 ft (1.573 m), and 6.61 ft (2.015 m); no flow for many days.

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

DISCHARGE\* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

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

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

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>)

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

## 09430500 GILA RIVER NEAR GILA, N. MEX.

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼ sec.30, T.14 S., R.16 W., Grant County, on left bank at Hooker damsite, 1.6 mi (2.6 km) upstream from Mogollon Creek, 7 mi (11 km) northeast of Gila, and at mile 572.5 (921.2 km).

DRAINAGE AREA.--1,864 mi<sup>2</sup> (4,828 km<sup>2</sup>).

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft (1,419.09 m) above mean sea level from river-profile survey. Prior to Dec. 31, 1928, at site 5 mi (8 km) upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--48 years (1927-75), 135 ft<sup>3</sup>/s (3.823 m<sup>3</sup>/s) 97,810 acre-ft/yr (121 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 3,620 ft<sup>3</sup>/s (103 m<sup>3</sup>/s) Sept. 8 (gage height, 5.80 ft or 1.768 m); minimum, 37 ft<sup>3</sup>/s (1.05 m<sup>3</sup>/s) at times.

Period of record: Maximum discharge, 25,400 ft<sup>3</sup>/s (719 m<sup>3</sup>/s) Sept. 29, 1941 (gage height, 17.2 ft or 5.24 m, from floodmark), from rating curve extended above 3,900 ft<sup>3</sup>/s (110 m<sup>3</sup>/s) on basis of velocity-area studies; minimum, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) July 15, 1971.

Other major floods occurred in November 1905, December 1906, and January 1916.

REMARKS.--Records good. Diversions for irrigation of about 500 acres (202 hm<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1944 (M), 1949 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	190	86	83	848	144	310	255	136	40	76	55
2	59	170	83	86	640	180	374	235	124	43	64	52
3	55	161	83	83	888	250	384	225	116	43	61	55
4	55	152	90	78	410	350	446	225	112	46	55	91
5	50	140	97	72	332	362	591	235	112	46	52	378
6	50	127	93	75	280	350	680	230	112	49	46	2320
7	57	123	93	75	250	386	680	220	112	49	43	2640
8	64	116	90	75	220	422	640	208	112	52	40	2850
9	75	123	90	78	204	676	556	200	104	52	43	2290
10	64	123	86	78	196	832	476	184	100	52	43	1770
11	57	144	83	72	188	720	452	180	94	49	40	1690
12	90	144	78	67	180	598	500	184	88	55	43	1880
13	97	131	78	62	172	597	488	192	85	58	52	1970
14	86	119	75	62	168	434	446	200	79	58	55	1860
15	81	112	70	62	180	422	410	216	76	58	58	1330
16	78	104	70	64	176	428	386	220	70	58	55	1000
17	75	101	67	67	168	410	386	235	67	64	52	612
18	72	97	70	67	164	380	434	230	64	67	55	521
19	70	93	72	67	148	350	440	212	61	64	46	452
20	67	90	70	67	148	338	392	204	58	67	46	434
21	70	86	72	70	152	344	362	192	54	67	58	410
22	75	86	75	72	156	386	350	184	52	70	94	320
23	90	86	75	75	140	422	368	180	52	112	128	265
24	93	83	75	75	136	392	380	160	49	116	85	225
25	90	83	81	78	136	362	374	148	49	120	82	196
26	86	81	72	78	136	344	356	140	46	94	76	176
27	90	81	72	81	136	350	356	132	46	82	79	164
28	97	83	72	83	136	338	338	136	43	97	112	156
29	104	83	78	93	---	338	395	148	40	144	85	148
30	140	83	81	477	---	320	270	156	40	116	67	140
31	235	---	81	1190	---	310	---	152	---	88	61	---
TOTAL	2534	3395	2458	3812	7088	12445	12932	6018	2354	2176	1952	26450
MEAN	81.7	113	79.3	123	253	401	431	194	78.5	70.2	63.0	882
MAX	235	190	97	1190	888	832	680	255	136	144	128	2850
MIN	50	81	67	62	136	144	270	132	40	40	40	52
AC-FT	5030	6730	4880	7560	14060	24680	25650	11940	4670	4320	3870	52460
CAL YR 1974 TOTAL	26896			73.7	MAX 431	MIN 20	AC-FT 53350					
WTR YR 1975 TOTAL	83614			MEAN 229	MAX 2850	MIN 40	AC-FT 165800					

PEAK DISCHARGE (BASE, 600 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-31	0700	3.90	1,330	4-6	1800	3.20	720
3-9	2100	3.45	920	9-8	0230	5.80	3,620

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.

(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", in SE¼ sec.13, T.13 S., R.18 W., Grant County, 12 mi (19 km) upstream from mouth, and 14.2 mi (23 km) north of Cliff.

DRAINAGE AREA.--69 mi<sup>2</sup> (179 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,440 ft (1,658 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 27.9 ft<sup>3</sup>/s (0.790 m<sup>3</sup>/s), 20,120 acre-ft/yr (24.8 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 2,130 ft<sup>3</sup>/s (60.3 m<sup>3</sup>/s) Sept. 7 (gage height, 6.85 ft or 2.088 m); no flow at times.  
Period of record: Maximum discharge, 10,800 ft<sup>3</sup>/s (306 m<sup>3</sup>/s) Aug. 12, 1967 (gage height, 13.7 ft or 4.18 m, from floodmarks),  
From rating curve extended above 220 ft<sup>3</sup>/s (6.23 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE\* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	40	7.8	3.3	92	47	45	49	6.7	0	2.4	0
2	4.7	34	7.0	3.4	67	54	41	49	6.5	0	1.7	0
3	4.4	29	6.7	5.7	54	60	44	49	6.5	0	1.5	0
4	3.9	24	5.7	5.5	46	55	54	49	6.2	0	1.3	4.8
5	3.7	21	7.8	5.5	39	47	64	48	5.4	0	1.1	56
6	3.4	19	7.0	5.3	34	47	64	41	4.9	1.1	.77	488
7	3.4	14	5.7	4.8	32	47	63	36	4.4	3.0	.81	956
8	3.4	26	5.7	4.7	32	64	55	32	3.9	4.2	.73	516
9	3.4	258	5.5	4.8	32	186	50	32	3.5	3.7	.61	338
10	3.0	114	5.0	8.5	32	120	53	35	3.2	3.2	.50	187
11	5.0	68	4.7	6.5	29	80	61	38	2.9	4.3	.40	257
12	16	46	4.7	14	26	66	59	42	2.7	4.9	.36	196
13	36	38	4.7	10	26	56	55	42	2.6	13	1.2	146
14	24	33	4.4	6.0	30	56	52	40	2.4	8.3	1.0	104
15	16	30	7.0	6.9	30	53	59	38	2.3	5.5	1.1	77
16	12	26	4.2	8.3	27	52	70	37	2.1	7.1	.81	54
17	9.5	24	3.9	9.3	26	51	88	33	2.0	8.2	.66	41
18	8.1	21	3.7	9.9	23	46	88	28	2.0	12	.50	31
19	7.4	19	6.7	12	23	45	72	24	1.9	8.8	.35	25
20	6.7	17	3.7	12	23	47	63	21	1.9	7.7	.29	21
21	6.0	16	3.4	12	24	53	68	19	1.9	6.0	.44	18
22	8.1	14	3.4	12	23	56	81	17	1.8	6.2	2.0	15
23	15	13	4.2	12	23	57	77	15	1.6	7.4	3.4	14
24	14	12	9.2	13	21	51	78	12	1.4	6.1	2.9	13
25	12	12	8.8	10	23	46	81	11	.80	5.4	1.7	11
26	11	11	7.8	10	26	51	82	11	.04	5.4	1.1	11
27	10	10	7.0	11	32	45	67	11	0	5.6	.81	9.5
28	10	9.2	5.2	12	39	41	56	11	0	5.4	.47	8.9
29	68	9.2	4.2	14	---	40	53	10	0	4.6	.35	8.0
30	96	8.1	3.7	136	---	38	51	8.8	0	5.0	.16	7.5
31	46	---	11	190	---	46	---	7.8	---	3.2	.12	---
TOTAL	475.6	1015.5	179.5	578.4	934	1707	1894	896.6	81.54	155.3	31.54	3613.7
MEAN	15.3	33.9	5.79	18.7	31.4	58.0	63.1	28.9	2.72	5.01	1.02	120
MAX	96	258	11	190	92	186	88	49	6.7	13	3.4	956
MIN	3.0	8.1	3.4	3.3	21	38	41	7.8	0	0	.12	0
AC-FT	943	2010	356	1150	1850	3560	3760	1740	162	308	63	7170

CAL YR 1974 TOTAL 2460.86 MEAN 6.74 MAX 258 MIN 0 AC-FT 4880  
WTR YR 1975 TOTAL 11652.68 MEAN 31.9 MAX 956 MIN 0 AC-FT 23110

PEAK DISCHARGE (BASE, 100 FT<sup>3</sup>/S).--JAN 30 (2315) 328 FT<sup>3</sup>/S (4.38 FT); SEPT 7 (1330) 2,130 FT<sup>3</sup>/S (6.85 FT.).

## 09431500 GILA RIVER NEAR REDROCK, N. MEX.

LOCATION.--Lat 32°43'37", long 108°40'30", in  $\frac{1}{2}$  sec. 23, T.18 S., R.18 W., Grant County, on left bank 0.2 mi (0.3 km) downstream from Copper Canyon, 0.2 mi (0.3 km) upstream from lower end of box canyon, 4.7 mi (7.6 km) northeast of Redrock, 14 mi (23 km) downstream from Mangas Creek, and at mile 539.2 (867.6 km).

DRAINAGE AREA.--2,829 mi<sup>2</sup> (7,327 km<sup>2</sup>).

PERIOD OF RECORD.--September 1904 to February 1905 (gage heights only). May 1905 to December 1906, January to December 1907 and July to October 1908 (gage heights only). November 1908 to December 1910, January 1911 to January 1912 and May to June 1912 (gage heights only). August 1912 to September 1955, October 1962 to current year. Monthly or annual discharge only for some periods, published in WSP 1313. Published as "near Cliff" 1904-07, and as "near Redrock" 1908-55.

GAGE.--Water-stage recorder. Altitude of gage is 4,090 ft (1,247 m) from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi (21.7 km) upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--59 years (1905-06, 1908-10, 1912-55, 1962-75), 198 ft<sup>3</sup>/s (5.607 m<sup>3</sup>/s), 143,500 acre-ft/yr (177 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 6,740 ft<sup>3</sup>/s (191 m<sup>3</sup>/s) Sept. 11 (gage height, 14.40 ft or 4.389 m); minimum, 22 ft<sup>3</sup>/s (0.62 m<sup>3</sup>/s) Aug. 17.

Period of record: Maximum discharge, 40,000 ft<sup>3</sup>/s (1,130 m<sup>3</sup>/s) Sept. 25, 1941 (gage height, 31 ft or 9.4 m, from floodmarks), computed on basis of known peak flow for station below Blue Creek; minimum, 2.2 ft<sup>3</sup>/s (0.062 m<sup>3</sup>/s) Aug. 5, 1947.

REMARKS.--Records fair. Diversions for irrigation of about 5,000 acres (20.2 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	210	79	74	633	203	411	335	129	41	83	56
2	82	195	80	75	486	222	449	306	123	42	66	78
3	77	185	79	69	436	282	474	301	118	43	61	110
4	75	182	79	66	398	353	477	292	111	48	55	490
5	79	173	81	62	365	420	553	289	109	48	49	542
6	74	153	78	63	342	409	638	276	103	54	44	2880
7	75	142	73	62	311	413	652	272	101	60	39	4380
8	68	137	76	67	293	442	629	258	99	56	36	4670
9	78	172	84	71	280	542	571	235	108	51	33	3400
10	75	190	82	71	266	810	534	219	103	49	29	2600
11	78	164	76	74	251	741	514	212	102	156	25	3190
12	79	155	80	76	257	683	543	211	97	113	25	2980
13	113	149	82	82	232	600	557	218	92	75	28	2920
14	109	135	84	81	235	544	520	236	86	70	29	2570
15	103	126	84	80	218	535	478	251	82	69	27	1730
16	97	121	88	82	215	540	449	244	76	66	24	1240
17	89	113	89	82	215	520	445	249	72	66	23	904
18	89	102	88	89	221	500	476	245	69	66	23	710
19	80	99	88	88	207	449	509	227	64	68	23	584
20	66	96	84	86	203	442	487	210	54	63	23	536
21	66	91	83	81	200	444	445	195	49	68	24	488
22	68	85	81	71	203	460	425	185	46	82	110	420
23	79	84	80	69	202	502	439	173	43	142	200	350
24	86	81	79	72	195	496	451	163	43	150	110	306
25	82	84	76	78	208	468	425	156	49	105	96	276
26	78	85	78	76	207	443	420	149	49	95	80	245
27	78	85	80	78	200	468	416	148	48	95	160	218
28	82	80	73	82	196	457	406	140	43	94	120	198
29	88	78	72	86	---	472	386	136	42	99	96	188
30	140	84	74	120	---	450	357	135	41	112	70	179
31	170	---	73	847	---	421	---	135	---	101	60	---
TOTAL	2686	3836	2483	3160	7675	14731	14536	6801	2351	2447	1871	39438
MEAN	86.6	128	80.1	102	274	475	485	219	78.4	78.9	60.4	1315
MAX	170	210	89	847	633	810	652	335	129	156	200	4670
MIN	66	78	72	62	195	203	357	135	41	41	23	56
AC-FT	5330	7610	4930	6270	15220	29220	28830	13490	4660	4850	3710	78230
CAL YR 1974 TOTAL	27233.4											
WTR YR 1975 TOTAL	102015.0											
MEAN	74.6											
MAX	338											
MIN	23											
AC-FT	54020											
WTR YR 1975 TOTAL	202300											

PEAK DISCHARGE (BASE, 3,000 FT<sup>3</sup>/S).--JULY 11 (2030) 6,300 FT<sup>3</sup>/S (15.36 FT.); SEPT 11 (2245) 6,740 FT<sup>3</sup>/S (14.40 FT.)

## 09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, N. MEX.

LOCATION.--Lat 32°38'53", long 108°50'43", in SE¼SW¼ sec.18, T.19 S., R.19 W., Grant County, on left bank at head of canyon, 1.4 mi (2.3 km) downstream from Blue Creek, 10 mi (16 km) east of Virden, 16 mi (26 km) upstream from New Mexico-Arizona State line, and at mile 523.6 (842.5 km).

DRAINAGE AREA.--3,203 mi<sup>2</sup> (8,296 km<sup>2</sup>), excluding Animas River Basin.

PERIOD OF RECORD.--May to November 1914, March to September 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi (14 km) downstream, and in Sunset Canal. Published as Gila River near Duncan, Ariz., 1914-15 and as Gila River at Fuller's Ranch, near Duncan, Ariz., 1931-38.

GAGE.--Water-stage recorder. Altitude of gage is 3,875 ft (1,181 m) from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi (9 km) downstream, 1,000 ft (300 m) upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--48 years (1927-75), 178 ft<sup>3</sup>/s (5.041 m<sup>3</sup>/s), 129,000 acre-ft/yr (159 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 7,720 ft<sup>3</sup>/s (219 m<sup>3</sup>/s) Sept. 8 (gage height, 12.30 ft or 3.749 m); minimum 7.5 ft<sup>3</sup>/s (0.21 m<sup>3</sup>/s) Aug. 18.

Period of record: Maximum discharge, 41,700 ft<sup>3</sup>/s (1,180 m<sup>3</sup>/s) Sept. 29, 1941 (gage height, 25.78 ft or 7.858 m); minimum, 1 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) July 14, 1934.

REMARKS.--Records good. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres (25.1 km<sup>2</sup>) above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	231	101	106	1260	158	366	334	116	31	90	48
2	70	209	104	115	842	167	394	310	110	30	70	41
3	67	190	99	105	666	205	421	300	108	29	56	40
4	62	175	104	105	586	254	421	296	105	29	49	229
5	68	177	104	100	526	292	478	285	98	38	43	487
6	64	151	105	102	478	308	574	276	93	247	39	2110
7	66	138	99	102	442	314	634	267	91	126	34	4480
8	55	132	99	104	406	340	634	258	86	98	30	6180
9	65	154	108	107	379	403	578	234	89	79	28	3870
10	94	220	111	102	358	719	532	234	93	68	26	2800
11	81	195	102	101	340	722	502	267	87	143	23	3730
12	79	177	102	99	332	650	520	192	82	617	21	3990
13	157	169	105	104	308	574	582	198	75	133	20	3210
14	141	146	104	98	306	517	517	205	68	116	18	3500
15	115	134	99	96	283	517	475	222	64	108	15	2300
16	100	133	102	99	274	520	448	214	59	102	13	1520
17	90	130	104	97	263	520	427	223	55	105	10	1100
18	92	121	102	106	268	505	448	229	51	126	8.2	894
19	89	117	105	110	249	475	481	216	49	67	9.2	785
20	72	116	100	108	234	448	469	205	44	60	9.0	670
21	67	116	102	107	214	442	430	193	41	55	11	583
22	68	108	100	95	211	445	403	180	39	57	106	494
23	80	105	101	90	204	472	403	164	37	103	221	382
24	90	101	101	91	188	478	412	151	36	254	113	328
25	85	105	100	96	190	445	391	146	35	145	88	304
26	79	102	101	98	181	418	388	135	35	125	80	271
27	76	107	105	99	170	430	391	129	35	125	163	245
28	86	102	101	106	156	418	382	125	34	105	132	227
29	90	97	99	113	---	427	366	121	32	118	100	210
30	158	104	104	200	---	418	350	122	32	124	73	196
31	195	---	105	1440	---	382	---	121	---	105	56	---
TOTAL	2772	4262	3178	4601	10314	13383	13817	6469	1979	3668	1754.4	45224
MEAN	89.4	142	103	148	368	432	461	209	66.0	118	56.6	1507
MAX	195	231	111	1440	1260	722	634	334	116	617	221	6180
MIN	55	97	99	90	156	158	350	121	32	29	8.2	40
AC-FT	5500	8450	6300	9130	20460	26550	27410	12830	3930	7280	3480	89700

CAL YR 1974 TOTAL 29523.9 MEAN 80.9 MAX 752 MIN 2.7 AC-FT 58560  
WTR YR 1975 TOTAL 111421.4 MEAN 305 MAX 6180 MIN 8.2 AC-FT 221000

PEAK DISCHARGE (BASE 1,900 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-11	2330	9.79	2,670	9-12	0100	11.64	6,200
9-8	0230	12.30	7,720				

## 09442680 SAN FRANCISCO RIVER NEAR RESERVE, N. MEX.

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, on left bank 1,300 ft (400 m) downstream from Rainbow Bridge Canyon, 1.7 mi (2.7 km) northwest of Reserve, and at mile 563.1 (906.0 km).

DRAINAGE AREA.--350 mi<sup>2</sup> (907 km<sup>2</sup>), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,820 ft (1,774 m) from topographic map. Prior to Dec. 15, 1972 at site 1,800 ft (549 m) upstream at datum 21.3 ft (6.49 m) higher.

AVERAGE DISCHARGE.--16 years, 25.3 ft<sup>3</sup>/s (0.716 m<sup>3</sup>/s), 18,330 acre-ft/yr (22.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 929 ft<sup>3</sup>/s (26.3 m<sup>3</sup>/s) July 11 (gage height, 6.80 ft or 2.073 m); minimum, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) July 10.

Period of record: Maximum discharge, 11,900 ft<sup>3</sup>/s (337 m<sup>3</sup>/s) Oct. 20, 1972 (gage height, 7.47 ft or 2.277 m in gage well, 8.05 ft or 2.454 m, from outside floodmarks, site and datum then in use), from rating curve extended above 9,000 ft<sup>3</sup>/s (255 m<sup>3</sup>/s) on basis of velocity-area study; minimum, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Mar. 16, 1959.

Maximum stage known, about 15 ft (4.6 m), as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft<sup>3</sup>/s (566 m<sup>3</sup>/s) at Alma (downstream). See WSP 1313.

REMARKS.--Records fair. Possible minor regulation by Luna Lake, 27 mi (43 km) upstream. Diversions for irrigation of about 500 acres (202 hm<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	47	9.3	7.5	16	30	86	30	5.1	3.9	5.1	4.9
2	4.5	44	10	8.2	13	47	71	24	7.0	5.4	5.0	5.0
3	4.5	39	8.6	7.5	14	78	70	16	6.3	5.1	4.9	5.3
4	4.5	35	9.3	6.4	14	79	69	19	5.4	4.8	4.8	11
5	4.5	30	9.6	7.5	14	70	68	19	4.8	3.6	4.6	11
6	4.8	28	9.3	7.8	12	89	67	18	4.3	3.8	4.6	24
7	4.3	24	8.2	9.3	12	87	64	16	4.3	4.6	4.5	19
8	9.3	24	8.9	8.6	12	91	67	14	4.8	5.1	4.4	62
9	8.6	24	6.8	9.3	10	222	68	14	5.6	3.2	4.2	288
10	8.2	23	6.4	7.6	13	199	77	14	6.4	1.4	4.6	92
11	8.9	19	7.1	7.2	13	155	79	16	6.2	28	4.8	62
12	8.2	18	7.8	6.3	13	123	72	14	6.0	3.2	5.4	52
13	8.9	16	7.8	7.6	14	96	67	13	6.1	3.2	5.8	41
14	10	17	6.4	8.1	15	102	61	12	6.5	3.2	5.6	32
15	8.2	16	6.8	8.2	18	112	61	11	7.3	6.4	5.5	28
16	6.4	15	8.2	8.5	17	98	60	11	8.0	7.0	6.4	23
17	6.8	15	7.8	8.5	16	98	60	13	8.4	7.3	5.9	19
18	6.4	14	7.8	8.6	14	79	66	12	8.8	7.7	5.9	26
19	6.1	14	7.1	8.8	14	91	67	11	8.4	7.5	5.8	39
20	6.1	13	7.5	7.9	15	113	61	10	8.7	7.3	5.9	29
21	6.1	13	7.8	8.5	15	125	56	7.8	8.7	7.1	6.4	20
22	8.6	12	7.8	8.5	13	122	54	6.9	8.3	7.1	7.4	17
23	13	12	7.8	7.9	13	105	54	5.9	8.3	7.0	6.8	16
24	14	10	6.4	8.4	15	85	53	4.8	8.6	7.7	6.2	15
25	10	10	2.0	8.9	15	85	46	3.1	8.1	6.3	5.9	14
26	8.6	8.9	4.0	9.0	15	91	44	2.2	7.0	5.9	5.8	14
27	10	8.9	6.0	9.4	17	76	43	4.6	6.5	5.8	5.6	13
28	10	9.3	8.2	11	21	69	40	7.0	5.8	5.6	5.4	13
29	131	8.9	10	12	---	67	37	8.8	5.0	5.6	5.2	13
30	101	8.2	8.9	27	---	56	33	8.1	4.3	5.6	5.0	12
31	54	---	6.8	25	---	69	---	5.6	---	5.4	5.0	---
TOTAL	538.7	576.2	236.4	295.0	403	3009	1821	371.8	199.0	190.8	168.4	1020.2
MEAN	17.4	19.2	7.63	9.52	14.4	97.1	60.7	12.0	6.63	6.15	5.43	34.0
MAX	131	47	10	27	21	222	86	30	8.8	28	7.4	288
MIN	4.5	8.2	2.0	6.3	10	30	33	2.2	4.3	1.4	4.2	4.9
AC-FT	1070	1140	469	585	799	5970	3610	737	395	378	334	2020

CAL YR 1974 TOTAL 3091.4 MEAN 8.47 MAX 131 MIN 2.0 AC-FT 6130  
WTR YR 1975 TOTAL 8829.5 MEAN 24.2 MAX 288 MIN 1.4 AC-FT 17510

PEAK DISCHARGE (BASE, 450 FT<sup>3</sup>/S).--JULY 11 (1445) 929 FT<sup>3</sup>/S (6.80 FT.); SEPT 9 (0700) 868 FT<sup>3</sup>/S (5.28 FT.).



## 09442692 TULAROSA RIVER ABOVE ARAGON, N. MEX.

LOCATION.--Lat 33°53'29", long 108°30'54", in NW 1/4 sec. 9, T.5 S., R.16 W., Catron County, on right bank 0.4 mi (0.6 km) upstream from first diversion, 1.4 mi (2.3 km) northeast of Aragon, and 8 mi (13 km) upstream from Apache Creek.

DRAINAGE AREA.--94 mi<sup>2</sup> (244 km<sup>2</sup>).

PERIOD OF RECORD.--July 1966 to current year. 1955 to 1965 at site 0.6 mi (1.0 km) upstream (drainage area, 89 mi<sup>2</sup> or 230.5 km<sup>2</sup>), annual maximum only.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,750 ft (2,057 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 3.43 ft<sup>3</sup>/s (0.097 m<sup>3</sup>/s), 2,490 acre-ft/yr (3.07 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 87 ft<sup>3</sup>/s (2.46 m<sup>3</sup>/s) Sept. 12 (gage height, 2.13 ft or 0.649 m); minimum, 2.2 ft<sup>3</sup>/s (0.062 m<sup>3</sup>/s) Mar. 20.

Period of record: Maximum discharge, 392 ft<sup>3</sup>/s (11.1 m<sup>3</sup>/s) Sept. 1, 1971 (gage height, 3.13 ft or 0.954 m), from rating curve extended above 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s) July 22, 1969.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.8	2.8	3.1	2.9	3.7	3.0	2.8	2.9	2.7	2.6	2.9
2	2.6	2.8	2.8	3.1	2.8	3.9	2.9	2.8	2.8	2.7	2.5	3.1
3	2.6	2.9	2.8	3.2	2.8	4.2	3.0	2.8	2.8	2.7	2.5	2.8
4	2.6	2.9	2.8	3.2	2.8	3.4	3.0	2.9	2.7	2.7	2.5	2.9
5	2.6	2.8	2.8	3.2	2.8	3.0	3.0	3.0	2.7	2.7	2.5	3.0
6	2.7	2.8	2.8	3.2	2.8	3.2	3.0	3.0	2.9	2.8	2.5	3.1
7	2.7	2.8	2.8	3.3	2.8	3.2	3.2	2.9	2.9	2.7	2.6	3.1
8	2.7	2.8	2.8	3.3	2.8	3.1	3.1	2.9	2.8	2.8	2.6	2.9
9	2.7	2.8	2.8	3.3	2.8	16	3.3	3.0	2.8	2.8	2.6	2.9
10	4.1	2.8	2.8	3.3	2.8	7.2	3.2	3.0	2.8	2.9	2.8	2.8
11	2.8	2.8	2.8	3.2	2.8	12	3.4	3.0	2.8	2.9	2.7	3.3
12	2.8	2.6	2.8	3.2	2.8	4.6	3.4	3.0	2.8	2.9	3.0	7.8
13	2.8	2.6	2.8	3.2	2.8	4.2	3.5	3.0	2.8	2.9	2.8	3.0
14	2.7	2.6	2.8	3.1	2.9	4.2	3.5	3.1	2.8	2.9	2.9	2.8
15	2.7	2.6	2.8	3.1	2.9	3.6	3.4	3.1	2.9	2.9	2.9	2.9
16	2.7	2.6	2.8	3.0	2.9	3.0	3.4	3.1	2.8	2.9	2.9	3.0
17	2.7	2.7	2.8	3.0	2.9	2.7	3.3	3.1	2.8	2.9	2.9	3.0
18	2.7	2.7	2.8	3.0	2.9	2.4	3.3	3.0	2.8	2.8	3.0	3.1
19	2.7	2.7	2.8	3.0	2.9	2.3	3.3	3.0	2.8	2.8	3.0	3.1
20	2.7	2.7	2.8	2.9	2.9	3.4	3.2	2.9	2.8	2.7	3.0	3.0
21	2.7	2.7	2.9	2.9	2.9	12	3.1	2.9	2.7	2.7	3.2	3.0
22	2.8	2.7	2.9	2.9	2.8	15	3.1	2.9	2.7	2.7	3.2	3.0
23	2.7	2.7	2.9	2.8	2.8	9.6	3.1	2.9	2.7	2.7	3.1	2.9
24	2.7	2.7	2.9	2.8	2.8	3.3	3.1	2.9	2.7	2.7	3.1	2.9
25	2.8	2.7	3.1	2.8	2.8	3.1	3.0	2.9	2.7	2.6	3.2	2.9
26	2.9	2.7	3.0	2.7	2.8	5.3	3.0	3.0	2.7	2.6	3.2	2.8
27	2.8	2.7	3.0	2.7	2.8	3.0	3.0	3.0	2.7	2.6	3.2	2.8
28	2.8	2.7	3.0	2.8	3.3	2.8	3.0	3.0	2.7	2.6	3.1	2.8
29	3.0	2.8	3.0	2.8	---	2.9	2.9	3.0	2.7	2.7	3.0	2.7
30	2.9	2.8	3.1	3.2	---	2.9	2.8	3.0	2.7	2.7	3.0	2.7
31	2.8	---	3.1	3.3	---	2.9	---	2.9	---	2.6	2.9	---
TOTAL	86.1	82.0	88.9	94.6	79.8	156.5	94.5	91.8	83.2	85.3	89.0	93.0
MEAN	2.78	2.73	2.87	3.05	2.85	5.05	3.15	2.96	2.77	2.75	2.87	3.10
MAX	4.1	2.9	3.1	3.3	3.3	16	3.5	3.1	2.9	2.9	3.2	7.8
MIN	2.6	2.6	2.8	2.7	2.8	2.3	2.8	2.8	2.7	2.6	2.5	2.7
AC-FT	171	163	176	188	158	310	187	182	165	169	177	184

CAL YR 1974 TOTAL 995.9 MEAN 2.73 MAX 4.1 MIN 2.2 AC-FT 1980  
WTR YR 1975 TOTAL 1124.7 MEAN 3.08 MAX 16 MIN 2.3 AC-FT 2230

PEAK DISCHARGE (BASE, 20 FT<sup>3</sup>/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1930	1.84	44	3-22	0230	1.89	41
3-9	0500	1.86	45	9-12	2100	2.13	87

## 09443000 SAN FRANCISCO RIVER NEAR ALMA, N. MEX.

LOCATION.--Lat 33°22'05", long 108°54'35", in SW¼SE¼ sec. 4, T.11 S., R.20 W., Catron County, on right bank 1.2 mi (1.9 km) downstream from Alma, 4 mi (6 km) northwest of Glenwood, 6 mi (10 km) upstream from Whitewater Creek, and at mile 523.5 (842.3 km).

DRAINAGE AREA.--1,546 mi<sup>2</sup> (4,004 km<sup>2</sup>).

PERIOD OF RECORD.--September 1904 to January 1914, fragmentary (see WSP 1313), January 1964 to current year. Prior to October 1911, published as "at Alma".

GAGE.--Water-stage recorder. Datum of gage is 4,841 ft (1,475.5 m) above mean sea level. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft (150 m) of each other, 0.8 mi (1.3 km) upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum. Prior to Nov. 1, 1972, at datum 3.00 ft (0.91 m) higher.

AVERAGE DISCHARGE.--11 years (1964-75), 73.4 ft<sup>3</sup>/s (2,079 m<sup>3</sup>/s), 53,180 acre-ft/yr (65.6 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 15,600 ft<sup>3</sup>/s (442 m<sup>3</sup>/s) Sept. 9 (gage height, 11.34 ft or 3.456 m); no flow, Oct. 4-5.  
Period of record: Maximum discharge, 30,600 ft<sup>3</sup>/s (867 m<sup>3</sup>/s) Oct. 20, 1972 (gage height, 18.16 ft or 5.535 m, present datum, fr - floodmarks in well), from rating curve extended above 3,500 ft<sup>3</sup>/s (99.1 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow many days.  
Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 90,000 ft<sup>3</sup>/s (2,550 m<sup>3</sup>/s) or greater were computed at Clifton, Ariz.

REMARKS.--Records fair. Diversions for irrigation of about 1,500 acres (607 hm<sup>2</sup>) above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	68	10	11	86	48	166	82	11	2.0	4.1	.65
2	4.1	63	10	11	49	102	194	68	9.6	1.6	2.5	3.0
3	4.1	68	10	14	41	185	194	62	8.0	1.1	2.0	39
4	1.6	57	10	7.6	37	204	207	55	7.2	1.1	1.6	36
5	0	49	11	7.2	32	182	239	55	6.3	1.6	1.6	42
6	1.6	41	12	7.6	30	178	246	60	5.8	11	1.6	126
7	17	38	11	10	28	223	239	60	5.8	9.6	1.6	195
8	37	38	12	11	27	220	233	51	5.2	3.0	1.6	547
9	17	37	11	14	27	518	210	44	5.2	2.5	1.6	4270
10	16	37	9.6	14	27	535	223	37	4.7	2.0	1.1	475
11	12	36	8.0	12	26	455	239	34	4.1	2.0	1.1	598
12	22	36	8.8	13	26	335	250	27	3.6	8.3	8.6	395
13	22	31	9.6	6.8	26	274	236	18	3.0	27	17	365
14	17	28	10	9.6	30	256	198	20	3.0	16	21	245
15	14	26	9.6	11	36	270	191	23	3.0	6.3	16	131
16	13	24	7.2	14	41	256	182	16	3.0	1.1	10	83
17	11	23	9.6	13	37	246	194	32	3.6	1.1	6.8	53
18	8.8	20	9.6	13	34	217	214	33	3.6	50	4.7	43
19	8.0	19	10	13	28	204	198	15	3.6	27	1.6	80
20	7.2	18	9.6	14	30	217	188	14	3.0	6.3	1.6	180
21	7.2	18	9.6	8.8	31	246	162	13	3.0	5.2	1.6	107
22	8.8	16	9.6	7.2	30	270	166	12	3.0	6.3	1.6	63
23	47	15	10	6.3	30	263	166	12	3.0	7.2	3.6	46
24	37	15	8.0	5.2	26	233	159	12	3.0	12	4.2	36
25	27	14	3.3	5.2	27	198	156	12	3.0	34	2.5	31
26	41	13	4.7	5.2	27	210	150	12	3.0	27	1.1	27
27	68	12	7.6	5.8	26	214	137	11	2.5	21	.65	24
28	41	12	8.8	6.3	27	182	124	10	2.5	22	.65	22
29	216	12	11	6.3	---	146	115	10	2.5	21	.65	17
30	254	12	13	32	---	134	98	11	2.5	9.6	.65	12
31	107	---	11	182	---	123	---	12	---	5.8	.65	---
TOTAL	1092.1	896	295.2	497.1	922	7344	5676	433	130.3	426.4	125.55	8291.65
MEAN	35.2	29.9	9.52	16.0	32.9	237	189	30.1	4.34	13.8	4.05	276
MAX	254	68	13	182	86	535	250	82	11	83	21	4270
MIN	0	12	3.3	5.2	26	48	98	10	2.5	1.1	.65	.65
AC-FT	2170	1780	586	986	1830	14570	11260	1850	258	846	249	16450
CAL YR 1974	TOTAL	3936.11	MEAN	10.8	MAX	254	MIN	0	AC-FT	7810		
WTR YR 1975	TOTAL	26629.30	MEAN	73.0	MAX	4270	MIN	0	AC-FT	52820		

PEAK DISCHARGE (BASE, 1,000 FT<sup>3</sup>/S).--SEPT 9 (0045) 15,600 FT<sup>3</sup>/S (11.34 FT.).

## 09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, on left bank 0.2 mi (0.3 km) upstream from hot springs, 5 mi (8 km) south of Glenwood, 6 mi (10 km) downstream from Whitewater Creek, and at mile 511.5 (823.0 km).

DRAINAGE AREA.--1,653 mi<sup>2</sup> (4,281 km<sup>2</sup>).

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,552.06 ft (1,387.468 m) above mean sea level; prior to Feb. 15, 1934, at site 4.5 mi (7.2 km) upstream at datum 98.82 ft (30.120 m) higher.

AVERAGE DISCHARGE.--48 years, 71.1 ft<sup>3</sup>/s (2.014 m<sup>3</sup>/s), 51,510 acre-ft/yr (63.5 hm<sup>3</sup>/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft<sup>3</sup>/s (292 m<sup>3</sup>/s) Sept. 9 (gage height, 10.80 ft or 3.292 m); minimum, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/s) Aug. 12.

Period of record: Maximum discharge, 34,100 ft<sup>3</sup>/s (966 m<sup>3</sup>/s) Oct. 20, 1972 (gage height, 16.61 ft or 5.063 m), from rating curve extended above 22,000 ft<sup>3</sup>/s (623 m<sup>3</sup>/s); minimum, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Aug. 6, 1961.

Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 90,000 ft<sup>3</sup>/s (2,550 m<sup>3</sup>/s) or greater were computed for station at Clifton, Ariz. On Nov. 26, 1905, a peak of 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) was measured (by float-area method) at station at Alma (about 12 mi or 19 km upstream, drainage area, 1,560 mi<sup>2</sup> or 4,040 km<sup>2</sup>); a similar measurement of 21,000 ft<sup>3</sup>/s (595 m<sup>3</sup>/s) was made at the Alma station for peak of Dec. 3, 1906.

REMARKS.--Records good except those for June, which are poor. Diversions for irrigation of about 2,000 acre (810 hm<sup>2</sup>) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	86	35	28	97	51	199	144	52	21	27	24
2	28	72	35	28	70	78	231	131	49	24	25	25
3	26	84	34	28	60	121	218	122	46	27	23	38
4	27	71	35	27	55	164	233	117	43	30	23	69
5	27	67	35	25	52	163	280	115	41	33	22	82
6	29	62	33	26	48	157	302	119	39	43	23	138
7	33	57	32	26	46	194	309	116	37	48	22	260
8	55	55	32	28	44	194	306	102	35	48	20	320
9	44	71	32	29	43	504	274	94	34	45	22	4020
10	40	68	32	30	43	596	257	88	33	46	21	578
11	39	60	30	29	42	443	279	90	35	47	19	946
12	45	54	30	25	41	375	286	92	31	98	30	389
13	47	49	30	25	40	321	277	87	28	90	33	246
14	44	46	29	25	43	283	257	88	26	67	45	182
15	40	44	29	27	46	295	234	90	28	48	48	128
16	39	43	27	27	49	296	229	92	30	33	41	99
17	38	41	27	27	50	279	244	95	27	77	33	81
18	36	41	28	28	49	263	268	98	27	77	30	71
19	35	39	28	27	47	229	256	88	28	76	26	87
20	32	39	28	27	46	242	235	81	25	44	25	117
21	31	38	27	27	46	313	213	77	24	58	32	93
22	36	38	28	25	48	334	218	70	23	40	33	73
23	52	38	28	24	46	324	225	66	22	36	41	62
24	60	38	25	23	44	298	223	60	24	35	31	56
25	48	36	23	23	45	256	218	58	22	65	28	52
26	46	36	23	22	45	256	212	58	22	54	25	48
27	81	36	24	23	45	245	207	58	23	43	23	46
28	52	36	26	22	46	207	191	60	22	40	23	43
29	123	36	27	22	---	196	171	66	21	40	22	40
30	261	36	28	28	---	179	155	62	21	37	22	38
31	121	---	28	147	---	167	---	56	---	28	24	---
TOTAL	1643	1517	908	928	1376	8023	7207	2740	918	1498	862	8451
MEAN	53.0	50.6	29.3	29.9	49.1	259	240	88.4	30.6	48.3	27.8	282
MAX	261	86	35	147	97	596	309	144	52	98	48	4020
MIN	26	36	23	22	40	51	155	56	21	21	19	24
AC=FT	3260	3010	1800	1840	2730	15910	14300	5430	1820	2970	1710	16760

CAL YR 1974 TOTAL 10245 MEAN 28.1 MAX 261 MIN 12 AC=FT 20320  
WTR YR 1975 TOTAL 36071 MEAN 98.8 MAX 4020 MIN 19 AC=FT 71550

PEAK DISCHARGE (BASE, 800 FT<sup>3</sup>/S).--SEPT 9 (0300) 10,300 FT<sup>3</sup>/S (10.80 FT.).

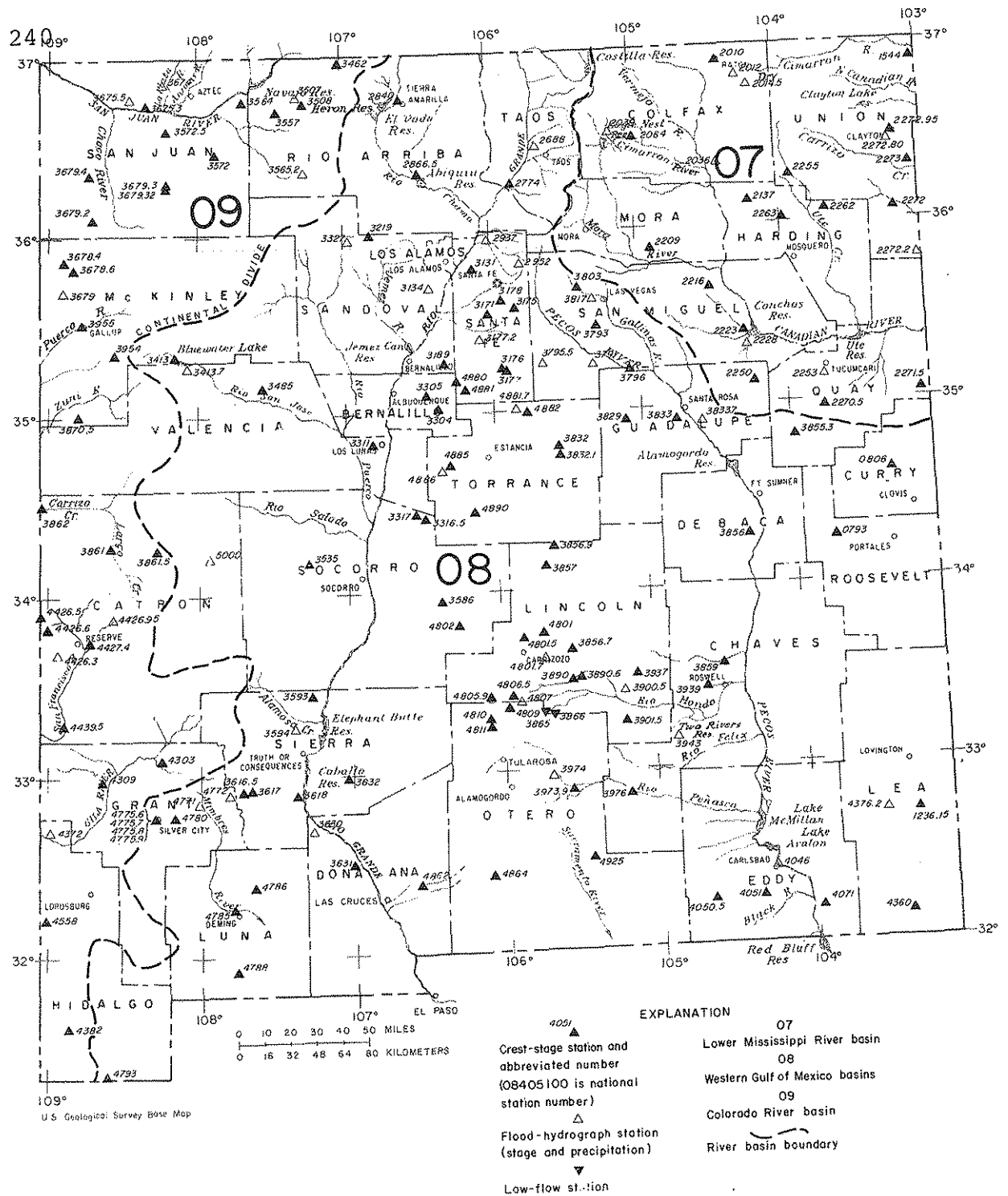


Figure 3.—Map of New Mexico showing location of partial-record stations.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

#### Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Rio Grande basin						
08386500	Rio Ruidoso near Ruidoso, N. Mex.	Lat 33°20'11", long 105°43'31", in NW¼SW¼SW¼ sec.19, T.11 S., R.13 E., Lincoln County at Mescalero Apache Indian Reservation boundary, 3.0 mi (4.8 km) west of Ruidoso, N. Mex.	17.2	1953-75	10-30-74	27
					12-10-74	4.4
					4- 4-75	7.8
					5- 8-75	30
					5-19-75	33
					6- 5-75	15
					9-16-75	43
08386600	Carrizo Creek at Ruidoso, N. Mex.	Lat 33°19'27", long 105°30'13", SW¼NW¼SW¼ sec.26, T.11 S., R.13 E., Lincoln County, at mouth, at Ruidoso, N. Mex.	24.2	1953-75	12-11-74	2.8
					4- 3-75	2.8
					4-24-75	9.0
					5-19-75	5.0
					6- 5-75	2.9
						9-16-75

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. An S under the station number indicates that a complete hydrograph of flow events and precipitation data are recorded. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each year is given. Information on some lower floods may have been obtained, and discharge measurements made for purposes of establishing the stage-discharge relation, but these are not published herein. The year given in the period of record column represents the first year of a period extending through the current year unless otherwise noted. For some stations, publication of discharge is delayed pending definition of stage-discharge relationship. Published maximums for years prior to 1971 are for water years; maximums for the years 1971 through 1974 had been previously published for calendar years. The 1971 through 1974 maximums are herein republished, with appropriate revisions, for the respective water years.

## Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Arkansas River Basin							
07154400	Carrizozo Creek near Kenton, Okla.	Lat 36°52'55", long 103°01'05", Union County, under bridge on New Mexico State Highway 18, 4 miles southwest of Kenton.	111	1953-	8- -71	(b)	c100
					7- 3-72	5.81	2,050
					8- 3-73	8.46	4,700
					8- 3-74	7.82	3,800
					1975	(b)	<60
07201000	Raton Creek at Raton, N. Mex.	Lat 36°54', long 104°26', Colfax County, 60 ft above bridge on State Highway 72 at Raton.	14.4	1953-	5-29-71	.55	38
					8- 4-72	4.05	460
					9-27-73	1.41	102
					8- -74	1.45	105
					7- 8-75	1.38	100
07201200 S	Chicorica Creek tributary near Raton, N. Mex.	Lat 36°54'40", long 104°19'56", Colfax County, upstream from culvert on U.S. Highway 64-87, 7.7 miles southeast of Raton.	5.18	1971-	6- 8-71	5.56	115
					7- 3-72	6.54	217
					7-22-73	6.33	196
					1974	(b)	<5
					9- 8-75	4.55	18
07201450 S	Green Mountain Arroyo near Raton, N. Mex.	Lat 36°47'00", long 104°15'42", Colfax County, about 1,500 feet upstream from bridge on U.S. Highway 64-87, 12.8 miles southeast of Raton.	18.2	1971-	7-19-71	3.51	(+)
					6-16-72	7.23	691
					7- 2-73	d9.79	5,030
					9-20-74	8.29	704
					8- 9-75	4.91	(+)
07203600 S	Rio del Plano tributary near Taylor Springs, N. Mex.	Lat 36°26'59", long 104°22'34", Colfax County, 1.7 miles south of Sauble Ranch, 11.0 miles northeast of Taylor Springs.	6.71	1971-	5-29-71	9.08	392
					6-29-72	7.72	(+)
					10-12-72	8.16	(+)
					7-29-74	7.75	(+)
					8- 9-75	8.27	(+)
07203900 S	Graney Creek near Eagle Nest, N. Mex.	Lat 36°34'37", long 105°18'38", Colfax County, 3.0 miles northwest of Eagle Nest.	1.83	1971-	1971	(b)	(+)
					8- 7-72	2.28	(+)
					5-10-73	2.51	(+)
					6- 7-74	2.31	(+)
					5-12-75	2.51	(+)
07206400	Clear Creek near Ute Park, N. Mex.	Lat 36°31'35", long 105°10'30", Colfax County, Maxwell Grant, 0.25 mile upstream from mouth, and 4 miles southwest of Ute Park.	7.44	1962-67* 1968-	6- -71	.98	4
					7- -72	1.18	7
					5- -73	2.36	c30
					6- 7-74	1.45	c5
					7- 9-75	1.67	c7
07213700	Canadian River tributary near Mills, N. Mex.	Lat 36°10'00", long 104°15'47", Harding County, on downstream end of left bridge abutment on State Highway 39, 6 miles north of Mills.	a4.2	1954-	1971	-	0
					10-26-71	1.05	<5
					1973	(b)	(+)
					1974	-	0
					1975	-	0
07220900	Dog Creek near Shoemaker, N. Mex.	Lat 36°49'32", long 104°53'28", Mora County, 0.5 mile above Valmore-Shoemaker road, and 1.8 miles northwest of Shoemaker.	18.4	1954-	8- 7-71	7.07	c310
					7-21-72	8.73	1,130
					9-10-73	8.70	1,090
					1974	(b)	<50
					9-12-75	8.72	1,100
07221600	Lagartija Creek tributary near Sanchez, N. Mex.	Lat 35°38', long 104°25' San Miguel County, at bridge on State Highway 65, 0.9 mile northeast of Sanchez.	a1	1961-	7- 1-71	2.04	(+)
					5-10-72	3.97	630
					1973	(b)	(+)
					1974	(b)	(+)
					9-21-75	3.58	(+)

## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Arkansas River Basin - Continued							
07222300	Trementina Creek at Trementina, N. Mex.	Lat 35°28', long 104°25', San Miguel County, at bridge on State Highway 65, at Trementina.	a65	1959-	7- 1-71 9-10-72 8-30-73 7- 9-74 9-12-75	7.97 9.43 3.63 5.45 6.60	4,100 6,800 408 1,270 2,300
07222800 S	Garita Creek tributary near Variadero, N. Mex.	Lat 35°20'10", long 104°21'50", San Miguel County, 1.2 miles upstream from mouth, 6.3 miles southeast of Variadero.	a12	1971-	7-27-71 8-31-72 7-25-73 8- 3-74 9-12-75	d10.49 d12.09 10.08 4.12 4.75	1,510 c3,000 1,170 92 130
07225000	Pajarito Creek at Newkirk, N. Mex.	Lat 35°04'20", long 104°14'50" Guadalupe County, downstream side of bridge on U.S. Highway 66, 1 mile east of Newkirk.	55.0	1954-	7- 1-71 7-20-72 6-13-73 9-17-74 9-12-75	4.05 4.93 2.18 3.37 2.52	940 1,340 360 700 445
07225300 S	Bluewater Creek near Tucumcari, N. Mex.	Lat 35°08'31", long 103°47'32", Quay County, in Tucumcari Metropolitan Park, 1,600 feet north of the park's southern boundary, and 4.8 miles southwest of Tucumcari.	15.2	1971-	8- 8-71 7- -72 7-21-73 8-27-74 10-12-74	d12.50 9.32 d12.2 5.80 3.77	2,280 (+) (+) (+) (+)
07225500	Ute Creek near Gladstone, N. Mex.	Lat 36°18', long 103°56', Union County, on bridge on State Highway 58, 3 miles east of Gladstone.	256	1953-	8- 8-71 7-17-72 1973 1974 1975	6.33 1.76 (b) (b) (b)	9,800 4,100 (+) (+) (+)
07226200	Bueyeros Creek at Bueyeros, N. Mex.	Lat 35°58'10", long 103°41'05", in E½ sec.7, T.20 N., R.31 E., Harding County, on right upstream wingwall of culvert on State Road 102 at Bueyeros.	a34	1957-	1971 7-17-72 1973 1974 1975	(b) d12.77 (b) (b) (b)	(+) 5,800 (+) (+) (+)
07226300	Carrizo Creek near Roy, N. Mex.	Lat 36°02'58", long 103°57'48", Harding County, 800 ft below State Highway 120, and 15 miles northeast of Roy.	a68	1954-	7-23-71 7-21-72 1973 1974 10-12-74	3.69 3.86 (b) (b) 4.30	330 375 <50 <50 490
07227050	Plaza Larga Creek tributary near Ragland, N. Mex.	Lat 34°50', long 103°45', Quay County, at culvert on State Highway 18, 1.2 miles northwest of Ragland.	.36	1952-	6-21-71 7-20-72 7-24-73 9-17-74 7-22-75	6.69 7.76 5.38 5.69 5.90	182 310 56 80 100
07227150	Arroyo del Puerto near Endee, N. Mex.	Lat 35°03', long 103°05', Quay County, at bridge on State Highway 93, 5.4 miles south of Endee.	a25	1961-	1971 11-16-71 1973 1974 1975	(b) 5.39 (b) (b) (b)	(+) (+) (+) (+) (+)
07227200	Tramperos Creek near Stead, N. Mex.	Lat 36°04'15", long 103°12'10", in NW¼ sec.10, T.21 N., R.35 E., Union County, at bridge on State Highway 18, 2.1 miles south of Stead and 26 miles south Clayton.	a556	1966-73* 1974-	5-30-71 7-17-72 3-30-73 8-11-74 6-21-75	9.27 12.75 2.71 4.57 8.80	1,720 7,190 13 206 2,090
07227220 S	Fullingim Draw, near Nara Visa, N. Mex.	Lat 35°45'50", long 103°07'30", Union County upstream from culvert on State Highway 18, 11.3 miles north of Nara Visa.	15.1	1971-	5-29-71 5-11-72 7- -73 8-11-74 7-22-75	6.65 8.07 3.07 d9.3 3.33	(+) (+) (+) 4,070 (+)
07227280 S	Sand Draw tributary No. 2 near Clayton, N. Mex.	Lat 36°23'33", long 103°22'51", Union County, 0.85 mile north of U.S. Highway 56 and 11.5 miles southwest of Clayton.	1.81	1968-	5-29-71 7-10-72 1973 6- 1-74 8-14-75	10.36 10.51 - 10.64 13.03	(+) (+) 0 (+) 311

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Arkansas River Basin - Continued							
07227295	Sand Draw tributary near Clayton, N. Mex.	Lat 36°23'20", long 103°19'05", Union County, above culvert on State Highway 58, 8 miles southwest of Clayton.	1.25	1952-	7-19-71 6-13-72 1973 8- 3-74 7- 6-75	0.10 2.01 (b) 3.62 1.50	8 77 <5 143 60
07227300	Sand Draw near Clayton, N. Mex.	Lat 36°20'30", long 103°11'30", Union County, on downstream side of bridge on State Highway 18, 7.5 miles south of Clayton.	.42	1953-	7-19-71 9- 8-72 8- 3-73 8- 3-74 7- 6-75	2.09 2.41 1.38 2.52 3.01	(+) (+) (+) (+) (+)
Brazos River basin							
08079300	Blackwater Draw tributary near Floyd, N. Mex.	Lat 34°13', long 103°45', Roosevelt County, 0.5 mile below section road and 10 miles west of Floyd.	.10	1963-	1971 9- 2-72 7-26-73 1974 10-23-74	- 5.05 .54 (b) .57	0 (+) (+) (+) (+)
08080600	Running Water Draw near Clovis, N. Mex.	Lat 34°31'55", long 103°12'05", Curry County, 0.25 mile upstream from Highway 18 and 8 miles north of Clovis.	109	1953-56 1957-64*	8- 8-71 7-24-72 7-20-73 8-25-74 1975	2.43 (e) .93 3.45 (b)	<160 c8,000 -100 450 -100
08123615	Monument Draw near Monument, N. Mex.	Lat 32°41'48", long 103°16'10", S.W. 1/4 sec. 32, T.18 S., R.37 E., Lea County upstream from culvert on U.S. Highway 62-180, 8 miles west of Hobbs, and 5 miles north of Monument.	17.2	1975-	7-20-75	2.11	(+)
Rio Grande basin							
08268800 S	Rio Grande tributary near Arroyo Hondo, N. Mex.	Lat 36°28'29", long 105°43'05", Taos County, upstream from culvert on State Road 111, 0.8 mile east of Rio Grande Gorge Bridge and 4.6 miles southwest of Arroyo Hondo.	1.16	1963-	1971 1972 1973 1974 1975	- - - - -	0 0 0 0 0
08277400	Rio Grande tributary at Rinconada, N. Mex.	Lat 36°12'55", long 105°53'25", Rio Arriba County, at culvert on U.S. Highway 64, 0.6 mile west of Rinconada.	.02	1952-75g	1975	(e)	-
08284000	Rito de Tierra Amarilla at Tierra Amarilla, N. Mex.	Lat 36°41'55", long 106°33'25", Rio Arriba County, 400 ft below culvert on U.S. Highway 84, at Tierra Amarilla.	49.7	1957-	1971 1972 5- -73 1974 1975	(b) (b) 4.61 3.23 5.28	<150 -150 740 310 (+)
08286650	Cañjilon Creek above Abiquiu Reservoir, N. Mex.	Lat 36°18'55", long 106°29'05", Rio Arriba County, in Piedra Lumbre Grant, 300 ft upstream from bridge on U.S. Highway 84, 0.2 mile northwest of entrance to Ghost Ranch and about 12 miles northwest of Abiquiu.	144	1965-	9-30-71 7-17-72 6- 7-73 1974 10-11-74	5.30 4.68 5.75 3.24 4.73	h(+) h(+) h(+) (+) h(+)
08293700 S	Arroyo Seco tributary near Pojoaque, N. Mex.	Lat 35°56'33", long 106°01'12", Santa Fe County, upstream from culvert on U.S. Highway 64-84-285, 3.5 miles north of Pojoaque.	.72	1971-	7-22-71 6-11-72 9-10-73 7-28-74 7- 3-75	10.29 5.88 5.59 10.62 7.22	452 57 19 508 168
08295200 S	Rio en Medio near Santa Fe, N. Mex.	Lat 35°47'30", long 105°47'38", Santa Fe County, in Santa Fe National Forest, on right bank 300 feet east of Santa Fe Ski Basin parking area, and 10.8 miles northeast of Santa Fe.		1963-73g 1973-	8-19-71 8-19-72 6-13-73 8- 6-74 7-16-75	1.36 .94 1.52 .78 1.04	9 4 12 2 20



## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08313100	Cañada Ancha tributary near Santa Fe, N. Mex.	Lat 35°44'05", long 106°07'00", Santa Fe County, in Caja del Rio Grant, 9 miles northwest of Santa Fe.	1.23	1940-48 1952-	7-27-71 1972 10-20-72 7-12-74 1975	4.36 - 3.39 3.98 -	44 0 7 24 0
08313400 S	Bland Canyon near Cochiti Pueblo, N. Mex.	Lat 35°42'11", long 106°24'56", Sandoval County, 200 ft south of Forest Service Road, 0.3 mile inside Santa Fe National Forest, 7.5 miles north of Cochiti.	7.57	1962-	8-19-71 7-10-72 9-11-73 1974 4-24-75	2.54 2.97 2.45 (b) 1.67	86 c65 72 <1 16
08317100	Arroyo Yupa tributary near Cerrillos, N. Mex.	Lat 35°31'58", long 106°08'45", Santa Fe County, 300 ft above culvert on U.S. Highway 85, 1.4 miles southwest of Turquoise Trading Post, and 6.5 miles north of Cerrillos.	.47	1957-	1971 1972 1973 1974 10- 7-74	(b) (b) (b) (b) .82	<15 <15 <15 <15 19
08317500	Galisteo Creek at Canonicito, N. Mex.	Lat 35°33'02", long 105°49'20", Santa Fe County, above railroad bridge, 0.2 mile above Apache Canyon at Canonicito.	11.3	1955-56 1959-	7-27-71 7-25-72 7-17-73 5- -74 7-11-75	3.69 3.73 2.81 2.22 3.35	1,160 1,200 680 380 970
08317600	San Cristobal Arroyo near Galisteo, N. Mex.	Lat 35°22'55", long 105°51'05", Santa Fe County, at bridge on U.S. Highway 285, 5.5 miles east of Galisteo.	116	1955-	7-27-71 8-28-72 9-11-73 8-27-74 7-10-75	10.34 6.86 5.61 4.57 7.26	5,500 1,930 1,040 560 2,200
08317700	Tarhole Canyon near Galisteo N. Mex.	Lat 35°21'55", long 105°50'40", Santa Fe County, at culvert on U.S. Highway 285, 6 miles southeast of Galisteo.	2.15	1952-	7-27-71 7-15-72 7-17-73 1974 7-10-75	13.99 18.32 15.79 (b) 18.84	195 870 425 <200 990
08317720 S	Cañada de la Cueva near Galisteo N. Mex.	Lat 35°26'13", long 106°00'45", Santa Fe County, 6.4 miles east of Cerrillos and 4.8 miles northwest of Galisteo.	1.79	1970-	7-26-71 9- 1-72 9-11-73 1974 8-29-75	4.58 3.53 2.69 - 2.13	649 222 92 0 41
08317800	Cañada de las Minas tributary near Santa Fe, N. Mex.	Lat 35°36'27", long 105°54'42", Santa Fe County, at culvert on U.S. Highway 84, 85 and 285, 1.3 miles northeast of Seton Village, and 5.7 miles south of Santa Fe.	.56	1952-	7-19-71 1972 1973 1974 7-10-75	d12.55 (b) .48 .68 1.44	652 <10 <10 <10 c16
08318900	San Pedro Creek near Golden, N. Mex.	Lat 36°13'45", long 106°18'00", Sandoval County, 1 mile below bridge on State Highway 10 and 5.5 miles southwest of Golden.	45.2	1953-	7-22-71 5-30-72 6-12-73 1974 8-13-75	2.26 2.46 .20 -.07 2.19	1,600 1,770 195 <80 1,530
08321900	Rio de las Vacas near Senorita, N. Mex.	Lat 35°59'35", long 106°47'45", Sandoval County, at bridge on side road, 0.1 mile south of State Highway 126 and 6.5 miles east of Senorita.	26.8	1957-	9-17-71 9-11-72 5- -73 7- 7-74 4-12-75	2.92 2.96 4.56 2.97 4.06	110 114 430 124 300
08330400	Juan Toro Canyon near Miera, N. Mex.	Lat 35°00'57", long 106°20'14", Bernalillo County, 150 ft east of State Highway 10, 1 mile southeast of Cedro, and 4.5 miles northwest of Miera.	1.57	1959-	7-20-71 8-27-72 1973 1974 1975	1.33 .85 (b) (b) (b)	(+) (+) (+) (+) (+)
08330500	Tijeras Arroyo at Albuquerque, N. Mex.	Lat 35°03'40", long 106°28'40", Bernalillo County, 300 ft south of U.S. Highway 66 and 0.4 mile southeast of city limits of Albuquerque.	75.3	1943-48* 1958-	8-17-71 1972 1973 1974 8-12-75	2.30 (b) (b) (b) 3.37	600 <250 <250 <250 1,860

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08331100	Belén Highline Canal tributary near Los Lunas, N. Mex.	Lat 34°49'20", long 106°49'10", Valencia County, above culvert on State Highway 6, 5.0 miles west of Los Lunas.	.16	1952-53 1955-	1971 1972 10-13-72 8- 7-74 8-13-75	(b) (b) 6.00 5.41 5.11	<10 <10 330 260 226
08331650	Cañada Montoso near Scholle, N. Mex.	Lat 34°24', long 106°29', Socorro County, 130 ft upstream from dip on abandoned highway, 500 ft upstream from bridge on U.S. Highway 60, 3.6 miles southwest of Scholle.	a35	1961-	8- 5-71 8-27-72 10-26-72 7- 5-74 9-13-75	2.15 2.08 1.89 2.44 2.25	157 140 c100 255 185
08331700	Abo Arroyo tributary near Scholle, N. Mex.	Lat 34°24'10", long 106°30'35", Socorro County, at culvert on U.S. Highway 60, 2.5 miles south-east of junction of U.S. Highway 60, and State Highway 6, southwest of of Scholle.	.23	1954-	9-23-71 8-27-72 7-19-73 7- 5-74 9-13-75	17.94 15.17 14.03 16.26 14.88	290 110 55 172 95
08332700 S	San Pablo Creek near Cuba, N. Mex.	Lat 35°56'55", long 106°56'44", Sandoval County, upstream from bridge on old section of State Highway 44 and 5.6 miles south of Cuba.	12.8	1970-	7-20-71 9-11-72 8- 2-73 7- 7-74 9-11-75	9.07 4.32 4.64 5.01 d7.0	c2,360 (+) (+) (+) (+)
08341300	Bluewater Creek above Bluewater Dam, near Bluewater N. Mex.	Lat 35°15'35", long 108°07'05", Valencia County, 2.3 miles south of Bluewater Dam, and 8 miles west of Bluewater.	a75	1953-	9-30-71 1972 4-17-73 4- -74 9- 4-75	2.56 (a) 4.73 .83 3.40	144 - 610 25 302
08341370 S	Pine Canyon near Thoreau, N. Mex.	Lat 35°18'34", long 108°10'14", McKinley County, about 1 mile southwest of the north end of Bluewater Lake and about 7 miles southeast of Thoreau.	6.09	1969-	1971 1972 4- -73 8- 4-74 4- 4-75	- - 3.21 1.26 1.99	0 0 148 1 26
08348500	Encinal Creek near Casa Blanca, N. Mex.	Lat 35°08'35", long 107°27'55", Valencia County, 1.8 miles north of village of Encinal and 6.8 miles north of Casa Blanca.	6.19	1937-39* 1959-	8- 6-71 1972 3- -73 1974 9- 9-75	2.42 (b) 3.82 (b) 2.46	90 <90 240 <90 94
08353500	La Jencia Creek near Magdalena, N. Mex.	Lat 34°09'45", long 107°12'35", Socorro County, 3.5 miles northeast of Magdalena.	195	1957-	7-27-71 9- 2-72 5-14-73 8-27-74 8-22-75	5.48 10.18 .99 1.51 9.79	2,800 4,700 160 440 4,550
08358600	Chupadera Wash tributary at Bingham, N. Mex.	Lat 33°54', long 106°20', Socorro County, 75 ft upstream from culvert on U.S. Highway 380, 0.1 mile west of Bingham.	1.29	1961	8-30-71 9- 2-72 1973 1974 1975	1.97 2.20 1.36 1.31 1.28	155 190 <100 <100 <100
08359300	San Jose Arroyo near Monticello, N. Mex.	Lat 33°28'05", long 107°14'30", Sierra County, at head of box canyon just below major tributary, 800 ft below culvert on U.S. Highway 85, 13 miles Northeast of Monticello.	26.9	1959-	1971 1972 1973 1974 9-11-75	(b) (b) (b) (b) 5.46	(+) (+) (+) (+) (+)
08359400 S	Lumber Canyon tributary near Monticello, N. Mex.	Lat 33°24', long 107°16', Sierra County, at culvert on U.S. Highway 85, 0.2 mile north of road to Red Rock Ranger station, and 10.5 miles east of Monticello.	.90	1952-	8-17-71 9- 3-72 8-30-73 8- 4-74 9-11-75	1.55 d6.31 1.14 3.33 2.21	126 778 78 364 205
08361650	Percha Creek near Kingston, N. Mex.	Lat 32°55'05", long 107°38'55", Sierra County, at bridge on State Highway 180, 3.3 miles east of Kingston.	21.5	1953-	10- 4-70 9- 3-72 10-20-72 7-15-74 9- 6-75	5.03 d15.8 4.24 2.87 7.05	810 3,740 512 270 1,120

## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08361700	Percha Creek near Hillsboro, N. Mex.	Lat 32°54'55", long 107°36'05", Sierra County, 150 ft south of State Highway 180, and 2 miles west of Hillsboro.	35.4	1957-	8- 9-71 9- 3-72 10-20-72 1974 9- 6-75	4.63 d11.7 5.02 (b) 5.23	1,330 12,200 1,650 <100 1,800
08361800	Percha Creek at Caballo Dam near Arrey, N. Mex.	Lat 32°54', long 107°19', Sierra County, at bridge on U.S. Highway 85, 0.5 mile above mouth and Caballo Reservoir, and 3.5 miles north of Arrey.	119	1953-	8-18-71 9- 3-72 10-20-72 7- 8-74 9-12-75	1.96 d10.2 2.81 1.47 3.24	1,020 15,400 2,400 560 3,430
08363000 S	Rio Grande tributary near Salem, N. Mex.	Lat 32°43'01", long 107°12'03", Doña Ana County, upstream from culvert on Interstate Highway 25, 1.0 miles northeast of Salem.	.18	1971-	8-27-71 7-18-72 8-29-73 7- 8-74 7-29-75	4.72 8.31 8.70 7.65 5.88	(+) 445 500 (+) (+)
08363100	Rio Grande tributary near Radium Springs, N. Mex.	Lat 32°30'05", long 106°57'05", Doña Ana County, above culvert on U.S. Highway 85, 120 ft above mouth, and 1.4 miles west of Radium Springs.	.40	1955-	7- 2-71 10-25-71 10-21-72 7- 8-74 3-29-75	4.19 5.96 5.50 7.57 4.20	54 179 j145 288 55
08363200	Aleman Draw at Aleman, N. Mex.	Lat 33°00'00", long 107°00'20", Sierra County, on Santa Fe Railroad bridge, 140 ft above dip on Engle-Rincon road, and 0.26 mile west of Aleman.	25.5	1959-	9-28-71 9- 1-72 5-13-73 8-10-74 9-12-75	6.34 8.61 2.66 6.01 9.06	1,560 4,700 187 1,400 5,400
08379100 S	Pecos River tributary near Sena, N. Mex.	Lat 35°18'37", long 105°23'37", San Miguel County, upstream from culvert on State Highway 3, 0.8 mile north of Sena.	1.24	1971-	1971 9-11-72 7-18-73 1974 1975	(b) 7.53 6.25 (b) (b)	(+) (+) (+) (+) (+)
08379300	Tecolote Creek at Tecolote, N. Mex.	Lat 35°27'20", long 105°16'55", San Miguel County, on bridge on U.S. Highway 85 at Tecolote.	122	1954-	7-20-71 7-17-72 1973 9- -74 7-10-75	9.07 5.82 (b) h7.80 6.35	3,500 680 <100 h2,050 940
08379550 S	Cañon Blanco near Leyba, N. Mex.	Lat 35°13'14", long 105°40'12", San Miguel County, 0.2 mile south of White Lakes-Leyba road and 5.0 miles west of Leyba.	11.2	1971-	7-19-71 7-27-72 9- 9-73 8-27-74 8-21-75	4.85 6.24 4.36 4.36 3.45	226 790 143 143 48
08379600	Pecos River tributary near Dilia, N. Mex.	Lat 35°12'50", long 105°04'50", Guadalupe County, above culvert on U.S. Highway 84, and 1.7 miles northwest of Dilia.	.16	1952-	8-17-71 8-26-72 7-17-73 1974 1975	4.07 2.25 .83 - -	114 57 10 0 0
08380300	Sandoval Canyon at Gallinas, N. Mex.	Lat 35°41'19", long 105°21'17", San Miguel County, about 500 ft upstream from culvert on State Highway 65, at north edge of Gallinas.	7.6	1957 1961-	8-19-71 8-28-72 5- -73 7- -74 7-10-75	1.83 4.64 1.85 1.92 1.48	h140 1,650 h145 160 68
08381700 S	Cañon Piedra Lumbre near Las Vegas, N. Mex.	Lat 35°34'14", long 105°17'50", San Miguel County, upstream from bridge on State Road 283, 4.3 miles west-southwest of Las Vegas.	8.06	1971-	7-29-71 7-18-72 7-25-73 7-29-74 7- -75	3.60 3.13 2.40 2.45 3.05	138 59 5 7 50
08382900	Pecos River tributary near Pintada, N. Mex.	Lat 34°58'06", long 105°05'38", Guadalupe County, in Anton Chico Grant, 1,500 ft south of U.S. Highway 66, 6.8 miles north of Pintada.	.16	1961-	7-19-71 8-26-72 1973 1974 1975	d4.80 1.00 (b) (b) (b)	6,600 <30 <30 <30 <30

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08383200	Pintada Arroyo tributary near Clines Corners, N. Mex.	Lat 34°50'40", long 105°35'05", Torrance County, above culvert on U.S. Highway 285, 12.2 miles south of Clines Corners.	29.2	1952-	7-19-71 8-26-72 1973 7-7-74 9-12-75	1.61 2.32 .63 1.09 2.80	52 133 <20 <20 (+)
08383210	Pintada Arroyo tributary near Encino, N. Mex.	Lat 34°48'40", long 105°34'00", Torrance County, above culvert on U.S. Highway 285, 0.1 mile south of ranch road, and 12.5 miles northwest of Encino.	a1	1959-	1971 8-16-72 1973 1974 9-12-75	- 2.02 - - 2.56	0 99 0 0 145
08383300	Pintada Arroyo near Santa Rosa, N. Mex.	Lat 34°53'20", long 104°43'50", Guadalupe County, at bridge on U.S. Highway 54, and 4.5 miles southwest of Santa Rosa.	896	1959-	8-23-71 8-26-72 10-20-72 1974 10-10-74	2.27 8.70 4.42 2.24 7.83	(+) (+) (+) (+) (+)
08383370 S	Pecos River tributary near Puerto de Luna, N. Mex.	Lat 34°52'35", long 104°38'16", Guadalupe County, 25 ft upstream from culvert on State Highway 91, 3.1 miles north of Puerto de Luna.	.37	1961-	8-24-71 7-18-72 8-30-73 8-4-74 10-10-74	6.94 d7.01 5.90 6.26 7.21	91 96 38 56 108
08385530	Alamosa Creek tributary near Jordan, N. Mex.	Lat 34°48', long 103°58', Quay County, 500 ft upstream from dip on State Highway 156, 6.9 miles west of Jordan.	9.71	1962-	6-21-71 7-11-72 7-24-73 1974 7-22-75	1.69 6.86 2.95 - 1.65	h11 2,850 100 0 10
08385600	Yeso Creek near Fort Sumner, N. Mex.	Lat 34°16', long 104°17', De Baca County, at abandoned bridge 1 mile downstream from State Highway 20, and 14.5 miles south of Fort Sumner.	242	1937 1952-	8-24-71 8-27-72 7-26-73 9-14-74 9-11-75	1.24 1.78 3.45 1.85 .33	560 790 1,900 830 255
08385670	Aragon Creek tributary near Encinosa, N. Mex.	Lat 33°41', long 105°34', Lincoln County, 0.3 mile upstream from wooden bridge on dirt road, 1.2 miles north of State Highway 48, 4.3 miles west of Encinosa.	6.07	1961-	1971 1972 10-19-72 9-18-74 9-12-75	3.93 3.52 3.72 4.17 3.64	540 335 430 700 390
08385690	Bonita Canyon tributary near Corona, N. Mex.	Lat 34°14', long 105°37', Lincoln County, above culvert on U.S. Highway 54, and 1.8 miles southwest of Corona.	a.6	1959-	1971 9-2-72 1973 1974 8-22-75	- 2.05 - - 1.82	0 43 0 0 35
08385700	Cloud Canyon near Gallinas, N. Mex.	Lat 34°08', long 105°40', Lincoln County, above culvert on U.S. Highway 54, and 2.0 miles southwest of Gallinas.	a10	1957-	8-25-71 9-2-72 1973 1974 1975	3.63 3.11 - - -	93 60 0 0 0
08385900	Salt Creek tributary near Roswell, N. Mex.	Lat 33°33', long 104°31', Chavez County, at culvert on U.S. Highway 285, 4.7 miles north of junction of U.S. Highway 70 and 285, and 10 miles north of Roswell.	.04	1952-	9-23-71 7-20-72 1973 8-11-74 7-22-75	1.39 2.21 (b) h.81 .80	(+) (+) (+) (+) (+)
08389000	Rio Bonito near Fort Stanton, N. Mex.	Lat 33°31'05", long 105°29'10", Lincoln County, at bridge on U.S. Highway 380, 2.5 miles northeast of Fort Stanton.	a85	1955-	8-8-71 6-11-72 5-73 9-18-74 7-11-75	4.75 4.49 3.59 3.05 4.10	760 520 157 62 330
08389060	Rio Bonito tributary near Fort Stanton,	Lat 33°31'15", long 105°28'05", Lincoln County, at culvert on U.S. Highway 380, 150 ft above	.72	1955-	1971 1972 1973 1974 1975	(b) (b) - - -	c<10 c<10 0 0 0

## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08390050 S	Rio Hondo tributary at Tinnie, N. Mex.	Lat 33°22'15", long 105°13'01", Lincoln County, upstream from culvert on U.S. Highway 70-380, 0.5 mile east of junction of U.S. Highway 70-380 and State Highway 368, and at Tinnie.	.23	1971-	9- 2-71 9- 7-72 7-29-73 8-27-74 7- 6-75	d7.43 hd10.80 3.81 5.05 4.22	(+) 420 (+) (+) (+)
08390150	Gallo Canyon near Picacho, N. Mex.	Lat 33°18', long 105°10', Lincoln County, 500 ft east of road, 5 miles south of Picacho.	1.32	1962-	7-31-71 8-27-72 9-10-73 9-16-74 7-21-75	4.94 4.00 9.19 5.72 3.32	218 (+) (+) (+) (+)
08393700	Fancho Canyon near Arabela, N. Mex.	Lat 33°17', long 105°12', Lincoln County, 200 ft downstream from dip on State Highway 368, 5.6 miles south of Arabela.	16.7	1962-	7-31-71 1972 1973 1974 7-21-75	10.17 (b) (b) (b) 3.01	(+) (+) (+) (+) (+)
08393900	Eight Mile Draw near Roswell, N. Mex.	Lat 33°25', long 104°39", Chavez County, 6.5 miles west of Roswell	397	1941 1952-	9-23-71 7-20-72 1973 1974 9-11-75	14.32 15.02 (b) (b) 13.97	530 1,330 <10 <10 285
08394300 S	Twin Butte Canyon tributary near Roswell, N. Mex.	Lat 33°10'34", long 104°51'30", Chavez County, about 0.1 mile upstream from mouth and about 22 miles southwest of Roswell.	5.01	1968-	7-31-71 9-11-72 1973 9-22-74 10-23-74	7.63 4.93 - 3.84 5.79	(+) (+) 0 (+) 1,530
08397390	Curtis Canyon near Mayhill, N. Mex.	Lat 32°51'52", long 105°31'05", Otero County, 0.26 mile above SCS dam, 0.4 mile west of State Highway 130, and 2.5 miles southwest of Mayhill.	10.3	1959-	1971 1972 1973 1974 1975	(b) (b) (b) - (b)	(+) (+) (+) 0 c10
08397400 S	Hyatt Canyon near Cloudcroft, N. Mex.	Lat 32°56'06", long 105°37'37", Otero County, 0.5 mile south of State Highway 83, and 7 miles east of Cloudcroft.	3.08	1953-	9- 9-71 8-20-72 8-15-73 7-28-74 9-10-75	1.31 2.01 1.47 2.15 1.45	(+) (+) (+) (+) (+)
08397600	Rio Peñasco near Dunken, N. Mex.	Lat 33°52'55", long 105°10'40", Chavez County, on bridge on State Highway 24, 5 miles north of Dunken.	583	1952-56 1956-62 1963-	7-11-64 9- 1-65 8-23-66 8-10-67 7- 6-68 8-31-69 1970 1971 1972 10-23-72 1974 6-24-75	2.92 8.08 8.31 8.44 d9.54 11.88 - (b) h8.60 11.61 (b) 13.64	c500 880 1,050 1,100 h1,850 3,650 - <100 1,200 3,400 <100 4,990
08404600 S	Pecos River tributary at Carlsbad, N. Mex.	Lat 32°26'50", long 104°15'48", Eddy County, upstream from culvert on U.S. Highway 285, at entrance to Botanical-Zoological Gardens, 2.9 miles northwest of county court house in Carlsbad.	.47	1971-	8-23-71 6-13-72 1973 9-27-74 10-24-74	3.74 9.64 - 3.39 d12.8	32 479 0 16 810
08405050	Last Chance Canyon tributary near Carlsbad Caverns, N. Mex.	Lat 32°17'30", long 104°36'20", Eddy County, above culvert on State Highway 137, 0.1 mile north of road to Sitting Bull Falls, and 12.5 miles northwest of Carlsbad Caverns.	.2	1959-	8-16-71 9- 2-72 9- 7-73 8-23-74 7-24-75	3.22 3.12 1.43 3.71 1.75	155 145 207 207 38
08405100	Mosley Canyon near White City, N. Mex.	Lat 32°15', long 104°20', Eddy County 600 ft below dip on Dark Canyon road, and 5.5 miles north of White City.	14.6	1959-	7-31-71 9- 2-72 1973 1974 10-23-74	2.87 6.30 (b) (e) 3.37	(+) 2,650 (+) (+) (+)

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES  
Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Rio Grande basin - Continued							
08407100	Pierce Canyon near Malaga, N. Mex.	Lat 32°11'24", long 103°57'41", SW 1/4 NW 1/4, Sec. 26, T. 24 S., R. 29 E., Eddy County, about 1 mile east of the Pierce Canyon crossing on the Pecos River, 8 miles east of Malaga.	8.55	1975-	1975	(e)	-
08436000	San Simon Swale tributary near Jal, N. Mex.	Lat 32°09', long 103°22', Lea County, 0.4 mile south of State Highway 128, and 10.7 miles west of Jal.	a20	1963-	1971 1972 1973 1974 1975	(b) (b) - (b) -	(+) (+) 0 (+) 0
08437620 S	Monument Draw tributary near Monument, N. Mex.	Lat 32°39'44", long 103°27'16", Lea County, upstream from culvert on U.S. Highway 62-180, about 12 miles northwest of Monument and 19.5 miles west of Hobbs.	6.23	1968-	8-16-71 6-10-72 1973 8-11-74 7-21-75	5.24 7.87 (b) 5.52 5.75	(+) 1,280 (+) (+) (+)
Mimbres River basin							
08477100 S	Willow Springs Canyon at Mimbres, N. Mex.	Lat 32°51'20", long 107°58'35", Grant County, about 600 ft downstream from State Road 61, 0.2 mile north of post office in Mimbres.	3.84	1970-	8- -71 8-16-72 7-14-73 8- 4-74 10-22-74	1.38 3.07 3.37 7.58 1.96	(+) (+) (+) 1,180 (+)
08477200 S	Iron Creek near Kingston, N. Mex.	Lat 32°54'50", long 107°46'35", Grant County, 50 ft east of State Highway 180, 1.6 road miles west of Emory Pass, and 4.5 miles west of Kingston.	.74	1955-	8-29-71 8-21-72 10-20-72 1974 3- -75	3.64 4.08 4.15 (b) 4.38	c5 c12 c14 (+) c20
08477560	Little Walnut Creek near Silver City, N. Mex.	Lat 32°48'20", long 108°17'35", Grant County, 85 ft above dip on Bear Mountain Road, and 2 miles north of Silver City.	5.10	1959-	7-27-71 9- 3-72 7- 6-73 7-13-74 9- 3-75	1.97 2.11 2.01 1.92 2.21	440 540 450 420 530
08477570	Silva Creek tributary at Silver City, N. Mex.	Lat 32°47'42", long 108°16'47", Grant County, 350 ft above dip on Little Walnut Road, and 0.7 mile north of boundary of Silver City.	2.12	1958-	7-27-71 9- 3-72 10-20-72 9-13-74 9- 3-75	4.55 d6.53 3.29 3.02 d3.74	1,000 1,730 450 370 (+)
08477580	Silva Creek at Silver City, N. Mex.	Lat 32°46'41", long 108°16'41", Grant County, 190 ft above Twelfth Street bridge at Silver City.	10.0	1958-	7-27-71 9- 3-72 10-20-72 9-13-74 9- 3-75	2.97 3.49 d4.49 h1.87 3.20	660 1,060 1,800 <200 840
08477590	Pinos Altos Creek at Silver City, N. Mex.	Lat 32°46'52", long 108°16'04", Grant County, 2 blocks below U.S. Highway 260 at Silver City.	4.63	1958-	7-27-71 9- 3-72 10-20-72 1974 1975	3.79 4.09 1.31 (b) (b)	2,980 (+) (+) (+) (+)
08478000	Cameron Creek at Central, N. Mex.	Lat 32°47', long 108°10', Grant County, 0.5 mile above culvert on U.S. Highway 260, at north edge of Central.	18.8	1954-	9- 9-71 9- 3-72 7- 6-73 7-13-74 9- 5-75	5.01 4.45 3.21 1.76 2.08	1,350 1,080 605 210 280
08478500	Mimbres River at Deming, N. Mex.	Lat 32°17'00", long 107°45'35", Luna County, at bridge on U.S. Highway 260, at north end of Deming.	1,370	1954-	8- 7-54 7-28-71 9- 3-72 10-20-72 7-15-74 9-29-75	4.40 2.33 4.75 d6.68 2.47 5.21	h1,500 750 1,750 2,690 750 1,990

## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Mimbres River basin - Continued							
08478600	Mimbres basin tributary near Florida, N. Mex.	Lat 32°21'25", long 107°37'35", Luna County, above culvert on State Highway 26, and 5 miles southwest of Florida.	.55	1959-	10- 2-70	2.56	180
					7-25-72	3.01	235
					1973	-	0
					7-15-74	2.02	118
					9-12-75	3.69	321
08478800	Seventysix Draw tributary near Waterloo, N. Mex.	Lat 31°56'34", long 107°44'38", Luna County, upstream from culvert on State Road 11, 3.9 miles southeast of Waterloo, and 7.9 miles north of Columbus.	.2	1967-	7-31-71	5.41	136
					8-27-72	5.28	130
					1973	-	0
					9-15-74	3.30	60
					10-12-74	2.65	41
Playas Valley							
08479300	Deer Creek tributary near Antelope Wells, N. Mex.	Lat 31°23'00", long 108°42'15", Hidalgo County, 0.1 mile below dip on State Highway 79, 2.5 miles east of San Luis Pass, and 12 miles west of Antelope Wells.	4.3	1959-	7-14-67	h1.90	h280
					7-22-71	2.29	380
					9- 3-72	2.88	h600
					7-27-73	1.99	300
					8- 2-74	1.26	158
					10-11-74	1.60	215
Tularosa Valley							
08480100	White Oaks Canyon at White Oaks, N. Mex.	Lat 33°46', long 105°44', Lincoln County, 40 ft upstream from culvert on State Highway 349, 1 mile northeast of White Oaks.	1.14	1961-	8- 1-71	2.90	(+)
					8-17-72	1.66	(+)
					7-17-73	d1.3	(+)
					8- 6-74	1.42	(+)
					8-22-75	1.24	(+)
08480150	White Oaks Canyon near Carrizozo, N. Mex.	Lat 33°44', long 105°50', Lincoln County, 100 ft upstream from culvert on U.S. Highway 54, 6 miles north of Carrizozo.	31	1959- 1961-	8- 1-71	3.31	1,250
					8-17-72	2.66	1,000
					7-17-73	1.95	c760
					8- 6-74	3.31	1,250
					8-22-75	2.39	910
08480170 S	Nogai Creek tributary near Nogai, N. Mex.	Lat 33°34'54", long 105°41'10", Lincoln County, upstream from culvert on U.S. Highway 380, about 2.0 road miles west of Indian Divide, 7 miles north-west of Capitan and 2 miles north of Nogai.	1.94	1968-	8- -71	1.55	(+)
					9- 1-72	4.85	318
					1973	(b)	<10
					7-10-74	3.32	44
					9- 9-75	3.27	(+)
08480200	Taylor Canyon tributary near Bingham, N. Mex.	Lat 33°48', long 106°12', Socorro County, 200 ft north of U.S. Highway 380, 12 miles southeast of Bingham.	2.66	1961-	1971	-	0
					9- 2-72	1.36	(+)
					1973	1.31	(+)
					7-20-74	1.41	(+)
					1975	-	0
08480590	Tularosa Valley tributary near Oscura, N. Mex.	Lat 33°24'41", long 106°04'09", Lincoln County, 50 ft below culvert on U.S. Highway 54, and 5.2 miles south of Oscura.	3.22	1958-	1971	(b)	(+)
					1972	(b)	(+)
					1973	-	0
					1974	(b)	(+)
					1975	-	0
08480650	Minnie Hall Draw near Three Rivers, N. Mex.	Lat 33°25', long 106°05', Lincoln County, 8 miles northeast of Three Rivers.	9.70	1956-	7-24-71	12.07	1,370
					1972	(b)	<500
					7-30-73	10.62	<500
					8- 5-74	11.38	820
					9-12-75	10.88	<500
08480700 S	Indian Creek near Three Rivers, N. Mex.	Lat 33°22'10", long 105°53'25", Otero County, 150 ft above diversion dam, and 12 miles east of Three Rivers.	6.8	1956-58 <sup>8</sup> 1959-	7-26-71	4.00	211
					9- 9-72	4.08	229
					7-15-73	2.57	16
					9-23-74	2.56	16
					7-18-75	3.76	160

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES  
Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Tularosa Valley - Continued							
08480900	Indian Creek at mouth near Three Rivers, N. Mex.	Lat 33°22'45", long 105°57'25", Otero County, 75 ft above diversion dam, 0.35 mile above mouth, and 5.5 miles east of Three Rivers.	10.9	1956-58* 1959-	7-26-71	4.39	400
					1972	(b)	<100
					1973	(b)	<100
					1974	(b)	<100
					1975	(b)	<100
08481000	Three Rivers at Three Rivers, N. Mex.	Lat 33°18'10", long 106°04'20", Otero County, 150 ft below Southern Pacific Railroad bridge, 400 ft above bridge on U.S. Highway 54, and 1.3 miles south of Three Rivers.	96.0	1956-	7-24-71	4.41	3,800
					8-28-72	3.63	2,350
					5-14-73	3.61	2,300
					9-19-74	d2.4	900
					9-12-75	2.52	1,000
08481100	Tularosa Valley tributary near Three Rivers, N. Mex.	Lat 33°18', long 106°05', Otero County, at culvert on U.S. Highway 54, 1.6 miles south of Three Rivers.	13.8	1952-	1971	(b)	<60
					1972	-	0
					7- 9-73	.13	123
					1974	(b)	<60
					10-11-74	.05	86
08486200	Black Prince Canyon tributary near Organ, N. Mex.	Lat 32°27', long 106°32', Doña Ana County, above culvert on U.S. Highway 70, 2.3 miles east of San Augustin Pass, and 4.0 miles east of Organ.	.73	1959-	1971	-	0
					1972	-	0
					1973	-	0
					1974	-	0
					1975	-	0
08486400	Tularosa Valley tributary near Orogrande, N. Mex.	Lat 32°24'55", long 106°04'20", Otero County, at bridge on U.S. Highway 54, and 2.7 miles northeast of Orogrande.	2.53	1959-	7- 3-71	1.47	(+)
					9- 2-72	1.34	(+)
					1973	(b)	(+)
					7-30-74	1.74	(+)
					1975	-	0
Estancia Valley							
08488000	Estancia Valley tributary at Cedar Grove, N. Mex.	Lat 35°32', long 106°11', Santa Fe County, 50 ft upstream from culvert on State Highway 344, 0.1 mile south of Cedar Grove.	1.21	1955 1961-	7-26-71	7.09	(+)
					8-26-72	7.86	(+)
					1973	7.47	(+)
					1974	(b)	(+)
					9-12-75	7.07	(+)
08488100	Juan Tomas Canyon near Edgewood, N. Mex.	Lat 35°10', long 106°14', Santa Fe County, 140 ft upstream from culvert on U.S. Highway 66, 2.5 miles northwest of Edgewood.	a20	1962-	1971	(b)	c10
					1972	d2.78	(+)
					1973	(b)	(+)
					1974	(b)	(+)
					1975	(b)	c<10
08488170 S	Chavez Draw tributary near Clines Corners, N. Mex.	Lat 35°01'06", long 105°49'06", Torrance County, one mile north of Interstate 40, 13 miles east of Moriarty and 9 miles west of Clines Corners.	2.73	1968-	7-23-71	5.11	<5
					7- 9-72	7.29	275
					10-23-72	5.99	27
					8-24-74	5.44	c8
					7-11-75	d6.0	27
08488200	Osita Draw near Clines Corners N. Mex.	Lat 35°00', long 105°46', Torrance County, 100 ft upstream from culvert on U.S. Highway 66, 7.5 miles west of Clines Corners.	a10	1961-	9-23-71	4.61	980
					6-16-72	2.38	230
					7- 2-73	3.82	610
					1974	(b)	<100
					1975	-	0
08488500	Cañon de Torreon at Torreon, N. Mex.	Lat 34°43'20", long 106°17'50", Torrance County, at culvert on State Highway 10, in Torreon.	18.2	1954-	1971	(b)	<25
					1972	(b)	<25
					1973	(b)	<25
					1974	(b)	<25
					10-12-74	1.50	170
08488600 S	Arroyo del Cuervo near Torreon, N. Mex.	Lat 34°41'35", long 106°18'27", Torrance County, in Town of Torreon Grant, about 0.3 mile above culvert on State Road 10 and 2 miles south of Torreon.	11.8	1969-	7- 1-71	4.40	1,080
					7-19-72	4.50	1,140
					10-20-72	2.00	78
					7-31-74	2.11	100
					9-11-75	2.14	106



## Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Estancia Valley - Continued							
08489000	Cañada del Leon near Mountainair, N. Mex.	Lat 34°25', long 106°29', 0.25 mile above culvert on State Highway 10, and 8.4 miles southeast of Mountainair.	3.9	1953-	1971	-	0
					1972	(b)	(+)
					1973	-	0
					1974	(b)	<5
					1975	-	0
Salt basin							
08492500	Fleming Draw near Piñon, N. Mex.	Lat 32°31', long 105°21', Otero County, 0.2 mile above dip in ranch road, and 7.5 miles south of Piñon.	16.6	1959-	1971	(b)	<200
					1972	8.26	4,800
					1973	(b)	<200
					1974	4.60	870
					1975	-	0
San Augustin Plains basin							
08500000 S	Swingle Canyon near Datil, N. Mex.	Lat 34°11'17", long 107°53'55", Catron County, about 0.3 mile upstream from U.S. Highway 60, and 4.3 miles northwest of Datil.	6.35	1970-	8-31-71	2.92	70
					7-16-72	2.53	(+)
					1973	(e)	-
					1974	(e)	-
					1975	(e)	-
San Juan River basin							
09346200	Rio Amargo at Dulce, N. Mex.	Lat 36°56'00", long 107°00'00", Rio Arriba County, under bridge on State Highway 17, at Dulce.	168	1956-	9-30-71	4.78	650
					2-22-72	45.35	810
					10-19-72	6.98	1,300
					5- -74	3.00	275
					9-11-75	6.46	1,140
09350700 S	Ruben Canyon near Gobernador, N. Mex.	Lat 36°44'26", long 107°14'33", Rio Arriba County, in Carson National Forest, upstream from culvert on State Highway 17, and 6.5 miles east of Gobernador.	5.06	1970-	9-29-71	3.21	(+)
					9-19-72	3.43	(+)
					10-19-72	3.59	(+)
					7-21-74	3.52	(+)
					4- -75	3.56	(+)
09350800	Vaqueros Canyon near Gobernador, N. Mex.	Lat 36°44', long 107°17', Rio Arriba County, 100 ft east of State Highway 17, and 4.2 miles east of Gobernador.	60.5	1956-	9-30-71	h3.08	155
					1972	(b)	<50
					5- -73	44.6	370
					5- 2-74	2.28	82
					4-10-75	2.83	130
09355700	Gobernador Canyon near Gobernador, N. Mex.	Lat 36°41'05", long 107°25'10", San Juan County, 0.2 mile south of State Highway 17, and 4 miles southwest of Gobernador.	19.8	1956-	9-30-71	7.40	1,100
					8- -72	43.41	375
					10- -72	(e)	<1,250
					1974	(b)	<400
					4-10-75	4.81	505
09356400	Manzanares Canyon near Turley, N. Mex.	Lat 36°44'15", long 107°42'15", San Juan County, 600 ft above culvert on State Highway 17, and 4.2 miles east of Turley.	3.20	1956-	8-21-71	1.91	310
					8-18-72	43.2	690
					9-10-73	4.30	1,100
					7-14-74	2.26	405
					7-17-75	2.65	515
09356520 S	Burro Canyon near Lindrith, N. Mex.	Lat 36°16'21", long 107°14'46", Rio Arriba County, upstream from culvert on State Highway 537, 11.5 miles west of Lindrith.	9.11	1970-	8-20-71	8.08	382
					8-10-72	5.02	104
					10-11-72	6.67	232
					1974	(b)	<1
					4-12-75	4.24	58

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
San Juan River basin - Continued							
09357200	Gallegos Canyon tributary near Nageezi, N. Mex.	Lat 36°28', long 107°55', San Juan County, at culvert on State Highway 44, 1.1 miles northwest of Huerfano Trading Post, and 12.5 miles northwest of Nageezi.	.20	1952-	9-30-71 8-18-72 3- -73 7-13-74 7-16-75	1.42 1.62 1.11 1.92 6.27	68 83 44 108 440
09357250	West Draw near Farmington, N. Mex.	Lat 36°35'24", long 108°11'03", San Juan County, 15 ft upstream of culvert on State Highway 371, 11 miles south of Farmington.	.32	1975-	9- 8-75	2.43	c2
09367400 S	La Plata River tributary near Farmington, N. Mex.	Lat 36°47'10", long 108°13'31", San Juan County, about 700 ft upstream from culvert on State Highway 17 and 4.1 miles northwest of Farmington.	1.03	1970-	8-21-71 12-26-71 3- -73 10-10-73 9- 8-75	d3.24 2.67 4.25 1.90 2.26	196 (+) (+) (+) (+)
09367530	Locke Arroyo near Kirtland, N. Mex.	Lat 36°44', long 108°18', San Juan County, on upstream side of abandoned culvert, 200 ft above U.S. Highway 550, 0.4 mile above mouth, and 3.3 miles east of Kirtland.	2.96	1951-	9-30-71 12-26-71 10-19-72 8- 3-74 9- 8-75	1.45 2.30 5.52 d.86 d.86	84 138 410 c50 c50
09367550 S	Stevens Arroyo near Kirtland, N. Mex.	Lat 36°46'00", long 108°22'10", San Juan County, upstream from gravel road to Young's Lake, 0.6 mile north of El Paso Natural Gas, San Juan Plant, and 2.3 miles north of Kirtland.	4.59	1970-	8-21-71 8-19-72 10- 7-72 7-27-74 9-11-75	3.77 3.21 3.83 2.28 2.57	680 (+) c700 (+) (+)
09367840	Yazzie Wash near Mexican Springs, N. Mex.	Lat 35°50'40", long 108°53'00", McKinley County, 5.0 miles northwest of Mexican Springs, and 23 miles north of Gallup.	a2.1	1953-54 1956-	8- 7-71 8-26-72 7- 7-73 7-16-74 9-12-75	5.04 2.66 3.35 3.43 2.62	630 102 183 195 98
09367860	Chusca Wash near Mexican Springs, N. Mex.	Lat 35°48'40", long 108°50'50", McKinley County, 1.8 miles northwest of Mexican Springs, and 20 miles north of Gallup.	a8.7	1953-	8- 7-71 8-26-72 4- -73 7-16-74 9-12-75	4.63 1.93 2.14 5.10 2.69	2,600 360 440 3,550 670
09367900 S	Black Springs Wash near Mexican Springs, N. Mex.	Lat 35°45'40", long 108°49'00", McKinley County, 2.5 miles south of Mexican Springs and 17 miles north of Gallup.	7.05	1954-	8- 7-71 8-26-72 10- 5-72 1974 9-12-75	1.68 .94 .85 (b) 2.52	1,080 559 508 <40 2,050
09357920	Coyote Wash tributary near Naschitti, N. Mex.	Lat 36°05'55", long 108°41'48", San Juan County, on bridge on U.S. Highway 666, 2.4 miles north of Naschitti, and 39 miles north of Gallup.	12.0	1967-	9-30-71 8-27-72 9-10-73 8- 1-74 1975	5.69 5.07 3.50 3.33 (e)	(+) (+) (+) (+) -
09367930	Hunter Wash at Bisti Trading Post, N. Mex.	Lat 36°16'36", long 108°15'15", San Juan County, on right bank, upstream of road crossing at Bisti Trading Post, N. Mex.	45.7	1975-	7-16-75	4.61	1,110
09367932	Hunter Wash tributary near Bisti Trading Post, N. Mex.	Lat 36°15'33", long 108°15'06", San Juan County, on left bank upstream of culverts, 1.2 mile south of Bisti Trading Post.	8.47	1975-	7-16-75	6.55	(+)
09367940	Pena Blanca Arroyo (formerly Theodore Wash) near Newcomb, N. Mex.	Lat 36°21'39", long 108°43'09", San Juan County, on bridge on U.S. Highway 666, 5.2 miles north of Newcomb.	h46.8	1967-	9-30-71 8-27-72 3- -73 1974 9-10-75	4.47 d13.4 3.44 (b) 6.57	(+) 2,070 (+) (+) (+)

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES  
Annual maximum discharge at crest-stage partial-record stations - Continued

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Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual Maximum	
						Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Little Colorado River basin							
09386100	Largo Creek near Quemado, N. Mex.	Lat 34°19'25", long 108°31'40", Catron County, on downstream side of bridge on ranch road 2.5 miles southwest of Quemado.	151	1954-	8- 6-71 1972 9-11-73 1974 10- 6-74	2.41 (b) 2.40 (b) 3.22	385 <150 380 <150 670
09386150	Mangas Creek tributary near Pietown, N. Mex.	Lat 34°18', long 108°10', Catron County, above culvert on U.S. Highway 60, 1.3 miles west of Pietown Post Office.	a.08	1952-	8- 6-71 1972 1973 1974 1975	1.49 (b) (b) (b) (b)	(+) (+) (+) (+) (+)
09386200	Carrizo Creek near Salt Lake, N. Mex.	Lat 34°31', long 109°01', Catron County, on left downstream wingwall of bridge, 1.3 miles east of New Mexico-Arizona State line and 15 miles west of Salt Lake.	f560	1957-	9-29-71 1972 5- -73 1974 9- 6-75	.58 (b) 4.10 (b) 6.24	(+) (+) (+) (+) (+)
09387050	Galestena Canyon tributary near Black Rock, N. Mex.	Lat 34°58'45", long 108°40'00", McKinley County, 100 ft below bridge on State Highway 32 and 10.5 miles southeast of Black Rock.	a19	1957-	9-29-71 1972 7- 8-73 1974 9-12-75	3.04 (b) 2.12 1.72 1.04	161 <20 82 55 21
09395400	Milk Ranch Canyon near Fort Wingate, N. Mex.	Lat 35°25'55", long 108°33'30", McKinley County, 0.5 mile below culvert on secondary road between Fort Wingate and McGaffey, and 3 miles south of Fort Wingate.	14.0	1949 1953-	9-29-71 1972 4-17-73 1974 3- -75	.64 (b) 1.36 (b) .25	135 <40 380 <40 60
09395500	Puerco River at Gallup, N. Mex.	Lat 35°31'49", long 108°44'23", McKinley County, on right bank north of the Santa Fe RR freight depot, 1,500 ft above Second Street Bridge at Gallup.	558	1940-46 1956-	9-30-71 7-17-72 5- 6-73 7-16-74 9- 8-75	3.82 d15.3 4.42 6.90 d13.2	980 c12,000 1,500 3,750 9,800
Gila River Basin							
09430300	Copperas Canyon near Pinos Altos, N. Mex.	Lat 33°05', long 108°13', Grant County, on east side of Cooperas Canyon road and 15 miles north of Pinos Altos.	3.95	1963-	7- 3-71 9- 3-72 10-20-72 1974 1975	2.49 3.27 1.59 (b) -	(+) (+) (+) (+) 0
09430900	Duck Creek at Cliff, N. Mex.	Lat 32°58', long 108°36', Grant County, at Cliff below bridge on State Highway 211, and 0.6 mile above mouth.	228	1957-	7-30-71 8-26-72 10-19-72 9-19-74 9- 4-75	11.03 8.50 10.09 7.80 6.38	6,900 4,850 6,100 4,350 3,300
09437200 S	Mexican Canyon at Virden, N. Mex.	Lat 32°41'03", long 108°59'00", Hidalgo County, upstream from dip in State Road 82, and about 0.8 mile east of Virden.	3.40	1968-	8-28-71 9- 3-72 7-18-73 8- 4-74 7- 5-75	10.91 10.56 11.38 10.50 10.49	(+) (+) (+) (+) (+)
09438200	Animas Creek near Cloverdale, N. Mex.	Lat 31°34'15", long 108°52'30", Hidalgo County, near head of small box canyon 0.1 mile west of State Highway 338, and 11 miles north of Cloverdale.	157	1959-	7-24-71 7-24-72 7-15-73 7-16-74 10-13-74	6.11 5.76 4.38 4.82 7.78	1,600 1,300 510 720 3,400
09442630 S	Mail Hollow near Luna, N. Mex.	Lat 33°47'38", long 108°56'59", Catron County, upstream from culvert on U.S. Highway 180, 2.3 miles south of Luna.	4.20	1970-	9-30-71 10-24-71 10-20-72 7-30-74 9- 9-75	2.19 3.21 3.90 1.55 2.36	17 120 (+) 5 31

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations - Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Gila River Basin - Continued							
09442650	Romero Creek near New Mexico-Arizona State line near Luna, N. Mex.	Lat 33°57', long 108°59', Catron County, at culvert on Luna-Underwood Lake road, about 1 mile east of New Mexico-Arizona State line, and 8 miles northwest of Luna.	10.8	1958-	8-22-71	8.44	43
					9- 3-72	7.98	12
					10-20-72	9.80	440
					4- -74	8.63	66
					4- -75	8.81	96
09442660	Trout Creek at Luna, N. Mex.	Lat 33°51', long 108°58', Catron County, 500 ft downstream from bridge on Luna-Red Hill road and 2.6 miles north of Luna.	31.9	1954-	8-22-71	1.88	155
					9- 3-72	1.18	48
					10-19-72	h4.47	h2,250
					1974	(b)	<40
					9- 9-75	2.27	280
09442695 S	Negro Canyon at Aragon, N. Mex.	Lat 33°53', long 108°33', Catron County, above culvert on State Highway 12, at west edge of Aragon.	9.62	1958-	7-30-71	1.22	184
					10- -71	.85	100
					8- 2-73	2.27	360
					8- 3-74	.75	72
					10-10-74	1.38	210
09442740	Tularosa River near Reserve, N. Mex.	Lat 33°44'00", long 108°42'10", Catron County, 150 ft west of Eagle Peak Lookout road and 3.3 miles northeast of Reserve.	426	1956-	8- 6-71	d4.55	500
					9- 2-72	4.10	420
					10-20-72	6.00	780
					1974	(b)	<150
					1975	(b)	<150
09443950	Red Colt Canyon at Pleasanton, N. Mex.	Lat 33°15'30", long 108°52'15", Catron County, above culvert on U.S. Highway 260, and 1 mile south of Pleasanton.	3.00	1959-	8-13-71	8.44	(+)
					9- 3-72	9.13	(+)
					8- 2-73	9.70	(+)
					1974	h8.57	(+)
					7-21-75	d9.51	(+)
09455800	Steins Creek at Steins, N. Mex.	Lat 32°14', long 109°00', Hidalgo County, at culvert on State Highway 14, 0.9 mile west of Steins.	1.26	1959-	1959	3.32	c180
					1960	(b)	<100
					1961	(b)	<100
					1962	3.29	c170
					9- 3-63	4.08	262
					9-10-64	3.39	c190
					9- 3-65	4.80	c317
					9-11-66	3.86	c230
					6-19-67	2.54	<100
					1968	-	0
					1969	-	0
					9- 6-70	1.85	<100
					7- 2-71	2.27	<100
					8-26-72	4.71	c310
					1973	-	0
					8-23-74	4.16	c250
					7-21-75	4.19	c255

&lt; Less than.

S Flood-hydrograph site.

+ Discharge not yet determined.

x Operated as continuous-record gaging station.

a Approximately.

b Peak did not reach bottom of 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.

## Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (\*); measurements of peak flow by a dagger (†).

## Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Measurements Discharge (cfs)
Arkansas River basin						
Chicorica Creek	Canadian River	Lat 36°46'13", long 104°23'45", in S½ sec.4, T.29 N., R.24 E., Colfax County, at highway bridge near east boundary of Maxwell Grant, 300 ft downstream from Una de Gato Creek, 4.4 miles northeast of Hebron, and 9 miles south of Raton, N. Mex.	381	1945-52† 1966-74	10-23-74 11-14-74 12- 2-74 1- 3-75 1-22-75 2-11-75 3-11-75 4- 9-75 5- 6-75 6- 3-75 6-30-75 7-29-75 8-25-75 9-23-75	1.0 2.4 3.4 3.7 1.9 2.3 2.6 7.3 1.1 1.5 .01 0 .02 a.18
Canadian River	Arkansas River	Lat 35°24'12", long 104°11'18", San Miguel County, in Pablo Montoya Grant, 300 ft below Conchas Dam, and 24 miles north of Newkirk.	7,417	1936-38† 1942-72† 1973-74	11-13-74 1-21-75 5-15-75 6-28-75 7-23-75	3.3 3.4 4.1 6.2 3.2
Canadian River	Arkansas River	Lat 35°23'35", long 103°02'30", in SW¼ sec.32, T.14 N., R.37 E., Quay County, at N.Mex.-Texas state line, 14.7 miles north of Glenrio, N. Mex.	-	1969-74	12- 5-74 1-16-75 2-25-75 3-24-75 4-24-75 5-20-75 7-22-75 8-26-75	16 15 17 6.3 5.6 5.0 321 0
Rio Grande basin						
Red River	Rio Grande	Lat 36°40'53", long 105°39'24", in NW¼NW¼ sec.10, T.28 N., R.12 E., Taos County, 0.3 miles downstream from State Fish Hatchery, near Questa, N. Mex.	-	1963 1965-66 1969-74	10- 1-74 11- 6-74 11-18-74 12-11-74 1- 8-75 2- 5-75 2-18-75 3-18-75 5-14-75 6-12-75 7-11-75 8- 5-75	39 38 39 34 32 38 40 36 166 207 145 60
Canjilon Creek	Rio Chama	Lat 36°21'20", long 106°31'10", in NE¼SE¼ sec.33, T.25 N., R.4 E., Rio Arriba County, 0.5 mile southeast of Echo Amphitheatre, and 0.2 mile east of U.S. Highway 84.	-	-	5-16-75	137
Tesuque Creek	Pojoaque River	Lat 35°44'20", long 105°54'20", in Juan de Gabaldon Grant, 1.0 mile upstream from Little Tesuque Creek and 4.0 miles northeast of Santa Fe, N. Mex.	11.6	1936-51† 1953-70b 1974	2- 4-75	*1.0
Alamosa Creek	Rio Grande	Lat 33°34'09", long 107°35'33", in SE¼ sec.31, T.8 S., R.7 W., Socorro County, just downstream from Wildhorse Creek, and 15 miles northwest of Monticello, N. Mex.	403	1931-42† 1958-71† 1972-74	11-15-74 2- 7-75 5- 8-75 8-21-75	*7.2 *7.6 *5.5 *7.0
Carriazo Creek	Rio Ruidoso	Lat 33°18'20", long 105°40'05", in SW¼SE¼SW¼ sec.34, T.11 S., R.13 E., at Mescalero Apache Indian Reservation Boundary, Lincoln County, near Ruidoso, N. Mex.	-	1961-66 1974	5- 7-75	3.0

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## Measurements at miscellaneous sites

Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Discharge (cfs)
Rio Grande basin--Continued						
South Fork	Eagle Creek	Lat 33°23'27", long 105°44'00", T.10 S., R.12 E., at Mescalero Apache Reservation Boundary, Lincoln County, near Alto, N. Mex.	-	-	5- 7-75 6- 4-75	1.5 .50
Little McKittrick Canyon	Dark Canyon	Lat 32°21'53", long 104°17'40", in NE¼NW¼SE¼ sec.28, T.11 S., R.19 E., Lincoln County, at Riverside, N. Mex.	57.2	-	10-23-74	†32,200
Pecos River	Rio Grande	Lat 32°22'56", long 104°08'20", in SE¼NW¼NE¼ sec.24, T.22 S., R.27 E., Eddy County, 0.4 mile below Six Mile Dam and 6 miles southeast of Carlsbad, N. Mex.	18,560	-	7-23-54 1-23-61 2- 6-64 7-27-64 5-17-66 3-24-70 7-17-75 8-21-75 9-18-75	2.2 17 29 5.4 7.0 8.6 a25 *25 *29
Rattlesnake Springs	Black River	Lat 32°06'34", long 104°28'17", SE¼SW¼ sec.23, T.25 S., R.24 E., Eddy County, 5.0 mi southwest of Carlsbad Caverns, 7.0 mi southwest of White City and 25 mi southwest of Carlsbad, N. Mex.	-	1952-70	3-25-75 4-29-75 7-30-75 8-28-75 9- 6-75	*1.6 *.48 *1.8 *.37 *1.2
Blue Springs	Black River	Lat 32°11'07", long 104°16'50", SW¼NE¼SW¼ sec.27, T.24 S., R.26 E., above all diversions, Eddy County, 5.5 mi east of White City, N. Mex.	-	1907 1919-20 1923 1935 1952-70 1973-74	10-11-74 10-18-74 11- 4-74 11-25-74 12-12-74 12-27-74 1-18-75 2- 3-75 2-25-75 3- 5-75 3-18-75 4- 3-75 6-17-75 6-26-75 7-30-75 9- 6-75 9-23-75	*11 *12 *13 *14 *14 *14 *13 *15 *14 *14 *14 *12 *12 *12 *11 *11
Castle Springs	Black River	Lat 32°11'59", long 104°15'13", NW¼SW¼SW¼ sec.24, T.24 S., R.26 E., Eddy County, at Black River Village 7.2 miles east of White City, N. Mex.	-	-	7-30-75 8-28-75	*.66 *.77
Pecos River	Rio Grande	Lat 32°13'05", long 104°00'08", SE¼SW¼NE¼ sec.17, T.24 S., R.29 E., Eddy County, at Fishing Rock Crossing, 4.1 miles southeast of Malaga, N. Mex., and at mile 430.8.	-	1953-54 1962-74	11-18-74 12-13-74 12-31-74 2- 5-75 3-10-75 4- 8-75 5-14-75 7- 7-75 8- 4-75 9-15-75	162 154 142 120 82 *57 *59 *43 *31 *56

## Measurements at miscellaneous sites

## Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Measured Drainage previously area (sq mi)	(water years)	Date	Measurements Discharge (cfs)
Rio Grande basin--Continued						
Pecos River	Rio Grande	Lat 32°10'38", long 103°59'53", NE½SE¼NE¼, sec. 32 (corrected) T.24 S., R.29 E., in Eddy County, at First Ford 3.0 miles (corrected), below Pierce Canyon Crossing and 5.6 miles southeast of Malaga, N. Mex., at mile 422.7.	-	1959 1961-64 1966-74	12-20-74	129
					12-31-74	161
					2- 5-75	118
					3-10-75	83
					4- 8-75	*56
					5-14-75	*64
					7- 7-75	*58
					8- 8-75	*36
					9-15-75	*59
Gila River basin						
Mangas Creek	Gila River	Lat 32°50'48", long 108°30'74", in NW¼NE¼ sec.8, T.17 S., R.16 W., Grant County, 0.4 mile northwest of Mangas Springs.	-	1972-74	11-19-74	2.6
					1- 8-75	2.9
					3- 5-75	2.5
					5-16-75	2.4
					7- 2-75	1.8
					9-18-75	3.7

a Estimated.

b Operated as a crest-stage station.

f Operated as a continuous record station.

\* Base flow.

† Peak discharge.

A seepage or low-flow investigation along a watercourse involves discharge measurements or observations of no flow at selected sites in a given reach of the channel, plus measurements of inflow and diversions, field commentary relative to observations, water samples and temperatures, and any other relevant data. Measuring sites are described to the extent that they may be used in subsequent investigations. Sometimes temporary recording installations are used to supplement records at regular gaging stations in the study of flow trends.

Field work proceeds from the most upstream measuring site. Hydrographers may alternate measurements, or the main reach may be subdivided and hydrographers assigned to each subreach, with overlap measurements to be made at joining points (These would be listed together, the discharge above the line representing the last measurement of the hydrographer working the upper reach).

Indicated gains or losses may sometimes appear incompatible because of diurnal or other flow variations, or because of small inaccuracies in open-channel measurements. Trends in a given reach may vary with the seasons, or because of regulation. Successive investigations can serve to delineate a sustained trend, or a progressive change in trend.

## RIO GRANDE BASIN

## Cerro Canal Seepage Investigation

REACH.--On Cerro Canal from gaging station "at Costilla" (see sta 08258000) to gaging station "at State Line near Jaroso" (see sta 08259600), a distance of about 4.5 miles (7.2 km) of unlined canal. Water used is diverted from left bank of Costilla Creek for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado below the gaging station "Costilla Creek near Costilla" (see sta 08255500).

PREVIOUS INVESTIGATIONS.--None known.

DATE.--Sept. 3, 1975 (MDT, 0000-2400 hours time increments).

WEATHER.--There had been no precipitation recorded in the area since Aug. 28. Temperatures were seasonal. During the late afternoon of Sept. 3 thunderstorms developed in the area and precipitation was noted at the last site. However the amount was insufficient to cause any runoff during the investigation.

REMARKS.--Independent discharge measurements were made at each site by two hydrographers; the results were averaged and listed in the tabulation below. Individual measurements were rated as good (within 5%) to fair (within 8%). This accuracy should be taken into consideration when evaluating the indicated gains or losses.

Stream	Location	Time	Water Temp °C	Discharge, in ft <sup>3</sup> /S		
				Main Stream	Trib. or diver.	Indic. gain or loss
Cerro Canal	Lat 36°57'56", long 105°31'07", at regular gage (sta 08258000) 1400 ft (430 m) downstream from diversion dam	0915	13.0	40.3	-	-
Cerritos ditch No. 1	Lat 36°57'52", long 105°31'15", on left bank 10 ft (3 m) below head	1025	13.8	-	-3.06	-
Cerritos ditch No. 2	Lat 36°57'29", long 105°31'45", on left bank 150 ft (46 m) below head	1235	16.0	-	-5.51	-
Vigil diversion	Lat 36°57'30", long 105°31'47", on left bank at road crossing	1105	-	-	0	-
DeHerrera diversion	Lat 36°57'30", long 105°31'47", on left bank at road crossing	1110	-	-	0	-
Return flow from Cerritos ditch No. 1	Lat 36°57'40", long 105°32'03", on right bank at entrance to Cerro Canal	1115	-	-	+0.05	-
Association ditch	Lat 36°57'40", long 105°32'03", 30 ft (9 m) below head	1205	16.2	-	-15.3	-
Cerro Canal	Lat 36°57'41", long 105°32'05", at regular gage (sta 08258600) 220 ft (67 m) downstream from Association ditch	1405	17.5	18.0	-	-3.43
Return flow from Cerritos ditch No. 1	Lat 36°57'47", long 105°32'13", on right bank at entrance to Cerro Canal	1340	-	-	+0.04	-
Cerro Canal	Lat 36°58'45", long 105°32'53", at bend	1445	17.2	17.0	-	-1.04
N.Mex branch Cerro Canal	Lat 36°59'37", long 105°34'28", at regular gage (sta 08259500) 45 ft (14 m) downstream from head	1520	-	-	0	-
Cerro Canal	Lat 36°59'41", long 105°34'36", at regular gage (sta 08259600) 780 ft (240 m) downstream from head of N. Mex branch Cerro Canal	1600	16.0	17.0	-	0



## Rio Penasco Seepage Investigation

REACH.--On Rio Penasco from New Mexico State Highway 24 bridge near Dunken, N. Mex. to the diversion structure for the Hope Community Ditch, near Hope, N. Mex., a distance of about 24.5 river miles (39.4 km). The Rio Penasco runs eastward from the Sacramento Mountains to the Pecos River. The gradient is fairly steep throughout the length of the stream.

In the reach of this investigation the stream channel is fairly well incised into the grassy foothills east of the Sacramento Mountains. There is no withdrawal, either surface or subsurface for irrigation in this reach. The gradient is steep (40<sup>+</sup> ft per mi) and the streambed is predominately large gravel and cobbles overlying limestone outcrops. This reach of the streambed has historically been known to be a losing reach and is normally dry.

Heavy rains throughout the area during September and October supplied sufficient moisture that subsequently there had been continuous flow through the reach.

U. S. Geological Survey topographical maps were used for land locations.

PREVIOUS INVESTIGATIONS.--In conjunction with the Hope Irrigation Project measurements were made by the U. S. Bureau of Reclamation in 1926-27 through part of the same reach.

DATE.--December 23, 1974 (Mountain Standard Time, 0000 - 2400 hours, time increments).

WEATHER.--During the two weeks preceding this investigation there had been no precipitation; the temperature had been average or above with moderate winds. On December 23 there were moderately high gusty winds, 20-40 mile per hour, it was dry and the maximum daytime temperatures were in the low sixties, the minimums were in the low forties and high thirties.

REMARKS.--This seepage investigation was made to determine the areas of greatest loss in the reach between the New Mexico Highway 24 bridge near Dunken, N. Mex. and the Hope Community Ditch diversion structure. The investigation was a cooperative effort between personnel of the New Mexico State Engineer's Office, members of the Hope Community Ditch Association, and the U. S. Geological Survey, WRD.

There was no tributary or spring inflow in the reach covered by this investigation. This series of discharge measurements indicate that there are losses in flow through the entire reach.

Location	Distance between sites in miles	Time	Measured Discharge in cfs	Indicated Loss in cfs
NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.35, T.16 S., R.17 E., at New Mexico Hwy. 24 bridge near Dunken, N. Mex.	0	0930	40.9	-
SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.1, T.17 S., R.17 E., at Penasco River ranch bridge	1.5	1030	36.6	4.3
NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.7, T.17 S., R.18 E., 100 ft downstream from ford	2.0	1130	35.7	0.9
SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.14, T.17 S., R.18 E., downstream from water gap in fence	4.8	1320	30.8	4.9
SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.8, T.17 S., R.19 E., downstream from old concrete bridge	<u>2.5</u> -	<u>1410</u> 0930	<u>27.1</u> 28.2	<u>3.7</u> -
NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.12, T.17 S., R.19 E., at Y-O Crossing	6.3	1100	16.1	12.1
NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.19, T.17 S., R.20 E., at mouth Bluewater Canyon	2.7	1200	10.2	5.9
NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.21, T.17 S., R.20 E., at Hope Retard Dam	2.0	1315	5.4	4.8
SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.14, T.17 S., R.20 E., at head of Hope Community Ditch diversion	2.8	1445	5.0	0.4



## SECTION 2. WATER QUALITY RECORDS



07199000 CANADIAN RIVER NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°47'14", long 104°27'42", Colfax County, in Maxwell Grant, at gaging station on highway bridge on U.S. Highways 64 and 85, 3.1 mi (5.0 km) north of Hebron, 5.0 mi (8.0 km) upstream from Chicorica Creek, and 8.0 mi (12.9 km) south of Raton, and at mile 888.1 (1,429.0 km).

DRAINAGE AREA.--229 mi<sup>2</sup> (593 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: February 1966 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT. 23...	0900	.08	10	10	240	110	270	5.7	269	0	1400	19
NOV. 14...	0935	1.9	8.5	--	91	35	98	2.9	249	0	350	11
DEC. 02...	1320	3.9	9.0	--	87	31	89	2.8	246	0	300	9.9
JAN. 03...	1200	.51	9.5	--	92	33	100	2.4	171	0	400	12
FEB. 22...	1620	1.9	8.8	--	94	34	94	2.7	244	0	360	12
MAR. 11...	1440	.40	7.0	--	150	69	160	3.0	251	0	740	15
MAY 11...	1540	.17	7.9	--	180	90	200	3.8	266	--	960	18
SEP. 06...	1545	.08	10	--	200	110	240	5.0	271	--	1200	20
SEP. 23...	1345	.01	7.3	--	300	150	380	7.0	255	0	1800	25

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIT- E (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00960)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 23...	.2	.03	.00	2290	2190	1100	880	3.6	2620	7.9	10.0	70
NOV. 14...	.3	.75	--	--	723	370	170	2.2	1070	7.9	2.0	--
DEC. 02...	.3	.91	--	--	654	350	150	2.1	991	8.0	.0	--
JAN. 03...	.3	1.0	--	--	738	370	230	2.3	1120	7.8	.0	--
FEB. 22...	.3	1.2	--	--	731	370	170	2.1	1080	8.0	.0	--
MAR. 11...	.2	.15	--	--	1270	660	450	2.7	1740	8.0	3.0	--
MAY 11...	.3	.03	--	--	1590	820	600	3.0	2150	--	11.0	--
SEP. 06...	.3	.02	--	--	1920	950	730	3.4	2431	--	18.0	--
SEP. 23...	.3	.07	--	--	2800	1400	1200	4.5	3470	7.7	16.0	--

07199600 CHICORICA CREEK NEAR YANKEE, N. MEX.

LOCATION.--Lat 36°55'50", long 104°22'24", Colfax County, in Maxwell Grant, at gaging station, 1.0 mi (1.6 km) upstream from East Fork, 1.8 mi (2.9 km) downstream from Lake Alice, 2.8 mi (4.5 km) southwest of Yankee, 4.2 mi (6.8 km) northeast of Raton, 4.1 mi (6.6 km) downstream from Lake Maloya, and at mile 17.4 (28.0 km).

DRAINAGE AREA.--32.5 mi<sup>2</sup> (84.2 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: August 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICARB- ONATE (HCO3) (MG/L) (00440)	CARB- ONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
AUG. 25...	1625	.03	12	27	10	28	2.9	179	0	24
SFP. 16...	1154	.00	--	--	--	--	--	--	--	--
23...	1220	.10	13	30	11	25	1.9	188	0	22

DATE	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	NON- CARB- ONATE HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARB- ONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
AUG. 25...	2.8	.2	.11	196	110	0	1.2	320	7.7	--
SFP. 16...	--	--	--	--	--	--	--	411	8.1	21.0
23...	1.0	.2	.07	197	120	0	1.0	340	8.1	16.5

07201420 UNA DE GATO CREEK BELOW THROTTLE DAM NEAR RATON, N. MEX.

LOCATION.--Lat 36°48'52", long 104°13'57", in SE¼SW¼ sec. 24, T.30 N., R.25 E., Colfax County, at gaging station 1.0 mi (1.6 km) downstream from Throttle Dam and 13 mi (21 km) southeast of Raton.

DRAINAGE AREA.--49.5 mi<sup>2</sup> (128.2 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: August 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	DIS- SOLVED BICARBONATE (HCO3) (MG/L) (00440)	DIS- SOLVED CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
DATE	TIME									
AUG. 26...	1135	1.1	11	54	27	25	4.0	216	0	110
SEP. 23...	1000	.91	12	60	27	25	4.0	167	0	130

DATE	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CARBONATE HARDNESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	
AUG. 26...	3.6	.3	.14	342	250	69	.7	548	7.5	18.0
SEP. 23...	22	.3	.26	364	260	120	.7	590	7.8	9.5

## 07202000 CHICORICA CREEK NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°46'13", long 104°23'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.4, T.29 N., R.24 E., Colfax County, at gaging station at highway bridge near east boundary of Maxwell Grant, 300 ft (91 m) downstream from Una de Gato Creek, 4.4 mi (7.1 km) northeast of Hebron, and 9 mi (14.5 km) south of Raton.

DRAINAGE AREA.--381 mi<sup>2</sup> (987 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: February 1966 to current year.  
Sediment records: October 1949 to September 1950.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- SOLVED (CF5) (000161)	DIS- SOLVED SILICA (S102) (MG/L) (00955)	DIS- SOLVED IRON (FF) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00913)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASS- SUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00445)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.												
23...	0915	1.0	9.8	10	180	110	200	4.9	308	0	960	28
NOV.												
14...	1230	2.4	8.4	--	180	110	220	6.1	314	0	990	40
DEC.												
02...	1100	3.4	11	--	180	110	220	6.7	316	0	960	41
JAN.												
03...	0940	3.7	13	--	160	91	190	5.4	307	0	880	37
22...	1730	1.9	13	--	160	110	260	8.3	297	0	1100	54
FEB.												
11...	1345	2.3	11	--	150	97	230	7.0	268	0	950	46
MAR.												
11...	1500	2.6	7.3	--	150	98	190	4.5	284	--	840	31
APR.												
29...	0845	7.3	10	10	76	39	83	3.0	215	0	260	83
MAY												
06...	1340	1.1	5.3	--	110	65	140	3.8	253	--	590	17
JUNE												
03...	1525	1.5	6.1	--	120	91	200	4.8	214	0	910	26
AUG.												
25...	1530	1.2	10	--	130	77	130	5.8	115	0	750	16
SEP.												
23...	1310	1.8	7.8	--	150	94	170	6.5	285	0	860	32

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED ORPHE- NITE AT (MG/L) (70300)	DIS- SOLVED SODIUM CONSTIT- (MG/L) (70301)	DIS- SOLVED MAG- NESIUM (CA+MG) (MG/L) (00900)	DIS- SOLVED BICAR- BONATE PLUS (MG/L) (00902)	DIS- SOLVED SODIUM RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED CHLO- RIDE (H) (MG/L) (01020)
OCT.												
23...	4	104	100	1890	1650	900	680	2.9	2230	8.1	11.0	140
NOV.												
14...	4	2.6	--	--	1720	900	640	3.2	2300	7.9	5.5	--
DEC.												
02...	4	7.4	--	--	1720	900	640	3.2	2260	7.4	5	--
JAN.												
03...	5	4.4	--	--	1550	770	520	3.0	2130	7.3	6	--
22...	6	6.5	--	--	1490	850	610	3.9	2450	7.1	6	--
FEB.												
11...	7	7.9	--	--	1660	770	550	3.6	2210	7.3	3.0	--
MAR.												
11...	4	2.3	--	--	1470	780	550	3.0	2080	--	7.0	--
APR.												
29...	3	77	15	707	864	350	170	1.9	1000	7.5	1.0	80
MAY												
06...	3	109	--	--	1050	540	330	2.6	1510	--	13.0	--
JUNE												
03...	3	105	--	--	1460	670	500	3.4	1940	8.0	14.0	--
AUG.												
25...	4	108	--	--	1180	640	550	2.2	1680	7.6	24.0	--
SEP.												
23...	4	168	--	--	1490	760	530	3.0	2070	8.1	17.0	--



07203000 VERMEJO RIVER NEAR DAWSON, N. MEX.

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, in Maxwell Grant, at gaging station, 1.3 mi (2.1 km) north of Dawson, 2.3 mi (3.7 km) upstream from Rail Canyon, and at mile 22.5 (36.2 km).

DRAINAGE AREA.--301 mi<sup>2</sup> (780 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: January 1945 to October 1950, March 1964 to current year.  
Sediment records: January 1949 to September 1951.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT. 24...	1320	2.5	8.1	20	52	15	37	2.4	194	0	110	6.4
FEB. 12...	1025	.90	8.4	10	60	16	35	2.0	206	0	100	6.9
MAR. 12...	1145	6.5	--	--	--	--	--	--	--	--	--	--
MAY 07...	1515	11	11	20	45	10	23	1.8	158	--	65	3.1
SEP. 22...	1735	4.1	7.3	10	49	14	33	2.3	188	0	100	4.1

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 24...	.7	.03	.00	325	327	190	31	1.2	527	8.2	14.5	30
FEB. 12...	.7	.35	.01	337	332	220	51	1.0	550	8.2	1.0	20
MAR. 12...	--	--	--	--	--	--	--	--	510	--	2.0	--
MAY 07...	.7	.43	.05	251	240	150	24	.8	388	--	18.0	20
SEP. 22...	.7	.01	.00	303	303	180	26	1.1	479	8.0	18.0	40

07206000 CIMARRON RIVER BELOW EAGLE NEST DAM, N. MEX.

LOCATION.--Lat 36°31'55", long 105°13'43", Colfax County, in Maxwell Grant, at gaging station 300 ft (91 m) downstream from Eagle Nest Dam, 2.5 mi (4.0 km) southeast of Eagle Nest, 6.7 mi (10.8 km) west of Ute Park, and at mile 48.6 (78.2 km).

DRAINAGE AREA.--167 mi<sup>2</sup> (433 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: August 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000611)	DIS- SOLVED SILICA (SI02) (MG/L) (000955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (000915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (000925)	DIS- SOLVED SODIUM (NA) (MG/L) (000930)	DIS- SOLVED POTAS- SIUM (K) (MG/L) (000935)	HICAH- MONATE (HCO3) (MG/L) (000440)	CAR- MONATE (CO3) (MG/L) (000445)	DIS- SOLVED SULFATE (SO4) (MG/L) (000945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (000940)
AUG.											
27...	1145	22	9.3	37	9.3	14	2.4	164	0	14	4.9
SEP.											
22...	1410	2.1	8.6	34	9.1	13	2.6	166	0	17	4.4

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (000950)	DIS- SOLVED NITRIT- PLUS (N) (MG/L) (000631)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UTENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (000900)	NON- CAR- BONATE HARD- NESS (MG/L) (000902)	SODIUM AD- SORP- TION RATIO (000931)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (000095)	PH (UNITS) (000400)	TEMPER- ATURE (DEG C) (000010)	DIS- SOLVED BORON (B) (MG/L) (01020)
AUG.										
27...	.5	.62	175	130	0	.5	300	7.4	17.0	30
SEP.										
27...	.5	.4	177	130	0	.5	304	7.6	9.5	--

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec.21, T.24 N., R.23 E., Colfax County, at gaging station at head of gorge,  
2.0 mi (3.2 km) south of Taylor Springs, 2.3 mi (3.7 km) downstream from Cimarron River, 2.4 mi (3.9 km) upstream from Chico Creek,  
7.1 mi (11.4 km) southeast of Springer, and at mile 850.4 (1,368.3 km).

DRAINAGE AREA.--2,850 mi<sup>2</sup> (7,380 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: June 1966 to June 1975 (discontinued).  
Sediment records: August 1969 to June 1975 (discontinued).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (Mn) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)
OCT. 22...	1145	4.9	7.0	50	--	250	130	250	7.3	216
NOV. 21...	1041	5.7	6.6	10	--	260	150	270	5.1	244
DEC. 17...	1000	5.0	9.4	140	80	340	190	320	4.5	316
JAN. 15...	1145	8.0	7.9	10	--	280	150	280	5.2	284
FEB. 11...	0915	25	6.9	10	--	240	150	270	4.9	261
MAR. 11...	1245	9.1	5.2	10	30	260	140	270	3.9	238
APR. 15...	1145	9.1	4.9	0	--	280	190	320	2.4	229
MAY 06...	1336	5.0	5.0	60	--	320	170	270	4.9	235
JUNE 04...	1544	11	4.3	40	0	270	170	280	6.4	196

DATE	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
OCT. 22...	0	1400	71	.5	.00	.00	.00	.00	.04
NOV. 21...	0	1500	66	.4	.01	.00	.08	.01	.06
DEC. 17...	0	1800	42	.5	.19	.00	.29	.19	.03
JAN. 15...	0	1500	51	.4	.03	.00	.03	.03	.03
FEB. 11...	0	1400	57	.4	.18	.00	.18	.18	.03
MAR. 11...	0	1500	59	.5	.01	.00	.01	.01	.00
APR. 15...	0	1800	63	.4	.02	.00	.02	.02	.00
MAY 06...	0	1700	71	.5	.02	.00	.02	.02	.03
JUNE 04...	0	1600	64	.5	.01	.00	.02	.01	.00

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (000005)	TOTAL NITRO- GEN (N) (MG/L) (000000)	TOTAL PHOS- PHORUS (P) (MG/L) (000005)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (000011)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (000000)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (000001)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (000000)	SODIUM AD- SORP- TION RATIO (000002)	SODIUM AD- SORP- TION RATIO (000001)
OCT. 22...	.25	.29	.03	.04	2510	2220	1200	980	3.2
NOV. 21...	.19	.33	.07	.01	2640	2380	1300	1100	3.3
DEC. 17...	.22	.34	.04	.04	3270	2900	1600	1300	3.4
JAN. 15...	.77	.83	.01	.01	2810	2420	1300	1100	3.4
FEB. 11...	.37	.58	.06	.06	2490	2260	1200	1000	3.4
MAR. 11...	.38	.39	.02	.02	2800	2360	1200	1000	3.4
APR. 15...	.23	.25	.04	.01	3030	2770	1500	1300	3.6
MAY 06...	.28	.33	.02	.00	3060	2660	1500	1300	3.0
JUNE 04...	.62	.64	.02	.01	2950	2490	1400	1200	3.3

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000005)	PH (UNITS) (000000)	AIR TEMPER- ATURE (DEG C) (000029)	TEMPER- ATURE (DEG C) (000010)	TUR- BID- ITY (JTU) (000070)	DIS- SOLVED OXYGEN (MG/L) (000300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (000340)	TOTAL ORGANIC CARBON (C) (MG/L) (000000)	DIS- SOLVED BORON (B) (MG/L) (000020)
OCT. 22...	2860	8.4	19.0	12.0	10	9.0	13	4.7	400
NOV. 21...	2820	8.2	17.5	5.5	9	10.8	18	4.5	170
DEC. 17...	3490	8.2	14.5	.0	7	11.7	9	4.0	200
JAN. 15...	3060	7.6	2.5	.0	1	7.5	9	5.4	120
FEB. 11...	2775	8.6	4.0	2.0	50	11.4	13	5.6	120
MAR. 11...	3090	8.3	10.0	7.5	7	9.6	11	3.9	140
APR. 15...	3260	8.2	18.0	13.5	13	9.2	16	3.8	150
MAY 06...	3210	8.2	17.5	10.0	3	9.0	21	9.7	210
JUNE 04...	3176	8.1	32.0	14.0	17	7.3	20	8.7	190

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COBALT (CO) (UG/L) (01037)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL ZINC (ZN) (UG/L) (01092)
SEP. 24...	1150	<10	0	<50	10	80	40

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
DEC. 17...	1000	1	1	200	<10	0	0	<10	50	2	20	2
MAR. 11...	1245	0	0	140	40	0	35	10	<50	0	20	1
JUNE 04...	1544	1	1	190	<10	0	0	0	<50	0	10	5

	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71990)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 17...	610	140	<100	1	80	80	<.1	<.1	2	2	20	0
MAR. 11...	510	10	<100	1	70	30	.4	.1	3	2	40	0
JUNE 04...	560	40	<100	1	90	0	.1	.0	2	2	10	0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FFCAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIFS PER 100 ML) (31679)
OCT. 22...	1145	15	23
NOV. 21...	1041	4	8
DEC. 17...	1000	0	1
JAN. 15...	1145	1	3
FEB. 11...	0915	0	26
MAR. 11...	1245	0	3
APR. 15...	1145	1	33
MAY 06...	1336	14	14
JUNE 04...	1544	0	24

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT. 22...	1145	12.0	4.9	59	.78	83
NOV. 21...	1041	5.5	5.7	44	.68	94
DEC. 17...	1000	.0	5.0	61	.82	47
JAN. 15...	1145	.0	8.0	19	.41	33
FEB. 11...	0915	2.0	25	176	12	92
MAR. 11...	1245	7.5	9.1	30	.74	92
APR. 15...	1145	13.5	9.1	33	.81	78
MAY 06...	1336	10.0	5.0	35	.47	45
JUNE 04...	1544	19.0	11	12	.36	98

07221500 CANADIAN RIVER NEAR SANCHEZ, N. MEX.

LOCATION.--Lat 35°39'08", long 104°22'39", in SW 1/4 sec.34, T.17 N., R.24 E., San Miguel County, at gaging station, 1,000 ft (300 m) downstream from bridge on State Highway 65, 0.9 mi (1.4 km) upstream from Lagartija Creek, 3.2 mi (5.1 km) northeast of Sanchez, 10 mi (16 km) downstream from Mora River, 25 mi (40 km) southwest of Mosquero, and at mile 777.0 (1,250.2 km).

DRAINAGE AREA.--6,015 mi<sup>2</sup> (15,579 km<sup>2</sup>), of which 303 mi<sup>2</sup> (785 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.  
Sediment records: August 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FF) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00449)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
JULY 23...	1100	94	12	0	--	60	14	18	2.4	193	0	67
AUG. 27...	0935	6.7	8.4	50	0	50	18	29	3.3	178	0	95
SEP. 18...	1500	--	--	--	--	--	--	--	--	--	--	--
23...	1030	94	9.3	10	--	86	32	57	3.7	184	0	290
25...	1210	65	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED HARD- NESS (CA+MG) (MG/L) (00900)
JULY 23...	5.9	.5	.47	.47	.04	1.9	2.4	.53	.03	278	278	210
AUG. 27...	9.7	.4	.06	.02	.00	.52	.58	.13	.00	307	302	200
SEP. 18...	--	--	.21	--	.00	1.4	1.6	.21	--	--	--	--
23...	12	.4	.08	.08	.04	.83	.95	.15	.01	500	582	350
25...	--	--	.06	--	.00	.77	.91	.09	--	--	--	--

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00641)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00649)	DIS- SOLVED BORON (B) (UG/L) (01020)
JULY 23...	49	.5	430	8.2	30.0	24.5	320	7.1	44	10	--	40
AUG. 27...	53	.9	475	7.8	27.5	22.0	80	8.4	44	3.6	1.0	50
SEP. 18...	--	--	608	--	--	24.5	280	--	--	--	--	--
23...	200	1.3	860	9.4	29.0	14.0	95	8.0	12	2.4	1.4	80
25...	--	--	696	--	--	18.0	60	--	--	--	--	--

07221500 CANADIAN RIVER NEAR SANCHEZ, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED MOLYB- (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
AUG. 27...	0935	2	2	50	<10	0	20	20	160	0	10	2

DATE	TIME	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELF- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
AUG. 27...	2700	50	<100	0	0	120	0	.0	.0	0	0	10	0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOC- CI (COL- ONIES PER 100 ML) (31679)
JULY 23...	1100	520	320
AUG. 27...	0935	20	100
SEP. 23...	1030	120	190

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT (MG/L) (00155)	SUS- PENDED SEDIM- ENT (MG/L) (00155)	SUS- PENDED SEDIM- ENT (MG/L) (00155)
AUG. 27...	0935	22.0	6.7	106	1.9	97	
SEP. 23...	1030	14.0	94	155	30	82	

07223300 CONCHAS CANAL BELOW CONCHAS DAM, N. MEX.

LOCATION.--Lat 35°22'35", long 104°10'03", San Miguel County, in Pablo Montoya Grant, at gaging station, at upstream end of tunnel transition section, 1.0 mi (1.6 km) downstream from headgates in Conchas Dam, and 21.5 mi (34.6 km) north of Newkirk.

PERIOD OF RECORD.--Chemical analyses: April 1964 to current year.

REMARKS.--No flow during most of each winter.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHANGE (CFS) (00061)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
OCT.											
17...	1120	.30	4.9	10	68	29	61	4.7	172	0	240
FEB.											
20...	1055	.49	5.5	--	73	31	59	5.4	178	0	260
MAY											
15...	1215	287	6.3	--	77	33	64	4.7	185	--	290
JUNE											
28...	1430	141	7.0	--	74	35	67	4.9	177	--	290
JULY											
23...	0840	.13	--	--	--	--	--	--	--	--	--
AUG.											
27...	0800	314	--	--	--	--	--	--	--	--	--
SEP.											
18...	1225	81	--	--	--	--	--	--	--	--	--
23...	0830	114	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)
OCT.											
17...	16	.4	--	--	--	.00	--	--	--	--	.00
FEB.											
20...	17	.3	--	--	--	.01	--	--	--	--	--
MAY											
15...	18	.4	--	--	--	.00	--	--	--	--	--
JUNE											
28...	24	.5	--	--	--	.12	--	--	--	--	--
JULY											
23...	--	--	.26	.01	.27	.27	.04	2.9	3.2	.04	.00
AUG.											
27...	--	--	--	--	.01	.01	.00	.43	.44	.05	.01
SEP.											
18...	--	--	--	--	.00	--	.00	.76	.76	.04	--
23...	--	--	--	--	.02	.02	.03	.50	.55	.02	.01

DATE	DIS- SOLVED SOLIDS (MFSI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT.											
17...	543	509	290	150	1.6	811	8.1	--	15.0	--	70
FEB.											
20...	--	539	310	160	1.5	848	8.1	--	5.5	--	--
MAY											
15...	--	535	330	180	1.5	879	--	--	15.5	--	--
JUNE											
28...	--	590	330	180	1.6	884	--	--	29.0	--	--
JULY											
23...	--	--	--	--	--	813	--	25.0	23.0	19	--
AUG.											
27...	--	--	--	--	--	880	8.2	21.5	22.0	5	--
SEP.											
18...	--	--	--	--	--	855	--	--	23.0	1	--
23...	--	--	--	--	--	870	8.7	14.0	18.5	4	--



## 07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ sec.21, T.13 N., R.33 E., Quay County, in Ute Reservoir impounded by Ute Dam on the Canadian River which is 2.5 mi (4.0 km) southwest of Logan, 3.5 mi (5.6 km) downstream from Ute Creek, and at mile 673.1 (1,083.0 km).

DRAINAGE AREA.--11,140 mi<sup>2</sup> (28,853 km<sup>2</sup>), of which 1,110 mi<sup>2</sup> (2,875 km<sup>2</sup>) is noncontributing, and 7,400 mi<sup>2</sup> (19,000 km<sup>2</sup>) is controlled by Conchas Dam (total area downstream from Conchas Dam is 3,731 mi<sup>2</sup> (9663 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: March 1963 to current year.  
Sediment records: March 1975 to current year.

REMARKS.--Samples for chemical analyses are collected semi-annually at surface, and/or bottom levels of selected sites.

Site locations are as follows: Site A, 0.4 mi (0.6 km) upstream from Ute Dam; Site B, 0.6 mi (1.0 km) upstream from Ute Dam; Site C, 1.9 mi (3.1 km) upstream from Ute Dam; Site D, on the Ute Creek arm, 5.7 mi (9.2 km) upstream from Ute Dam; Site E, 3.8 mi (6.1 km) upstream from Ute Dam at confluence of Ute Creek and Canadian River arms; Site F, on the Canadian River arm, 9.1 mi (14.6 km) upstream from Ute Dam; Site G, on the Ute Creek arm, 6.9 mi (11.1 km) upstream from Ute Dam; Site H, on the Canadian River arm, 12.8 mi (20.6 km) upstream from Ute Dam; Site I, on the Canadian River arm, 5.0 mi (8.0 km) upstream from Ute Dam.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## 07226510 UTE RESERVOIR AT SITE F (LAT 35°20'21", LONG 103°33'07")

DATE	TIME	DEPTH (FT) (00003)	DEPTH OF WATER- VOLUME (FT) (72025)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)
MAR. 25...	1100	17	22	.3	10	41	28	150	5.3
AUG. 26...	1030	21	26	3.6	10	30	22	140	5.3

DATE	TIME	BICARB- ONATE (HCO3) (MG/L) (00440)	CARB- ONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)
MAR. 25...	270	5	250	45	1.0	.01	.03	688	659	
AUG. 26...	243	0	220	39	.8	.02	.02	591	581	

DATE	TIME	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARB- ONATE HARD- NESS (MG/L) (00902)	SODIUM AND SULF- FATE RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHO) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	WATER TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	DIS- SOLVED HUMIN (H) (MG/L) (01020)
MAR. 25...	220	0	4.4	1100	8.7	13.0	9.5	9.7	180	
AUG. 26...	170	0	4.7	850	7.7	27.0	23.0	3.7	230	

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIF PER 100 ML) (31679)
MAR. 25...	1100	0	3
AUG. 26...	1030	0	3

## ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07226510 UTE RESERVOIR AT SITE F--Continued

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	SUS- PENDED SEDI- MENT (MG/L) (80154)
MAR. 25...	1100	9.0	19

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07226515 UTE RESERVOIR AT SITE I (LAT 35°21'03", LONG 103°31'00")

DATE	TIME	DEPTH (FT) (00003)	DEPTH OF REFR- VIR (FT) (77025)	DIS- SOLVED SILICA (MG/L) (00095)	DIS- SOLVED THOM (FE) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)
MAR. 24...	1130	32	37	1.2	10	75	24	140	5.7
AUG. 26...	1130	31	36	2.7	10	31	23	140	5.5

DATE	TIME	BICAR- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	DIS- SOLVED NITRIT- E (MG/L) (00631)	DIS- SOLVED NITRAT- E (MG/L) (00671)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (00301)
MAR. 24...	250	4	229	40	1.0	.01	.01	.01	610	594
AUG. 26...	243	0	240	41	.9	.03	.02	.02	611	604

DATE	TIME	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- CYCIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	DIS- SOLVED BORON (B) (MG/L) (01020)
MAR. 24...	190	0	4.5	490	8.7	18.0	8.0	9.9	130	
AUG. 26...	170	0	4.6	870	8.1	27.0	23.0	5.5	250	

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREPT- TOCOCCI (COL- ONIES PER 100 ML) (31679)
MAR. 24...	1130	0	3
AUG. 26...	1130	6	9

## 07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## 07226560 UTE RESERVOIR AT SITE B (LAT 35°20'32", LONG 103°27'16")

				DEPTH OF RESEV- VOIR (FT) (72025)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)
DATE	TIME	DEPTH (FT) (000003)									
MAR.											
25...	0930	5.0	52	1.8	10	0	36	23	140	5.7	
25...	1015	47	52	1.6	30	0	35	23	140	5.9	
AUG.											
26...	0830	5.0	52	1.7	10	0	31	25	140	6.0	
26...	0930	47	52	2.2	30	120	34	22	140	5.7	
DATE		BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
MAR.											
25...	255	1	210	40	.9	.01	.00	.00	.02	.01	.03
25...	256	2	220	40	1.0	.00	.00	.00	.01	.00	.03
AUG.											
26...	244	0	230	41	.8	--	--	--	.02	.02	.00
26...	247	0	220	39	.8	--	--	--	.02	.02	.00
DATE		TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOP- HOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)
MAR.											
25...	.28	.33	.01	.01	612	585	180	0	4.5	950	
25...	.28	.32	.01	.01	612	595	180	0	4.5	950	
AUG.											
26...	.76	.78	.04	.01	622	596	180	0	4.5	850	
26...	.41	.43	.05	.00	595	586	180	0	4.6	850	
DATE	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00689)	DIS- SOLVED BORON (B) (UG/L) (01020)	
MAR.											
25...	8.7	9.0	8.5	4	10.0	14	11	--	--	240	
25...	8.6	9.0	8.5	4	9.9	13	4.0	--	--	220	
AUG.											
26...	7.5	26.0	24.0	3	7.1	15	--	8.2	.3	220	
26...	8.2	27.0	28.0	5	.2	7	--	4.2	.0	210	

## ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.--Continued

07226560 UTE RESERVOIR AT SITE B--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHROM- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)
MAR.								
25...	0930	3	100	240	0	0	0	10
25...	1015	4	400	220	0	0	0	30
AUG.								
26...	0830	5	200	220	18	0	3	10
26...	0930	5	200	210	1	0	1	30

DATE	TOTAL LEAD (Pb) (UG/L) (01051)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (Hg) (UG/L) (71908)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR.							
25...	<100	0	0	.0	1	0	20
25...	<100	0	0	.0	1	0	10
AUG.							
26...	<100	3	0	.0	1	0	0
26...	<100	0	120	.0	0	0	0

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL RAD- IUM RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDE GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS (PC/L) (80050)	SUS- PENDE GROSS BETA AS (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
MAR.											
25...	1015	<1	12	<.4	3.3	1.3	2.7	1.3	.12	9.1	--
AUG.											
26...	0930	2	28	<.4	11	1.2	8.7	1.2	.11	--	8.5

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	SIREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
MAR.				
25...	0930	440	0	1
25...	1015	--	0	1
AUG.				
26...	0830	1300	0	0
26...	0930	--	10	9

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.---Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07226560 UTE RESERVOIR AT SITE B---Continued

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Mar 25	0930	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Polyblepharidaceae			
		<u>Chlamydomonas</u>		4	
		Chlorococcales			
		Oocystaceae			
		<u>Ankistrodesmus</u>		12	
		<u>Oocystis</u>		16	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		<u>Synedra</u>		4	
Aug 26	0830	CYANOPHYTA			Sediment Sampler
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		<u>Anabaena</u>		64	
		TOTAL	440		
		CHLOROPHYTA			
		Chlorophyceae			
		Chlorococcales			
		Oocystaceae			
		<u>Ankistrodesmus</u>	70	6	
		<u>Glosteriopsis</u>	18	1	
		<u>Oocystis</u>	36	3	
		<u>Treuxaria</u>	36	3	
Scenedesmaceae					
<u>Scenedesmus</u>	120	9			
Volvocales					
Phacotaceae					
<u>Phacotus</u>	36	3			
Aug 26	0830	CHRYSTOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>	18	1	
		Pennales			
		Naviculaceae			
		Stauropleis	36	3	
		Nitzschaceae			
		<u>Nitzschia</u>	410	30	
		Chrysophyceae			
		Chrysomonadales			
		Ochromonadaceae			
		<u>Dinobryon</u>	360	26	
Aug 26	0830	CYANOPHYTA			Sediment Sampler
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>	140	10	
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Spirulina</u>	18	1	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		<u>Trachelomonas</u>	36	3	
		Aug 26	0830	PYRRHOPHYTA	
Dinophyceae					
Gymnodiniales					
Gymnodiniaceae					
<u>Gymnodinium</u>	18			1	
TOTAL	1,300				

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.--Continued

## PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07226560 UTE RESERVOIR AT SITE B--Continued

DATE	TIME	ALDRIN		CHLOR-DANE		DIB		DDE		DDT	
		TOTAL ALDRIN (UG/L)	MA-ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	MA-CHLOR-DANE (UG/KG)	TOTAL DIB (UG/L)	MA-DIB (UG/KG)	TOTAL DDE (UG/L)	MA-DDE (UG/KG)	TOTAL DDT (UG/L)	MA-DDT (UG/KG)
		(39338)	(39333)	(39358)	(39351)	(39358)	(39363)	(39365)	(39368)	(39378)	(39373)
MAR. 25...	1915	--	.0	--	0	--	.0	--	.0	--	.0
AUG. 26...	0930	.00	--	.0	--	.00	--	.00	--	.00	--

DATE	DI-ELDRIN		ENDRIN		HEPTA-CHLOR		HEPTA-CHLOR EPOXIDE		LINDANE	
	TOTAL DI-ELDRIN (UG/L)	MA-DI-ELDRIN (UG/KG)	TOTAL ENDRIN (UG/L)	MA-ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	MA-HEPTA-CHLOR (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	MA-HEPTA-CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	MA-LINDANE (UG/KG)
	(39570)	(39380)	(39383)	(39390)	(39393)	(39410)	(39413)	(39420)	(39423)	(39340)
MAR. 25...	--	--	.0	--	.0	--	.0	--	.0	--
AUG. 26...	.00	.00	--	.00	--	.00	--	.00	--	.00

DATE	TOTAL MALATHION		TOTAL PARATHION		PCB		TOX-APHERE		TOTAL 2,4-D		TOTAL 2,4,5-T		TOTAL SILVEX	
	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)
	(39530)	(39600)	(39540)	(39516)	(39519)	(39400)	(39403)	(39730)	(39740)	(39760)				
MAR. 25...	--	--	--	--	0	--	0	--	--	--	--	--	--	--
AUG. 26...	.00	.00	.00	.0	--	0	--	.00	.00	.00				

## INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C)		SUSPENDED SEDIMENT (MG/L)	
		(00010)	(R0154)		
MAR. 25...	0930	8.5	29		

07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.

LOCATION.—Lat 35°20'28", long 103°23'40", in SW 1/4 sec. 24, T.13 N., R.33 E., Quay County, at gaging station 0.3 mi (0.5 km) upstream from bridge on State Highway 39, 1.9 mi (3.1 km) southeast of Logan, and at mile 2.3 (3.7 km).

DRAINAGE AREA.—786 mi<sup>2</sup> (2,036 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: July 1959 to current year.

Water temperatures: July 1959 to January 1966.

Sediment records: July 1970 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT. 15...	1615	52	8.5	10	49	19	120	4.5	208	0	240	33
NOV. 13...	0935	6.9	9.0	--	75	45	270	4.6	274	0	550	110
DEC. 12...	1015	4.4	8.0	--	81	56	340	3.8	290	0	700	160
JAN. 20...	1515	3.1	8.3	--	77	60	370	4.3	263	0	790	170
FEB. 19...	1040	6.4	7.8	--	88	63	360	3.5	315	0	810	140
MAR. 20...	0940	1.5	6.8	--	72	52	400	4.8	268	--	720	230
APR. 14...	0945	24	7.3	30	29	16	210	2.9	212	--	330	64
MAY 12...	0950	26	7.6	--	55	32	310	6.6	203	--	600	90
JULY 24...	0915	123	9.4	--	23	5.3	96	3.0	202	0	100	14
SEP. 15...	0945	11	8.8	--	22	8.2	160	3.3	216	0	210	39

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 15...	.4	.35	.00	599	579	200	29	3.7	928	8.1	17.0	160
NOV. 13...	.8	.22	--	--	1208	370	150	6.1	1840	8.2	8.0	--
DEC. 12...	.8	.37	--	--	1490	430	190	7.1	2230	6.1	2.0	--
JAN. 20...	1.0	.35	--	--	1610	440	220	7.7	2360	8.0	11.0	--
FEB. 19...	1.0	.51	--	--	1630	480	220	7.2	2360	8.1	4.0	--
MAR. 20...	.8	.01	--	--	1620	390	170	6.8	2520	--	10.5	--
APR. 14...	.5	.76	.03	789	768	140	0	7.8	1250	--	8.0	250
MAY 12...	.6	.32	--	--	1200	270	100	8.2	1860	--	15.5	--
JULY 24...	.4	.78	--	--	354	79	0	4.7	571	7.7	20.0	--
SEP. 15...	.6	.69	--	--	561	89	0	7.4	916	8.0	17.0	--

07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DIMENT (MG/L) (00154)	SUS- PENDE DIMENT (T/DAY) (00155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)
OCT.											
15...	1615	17.0	52	1680	236	59	71	81	85	89	100
NOV.											
13...	0935	8.0	6.9	130	2.4	--	--	--	--	--	--
DEC.											
12...	1015	2.0	4.4	99	1.2	--	--	--	--	--	--
FEB.											
19...	1040	4.0	6.4	179	3.1	--	--	--	--	--	--
MAR.											
20...	0940	10.5	1.5	29	.12	--	--	--	--	--	--
APR.											
14...	0945	8.0	24	4700	305	--	--	--	--	--	--
MAY											
12...	0050	15.5	26	8440	628	--	--	--	--	--	--
JULY											
24...	0915	20.0	123	12200	4050	59	69	86	91	95	100
SEP.											
10...	1455	31.0	102	59	16	--	--	--	--	--	--
15...	0945	17.0	11	13700	407	84	90	100	--	--	--



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

LOCATION.--Lat 35°23'35", long 103°02'30", in SW¼ sec.32, T.14 N., R.37 E., Quay County, 0.1 mi (0.2 km) upstream from New Mexico-Texas State line, 5.5 mi (8.8 km) downstream from Rana Canyon, and 14.7 mi (23.7 km) north of Glenrio.

DRAINAGE AREA.--12,616 mi<sup>2</sup> (32,675 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: July 1969 to June 1973, November 1974 to current year.  
Sediment records: February 1970 to June 1973, November 1974 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHANGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (K) (MG/L) (00440)
NOV.										
08...	1515	22	10	10	--	100	46	940	5.5	294
DEC.										
05...	1235	15	11	20	--	120	65	1400	6.3	315
JAN.										
16...	1310	15	11	10	--	130	75	1500	8.5	327
FEB.										
25...	1356	17	9.3	10	--	120	64	1300	7.4	311
MAR.										
24...	1235	6.3	12	10	200	130	80	1600	9.9	307
APR.										
24...	1351	5.6	10	10	--	110	74	1500	9.9	208
MAY										
20...	1310	5.0	9.1	30	--	110	84	1400	12	256
JUNE										
24...	1700	50	5.8	40	0	17	6.0	110	3.8	130
JULY										
22...	1330	321	7.1	10	--	28	5.8	230	3.7	171

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
NOV.										
08...	0	410	1300	.6	.44	.01	.45	.45	.03	.48
DEC.										
05...	0	500	2000	.6	.34	.00	.38	.34	.05	.17
JAN.										
16...	--	480	2300	.5	.34	.01	.36	.35	.02	.37
FEB.										
25...	0	440	2000	.5	.36	.00	.38	.36	.03	.26
MAR.										
24...	0	450	2300	.8	.38	.00	.40	.38	.02	.12
APR.										
24...	0	410	2200	.6	.12	.01	.14	.13	.00	.15
MAY										
20...	0	610	1900	.7	.03	.01	.04	.04	.01	.45
JUNE										
24...	0	46	130	.3	.15	.02	.37	.37	.08	6.3
JULY										
22...	0	150	220	.5	--	--	.53	.50	.07	4.2

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOP- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED ORGANI- C RESI- DUE AT 100 C (MG/L) (00300)	DIS- SOLVED SUM OF CONSTIT- UENTS (MG/L) (00301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHUS) (00095)
NOV.									
08...	.96	.27	.02	2980	2960	440	200	20	5234
DEC.									
05...	.60	.05	.02	4120	4250	570	310	26	7200
JAN.									
16...	.75	.03	.01	4550	4670	630	370	26	7600
FEB.									
25...	.67	.06	.00	3980	4100	560	310	24	6860
MAR.									
24...	.54	.02	.02	4400	4740	650	400	27	8000
APR.									
24...	.29	.02	.02	4660	4450	600	340	27	7400
MAY									
20...	.50	.08	.08	4290	4250	620	410	24	7000
JUNE									
24...	6.4	2.9	.00	360	385	67	0	5.8	670
JULY									
22...	4.8	.03	.00	104	132	94	0	10	1250

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PH (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	DIS- SOLVED BORON (H) (01020)
NOV.									
08...	8.2	14.0	14.5	200	9.0	20	4.3	--	330
DEC.									
05...	8.4	14.5	11.5	40	10.0	48	3.7	--	350
JAN.									
16...	8.4	9.5	5.5	6	11.5	55	4.0	--	340
FEB.									
25...	8.4	12.0	12.0	30	9.6	57	3.6	--	320
MAR.									
24...	8.3	16.0	12.0	4	10.4	52	1.4	--	350
APR.									
24...	8.3	20.0	26.0	17	8.7	25	16	--	370
MAY									
20...	8.4	31.0	24.5	39	7.5	46	4.5	--	450
JUNE									
24...	8.0	32.0	27.0	1500	6.1	110	--	--	90
JULY									
22...	8.3	24.0	22.0	22000	6.3	210	102	20	210

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
DEC.												
05...	1235	2	1	350	--	1	--	<10	--	0	--	5
MAR.												
24...	1235	1	1	350	20	0	1	0	<50	0	<10	0
JUNE												
24...	1700	90	4	90	<10	1	120	0	50	0	150	9

DATE	TIME	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC.													
05...	--	20	--	1	--	--	--	--	--	0	0	--	30
MAR.													
24...	290	10	<100	0	230	200	.3	.3	1	1	20	20	
JUNE													
24...	91000	40	100	1	3000	0	.1	.0	1	0	370	0	

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	PERI- PHYTON BIOMASS (G/50 M) (00572)	PERI- PHYTON BIOMASS (G/50 M) (00573)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A (MG/50 M) (32228)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B (MG/50 M) (32226)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
NOV.								
08...	1515	450	--	--	--	--	87	160
DEC.								
05...	1235	660	--	--	--	--	31	19
JAN.								
16...	1310	240	--	--	--	--	9	5
FEB.								
25...	1356	540	--	--	--	--	1	0
MAR.								
24...	1235	--	15	17	1.1	.1	0	0
APR.								
24...	1351	380	14	16	.5	.0	15	36
MAY								
20...	1310	31900	21	23	.3	.0	2	15
JUNE								
24...	1700	1300	--	--	--	--	17000	15000
JULY								
22...	1330	15000	--	--	--	--	26000	7300

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov 08	1515	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		50	
		Pennales			
		Naviculaceae			
		<u>Navicula</u>		38	
		Gomphonemataceae			
		<u>Gomphonema</u>		12	
		TOTAL	460		
Dec 05	1235	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		<u>Navicula</u>		64	
		Nitzschaceae			
		<u>Nitzschia</u>		36	
		TOTAL	660		
Jan 16	1310	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		10	
		Pennales			
		Naviculaceae			
		<u>Navicula</u>		70	
		Nitzschaceae			
		<u>Nitzschia</u>		20	
		TOTAL	240		
Feb 25	1356	CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Tabellariaceae			
		<u>Tabellaria</u>		30	
		Naviculaceae			
		<u>Navicula</u>		7	
		<u>Pinnularia</u>		50	
		Gomphonemataceae			
		<u>Gomphonema</u>		9	
		Nitzschaceae			
		<u>Nitzschia</u>		4	
		TOTAL	540		
Apr 24	1351	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		<u>Amphiprora</u>		5	
		<u>Navicula</u>		45	
		Nitzschaceae			
		<u>Nitzschia</u>		41	
		Surirellaceae			
		<u>Surirella</u>		9	
		TOTAL	380		

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 20	1310	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Oocystaceae			
		Ankistrodesmus		18	
		Oocystis		5	
		Selenastrum		1	
		Treubaria		1	
		Scenedesmaceae			
		Scenedesmus		7	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		7	
		Pennales			
		Naviculaceae			
		Navicula		1	
		Cymbellaceae			
		Epithemia		1	
		Nitzschia			
		Nitzschia		22	
		Surirellaceae			
		Surirella		1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis		16	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		20	
		TOTAL	31,000		
Jun 24	1700	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira		38	
		Pennales			
		Naviculaceae			
		Navicula		62	
		TOTAL	1,300		
Jul 22	1330	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Fragiliariaceae	990	6	
		Synedra			
		Naviculaceae	990	6	
		Navicula			
		Surirellaceae			
		Surirella		<1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Aphanizomenon	13,000	88	
		TOTAL	15,000		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Mar 24	27	17	15	1.1	0.1	1800	Polyethylene strip
Apr 24	31	16	14	0.5	0.0	4700	"
May 20	26	23	21	0.3	0.0	4200	"

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.---Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV. 08...	1515	14.5	22	401	24	95
DEC. 05...	1235	11.5	15	213	8.6	75
JAN. 16...	1310	5.5	15	51	2.1	83
FEB. 25...	1356	12.0	17	114	5.2	91
MAR. 24...	1235	12.0	6.3	29	.49	81
APR. 24...	1351	26.0	5.6	96	1.5	88
MAY 20...	1310	24.5	5.0	73	.99	92
JUNE 24...	1700	27.0	50	5880	794	99
JULY 22...	1330	22.0	321	25700	22300	97

08251500 RIO GRANDE NEAR LOBATOS, COLO.  
(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, at gaging station at highway bridge, 6 mi (10 km) north of Colorado-New Mexico State line, 7 mi (11 km) downstream from Culebra Creek, 10 mi (16 km) east of Lobatos, 14 mi (23 km) east of Antonito, and at mile 1,722.1 (2,770.9 km).

DRAINAGE AREA.--7,700 mi<sup>2</sup> (19,900 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in northern part of San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: September 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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00945)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L) (00440)
MAR.										
20...	0930	389	23	60	40	28	5.5	17	3.6	100
APR.										
23...	1100	470	23	--	--	23	3.9	14	3.1	86
MAY										
27...	1330	1800	19	--	--	15	2.7	10	3.1	55
JUNE										
28...	1200	2070	19	100	0	23	4.5	17	3.2	66
AUG.										
01...	--	717	20	--	--	21	4.2	14	2.9	73
29...	1200	410	22	--	--	22	4.3	13	2.8	78
SEP.										
30...	1345	286	24	20	30	25	4.8	17	3.5	93

DATE	CAN- NONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRIT- PLUS NITRATE (N) (MG/L) (00630)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00605)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
MAR.									
20...	0	40	5.3	.3	.02	.22	.07	186	172
APR.									
23...	0	33	4.4	.2	.00	.49	.19	156	147
MAY									
27...	--	23	2.3	.2	.02	.84	.18	113	102
JUNE									
28...	--	53	4.4	.2	.02	.45	.11	154	156
AUG.									
01...	0	33	3.3	.3	--	--	--	143	135
29...	0	32	2.8	.3	.10	.53	.12	141	138
SEP.									
30...	3	40	4.0	.3	.01	.48	.11	176	168

DATE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00045)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	TOTAL ORGANIC CARBON (C) (MG/L) (00600)
MAR.									
20...	93	11	.8	285	8.2	6.5	5	--	2.8
APR.									
23...	74	3	.7	232	8.3	11.0	15	--	--
MAY									
27...	49	3	.6	150	--	13.0	28	--	--
JUNE									
28...	76	22	.8	250	--	18.0	14	--	7.1
AUG.									
01...	70	10	.7	225	8.2	20.0	16	6.7	--
29...	73	9	.7	225	8.8	18.0	13	10.1	--
SEP.									
30...	42	1	.8	250	8.0	17.5	4	11.8	3.4

## 08251500 RIO GRANDE NEAR LOBATOS, COLO.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL CORAL (CO) (UG/L) (01037)	DIS- SOLVED CORAL (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)
MAR. 20...	0930	2	2	<10	0	25	0	<50	0	<10	0	950
JUNE 28...	1200	7	4	<10	0	0	0	<50	0	10	2	1300
SEP. 30...	1345	3	2	0	0	10	10	<50	1	10	1	490

DATE	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71400)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELF- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR. 20...	60	<100	0	120	40	.1	.1	1	0	40	20
JUNE 28...	100	<100	0	190	0	.0	.0	0	0	50	0
SEP. 30...	20	<100	3	90	30	1.7	1.0	0	0	10	10

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILTI- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS (PC/L) (80050)	SUS- PENDED GROSS BETA AS (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (DIRECT FLUORO- METRIC) (PC/L) (80010)
SEP. 30...	1345	9	2.6	<.4	4.3	.9	3.4	.8	.01	.8

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (32224)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (32226)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
MAR. 20...	0930	--	--	--	--	--	0	3	12
APR. 23...	1100	9600	--	--	--	--	30	15	130
MAY 27...	1130	--	--	--	--	--	320	83	200
MAY 27...	1330	5800	--	--	--	--	--	--	--
JUNE 28...	1200	3300	2.1	2.2	1.1	.6	--	--	--
AUG. 01...	--	9100	16	21	8.8	.8	--	--	--
AUG. 01...	0945	--	--	--	--	--	20	17	17
SEP. 29...	1200	5000	--	--	--	--	10	7	13
SEP. 30...	1345	4800	34	42	59	1.3	0	8	8

## 08255500 COSTILLA CREEK NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, in Sangre de Cristo Grant, at gaging station, 70 ft (21 m) downstream from bridge on State Highway 196, 0.5 mi (0.8 km) upstream from diversion dam, and 1.6 mi (2.6 km) southeast of Costilla, and at mile 15.9 (25.6 km).

DRAINAGE AREA.--195 mi<sup>2</sup> (505 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: August 1966 to November 1974 (discontinued).

Sediment records: July 1973 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00055)	FIS- SOLVED CAL- CIUM (CA) (MG/L) (00015)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00025)	DIS- SOLVED SODIUM (NA) (MG/L) (00030)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00035)	HICAN- BONATE (HCO3) (MG/L) (00040)	DIS- SOLVED SULFATE (SO4) (MG/L) (00045)
NOV. 19...	1525	7.9	15	24	4.4	6.8	1.3	105	7.3
DATE	TIME	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00040)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00050)	DIS- SOLVED NITRATE (N) (MG/L) (00061)	DIS- SOLVED SOLIDS (SUM OF CONS LI- TUENIS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00000)	SODIUM AD- SORP- TION RAATIO (00031)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00005)	TEMPER- ATURE (DEG C) (00010)
NOV. 19...	1.4	.7	.02	113	78	0	.3	186	3.0

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT CHANGE (T/DAY) (00155)	SUS. SED. STEV. DIAM. % FINEH THAN (70331)	SUS. SED. STEV. DIAM. % FINEH THAN (70332)	SUS. SED. STEV. DIAM. % FINEH THAN (70333)	SUS. SED. STEV. DIAM. % FINEH THAN (70334)
NOV. 19...	1525	3.0	7.9	11	.24	33	42	59	100
OCT. 10...	1150	.0	4.5	6	.07	53	67	100	--
JAN. 28...	1135	.0	5.5	4	.06	--	--	--	--
FEB. 21...	1600	.5	8.0	8	.17	86	--	--	--
MAR. 20...	1250	6.0	9.0	8	.19	88	--	--	--
APR. 15...	1230	8.0	11	6	.18	74	--	--	--
JULY 09...	1110	14.0	104	100	28	--	--	--	--
SEP. 23...	0920	--	9.8	5	.13	85	--	--	--



08255500 COSTILLA CREEK NEAR COSTILLA, N. MEX.--Continued

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEED SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDEED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)
NOV. 19...	1525	7.9	11	.24	--	--	--	--	--	--
DEC. 10...	1150	4.5	6	.07	--	--	--	--	--	--
APR. 15...	1230	11	6	.18	42	58	76	95	99	100
SEP. 18...	1440	--	--	--	--	--	--	--	--	--
23...	0920	9.8	5	.13	--	--	--	--	--	--

DATE	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
NOV. 19...	0	1	2	8	15	23	34	61	94	100
DEC. 10...	1	2	9	30	66	86	93	94	100	--
APR. 15...	--	--	--	--	--	--	--	--	--	--
SEP. 18...	5	8	25	57	85	96	100	--	--	--
23...	0	0	3	20	50	82	95	100	--	--

08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.

LOCATION.--Lat 36°41'07", long 105°39'05", S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.28 N., R.12 E., Taos County, at Fish Hatchery bridge, 3.5 mi (5.6 km) upstream from mouth, and 4 mi (6.4 km) southwest of Questa.

DRAINAGE AREA.--185 mi<sup>2</sup> (479 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1966 to current year.

Water temperatures: January 1966 to September 1974.

Sediment records: July 1970 to current year.

REMARKS.--This station converted from daily to monthly operation in October 1974.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00956)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTAS- SIUM (K) (MG/L) (00935)
OCT.								
01...	1340	36	20	10	64	9.4	21	4.3
NOV.								
06...	1520	39	21	--	110	11	21	6.7
14...	0930	37	15	--	94	8.9	21	5.4
DEC.								
11...	0940	33	22	--	120	11	25	7.0
JAN.								
04...	0930	32	25	--	72	9.7	22	3.9
FEB.								
05...	1730	34	20	--	83	9.6	22	5.6
MAR.								
14...	1515	36	18	--	87	10	21	5.6
APR.								
16...	1530	34	5.6	--	72	9.7	22	4.8
JULY								
11...	1155	137	10	--	34	4.7	7.3	1.7
AUG.								
05...	1445	62	16	--	36	6.1	14	2.5

DATE	RICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED RESI- DUE AT 180 C (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
OCT.									
01...	87	0	170	6.7	1.1	.02	.01	367	343
NOV.									
06...	94	0	270	7.3	1.3	.50	--	--	497
14...	93	0	230	6.1	.5	1.9	--	--	435
DEC.									
11...	93	0	340	7.6	1.4	.72	--	--	543
JAN.									
04...	101	0	160	6.8	1.1	.44	--	--	352
FEB.									
05...	90	0	210	7.8	1.1	.60	--	--	406
MAR.									
14...	95	--	220	7.4	1.2	.42	--	--	419
APR.									
16...	48	--	210	7.8	1.1	.02	--	--	357
JULY									
11...	69	--	67	2.6	.5	.19	--	--	167
AUG.									
05...	91	0	66	5.1	.7	.46	--	--	193

06266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED SILICON (8) (01020)
OCT.								
01...	210	140	.6	521	8.0	15.5	1	0
NOV.								
06...	320	240	.5	728	7.6	11.5	1	--
18...	270	190	.6	640	7.7	9.0	2	--
DEC.								
11...	350	270	.6	793	7.1	9.0	2	--
JAN.								
08...	220	140	.6	529	7.9	7.5	2	--
FEB.								
05...	250	180	.6	624	7.2	8.0	2	--
MAR.								
18...	260	180	.6	625	--	13.0	3	--
APR.								
16...	220	180	.6	562	--	15.0	2	--
JULY								
11...	110	58	.3	265	--	14.0	6	--
AUG.								
05...	120	40	.6	299	7.4	20.0	2	--

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL MOLYB- DENUM (MO) (01062)
NOV.		
06...	1520	740
18...	0930	380
DEC.		
11...	0940	390
JAN.		
08...	0930	240
FEB.		
05...	1730	280
JULY		
11...	1155	70
AUG.		
05...	1445	0

## INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (00155)
OCT.					
01...	1340	15.5	36	23	2.2
NOV.					
06...	1520	11.5	39	7	.74
18...	0930	9.0	37	6	.60
DEC.					
11...	0940	9.0	33	67	6.0
FEB.					
05...	1730	8.0	34	11	1.0
18...	1315	9.5	36	10	.97
MAR.					
18...	1515	13.0	36	5	.49
APR.					
16...	1530	15.0	38	298	31
MAY					
14...	1000	7.0	168	181	82
JULY					
11...	1155	14.0	137	18	6.7
AUG.					
05...	1500	20.0	62	14	2.3

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, N. MEX.

LOCATION.--Lat 36°19'12", long 105°45'14", in MN&NEK sec.15, T.24 N., R.11 E., Taos County, at gaging station, 1.7 mi (2.7 km) downstream from bridge on State Highway 96, 2.0 mi (3.2 km) downstream from Rio Pueblo de Taos, 11.8 mi (19.0 km) southwest of Taos, and at mile 1,637.7 (2,667.2 km).

DRAINAGE AREA.--9,730 mi<sup>2</sup> (25,200 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: August 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-
		TANEOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED			
		DIS-	SILICA	CAL-	MAG-	SODIUM	TAS-	MONATE	BONATE	SULFATE
		CHARGE	(SI02)	(CA)	(MG)	(NA)	(K)	(HCO3)	(CO3)	(SO4)
		(CFS)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
		(00061)	(00955)	(00915)	(00925)	(00930)	(00935)	(00440)	(00445)	(00945)
AUG. 07...	1240	686	20	22	3.7	16	3.1	87	0	36
DATE		DIS-	DIS-	DIS-	DIS-	NON-	SODIUM	PH	TEMPER-	TUR-
		SOLVED	SOLVED	SOLVED	SOLVED	CAR-	AD-			
		CHLO-	FLUO-	NITRITE	(SUM OF	HARD-	BONATE	SORP-		
		RIDE	RIDE	NITRATE	CONSTI-	NESS	HARD-	TION		
		(CL)	(F)	(N)	TUENTS)	(CA+MG)	NESS	RATIO		
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)		(UNITS)	(DEG C)
		(00940)	(00950)	(00631)	(70301)	(00900)	(00902)	(00931)	(00400)	(00010)
AUG. 07...	5.3	.3	.13	150	70	0	.8	7.3	21.0	2

## 08279000 EMBUDO CREEK AT DIXON, N. MEX.

LOCATION.--Lat 36°12'39", long 105°54'47", in NEkSEk sec.19, T.23 N., R.10 E., Rio Arriba County, at gaging station, 750 ft (230 m) upstream from U.S. Highway 64, 0.5 mi (0.8 km) upstream from mouth, 0.5 mi (0.8 km) east of Embudo Post Office, and 1.7 mi (2.7 km) northwest of Dixon. Prior to Sept. 2, 1971, at site 750 ft (230 m) downstream.

DRAINAGE AREA.--305 mi<sup>2</sup> (790 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: August 1970 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000611)	DIS- SOLVED SILICA (SIOR) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)
OCT.									
15...	1110	27	18	10	71	7.8	12	2.0	244
NOV.									
14...	0920	28	15	--	70	8.2	10	1.3	240
DEC.									
11...	1120	18	16	--	69	7.6	10	1.5	232
JAN.									
07...	1030	32	14	--	60	6.9	9.3	1.2	210
FEB.									
04...	1000	22	13	--	66	8.2	8.8	1.6	217
MAR.									
04...	1040	35	12	--	54	7.0	8.0	2.2	187
22...	1435	--	--	--	--	--	--	--	--
APR.									
03...	1003	35	11	0	59	7.6	11	1.6	184
MAY									
01...	0945	133	8.8	--	37	5.1	5.0	1.0	126
07...	0930	217	--	--	--	--	--	--	--
27...	1405	293	7.8	--	32	3.9	3.1	.9	102
SEP.									
15...	1045	183	8.8	--	40	5.6	4.0	.9	134

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIF PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (REFT- DUE AT 100 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)
OCT.									
15...	0	27	8.9	.3	.11	.01	270	268	210
NOV.									
14...	0	23	5.9	.3	.11	--	--	252	210
DEC.									
11...	0	26	6.4	.3	.40	--	--	253	200
JAN.									
07...	0	24	5.8	.3	.38	--	--	227	180
FEB.									
04...	0	27	6.6	.3	.16	--	--	239	200
MAR.									
04...	0	24	5.1	.2	.14	--	--	205	160
22...	--	--	--	--	--	--	--	--	--
APR.									
03...	--	26	6.6	.2	.06	.02	209	210	170
MAY									
01...	--	19	3.0	.2	.05	--	--	141	110
07...	--	--	--	--	--	--	--	--	--
27...	--	14	1.4	.1	.02	--	--	114	96
SEP.									
15...	0	17	3.1	.2	.06	--	--	146	120

08279000 EMBUDO CREEK AT DIXON, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- CORALI UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 15...	10	.4	454	8.2	--	13.5	--	--	0
NOV. 14...	13	.3	426	8.2	--	6.0	--	--	--
DEC. 11...	10	.3	426	8.1	--	3.0	--	--	--
JAN. 07...	8	.3	385	8.2	6.0	3.0	--	--	--
FEB. 04...	22	.3	406	8.3	--	2.0	--	--	--
MAR. 04...	7	.3	354	8.1	--	2.0	--	--	--
APR. 22...	--	--	291	--	--	5.0	8	25	--
MAY 03...	18	.4	358	--	--	3.5	--	--	30
JUN 01...	10	.2	242	--	--	4.0	--	--	--
JUL 07...	--	--	204	--	--	3.5	--	--	--
AUG 27...	12	.1	198	--	--	13.5	--	--	--
SEP. 15...	13	.2	255	7.8	--	12.5	--	--	--

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.

RECORDS FURNISHED BY THE CORP OF ENGINEERS, ALBUQUERQUE DISTRICT, NOT AVAILABLE AT THIS TIME.

08287000 RIO CHAMA BELOW ABIQUIU DAM, N. MEX.

RECORDS FURNISHED BY THE CORP OF ENGINEERS, ALBUQUERQUE DISTRICT, NOT AVAILABLE AT THIS TIME.

## 08290000 RIO CHAMA NEAR CHAMITA, N. MEX.

LOCATION.--Lat 36°04'26", long 106°06'40", in NE¼NE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, San Juan Pueblo Grant at gaging station, at bridge on U.S. Highway 285, 0.5 mi (0.8 km) west of Chamita, 2.5 mi (4.0 km) northwest of San Juan Pueblo, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--3,144 mi<sup>2</sup> (8,143 km<sup>2</sup>) of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: April 1963 to current year.

Water temperatures: October 1950 to current year.

Sediment records: October 1947 to current year.

REMARKS.--Daily specific conductance, daily temperature, and suspended sediment records furnished by Corps of Engineers, Albuquerque District are not available at this time.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000661)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01346)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT. 16...	1650	54	23	10	69	12	53	4.6	229	0	140	14
OCT. 10...	1145	60	20	10	72	15	50	3.5	209	0	150	17
JAN. 23...	1220	59	20	--	73	17	58	3.9	239	0	140	24
FEB. 05...	1240	78	18	--	70	16	57	4.2	233	0	120	23
MAR. 05...	1430	595	--	--	--	--	--	--	--	--	--	--
APR. 02...	1250	130	--	--	--	--	--	--	--	--	--	--
APR. 10...	1110	1490	--	--	--	--	--	--	--	--	--	--
MAY 06...	1040	1760	--	--	--	--	--	--	--	--	--	--
DATE		DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70361)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00980)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED MORON (H) (UG/L) (01020)
OCT. 16...	.4	.10	.05	433	429	220	32	1.6	667	7.9	21.0	4
OCT. 10...	.3	.28	.00	447	432	240	69	1.4	681	8.1	.0	70
JAN. 23...	.4	.02	--	--	454	250	54	1.6	740	8.2	.0	--
FEB. 05...	.5	.01	--	--	424	240	49	1.6	704	8.3	4.0	--
MAR. 05...	--	--	--	--	--	--	--	--	523	--	9.0	--
APR. 02...	--	--	--	--	--	--	--	--	520	--	7.5	--
APR. 10...	--	--	--	--	--	--	--	--	586	--	4.5	--
MAY 06...	--	--	--	--	--	--	--	--	289	--	7.0	--



08313000, RIO GRANDE AT OTOMI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.  
(National stream-quality accounting network, irrigation,  
surveillance, and radiochemical network station)

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, in San Ildefonso Pueblo Grant at gaging station, 400 ft (120 m) downstream from bridge on State Highway 4, 1.8 mi (2.9 km) southwest of San Ildefonso Pueblo, 2.5 mi (4.0 km) downstream from Pojoaque River, and 6.8 mi (10.9 km) west of Pojoaque, and at mile 1,614.2 (2,597.2 km).

DRAINAGE AREA.--14,300 mi<sup>2</sup> (37,040 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: October 1946 to current year.

Water temperatures: October 1948 to current year.

Sediment records: October 1947 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 312 mg/l Oct. 23; minimum, 131 mg/l May 16-31.

Hardness: Maximum, 180 mg/l Nov. 1-30; minimum, 83 mg/l May 16-31.

Specific conductance: Maximum daily, 529 micromhos Oct. 13; minimum daily, 189 micromhos May 22.

Water temperatures: Maximum, 26.5°C Aug. 1, 3-5; minimum, freezing point on many days during December, and January, February.

Sediment concentrations: Maximum daily, 12,500 mg/l Sept. 12; minimum daily, 29 mg/l Oct. 3.

Sediment discharge: Maximum daily, 52,200 tons (47,400 tonnes) Sept. 12; minimum daily, 20 tons (18 tonnes) Oct. 3.

## Period of record:

Dissolved solids: Maximum, 1,030 mg/l Aug. 5, 1963; minimum, 131 mg/l May 16-31, 1975.

Hardness: Maximum, 702 mg/l Aug. 5, 1963; minimum, 83 mg/l May 22-26, 1960, June 22-28, 1968, May 16-31, 1975.

Specific conductance: Maximum daily, 1,310 micromhos Aug. 5, 1963; minimum daily, 165 micromhos June 13, 1952.

Water temperatures: Maximum, 31.0°C Aug. 4, 5, 1954; minimum, freezing point on many days during winter months each year.

Sediment concentrations: Maximum daily, 43,500 mg/l Aug. 21, 1955; minimum daily, 11 mg/l July 27, 1963, and Feb. 7, 1974.

Sediment discharge: Maximum daily, 366,000 tons (332,000 tonnes) Aug. 23, 1961; minimum daily, 3 tons (2.7 tonnes) July 27, 1963.

REMARKS.--Daily mean temperature is computed by averaging the maximum and minimum temperatures for each day.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NESI- UM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED TAS- SIUM (K) (00935)	BICAR- BONATE (HCO3) (00440)	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
OCT.												
01-31	361	22	--	50	8.2	33	3.5	174	0	82	11	.6
NOV.												
01-30	429	24	--	56	10	34	3.9	177	0	82	11	.6
DEC.												
01-31	450	27	--	47	7.8	27	3.6	162	0	59	8.8	.6
JAN.												
01-31	473	25	--	43	7.5	25	2.7	153	0	63	10	.7
FEB.												
01-28	562	23	--	41	7.9	24	3.2	145	--	62	8.1	.4
MAR.												
01-31	956	22	--	42	7.2	23	3.3	131	--	65	7.0	.4
APR.												
01-08	928	21	--	41	8.3	23	3.3	132	--	69	7.6	.4
09-16	2340	16	--	48	11	26	3.2	122	--	120	5.3	.3
17-25	2260	16	--	39	8.5	17	2.9	114	--	75	4.8	.3
26-30	3170	16	--	43	7.1	14	2.8	103	--	64	4.1	.3
MAY												
01-09	2760	16	--	37	7.6	13	2.7	105	--	56	3.4	.2
10-15	3370	15	--	32	5.3	11	2.5	102	--	42	3.4	.2
16-31	4310	15	--	26	4.4	9.7	2.2	85	--	28	2.6	.2
JUNE												
01-03	3690	17	--	27	4.8	10	2.1	90	--	34	2.8	.2
04-11	4080	16	--	27	4.7	9.7	2.1	87	--	33	2.8	.2
12-30	4050	17	--	29	5.1	14	2.6	90	--	49	3.9	.2
JULY												
01-10	3370	16	--	35	5.8	15	2.7	95	0	54	3.8	.2
11-12	3800	17	--	50	6.7	17	3.1	141	0	61	4.8	.4
13-16	3800	15	--	37	6.8	18	2.9	101	1	77	4.7	.2
17-25	2190	16	--	50	7.7	22	3.3	104	3	95	5.0	.3
26-31	1140	17	--	37	6.1	21	3.2	115	0	66	5.8	.3
AUG.												
01-08	790	18	--	33	6.1	21	3.5	114	0	62	6.4	.4
09-13	1480	20	--	56	7.2	21	4.1	168	0	73	5.9	.3
14-31	904	18	--	38	6.4	20	3.4	121	0	57	5.7	.3
SEP.												
01-11	1160	17	--	34	6.5	17	2.7	125	0	46	5.2	.3
12-16	1190	19	--	34	5.8	19	2.9	138	0	39	5.2	.3
17-30	756	19	--	36	6.8	19	2.7	131	0	43	5.5	.3
WTD. AVG.	--	18	--	36	6.4	17	2.8	111	--	56	4.9	.3
TIME WTD.												
AVG.	1470	20	--	41	7.3	22	3.1	134	--	63	7.0	.4
TOT. LOAD (TONS)	--	25700	--	52700	9330	24800	4080	161000	--	81600	7150	423

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (R) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
01-31	.15	--	--	--	297	.40	289	160	17	1.1	472	8.0
NOV.												
01-30	.16	--	--	--	309	.42	358	180	35	1.1	487	8.1
DEC.												
01-31	.29	--	--	--	262	.36	318	150	17	1.0	410	8.0
JAN.												
01-31	.36	--	--	--	254	.35	324	140	14	.9	383	8.2
FEB.												
01-28	.25	--	--	--	242	.33	367	140	16	.9	380	--
MAR.												
01-31	.32	--	--	--	236	.32	609	130	27	.9	366	--
APR.												
01-08	.34	--	--	--	240	.33	601	140	28	.9	360	--
09-16	.19	--	--	--	291	.40	1840	170	65	.9	461	--
17-25	.31	--	--	--	221	.30	1350	130	39	.6	343	--
26-30	.35	--	--	--	204	.28	1750	140	52	.5	295	--
MAY												
01-09	.33	--	--	--	189	.26	1410	120	38	.5	295	--
10-15	.17	--	--	--	162	.22	1470	100	18	.5	248	--
16-31	.18	--	--	--	131	.18	1520	83	13	.5	209	--
JUNE												
01-03	.11	--	--	--	143	.19	1420	87	13	.5	218	--
04-11	.11	--	--	--	139	.19	1530	87	15	.5	219	--
12-30	.09	--	--	--	166	.23	1820	93	20	.6	262	--
JULY												
01-10	.08	--	--	--	180	.24	1640	110	33	.6	275	8.1
11-12	.25	--	--	--	231	.31	2370	150	37	.6	355	7.8
13-16	.06	--	--	--	213	.29	2190	120	36	.7	323	8.4
17-25	.05	--	--	--	254	.35	1500	160	66	.8	381	8.5
26-31	.01	--	--	--	213	.29	656	120	23	.8	328	8.7
AUG.												
01-08	.02	--	--	--	207	.28	442	110	14	.9	313	8.7
09-13	.19	--	--	--	271	.37	1080	170	32	.7	418	8.0
14-31	.14	--	--	--	209	.28	510	120	22	.8	327	8.2
SEP.												
01-11	.09	--	--	--	191	.26	598	110	9	.7	311	8.1
12-16	.10	--	--	--	194	.26	623	110	0	.8	325	8.0
17-30	.02	--	--	--	197	.27	402	120	10	.8	305	8.2
WTD. AVG.	.17	--	--	--	198	.27	--	117	26	.7	308	--
TIME WTD.												
AVG.	.20	--	--	--	232	.32	--	134	23	.8	361	--
TOT. LOAD (TONS)	250	--	--	--	287000	--	--	--	--	--	--	--

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00415)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
23...	0915	340	23	20	--	52	8.8	34	4.5	178
NOV.										
22...	1053	390	23	10	--	53	8.4	34	3.7	180
DEC.										
18...	0900	445	26	10	10	48	9.5	29	3.2	163
JAN.										
16...	1000	390	27	10	--	44	8.0	26	3.3	162
FEB.										
12...	1000	564	24	10	--	48	8.1	24	3.1	144
MAR.										
12...	1030	1060	19	40	0	45	7.1	20	2.6	124
APR.										
16...	1400	2430	16	10	--	46	11	22	1.7	125
MAY										
05...	1340	2880	16	40	--	33	6.6	12	2.6	101
JUNE										
03...	1436	3680	16	830	0	26	5.3	10	2.2	87
JULY										
09...	1415	3440	19	20	--	34	6.6	15	2.6	97
AUG.										
06...	0900	685	20	20	0	34	5.9	20	3.2	109
SEP.										
09...	0910	1060	19	10	--	35	5.9	18	2.9	127

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
OCT.										
23...	0	91	10	.6	.01	.00	.02	.01	.06	.46
NOV.										
22...	0	69	11	.6	.01	.00	.01	.01	.01	.08
DEC.										
18...	0	72	9.8	.6	.08	.00	.15	.08	.03	.15
JAN.										
16...	0	49	9.4	.5	.47	.01	.70	.48	.02	.86
FEB.										
12...	0	69	10	.4	.00	.00	.00	.00	.01	.39
MAR.										
12...	0	67	7.0	.5	.13	.00	.14	.13	.01	.53
APR.										
16...	0	91	4.7	.3	.19	.00	.20	.19	.01	.42
MAY										
05...	0	49	4.1	.2	.11	.00	.11	.11	.03	.57
JUNE										
03...	0	33	3.0	.2	.05	.00	.07	.05	.00	.68
JULY										
09...	0	58	3.4	.2	.07	.00	.07	.07	.00	.81
AUG.										
06...	0	53	5.6	.4	--	--	.08	.02	.03	.39
SEP.										
09...	0	39	4.3	.4	--	--	.03	.01	.00	.86
DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICHO- MHOS) (00095)	PH
OCT.										
23...	.54	.07	.02	304	312	170	24	1.1	493	8.2
NOV.										
22...	.10	.05	.02	307	292	170	19	1.1	467	8.4
DEC.										
18...	.33	.04	.01	291	279	160	25	1.0	435	8.4
JAN.										
16...	1.6	.06	.04	259	249	140	7	.9	370	8.0
FEB.										
12...	.40	.09	.09	257	258	150	35	.8	375	8.4
MAR.										
12...	.68	.13	.04	235	230	140	40	.7	360	7.9
APR.										
16...	.63	.23	.04	268	255	160	58	.8	400	7.9
MAY										
05...	.71	.19	.02	174	174	110	27	.5	295	8.1
JUNE										
03...	.75	.27	.05	152	140	87	15	.5	224	8.1
JULY										
09...	.88	.19	.02	188	187	110	33	.6	290	7.9
AUG.										
06...	.50	.12	.03	197	196	110	20	.8	315	8.2
SEP.										
09...	.89	.12	.01	192	187	110	8	.7	310	8.3

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00689)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 23...	12.5	11.5	30	8.9	10	4.7	--	--	170
NOV. 22...	12.5	4.5	10	10.4	4	5.9	--	--	90
DEC. 18...	-3.5	.0	7	12.0	6	4.2	--	--	80
JAN. 16...	-8.0	.0	7	11.7	8	9.2	--	--	50
FEB. 12...	3.0	2.5	20	11.2	11	3.7	--	--	40
MAR. 12...	2.5	4.0	30	10.4	12	4.5	--	--	40
APR. 16...	26.0	10.0	70	9.2	27	7.4	--	--	30
MAY 05...	19.5	13.0	84	9.0	39	9.6	--	--	30
JUNE 03...	29.5	16.5	38	7.4	14	14	--	--	9
JULY 09...	25.5	21.0	60	7.5	18	--	4.2	1.0	30
AUG. 06...	25.0	19.5	19	9.2	14	--	3.6	.4	40
SEP. 09...	19.0	10.0	200	8.0	11	--	4.7	4.1	50

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COBALT (CO) (UG/L) (01037)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL ZINC (ZN) (UG/L) (01092)
MAR. 14...	1400	<10	0	<50	10	70	100
JUNE 27...	1134	<10	0	<50	<10	110	20
SEP. 25...	0815	10	0	<50	<10	--	--

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		ARSENIC (AS) (UG/L) (01002)	SOLVED ARSENIC (AS) (UG/L) (01000)	SOLVED BORON (B) (UG/L) (01020)	CAD- MIUM (CD) (UG/L) (01027)	SOLVED CAD- MIUM (CD) (UG/L) (01025)	CHRO- MIUM (CR) (UG/L) (01034)	SOLVED CHRO- MIUM (CR) (UG/L) (01030)	COBALT (CO) (UG/L) (01037)	SOLVED COBALT (CO) (UG/L) (01035)	COPPER (CU) (UG/L) (01042)	SOLVED COPPER (CU) (UG/L) (01040)	
OCT. 18...	0900	3	2	80	<10	0	0	<10	<50	3	30	5	
MAR. 12...	1030	0	0	40	<10	0	30	0	<50	1	20	1	
JUNE 03...	1436	3	1	9	<10	0	10	0	<50	0	10	3	
AUG. 06...	0900	2	1	40	<10	1	0	0	<50	0	<10	4	
DATE	TIME	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANGANESE (MN) (UG/L) (01055)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SILICA (SI) (UG/L) (01147)	DIS- SOLVED SILICA (SI) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 18...	710	10	<100	0	40	10	<.1	<.1	1	1	8	0	
MAR. 12...	3100	40	<100	2	140	0	.2	.2	0	0	40	6	
JUNE 03...	2400	830	<100	1	160	0	.4	.1	1	0	10	10	
AUG. 06...	1300	20	<100	0	120	0	.0	.0	0	0	40	0	

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975[illegible]

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					Sampling method
Date	Time	Organism	Count (cells/ml)	Percent of total	
Oct 23	0915	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum		10	
		Oocystaceae			
		Ankistrodesmus		1	
		Oocystis		12	
		Scenedesmaceae			
		Scenedesmus		5	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		33	
		Pennales			
		Diatomaceae			
		Diatoma		6	
		Fragilariaceae			
		Synedra		4	
		Achnanthaceae			
		Achnanthes		1	
		Cocconeis		5	
		Rhoicosphenia		1	
		Naviculaceae			
		Navicula		15	
		Neidium		1	
		Gomphonemataceae			
		Gomphonema		1	
		Cymbellaceae			
		Epithemia		2	
		Nitzschaceae			
		Nitzschia		2	
		Surirellaceae			
		Surirella		1	
		TOTAL	12,000		
Nov 22	1053	CHRYSTOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		69	
		Pennales			
		Diatomaceae			
		Diatoma		9	
		Fragilariaceae			
		Synedra		1	
		Achnanthaceae			
		Achnanthes		1	
		Rhoicosphenia		1	
		Naviculaceae			
		Navicula		9	
		Gomphonemataceae			
		Gomphonema		2	
		Cymbellaceae			
		Cymbella		3	
		Nitzschaceae			
		Nitzschia		4	
		TOTAL	4,300		

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Dec 18	0900	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Zygnematales			
		Zygnemataceae			
		<u>Mougeotia</u>		4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		<u>Diatoma</u>		38	
		Fragillariaceae			
		<u>Fragilaria</u>		3	
		<u>Synedra</u>		5	
		Achnanthaceae			
		Cocconeis		3	
		Naviculaceae			
		<u>Gyrosigma</u>		3	
		<u>Navicula</u>		22	
		Gomphonemataceae			
		Gomphonema		3	
		Cymbellaceae			
		<u>Cymbella</u>		3	
		Nitzschaceae			
		<u>Nitzschia</u>		3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Oscillatoria</u>		13	
		TOTAL	4,900		
Jan 16	1000	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		<u>Diatoma</u>		22	
		Fragillariaceae			
		<u>Fragilaria</u>		20	
		<u>Synedra</u>		2	
		Achnanthaceae			
		Cocconeis		6	
		<u>Rholocospheia</u>		4	
		Naviculaceae			
		<u>Caloneis</u>		1	
		<u>Navicula</u>		33	
		<u>Neidium</u>		1	
		Gomphonemataceae			
		Gomphonema		2	
		Cymbellaceae			
		<u>Amphora</u>		3	
		<u>Epithemia</u>		1	
		<u>Rhopalodia</u>		1	
		Nitzschaceae			
		<u>Nitzschia</u>		2	
		Surirellaceae			
		<u>Cymatopleura</u>		1	
		TOTAL	5,500		
Feb 12	1000	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		<u>Diatoma</u>		43	
		Fragillariaceae			
		<u>Fragilaria</u>		16	
		<u>Synedra</u>		2	
		Achnanthaceae			
		<u>Achnanthes</u>		1	
		Cocconeis		4	
		<u>Rholocospheia</u>		2	
		Naviculaceae			
		<u>Gyrosigma</u>		1	
		<u>Navicula</u>		21	
		Gomphonemataceae			
		Gomphonema		6	
		Cymbellaceae			
		<u>Epithemia</u>		1	
		Nitzschaceae			
		<u>Nitzschia</u>		3	
		Surirellaceae			
		<u>Cymatopleura</u>		1	
		TOTAL	7,800		

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Mar 12	1030	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		3	
		Pennales			
		Diatomaceae			
		Diatoma		5	
		Fragilariaceae			
		<u>Fragilaria</u>		33	
		Achnanthaceae			
		<u>Achnanthes</u>		7	
		<u>Cocconeis</u>		1	
		<u>Rhizococphenia</u>		1	
		Naviculaceae			
		<u>Navicula</u>		27	
		Gomphonemataceae			
		<u>Gomphonema</u>		3	
		Cymbellaceae			
		<u>Cymbella</u>		2	
		<u>Epithemia</u>		1	
		Nitzschiaceae			
		<u>Nitzschia</u>		15	
		Surirellaceae			
		<u>Surirella</u>		1	
		TOTAL	7,700		
Apr 16	1400	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		<u>Pediastrum</u>		12	
		Oocystaceae			
		<u>Ankistrodesmus</u>		2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		24	
		Pennales			
		Fragilariaceae			
		<u>Synedra</u>		22	
		Achnanthaceae			
		<u>Cocconeis</u>		2	
		Naviculaceae			
		<u>Navicula</u>		16	
		Gomphonemataceae			
		<u>Gomphonema</u>		4	
		Cymbellaceae			
		<u>Cymbella</u>		2	
		<u>Epithemia</u>		4	
		<u>Rhopalodia</u>		2	
		Nitzschiaceae			
		<u>Hantzschia</u>		2	
		<u>Nitzschia</u>		6	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>		2	
		TOTAL	4,800		



08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 05	1340	CHRYSTOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		14	
		<u>Melosira</u>		5	
		Pennales			
		Fragilariaceae			
		<u>Fragilaria</u>		7	
		<u>Hannaea</u>			
		<u>Hannaea Arcus</u>		5	
		Achnanthaceae			
		<u>Rhoicosphenia</u>		5	
		Naviculaceae			
		<u>Navicula</u>		21	
		Gomphonemataceae			
		<u>Gomphonema</u>		7	
		Cymbellaceae			
		<u>Cymbella</u>		5	
		<u>Epithemia</u>		7	
		Nitzschaceae			
		<u>Hantzschia</u>		5	
		<u>Nitzschia</u>		12	
		Surirellaceae			
		<u>Surirelia</u>		7	
		TOTAL	3,900		
Jun 03	1436	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		<u>Scenedesmus</u>		9	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		7	
		Pennales			
		Diatomaceae			
		<u>Diatoma</u>		4	
		Fragilariaceae			
		<u>Fragilaria</u>		61	
		<u>Synedra</u>		3	
		<u>Hannaea</u>		1	
		Naviculaceae			
		<u>Navicula</u>		2	
		Gomphonemataceae			
		<u>Gomphonema</u>		2	
		Cymbellaceae			
		<u>Cymbella</u>		2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Coccochloris</u>		9	
		TOTAL	9,200		
Jul 09	1415	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		<u>Scenedesmus</u>		<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>	130	3	
		<u>Melosira</u>	130	3	
		Pennales			
		Achnanthaceae			
		<u>Cocconeis</u>	130	3	
		<u>Rhoicosphenia</u>		<1	
		Cymbellaceae			
		<u>Cymbella</u>	130	3	
		<u>Epithemia</u>	130	3	
		Diatomaceae			
		<u>Diatoma</u>	260	5	
		Fragilariaceae			
		<u>Fragilaria</u>	2,200	44	
		<u>Synedra</u>		<1	
		Gomphonemataceae			
		<u>Gomphonema</u>	260	5	
		Naviculaceae			
		<u>Navicula</u>	530	10	

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jul 09	1415	Nitzschiaceae			Sediment Sampler
		<u>Denticula</u>		<1	
		<u>Hantzschia</u>		<1	
		<u>Nitzschia</u>	1,000	21	
		Surirellaceae			
		<u>Surirella</u>	130	3	
		TOTAL	5,200		
Aug 06	0900	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		<u>Pediastrum</u>	3,400	23	
		Oocystaceae			
		<u>Selenastrum</u>		<1	
		Scenedesmaceae			
		<u>Crucigenia</u>	870	6	
		<u>Scenedesmus</u>	870	6	
		Volvocales			
		Volvocaceae			
		<u>Eudorina</u>		<1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>	7,600	51	
		<u>Melosira</u>		<1	
		Pennales			
		Achnanthaceae			
		<u>Cocconeis</u>		<1	
		<u>Rhoicosphenia</u>		<1	
		Cymbellaceae			
		<u>Epithemia</u>		<1	
		Diatomaceae			
		<u>Diatoma</u>		<1	
		Fragilariaceae			
		<u>Asterionella</u>		<1	
		<u>Fragilaria</u>		<1	
		<u>Synedra</u>		<1	
		Gomphonemataceae			
		<u>Gomphonema</u>		<1	
		Naviculaceae			
		<u>Gyrosigma</u>		<1	
		<u>Navicula</u>	870	6	
		<u>Pinnularia</u>		<1	
		Nitzschiaceae			
		<u>Nitzschia</u>	1,300	9	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>		<1	
		TOTAL	15,000		
Sep 09	0910	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		<u>Scenedesmus</u>	1,700	8	
		Volvocales			
		Volvocaceae			
		<u>Pandorina</u>		<1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>	12,000	57	
		Pennales			
		Achnanthaceae			
		<u>Cocconeis</u>	430	2	
		<u>Rhoicosphenia</u>	430	2	
		Cymbellaceae			
		<u>Cymbella</u>		<1	
		Fragilariaceae			
		<u>Fragilaria</u>	3,000	13	
		Gomphonemataceae			
		<u>Gomphonema</u>	430	2	
		Naviculaceae			
		<u>Navicula</u>	1,200	6	
		Nitzschiaceae			
		<u>Nitzschia</u>	2,500	11	
		TOTAL	22,000		

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll <sup>a</sup>	Chlorophyll <sup>b</sup>	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight	(mg/m <sup>2</sup> )	(mg/m <sup>2</sup> )		
Oct 23	28	110	100	4.0	0.7	980	Polyethylene strip
Apr 16	35	4.3	3.2	2.8	1.1	410	"

## SPECIFIC CONDUCTANCE (MICROHMOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	527	429	424	387	383	339	304	212	277	350	---
2	439	519	433	398	388	354	350	320	217	277	336	304
3	439	517	396	387	376	366	346	306	224	269	310	310
4	444	496	398	392	371	441	339	292	228	262	297	328
5	449	490	415	385	362	422	334	276	216	268	287	319
6	438	491	431	374	345	398	329	285	211	264	302	317
7	427	490	427	364	355	382	398	282	214	270	300	312
8	433	489	412	376	362	375	392	285	216	268	318	301
9	437	492	405	376	352	372	433	298	212	289	427	304
10	431	489	398	371	366	380	486	269	215	298	425	304
11	437	476	397	387	369	358	498	271	227	348	397	301
12	462	466	383	397	369	345	471	245	245	371	389	342
13	529	470	416	390	369	344	446	227	269	311	455	327
14	448	470	393	383	361	357	416	227	273	319	334	313
15	459	488	424	368	353	355	412	233	279	328	308	311
16	473	476	401	357	376	363	390	209	286	335	307	312
17	472	471	393	350	370	366	369	207	278	426	293	301
18	475	465	403	361	375	366	355	196	264	401	314	290
19	467	471	399	364	371	355	345	198	264	350	316	291
20	461	472	396	344	365	345	326	196	255	343	284	294
21	461	465	413	354	362	357	303	190	253	353	362	303
22	469	468	395	361	350	339	296	189	262	350	400	305
23	477	461	388	361	359	339	321	194	266	401	321	305
24	474	464	361	369	363	335	316	214	274	403	345	307
25	473	457	400	369	376	323	440	223	270	345	316	307
26	528	461	385	357	379	319	293	219	242	327	316	312
27	475	452	374	368	388	365	268	221	240	333	302	326
28	489	456	367	368	385	357	294	227	234	330	357	323
29	469	449	409	375	---	352	295	208	240	323	357	323
30	477	440	375	398	---	347	298	201	251	309	330	324
31	487	---	394	381	---	349	---	200	---	335	318	---
MONTH	462	477	400	374	368	362	363	239	245	325	338	311
YEAR	MAX	529	MIN	189	MEAN	355						

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), RECORDER MAXIMUM, MINIMUM, AND MEAN, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	12.0	15.5	10.0	6.0	8.0	2.0	0.0	1.0	0.0	0.0	0.0
2	19.0	13.0	16.0	12.0	8.0	10.0	3.5	0.0	2.0	0.0	0.0	0.0
3	19.0	14.0	16.5	11.0	9.0	10.0	4.5	0.5	2.5	0.0	0.0	0.0
4	20.5	15.5	18.0	11.5	7.0	9.0	4.5	0.5	2.5	0.0	0.0	0.0
5	19.0	15.5	17.0	10.5	6.5	8.5	5.5	2.0	4.0	1.0	1.0	1.0
6	16.0	12.0	14.0	11.0	6.5	9.0	6.0	3.0	4.5	1.0	1.0	1.0
7	16.0	12.0	14.0	11.0	6.5	9.0	4.0	3.0	3.5	2.0	1.0	1.5
8	19.0	14.0	16.5	11.0	6.5	9.0	4.5	2.0	3.0	1.5	1.0	1.0
9	20.0	15.5	18.0	12.0	9.0	10.5	3.0	0.0	1.5	2.0	1.0	1.5
10	18.5	13.5	16.0	11.0	7.0	9.0	2.0	0.0	1.0	1.0	1.0	1.0
11	17.0	12.0	14.5	10.0	5.5	8.0	2.0	0.0	1.0	1.0	1.0	1.0
12	15.5	13.5	14.5	10.0	5.5	8.0	3.0	0.0	1.5	0.0	0.0	0.0
13	15.5	12.0	14.0	10.0	5.0	7.5	3.0	0.0	1.5	0.0	0.0	0.0
14	15.5	13.5	14.5	9.0	4.5	7.0	2.0	0.0	1.0	0.5	0.0	0.0
15	17.0	11.0	14.0	10.0	5.5	8.0	2.0	0.5	1.0	0.5	0.0	0.0
16	17.0	11.0	14.0	10.0	5.5	8.0	3.0	0.5	2.0	0.0	0.0	0.0
17	17.0	12.0	14.5	9.0	4.5	7.0	3.0	0.5	2.0	0.5	0.0	0.0
18	18.0	12.0	15.0	9.0	5.5	7.0	4.0	0.5	2.0	1.0	0.0	0.5
19	17.0	12.0	14.5	9.5	5.5	7.5	3.0	0.5	2.0	2.0	0.5	1.0
20	17.0	11.5	14.0	8.5	4.5	6.5	3.0	0.5	2.0	2.0	0.5	1.0
21	16.0	12.0	14.0	8.0	3.5	6.0	3.0	0.5	2.0	1.0	0.5	1.0
22	14.0	12.0	13.0	7.0	3.5	5.0	4.0	0.5	2.0	1.0	0.5	1.0
23	15.0	12.0	13.5	8.0	4.5	6.0	3.0	0.5	2.0	1.0	0.5	1.0
24	15.0	10.0	12.5	8.0	4.5	6.0	1.0	0.0	0.5	2.0	0.5	1.0
25	15.0	11.0	13.0	8.0	4.0	6.0	0.0	0.0	0.0	4.0	0.5	2.0
26	14.5	11.0	13.0	8.0	4.0	6.0	0.0	0.0	0.0	5.0	1.0	3.0
27	14.5	12.0	13.0	6.5	3.0	5.0	0.0	0.0	0.0	5.0	2.0	3.5
28	13.0	10.5	12.0	5.5	3.0	4.0	0.0	0.0	0.0	7.0	3.0	5.0
29	12.0	9.5	11.0	5.5	2.0	4.0	0.0	0.0	0.0	5.0	2.5	4.0
30	11.0	8.0	9.5	4.0	1.0	2.5	0.0	0.0	0.0	6.5	4.0	5.0
31	10.0	7.0	8.5	---	---	---	0.0	0.0	0.0	6.5	4.5	5.5
MONTH	20.5	7.0	14.0	12.0	1.0	7.0	6.0	0.0	1.5	7.0	0.0	1.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	4.0	6.0	11.0	5.5	8.0	9.0	6.5	8.0	12.0	9.0	10.5
2	6.0	2.0	4.0	10.5	4.5	7.5	10.0	4.0	7.0	13.5	9.0	11.0
3	5.5	1.5	3.5	9.5	4.5	7.0	11.5	4.5	8.0	14.5	9.0	12.0
4	5.5	1.5	3.5	8.0	4.0	6.0	13.5	6.5	10.0	13.5	9.0	11.0
5	5.5	1.5	3.5	8.0	4.0	6.0	14.5	8.0	11.0	13.0	9.0	11.0
6	4.5	0.0	2.0	10.0	5.5	8.0	11.5	8.0	10.0	11.5	6.5	9.0
7	4.5	0.0	2.0	10.0	5.0	7.5	10.0	6.0	8.0	13.0	6.5	10.0
8	5.5	1.0	3.0	9.0	5.5	7.0	8.0	3.5	6.0	14.0	8.0	11.0
9	7.5	2.0	5.0	9.5	5.5	7.5	9.5	4.0	7.0	14.0	8.5	11.0
10	6.5	5.0	6.0	9.5	5.5	7.5	9.0	5.0	7.0	14.5	9.0	12.0
11	7.0	2.5	5.0	8.0	5.5	7.0	9.0	6.0	7.5	15.0	9.5	12.0
12	7.5	2.5	5.0	8.0	4.0	6.0	9.0	5.0	7.0	14.5	10.5	12.5
13	7.0	2.5	5.0	8.5	4.5	6.5	10.0	5.5	8.0	15.0	10.0	12.5
14	7.0	5.0	6.0	10.5	5.0	8.0	11.5	6.0	9.0	15.5	10.5	13.0
15	5.5	4.0	5.0	9.0	6.0	7.5	13.0	7.0	10.0	15.0	11.5	13.0
16	7.0	2.5	5.0	10.0	4.5	7.0	13.0	8.0	10.5	15.5	11.5	13.5
17	5.0	3.5	4.0	10.5	6.5	8.5	13.0	8.5	11.0	15.5	11.5	13.5
18	7.0	2.5	5.0	11.0	4.5	8.0	11.0	6.5	9.0	16.0	11.5	14.0
19	7.0	2.0	4.5	13.0	6.5	10.0	12.0	6.0	9.0	15.5	11.5	13.5
20	7.5	2.0	5.0	14.0	9.0	11.5	14.5	8.0	11.0	16.0	11.5	14.0
21	6.5	2.0	4.0	13.0	9.5	11.0	14.0	9.5	12.0	16.0	12.0	14.0
22	4.5	0.5	2.5	11.0	8.0	9.5	14.5	10.5	12.5	15.0	11.5	13.0
23	4.5	0.5	2.5	8.0	5.0	6.5	13.5	9.0	11.0	14.0	9.5	12.0
24	6.5	0.5	3.5	9.5	3.5	6.5	14.0	8.5	11.0	15.0	9.5	12.0
25	7.5	1.0	4.0	11.0	5.0	8.0	13.5	9.0	11.0	16.0	10.0	13.0
26	9.5	3.5	6.5	9.5	6.0	8.0	13.0	9.0	11.0	16.0	11.0	13.5
27	9.5	3.5	6.5	6.5	4.0	5.0	11.5	8.5	10.0	16.0	12.5	14.0
28	10.5	4.5	7.5	7.0	2.0	4.5	12.0	6.5	9.0	14.5	11.5	13.0
29	---	---	---	8.0	3.5	6.0	12.0	8.5	10.0	13.0	10.0	11.5
30	---	---	---	9.5	3.5	6.5	13.0	7.0	10.0	14.5	9.5	12.0
31	---	---	---	11.0	4.5	8.0	---	---	---	14.5	10.0	12.0
MONTH	10.5	0.0	4.5	14.0	2.0	7.5	14.5	3.5	9.5	16.0	6.5	12.0

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), RECORDER MAXIMUM, MINIMUM, AND MEAN, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.0	10.5	14.0	23.0	19.5	21.0	26.5	20.5	23.5	24.5	18.5	21.5
2	16.0	13.0	14.5	24.0	19.0	21.5	25.5	20.5	23.0	24.0	19.5	22.0
3	18.0	13.5	16.0	24.0	19.5	22.0	26.5	20.0	23.0	23.0	19.5	21.0
4	18.0	13.5	16.0	24.0	19.5	22.0	26.5	21.0	24.0	21.5	19.0	20.0
5	19.5	13.5	16.0	24.0	19.0	21.5	26.5	20.5	23.5	18.5	17.0	18.0
6	18.5	13.5	16.0	22.5	18.0	20.0	26.0	20.0	23.0	20.0	16.0	18.0
7	17.0	14.0	15.5	23.5	19.5	21.5	26.0	20.0	23.0	20.5	16.5	18.5
8	17.5	13.5	15.5	23.5	19.0	20.0	24.0	20.5	22.0	20.5	17.5	19.0
9	16.5	13.5	15.0	23.0	19.5	21.0	24.5	19.0	22.0	22.5	17.0	20.0
10	15.5	13.0	14.0	22.0	19.5	21.0	23.0	19.5	21.0	22.0	18.0	20.0
11	16.5	10.5	13.5	22.5	19.0	21.0	24.5	20.0	22.0	20.5	18.0	19.0
12	17.5	11.5	14.5	23.0	18.5	21.0	23.0	19.0	21.0	19.0	15.5	17.0
13	18.0	13.0	15.5	23.0	18.5	21.0	22.0	18.0	20.0	16.0	14.0	15.0
14	18.5	13.5	16.0	23.5	19.5	21.5	22.5	18.0	20.0	19.0	14.0	16.5
15	19.5	14.5	17.0	23.0	19.0	21.0	24.5	18.5	21.5	21.0	15.5	18.0
16	18.5	15.0	17.0	23.0	19.5	21.0	23.0	19.0	21.0	21.5	16.0	19.0
17	19.0	15.0	17.0	22.0	19.0	20.5	23.5	18.0	21.0	21.0	16.0	18.5
18	18.5	15.0	17.0	24.0	19.5	22.0	24.0	18.5	21.0	21.0	16.0	18.5
19	18.5	14.5	16.5	24.5	19.5	22.0	24.5	18.5	21.5	21.5	16.5	19.0
20	19.0	15.0	17.0	24.5	20.0	22.0	23.0	19.0	21.0	19.5	16.0	18.0
21	19.5	15.0	17.0	24.0	19.0	21.5	23.0	18.5	21.0	17.5	14.5	16.0
22	18.5	15.0	17.0	25.0	20.0	22.5	24.0	18.5	21.0	18.5	12.0	15.0
23	18.5	14.0	16.0	25.0	20.0	22.5	25.0	19.0	22.0	19.0	12.5	16.0
24	19.5	14.5	17.0	24.0	20.0	22.0	24.0	19.0	21.5	19.0	13.5	16.0
25	19.5	15.5	17.5	24.0	19.5	22.0	23.5	16.5	20.0	19.0	13.0	16.0
26	19.5	14.5	17.0	24.0	18.5	21.0	24.0	17.0	20.5	19.0	13.0	16.0
27	19.5	14.5	17.0	25.0	19.5	22.0	23.0	18.5	21.0	19.0	12.5	16.0
28	20.0	15.0	17.5	24.5	20.0	22.0	22.0	17.5	20.0	19.0	13.0	16.0
29	23.0	15.5	19.0	25.5	20.5	23.0	23.0	16.5	20.0	19.0	12.0	15.5
30	24.0	19.0	21.5	25.5	20.0	23.0	23.0	17.0	20.0	17.0	12.0	14.5
31	---	---	---	25.5	19.5	22.5	23.5	17.0	20.0	---	---	---
MONTH	24.0	10.5	16.5	25.5	18.0	21.5	26.5	16.5	21.5	24.5	12.0	18.0
YEAR	26.5	8.0	11.5									

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	254	32	22	498	421	566	380	72	74
2	256	120	83	480	305	395	381	147	151
3	250	29	20	443	276	330	473	197	252
4	251	32	22	443	210	251	476	183	235
5	266	66	47	460	215	267	479	183	237
6	289	71	55	420	210	243	512	239	330
7	338	660	602	415	180	202	534	215	310
8	328	156	138	411	147	163	529	278	397
9	307	90	75	420	124	141	507	255	349
10	413	9330	23400	439	145	172	446	247	297
11	456	8570	10900	447	138	167	467	267	337
12	625	9880	17900	448	155	187	439	240	284
13	494	6100	8140	447	157	189	466	180	226
14	417	2000	2250	470	145	184	455	229	281
15	352	1240	1180	469	175	222	443	135	161
16	346	1150	1070	451	137	167	462	214	267
17	350	1050	992	411	136	151	463	271	339
18	343	250	232	388	95	100	468	237	299
19	323	140	122	385	98	102	463	224	285
20	313	96	81	390	90	95	470	215	273
21	315	119	101	391	70	74	482	213	277
22	317	165	141	389	86	90	464	118	148
23	341	265	244	385	118	123	462	110	137
24	382	240	248	409	100	110	435	78	92
25	402	270	293	401	107	116	385	106	110
26	384	265	275	396	115	123	412	146	162
27	390	298	314	414	108	121	436	436	513
28	401	290	314	447	100	121	400	613	662
29	367	154	153	455	153	188	387	340	355
30	459	865	1070	430	135	157	401	190	206
31	466	655	824	---	---	---	384	114	118
MONTH	11195	---	71308	12860	---	5517	13961	---	8164

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	375	174	176	576	342	532	733	110	1410
2	443	337	403	544	315	497	725	550	1080
3	430	615	714	545	301	443	740	620	1250
4	410	382	423	546	296	438	629	1230	3090
5	442	375	448	555	243	364	1190	1350	4470
6	480	461	597	513	229	317	1010	812	2210
7	480	756	460	508	297	407	1950	602	1710
8	490	407	538	540	262	382	1150	632	1960
9	490	354	468	547	182	269	1240	687	2300
10	490	115	152	564	197	300	1200	967	3130
11	480	260	337	568	250	383	1330	817	2930
12	470	312	396	562	299	454	1090	411	1210
13	450	241	293	551	167	248	401	355	940
14	428	229	265	559	185	279	881	344	818
15	443	272	325	580	173	271	872	294	692
16	447	219	264	581	161	253	861	488	1130
17	469	224	284	566	136	208	827	282	630
18	490	393	520	573	138	213	823	224	498
19	488	306	403	568	140	215	831	248	556
20	477	301	368	553	173	258	830	266	596
21	475	307	394	568	169	259	938	369	935
22	460	275	342	559	121	183	1050	391	1110
23	453	231	283	543	109	160	1080	372	1080
24	464	236	296	502	149	202	1080	360	1050
25	484	334	436	537	196	284	962	232	663
26	494	377	503	617	260	433	855	219	506
27	498	258	347	626	235	397	903	408	995
28	509	323	444	651	269	473	954	284	732
29	510	204	281	---	---	---	879	258	612
30	546	248	366	---	---	---	825	205	457
31	609	527	867	---	---	---	821	209	463
MONTH	14674	---	12933	15744	---	9122	29649	---	41153

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	820	148	328	2390	811	5230	3890	1050	11800
2	818	167	369	2640	918	6540	3580	1160	11200
3	796	150	322	2640	737	5250	3600	1100	10700
4	798	127	274	2680	684	4950	3720	825	8290
5	800	138	298	2780	407	3050	3870	678	7080
6	931	386	970	2960	749	5990	3970	644	6950
7	1190	697	2240	3050	1020	8400	4130	829	9240
8	1270	409	1400	2810	900	6830	4380	940	11100
9	2280	1490	9170	2900	791	6190	4400	1280	15200
10	2380	1250	8030	2790	785	5910	4250	965	11100
11	2390	980	6320	3090	1080	9010	3960	840	8980
12	2410	844	5490	3210	1420	12300	4150	802	8990
13	2390	917	5920	3240	1580	13800	4440	848	10200
14	2300	773	4800	3700	2060	20600	4540	829	10200
15	2270	749	4590	4190	1870	21200	4490	921	11200
16	2330	811	5100	4300	1190	13800	4550	1040	12800
17	2400	840	5440	4550	1900	23300	4660	850	10700
18	2450	921	6090	4640	1670	20900	4630	884	11100
19	1870	620	3130	4670	1530	19300	4640	940	11800
20	1320	440	1570	4570	1320	16300	4390	873	10300
21	1390	404	1520	4360	1590	18700	4030	748	8140
22	1700	708	3250	4150	1940	21700	3770	915	9310
23	2910	1450	11400	4200	1470	16700	3620	381	3720
24	3030	1400	11500	4400	1570	18700	3420	422	3900
25	3250	1500	13200	4190	1580	17900	3640	947	9310
26	3530	1640	15600	3840	1190	12300	3730	609	6130
27	3210	1540	13300	3760	1200	12200	3760	460	4670
28	3280	1480	13100	4300	1560	18100	3670	271	2690
29	3150	1180	10000	4470	2230	26900	3580	984	9510
30	2690	1080	7840	4430	1350	16100	3220	357	3100
31	---	---	---	4170	1120	12600	---	---	---
MONTH	62353	---	172561	114070	---	420750	120680	---	268610

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3110	326	2740	896	420	1020	974	299	786
2	3210	320	2770	905	547	1340	939	302	766
3	3330	378	3400	873	419	988	1040	405	1140
4	3430	325	3010	790	314	670	1530	2350	9940
5	3550	292	2800	740	798	1590	1780	3370	16200
6	3460	261	2440	685	170	314	1230	1370	4550
7	3300	399	3560	663	129	231	991	473	1270
8	3290	241	2140	771	322	670	1160	3340	16100
9	3450	417	3880	1400	6000	31000	1150	1890	5070
10	3600	731	7790	1390	5300	19900	972	2380	6250
11	3640	560	5730	1310	1300	4600	995	2730	7330
12	3950	2210	23600	1720	9550	51100	1530	12500	52200
13	3830	2020	20900	1580	10200	44600	1230	2090	6940
14	3860	895	9330	1480	2850	11400	1100	1060	3150
15	3780	911	9300	965	779	2030	1060	784	2240
16	3750	1130	11400	892	455	1100	1030	678	1890
17	3530	991	9450	863	1270	2960	1010	552	1510
18	2700	1150	8380	817	1420	3130	997	430	1160
19	1950	762	4010	749	340	688	930	425	1070
20	1870	802	4050	894	772	1860	869	731	1720
21	1900	374	1920	1080	763	2220	810	223	493
22	1580	618	2640	912	1100	2710	783	247	522
23	1790	885	4280	778	625	1310	724	223	436
24	2280	389	2390	729	285	561	680	220	404
25	2120	1170	7290	659	217	386	678	184	337
26	1470	640	2540	629	190	323	653	163	287
27	1190	1370	4400	852	619	1420	639	124	214
28	1250	995	3360	1080	598	1740	611	108	178
29	1080	783	2280	1080	413	1120	589	110	175
30	925	719	1800	911	272	659	597	104	168
31	924	692	1730	987	436	1160	---	---	---
MONTH	83099	---	175310	30000	---	194810	29290	---	145296
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)			537,575.00					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)			1,525,534.00					

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)
OCT.									
12...	0900	13.5	884	18000	43000	28	34	55	89
23...	0915	11.5	340	200	184	--	--	--	--
NOV.									
22...	1053	4.5	390	86	91	--	--	--	--
FER.									
12...	1000	2.5	564	438	667	--	--	--	--
MAR.									
12...	1030	4.0	1060	353	1010	--	--	--	--
APR.									
16...	1400	10.0	2430	1020	6690	--	--	--	25
JULY									
09...	1415	21.0	3440	353	3280	--	--	--	51
23...	0655	20.0	1770	1150	5500	--	--	--	--
AUG.									
06...	0900	19.5	685	126	233	--	--	--	--
13...	0800	18.0	1780	14000	67300	--	--	--	88
SEP.									
09...	0910	18.0	1060	973	2790	--	--	--	63

## RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
OCT.									
12...	98	100	--	--	--	--	--	--	--
23...	--	--	--	--	36	--	--	--	--
NOV.									
22...	--	--	--	--	45	62	76	99	100
FEB.									
12...	--	--	--	--	15	--	--	--	--
MAR.									
12...	--	--	--	--	24	--	--	--	--
APR.									
16...	39	70	95	100	--	--	--	--	--
JULY									
09...	56	69	97	100	--	--	--	--	--
23...	--	--	--	--	89	92	95	99	100
AUG.									
06...	--	--	--	--	39	47	67	97	100
13...	96	99	100	--	--	--	--	--	--
SEP.									
09...	97	100	--	--	--	--	--	--	--



## 08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.

LOCATION.--Lat 35°37'04", long 106°19'26", in SW¼NE¼ sec.17, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, at gaging station, 1,090 ft (300 m) downstream from Cochiti Dam, 1.4 mi (2.3 km) northeast of Cochiti Pueblo, and at mile 1,589.0 (2,556.7 km). Prior to Nov. 14 at site 2.4 mi (3.9 km) downstream.

DRAINAGE AREA.--14,900 mi<sup>2</sup> (38,590 km<sup>2</sup>) approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: November 1971 to March 1974.

Specific conductance: October 1974 to current year.

Water temperatures: July 1971 to current year.

Sediment records: July 1974 to current year.

## EXTREMES:

Current year:

Specific conductance: Maximum daily, 504 micromhos Nov. 6; minimum daily, 185 micromhos May 9.

Water temperatures: Maximum, 23°C Sept. 18, 25 and 27; minimum, freezing point on several days during winter months.

Sediment concentrations: Maximum daily, 343 mg/l June 16; minimum daily, 6 mg/l on several days during December, January, and July.

Sediment discharge: Maximum daily, 3,540 tons (3,210 tonnes) June 16; minimum daily, 4.1 tons (3.7 tonnes) Oct. 2.

Period of record:

Specific conductance: Maximum daily, 504 micromhos Nov. 6, 1974; minimum daily, 185 micromhos May 9, 1975.

Water temperatures: Maximum, 30.5°C July 16-17, 1971; minimum, freezing point on several days during winter months.

Sediment concentrations: Maximum daily, 343 mg/l June 16, 1975; minimum daily, 6 mg/l on several days during December 1974, January and July 1975.

Sediment discharge: Maximum daily, 3,540 tons (3,210 tonnes) June 16, 1975; minimum daily, 3.3 tons (3 tonnes) Sept. 12, 1974.

REMARKS.--Temperature recorder inoperative for periods of record not shown in temperature table.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	470	456	398	367	389	346	186	200	346	344	286
2	442	499	450	410	368	392	347	189	201	344	334	287
3	438	501	450	408	367	407	349	191	210	343	327	284
4	436	499	443	414	383	406	351	192	209	341	292	280
5	---	496	437	412	382	375	347	191	209	342	289	280
6	---	504	422	412	366	374	347	191	201	343	288	274
7	---	500	418	403	365	381	---	186	331	344	291	278
8	---	499	418	405	365	376	---	188	322	343	284	276
9	---	494	420	388	365	377	---	185	200	344	289	277
10	---	493	418	386	366	375	433	190	198	252	286	272
11	---	492	416	387	365	371	436	187	199	342	285	273
12	---	485	413	395	370	369	436	187	235	351	293	273
13	---	485	424	402	371	374	436	192	235	346	291	271
14	---	484	413	410	381	367	436	187	234	348	288	272
15	---	476	412	405	385	365	436	187	234	347	290	271
16	---	477	412	385	375	365	436	191	255	345	287	274
17	---	474	414	384	375	365	290	186	261	346	286	274
18	---	474	417	384	376	361	290	186	251	347	275	272
19	---	474	422	384	375	362	290	188	251	346	274	276
20	---	466	425	377	368	368	288	188	251	348	274	275
21	---	464	422	367	367	349	288	188	244	346	273	274
22	---	464	415	376	375	347	290	189	---	346	271	279
23	459	466	416	367	372	347	288	200	---	345	273	281
24	---	463	414	367	371	347	288	193	---	345	273	274
25	---	462	408	362	371	347	286	205	---	346	275	289
26	---	461	406	358	375	345	289	200	---	349	275	280
27	---	434	394	355	392	337	288	201	---	350	275	276
28	---	458	394	355	389	333	287	201	---	347	277	276
29	483	460	394	368	---	354	287	202	---	346	275	282
30	486	458	396	354	---	364	---	201	---	346	274	274
31	478	---	395	365	---	366	---	200	---	345	275	---
MONTH	---	478	418	385	373	366	342	192	---	343	287	277
YEAR	MAX	504	MIN	185	MEAN	341						

WATER TEMPERATURE (DEG. °C), RECORDER MAXIMUM, MINIMUM, AND MEAN, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	10.0	15.0	11.0	10.0	10.5	4.0	3.0	3.5	0.0	0.0	0.0
2	20.5	11.0	15.5	10.0	9.0	9.5	3.0	3.0	3.0	0.5	0.0	0.0
3	20.5	10.5	15.5	9.5	9.0	9.5	3.5	2.5	3.0	---	---	---
4	20.5	13.5	17.0	9.5	9.0	9.0	3.0	2.0	2.5	0.0	---	0.0
5	21.0	13.0	16.5	9.0	9.0	9.0	3.0	2.5	2.5	0.0	---	---
6	16.0	14.0	15.0	9.5	9.0	9.0	3.0	2.5	2.5	0.0	---	---
7	16.0	15.5	15.0	9.0	8.5	9.0	3.5	2.5	3.0	0.0	---	---
8	17.0	15.5	16.0	9.0	8.5	8.5	4.0	3.0	3.5	0.0	---	---
9	17.5	15.0	16.0	9.5	8.5	8.5	3.5	3.0	3.5	---	---	---
10	18.5	15.5	16.5	9.0	8.5	9.0	3.5	2.5	3.0	---	---	---
11	17.5	16.0	16.5	9.5	9.0	9.0	3.0	2.5	2.5	---	---	---
12	16.0	16.0	16.0	9.0	8.5	9.0	2.5	2.0	2.0	---	---	---
13	16.0	15.5	15.5	9.0	8.5	8.5	2.5	1.5	2.0	---	---	---
14	15.5	14.5	15.0	8.5	8.0	8.5	2.0	1.0	1.5	---	---	---
15	15.0	14.0	14.5	8.0	7.5	8.0	2.0	1.0	1.5	---	---	---
16	15.0	14.0	14.5	8.0	7.5	7.5	1.5	1.0	1.5	---	---	---
17	15.5	14.0	14.5	7.5	7.5	7.5	1.5	1.0	1.5	---	---	---
18	16.0	14.5	15.0	8.0	7.5	7.5	1.5	1.0	1.0	---	---	---
19	16.0	14.0	15.0	8.0	7.5	7.5	1.5	1.0	1.0	---	---	---
20	15.5	14.0	14.5	7.5	7.0	7.5	1.5	1.0	1.0	---	---	---
21	16.0	14.0	14.5	7.5	7.0	7.0	1.5	1.0	1.5	---	---	---
22	15.0	14.0	14.5	7.0	6.5	7.0	1.5	1.0	1.5	---	---	---
23	15.0	13.5	14.0	7.0	6.5	7.0	1.5	1.0	1.5	---	---	---
24	15.0	13.5	14.0	6.5	6.5	6.5	2.0	1.0	1.5	---	---	---
25	15.0	13.5	14.0	6.5	6.0	6.5	2.0	1.5	1.5	---	---	---
26	14.5	13.5	13.5	6.5	6.0	6.0	1.5	1.0	1.5	---	---	---
27	14.0	12.5	13.5	6.0	5.5	5.5	1.5	1.0	1.0	---	---	---
28	13.5	13.0	13.5	5.5	5.0	5.5	1.0	0.5	0.5	---	---	---
29	13.5	12.0	13.0	5.0	4.5	4.5	0.5	0.5	0.5	---	---	---
30	13.0	11.5	12.0	4.5	4.0	4.0	0.5	0.0	0.5	---	---	---
31	11.5	11.0	11.0	---	---	---	0.5	0.0	0.0	---	---	---
MONTH	21.0	10.0	15.0	11.0	4.0	7.5	4.0	0.0	2.0	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.0	5.5	6.5	8.0	7.0	7.5	11.0	10.5	10.5
2	---	---	---	8.0	6.5	7.5	8.5	7.5	8.0	12.0	11.0	11.5
3	---	---	---	8.5	7.5	8.0	8.5	7.5	8.0	12.0	11.0	11.5
4	---	---	---	8.5	8.0	8.5	9.0	8.0	8.5	12.5	11.5	12.0
5	---	---	---	8.5	8.0	8.0	10.5	9.0	9.5	12.5	12.0	12.5
6	---	---	---	8.0	7.5	8.0	11.0	10.0	10.5	12.5	12.0	12.0
7	---	---	---	9.0	7.5	8.0	10.5	9.5	10.5	11.5	10.5	11.0
8	---	---	---	9.0	8.5	9.0	9.5	7.5	8.5	11.0	10.0	10.5
9	---	---	---	9.0	8.5	8.5	7.5	6.5	6.5	12.0	11.0	11.5
10	3.5	0.0	0.0	8.5	7.5	8.0	7.5	6.5	7.0	13.0	12.0	12.0
11	4.5	3.5	4.0	8.0	8.0	8.0	7.5	7.5	7.5	13.5	12.0	12.5
12	4.5	4.0	4.0	8.0	7.0	7.5	7.5	7.5	7.5	13.5	13.0	13.0
13	4.5	4.0	4.5	7.0	7.0	7.0	8.0	7.5	7.5	13.5	13.0	13.5
14	4.5	4.5	4.5	7.0	6.5	6.5	8.5	7.5	7.5	13.5	13.0	13.5
15	4.5	4.5	4.5	7.5	6.5	7.0	10.0	8.5	8.5	15.0	13.5	14.0
16	4.5	4.0	4.5	8.0	7.5	8.0	10.0	9.0	9.5	14.5	14.0	14.5
17	4.0	4.0	4.0	8.5	7.5	8.0	10.5	9.5	10.0	15.0	14.0	14.5
18	4.5	4.0	4.0	9.0	8.0	8.5	10.5	10.0	10.5	15.0	14.0	14.5
19	4.0	3.5	4.0	9.0	8.5	8.5	11.0	10.0	10.5	15.0	14.0	14.5
20	4.5	4.0	4.0	10.5	8.5	9.5	10.5	9.5	10.0	14.5	14.0	14.0
21	4.5	4.0	4.0	11.0	10.0	10.5	10.5	9.5	10.0	14.5	13.5	14.0
22	4.5	4.0	4.0	11.0	10.5	10.5	10.5	9.5	10.5	14.5	14.0	14.0
23	4.0	3.0	3.5	10.5	9.0	10.0	12.0	10.5	11.0	14.0	13.0	13.5
24	3.5	2.5	3.0	9.0	7.5	8.0	12.0	11.0	11.5	13.0	12.0	12.5
25	3.5	2.5	3.0	7.5	6.5	7.0	12.5	11.0	12.0	14.0	12.5	13.5
26	4.0	3.0	3.5	7.5	7.0	7.0	12.5	11.0	12.0	14.5	13.5	14.0
27	5.5	4.0	4.5	7.5	6.5	7.0	12.0	11.0	11.5	15.0	14.5	15.0
28	6.0	5.0	5.5	6.5	5.5	5.5	11.0	10.5	10.5	15.0	15.0	15.0
29	---	---	---	5.5	5.0	5.0	10.5	10.0	10.0	15.0	13.0	14.0
30	---	---	---	6.0	5.0	5.5	10.5	10.0	10.5	13.0	12.5	13.0
31	---	---	---	7.0	5.5	6.5	---	---	---	13.5	12.0	13.0
MONTH	---	---	---	11.0	5.0	8.0	12.5	6.5	9.5	15.0	10.0	13.0

08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), RECORDER MAXIMUM, MINIMUM, AND MEAN, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	13.0	13.5	20.0	18.5	19.5	---	---	---	---	---	---
2	15.5	13.5	14.5	20.0	19.0	19.5	---	---	---	---	---	---
3	15.5	15.0	15.0	20.5	19.5	20.0	---	---	---	---	---	---
4	16.5	15.5	16.0	21.0	19.5	20.5	---	---	---	---	---	---
5	16.5	15.5	16.0	21.0	20.0	20.5	---	---	---	---	---	---
6	17.0	15.5	16.5	21.0	20.0	20.5	---	---	---	---	---	---
7	16.5	16.0	16.0	21.0	20.0	20.5	---	---	---	---	---	---
8	16.5	16.0	16.0	21.5	20.0	20.5	---	---	---	---	---	---
9	16.5	15.0	16.0	21.5	20.5	21.0	---	---	---	---	---	---
10	16.5	15.5	16.0	22.0	20.5	21.0	---	---	---	---	---	---
11	16.0	15.0	16.0	21.5	20.5	21.0	---	---	---	---	---	---
12	15.5	15.0	15.5	21.0	20.0	20.5	---	---	---	---	---	---
13	16.0	15.5	15.5	21.0	20.5	20.5	---	---	---	---	---	---
14	16.5	15.0	16.0	21.5	20.5	21.0	---	---	---	---	---	---
15	17.0	16.0	16.5	21.5	20.5	21.0	---	---	---	---	---	---
16	17.0	16.5	16.5	21.5	20.5	21.0	---	---	---	---	---	---
17	17.0	16.5	16.5	22.0	21.0	21.5	---	---	---	---	---	---
18	17.0	16.5	17.0	21.5	20.5	21.0	22.0	22.0	22.0	22.0	21.5	21.5
19	17.5	16.5	17.0	21.5	21.0	21.5	22.0	22.0	22.0	22.0	21.0	22.0
20	17.0	16.5	17.0	22.0	21.0	21.5	---	---	---	---	---	---
21	17.5	17.0	17.0	21.5	21.0	21.5	22.0	21.5	22.0	22.0	21.5	22.0
22	17.5	17.0	17.5	22.5	21.0	21.5	22.0	21.5	22.0	22.0	21.5	22.0
23	18.0	17.0	17.5	22.5	21.5	22.0	22.0	21.5	22.0	22.0	21.5	22.0
24	18.0	17.0	17.5	22.5	21.0	21.5	22.5	21.5	22.0	22.0	21.5	22.0
25	18.5	17.5	18.0	22.0	21.5	21.5	23.0	21.5	22.5	22.5	21.5	22.5
26	18.5	18.0	18.5	---	---	---	22.5	22.0	22.5	22.5	22.0	22.5
27	18.5	18.0	18.5	---	---	---	23.0	22.0	22.0	22.0	21.0	21.5
28	19.0	18.0	18.5	---	---	---	22.5	22.0	22.0	22.0	21.0	21.5
29	19.0	18.0	18.5	---	---	---	22.0	21.0	21.5	21.5	21.0	21.5
30	19.0	18.0	19.0	---	---	---	22.0	21.0	21.5	21.5	21.0	21.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	19.0	13.0	16.5	22.5	18.5	21.0	---	---	---	---	---	---
YEAR	23.0	0.0	11.0	---	---	---	---	---	---	---	---	---

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	98	18	4.8	435	26	31	458	14	17
2	96	16	4.1	451	22	27	438	10	12
3	100	18	4.9	459	21	26	437	16	19
4	99	21	5.6	444	19	23	466	32	40
5	99	21	5.6	445	19	23	481	35	45
6	134	22	8.0	444	20	24	493	36	48
7	233	27	17	435	13	15	513	35	48
8	210	25	14	427	17	20	529	36	51
9	157	20	8.5	427	21	24	531	38	54
10	152	20	8.2	428	23	27	521	21	30
11	227	26	16	437	24	28	502	33	45
12	296	30	24	444	23	28	493	32	43
13	337	31	28	449	35	42	483	33	43
14	329	31	28	452	13	16	483	21	27
15	298	30	24	466	20	25	475	30	38
16	251	27	18	471	22	28	475	35	45
17	222	25	15	465	21	26	483	35	46
18	219	25	15	448	19	23	488	39	51
19	212	25	14	431	21	24	494	17	23
20	205	25	14	419	25	28	492	13	17
21	206	25	14	418	21	24	498	11	15
22	202	25	14	418	20	23	501	11	15
23	202	25	14	418	18	20	496	12	16
24	206	25	14	419	32	36	489	11	15
25	223	26	16	428	27	31	449	11	13
26	242	27	18	428	28	32	414	60	67
27	256	25	17	425	51	59	420	11	12
28	259	20	14	434	31	36	428	7	8.1
29	262	18	13	458	22	27	411	6	6.7
30	268	19	14	464	18	23	402	6	6.5
31	330	29	26	---	---	---	394	7	7.4
MONTH	6630	---	450.7	13187	---	819	14637	---	923.7

08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	368	6	6.0	669	28	51	638	25	43
2	356	7	6.7	668	24	43	675	40	73
3	380	6	6.2	647	25	44	637	65	112
4	380	7	7.2	886	22	53	652	70	123
5	375	9	9.1	871	23	54	845	43	98
6	385	8	8.3	610	27	44	927	38	95
7	419	8	9.1	520	38	53	877	40	95
8	447	8	9.7	515	39	54	865	42	98
9	472	6	7.6	531	41	59	959	40	104
10	486	7	9.2	539	39	57	860	41	95
11	457	7	8.6	551	45	67	886	44	105
12	414	12	13	551	36	54	963	37	96
13	400	10	11	544	31	46	1050	29	82
14	399	15	16	535	26	38	858	32	74
15	402	23	25	546	23	34	731	31	61
16	398	18	19	562	23	35	685	32	59
17	424	17	19	559	20	30	658	29	52
18	442	19	23	552	22	33	637	26	45
19	468	20	25	551	24	36	630	27	46
20	484	22	29	551	23	34	640	33	57
21	488	18	24	543	22	32	646	27	47
22	481	15	19	564	25	38	770	25	52
23	456	18	22	550	28	42	848	25	57
24	442	16	19	527	22	31	882	23	55
25	463	19	24	500	11	15	859	24	56
26	494	13	17	545	28	41	751	31	63
27	520	16	22	588	39	62	691	31	58
28	545	14	21	595	30	48	723	28	55
29	567	18	28	---	---	---	773	25	52
30	589	16	25	---	---	---	801	26	56
31	630	24	41	---	---	---	672	24	44
MONTH	14031	---	529.7	16370	---	1228	24089	---	2208
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	632	31	53	2080	64	359	4210	50	568
2	631	35	60	2270	63	386	3730	50	504
3	622	37	62	2400	71	460	3470	56	525
4	600	37	60	2430	70	459	3300	55	490
5	597	35	56	2500	75	506	3090	49	409
6	615	36	60	2610	70	493	3270	42	371
7	812	38	83	2850	65	500	3430	39	361
8	1010	41	112	2640	68	485	3590	41	397
9	1330	53	190	2430	70	459	3350	34	308
10	1700	77	353	2660	74	531	2770	29	217
11	1460	42	166	2800	78	590	2360	32	204
12	1320	35	125	2850	70	539	2530	29	198
13	1250	36	121	2920	72	568	2770	27	202
14	1200	36	117	3440	74	687	3190	49	422
15	1140	35	108	3610	71	692	3640	223	2190
16	1190	33	106	3860	80	834	3820	343	3540
17	1140	54	156	4180	73	824	3860	294	3060
18	1120	81	253	4260	68	782	3950	36	384
19	1090	92	271	4280	70	809	4340	20	234
20	978	88	232	4430	71	849	3870	21	219
21	1010	88	240	4450	71	853	3160	17	145
22	1230	88	292	4350	70	822	3410	15	138
23	2820	86	655	4240	71	813	3460	16	149
24	3700	88	879	4350	75	881	3470	16	150
25	3610	88	858	4310	67	780	3350	18	163
26	3610	88	858	4090	51	563	3150	18	153
27	3610	87	848	3720	51	512	3530	20	191
28	3550	85	815	3930	54	573	3510	21	199
29	3570	86	829	4440	57	683	3390	19	174
30	2820	76	579	4500	70	850	3190	19	164
31	---	---	---	4450	55	661	---	---	---
MONTH	49967	---	9597	108330	---	19803	102160	---	16429

08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2810	16	121	709	22	42	690	18	34
2	2750	15	111	733	39	77	734	23	48
3	3110	15	126	667	35	63	701	24	45
4	3310	17	152	608	30	49	980	21	56
5	3520	13	124	474	18	23	1350	25	93
6	3390	8	73	439	26	31	1200	18	58
7	3240	6	52	426	30	35	663	15	27
8	3130	7	59	483	24	31	620	15	25
9	3160	10	85	670	18	33	836	15	34
10	3410	13	120	1100	23	68	998	17	46
11	3580	13	126	1130	23	70	753	18	37
12	3810	11	113	1130	24	73	898	16	39
13	3640	11	108	1270	25	86	768	13	27
14	3630	8	78	1120	23	70	1010	15	41
15	3700	6	60	833	17	38	1080	14	41
16	3390	7	64	570	9	14	872	14	33
17	3350	9	81	642	14	24	723	12	23
18	2780	14	105	624	20	34	737	14	28
19	1800	13	63	489	16	21	760	13	27
20	1550	10	42	523	17	24	656	12	21
21	1640	10	44	707	17	32	610	11	18
22	2200	9	53	768	15	31	612	17	28
23	2050	11	61	543	16	23	572	15	23
24	1290	10	35	444	16	19	509	16	22
25	1020	9	25	504	17	23	494	23	31
26	1300	14	49	431	18	21	498	22	30
27	1130	14	43	496	19	25	440	20	24
28	833	14	31	750	20	40	415	12	13
29	993	13	35	761	16	33	417	16	18
30	802	11	24	637	17	29	415	16	18
31	624	12	20	593	16	26	---	---	---
MONTH	76942	---	2283	21274	---	1208	22011	---	1006
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)				469,628.00				
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)				56,485.10				

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.

LOCATION.--Lat 35°27'56", long 106°12'57", in SE¼SE¼ sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, at gaging station, 0.6 mi (1.0 km) downstream from Galisteo Dam, 5.5 mi (8.8 km) northwest of Cerrillos, and at mile 11.2 (18.0 km).

DRAINAGE AREA.--597 mi<sup>2</sup> (1,546 km<sup>2</sup>).

PERIOD OF RECORD.--Specific conductance: July 1971 to current year.

Water temperatures: July 1971 to current year.

Sediment records: July 1971 to current year.

## EXTREMES:

## Current year:

Specific conductance: Maximum, not determined; minimum, not determined.

Water temperatures: Maximum, not determined; minimum, not determined.

Sediment concentrations: Maximum daily, 38,500 mg/l Sept. 11; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 60,400 tons (54,800 tonnes) Sept. 11; minimum daily, 0 tons (0 tonnes) on many days.

## Period of record:

Specific conductance: Maximum, not determined; minimum, not determined.

Water temperatures: Maximum, not determined; minimum, not determined.

Sediment concentrations: Maximum daily, 73,100 mg/l July 17, 1972; minimum daily, no flow on many days each year.

Sediment discharge: Maximum daily 111,000 tons (101,000 tonnes) July 17; minimum daily, 0 tons (0 tonnes) on many days each year.

REMARKS.--Samples are collected when flow is observed on this ephemeral stream. The extremes for specific conductance and water temperatures were not reported because the number of missing days of record exceeded 20 percent of flow of year.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1330	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	1720	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	1520	---	---	1890	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	1070	---	---	---	---	---	1330
11	---	---	---	---	---	1150	---	---	---	---	---	---
12	---	---	1400	---	---	1130	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	650	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	1000	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	1540	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	1770	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YFAR	MAX	1890	MIN	650	MEAN	1350						

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	18.0
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	12.0	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	12.5	---	---	0.5	---	---	---	---	---	---	---	21.0
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	4.0	---	---	---	---	---	19.0
11	---	---	---	---	---	10.0	---	---	---	---	---	---
12	---	---	0.5	---	---	9.0	---	---	---	---	24.5	---
13	---	---	---	---	---	---	---	---	---	---	29.5	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	13.0	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	14.0	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	17.0	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	9.5	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	17.0	---	---	---	17.0	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	29.5	MIN	0.5	MEAN	13.5						

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	7.1	1680	32	.40	240	.26
2	0	0	0	4.3	840	9.8	.50	250	.34
3	0	0	0	3.2	540	4.7	.50	250	.34
4	0	0	0	2.9	500	3.9	.50	250	.34
5	0	0	0	2.9	410	3.2	.50	250	.34
6	1.1	1790	77	1.3	400	1.4	.47	245	.31
7	12	15200	527	.98	300	.79	.45	245	.30
8	3.7	2200	22	1.1	330	.98	.42	245	.28
9	1.5	600	2.4	1.6	360	1.6	.40	240	.26
10	1.0	300	.81	.98	300	.79	.40	240	.26
11	84	30600	31600	.72	280	.54	.43	245	.28
12	40	28000	6010	.61	260	.43	.42	239	.92
13	3.0	1340	11	.72	270	.52	.40	240	.26
14	1.5	599	2.4	.61	260	.43	.37	230	.23
15	1.2	345	1.1	.61	260	.43	.40	240	.26
16	1.0	300	.81	.61	260	.43	.45	245	.30
17	.85	250	.57	.50	250	.34	.50	250	.34
18	.23	150	.09	.50	250	.34	.45	245	.30
19	.13	368	.31	.40	240	.26	.50	250	.34
20	.10	400	.11	.40	240	.26	.50	250	.34
21	1.5	1240	19	.50	250	.34	.60	260	.42
22	1.6	1650	7.1	.72	270	.52	.60	260	.42
23	56	17200	9130	.50	250	.34	.43	245	.28
24	9.0	9190	544	.50	250	.34	.33	235	.21
25	2.0	2200	12	.49	245	.32	.23	220	.14
26	1.0	1080	2.7	.48	245	.32	.35	235	.22
27	60	36600	7940	.47	245	.31	.40	240	.26
28	20	1550	84	.44	240	.29	.40	240	.26
29	7.1	3100	59	.30	230	.19	.45	245	.30
30	19	10400	606	.35	230	.22	.48	250	.32
31	12	4300	139	---	---	---	.40	240	.26
MONTH	340.51	---	56798.40	36.79	---	66.33	13.63	---	9.69

## RIO GRANDE BASIN

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

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

JANUARY				FEBRUARY				MARCH	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.56	250	.38	.77	285	.59	.23	150	.09
2	.64	260	.45	.74	285	.57	.12	100	.03
3	.68	270	.50	.66	270	.48	.06	80	.01
4	.70	280	.53	.60	255	.41	5.8	592	11
5	.70	280	.53	.54	240	.35	3.4	300	2.8
6	.76	285	.58	.50	220	.30	1.6	685	3.0
7	.78	285	.60	1.4	340	1.3	.40	700	.76
8	.80	290	.63	1.6	350	1.5	4.0	2980	54
9	.80	290	.63	1.4	340	1.3	10	5010	135
10	.70	280	.53	1.6	350	1.5	13	6400	225
11	.60	255	.41	.85	300	.69	13	6280	220
12	.52	240	.34	.40	200	.22	14	5410	204
13	.64	260	.45	.61	255	.42	9.8	4890	129
14	.70	280	.53	1.4	340	1.3	6.3	4430	75
15	.77	285	.59	1.6	350	1.5	5.6	4800	73
16	.69	280	.52	1.3	330	1.2	7.1	6250	120
17	.69	280	.52	1.1	330	.98	4.3	5900	68
18	.72	280	.54	.85	300	.69	2.0	5750	31
19	.78	290	.61	.50	220	.30	.72	5600	11
20	.85	300	.69	.50	220	.30	.13	2340	1.0
21	.72	280	.54	.50	220	.30	0	0	0
22	.60	255	.41	.72	280	.54	0	0	0
23	.54	250	.36	.56	220	.33	0	0	0
24	.79	290	.62	.78	285	.60	2.0	3650	45
25	1.0	320	.86	.90	300	.73	2.9	6190	48
26	.96	310	.80	.80	290	.63	.61	2080	3.4
27	.89	300	.72	.61	255	.42	1.7	3630	36
28	.85	300	.69	.50	220	.30	2.7	6660	49
29	.74	285	.57	---	---	---	2.2	5860	35
30	1.1	330	.98	---	---	---	1.4	3410	13
31	.90	330	.80	---	---	---	.14	863	.54
MONTH	23.17	---	17.91	24.29	---	19.75	115.21	---	1593.63
APRIL				MAY				JUNE	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.01	80	.01			
2	.01	247	.03	0	0	0			
3	.05	541	.23	0	0	0			
4	.03	679	.14	0	0	0			
5	0	0	0	0	0	0			
6	0	0	0	0	0	0			
7	.08	973	.42	0	0	0			
8	.06	860	.37	0	0	0			
9	.10	1020	.63	0	0	0			
10	.21	2400	2.6	0	0	0			
11	.23	4410	2.7	0	0	0			
12	6.7	8350	166	0	0	0			
13	4.7	7110	90	0	0	0			
14	1.1	5000	15	0	0	0			
15	.43	2790	6.3	0	0	0			
16	20	16400	1070	0	0	0			
17	26	17200	1210	0	0	0			
18	15	7790	315	0	0	0			
19	14	3690	139	0	0	0			
20	11	2110	63	0	0	0			
21	2.0	1120	6.0	0	0	0			
22	.72	428	.83	0	0	0			
23	.50	498	.67	0	0	0			
24	1.1	660	2.0	0	0	0			
25	.90	596	1.6	0	0	0			
26	.19	373	.31	0	0	0			
27	.09	193	.12	0	0	0			
28	1.2	488	1.6	0	0	0			
29	.62	294	.57	0	0	0			
30	.11	99	.09	0	0	0			
31	---	---	---	0	0	0			
MONTH	107.13	---	3095.21	.01	---	.01	0	---	0



08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	171	21200	39600
5	0	0	0	0	0	0	72	26700	13500
6	0	0	0	0	0	0	2.4	2300	15
7	0	0	0	0	0	0	2.4	1200	7.8
8	0	0	0	0	0	0	64	26000	10500
9	.02	73	.03	6.9	13500	432	23	6900	428
10	2.7	5630	93	4.9	13200	210	7.2	1000	19
11	3.5	10500	164	.18	963	1.0	264	38500	60400
12	32	14700	1670	16	30700	2940	122	21000	6920
13	80	16600	3810	8.8	32000	760	19	4400	226
14	9.8	5490	145	.33	3000	3.2	4.3	1890	22
15	18	5070	293	0	0	0	1.7	825	3.8
16	58	13500	3260	0	0	0	.85	505	1.2
17	43	25500	5380	0	0	0	.40	320	.35
18	3.0	2390	19	0	0	0	.16	107	.06
19	.40	1070	1.2	0	0	0	.04	75	.01
20	37	8250	5620	12	9370	2770	0	0	0
21	8.0	444	9.6	171	28400	56100	.48	210	.27
22	8.0	2790	305	80	10700	6460	.10	90	.02
23	.50	1400	1.9	.27	172	.39	.04	75	.01
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	.83	1980	28	0	0	0	0	0	0
30	.13	1170	.98	0	0	0	0	0	0
31	0	0	0	0	0	0	---	---	---
MONTH	304.88	---	20800.71	300.38	---	69676.59	755.07	---	131643.5
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)			2,021.07					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)			283,721.73					

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C) (000101)	INSTANTANEOUS DISCHARGE (CFS) (000061)	SUSPENDED SEDIMENT (MG/L) (80154)	SUSPENDED SEDIMENT DISCHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)
MAR.									
12...	1545	9.0	12	5210	169	40	53	77	90
APR.									
29...	0945	4.0	1.6	352	1.5	--	--	--	--
30...	1530	23.0	.40	316	.34	--	--	--	--
JULY									
15...	1400	30.0	9.8	1680	44	--	--	--	--
17...	0945	--	26	27100	1900	--	--	--	--
17...	1600	--	10	10900	294	--	--	--	--
18...	0925	--	4.0	2620	28	--	--	--	--
21...	1345	29.0	1.3	366	1.3	--	--	--	--
AUG.									
13...	1731	29.5	4.9	29100	385	--	--	--	--
SEP.									
04...	1235	18.0	230	12500	7760	--	--	--	88
08...	1600	21.0	365	80000	78000	30	37	57	84

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.---Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70334)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70335)	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM (70336)
MAR. 12...	97	100	--	--	--	--	--	--
APR. 29...	--	--	95	97	98	100	--	--
30...	--	--	91	95	98	100	--	--
JULY 15...	--	--	100	--	--	--	--	--
17...	--	--	95	97	98	99	99	100
17...	--	--	98	99	99	100	--	--
18...	--	--	98	99	100	--	--	--
21...	--	--	88	91	95	100	--	--
AUG. 13...	--	--	100	--	--	--	--	--
SEP. 04...	99	100	--	--	--	--	--	--
08...	94	100	--	--	--	--	--	--

## 08319000 RIO GRANDE AT SAN FELIPE, N. MEX.

LOCATION.--Lat 35°26'39", long 106°26'23", in S&W&E sec.17, T.14 N., R.5 E., Sandoval County, in San Felipe Grant, at gaging station 200 ft (61 m) downstream from Tonque Arroyo, 1,700 ft (520 m) upstream from steel highway bridge, 0.3 mi (1.3 km) upstream from San Felipe Pueblo, 11 mi (18 km) northeast of Bernalillo, and at mile 1,572.7 (2,530.5 km).

DRAINAGE AREA.--16,100 mi<sup>2</sup> (41,670 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.

Sediment records: July 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000611)	DIS- SOLVED SILICA (SI02) (PP) (MG/L) (000455)	DIS- SOLVED IRON (FE) (MG/L) (010461)	DIS- SOLVED MANGANESE (MN) (MG/L) (010555)	DIS- SOLVED CALCIUM (CA) (MG/L) (000915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (000425)	DIS- SOLVED SODIUM (NA) (MG/L) (000930)	DIS- SOLVED POTASSIUM (K) (MG/L) (000435)	BICARBONATE (HCO3) (MG/L) (000440)
JULY 09...	1000	3110	20	60	--	31	6.2	14	2.5	92
AUG. 05...	0900	655	15	10	10	44	7.3	21	12	113
SEP. 10...	1200	1110	19	10	--	34	6.6	22	3.3	121

DATE	CARBONATE (CO3) (MG/L) (000445)	DIS- SOLVED SULFATE (SO4) (MG/L) (000455)	DIS- SOLVED CHLORIDE (CL) (MG/L) (000440)	DIS- SOLVED FLUORIDE (F) (MG/L) (000450)	DIS- SOLVED NITRATE (N) (MG/L) (000618)	DIS- SOLVED NITRITE (N) (MG/L) (000613)	TOTAL NITRITE PLUS NITRATE (MG/L) (000630)	DIS- SOLVED NITRITE PLUS NITRATE (MG/L) (000631)	AMMONIA NITROGEN (N) (MG/L) (000610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (000605)
JULY 09...	0	53	3.6	.2	.00	.01	.05	.01	.03	.35
AUG. 05...	0	83	12	.3	--	--	.01	.01	.00	.30
SEP. 10...	0	61	5.3	.3	--	--	.06	.06	.00	.57

DATE	TOTAL NITROGEN (N) (MG/L) (000600)	TOTAL PHOSPHORUS (P) (MG/L) (000665)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (000671)	DIS- SOLVED SOLIDS DUE AT 100 C (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	NON- CARBONATE HARDNESS (CA+MG) (MG/L) (000900)	SODIUM AD- SORPTION RATIO (MG/L) (000902)	SPE- CIFIC CONDUCTANCE (MICRO- MHOS) (MG/L) (000931)
JULY 09...	.43	.07	.01	179	176	100	27	.6
AUG. 05...	.31	.07	.01	272	251	140	47	.8
SEP. 10...	.63	.16	.02	222	216	120	23	.9

DATE	PH (UNITS) (000400)	AIR TEMPER- ATURE (DEG C) (000020)	TEMPER- ATURE (DEG C) (000010)	DUR- BILITY (JTD) (000070)	DIS- SOLVED OXYGEN (MG/L) (000300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (000340)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (000681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (000689)	DIS- SOLVED BORON (B) (MG/L) (01020)
JULY 09...	8.0	23.5	21.0	15	7.4	15	3.8	5.0	30
AUG. 05...	7.6	24.5	20.5	16	6.9	13	3.2	.5	60
SEP. 10...	8.1	27.5	21.5	40	7.1	11	4.0	.1	60

08319000 RIO GRANDE AT SAN FELIPE, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		ARSENIC	SOLVED	SOLVED	COPPER	SOLVED	CHROMIUM	SOLVED	COPPER	SOLVED	COPPER	SOLVED	
		(AS)	(AS)	(AS)	(CU)	(CU)	(CR)	(CR)	(CU)	(CU)	(CU)	(CU)	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		(01002)	(01009)	(01026)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)	
AUG.	05...	0900	1	0	60	<10	1	10	0	<50	0	<10	0
DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		IRON	SOLVED	SOLVED	MANGANESE	SOLVED	MERCURY	SOLVED	NIUM	SOLVED	ZINC	SOLVED	
		(FE)	(FE)	(FE)	(MN)	(MN)	(HG)	(HG)	(NI)	(NI)	(ZN)	(ZN)	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		(01045)	(01046)	(01051)	(01049)	(01053)	(01056)	(01070)	(01090)	(01147)	(01145)	(01092)	(01090)
AUG.	05...	670	10	<100	0	50	10	.1	.0	0	0	20	0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLIFORM (COL- PER 100 ML) (31616)	STREP- TOCOCCHI (COL- ONIES PER 100 ML) (31679)
		(31616)	(31679)
JULY 09...	1000	47	140
AUG. 05...	0900	140	54
SEP. 10...	1200	210	250

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (MG/L) (80155)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
JULY 09...	1000	21.0	3110	97	815		20
AUG. 05...	0900	20.5	655	72	127		48
SEP. 10...	1200	21.5	1110	292	875		44

## 08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec. 5, T.13 N., R.4 E., Sandoval County, at gaging station 0.8 mi (1.3 km) downstream from Jemez Canyon Dam, 2.0 mi (3.2 km) upstream from mouth, and 6 mi (9.6 km) north of Bernalillo.

DRAINAGE AREA.--1,038 mi<sup>2</sup> (2,688 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: February 1966 to current year.  
Sediment records: March 1974 to current year (discontinued).

REMARKS.--Daily specific conductance records computed from records furnished by the U.S. Corps of Engineers.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (00061)	DIS- SOLVED SILICA (5102) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESI- UM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)
OCT.								
21...	1500	17	38	20	95	9.9	250	15
28...	1445	35	--	--	--	--	--	--
NOV.								
25...	1600	25	16	--	79	9.5	220	14
DEC.								
09...	1520	12	37	--	98	12	270	14
23...	1120	9.3	--	--	--	--	--	--
JAN.								
13...	1050	7.4	52	--	130	14	330	19
FEB.								
12...	0950	8.5	--	--	--	--	--	--
18...	1030	24	31	--	110	17	370	22
24...	1100	2.8	--	--	--	--	--	--
MAR.								
03...	1145	40	35	--	64	9.1	220	13
17...	1230	44	--	--	--	--	--	--
24...	1000	54	--	--	--	--	--	--
APR.								
07...	1045	65	28	0	42	5.8	81	7.1
MAY								
27...	1230	55.9	21	--	31	2.7	31	4.3
JUNE								
09...	1245	174	22	--	37	4.0	44	4.9
JULY								
29...	1030	6.8	32	--	65	7.8	170	12
AUG.								
25...	1240	32	12	--	95	11	170	11
SEP.								
08...	1000	120	16	--	120	13	230	11

DATE	BICAR- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRO- GEN (P) (MG/L) (00671)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00300)	DIS- SOLVED SOLIDS (SOLIDS DUE AT CONSTIT- UENTS) (MG/L) (00301)
OCT.									
21...	259	0	290	249	1.5	.84	.06	1110	1070
28...	250	0	--	253	--	--	--	--	--
NOV.									
25...	322	0	290	200	.5	.41	--	--	899
DEC.									
09...	312	0	250	250	1.3	.87	--	--	1080
23...	--	--	--	--	--	--	--	--	--
JAN.									
13...	509	0	200	340	1.6	.15	--	--	1430
FEB.									
12...	--	--	--	--	--	--	--	--	--
18...	304	0	440	130	1.3	.25	--	--	1480
24...	--	--	--	--	--	--	--	--	--
MAR.									
03...	302	0	190	190	1.1	.06	--	--	875
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
APR.									
07...	169	--	77	60	.7	.13	.06	410	394
MAY									
27...	117	--	31	26	.3	.07	--	--	206
JUNE									
09...	142	--	39	34	.5	.06	--	--	261
JULY									
29...	264	0	150	160	1.1	.04	--	--	730
AUG.									
25...	156	0	350	140	.8	.10	--	--	875
SEP.									
08...	152	0	480	180	.8	.16	--	--	1110

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	HARD- NESS (CA,MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AN- ION SODIUM RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (H) (01020)
OCT.								
21...	280	68	6.5	1750	8.1	--	21.0	1300
28...	--	--	--	1860	7.9	--	15.0	--
NOV.								
25...	240	0	5.2	1450	8.1	--	8.0	--
DEC.								
09...	270	14	7.2	1790	8.3	--	5.0	1400
23...	--	--	--	1450	--	--	1.5	--
JAN.								
13...	400	0	7.2	2250	8.1	--	0	1900
FEB.								
12...	--	--	--	1750	--	--	2.5	--
18...	340	91	8.7	2320	8.2	--	1.0	1700
24...	--	--	--	1910	--	--	1.0	--
MAR.								
03...	200	0	6.8	1430	8.2	--	8.0	1100
17...	--	--	--	1460	--	--	8.5	--
24...	--	--	--	1070	--	--	9.0	--
APR.								
07...	130	0	3.1	667	--	--	5.0	440
MAY								
27...	49	0	1.4	339	--	--	18.5	180
JUNE								
09...	110	0	1.8	435	--	25.0	19.5	280
JULY								
29...	190	0	5.3	1190	8.0	24.0	25.9	1000
AUG.								
25...	240	150	4.4	1330	7.8	30.0	23.5	730
SEP.								
04...	350	230	5.3	1650	7.7	--	18.0	720

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL BORON (B) (UG/L) (01022)	TOTAL LITHIUM (LI) (UG/L) (01132)
JAN.			
14...	1615	1900	--
28...	1300	1900	1600
FEB.			
19...	0920	1800	1300
MAR.			
18...	1030	1500	780
APR.			
22...	1150	760	700
MAY			
13...	1215	690	630

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)
OCT. 21...	1500	40	1300	20	--
DEC. 09...	1520	--	1400	--	1400
JAN. 13...	1050	--	1900	--	1800
FEB. 18...	1000	--	1700	--	1400
MAR. 03...	1145	--	1100	--	1200
APR. 07...	1045	26	440	0	10
MAY 27...	1230	8	180	--	160
JUNE 09...	1245	12	280	--	250
JULY 29...	1030	--	1000	--	910
AUG. 25...	1240	--	730	--	830
SEP. 08...	1000	--	720	--	810

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILT- RAHLF RESIDUE (MG/L) (00510)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SP90 /Y90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS SK90 /Y90 (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
DEC. 23...	1125	420	25	22	23	14	18	12	.17	4.1

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, in Atrisco Grant, at gaging station on U.S. Highway 66 at Albuquerque, and at mile 1,540.0 (2,477.9 km).

DRAINAGE AREA.--17,440 mi<sup>2</sup> (45,170 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Specific conductance: October 1969 to current year.

Water temperatures: October 1969 to current year.

Sediment records: May 1969 to September 1969 (partial-record station), October 1969 to current year.

## EXTREMES:

## Current year:

Specific conductance: Maximum daily, 1,840 micromhos Oct. 12; minimum daily, 213 micromhos May 22.

Water temperatures: Maximum, 26.0°C July 20, Aug. 8,9,15; minimum, 2.0°C on several days during December and January.

Sediment concentrations: Maximum daily, 45,500 mg/l Oct. 12; minimum daily, 66 mg/l Aug. 8.

Sediment discharge: Maximum daily, 114,000 tons (103,000 tonnes) June 5; minimum daily, 6.6 tons (6 tonnes) Oct. 2.

## Period of record:

Specific conductance: Maximum, 1,840 micromhos Oct. 12, 1974; minimum daily 133 micromhos July 21, 1971.

Water temperatures: Maximum, 34.0°C July 12, 1970; minimum, freezing point Nov. 1, 1970, Jan. 3-5, 1971.

Sediment concentrations: Maximum daily, 45,500 mg/l July 21, 1971; minimum daily, no flow on many days in 1971 and 1972.

Sediment discharge: Maximum daily, 275,000 tons (249,000 tonnes) July 27, 1971; minimum daily; 0 tons (0 tonnes) on many days in 1971 and 1972.

REMARKS.--Additional sediment total discharge determination were made bi-weekly when needed.

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (R0020)
JUNE			
02...	1530	.05	.85
02...	1800	.06	.94

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	595	530	495	550	481	444	352	234	248	357	356
2	---	583	515	502	511	462	438	344	234	231	355	345
3	---	563	510	497	483	465	448	330	241	230	352	338
4	485	573	518	513	487	465	432	325	244	234	356	250
5	483	570	518	524	470	466	435	326	241	238	350	420
6	---	547	522	547	465	436	436	326	237	241	370	570
7	454	551	533	507	472	445	440	316	236	240	359	520
8	472	570	524	493	466	460	431	307	362	239	365	580
9	480	538	508	490	477	433	406	316	230	244	320	60
10	472	551	560	503	479	605	426	320	227	245	355	470
11	465	565	508	517	492	492	431	315	234	288	347	44
12	1840	555	497	527	482	466	472	303	228	258	328	36
13	593	537	508	503	469	467	487	292	227	260	320	47
14	535	527	535	485	447	451	560	279	237	366	542	42
15	535	530	523	483	483	427	535	259	253	367	634	42
16	545	545	497	480	487	437	565	248	245	332	526	45
17	497	537	506	495	648	472	505	240	259	---	469	53
18	495	537	523	500	593	461	493	227	275	318	478	50
19	497	523	523	494	513	475	513	225	283	307	480	43
20	497	545	527	480	492	439	490	224	272	312	478	40
21	490	537	518	471	448	449	497	217	277	298	417	40
22	485	547	503	482	458	463	463	213	269	329	430	41
23	480	515	527	474	475	425	453	225	263	334	435	40
24	487	547	507	495	468	430	394	225	261	323	384	41
25	525	543	507	490	458	444	384	234	260	333	409	41
26	490	528	497	499	523	431	380	243	266	336	398	40
27	489	532	385	533	489	437	371	249	268	334	400	41
28	537	525	497	507	478	445	362	246	267	338	406	41
29	532	517	480	533	---	433	344	244	256	336	324	40
30	455	513	478	503	---	398	334	248	253	347	340	40
31	895	---	507	540	---	445	---	244	---	352	345	---
MONTH	563	545	509	502	492	455	446	273	255	295	401	4
YEAR	MAX	1840	MIN	213	MEAN	429						



08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	5.0	2.0	6.0	8.0	6.0	---	17.0	19.0	25.0	22.0
2	---	11.0	6.0	2.0	4.0	6.0	6.0	17.0	19.0	20.0	24.0	23.0
3	---	8.0	6.0	3.0	4.5	7.0	9.0	17.0	20.0	19.0	20.0	23.0
4	19.0	11.0	6.0	3.0	4.0	7.0	10.0	13.0	21.0	21.0	22.0	22.0
5	21.0	12.0	5.0	4.0	3.0	8.0	11.0	14.0	21.0	20.0	23.0	21.0
6	---	12.0	5.0	3.0	4.0	7.0	7.0	13.0	21.0	19.0	24.0	21.0
7	16.0	13.0	6.0	3.0	5.0	8.0	6.0	15.0	22.0	23.0	25.0	18.0
8	19.0	12.0	4.0	3.0	4.0	5.0	7.0	16.0	17.0	24.0	26.0	20.0
9	20.0	11.0	5.0	2.0	5.0	6.0	8.0	17.0	21.0	23.0	26.0	20.0
10	16.0	8.0	5.0	2.0	4.0	7.0	7.0	18.0	19.0	23.0	19.0	19.0
11	19.0	11.0	6.0	2.0	5.0	6.0	7.0	14.0	20.0	22.0	24.0	19.0
12	15.0	12.0	5.0	2.0	6.0	7.0	7.0	16.0	19.0	23.0	25.0	17.0
13	13.0	11.0	6.0	2.0	6.0	7.0	6.0	---	20.0	23.0	22.0	18.0
14	14.0	12.0	5.0	3.0	5.0	8.0	8.0	18.0	22.0	25.0	25.0	18.0
15	17.0	11.0	5.0	3.0	4.0	5.0	9.0	18.0	16.0	20.0	26.0	17.0
16	17.0	13.0	4.0	4.0	4.0	6.0	10.0	17.0	19.0	24.5	19.0	20.0
17	20.0	10.0	5.0	3.0	4.0	5.0	10.0	20.0	20.0	---	20.0	19.0
18	20.0	12.0	4.0	4.0	5.0	7.0	8.0	16.0	20.0	23.0	19.0	21.0
19	21.0	11.0	4.0	4.0	5.0	8.0	10.0	17.0	19.0	24.0	25.0	20.0
20	12.0	11.0	5.0	2.0	6.0	9.0	16.0	18.0	20.0	26.0	23.0	20.0
21	10.0	10.0	6.0	3.0	4.0	6.0	13.0	19.0	21.0	21.5	22.0	17.0
22	13.0	10.0	4.0	3.0	4.0	7.0	14.0	15.0	17.0	22.0	24.0	19.0
23	14.0	11.0	4.0	4.0	3.0	5.0	15.0	17.0	20.0	23.0	23.0	20.0
24	13.0	8.0	3.0	4.0	5.0	7.0	14.0	13.0	20.0	21.0	22.0	19.0
25	13.0	8.0	2.0	5.0	6.0	8.0	15.0	15.0	19.0	23.0	23.0	19.0
26	13.0	7.0	2.0	5.0	6.0	5.0	14.0	19.0	20.0	24.5	23.0	18.0
27	10.0	7.0	3.0	5.0	7.0	5.0	15.0	18.5	21.0	25.0	23.0	20.0
28	12.0	6.0	3.0	5.0	6.0	7.0	15.0	14.0	22.0	25.0	24.0	13.0
29	10.0	6.0	3.0	4.0	---	7.0	16.0	17.0	21.0	24.0	22.0	18.0
30	11.0	7.0	3.0	4.0	---	5.0	16.0	16.0	20.0	24.0	---	17.0
31	9.0	---	3.0	5.0	---	7.0	---	19.0	---	24.0	23.0	---
MONTH	15.0	10.0	4.5	3.5	5.0	6.5	10.5	16.5	20.0	22.5	23.0	19.5
YEAR	MAX	26.0	MIN	2.0	MEAN	13.0						

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

DAY	OCTOBER				NOVEMBER				DECEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	25	120	8.1	285	3720	2860	453	650	795			
2	20	122	6.6	317	2970	2540	447	600	724			
3	30	115	9.3	365	2400	2370	433	490	573			
4	40	125	14	405	1640	1790	440	475	564			
5	35	135	13	408	1420	1560	500	725	979			
6	50	373	50	416	1110	1250	540	740	1080			
7	61	540	89	396	1120	1200	540	690	1010			
8	81	453	99	433	1710	2210	574	800	1240			
9	97	387	101	532	1720	2540	586	995	1570			
10	120	339	103	425	1110	1270	574	760	1180			
11	137	3040	2990	424	1130	1290	540	610	889			
12	350	29500	42500	458	1050	1300	490	499	660			
13	276	14800	11000	465	1030	1290	510	560	771			
14	171	6400	2950	439	1000	1190	440	840	998			
15	183	3940	1950	464	800	1000	406	750	822			
16	148	2000	799	489	880	1160	406	590	647			
17	114	464	143	580	810	1090	470	607	770			
18	115	428	133	510	700	964	470	680	863			
19	116	395	124	500	610	824	480	667	864			
20	116	380	119	440	630	748	490	746	987			
21	126	281	96	423	790	902	518	650	909			
22	135	149	54	406	620	680	563	675	1030			
23	160	407	176	389	610	641	544	701	1030			
24	136	138	51	393	520	552	488	720	949			
25	227	2040	1270	403	475	517	445	450	541			
26	182	420	206	420	570	646	475	600	770			
27	254	1880	1730	420	490	556	401	2030	2200			
28	330	2910	2590	431	400	465	382	1020	1050			
29	313	2560	2160	437	480	566	406	550	603			
30	365	1930	1900	446	800	963	449	505	612			
31	316	4030	3440	---	---	---	431	447	520			
MONTH	4829	---	76874.0	12839	---	36934	14891	---	28200			

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

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

JANUARY				FEBRUARY				MARCH	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	332	322	289	645	865	1510	675	625	1140
2	332	293	263	660	1050	1870	850	385	884
3	332	365	327	660	890	1590	890	1060	2550
4	190	310	159	645	663	1150	790	1060	2260
5	160	268	116	1090	1210	4300	675	865	1580
6	362	460	450	830	1340	3000	1010	1630	4450
7	384	705	731	675	940	1710	1190	1650	5300
8	510	792	1090	555	822	1230	1190	1150	3690
9	660	878	1560	525	700	992	1350	1820	6630
10	570	1040	1600	600	690	1120	1290	1810	6300
11	439	1080	1280	630	628	1070	1090	3680	10800
12	465	610	766	630	635	1080	1190	1400	4500
13	406	680	745	645	815	1420	1310	1000	3540
14	439	573	679	810	948	2070	1380	1210	4510
15	395	610	651	850	1040	2390	1250	860	2900
16	417	380	428	750	680	1380	990	665	1780
17	450	439	533	750	1080	2190	810	690	1510
18	525	425	602	660	895	1590	615	635	1050
19	600	635	1030	585	645	1020	555	660	989
20	690	550	1020	585	570	900	480	520	674
21	770	700	1460	570	672	1030	495	585	782
22	630	690	1170	660	555	989	495	650	869
23	540	490	714	645	1240	2160	690	785	1460
24	570	540	831	630	750	1280	790	775	1650
25	570	677	1040	555	775	1160	850	1030	2360
26	660	805	1430	480	510	661	850	840	1930
27	585	862	1360	570	610	939	645	785	1370
28	480	638	827	675	500	911	480	877	1140
29	540	788	1150	---	---	---	570	765	1180
30	630	1050	1790	---	---	---	720	580	1070
31	600	875	1420	---	---	---	690	645	1200
MONTH	15233	---	27511	18565	---	42712	26855	---	82048
APRIL				MAY				JUNE	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	428	640	740	3660	2410	23800	4570	1860	23000
2	465	468	588	2820	2560	19500	4390	1450	17200
3	417	595	670	3100	2350	19700	3450	1300	12100
4	495	557	744	2750	2570	19100	3380	9600	87600
5	450	450	547	3060	2540	21000	2780	15200	114000
6	406	470	515	2640	2600	18500	2920	7050	55600
7	540	648	945	2890	2040	15900	3310	2030	18100
8	1030	700	1950	3380	2820	25700	3660	1020	10100
9	1380	945	3520	2780	2130	16000	3830	1850	19100
10	2080	1830	10300	2710	2290	16800	3030	1850	15100
11	2470	2580	17200	3100	3550	29700	2140	3510	20300
12	1720	1580	7340	3310	2160	19300	2320	1240	7770
13	1660	1580	7080	3270	2110	18600	2820	960	7310
14	1400	1230	4650	3450	2650	24700	2680	1470	10600
15	1580	900	3840	4080	2810	31000	3020	1800	14700
16	1660	845	3790	4360	2600	30600	3520	1010	9600
17	1690	780	3560	4320	2630	30700	3520	1200	11400
18	1600	1650	7130	4530	2650	32400	3660	1920	19000
19	1750	1790	8460	4320	2450	28600	4010	1750	18900
20	1750	1270	6000	4250	1620	18600	4220	2450	27400
21	1690	1250	5700	4720	2040	26000	3200	2190	18900
22	1400	1900	7180	4880	2850	37600	2960	1990	15900
23	1870	3190	16100	5560	2150	32300	3340	1840	16600
24	4430	5600	67000	5800	3600	56400	3030	1550	12700
25	4290	4100	47500	5640	880	13400	3200	5340	46100
26	4150	2950	33100	4880	1380	18200	2750	2950	21900
27	4390	2420	28700	4430	1300	15500	3200	1570	13600
28	4460	2850	34300	3800	1690	17300	3660	1390	13700
29	4530	3760	46000	4530	1180	14400	3410	1420	13100
30	4640	2530	31700	4800	1540	20000	3270	2400	21200
31	---	---	---	4840	2430	31800	---	---	---
MONTH	60821	---	406849	122660	---	743100	99250	---	713080

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTR- RATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTR- RATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTR- RATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2640	6560	46800	420	187	212	347	200	187
2	2350	6570	41700	420	137	157	367	307	309
3	2570	2260	15700	470	179	227	468	468	591
4	2850	1380	10600	304	108	108	906	2940	8660
5	3240	1620	14200	304	165	100	1570	6030	25600
6	3410	1190	11000	260	158	113	1850	3910	19500
7	2890	1040	9120	244	63	45	1490	1980	7970
8	3200	970	9380	244	66	43	985	735	1950
9	2850	445	6500	244	142	94	916	1140	2820
10	3200	1020	4010	244	130	91	1120	2650	8010
11	3060	2670	17100	571	2160	4320	1150	2140	6640
12	3240	3410	29860	503	1140	2750	1400	2380	9000
13	3470	1870	19500	1720	4660	17000	1250	6280	21200
14	3270	2190	19200	1504	4110	17500	1010	2750	7500
15	3410	2910	26400	1390	1160	4350	1140	1390	4280
16	3130	1470	12400	901	550	1460	1240	1010	3380
17	3200	1350	11700	636	350	601	1140	873	2690
18	3240	2200	19200	507	540	856	824	765	1700
19	2020	2090	11400	504	1130	1700	677	780	1430
20	1070	850	2460	376	440	447	694	695	1300
21	2350	3800	25100	578	1040	1620	640	377	651
22	1840	2240	11100	895	5240	14300	535	524	757
23	2800	3090	23700	871	7890	18300	484	309	404
24	1870	1000	5320	564	804	1220	454	231	283
25	1380	725	2700	374	394	402	378	171	175
26	1200	1640	5310	351	408	387	335	233	211
27	1410	1030	3920	263	222	158	331	135	121
28	1100	570	1690	227	197	121	305	169	139
29	758	425	870	400	534	577	273	86	63
30	906	256	612	532	529	760	243	67	44
31	710	320	613	445	262	315	---	---	---
MONTH	75134	---	422305	18697	---	90414	24522	---	137560
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)			493,696.00					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)			2,807,587.00					

## 08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

						SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)						
OCT.										
12...	1500	15.0	460	41200	51200		67	83	98	98
NOV.										
11...	1100	11.5	425	1000	1150		50	59	75	78
DEC.										
02...	1415	6.5	455	604	742		34	45	65	70
23...	1500	5.5	562	548	832		41	46	66	--
FEB.										
03...	1215	4.5	709	747	1430		33	42	66	79
24...	1320	7.0	703	578	1100		25	30	44	59
MAR.										
10...	1330	7.0	1250	1350	4560		21	26	40	55
31...	1530	6.0	682	624	1150		32	38	48	59
APR.										
21...	1430	11.0	1180	1210	3860	--	--	--	--	42
24...	1410	14.0	4440	5780	69300		9	10	15	36
MAY										
15...	1715	14.0	4360	2430	28600		9	11	17	34
19...	1020	17.0	4320	3400	39700		4	5	6	12
22...	0930	12.5	4530	2050	25100		5	6	11	21
27...	1450	18.5	4590	1390	17200	--	--	--	--	16
JUNE										
02...	1500	20.0	4440	1910	22900	--	--	--	--	11
09...	1630	20.5	3550	2090	20000	--	--	--	--	9
16...	1130	26.0	3800	473	4850		50	66	83	--
23...	1445	28.0	3370	2270	20700		25	29	35	40
JULY										
02...	1030	--	1900	485	2490		17	19	25	42
07...	1420	20.0	2880	1100	8550	--	--	--	--	9
16...	1500	24.5	3200	1220	10500	--	--	--	--	7
28...	1200	25.0	1030	457	1270		16	17	21	32
AUG.										
04...	1430	22.0	429	70	81	--	--	--	--	--
SEP.										
08...	1430	20.0	954	346	891	--	--	--	--	--
22...	1015	13.5	554	587	878		44	55	66	--
29...	1505	23.0	270	130	95	--	--	--	--	--
DATE		SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)
OCT.										
12...	100	--	--	--	--	--	--	--	--	--
NOV.										
11...	82	98	100	--	--	--	--	--	--	--
DEC.										
02...	76	94	100	--	--	--	--	--	--	--
23...	--	--	--	--	76	82	96	100	--	--
FEB.										
03...	89	100	--	--	--	--	--	--	--	--
24...	68	99	100	--	--	--	--	--	--	--
MAR.										
10...	62	95	100	--	--	--	--	--	--	--
31...	74	100	--	--	--	--	--	--	--	--
APR.										
21...	56	90	99	100	--	--	--	--	--	--
24...	54	78	95	100	--	--	--	--	--	--
MAY										
15...	66	90	100	--	--	--	--	--	--	--
19...	31	77	99	100	--	--	--	--	--	--
22...	46	92	100	--	--	--	--	--	--	--
27...	37	81	100	--	--	--	--	--	--	--
JUNE										
02...	29	79	100	--	--	--	--	--	--	--
09...	25	76	99	100	--	--	--	--	--	--
16...	--	--	--	--	95	98	99	100	--	--
23...	44	81	100	--	--	--	--	--	--	--
JULY										
02...	67	100	--	--	--	--	--	--	--	--
07...	28	82	98	100	--	--	--	--	--	--
16...	25	79	100	--	--	--	--	--	--	--
28...	42	94	100	--	--	--	--	--	--	--
AUG.										
04...	--	--	--	--	69	79	100	--	--	--
SEP.										
08...	--	--	--	--	73	80	96	100	--	--
22...	--	--	--	--	72	76	88	99	100	--
29...	--	--	--	--	48	61	80	100	--	--

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--continued

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANFOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	
DATE	TIME								
NOV.									
11...	1100	425	1000	1150	1	2	45	92	
DEC.									
02...	1415	455	604	742	1	4	31	74	
23...	1500	562	548	832	1	1	45	87	
FEB.									
03...	1215	709	747	1430	4	18	88	99	
24...	1320	703	578	1100	1	13	73	97	
MAR.									
10...	1330	1250	1350	4560	0	2	47	98	
31...	1530	642	624	1150	3	25	88	99	
APR.									
21...	1430	1180	1210	3860	1	3	74	99	
24...	1410	4440	5780	69300	1	2	29	91	
MAY									
22...	0930	4530	2050	25100	1	4	46	76	
23...	1045	--	--	--	0	1	35	91	
27...	1450	4590	1390	17200	1	3	49	96	
JUNE									
02...	1500	4440	1910	22900	0	2	23	70	
09...	1500	--	--	--	0	0	7	52	
09...	1700	--	--	--	0	3	39	62	
16...	1130	3800	473	4850	0	0	21	71	
23...	1445	3370	2270	20700	1	2	40	94	
JULY									
07...	1420	2880	1100	8550	0	3	35	70	
14...	1450	3130	--	--	0	1	58	91	
28...	1200	1030	457	1270	1	3	48	85	
AUG.									
04...	1430	429	70	81	0	5	56	94	
08...	1414	--	--	--	1	4	49	94	
11...	1440	--	--	--	0	2	31	84	
25...	1040	--	--	--	0	0	25	74	
SEP.									
08...	1430	954	346	891	1	2	50	91	
22...	1015	554	587	878	1	1	23	86	
29...	1505	270	130	95	1	1	26	85	
DATE		RED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	RED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	RED MAT. FALL DIAM. % FINER THAN 1.00 MM (80164)	RED MAT. FALL DIAM. % FINER THAN 2.00 MM (80165)	RED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)	RED MAT. FALL DIAM. % FINER THAN 8.00 MM (80171)	RED MAT. FALL DIAM. % FINER THAN 16.0 MM (80172)	RED MAT. FALL DIAM. % FINER THAN 32.0 MM (80173)
NOV.									
11...	99	--	--	99	100	--	--	--	--
DEC.									
02...	91	--	--	95	97	99	100	--	--
23...	96	--	--	97	97	98	99	100	--
FEB.									
03...	100	--	--	--	--	--	--	--	--
24...	100	--	--	--	--	--	--	--	--
MAR.									
10...	100	--	--	--	--	--	--	--	--
31...	100	--	--	--	--	--	--	--	--
APR.									
21...	100	--	--	--	--	--	--	--	--
24...	--	--	98	98	99	100	--	--	--
MAY									
22...	--	--	87	93	97	99	100	--	--
23...	99	100	--	--	--	--	--	--	--
27...	100	--	--	--	--	--	--	--	--
JUNE									
02...	89	--	--	91	95	99	100	--	--
09...	79	--	--	82	92	98	100	--	--
09...	82	--	--	86	92	96	100	--	--
16...	--	--	84	91	94	96	99	100	--
23...	--	--	99	99	99	100	--	--	--
JULY									
07...	--	--	84	91	94	95	97	100	--
14...	--	--	95	96	97	99	100	--	--
28...	--	--	94	97	98	100	--	--	--
AUG.									
04...	--	--	97	97	98	99	100	--	--
08...	--	--	97	100	--	--	--	--	--
11...	--	--	94	98	99	99	100	--	--
25...	--	--	86	93	97	99	100	--	--
SEP.									
08...	--	--	94	97	99	100	--	--	--
22...	--	--	94	98	100	--	--	--	--
29...	--	--	96	99	100	--	--	--	--

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (00154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (00155)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY) (00156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
NOV.									
11...	1100	11.5	425	1000	1150	1580	170	1.2	2.0
DEC.									
02...	1415	6.5	455	604	742	1010	180	1.4	1.9
23...	1500	5.5	562	548	832	1170	214	1.3	2.0
FER.									
03...	1215	4.5	709	747	1430	2530	298	1.1	2.2
24...	1320	7.0	703	578	1100	2310	199	1.4	2.5
MAR.									
10...	1330	7.0	1250	1350	4560	5690	305	2.1	2.0
31...	1530	6.0	682	624	1150	1890	210	1.6	2.0
APR.									
21...	1430	11.0	1180	1210	3860	5850	290	1.6	2.5
24...	1410	14.0	4440	5780	69300	82700	305	3.5	4.2
MAY									
27...	1450	18.5	4590	1390	17200	22600	298	3.8	4.0
JUNE									
02...	1500	20.0	4440	1910	22900	33800	300	3.7	4.0
16...	1130	26.0	3800	473	4850	6920	300	3.2	4.0
23...	1445	28.0	3370	2270	20700	26800	298	3.1	3.7
JULY									
07...	1420	20.0	2880	1100	8550	13000	300	2.8	3.4
28...	1200	25.0	1030	457	1270	2490	276	1.6	2.3
AUG.									
04...	1430	22.0	429	70	81	167	223	1.1	1.8
SEP.									
08...	1430	20.0	954	346	891	1470	266	1.6	2.2
22...	1015	13.5	554	587	878	1110	232	1.3	1.9
29...	1505	23.0	270	130	95	158	200	.90	1.5

08331000 RIO GRANDE AT ISLETA, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 34°54'21", long 106°41'04", in NE 1/4 sec. 24, T. 08 N., R. 02 E., Valencia County, 50 feet (15 m) upstream from diversion dam, 50 feet (15 m) downstream from bridge on State Highway 147, at Isleta.

DRAINAGE AREA.--18,100 mi<sup>2</sup> (46,900 km<sup>2</sup>) (estimated).

PERIOD OF RECORD.--Chemical analyses: July 1972 to June 1974, July 1975 to current year.  
Sediment records: July 1975 to current year.

REMARKS.--Samples are collected on the Peralta main canal or the Belen Highline canal when the river is completely diverted.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	RICAR-	CAR-	DIS-	
		TANEOUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SI02) (MG/L) (00955)	SOLVED IRON (FE) (UG/L) (01046)	SOLVED MAN- GANESF (MN) (UG/L) (01056)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)		BONATE (HCO3) (MG/L) (00440)	BONATE (CO3) (MG/L) (00445)	SOLVED SULFATE (SO4) (MG/L) (00945)
JULY 28...	1530	1010	21	10	--	44	6.6	25	4.7	122	0	78	
AUG. 22...	1800	762	22	10	10	44	7.7	33	5.5	135	0	96	
SEP. 25...	1400	514	25	10	--	49	7.7	35	5.5	145	0	75	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00645)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)
JULY 28...	8.4	.4	.24	.19	.22	.54	1.0	.38	.22	264	250	140	
AUG. 22...	17	.4	.36	.35	.17	1.2	1.8	.82	.31	293	299	150	
SEP. 25...	17	.4	.32	.30	1.5	.10	1.9	.92	.77	296	290	150	
DATE		NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00689)	DIS- SOLVED BORON (B) (UG/L) (01020)
JULY 28...	37	.9	410	8.0	29.5	26.5	66	6.7	17	4.4	1.3	50	
AUG. 22...	41	1.2	460	7.9	25.0	26.0	260	5.6	24	3.5	--	90	
SEP. 25...	35	1.2	469	7.9	23.5	19.0	60	5.6	18	15	2.6	120	

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	SOLVED					
		(AS)	ARSENIC	BORON	MIUM	CAD-	MIUM	CHRO-					
		(UG/L)	(AS)	(B)	(CD)	(CD)	(CR)	(CW)	(CU)	(CO)	(UG/L)	(CU)	
		(01002)	(01000)	(01020)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)	
AUG. 22...	1800	10	4	90	10	0	20	0	50	0	20	2	
DATE		TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-		
		IRON	SOLVED	LEAD	SOLVED	MAN-	SOLVED	SELE-	SOLVED				
		(FE)	IRON	(PB)	LEAD	GANESE	MERCURY	NIUM	ZINC				
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)		
		(01045)	(01046)	(01051)	(01049)	(01055)	(01054)	(71900)	(71900)	(01147)	(01145)	(01092)	(01090)
AUG. 22...	9600	10	<100	0	350	10	.0	.0	0	0	30	10	

## RIO GRANDE BASIN

08331000 RIO GRANDE AT ISLETA, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FFCAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCEI (COL- ONIFS PEW 100 ML) (31679)
JULY			
24...	1530	700	220
AUG.			
22...	1800	71000	2700
SEP.			
25...	1400	4200	670

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDE SEDI- MENT CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)
JULY						
28...	1530	26.5	1010	193	526	77
AUG.						
22...	1800	26.0	762	386	794	95
SEP.						
25...	1400	19.0	514	125	173	95



08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.

LOCATION.—Lat 34°24'52", long 106°48'11", Socorro County, in Sevilleta or Belen Grant, at gaging station, 0.2 mi (0.3 km) south of U.S. Highway 60, 1.8 mi (2.9 km) east of Bernardo, about 3 mi (5 km) upstream from floodway, and 4 mi (6 km) upstream from Rio Puerco.

PERIOD OF RECORD.—Chemical analyses: October 1956 to February 1975 (discontinued).

Specific conductance: October 1956 to December 1974.

Water temperatures: October 1958 to December 1974.

Sediment records: October 1947 to December 1974.

REMARKS.—Records prior to 1965 water year were published as 08332000 Rio Grande near Bernardo, N. Mex., a composite of 08331990 Rio Grande Conveyance Channel near Bernardo, 08332010 Rio Grande Floodway near Bernardo, and 08332050 Bernardo Interior Drain at Bernardo.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS CHARGE (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00055)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)	BICARB- ONATE (HCO3) (MG/L) (00440)
NOV.									
14...	0900	290	29	10	71	11	58	5.6	215
JAN.									
15...	1240	25	28	--	64	10	51	5.0	201
30...	1200	30	25	--	64	9.6	52	5.3	205
FEB.									
12...	0900	23	24	--	65	9.4	50	5.0	202
20...	1130	24	24	--	66	10	53	5.0	203

DATE	CAL- CIUM (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED NITRO- GEN (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (WEIGHT) (MG/L) (00300)	DIS- SOLVED SOLIDS (SUN OF TWEIGHT) (MG/L) (00301)
NOV.									
14...	0	130	31	.5	1.9	--	.65	445	449
JAN.									
15...	0	110	28	.5	1.3	.67	--	--	401
30...	0	110	30	.3	.84	.63	--	--	491
FEB.									
12...	0	110	28	.3	.77	.64	--	--	395
20...	0	120	35	.4	.68	.71	--	--	421

DATE	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00995)	PH	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV.								
14...	220	44	1.7	687	7.8	--	7.0	140
JAN.								
15...	200	35	1.6	610	7.7	13.0	6.5	--
30...	200	32	1.6	625	7.7	--	6.0	--
FEB.								
12...	200	34	1.5	614	7.8	--	6.0	--
20...	210	43	1.8	692	7.8	--	5.0	--

## RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, in Belen or Sevilleta Grant, at gaging station on U.S. Highway 60, 5 mi (8 km) downstream from heading of conveyance channel, and 2 mi (3 km) east of Bernardo, and at mile 1,487.2 (2,392.9 km).

DRAINAGE AREA.--19,230 mi<sup>2</sup> (49,810 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: October 1956 to current year,

Specific conductance: October 1956 to current year.

Water temperatures: October 1964 to current year.

Sediment records: October 1964 to current year.

## EXTREMES:

Current year:

Specific conductance: Maximum daily, 872 micromhos Aug. 8; minimum daily, 286 micromhos May 22.

Water temperatures: Maximum, 34.5°C Aug. 9; minimum, 1.0°C Dec. 28, Jan. 12.

Sediment concentrations: Maximum daily, 12,100 mg/l Sept. 12; minimum daily, no flow on many days during October and November.

Sediment discharge: Maximum daily, 86,300 tons (78,300 tonnes) Sept. 12; minimum daily, 0 tons (0 tonnes) on many days during October and November.

Period of record:

Specific conductance (1964 to 1975): Maximum daily, 1,330 micromhos Aug. 10, 1967; minimum daily, 271 micromhos June 17, 1973.

Water temperatures (1964 to 1975): Maximum, 34.5°C Aug. 9, 1975; minimum, freezing point Feb. 23, 1971, and Feb. 3, 1972.

Sediment concentrations (1964 to 1975): Maximum daily, not determined; minimum daily, no flow on many days each year.

Sediment discharge (1964 to 1975): Maximum daily, 356,000 tons (323,000 tonnes) Aug. 11, 1967; minimum daily, 0 tons (0 tonnes) on many days each year.

REMARKS.--Additional sediment total discharge determinations were made bi-weekly when needed. Records prior to 1965 water year were published as 08332000 Rio Grande near Bernardo, N. Mex., a composite of 08331990 Rio Grande Conveyance Channel near Bernardo, 08332010 Rio Grande Floodway near Bernardo, and 08332050 Bernardo Interior Drain at Bernardo. No flow Oct. 1 to Nov. 4.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED THO- (FF) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	RICAR- MONATE (HCO3) (MG/L) (00640)
NOV.									
06...	1240	120	29	10	69	11	58	6.0	219
13...	1100	170	15	--	41	9.4	58	5.8	117
JAN.									
15...	1020	400	29	--	64	9.8	50	5.2	198
30...	1000	586	24	--	62	9.6	51	5.1	199
FEH.									
12...	1120	588	24	--	61	9.6	49	5.1	199
20...	1000	668	24	--	66	9.6	54	5.3	206
26...	0900	625	24	--	64	9.6	52	5.9	202
MAR.									
05...	1130	622	25	--	61	10	49	5.3	188
12...	0945	1080	23	--	59	11	54	5.5	168
19...	1000	512	21	--	48	9.2	48	4.7	151
APR.									
01...	1015	585	24	--	55	8.9	48	4.6	173
09...	0930	313	25	26	62	10	56	5.8	197
16...	1130	724	22	10	64	11	53	5.3	165
JUNE									
11...	1130	3380	18	--	39	5.1	20	3.0	114
JULY									
03...	1100	1790	20	--	45	6.8	26	3.8	127
AUG.									
20...	0930	210	24	--	55	11	63	5.3	166

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED URTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)
NOV.									
06...	0	120	32	.5	1.2	--	.62	449	441
13...	--	120	30	.5	.00	.22	--	--	337
JAN.									
15...	0	100	27	.5	1.5	.74	--	--	390
30...	0	100	31	.4	1.1	.84	--	--	386
FEB.									
12...	0	95	28	.4	1.1	.97	--	--	376
20...	0	110	34	.4	.94	.96	--	--	410
26...	0	110	33	.3	.97	.86	--	--	403
MAR.									
05...	0	90	27	.6	1.2	.91	--	--	375
12...	0	120	37	.6	1.7	.95	--	--	400
19...	--	91	27	.5	.44	.41	--	--	326
APR.									
01...	--	88	24	.5	.83	.92	--	--	342
09...	--	110	27	.5	.63	.52	.50	401	398
16...	--	150	26	.4	.94	.77	.39	425	418
JUNE									
11...	--	48	P.8	.3	.37	.27	--	--	200
JULY									
03...	--	69	10	.1	.20	.39	--	--	294
AUG.									
20...	0	150	27	.5	.10	.42	--	--	418

DATE	HARD- NESS (CA, MG) (00450)	HARD- NESS (MAG/L) (00902)	SODIUM AL- BOPH- TION RATIO (00921)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00695)	PH (00400)	AIR TEMPER- ATURE (DEG C) (00920)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
NOV.								
06...	220	40	1.7	691	7.7	--	15.0	150
13...	140	45	2.1	558	--	--	8.0	--
JAN.								
15...	200	38	1.5	618	7.6	--	1.0	--
30...	190	27	1.6	615	7.9	--	5.0	--
FEB.								
12...	190	27	1.5	612	7.7	--	5.0	--
20...	200	31	1.6	637	7.7	--	5.0	--
26...	200	34	1.6	616	7.8	--	7.0	--
MAR.								
05...	190	39	1.5	594	8.0	--	5.5	--
12...	190	55	1.7	643	7.8	9.0	5.0	--
19...	160	34	1.7	505	--	14.0	8.0	--
APR.								
01...	170	32	1.6	517	--	18.0	9.0	--
09...	200	34	1.7	623	--	--	5.0	130
16...	210	70	1.6	599	--	--	--	20
JUNE								
11...	120	25	.9	320	--	--	17.5	--
JULY								
03...	140	36	1.0	373	--	--	20.0	--
AUG.								
20...	180	46	2.0	547	7.3	--	21.0	--

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.-- Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	639	623	598	585	547	401	305	343	525	653
2		---	643	620	614	580	597	415	298	360	649	636
3		---	638	627	598	522	630	410	312	354	779	731
4		690	637	632	565	560	595	402	319	357	752	588
5		483	644	640	571	563	620	398	323	352	768	531
6		488	643	657	566	578	610	398	328	340	801	474
7		645	637	652	537	562	643	387	318	342	811	514
8		680	633	654	552	527	623	383	311	361	872	616
9		623	625	627	572	514	618	407	312	359	858	636
10		623	618	618	578	491	570	396	309	365	790	654
11		650	625	602	527	545	543	407	323	352	806	594
12		673	613	628	572	605	505	394	341	368	731	362
13		662	618	642	573	545	540	376	330	350	683	513
14		670	620	625	568	518	540	361	318	413	436	357
15		670	627	621	563	525	595	338	321	408	498	360
16		660	628	610	536	520	630	316	320	395	578	555
17		655	624	608	563	508	677	318	322	420	632	532
18		653	618	610	575	541	645	308	333	378	589	539
19		657	627	608	605	552	575	310	334	368	636	603
20		648	633	598	590	556	597	304	340	381	593	608
21		656	625	595	580	575	570	287	337	387	605	582
22		651	628	592	564	585	585	286	345	448	593	564
23		652	627	595	572	587	575	287	343	415	592	599
24		655	632	610	556	572	532	289	339	389	592	626
25		660	625	595	575	547	555	291	336	412	541	616
26		655	610	597	588	555	435	302	333	423	595	628
27		653	600	593	590	537	421	309	350	449	661	649
28		653	607	612	590	423	414	324	345	453	642	696
29		650	618	632	---	540	415	319	341	436	673	695
30		656	615	600	---	551	387	301	342	509	686	776
31		---	608	610	---	540	---	313	---	542	719	---
MONTH		645	625	617	573	545	559	347	328	394	667	583
YEAR	MAX	872	MIN	286	MEAN	534						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	5.0	2.0	11.5	14.0	13.5	17.0	18.0	27.0	30.5	30.0
2		---	9.5	4.0	10.0	13.0	14.0	18.5	22.5	26.5	32.5	30.0
3		---	11.0	3.0	10.0	14.5	17.0	15.5	22.5	25.5	33.0	25.5
4		14.0	9.5	5.0	7.5	14.0	17.0	17.0	23.0	24.5	28.5	23.5
5		8.0	10.0	4.0	6.0	14.5	15.0	17.0	24.5	28.5	31.0	21.0
6		14.0	10.0	5.0	5.0	15.0	12.5	16.0	24.5	24.0	31.5	19.0
7		15.0	7.0	4.5	9.0	15.0	11.5	17.0	18.5	24.5	31.0	24.0
8		12.0	4.5	5.5	10.5	11.5	11.0	18.5	21.0	25.5	30.5	23.5
9		15.0	6.0	4.0	10.0	8.5	14.0	21.0	20.0	27.5	34.5	23.5
10		13.5	5.0	3.0	11.5	14.0	15.0	17.0	21.0	25.0	30.5	24.0
11		14.5	6.0	1.5	11.0	12.0	14.0	19.0	22.0	24.0	31.0	23.5
12		14.0	7.0	1.0	13.5	8.5	9.5	21.0	25.0	25.5	28.0	17.0
13		8.0	7.0	1.5	11.0	13.0	10.0	20.0	24.0	26.0	25.0	15.0
14		13.0	4.0	5.0	8.0	13.0	16.5	22.0	25.0	25.0	26.5	19.0
15		13.5	5.5	6.5	10.0	9.0	18.0	20.0	24.0	25.0	28.0	22.0
16		14.5	7.0	6.0	14.0	11.0	18.5	19.0	21.5	26.0	28.0	24.5
17		9.0	7.0	6.0	7.0	11.0	16.5	15.0	25.0	25.0	27.5	22.5
18		15.0	6.5	8.0	9.5	14.5	15.0	18.0	22.0	27.0	28.0	24.0
19		13.0	9.0	7.5	9.5	16.5	14.0	20.0	22.0	27.0	29.5	23.5
20		13.0	8.0	10.0	11.5	19.5	16.0	21.0	22.5	26.0	25.0	23.0
21		13.0	10.0	5.0	6.5	15.0	19.0	19.0	23.0	27.5	26.0	18.0
22		10.0	7.5	6.0	8.0	15.0	16.5	16.0	24.0	28.5	27.0	20.0
23		10.5	8.0	3.0	4.0	10.0	18.0	19.0	24.5	29.0	27.0	27.0
24		12.0	4.5	8.0	12.5	13.0	19.0	21.0	23.0	27.5	27.5	22.5
25		13.0	2.5	10.0	12.0	15.5	20.0	20.0	25.5	27.5	27.5	21.0
26		8.0	7.5	12.0	14.0	10.0	15.0	17.0	26.0	28.0	28.0	23.0
27		8.0	5.0	9.0	13.5	9.5	14.0	20.0	25.5	28.5	25.5	20.0
28		9.5	1.0	10.0	14.0	10.0	18.0	16.0	24.0	28.0	29.5	20.0
29		7.0	4.0	7.0	---	9.0	15.0	19.0	28.0	25.0	30.0	28.0
30		8.0	5.0	10.0	---	14.0	19.0	18.0	27.5	27.0	30.5	19.0
31		---	3.5	9.0	---	15.0	---	18.0	---	29.0	30.0	---
MONTH		12.0	6.5	6.0	10.0	13.0	15.5	18.5	23.5	26.5	29.0	22.5
YEAR	MAX	34.5	MIN	1.0	MEAN	16.5						

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	187	400	202
2				0	0	0	196	460	243
3				0	0	0	232	580	363
4				0	0	0	344	635	590
5				55	873	156	440	542	644
6				110	925	275	416	525	590
7				140	860	325	448	645	780
8				148	890	356	464	900	1130
9				148	840	336	498	970	1300
10				169	895	408	480	5700	7390
11				210	900	510	489	1400	2380
12				164	1050	465	507	1960	2680
13				164	770	341	543	1830	2680
14				169	725	331	480	1460	1890
15				196	690	365	480	1820	2360
16				196	520	275	507	2800	3830
17				205	560	310	472	1340	1710
18				222	515	309	464	1530	1920
19				244	472	311	472	1180	1500
20				244	470	310	489	1180	1560
21				232	470	294	440	1290	1530
22				222	435	261	489	1500	1980
23				232	475	298	489	1200	1580
24				222	430	258	480	1920	2490
25				210	375	213	480	1700	2200
26				216	379	221	480	2060	2670
27				232	395	247	480	1150	1490
28				238	440	283	480	1500	1940
29				232	421	264	432	830	968
30				205	405	224	416	1210	1360
31				---	---	---	432	1740	2030
MONTH	0	---	0	5025.00	---	7946.00	13706	---	55980
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	424	1450	1660	692	1360	2540	728	755	1480
2	432	1120	1310	647	2030	3550	692	1080	2020
3	408	920	1010	669	1200	2170	658	875	1550
4	350	850	803	647	305	533	680	824	1510
5	300	720	583	647	180	314	636	660	1130
6	250	420	283	865	1840	5110	592	723	1160
7	230	335	208	788	2240	4770	647	1180	2060
8	448	455	550	570	2510	3860	969	1270	3320
9	516	775	1080	543	3250	4760	1170	1060	3350
10	525	930	1320	543	4030	5910	1340	1740	6300
11	507	1020	1400	614	1280	2120	1050	2820	7990
12	450	965	1170	625	930	1570	1050	1360	3860
13	370	1260	1260	692	1690	3160	943	1140	2900
14	344	1070	994	658	1410	2510	995	1030	2770
15	368	860	854	716	1050	2030	1020	1150	3170
16	392	1090	1150	839	825	1870	930	1040	2610
17	368	890	884	852	890	2050	752	1180	2400
18	384	920	954	878	1030	2440	625	1170	1970
19	408	1380	1520	740	618	1230	552	830	1240
20	440	1140	1350	716	555	1070	448	572	692
21	464	1580	1980	692	812	1520	400	725	783
22	498	1400	1880	764	1260	2600	314	665	564
23	516	1570	2190	776	775	1620	290	708	554
24	456	1330	1640	728	1120	2200	392	727	769
25	424	972	1110	728	655	1290	456	848	1040
26	498	1380	1860	639	645	1110	416	1650	1850
27	603	1040	1690	592	890	1420	692	1830	3420
28	647	1040	1820	647	692	1210	658	1290	2290
29	570	1160	1790	---	---	---	448	840	1020
30	570	610	939	---	---	---	472	715	911
31	647	910	1590	---	---	---	543	730	1070
MONTH	13807	---	38832	19507	---	66537	21558	---	67753

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	581	690	1080	4060	3250	35600	4320	1290	15000
2	376	665	675	2780	1970	14800	4140	1790	20000
3	210	576	327	2570	5670	39300	3700	1900	19000
4	196	523	277	2860	6850	52900	3650	2420	23800
5	200	418	226	2780	3840	28800	3450	1930	18000
6	174	324	152	2880	2070	16100	3060	1410	11600
7	216	410	239	2850	2200	16900	3270	2180	19200
8	272	440	323	3270	2090	18500	3560	1380	13300
9	376	477	484	3000	2650	21500	3850	1190	12400
10	543	1010	1480	2430	2390	15700	3570	1120	10800
11	906	1270	3110	2930	4510	35700	3100	1020	8540
12	1670	2250	10100	3540	2250	21500	2400	840	5440
13	865	1570	3670	3610	1780	17300	2560	803	5550
14	1010	1390	3790	3710	1300	13000	2620	1240	8770
15	752	922	1870	3510	2010	19000	2710	2130	16900
16	740	870	1740	3400	1680	15400	2620	4270	30200
17	764	925	1910	3300	2170	19300	2830	1510	11500
18	647	1140	1990	4110	2500	27700	2830	1970	15100
19	600	1430	2020	4150	2800	31400	2650	3720	26600
20	620	1250	2090	4180	2890	32600	3080	2440	20300
21	650	1140	2000	4600	2020	25100	3060	2000	16500
22	675	949	1730	4220	1780	20300	2380	1350	8680
23	728	725	1430	4970	3270	43900	2680	1600	11600
24	2640	2850	33100	5240	3590	50800	2430	1020	6690
25	3770	3910	39800	5510	3450	51300	2300	992	6160
26	3470	3210	30100	5060	5180	70800	2320	1040	6510
27	3940	2700	28700	4390	4410	52300	1750	940	4440
28	4360	2480	29200	4150	2500	28000	2280	1670	10300
29	4050	3220	35200	3830	2440	25200	2280	938	5770
30	4330	3210	37500	4430	2150	25700	2400	1230	7970
31	---	---	---	4230	1800	20600	---	---	---
MONTH	40331	---	276613	116550	---	907000	87850	---	396620
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2280	920	5660	307	199	165	86	134	31
2	1890	1520	7760	138	237	88	68	86	16
3	1560	860	3620	54	213	31	38	127	13
4	1920	1170	6070	54	215	31	202	3710	2440
5	2770	1330	9950	54	131	19	522	2550	4020
6	2650	1040	7440	38	147	15	1640	4830	21400
7	2830	1140	8710	31	78	6.5	1990	5460	29300
8	2590	1930	13500	26	57	4.0	1520	3360	13800
9	2960	1830	14600	28	73	5.5	1520	1700	6980
10	3100	823	6890	28	68	5.1	1600	2000	8640
11	3140	1470	12500	29	122	9.6	1890	3000	15300
12	3350	1450	13100	42	117	13	1750	12100	86300
13	3410	1310	12100	34	125	11	976	4050	10700
14	3480	2560	24100	336	2500	3120	1080	6900	20100
15	3490	2130	20100	706	3610	6880	920	4530	11300
16	3380	1640	15000	706	4760	9070	976	2260	5960
17	3180	1880	16100	538	2110	3060	1170	1920	6070
18	3080	2090	17400	320	625	540	1270	1880	6450
19	2890	1480	11500	203	450	247	831	1780	3990
20	1860	1940	9740	208	400	225	613	1700	2810
21	1900	2820	14500	214	345	199	873	1730	4080
22	2290	5890	36400	276	3100	2310	740	1290	2580
23	1830	3580	17700	307	3800	3150	573	1300	2010
24	2130	2940	16900	586	4300	6800	479	720	931
25	1550	1530	6400	433	3800	4440	433	660	772
26	1270	1000	3430	214	1520	878	363	459	450
27	920	620	1540	136	432	159	263	320	227
28	920	508	1260	125	388	131	167	449	202
29	803	545	1180	94	458	116	147	256	102
30	400	240	259	66	218	39	121	147	48
31	307	221	183	46	175	22	---	---	---
MONTH	70130	---	335592	6377	---	41789.7	24821	---	267022

WTR YR 1975 TOTAL WATER DISCHARGE (CFS-DAYS) 419,662.00  
 WTR YR 1975 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 2,461,684.70

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

			INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (00155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	
DATE	TIME	TEMPER- ATURE (DEG C) (00010)							
NOV.									
06...	1200	15.0	120	1100	356	70	78	83	
13...	1100	8.0	170	710	326	61	78	88	
DEC.									
10...	1600	5.0	498	7810	10500	4	4	4	
JAN.									
01...	1330	2.0	424	1340	1530	--	--	--	
30...	1000	5.0	586	492	778	50	61	72	
FEB.									
06...	1045	2.0	665	947	1700	30	37	45	
12...	1130	5.0	588	594	943	44	51	66	
20...	1000	5.0	668	560	1010	54	66	83	
26...	0900	7.0	625	516	871	55	60	75	
MAR.									
05...	1130	5.5	622	491	825	55	60	73	
12...	1000	5.0	1080	1060	3090	--	--	--	
19...	1000	8.0	512	563	778	51	59	70	
APR.									
01...	1015	9.0	585	458	723	51	59	77	
09...	0930	5.0	313	448	379	--	--	--	
MAY									
25...	1030	20.0	5770	3070	47800	--	--	--	
JUNE									
11...	1130	17.5	3380	1120	10200	--	--	--	
18...	1100	17.0	3060	653	5400	--	--	--	
JULY									
03...	1100	20.0	1790	444	2150	--	--	--	
12...	1330	25.5	3350	1530	13800	--	--	--	
AUG.									
20...	0930	21.0	210	306	174	--	--	--	
23...	1730	27.0	334	3860	3480	69	75	90	
SEP.									
10...	1700	24.0	1640	1110	4920	37	46	68	
25...	0915	20.0	406	729	799	24	30	34	
DATE		SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)
NOV.									
06...	--	--	--	--	--	88	93	98	100
13...	--	--	--	--	--	94	96	100	--
DEC.									
10...	7	26	88	100	--	--	--	--	--
JAN.									
01...	28	53	98	100	--	--	--	--	--
30...	84	98	100	--	--	--	--	--	--
FEB.									
06...	58	86	100	--	--	--	--	--	--
12...	78	93	100	--	--	--	--	--	--
20...	93	98	100	--	--	--	--	--	--
26...	--	--	--	--	86	94	100	--	--
MAR.									
05...	87	96	100	--	--	--	--	--	--
12...	67	88	100	--	--	--	--	--	--
19...	--	--	--	--	78	91	99	100	--
APR.									
01...	--	--	--	--	83	95	100	--	--
09...	74	84	97	100	--	--	--	--	--
MAY									
25...	31	58	93	100	--	--	--	--	--
JUNE									
11...	43	83	100	--	--	--	--	--	--
18...	75	96	100	--	--	--	--	--	--
JULY									
03...	57	92	100	--	--	--	--	--	--
12...	46	77	95	100	--	--	--	--	--
AUG.									
20...	--	--	--	--	96	97	98	100	--
23...	93	98	100	--	--	--	--	--	--
SEP.									
10...	--	--	--	--	94	99	100	--	--
25...	45	71	100	--	--	--	--	--	--

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE D S E D I- M E N T C H A R G E (MG/L) (80154)	SUS- PENDE D S E D I- M E N T C H A R G E (T/DAY) (80155)	BED M A T. F A L L D I A M. % FINE R T H A N .062 MM (80158)	BED M A T. F A L L D I A M. % FINE R T H A N .125 MM (80159)	BED M A T. F A L L D I A M. % FINE R T H A N .250 MM (80160)	BED M A T. F A L L D I A M. % FINE R T H A N .500 MM (80161)	BED M A T. F A L L D I A M. % FINE R T H A N 1.00 MM (80162)	BED M A T. F A L L D I A M. % FINE R T H A N 2.00 MM (80163)
NOV.										
06...	1200	120	1100	356	0	1	55	95	99	100
13...	1100	170	710	326	1	3	61	96	100	--
JAN.										
30...	1000	586	492	778	2	7	76	99	100	--
FEB.										
06...	1045	665	947	1700	1	14	89	99	100	--
12...	1130	588	594	943	1	12	91	100	--	--
20...	1000	668	560	1010	3	18	93	100	--	--
26...	0900	625	516	871	1	4	72	100	--	--
MAR.										
05...	1130	622	491	825	1	17	95	100	--	--
12...	1000	1080	1060	3090	1	7	91	100	--	--
19...	1000	512	563	778	0	2	52	100	--	--
APR.										
01...	1015	585	458	723	1	8	41	90	97	100
09...	0930	313	448	379	0	1	37	98	100	--
JUNE										
11...	1130	3380	1120	10200	3	18	62	100	--	--
JULY										
03...	1100	1790	444	2150	2	13	76	100	--	--
AUG.										
20...	0930	210	306	174	0	11	85	98	100	--
SEP.										
25...	0915	406	729	799	3	19	90	100	--	--

## TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE D S E D I- M E N T C H A R G E (MG/L) (80154)	SUS- PENDE D S E D I- M E N T C H A R G E (T/DAY) (80155)	TOTAL S E D I- M E N T D I S- C H A R G E (T/DAY) (80156)	STREAM W I D T H (FT) (00004)	MEAN D E P T H (FT) (00064)	STREAM V E L O C I T Y (FPS) (00055)
NOV.									
06...	1200	15.0	120	1100	356	431	55	1.2	1.9
13...	1100	8.0	170	710	326	382	155	.80	1.4
JAN.									
30...	1000	5.0	586	492	778	1190	150	1.5	2.5
FEB.									
06...	1045	2.0	665	947	1700	3140	188	1.3	2.7
12...	1130	5.0	588	594	943	1330	208	1.3	2.2
20...	1000	5.0	668	560	1010	1570	180	1.2	3.0
26...	0900	7.0	625	516	871	1480	175	1.4	2.6
MAR.									
05...	1130	5.5	622	491	825	1190	175	1.7	2.1
12...	1000	5.0	1080	1060	3090	5270	215	1.6	3.2
19...	1000	8.0	512	563	778	1100	170	1.4	2.1
APR.									
01...	1015	9.0	585	458	723	1000	215	1.3	2.0
09...	0930	5.0	313	448	379	567	155	1.1	1.9
JUNE									
11...	1130	17.5	3380	1120	10200	14900	231	3.5	4.1
JULY									
03...	1100	20.0	1790	444	2150	4300	280	1.7	3.7
AUG.									
20...	0930	21.0	210	306	174	214	105	1.3	1.6
SEP.									
25...	0915	20.0	406	729	799	1440	240	.99	1.7



## 08353000 RIO PUERCO NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, at gaging station on former U.S. Highway 85, and 0.2 mi (0.3 km) upstream from Interstate Highway 25, 1.2 mi (1.9 km) southwest of Bernardo, 3 mi (4.8 km) upstream from mouth, and 18 mi (29 km) south of Belen.

DRAINAGE AREA.--7,350 mi<sup>2</sup> (19,040 km<sup>2</sup>), approximately, of which at least 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) does not contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: July 1956 to current year.

Specific conductance: July 1956 to current year.

Water temperatures: October 1964 to current year.

Sediment records: October 1947 to current year.

## EXTREMES:

Current year:

Specific conductance: Maximum daily, 3,730 micromhos Apr. 28; minimum daily, 754 micromhos July 18.

Water temperatures: Maximum, 30.5°C Aug. 3, 1970, July 26, 1975; minimum, 4.0°C Feb. 23, Mar. 5.

Sediment concentrations: Maximum daily, 246,000 mg/l Mar. 3; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 728,000 tons (660,000 tonnes) Sept. 5; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Specific conductance: Maximum daily, 11,400 micromhos June 10, 1968; minimum daily, 238 micromhos July 30, 1969.

Water temperatures: Maximum, 30.5°C Aug. 3, 1970, July 26, 1975; minimum, freezing point Dec. 30, 1971.

Sediment concentrations: Maximum daily, 267,000 mg/l July 26, 1957; minimum daily, no flow on many days of each year.

Sediment discharge: Maximum daily, 2,240,000 tons (2,030,000 tonnes) Aug. 7, 1957; minimum daily, 0 tons (0 tonnes) on many days of each year.

REMARKS.--Chemical analyses are run on composite samples collected during the day or period indicated. Samples are collected when flow is observed on this ephemeral stream.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED POT- SIUM (K) (00935)	DIS- SOLVED BICAR- BONATE (HCO3) (00440)	DIS- SOLVED CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
OCT.												
12...	679	9.1	--	230	53	260	10	129	0	1100	54	.6
13-14	660	8.1	--	120	26	180	8.4	118	0	580	43	.8
15-18	94	9.4	--	140	28	180	6.0	159	0	590	42	.7
22-26	105	9.4	--	140	28	180	6.0	159	0	590	42	.7
29-31	318	9.4	--	140	28	180	6.0	159	0	590	42	.7
NOV.												
01-04	82	7.0	--	110	26	180	6.5	177	0	510	52	.5
JAN.												
29...	3.0	12	--	200	61	370	8.5	255	0	940	260	.7
FEB.												
01-10	7.5	11	--	180	57	350	11	238	0	970	190	.6
23-24	.75	7.6	--	160	51	330	8.7	199	0	880	190	.5
MAR.												
02-03	444	9.8	--	190	51	350	9.5	223	0	1100	74	.5
04-07	231	8.0	--	130	31	220	6.9	162	0	730	33	.8
08-16	28	7.8	--	150	40	270	7.5	180	0	850	91	.9
17-20	5.4	8.8	--	170	50	370	8.5	229	--	990	150	.7
21-23	1.6	8.0	--	210	61	460	9.6	224	--	1300	220	1.0
APR.												
19-22	1.2	14	20	240	87	470	12	252	--	1500	210	.9
28...	12	12	--	280	86	520	13	243	--	1700	180	.9
29-30	26	11	--	220	57	350	9.1	210	--	1200	75	.9
MAY												
01-05	9.6	10	--	220	57	330	8.8	189	--	1200	110	1.0
09-15	16	10	--	220	56	320	9.1	177	--	1200	110	1.1
16-29	48	8.4	--	150	42	230	6.4	127	--	840	45	1.0
30-31	20	8.1	--	150	39	230	6.6	116	--	790	57	.8
JUNE												
01-12	12	8.2	--	160	44	250	6.7	123	--	900	68	1.0
13-16	9.0	9.3	--	160	41	270	6.9	136	--	930	72	1.1
JULY												
10...	1.9	9.1	--	54	8.5	120	11	121	--	210	110	.6
12-17	246	13	--	220	56	300	10	142	--	1100	81	.7
18...	40	15	--	61	12	74	7.8	123	--	210	35	.7
19-31	50	13	--	170	40	280	9.6	168	--	930	67	.7
AUG.												
01-04	15	12	--	190	43	270	10	164	0	970	98	.8
14-19	40	13	--	190	42	260	9.7	201	0	950	70	.7
22...	27	13	--	250	83	410	11	240	0	1400	200	.6
23-28	48	9.9	--	130	26	150	9.3	142	0	560	58	.8
SEP.												
05-07	839	9.6	--	180	38	210	7.5	140	0	850	44	.8
08-18	619	9.8	--	120	24	180	6.9	151	0	590	50	.8
WTD. AVG.	--	9.8	--	151	34	216	7.7	152	--	749	54	.8
TIME WTD.												
AVG.	125	10.0	--	167	43	267	8.3	169	--	887	87	.8
TOT. LOAD (TONS)	--	518	--	7970	1780	11400	405	8050	--	39600	2860	40

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (WESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SOM OF CONSTIT- UENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (MG/L) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPEC- IFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
12...	1.2	--	--	--	1790	2.43	3280	790	680	4.0	2370	7.7
13-14	1.1	--	--	--	1030	1.40	1840	410	310	3.9	1540	7.8
15-18	.67	--	--	--	1080	1.47	274	470	340	3.6	1540	7.9
22-26	.67	--	--	--	1080	1.47	306	470	340	3.6	1540	7.9
29-31	.67	--	--	--	1080	1.47	927	470	340	3.6	1540	7.9
NOV.												
01-04	.32	--	--	--	981	1.33	217	380	240	4.0	1430	7.8
JAN.												
29...	.95	--	--	--	1980	2.69	16.0	750	540	5.9	2820	7.8
FEB.												
01-10	.86	--	--	--	1890	2.57	38.3	680	490	5.8	2700	7.9
23-24	.49	--	--	--	1730	2.35	3.50	610	450	5.8	2470	7.9
MAR.												
02-03	1.4	--	--	--	1900	2.58	2280	680	500	5.8	2590	7.8
04-07	.67	--	--	--	1240	1.89	773	450	320	4.5	1770	8.0
08-16	.70	--	--	--	1510	2.05	114	540	390	5.1	2130	7.9
17-20	1.4	--	--	--	1870	2.54	27.3	630	440	6.4	2700	--
21-23	1.5	--	--	--	2390	3.25	10.3	780	590	7.2	3210	--
APR.												
19-22	.53	.05	510	2710	2660	3.62	8.62	960	750	6.6	3406	--
28...	.61	--	--	--	2910	3.96	94.3	1100	850	7.0	3726	--
29-30	.83	--	--	--	2030	2.76	143	780	610	5.4	2711	--
MAY												
01-05	.59	--	--	--	2030	2.76	52.6	780	630	5.1	2675	--
09-15	.62	--	--	--	2020	2.75	87.3	780	630	5.0	2670	--
16-29	.71	--	--	--	1390	1.89	180	550	440	4.3	1884	--
30-31	.63	--	--	--	1340	1.82	72.4	540	440	4.3	1930	--
JUNE												
01-12	.77	--	--	--	1560	2.04	48.8	580	480	4.5	2060	--
13-16	.60	--	--	--	1560	2.12	37.9	570	460	4.9	2140	--
JULY												
10...	.94	--	--	--	587	.80	3.01	170	71	4.0	912	--
12-17	.55	--	--	--	1850	2.52	1230	760	640	4.8	2410	--
18...	1.3	--	--	--	482	.66	52.1	200	100	2.3	754	--
19-31	.70	--	--	--	1600	2.18	216	590	450	5.0	2130	--
AUG.												
01-04	1.0	--	--	--	1680	2.28	66.0	650	520	4.6	2280	7.5
14-19	.83	--	--	--	1640	2.23	177	650	480	4.4	2160	7.3
22...	.55	--	--	--	2490	3.39	182	970	770	5.7	3070	6.7
23-28	1.0	--	--	--	1020	1.39	132	430	320	3.1	1440	7.5
SEP.												
05-07	.95	--	--	--	1410	1.92	3190	610	490	3.7	1900	7.6
08-18	.98	--	--	--	1060	1.44	1770	400	280	3.9	1460	7.7
WTD. AVG.	.89	--	--	--	1300	1.77	--	516	391	4.1	1780	--
TIME WTD.												
AVG.	.79	--	--	--	1560	2.12	--	594	454	4.7	2130	--
TOT. LOAD (TONS)	47	--	--	--	68800	--	--	--	--	--	--	--

08353000 RIO PUERTO NEAR BERNARDO, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1410	---	---	2250	---	---	2590	1760	---	2280	---
2	---	---	---	---	2230	2750	---	2590	1710	---	2640	---
3	---	---	---	---	2410	2240	---	2600	1780	---	1980	---
4	---	1350	---	---	---	1820	---	2610	2060	---	2190	---
5	---	---	---	---	2690	1760	---	2890	2140	---	2070	2120
6	---	---	---	---	2870	1600	---	---	2300	---	---	1790
7	---	---	---	---	2780	1670	---	---	2360	---	---	1680
8	---	---	---	---	2730	1900	---	---	2220	---	---	1480
9	---	---	---	---	2720	2240	---	2620	---	---	---	1140
10	---	---	---	---	2960	2010	---	2520	1980	912	---	1580
11	---	---	---	---	---	2160	---	2480	1940	---	---	1530
12	2340	---	---	---	---	1910	---	2470	1970	2610	---	1190
13	1700	---	---	---	---	2010	---	3000	1950	1600	---	1670
14	1320	---	---	---	---	---	---	2810	2060	2540	2280	1500
15	1390	---	---	---	2320	2290	---	2580	1980	2610	1900	1410
16	1300	---	---	---	2530	2450	---	2090	2220	2380	2460	1400
17	1320	---	---	---	---	2330	---	2080	---	2590	2710	1580
18	1410	---	---	---	---	2570	---	1930	---	757	2090	1630
19	---	---	---	---	---	2780	3500	1900	---	2330	1540	1730
20	---	---	---	---	---	2730	3700	1830	---	2480	---	1810
21	---	---	---	---	---	3010	3300	1770	---	2940	---	---
22	---	---	---	---	---	3050	3030	1730	---	1160	3070	---
23	---	---	---	---	---	3340	---	1740	---	2230	1220	---
24	1680	---	---	---	---	---	---	1740	---	2020	1210	---
25	1610	---	---	---	---	---	---	1680	---	1950	1400	---
26	1460	---	---	---	---	---	---	1730	---	2030	1570	---
27	---	---	---	---	---	---	---	1840	---	2540	1580	---
28	---	---	---	---	---	---	3700	1930	---	2040	1670	---
29	1820	---	---	2750	---	---	2720	1910	---	1940	---	---
30	1500	---	---	---	---	---	2670	2010	---	1950	---	---
31	1610	---	---	---	---	---	---	1810	---	2040	---	---
MONTH	---	---	---	---	---	---	---	2200	---	---	---	---
YEAR	MAX	3790	MIN	757	MEAN	2110						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	10.0	---	---	10.0	---	---	18.5	19.0	---	28.0	---
2	---	---	---	---	10.0	5.0	---	21.0	25.5	---	29.0	---
3	---	---	---	---	12.0	9.0	---	15.5	23.0	---	28.0	---
4	---	9.5	---	---	---	7.5	---	17.5	22.5	---	27.5	---
5	---	---	---	---	5.5	4.0	---	18.0	26.0	---	19.0	18.0
6	---	---	---	---	5.0	12.5	---	---	25.5	---	---	17.5
7	---	---	---	---	7.0	14.0	---	---	17.0	---	---	21.5
8	---	---	---	---	8.5	10.0	---	---	20.0	---	---	23.0
9	---	---	---	---	7.5	8.5	---	23.0	---	---	---	21.5
10	---	---	---	---	13.0	13.0	---	14.0	21.0	20.0	---	21.0
11	---	---	---	---	---	10.0	---	20.0	22.0	---	---	19.5
12	15.0	---	---	---	---	8.0	---	22.0	25.5	24.5	---	17.0
13	15.5	---	---	---	---	13.0	---	23.0	24.0	26.0	---	15.5
14	15.0	---	---	---	---	---	---	24.0	24.5	24.0	25.0	18.0
15	15.0	---	---	---	---	6.0	---	19.5	24.0	25.5	26.5	22.0
16	16.0	---	---	---	---	10.0	---	18.0	21.0	26.0	28.0	28.0
17	18.0	---	---	---	---	10.0	---	14.0	---	24.0	28.0	22.0
18	22.0	---	---	---	---	15.0	---	17.0	---	27.0	27.5	23.0
19	---	---	---	---	---	19.0	21.0	19.5	---	27.0	27.5	23.0
20	---	---	---	---	---	17.0	17.5	19.5	---	25.0	---	24.0
21	---	---	---	---	---	17.0	20.0	18.5	---	26.5	---	---
22	---	---	---	---	---	14.5	17.0	15.0	---	29.0	27.5	---
23	---	---	---	---	---	7.5	---	19.5	---	27.5	27.0	---
24	12.0	---	---	---	15.0	---	---	22.0	---	27.5	25.0	---
25	18.0	---	---	---	---	---	---	21.0	---	28.0	26.0	---
26	14.0	---	---	---	---	---	---	16.0	---	30.5	27.5	---
27	---	---	---	---	---	---	---	19.0	---	25.5	23.0	---
28	---	---	---	---	---	---	17.5	15.0	---	26.0	30.0	---
29	11.0	---	---	10.0	---	---	16.0	18.0	---	28.5	---	---
30	9.5	---	---	---	---	---	19.0	16.0	---	29.0	---	---
31	9.5	---	---	---	---	---	---	18.0	---	26.0	---	---
MONTH	---	---	---	---	---	---	---	18.5	---	---	---	---
YEAR	MAX	30.5	MIN	4.0	MEAN	14.0						

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.---Continued

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

OCTOBER				NOVEMBER				DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	0	0	0	178	41000	19700				
2	0	0	0	77	21000	4370				
3	0	0	0	52	18500	2600				
4	0	0	0	20	17800	961				
5	0	0	0	10	16000	432				
6	0	0	0	1.0	15900	43				
7	.11	16600	22	0	0	0				
8	0	0	0	0	0	0				
9	0	0	0	0	0	0				
10	0	0	0	0	0	0				
11	112	61800	79100	0	0	0				
12	679	175000	370000.0	0	0	0				
13	354	106000	109000.0	0	0	0				
14	965	143000	402000.0	0	0	0				
15	265	53300	38800	0	0	0				
16	92	31000	7700	0	0	0				
17	15	23000	932	0	0	0				
18	2.0	19900	107	0	0	0				
19	0	0	0	0	0	0				
20	0	0	0	0	0	0				
21	0	0	0	0	0	0				
22	3.0	22000	178	0	0	0				
23	8.0	31000	670	0	0	0				
24	448	104000	134000.0	0	0	0				
25	65	87500	15400	0	0	0				
26	3.0	59000	478	0	0	0				
27	0	0	0	0	0	0				
28	0	0	0	0	0	0				
29	134	103000	48400	0	0	0				
30	239	101000	111000.0	0	0	0				
31	582	167000	334000.0	---	---	---				
MONTH	3966.11	---	1650787	338.00	---	28106.00	0	---	0	
JANUARY				FEBRUARY				MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	0	0	0	12	2240	73	0	0	0	
2	0	0	0	11	1630	48	327	157000	139000.0	
3	0	0	0	11	849	25	562	246000	373000.0	
4	0	0	0	10	6770	183	614	175000	290000.0	
5	0	0	0	10	4190	113	170	118000	54200	
6	0	0	0	7.6	51000	1050	88	96500	22900	
7	0	0	0	5.3	58800	841	51	73800	10200	
8	0	0	0	3.8	22600	232	42	70900	8040	
9	0	0	0	2.7	27200	198	36	71700	6970	
10	0	0	0	1.9	1370	7.0	30	65400	5300	
11	0	0	0	.80	1390	2.8	41	63300	7010	
12	0	0	0	0	0	0	53	62400	8930	
13	0	0	0	0	0	0	15	63700	2580	
14	0	0	0	0	0	0	12	63200	2050	
15	0	0	0	0	0	0	10	70400	1900	
16	0	0	0	0	0	0	8.5	59800	1370	
17	0	0	0	0	0	0	7.0	59300	1120	
18	0	0	0	0	0	0	6.0	54100	876	
19	0	0	0	0	0	0	5.0	47100	636	
20	0	0	0	0	0	0	3.5	45000	425	
21	0	0	0	0	0	0	2.5	35200	238	
22	0	0	0	0	0	0	1.6	25200	109	
23	0	0	0	1.0	10700	29	.60	6900	11	
24	0	0	0	.50	3610	4.9	0	0	0	
25	0	0	0	.20	1500	.81	0	0	0	
26	0	0	0	.10	218	.06	0	0	0	
27	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	
29	3.0	3280	27	---	---	---	0	0	0	
30	3.5	2810	27	---	---	---	0	0	0	
31	8.0	2400	52	---	---	---	0	0	0	
MONTH	14.50	---	106.00	77.90	---	2897.57	2085.70	---	936865.0	

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	24	95400	6180	26	71800	9040
2	0	0	0	15	85000	3440	15	70000	2840
3	0	0	0	5.0	87000	1170	7.3	68000	1340
4	0	0	0	3.0	90200	731	4.1	73900	818
5	0	0	0	1.0	86100	232	1.5	62400	253
6	0	0	0	0	0	0	2.6	63000	442
7	0	0	0	0	0	0	7.8	118000	2490
8	0	0	0	5.2	14700	1650	13	122000	4260
9	0	0	0	38	92000	9440	12	99700	3230
10	0	0	0	8.7	84300	1980	20	99500	5370
11	0	0	0	7.0	84000	1590	17	89500	4110
12	0	0	0	6.0	91800	1490	17	85600	3930
13	0	0	0	5.0	88000	1190	14	92600	3500
14	0	0	0	12	93300	3020	13	87900	3090
15	0	0	0	34	104000	9550	6.4	78400	1350
16	0	0	0	52	94500	13300	2.6	58000	407
17	0	0	0	60	85100	13800	1.1	40100	119
18	2.5	46700	315	68	81100	14900	0	0	0
19	2.0	76500	413	78	78600	16600	0	0	0
20	1.5	68500	277	74	83500	16700	0	0	0
21	1.0	35600	96	70	85700	16200	0	0	0
22	1.50	21000	28	55	78600	11700	0	0	0
23	0	0	0	53	67700	9690	0	0	0
24	0	0	0	56	76400	11600	0	0	0
25	0	0	0	42	76400	8660	0	0	0
26	0	0	0	27	68000	4960	0	0	0
27	0	0	0	15	51400	2080	0	0	0
28	12	37800	3180	12	59400	1920	0	0	0
29	23	111000	6890	12	88000	2850	0	0	0
30	30	119000	9640	16	80600	3480	0	0	0
31	---	---	---	24	73200	4740	---	---	---
MONTH	72.50	---	20839.00	877.90	---	194843.0	180.40	---	42589.00
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	12	96400	3120	0	0	0
2	0	0	0	26	110000	7720	0	0	0
3	0	0	0	13	94200	3310	0	0	0
4	0	0	0	8.2	75600	1670	2.8	33300	320
5	0	0	0	0	0	0	1210	219000	728000.0
6	0	0	0	0	0	0	1060	128000	411000.0
7	0	0	0	0	0	0	246	70000	46500
8	0	0	0	0	0	0	137	52500	19400
9	0	0	0	0	0	0	190	52100	27600
10	1.9	450	15	0	0	0	685	154000	299000.0
11	3.2	1300	11	0	0	0	1430	111000	381000.0
12	250	81300	63000	0	0	0	1530	55000	227000.0
13	84	35400	8030	15	39300	4950	1560	98600	490000.0
14	885	186000	505000.0	124	136000	53400	750	81000	164000.0
15	119	129000	41400	68	94000	17300	349	58000	54700
16	88	108000	25700	26	175000	12300	112	52500	15900
17	47	124000	15300	13	101000	3550	45	41900	5090
18	40	48700	7820	6.0	83000	1340	18	37600	1830
19	48	59900	10400	1.0	49000	132	6.4	31900	551
20	32	77500	6700	0	0	0	1.0	99500	269
21	63	95000	32300	1.2	10900	174	0	0	0
22	41	84800	11600	27	89400	7410	0	0	0
23	125	152000	53000	143	42100	15600	0	0	0
24	19	87900	4510	83	32000	7170	0	0	0
25	6.1	62000	1020	40	34900	3770	0	0	0
26	3.5	50000	472	15	33000	1370	0	0	0
27	124	124000	84300	3.5	25100	237	0	0	0
28	116	146000	45700	2.4	19300	125	0	0	0
29	41	105000	11600	0.80	14900	32	0	0	0
30	20	92900	5020	0	0	0	0	0	0
31	12	104000	3370	0	0	0	---	---	---
MONTH	2168.70	---	936268.0	628.10	---	144080.0	9332.20	---	2872160
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)			19,742.01					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)			6,829,450.57					

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)		SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (00155)	SUS. SED. FALL DIAM. % FINEH THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINEH THAN .004 MM (70338)	
DATE	TIME	TEMPER- ATURE (DEG C) (00010)						
OCT. 12...	1130	15.0	685	143000	264000	42	47	
NOV. 01...	1630	10.0	37	53700	5460	53	67	
MAR. 03...	1630	9.0	506	227000	310000	34	39	
MAY 17...	0800	14.0	63	86400	14700	67	80	
JUNE 07...	1030	17.0	6.8	116000	2130	88	93	
JULY 14...	1800	24.0	356	156000	150000	49	57	
JULY 21...	1730	26.5	252	245000	167000	48	56	
AUG. 15...	1400	26.0	54	81000	11900	69	80	
SEP. 05...	1020	18.0	2210	176000	1050000	40	47	
12...	1530	17.0	770	51300	107000	58	65	
DATE		SUS. SED. FALL DIAM. % FINEH THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINEH THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINEH THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINEH THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINEH THAN .500 MM (70345)	SUS. SED. FIVE DIAM. % FINEH THAN .062 MM (70351)	SUS. SED. FIVE DIAM. % FINEH THAN .125 MM (70352)
OCT. 12...	60	87	97	100	--	--	--	--
NOV. 01...	81	90	97	100	--	--	--	--
MAR. 03...	50	79	96	100	--	--	--	--
MAY 17...	99	--	--	--	--	99	100	--
JUNE 07...	99	100	--	--	--	100	--	--
JULY 14...	75	97	100	--	--	--	--	--
JULY 21...	70	89	97	100	--	--	--	--
AUG. 15...	95	--	--	--	--	100	--	--
SEP. 05...	58	79	92	99	100	--	--	--
12...	77	98	100	--	--	--	--	--

## 08354000 RIO SALADO NEAR SAN ACACIA, N. MEX.

LOCATION.--Lat 34°17'50", long 106°53'59", in NW¼ sec.24, T.1 N., R.1 W., Socorro County, at gaging station at former bridge site, 0.3 mi (0.5 km) upstream from bridge on Interstate Highway 25, 3.1 mi (5.0 km) upstream from mouth, 2.9 mi (4.7 km) north of San Acacia, and 15 mi (24 km) north of Socorro.

DRAINAGE AREA.--1,380 mi<sup>2</sup> (3,570 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: July to September 1956, June 1966 to current year.  
Sediment records: July 1948 to current year.

REMARKS.--Samples are collected when flow is observed on this ephemeral stream.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- SOLVED (CFS) (000011)	DIS- SOLVED SULFATE (S1042) (MG/L) (000045)	DIS- SOLVED IRON (FE) (MG/L) (010046)	DIS- SOLVED COPPER (CU) (MG/L) (000015)	DIS- SOLVED MANG- NESE (MG/L) (000025)	DIS- SOLVED SODIUM (NA) (MG/L) (000030)	DIS- SOLVED POT- ASH (MG/L) (000035)	DIS- SOLVED BICAR- BONATE (MG/L) (000440)	DIS- SOLVED CAR- BONATE (MG/L) (000445)	DIS- SOLVED SULFATE (SO4) (MG/L) (000045)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (000040)
OCT.												
08...	1100	9.1	11	20	76	19	150	5.7	174	0	330	120
SEP.												
10...	1100	425	14	--	65	12	50	4.0	215	0	150	21
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (000050)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (000031)	DIS- SOLVED NITRO- GENE (N) (MG/L) (000071)	DIS- SOLVED SULFIDE (S) (MG/L) (000005)	DIS- SOLVED SILICA (SIO2) (MG/L) (000010)	DIS- SOLVED SODIUM (NA) (MG/L) (000000)	DIS- SOLVED SODIUM (NA) (MG/L) (000002)	DIS- SOLVED SODIUM (NA) (MG/L) (000031)	DIS- SOLVED SODIUM (NA) (MG/L) (000005)	DIS- SOLVED SODIUM (NA) (MG/L) (000000)	DIS- SOLVED SODIUM (NA) (MG/L) (000000)
OCT.												
08...	1100	15	15	15	15	15	15	15	15	15	15	15
SEP.												
10...	1100	15	15	15	15	15	15	15	15	15	15	15

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (000010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT (MG/L) (00155)	SUS- PENDED SEDIM- ENT (MG/L) (00337)	SUS- PENDED SEDIM- ENT (MG/L) (00338)	SUS- PENDED SEDIM- ENT (MG/L) (00340)	SUS- PENDED SEDIM- ENT (MG/L) (00342)	SUS- PENDED SEDIM- ENT (MG/L) (00343)	SUS- PENDED SEDIM- ENT (MG/L) (00344)	SUS- PENDED SEDIM- ENT (MG/L) (00345)
OCT.												
08...	1100	15.0	9.1	70500	1730	--	--	--	--	--	--	--
AUG.												
13...	0910	19.5	252	230000	156000	35	48	67	85	90	97	100
22...	1230	25.0	74	36900	7370	62	70	86	96	99	100	--
SEP.												
10...	1100	21.0	425	62300	71500	47	62	77	88	94	99	100
20...	1630	18.0	10	9090	2.4	--	--	--	--	--	--	--

## 08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.

LOCATION.--Lat 34°14'54", long 106°54'04", in SW¼ sec.1, T.1 S., R.1 W., Socorro County, about 100 ft (30 m) downstream from gaging station, at downstream side of railway crossing, 0.5 mi (0.8 km) south of San Acacia, and 1.2 mi (1.9 km) downstream from San Acacia diversion dam.

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.

Specific conductance: October 1964 to current year.

Water temperatures: May 1959 to current year.

Sediment records: January 1959 to current year.

## EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,530 micromhos Oct. 14; minimum daily, 353 micromhos May 25.

Water temperatures: Maximum, 30.0°C July 4, Aug. 10; minimum, freezing point Jan. 12, 13.

Sediment concentrations: Maximum daily, 53,400 mg/l Mar. 3; minimum daily, 26 mg/l Sept. 24.

Sediment discharge: Maximum daily, 169,000 tons (153,000 tonnes) Mar. 3; minimum daily, .01 ton (.01 tonne) Aug. 14.

Period of record:

Specific conductance: Maximum daily, 3,840 micromhos Oct. 8, 1964; minimum daily, 136 micromhos June 19, 1967.

Water temperatures: Maximum, 36.0°C July 13, 1970; minimum, freezing point on several days during 1967-1969, 1971-1975.

Sediment concentrations: Maximum daily, 141,000 mg/l Aug. 10, 1959; minimum daily, no flow on many days during most years.

Sediment discharge: Maximum daily, 528,000 tons (479,000 tonnes) Aug. 28, 1972; minimum daily, 0 tons (0 tonnes) on many days during most years.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	TOTAL	DIS-	AMMONIA	TOTAL	TOTAL
		ANEOUS	SOLVED	SOLVED	NITRITE	NITRITE	NITRO-	ORGANIC	NITRO-
		DIS-	NITRATE	NITRATE	PLUS	PLUS	GEN	GEN	GEN
		CHARGE	(N)	(N)	(N)	(N)	(N)	(N)	(N)
		(CFS)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
		(00061)	(00618)	(00613)	(00630)	(00631)	(00610)	(00605)	(00600)
JULY									
31...	1111	224	.29	.42	.22	.22	.09	2.2	2.4
DATE		TOTAL	DIS-	SPF-	PH	TEMPER-	TEMPER-	TUR-	DIS-
		PHOS-	ORTHOPHOS-	PHOS-					
		PHOS-	PHOS-	PHOS-					
		(P)	(P)	(P)					
		(MG/L)	(MG/L)	(MG/L)	(UNITS)	(DEG C)	(DEG C)	(FTU)	(MG/L)
		(00665)	(00671)	(00695)	(00400)	(00020)	(00010)	(00070)	(00300)
JULY									
31...	1.5	.21	730	8.2	79.9	22.5	1200	1.7	

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL	SIMP-
		COLI-	TOCOC-
		FORM	(COL-
		(COL-	ONIFS
		PER	PER
		100 ML	100 ML
		(31615)	(31679)
JULY			
31...	1111	370	560



08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	942	1090	758	748	712	728	685	515	408	412	766	824
2	935	995	755	740	775	713	667	498	382	414	916	610
3	935	905	745	775	773	1500	770	500	409	420	911	822
4	940	865	757	785	697	1330	785	509	425	421	918	773
5	980	869	730	785	690	910	805	518	417	415	922	839
6	933	835	745	790	688	825	807	498	420	393	800	824
7	937	815	740	820	635	780	830	498	430	391	879	913
8	937	795	738	795	675	705	472	461	458	396	942	914
9	945	805	730	773	712	662	447	473	395	405	928	915
10	905	755	730	743	725	640	845	495	457	406	862	929
11	870	775	723	710	720	695	740	500	459	487	1040	953
12	1190	770	723	710	712	755	590	531	502	735	949	973
13	1200	783	730	773	715	715	545	509	468	453	823	967
14	1530	785	723	740	705	655	620	543	430	668	819	1010
15	1190	785	728	735	692	662	670	459	429	581	823	1010
16	945	760	720	743	660	635	735	460	385	499	809	1020
17	905	760	727	750	694	630	780	469	417	505	798	1030
18	903	760	727	752	710	712	790	414	442	472	815	1030
19	915	760	720	740	745	720	697	421	442	503	818	1030
20	885	860	730	738	749	715	730	406	422	516	810	1080
21	890	758	729	740	728	717	690	404	472	546	791	1070
22	868	765	740	718	698	717	733	477	443	501	806	1060
23	1060	760	735	700	687	733	722	390	425	676	845	1070
24	970	768	727	807	698	598	709	431	445	509	849	1080
25	960	775	683	709	713	716	553	353	439	611	825	1080
26	895	755	695	710	738	710	513	377	417	568	812	1070
27	895	760	710	717	732	668	487	382	417	638	767	1080
28	1210	760	720	722	730	650	575	429	408	836	779	1080
29	1270	755	735	712	---	670	512	400	389	688	788	1080
30	935	755	745	728	---	667	490	380	395	727	796	1080
31	970	---	743	715	---	667	---	389	---	751	818	---
MONTH	995	805	730	746	711	752	670	454	428	533	846	974
YEAR	MAX	1530	MIN	353	MEAN	720						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	12.0	5.0	5.0	9.0	16.5	10.0	18.0	24.5	27.0	28.0	24.5
2	23.0	12.5	7.0	4.0	10.5	16.0	11.0	18.0	24.5	27.0	28.0	25.0
3	19.0	13.0	7.5	2.0	10.0	12.0	14.0	20.0	23.0	28.0	29.0	26.0
4	18.0	12.0	8.0	2.0	10.0	10.0	15.0	19.5	24.5	30.0	24.5	21.0
5	17.0	11.0	9.0	3.0	6.0	9.0	17.0	12.0	24.0	29.0	26.0	21.0
6	16.5	11.0	9.0	2.5	7.0	13.5	14.0	15.0	22.5	28.0	25.5	16.0
7	16.0	11.0	8.5	3.5	7.5	15.0	10.0	17.0	23.0	26.0	26.0	21.0
8	19.0	14.5	4.0	5.0	10.0	12.0	10.0	19.5	22.0	26.0	27.0	23.0
9	22.0	14.0	3.0	4.0	11.0	12.0	11.5	21.0	23.0	28.0	26.0	24.0
10	18.5	12.0	5.0	4.0	12.0	13.0	12.0	22.0	22.0	27.0	30.0	24.0
11	17.0	12.0	4.5	2.0	11.0	10.0	13.0	23.0	24.5	24.0	29.0	23.0
12	17.0	12.0	5.0	0.0	12.0	9.5	12.0	22.0	25.5	25.0	29.0	20.0
13	16.0	12.0	5.0	0.0	10.5	11.0	13.0	22.0	27.0	25.0	29.5	20.5
14	16.5	11.5	5.5	3.0	10.0	12.0	16.0	23.0	24.0	26.0	28.0	21.0
15	16.0	12.0	6.0	5.0	8.0	10.0	17.0	23.0	24.5	27.0	27.0	23.0
16	18.0	12.0	5.0	5.0	10.0	12.0	18.5	23.0	24.0	25.0	26.0	24.0
17	18.0	13.0	6.0	5.5	8.0	10.0	18.0	25.0	23.0	25.0	25.0	24.0
18	17.5	13.0	5.5	7.0	9.0	13.5	14.0	21.0	22.0	27.0	24.0	25.0
19	17.0	12.0	6.0	8.0	10.0	16.0	17.0	20.0	18.0	28.0	25.0	25.0
20	17.0	12.5	7.0	7.5	10.0	17.0	19.0	21.0	24.5	27.0	25.0	20.0
21	16.5	12.0	7.0	5.0	7.0	15.5	20.0	19.5	23.0	27.0	24.0	19.0
22	15.0	11.0	7.5	5.0	5.0	15.0	17.0	17.0	24.0	29.0	26.5	21.0
23	15.0	8.0	5.0	5.5	6.0	11.0	21.0	20.0	23.0	29.0	26.0	23.0
24	16.5	10.0	4.0	8.0	10.5	14.0	22.0	23.0	24.0	28.0	27.0	21.5
25	15.0	9.0	5.0	9.0	12.0	15.0	18.0	21.0	25.5	28.0	27.0	21.0
26	14.0	11.5	2.0	9.0	14.0	8.0	17.0	23.0	19.0	22.0	26.0	23.0
27	13.0	8.0	4.0	8.0	14.0	8.0	15.0	21.0	24.0	27.0	25.0	20.5
28	12.5	6.0	1.0	10.0	16.0	13.0	17.0	19.0	27.0	26.0	28.0	23.5
29	12.0	7.0	3.5	8.0	---	8.0	17.0	18.0	26.0	25.0	29.0	23.0
30	13.0	7.5	4.0	10.0	---	12.0	16.0	20.0	29.5	27.0	27.0	21.0
31	12.0	---	4.5	9.0	---	14.0	---	23.0	---	28.0	28.0	---
MONTH	16.5	11.0	5.5	5.5	10.0	12.5	15.5	20.5	24.0	27.0	27.0	22.5
YEAR	MAX	30.0	MIN	0.0	MEAN	16.5						

## 08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	39	780	82	542	31500	47400	540	3500	5100
2	15	273	11	484	19500	25500	540	4700	6850
3	16	229	9.9	440	10000	11900	552	4200	6260
4	22	472	28	419	9200	10400	571	3190	4920
5	100	618	209	459	9900	12300	564	3950	6020
6	92	610	147	517	11700	16300	576	3450	5370
7	70	15500	3250	558	8200	12400	593	3550	5680
8	147	10500	4030	569	8000	12300	622	3100	5210
9	153	3300	1360	604	9320	15200	618	1950	3250
10	205	3690	2210	609	6140	10100	661	4270	7890
11	237	2900	1860	685	7500	13900	669	7150	12900
12	681	33500	62900	657	7000	12400	666	6780	12200
13	551	31600	47000	638	9100	15700	656	6430	11400
14	985	49700	132000	629	7350	12500	649	6450	11300
15	617	30000	50000	628	3340	5660	645	7980	13800
16	351	12100	11500	616	4420	7350	649	7200	12600
17	280	7600	5750	616	4700	7820	629	5700	9680
18	255	4400	3030	606	4000	6540	636	5620	9650
19	196	4400	2330	596	5650	9090	654	4760	8410
20	167	9000	4060	593	4550	7290	663	5000	8950
21	145	3400	1330	593	3720	5960	664	4400	7890
22	221	3500	2090	566	5150	7870	664	5300	9500
23	413	26400	33400	567	5350	8190	664	4960	8890
24	686	42700	78500	554	5580	8350	684	4600	8500
25	496	20500	27500	535	3730	5390	691	3900	7280
26	251	10000	6780	542	4500	6590	701	3000	5680
27	321	10500	9100	532	4430	6360	698	3390	6390
28	410	19400	21500	548	5050	7470	666	3520	6330
29	521	32300	48100	542	4500	6590	631	3450	5880
30	531	24000	34400	540	3560	5190	595	3170	5090
31	733	40200	86300	---	---	---	589	2830	4500
MONTH	9907	---	680766.9	16984	---	340010	19600	---	243370
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	578	4500	7020	775	3690	7720	752	3710	7530
2	555	4830	7240	777	4010	8410	846	13300	36600
3	522	4720	6650	815	4870	10700	1120	53400	169000
4	500	3080	4160	822	3990	8860	1120	46600	141000
5	489	2800	3700	828	3780	8450	914	28700	70800
6	447	3240	3910	877	3990	9450	743	17800	37000
7	428	4330	5000	1120	4970	15000	679	9150	17900
8	485	5410	7080	870	4940	11600	812	4380	10100
9	534	4290	6190	756	4370	8920	908	5930	14500
10	586	2900	4590	715	4430	8550	1100	7980	23700
11	611	7290	12000	709	4300	8230	1050	7110	20200
12	562	4060	6160	738	3890	7750	1110	7280	21800
13	517	3060	4270	736	4530	9000	969	5900	15400
14	535	3000	4330	759	2070	4240	991	5750	15400
15	552	3930	5860	801	4270	9230	939	5190	13200
16	552	4230	6300	864	4200	9800	1050	6440	18300
17	549	4390	6510	857	3510	8120	882	4970	11800
18	559	4390	6630	851	3390	7790	670	3540	6400
19	575	4280	6640	854	3800	8760	585	2650	4190
20	597	4220	6800	807	5320	11600	518	1580	2210
21	636	4370	7500	783	4530	9580	487	1670	2200
22	651	4150	7290	822	4580	10200	440	1830	2170
23	679	4290	7860	841	4080	9260	441	1990	2370
24	652	4820	8490	816	4240	9340	499	2550	3440
25	627	4500	7620	800	4060	8770	563	2510	3820
26	623	5000	8410	775	3910	8180	559	2490	3760
27	644	3360	5840	749	4820	9750	718	3690	7150
28	690	4280	7970	732	4030	7960	783	5200	11000
29	706	4240	8080	---	---	---	642	2650	4590
30	694	3780	7080	---	---	---	597	2370	3820
31	729	3710	7300	---	---	---	598	2370	3830
MONTH	18064	---	204480	22649	---	255220	24085	---	705180

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	587	1780	2820	555	7440	11100	433	5710	6820
2	510	1450	2000	553	7140	10700	414	5440	6080
3	304	780	640	493	5880	7830	369	5100	5080
4	264	820	584	471	7140	9080	380	4160	4270
5	214	640	370	438	5150	6090	490	3950	5230
6	204	840	463	414	5610	6270	414	3390	3790
7	215	1080	627	430	5100	5920	391	4920	5190
8	215	750	435	412	4300	4780	387	4940	5160
9	287	1180	914	423	4490	5130	352	4900	4660
10	305	1730	1850	411	5080	5640	394	3930	4180
11	573	2450	3790	374	4200	4240	397	7530	8070
12	1270	5420	19300	342	4050	3740	368	5250	5220
13	1020	3950	10900	350	4300	4060	398	4700	5050
14	1040	4840	13600	356	5240	5040	411	3690	4090
15	882	3030	7220	362	5250	5130	400	3690	3990
16	718	1880	3640	376	5040	5930	405	3480	3810
17	695	1690	3170	377	4950	5040	378	3620	3690
18	707	2620	5000	389	6330	6650	372	5000	5020
19	834	3790	8530	445	8500	0200	388	5650	5920
20	721	3690	7180	429	9460	1000	369	4650	4630
21	864	4570	10700	370	8490	8480	379	5820	5960
22	581	2160	3390	346	7160	6690	430	5570	6470
23	562	2090	3170	353	8840	8630	400	3740	4040
24	709	3540	7900	346	2100	11300	371	3160	3170
25	1290	8210	24600	295	9030	7190	368	4330	4300
26	1180	6290	20000	319	6450	5560	369	4260	4240
27	1180	7000	22300	402	5380	5840	374	4700	4750
28	903	6440	15700	426	4520	5280	382	4680	4830
29	557	8390	12600	386	3380	3520	416	4800	5390
30	543	9230	13500	403	5160	5610	439	3530	4180
31	---	---	---	361	4800	4680	---	---	---
MONTH	20024	---	230893	12407	---	206070	11838	---	147280
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	508	3470	4760	196	3030	1600	1.3	119	.42
2	516	2930	4080	119	2820	906	1.8	112	.54
3	611	2160	3560	30	2820	228	1.5	97	.39
4	729	2300	4530	10	2160	58	1.8	82	.40
5	756	3800	7760	3.6	936	9.1	2.0	97	.52
6	790	3430	7320	2.9	257	2.0	2.3	123	.76
7	844	3940	8980	2.3	126	.78	2.3	82	.51
8	1060	3700	10600	3.0	220	1.8	2.6	61	.43
9	1150	3870	9530	3.0	338	2.7	2.6	57	.40
10	1140	2840	8740	3.0	318	2.6	3.0	62	.50
11	1050	3110	8820	1.5	3550	14	3.3	100	.89
12	919	12900	32000	2.1	1200	6.8	3.7	67	.67
13	921	6200	15400	.53	395	.57	3.3	45	.40
14	913	20500	50500	.02	229	.01	3.7	52	.52
15	922	10600	26400	.02	373	.02	3.7	41	.41
16	949	5750	14700	.13	344	.12	3.7	34	.34
17	953	5250	13500	.10	164	.04	3.3	43	.38
18	945	10700	27300	.21	156	.09	3.3	43	.38
19	965	4000	10400	.25	112	.08	3.0	53	.43
20	966	4900	12800	.38	53	.05	3.7	48	.48
21	958	3550	9180	.40	48	.05	3.7	64	.64
22	905	6090	14900	.46	57	.07	3.7	52	.52
23	955	10800	27800	.41	113	.13	4.1	33	.37
24	933	7380	18600	.40	90	.10	4.5	26	.32
25	902	11400	27800	.51	59	.08	4.5	30	.36
26	757	4350	8890	.53	58	.08	3.7	37	.37
27	502	3250	4510	.73	44	.09	4.5	40	.49
28	599	28800	46600	.83	46	.10	4.1	46	.51
29	652	12200	21500	1.0	61	.16	4.1	46	.51
30	360	7380	7170	1.0	43	.12	4.1	44	.49
31	198	3600	1920	1.3	52	.10	---	---	---
MONTH	25328	---	470550	385.61	---	2833.92	96.9	---	4.35

WTR YR 1975 TOTAL WATER DISCHARGE (CFS-DAYS) 181,368.51  
WTR YR 1975 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 3,486,668.17

## RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .008 MM (70339)
OCT.								
13...	1815	16.0	548	33300	49300	59	72	--
NOV.								
01...	1530	12.0	370	23200	23200	53	64	--
21...	1705	12.0	580	3710	5810	19	19	--
DEC.								
10...	1635	5.0	680	7560	13900	9	12	--
28...	1530	1.0	708	3480	6650	11	13	--
JAN.								
23...	1800	5.0	702	5430	10300	6	8	--
FEB.								
18...	1720	9.0	840	3390	7690	12	15	--
MAR.								
03...	1710	13.0	1530	85500	353000	45	50	--
APR.								
25...	0635	11.0	1340	9580	34700	22	23	--
MAY								
09...	0800	13.0	430	2430	3290	32	38	--
25...	1030	19.0	300	9410	7620	8	10	14
JUNE								
12...	0800	20.0	368	5810	5770	9	10	--
JULY								
14...	0915	21.0	878	32000	75900	52	59	--
31...	1111	22.5	224	2410	1460	61	70	--
AUG.								
11...	1715	29.0	1.2	7410	38	81	94	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)
OCT.							
13...	90	98	100	--	--	--	--
NOV.							
01...	82	92	93	98	100	--	--
21...	26	67	95	100	--	--	--
DEC.							
10...	14	49	90	99	100	--	--
28...	17	39	66	94	100	--	--
JAN.							
23...	11	22	46	100	--	--	--
FEB.							
18...	19	34	55	91	100	--	--
MAR.							
03...	82	96	98	99	100	--	--
APR.							
25...	36	66	89	97	100	--	--
MAY							
09...	47	68	80	93	100	--	--
25...	--	25	56	88	99	100	--
JUNE							
12...	12	20	57	94	100	--	--
JULY							
14...	77	91	94	98	100	--	--
31...	78	89	94	100	--	--	--
AUG.							
11...	100	--	--	--	--	--	100

## 08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, in Sevilleta Grant, at gaging station, 0.2 mi (0.3 km) below San Acacia diversion dam, 0.3 mi (0.5 km) east of San Acacia, and 2 mi (3 km) downstream from Rio Salado, and at mile 1,472.6 (2,369.4 km).

DRAINAGE AREA.--26,770 mi<sup>2</sup> (69,330 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: July to December 1937, March 1939 to September 1956, August 1975 to current year.

Specific conductance: July to December 1937, March 1939 to September 1956, October 1964 to current year.

Water temperatures: October 1947 to August 1956, January 1959 to current year.

Sediment records: July 1946 to June 1956, January 1959 to current year.

## EXTREMES:

## Current year:

Specific conductance: Maximum daily, 1,540 micromhos Oct 14; minimum daily, 351 micromhos May 24.

Water temperatures: Maximum, 30.0°C July 4, Aug. 10; minimum, freezing point Jan. 12, 13.

Sediment concentrations: Maximum daily, 65,100 mg/l Sept. 6; minimum daily, 37 mg/l Jan. 23.

Sediment discharge: Maximum daily, 1,120,000 tons (1,020,000 tonnes) Sept. 12; minimum daily, .18 ton (.16 tonne) Jan. 23.

## Period of record:

Specific conductance (1937, 1939-56, 1964-74): Maximum daily, 3,700 micromhos July 14, 1940; minimum daily, 236 micromhos May 17, 1942.

Water temperatures: Maximum, 34.5°C July 13, 1971; minimum (1947-56, 1959-62, 1964-74), freezing point on many days during winter months of most years.

Sediment concentrations: Maximum daily, 223,000 mg/l Aug. 11 1946; minimum daily, no flow on many days of most years.

Sediment discharge: Maximum daily, 1,760,000 tons (1,600,000 tonnes) Aug. 12, 1955, minimum daily, 0 tons (0 tonnes) on many days of most years.

REMARKS.--Additional sediment total discharge determinations were made bi-weekly when needed.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS TEMPERATURE (°C)	TOTAL NITRATE (MG/L)	DIS- SOLVED NITRATE (MG/L)	AMMONIA NITROGEN (MG/L)	TOTAL ORGANIC NITROGEN (MG/L)	TOTAL NITROGEN (MG/L)	TOTAL PHOSPHORUS (MG/L)
AUG.								
22...	1221	136	1.1	.58	.00	6.1	7.4	1.3
SEP.								
24...	1515	720	.52	--	.03	1.5	2.0	1.4
30...	1615	340	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ORTHO- PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO- MOS) (000000)	pH	AIR TEMPERATURE (°C) (00020)	TEMPERATURE (°C) (00010)	TURBIDITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)
AUG.								
22...		.08	800	8.2	28.0	22.0	17000	7.5
SEP.								
24...		--	685	8.3	24.5	21.0	300	8.0
30...		--	806	--	--	16.0	--	--

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLIFORM FORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COL. ONIFS PER 100 ML) (31679)
AUG.			
22...	1221	16000	22000
SEP.			
24...	1515	5100	900

## 08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	885	1330	945	910	785	560	680	466	302	402	612	684
2	895	1020	775	918	795	660	680	499	376	424	754	683
3	905	935	785	940	795	1520	733	500	399	403	755	721
4	918	885	820	880	660	1290	733	467	395	395	782	691
5	935	883	895	872	706	870	721	472	409	379	761	932
6	920	865	905	775	723	898	770	480	400	388	726	1230
7	945	1170	890	825	810	720	735	468	396	387	753	633
8	946	1260	885	795	920	642	745	447	411	394	813	611
9	925	1250	860	807	1080	595	725	462	395	387	803	601
10	895	1290	865	772	1120	628	685	466	400	389	746	964
11	863	1390	960	765	1090	643	595	478	400	457	780	1010
12	1520	1390	955	767	1100	735	595	468	408	736	1240	731
13	1530	1070	980	788	1110	670	643	456	400	447	1020	711
14	1540	1080	990	785	1090	638	648	430	405	671	1190	691
15	1220	1080	995	800	1120	600	668	444	381	570	633	651
16	1240	1030	775	820	1050	700	675	437	380	500	670	620
17	941	1020	773	827	1040	625	760	444	393	492	784	554
18	915	1050	835	842	1030	640	773	423	373	476	720	556
19	915	1030	910	860	747	630	665	418	375	492	685	544
20	900	1030	912	857	680	630	707	408	418	520	669	558
21	895	763	1010	918	730	632	670	385	377	472	665	559
22	875	805	1030	985	643	662	687	358	400	412	708	548
23	1070	925	1030	977	628	657	675	364	381	623	813	578
24	1190	985	990	940	608	640	670	351	399	445	645	615
25	989	900	908	670	660	605	485	353	393	535	641	622
26	932	900	923	713	632	597	481	358	417	469	670	655
27	930	920	924	708	637	592	477	366	389	497	700	656
28	1150	935	910	747	635	540	447	372	402	693	702	722
29	1160	930	945	756	---	641	470	358	402	560	721	722
30	1070	940	902	785	---	628	470	378	400	597	722	758
31	1310	---	---	807	---	670	---	378	---	612	724	---
MONTH	1040	1030	909	826	845	704	649	424	395	491	762	694
YEAR	MAX	1540	MIN	351	MEAN	730						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	12.0	5.0	5.0	9.0	16.5	10.0	18.0	24.5	27.0	28.0	29.5
2	23.0	12.5	7.0	4.0	10.5	16.0	11.0	20.0	24.5	27.0	28.0	25.0
3	19.0	13.0	7.5	2.0	10.0	12.0	14.0	22.0	23.0	28.0	29.0	26.0
4	18.0	12.0	8.0	2.0	10.0	10.0	15.0	19.5	24.5	30.0	24.5	21.0
5	17.0	11.5	9.0	3.0	6.0	9.0	17.0	17.0	24.0	29.0	26.0	26.0
6	16.5	11.0	9.0	2.5	7.0	13.5	14.0	15.0	22.5	28.0	25.5	10.0
7	16.0	11.0	8.5	3.5	7.5	15.0	10.0	17.0	23.0	26.0	26.0	21.0
8	19.0	14.5	4.0	5.0	10.0	12.0	10.0	19.5	22.0	26.0	27.0	23.0
9	22.0	14.0	3.0	4.0	11.0	12.0	11.5	21.0	23.0	28.0	26.0	24.0
10	18.5	12.5	5.0	4.0	12.0	13.0	15.0	22.0	23.0	27.0	30.0	24.0
11	17.0	12.0	4.5	2.0	11.0	10.0	13.0	23.0	24.5	24.0	29.0	23.0
12	17.0	12.0	5.0	0.0	12.0	9.5	12.0	22.0	25.5	25.0	29.0	20.0
13	16.0	12.0	5.0	0.0	10.5	11.0	13.0	22.0	27.0	25.0	29.5	20.5
14	16.5	11.5	5.5	3.0	10.0	12.0	16.0	23.0	24.0	26.0	28.0	21.0
15	16.0	12.0	6.0	5.0	8.0	10.0	17.0	23.0	21.0	27.0	27.0	23.0
16	18.0	12.0	5.0	5.0	10.0	12.0	18.0	23.0	24.0	25.0	26.0	18.0
17	18.0	13.0	6.0	5.5	8.0	10.0	18.0	22.0	23.0	25.0	25.0	24.0
18	17.5	13.0	5.5	7.0	9.0	13.5	14.0	21.0	22.0	27.0	24.0	25.0
19	18.0	12.0	6.0	8.0	10.0	16.0	17.0	20.0	22.5	28.0	25.0	25.0
20	17.0	12.0	7.0	7.5	10.0	17.0	19.0	21.0	24.5	27.0	25.0	20.0
21	16.5	12.0	9.0	5.0	7.0	15.5	20.0	19.5	23.0	27.0	24.0	19.0
22	15.0	11.0	7.5	5.0	5.0	15.0	17.0	17.0	24.0	29.0	26.5	21.0
23	15.0	8.0	5.0	5.5	6.0	17.0	21.0	20.0	23.0	29.0	26.0	23.0
24	16.5	10.0	4.0	8.0	10.5	14.0	22.0	23.0	24.0	28.0	27.0	21.5
25	15.0	9.0	5.0	9.0	12.0	15.0	18.0	21.0	25.5	28.0	27.0	21.0
26	14.0	11.5	2.0	9.0	14.0	8.0	17.0	23.0	19.0	22.0	26.0	23.0
27	13.0	8.0	4.0	8.0	16.0	8.0	15.0	21.0	24.0	27.0	25.0	20.5
28	12.5	6.0	1.0	10.0	16.0	13.0	17.0	19.0	27.0	26.0	28.0	23.5
29	12.0	7.5	3.5	8.0	---	18.0	17.0	18.0	26.0	25.0	29.0	23.0
30	9.0	7.5	4.0	9.0	---	12.0	16.0	20.0	29.5	27.0	27.0	21.0
31	12.0	---	4.5	10.0	---	10.0	---	23.0	---	28.0	28.0	---
MONTH	16.5	11.0	5.5	5.5	10.0	13.0	15.5	20.5	24.0	27.0	27.0	22.0
YEAR	MAX	30.0	MIN	0.0	MEAN	16.5						

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

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

DAY	OCTOBER				NOVEMBER				DECEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21	430	24	30	8070	1600	2.3	250	1.6			
2	19	612	34	3.5	2400	23	3.0	1850	15			
3	26	475	33	1.2	5500	18	4.0	1100	12			
4	25	940	63	2.3	3160	24	3.0	2320	19			
5	40	1450	224	3.9	2580	25	2.5	1370	9.2			
6	16	1480	64	3.0	1200	9.7	2.5	520	3.5			
7	32	2680	306	2.0	500	2.7	2.3	360	2.2			
8	15	3240	125	2.0	367	2.0	2.0	361	1.9			
9	9.4	1260	30	2.0	420	2.3	3.7	377	3.8			
10	8.9	1280	29	2.0	357	1.9	3.5	356	3.4			
11	7.8	8350	285	1.5	191	.77	2.7	199	1.5			
12	95	58600	18400	1.5	141	.57	2.2	190	1.1			
13	5.6	29300	464	1.5	142	.58	1.2	158	.51			
14	78	44500	9340	1.6	132	.57	2.0	137	.74			
15	7.4	14000	280	1.6	145	.63	2.6	131	.92			
16	2.6	8300	58	1.7	151	.69	3.9	107	1.1			
17	3.1	4310	29	1.7	136	.62	5.8	346	5.8			
18	4.5	3060	37	1.8	160	.78	4.0	416	4.5			
19	1.7	2400	11	1.8	184	.89	3.5	289	2.7			
20	9.4	1740	39	1.8	147	.71	3.0	548	4.4			
21	10	1240	35	5.0	640	8.6	2.6	163	1.1			
22	11	1220	34	2.5	750	5.1	2.4	110	.71			
23	16	4730	268	2.5	490	3.3	2.1	118	.67			
24	61	14600	4420	2.5	423	2.9	1.9	93	.48			
25	7.6	10500	227	2.3	433	2.7	1.9	105	.54			
26	7.6	17000	349	2.3	495	3.1	1.8	123	.60			
27	44	19000	2720	2.3	388	2.4	1.8	87	.42			
28	8.9	16800	454	2.3	465	2.9	1.9	102	.52			
29	17	17600	1260	2.5	1030	7.0	2.0	71	.38			
30	15	10100	299	2.5	400	2.7	1.9	88	.45			
31	203	16000	16300	---	---	---	1.8	101	.49			
MONTH	828.5	---	56241	95.1	---	1756.11	81.8	---	101.23			
DAY	JANUARY				FEBRUARY				MARCH			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.8	97	.47	2.6	257	1.8	8.0	400	8.6			
2	1.7	90	.41	2.3	815	5.1	19	11800	1360			
3	2.1	72	.41	1.9	962	4.9	37	40000	4320			
4	3.4	162	1.5	1.4	772	2.9	30	36500	3630			
5	4.3	157	1.8	.82	583	1.3	9.6	14100	365			
6	9.4	438	17	7.2	600	12	33	19900	2160			
7	8.4	397	9.0	33	2830	361	6.0	3800	62			
8	6.6	382	6.8	1.9	670	3.4	19	3840	197			
9	5.6	422	5.4	1.6	117	.51	23	3920	243			
10	5.1	549	7.6	1.2	128	.41	60	4110	755			
11	6.0	455	7.4	1.1	103	.31	31	3660	319			
12	11	442	13	1.3	105	.37	34	5070	468			
13	5.5	452	6.7	1.4	103	.39	11	3560	106			
14	4.2	377	4.3	1.7	199	.91	26	2940	224			
15	2.2	1240	7.4	2.1	186	1.1	33	3150	393			
16	1.1	1030	3.1	2.3	121	.75	26	2700	333			
17	1.6	422	1.8	2.6	266	1.9	14	2490	130			
18	2.3	282	1.8	3.1	217	1.8	13	1280	40			
19	1.8	301	1.5	8.4	863	25	15	1060	43			
20	1.7	140	.78	7.9	2090	45	18	1180	57			
21	1.9	195	1.0	7.4	2040	41	25	822	56			
22	1.7	88	.40	6.3	1320	22	17	634	29			
23	1.8	37	.18	6.0	680	11	14	522	20			
24	2.0	63	.34	5.6	955	14	18	575	27			
25	2.3	281	1.7	5.5	580	8.6	20	705	38			
26	2.3	373	2.3	8.0	596	13	25	891	62			
27	2.6	338	2.4	9.4	712	18	61	1080	178			
28	2.0	588	3.2	8.7	600	14	16	1140	49			
29	3.5	362	3.4	---	---	---	7.6	617	13			
30	4.1	264	2.9	---	---	---	13	500	27			
31	3.2	252	2.2	---	---	---	14	591	22			
MONTH	113.2	---	114.14	142.72	---	612.45	696.2	---	15739.6			

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18	655	32	3470	4150	38900	3860	2790	29100
2	11	910	15	2230	2630	15800	3990	2530	27300
3	10	325	8.8	1940	2860	15000	3640	2030	20000
4	11	377	11	2410	3250	21100	3150	2060	17500
5	18	370	18	2340	2450	15500	2900	1430	11500
6	14	305	12	2480	2260	15100	2430	1420	9320
7	14	283	11	2310	2050	12800	2630	1650	11700
8	8.4	302	6.9	2460	2460	16300	2860	1630	12600
9	16	368	16	2390	2980	19200	3000	2000	16200
10	26	607	43	1880	2610	13200	3110	1770	14900
11	27	746	60	2110	2690	15300	2350	1350	8570
12	86	1920	453	2480	2510	16800	1460	2140	8440
13	33	1580	141	2460	2640	17500	1510	1910	7790
14	39	1730	237	2560	2920	20200	1760	1340	6370
15	15	800	32	2820	3590	27300	1970	1120	5960
16	28	697	63	3330	3920	35200	2460	1130	7410
17	26	973	70	3590	3810	36900	2710	800	5850
18	17	1410	61	4100	5050	55900	2430	1030	6760
19	38	1100	119	4090	4340	47900	2650	1260	9020
20	15	837	34	3700	4160	41600	3040	1680	13800
21	18	1030	54	3250	4040	35500	3070	1570	13000
22	41	1520	191	3560	4190	40300	1960	860	4550
23	72	1250	296	3530	4010	38200	2130	805	4630
24	584	3380	11500	4020	5450	59200	2340	1640	10600
25	2420	5710	37300	5650	5370	81900	2090	830	4680
26	2050	3820	21100	5350	4100	59200	2300	1090	6770
27	2610	4240	29900	4500	2290	27800	1710	860	3970
28	3500	4680	44200	3490	2160	20400	2010	1140	6190
29	3430	5250	48600	3260	2120	18700	1990	803	4310
30	3700	4710	47100	3610	2820	27500	1880	645	3270
31	---	---	---	3600	3160	39700	---	---	---
MONTH	18895.4	---	241684.7	98970	---	936900	75390	---	312160
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1670	570	2570	45	3510	426	118	217	69
2	1310	688	2430	18	2200	107	103	385	151
3	1050	525	1490	13	2490	97	76	236	48
4	1160	775	2430	12	2010	65	235	8110	8590
5	1610	740	3220	7.1	567	11	2250	62500	425000
6	1740	824	3870	5.2	408	5.7	3270	65100	575000
7	2140	924	5340	5.2	235	3.3	2920	15000	118000
8	1430	828	3200	5.2	285	4.0	2170	18900	115000
9	1310	898	3180	5.2	519	7.3	2340	27500	308000
10	1280	928	3210	5.5	423	6.3	2740	61000	451000
11	2050	1790	9910	5.5	2300	34	2910	54000	424000
12	2900	5590	43800	5.5	14000	208	5080	59600	1120000
13	2680	15700	114000	55	41400	9730	3120	19500	167000
14	3590	28800	299000	204	39400	25100	2320	23300	146000
15	2360	9600	61200	652	14200	25000	1840	17300	85400
16	2550	7060	48600	786	7690	16300	1650	9210	41000
17	2450	8100	53600	705	13500	25700	1650	7200	32100
18	2360	5050	32200	454	16600	22800	1390	4500	17300
19	2150	3010	17500	187	2600	1310	753	4170	8480
20	887	4740	11400	135	724	264	603	4170	6790
21	843	1620	3690	880	30300	40000	736	4430	8800
22	1270	4800	16500	1640	29200	148000	816	3990	8790
23	517	11800	17400	1130	35200	16000	680	2900	5320
24	870	6350	14900	935	11700	29500	735	2830	5620
25	444	9660	12600	608	2600	4270	766	2440	5050
26	122	1490	491	384	1040	1810	745	2400	4830
27	205	3830	4170	395	1610	1720	586	2280	3610
28	136	15400	5650	266	651	468	430	1290	1500
29	68	2750	585	197	355	189	347	1200	1120
30	20	3430	185	141	213	81	294	2610	2070
31	39	3550	374	122	191	63	---	---	---
MONTH	43211	---	798615	9988.4	---	570269.6	43673	---	4096138
WTR YR 1975	TOTAL W/TER DISCHARGE (CFS-DAYS)				292,085.32				
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)				7,030,336.88				



08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)
OCT. 13...	1800	16.0	34	43400	3980	63	74	91
NOV. 01...	1515	12.0	121	22700	7420	60	71	90
DEC. 07...	1615	8.5	2.3	350	2.2	72	77	87
FEB. 07...	1650	7.5	1.7	1890	8.7	23	27	31
25...	1200	6.5	5.0	424	5.7	61	81	97
MAR. 03...	1655	13.0	24	53400	3460	58	67	93
APR. 25...	1200	10.5	2400	4320	28000	33	40	58
MAY 06...	1245	10.0	2250	1610	9780	29	36	49
12...	1500	22.0	2360	2470	15700	24	27	40
29...	1100	14.0	3160	1560	13300	30	36	47
JUNE 17...	1215	20.0	2740	292	2160	52	61	74
JULY 01...	1045	21.0	1640	555	2460	--	--	--
14...	0900	21.0	4100	37500	415000	53	62	81
28...	0805	22.0	160	29100	12600	65	77	96
AUG. 12...	1710	29.0	4.9	84600	1120	--	--	--
18...	1020	20.5	476	20200	26000	65	70	93
SEP. 05...	1650	26.0	1880	54900	279000	45	56	74
19...	1645	25.0	645	3410	5940	27	31	40
24...	1515	21.0	720	3180	6180	15	17	23
30...	1015	16.0	340	1650	1510	11	13	16
DATE		SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)
OCT. 13...	100	--	--	--	--	--	--	--
NOV. 01...	99	100	--	--	--	--	--	--
DEC. 07...	--	--	--	--	97	99	100	--
FEB. 07...	43	88	100	--	--	--	--	--
25...	--	--	--	--	98	99	99	100
MAR. 03...	97	99	100	--	--	--	--	--
APR. 25...	93	100	--	--	--	--	--	--
MAY 06...	79	94	100	--	--	--	--	--
12...	69	90	98	100	--	--	--	--
29...	74	95	100	--	--	--	--	--
JUNE 17...	--	--	--	--	94	98	100	--
JULY 01...	50	82	100	--	--	--	--	--
14...	96	99	100	--	--	--	--	--
28...	100	--	--	--	--	--	--	--
AUG. 12...	--	--	--	--	100	--	--	--
18...	100	--	--	--	--	--	--	--
SEP. 05...	86	93	100	--	--	--	--	--
19...	75	94	100	--	--	--	--	--
24...	46	81	99	100	--	--	--	--
30...	34	77	100	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)
FEB. 25...	1200	5.0	424	5.7	26	49	91	100	--
APR. 25...	1200	2400	4320	28000	5	40	93	100	--
MAY 06...	1245	2250	1610	9780	25	78	100	--	--
29...	1100	3160	1560	13300	13	63	100	--	--
JUNE 17...	1215	2740	292	2160	6	47	95	100	--
18...	1100	2800	--	--	2	13	89	100	--
JULY 01...	1045	1640	555	2460	2	30	92	99	100
AUG. 18...	1020	476	20200	26000	1	4	76	100	--
SEP. 30...	1015	340	1650	1510	2	18	90	100	--

## TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
FEB. 25...	1200	6.5	5.0	424	5.7	8.0	10	.44	1.1
APR. 25...	1200	10.5	2400	4320	28000	30800	205	3.0	3.9
MAY 06...	1245	10.0	2250	1610	9780	11700	200	3.0	3.8
29...	1100	14.0	3160	1560	13300	21700	200	2.7	5.8
JUNE 17...	1215	20.0	2740	292	2160	3220	176	3.4	4.6
JULY 01...	1045	21.0	1640	555	2460	4320	90	3.8	4.8
AUG. 18...	1020	20.5	476	20200	26000	96500	140	1.8	1.9
SEP. 30...	1015	16.0	340	1650	1510	2640	104	.95	3.4

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.  
(National stream-quality accounting network, irrigation,  
surveillance, and radiochemical network station)

LOCATION.--Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaris Grant No. 34, at gaging station 0.4 mi (0.6 km) northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mi (1.6 km) southwest of former site of San Marcial, 3.5 mi (5.6 km) downstream from railroad bridge near Tiffany siding, and 51 mi (82 km) downstream from heading at San Acacia.

PERIOD OF RECORD.--Chemical analyses: March 1954 to current year.

Specific conductance: March 1954 to current year.

Water temperatures: March 1954 to current year.

Sediment records: March 1954 to current year.

#### EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,250 micromhos Aug. 9; minimum daily, 398 micromhos June 7.

Water temperatures: Maximum, 28.0°C Aug. 9; minimum, 9.0°C Mar. 28, Apr. 28.

Sediment concentrations: Maximum daily, 18,700 mg/l July 28; minimum daily, No flow on many days during October to March.

Sediment discharge: Maximum daily, 44,400 tons (40,300 tonnes) July 28; minimum daily, 0 tons (0 tonnes) on many days during October to March.

Period of record:

Specific conductance: Maximum daily, 2,860 micromhos Oct. 25, 1956; minimum daily, 353 micromhos Jan. 8, 1963.

Water temperatures: Maximum, 35.0°C on several days during 1955, 1963, and 1971; minimum, freezing point on many days during December and January of most years.

Sediment concentrations: Maximum daily, 144,000 mg/l Sept. 19, 1971; minimum daily, no flow on many days during 1956, 1958, 1963, 1964, 1968, 1969, 1971, 1972, 1974, and 1975.

Sediment discharge: Maximum daily, 638,000 tons (579,000 tonnes) Aug. 28 1972; minimum daily, 0 tons (0 tonnes) on many days during 1956, 1958, 1963, 1964, 1968, 1969, 1971, 1972, 1974, and 1975.

REMARKS.--Additional sediment total discharge determinations were made bi-weekly when needed. No flow Oct. 1 to Nov. 10, Nov. 13-30, Dec. 1 to Mar. 16.

#### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DICARBONATE
		CHARGE (CFS)	SILICA (MG/L)	IRON (MG/L)	GASEOUS (MG/L)	CALCIUM (MG/L)	MAGNESIUM (MG/L)	SODIUM (MG/L)	POTASSIUM (MG/L)	(MG/L)
MAR.										
26...	1430	584	25	10	0	66	12	76	5.1	205
APR.										
21...	1030	840	--	--	--	--	--	--	--	--
22...	1414	844	22	10	--	63	12	71	5.6	175
28...	1300	1480	20	10	--	52	9.1	44	4.6	160
MAY										
05...	1230	812	21	20	--	57	10	56	4.7	165
27...	1331	600	21	40	--	58	11	56	5.8	170
27...	1332	600	--	--	--	--	--	--	--	--
JUNE										
16...	1500	788	21	10	0	54	10	55	4.5	154
JULY										
30...	1630	620	22	0	--	62	13	74	5.4	177
AUG.										
12...	1200	67	--	--	--	--	--	--	--	--
18...	0920	114	--	--	--	--	--	--	--	--
19...	1600	131	24	10	0	82	16	100	7.4	217
25...	0930	184	--	--	--	--	--	--	--	--
SEP.										
02...	0920	115	--	--	--	--	--	--	--	--
08...	1135	171	--	--	--	--	--	--	--	--
15...	1135	229	--	--	--	--	--	--	--	--
22...	1215	207	--	--	--	--	--	--	--	--
22...	1500	216	23	10	--	80	14	80	6.0	209
29...	1100	189	--	--	--	--	--	--	--	--

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.---Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
MAR.										
26...	0	130	52	.7	.62	.01	.65	.63	.03	1.2
APR.										
21...	--	--	--	--	--	--	--	--	--	--
22...	0	150	45	.5	.55	.01	.64	.56	.00	1.4
28...	--	98	26	.4	--	--	--	.69	--	--
MAY										
05...	--	120	35	.4	--	--	--	.41	--	--
27...	0	120	35	.4	.13	.00	.14	.13	.01	1.2
27...	--	--	--	--	--	--	--	--	--	--
JUNE										
16...	0	110	34	.4	.15	.01	.16	.16	.01	1.4
JULY										
30...	0	160	37	.6	--	--	.41	.28	.00	13
AUG.										
12...	--	--	--	--	--	--	.04	--	.00	.30
18...	--	--	--	--	--	--	.11	--	.00	1.1
19...	1	210	66	.6	--	--	.12	.11	.00	1.0
25...	--	--	--	--	--	--	.19	--	.03	2.9
SEP.										
02...	--	--	--	--	--	--	.02	--	.00	.43
08...	--	--	--	--	--	--	.07	--	.00	.57
15...	--	--	--	--	--	--	.10	--	.00	.47
22...	--	--	--	--	--	--	.05	--	.00	.35
22...	0	180	57	.4	--	--	.05	.05	.00	.33
29...	--	--	--	--	--	--	.04	--	.00	.38
DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOP- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSILI- TANTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
MAR.										
26...	1.9	1.1	.30	487	472	210	46	2.3	699	8.0
APR.										
21...	--	--	--	--	--	--	--	--	746	--
22...	2.0	1.0	.26	472	459	210	63	2.2	690	8.1
28...	--	.73	.19	356	337	170	36	1.5	551	--
MAY										
05...	--	.68	.16	394	386	180	48	1.7	608	--
27...	1.3	.60	.12	406	392	190	51	1.8	606	7.9
27...	--	--	--	--	--	--	--	--	613	--
JUNE										
10...	1.6	.40	.13	390	366	180	50	1.8	606	8.0
JULY										
30...	13	.16	.16	471	463	210	63	2.2	716	8.0
AUG.										
12...	.34	.13	--	--	--	--	--	--	857	--
18...	1.2	.31	--	--	--	--	--	--	836	--
19...	1.1	.57	.09	605	615	270	91	2.6	879	8.4
25...	3.1	1.5	--	--	--	--	--	--	812	--
SEP.										
02...	.45	.23	--	--	--	--	--	--	854	--
08...	.64	.22	--	--	--	--	--	--	841	--
15...	.57	.18	--	--	--	--	--	--	849	--
22...	.40	.19	--	--	--	--	--	--	821	--
22...	.38	.19	.07	552	544	260	86	2.2	869	8.3
29...	.42	.15	--	--	--	--	--	--	856	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHROMIUM (CR) (UG/L) (01034)	DIS- SOLVED CHROMIUM (CR) (UG/L) (01030)			
DATE	TIME										
MAR.											
26...	1430	7	6	160	20	0	2	0			
JUNE											
16...	1500	5	4	110	<10	0	20	0			
AUG.											
19...	1600	14	6	150	10	0	20	0			
SEP.											
22...	1500	--	--	150	--	--	--	--			
		TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANGANESE (MN) (UG/L) (01055)	
DATE											
MAR.											
26...	<50	1	40	2	25000	30	<100	0	740		
JUNE											
16...	<50	0	20	2	17000	10	<100	0	--		
AUG.											
19...	50	0	30	1	17000	10	<100	0	560		
SEP.											
22...	--	--	--	--	--	10	--	--	--	--	
		TOTAL MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01060)	DIS- SOLVED MERCURY (HG) (UG/L) (01060)	TOTAL MOLYB- DENUM (MO) (UG/L) (01062)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01062)	TOTAL SELF- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DATE											
MAR.											
26...	0	.0	.0	--	1	0	80	20			
JUNE											
16...	0	.0	.0	--	0	0	90	0			
AUG.											
19...	0	.0	.0	--	0	0	80	10			
SEP.											
22...	--	--	--	--	0	--	--	--	--	--	--

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILTR- ABLE RESIDUE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (00530)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (00040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS FE-59 AS SR90 /Y90 (PC/L) (00050)	SUS- PENDED GROSS FE-59 AS SR90 /Y90 (PC/L) (00060)	DIS- SOLVED GROSS RA-226 (KAOON METHOD) (UG/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)

MAX.	26...	1430	1200	48.1	73	6.3	43	5.1	36	.07	4.7
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## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00172)	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M (00573)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (32228)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (32226)	FECAL COLI- FORM (COL. ONIES PER 100 ML) (31616)	STREP- TOCOCCI (COL. ONIES PER 100 ML) (31679)

MAX.	26...	1430	2600	--	--	--	--	1400	880
APR.	22...	1414	710	1100	1200	6.4	1.0	1800	1200
MAY	27...	1321	380	--	--	--	--	200	380
JUNE	16...	1500	5800	1.5	2.1	1.4	.2	630	700
JULY	30...	1630	27	--	--	--	--	9700	7400
AUG.	19...	1600	3100	.8	1.1	1.9	.5	5100	1100
SEP.	22...	1500	720	--	--	--	--	730	330

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Mar 26	1430	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		3	
		Fragilariaceae			
		Synedra		23	
		Naviculaceae			
		Caloneis		3	
		Navicula		23	
		Gomphonemataceae			
		Gomphonema		17	
		Cymbellaceae			
		Cymbella		3	
		Nitzschaceae			
Apr 22	1414	Nitzschia		14	Sediment Sampler
		Surirellaceae			
		Cymatopleura		3	
		Surirella		11	
		TOTAL	2,600		
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		Synedra		25	
		Nitzschaceae			
		Nitzschia		50	
		Surirellaceae			
		Surirella		25	
		TOTAL	710		

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 27	1331	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		8	
		Fragilariaceae			
		Synedra		17	
		Achnanthaceae			
		Cocconeis		8	
		Naviculaceae			
		Navicula		8	
		Gomphonemataceae			
		Gomphonema		8	
		Nitzschiaceae			
		Nitzschia		42	
		Surirellaceae			
		Surirella		8	
		TOTAL	800		
Jun 16	1500	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas		8	
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Caloneis		8	
		Nitzschiaceae			
		Hantzschia		8	
		Nitzschia		58	
		Surirellaceae			
		Surirella		8	
		TOTAL	5,800		
Jul 30	1630	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	27	100	
		TOTAL	27		
Aug 19	1600	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	94	3	
		Scenedesmaceae			
		Scenedesmus	180	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		<1	
		Pennales			
		Fragilariaceae			
		Synedra	280	9	
		Naviculaceae			
		Navicula	180	6	
		Finnularia	94	3	
		Nitzschiaceae			
		Nitzschia	2,000	63	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	370	11	
		TOTAL	3,300		

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sep 22	1500	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira	51	7	
		Pennales			
		Fragilariaceae			
		Synedra	51	7	
		Gomphonemataceae			
		Gomphonema		<1	
		Naviculaceae			
		Caloneis		<1	
		Navicula	300	43	
		Nitzschaceae			
		Nitzschia	300	43	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		<1	
		TOTAL	720		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Apr 22	27	1200	1100	6.4	1.0	11000	Polyethylene strip
Jun 16	20	2.1	1.5	1.4	0.2	440	"
Aug 19	20	1.1	0.8	1.9	0.5	160	"

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	715	555	618	570	704	889
2						---	703	590	625	562	694	885
3						---	745	592	585	607	724	859
4						---	807	---	618	544	768	868
5						---	---	590	595	559	777	869
6						---	---	638	622	549	1120	854
7						---	865	641	398	548	1230	859
8						---	870	636	666	525	1230	863
9						---	845	631	666	433	1250	715
10						---	845	631	610	430	800	713
11						---	790	640	624	431	863	650
12						---	595	641	635	479	900	660
13						---	598	686	641	653	956	664
14						---	650	686	642	632	1000	718
15						---	653	673	664	637	993	710
16						---	700	791	652	560	985	725
17						1110	812	648	613	523	941	770
18						995	805	640	632	476	929	742
19						987	810	622	654	481	874	741
20						955	718	599	632	512	884	696
21						738	752	609	654	518	874	696
22						753	728	644	651	654	833	712
23						775	737	608	604	590	880	726
24						778	752	615	602	595	838	728
25						752	710	667	602	598	871	725
26						742	535	596	627	798	852	735
27						670	510	626	583	584	871	727
28						687	508	611	630	995	875	732
29						665	612	625	598	696	916	728
30						696	573	626	577	678	879	734
31						710	---	605	---	675	883	---
MONTH						---	712	632	617	584	909	756
YEAR	MAX	1250	MIN	398	MEAN	710						



08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	12.0	17.0	20.0	25.0	25.0	22.0
2						---	13.0	18.0	18.0	26.5	26.5	20.5
3						---	15.0	15.0	22.0	25.0	25.0	24.0
4						---	15.0	14.0	20.5	25.0	25.0	23.0
5						---	---	16.0	22.5	25.0	26.0	19.0
6						---	---	16.0	22.0	27.0	25.5	20.0
7						---	---	13.0	14.0	21.5	25.0	22.5
8						---	---	12.0	19.0	17.0	25.5	24.0
9						---	---	14.0	18.0	20.0	24.0	24.0
10						---	---	10.0	20.0	21.0	25.0	23.0
11						---	---	15.0	20.0	21.0	25.5	21.5
12						---	---	15.0	15.5	17.5	23.0	18.0
13						---	---	10.0	14.0	24.0	22.0	17.0
14						---	---	15.0	15.0	23.0	25.0	21.5
15						---	---	15.5	16.0	24.0	25.0	24.0
16						---	---	14.0	16.0	19.0	25.5	23.5
17						---	---	15.0	20.0	22.5	22.0	24.0
18						---	---	20.5	13.0	20.0	21.0	23.5
19						---	---	20.5	10.0	16.0	23.5	26.0
20						---	---	20.0	17.0	15.0	24.5	25.0
21						---	---	15.0	11.0	14.0	18.5	25.5
22						---	---	15.0	16.0	15.0	23.0	26.5
23						---	---	10.0	13.0	19.0	23.5	26.5
24						---	---	13.0	18.0	19.5	24.0	25.0
25						---	---	15.0	12.0	15.5	23.0	25.0
26						---	---	11.0	15.0	22.5	25.0	22.0
27						---	---	11.0	13.0	19.5	23.0	24.0
28						---	---	9.0	14.5	16.0	25.0	25.0
29						---	---	10.0	16.0	15.0	25.0	24.0
30						---	---	12.0	11.0	16.0	25.0	25.5
31						---	---	14.0	---	17.0	---	25.5
MONTH						---	---	14.5	17.0	22.0	25.0	24.0
YFAN	MAX	24.0	MIN	9.0	MFAN	20.0						

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0			
2				0	0	0			
3				0	0	0			
4				0	0	0			
5				0	0	0			
6				0	0	0			
7				0	0	0			
8				0	0	0			
9				0	0	0			
10				0	0	0			
11				15	3060	188			
12				45	2150	261			
13				0	0	0			
14				0	0	0			
15				0	0	0			
16				0	0	0			
17				0	0	0			
18				0	0	0			
19				0	0	0			
20				0	0	0			
21				0	0	0			
22				0	0	0			
23				0	0	0			
24				0	0	0			
25				0	0	0			
26				0	0	0			
27				0	0	0			
28				0	0	0			
29				0	0	0			
30				0	0	0			
31				---	---	---			
MONTH	0	---	0	60.00	---	449.00	0	---	0

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	0	0
2							0	0	0
3							0	0	0
4							0	0	0
5							0	0	0
6							0	0	0
7							0	0	0
8							0	0	0
9							0	0	0
10							0	0	0
11							0	0	0
12							0	0	0
13							0	0	0
14							0	0	0
15							0	0	0
16							0	0	0
17							16	187	8.1
18							25	118	8.0
19							19	103	5.3
20							18	84	4.1
21							234	1460	1990
22							504	1670	2270
23							492	1350	1790
24							510	1540	2120
25							586	1990	3150
26							589	2070	3290
27							728	2770	5440
28							864	2330	5440
29							808	1900	4150
30							716	1330	2570
31							716	1380	2670
MONTH	0	---	0	0	---	0	6825.00	---	34905.50
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	684	1480	2730	808	2350	5130	764	1450	2990
2	621	1570	2630	804	2110	4580	792	1480	3160
3	480	1120	1450	772	2840	5920	764	960	1980
4	399	822	886	792	2160	4620	744	1230	2470
5	354	775	741	768	1200	2490	788	1110	2360
6	321	748	648	688	1230	2280	792	2400	5130
7	351	790	749	692	1360	2540	732	2140	4230
8	370	745	744	677	1050	1920	732	1520	3060
9	408	900	991	712	1640	3150	728	1120	2200
10	468	940	1190	692	1690	3160	740	1000	2000
11	600	1510	2450	700	1630	3080	744	1110	2230
12	1070	6930	23200	659	1200	2140	720	910	1770
13	1390	5890	22100	649	1130	1980	712	1160	2230
14	1050	9650	27400	663	1290	2310	736	1580	3140
15	1110	3660	11000	663	1420	2540	756	1140	2330
16	792	3590	7680	670	1380	2500	760	865	1770
17	796	4060	8730	680	1820	3340	740	640	1280
18	784	4230	8950	700	2010	3800	712	470	904
19	836	5920	13400	724	2300	4500	724	517	1010
20	984	5860	15600	744	2540	5100	704	438	833
21	932	4200	10600	677	2120	3880	724	486	950
22	864	4160	9700	666	1910	3430	752	531	1080
23	684	4180	7720	649	1920	3360	772	575	1200
24	684	4000	7390	688	1770	3290	700	418	790
25	1430	5540	22500	540	1470	2140	696	419	787
26	1370	4310	15900	617	1620	2700	700	490	926
27	1370	1960	7250	575	1670	2590	673	439	798
28	1340	4030	14600	673	1760	3200	692	477	891
29	732	2790	5510	700	1860	3520	740	534	1070
30	768	2540	5270	732	1690	3340	760	694	1420
31	---	---	---	752	1360	2760	---	---	---
MONTH	24042	---	259709	21526	---	101290	22093	---	56929

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	844	772	1760	337	2770	2520	153	405	167
2	884	750	1790	318	1940	1670	120	198	64
3	888	500	1200	305	1460	1200	125	255	86
4	1050	647	1830	295	2220	1770	140	292	110
5	1090	618	1820	267	2240	1610	178	600	268
6	1070	1120	3240	239	227	146	158	750	320
7	1100	675	2000	211	126	72	162	540	236
8	1280	518	1790	183	148	73	171	530	245
9	1460	1120	4420	155	227	95	162	330	144
10	1430	1430	5520	127	63	22	175	412	195
11	1460	1920	7570	97	72	19	203	1770	970
12	1270	2410	8260	77	53	11	240	940	609
13	1240	7380	24700	71	72	14	265	2150	1540
14	1250	9600	32400	120	5450	2230	242	980	640
15	1160	10000	31300	140	10400	3930	223	340	205
16	1220	6310	20800	122	13800	4550	200	475	256
17	1290	2950	10300	108	915	267	191	255	132
18	1250	2490	8400	119	635	204	185	155	77
19	1280	2550	8810	121	725	237	176	276	131
20	1240	3040	10200	128	665	230	220	310	184
21	1250	2600	8770	144	570	222	218	341	201
22	1170	6700	21200	182	1120	550	211	305	174
23	1170	7680	24300	187	3240	1640	216	215	125
24	1130	8290	25300	187	3080	1560	214	165	95
25	1180	11100	35400	184	3070	1530	212	152	87
26	1040	7980	22400	189	1510	771	212	140	80
27	824	2440	5430	187	1150	581	209	287	162
28	816	18700	44400	160	1050	454	200	345	186
29	888	15200	36400	159	755	324	189	305	156
30	696	12800	24100	148	690	276	185	178	89
31	432	6760	7880	152	648	266	---	---	---
MONTH	34352	---	443690	5419	---	29044	5755	---	7954
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)			120,072.00					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)			933,970.50					

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (MG/L) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)
MAR.										
24...	1130	19.0	530	1990	2850	--	--	--	67	94
26...	1430	11.0	589	3000	4770	--	--	--	--	--
31...	1130	6.5	740	1340	2680	25	30	39	73	95
APR.										
21...	1000	11.0	840	2210	5010	42	50	61	87	99
22...	1414	15.0	844	2710	6180	--	--	--	--	--
28...	1300	9.0	1480	4330	17300	25	30	42	70	98
MAY										
05...	1230	11.0	817	1370	3020	35	42	55	89	100
27...	1331	19.0	600	2310	3740	17	20	28	50	78
JUNE										
16...	1400	22.0	788	873	1860	--	--	--	70	93
30...	1215	25.0	766	1120	2320	27	31	44	87	99
JULY										
21...	1200	20.0	1220	2620	8630	--	--	--	94	99
30...	1630	24.0	624	17200	29000	--	--	--	--	--
AUG.										
19...	1600	26.0	131	805	285	--	--	--	--	--
SEP.										
06...	1535	20.0	158	713	304	57	67	80	--	--
22...	1500	19.0	216	390	227	15	19	23	47	69

## 08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)	SUS. SED. FALL DIAM. % FINER THAN (70336)
MAR.									
24...	100	--	--	--	--	--	--	--	--
26...	--	--	--	55	--	--	--	--	--
31...	100	--	--	--	--	--	--	--	--
APR.									
21...	100	--	--	--	--	--	--	--	--
22...	--	--	--	57	--	--	--	--	--
28...	100	--	--	--	--	--	--	--	--
MAY									
05...	--	--	--	--	--	--	--	--	--
27...	98	99	100	--	--	--	--	--	--
JUNE									
16...	100	--	--	--	--	--	--	--	--
30...	100	--	--	--	--	--	--	--	--
JULY									
21...	100	--	--	--	--	--	--	--	--
30...	--	--	--	95	--	--	--	--	--
AUG.									
19...	--	--	--	91	--	--	--	--	--
SEP.									
06...	--	--	--	95	95	97	99	99	100
22...	100	--	--	--	--	--	--	--	--

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN (80158)	BED MAT. FALL DIAM. % FINER THAN (80159)	BED MAT. FALL DIAM. % FINER THAN (80160)	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)
MAR.									
24...	1130	530	1990	2850	1	8	70	100	--
31...	1130	740	1340	2680	2	12	54	100	--
APR.									
21...	1000	840	2210	5010	0	0	21	98	100
28...	1300	1480	4330	17300	46	85	96	98	100
MAY									
27...	1331	600	2310	3740	3	28	94	100	--
JUNE									
16...	1400	788	873	1860	1	14	78	100	--
30...	1215	766	1120	2320	1	12	67	100	--
JULY									
21...	1200	1220	2620	8630	1	2	27	99	100
SEP.									
22...	1500	216	390	227	0	4	77	100	--

## TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
MAR.									
24...	1130	19.0	530	1990	2850	3660	61	2.6	3.4
31...	1130	6.5	740	1340	2680	3500	64	2.5	4.7
APR.									
21...	1000	11.0	840	2210	5010	6190	66	2.5	5.1
28...	1300	9.0	1480	4330	17300	20400	69	3.5	6.2
MAY									
27...	1331	19.0	600	2310	3740	5380	70	2.2	3.9
JUNE									
16...	1400	22.0	788	873	1860	2730	66	2.5	4.8
30...	1215	25.0	766	1120	2320	3090	63	2.6	4.7
JULY									
21...	1200	20.0	1220	2620	8630	9830	64	3.5	5.5
SEP.									
22...	1500	19.0	216	390	227	354	68	1.8	1.8

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.  
(National stream-quality accounting network, irrigation,  
surveillance, and radiochemical network station)

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, in Pedro Armendaris Grant No. 33 at gaging station on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 mi (1.8 km) downstream from former site of San Marcial, and 18.5 mi (29.8 km) southwest of San Antonio, and at mile 1,425.2 (2,293.1 km).

DRAINAGE AREA.--27,700 mi<sup>2</sup> (71,740 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: May 1905 to April 1907, July 1946 to current year.

Specific conductance: May 1905 to April 1907, July 1946 to current year.

Water temperatures: January 1949 to current year.

Sediment records: July 1946 to current year.

#### EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,570 micromhos Sept. 6; minimum daily, 338 micromhos July 12.

Water temperatures: Maximum, 29.5°C July 30; minimum, freezing point Dec. 26, 28.

Sediment concentrations: Maximum daily, 65,800 mg/l Sept. 6; minimum daily, no flow on many days during March, April, August and September.

Sediment discharge: Maximum daily, 630,000 tons (572,000 tonnes) Sept. 12; minimum daily, 0 tons (0 tonnes) on many days during March, April, August and September.

Period of record:

Specific conductance: Maximum daily, 2,730 micromhos Apr. 8, 1953; minimum daily, 293 micromhos June 20, 1967.

Water temperatures: Maximum, 36.0°C Aug. 11, 1951; minimum, freezing point on many days of most years.

Sediment concentrations: Maximum daily, 126,000 mg/l Aug. 8, 1959; minimum daily, no flow on many days each year.

Sediment discharge: Maximum daily, 966,000 tons (876,000 tonnes) Oct. 22, 1957; minimum daily, 0 tons (0 tonnes) many days each 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. No flow Mar. 22-31, Apr. 1-24, Aug. 1-14, 30, 31, Sept. 1-4. Additional sediment total load determinations were made bi-weekly when needed.

#### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	DIS- SOLVED SILICA (SI02) (MG/L) (000955)	DIS- SOLVED IRON (FE) (UG/L) (010446)	DIS- SOLVED MANG- NESEF (MNI) (UG/L) (010556)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (000915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (000925)	DIS- SOLVED SODIUM (NA) (MG/L) (000930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (000935)	BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
16...	1330	570	15	0	--	110	20	130	6.5	176
NOV.										
11...	0900	541	--	--	--	--	--	--	--	--
13...	1430	530	28	10	--	72	13	80	3.9	221
DEC.										
02...	0930	483	--	--	--	--	--	--	--	--
11...	1330	562	27	20	0	70	13	72	5.2	216
JAN.										
21...	1130	580	--	--	--	--	--	--	--	--
21...	1400	580	18	10	--	18	11	78	5.4	211
FEB.										
18...	1430	789	24	20	--	61	12	73	5.2	202
APR.										
20...	0900	1870	20	10	--	54	8.4	37	4.4	146
MAY										
05...	0900	1730	20	20	--	49	8.3	35	4.2	163
27...	1100	3800	--	--	--	--	--	--	--	--
27...	1551	3540	18	20	--	36	7.2	28	4.4	120
JUNE										
16...	1830	1450	10	20	--	36	6.7	26	3.7	119
JULY										
30...	1915	30	14	20	--	84	17	130	6.8	232
AUG.										
19...	1921	112	24	30	--	87	14	100	5.8	224
SEP.										
22...	1818	513	21	10	--	61	12	64	4.5	188

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE (N) (00618)	DIS- SOLVED NITRITE (N) (00613)	TOTAL NITRITE PLUS NITRATE (N) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (00631)	AMMONIA NITRO- GEN (N) (00610)
OCT.									
16...	0	400	62	.7	.85	.04	1.1	.89	.07
NOV.									
11...	--	--	--	--	--	--	--	--	--
13...	0	150	50	.6	.63	.00	.69	.63	.06
DEC.									
02...	--	--	--	--	--	--	--	--	--
11...	0	140	48	.6	.42	.01	.45	.43	.14
JAN.									
21...	--	--	--	--	--	--	--	--	--
21...	0	140	53	.5	1.1	.02	1.2	1.1	.10
FEB.									
18...	0	40	.2	.5	.57	.01	.67	.58	.02
APR.									
28...	--	97	17	.4	--	--	--	.47	--
MAY									
05...	--	81	28	.4	--	--	--	.63	--
27...	--	--	--	--	--	--	--	--	--
27...	0	60	14	.4	.18	.01	.23	.19	.02
JUNE									
16...	0	58	12	.3	.21	.01	.22	.22	.03
JULY									
30...	0	330	34	1.0	--	--	--	.86	--
AUG.									
19...	0	230	.2	.1	--	--	--	.83	--
SEP.									
22...	0	140	35	.5	--	--	--	.51	--

DATE	TOTAL ORGANIC NITRO- GEN (N) (00605)	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RFST- DUE AT 180 C) (N) (00306)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (N) (00301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
OCT.									
16...	5.9	7.1	5.4	.05	878	835	360	220	3.0
NOV.									
11...	--	--	--	--	--	--	--	--	--
13...	.92	1.7	1.4	.38	545	511	230	49	2.3
DEC.									
02...	--	--	--	--	--	--	--	--	--
11...	1.8	2.4	1.6	.40	492	486	230	53	2.1
JAN.									
21...	--	--	--	--	--	--	--	--	--
21...	.51	1.4	1.1	.47	494	484	220	47	2.3
FEB.									
18...	.45	1.1	.99	.36	471	471	200	34	2.2
APR.									
28...	--	--	1.1	.12	337	313	170	50	1.2
MAY									
05...	--	--	.82	.14	311	302	160	23	1.2
27...	--	--	--	--	--	--	--	--	--
27...	3.5	3.7	.79	.10	240	226	110	16	1.1
JUNE									
16...	.26	.51	.63	.13	237	222	120	20	1.0
JULY									
30...	--	--	--	.02	744	739	290	99	3.3
AUG.									
19...	--	--	--	.12	588	628	280	91	2.6
SEP.									
22...	--	--	--	.18	426	434	200	48	2.0

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO/S) (000095)	PH (UNITS) (00400)	ATM TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00660)	DIS- SOLVED SOLIDS HOBON (R) (UG/L) (01020)
OCT. 16...	1240	7.8	22.0	14.0	80000	7.8	280	69	200
NOV. 11...	815	--	9.0	9.5	--	--	--	--	--
13...	828	8.2	19.0	10.0	700	9.7	41	20	180
DEC. 02...	788	--	5.5	4.5	--	--	--	--	--
11...	769	8.0	4.0	3.0	400	11.2	36	13	170
JAN. 21...	806	--	--	5.0	--	--	--	--	--
23...	752	8.2	12.0	6.0	300	10.6	24	17	180
FEB. 18...	720	8.2	8.5	5.5	300	10.6	31	15	150
APR. 28...	509	--	--	6.0	--	--	--	--	70
MAY 05...	478	--	--	10.0	--	--	--	--	70
27...	380	--	--	15.5	--	--	--	--	--
27...	359	7.8	26.5	20.0	1200	7.4	100	19	60
JUNE 16...	363	7.9	27.0	24.0	640	7.1	85	13	70
JULY 30...	1060	8.2	25.5	29.5	--	5.6	--	--	170
AUG. 19...	860	8.2	27.0	26.0	--	6.0	--	--	140
SEP. 22...	669	8.4	20.5	18.0	--	8.9	--	--	140

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (01027)	TOTAL CHRO- MIUM (CR) (01034)	TOTAL COBALT (CO) (01037)	TOTAL COPPER (CU) (01042)	TOTAL MAN- GANESE (MN) (01055)	TOTAL ZINC (ZN) (01092)
SEP. 18...	1230	20	150	300	350	11000	2100

## 08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	CHRO-	SOLVED	SOLVED	SOLVED	SOLVED
		(AS)	ARSENIC	BORON	MUM	CAO-	MUM	CHRO-	MUM	CHRO-	MUM	CHRO-
		(UG/L)	(AS)	(R)	(CN)	(CN)	(CR)	(CR)	(CR)	(CO)	(CO)	(CU)
		(01002)	(01000)	(01020)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)
DEC. 11...	1330	33	6	170	<10	1	20	<10	50	3	40	1

DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SILICA (SE) (UG/L) (01147)	DIS- SOLVED SILICA (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 11...	34000	20	100	0	1000	0	<.1	<.1	1	0	160	20

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	SUS-	DIS-	SUS-	DIS-	SUS-	DIS-	DIS-
		NON-	SOLVE(	PENDED	SOLVE(	PENDED	SOLVE(	PENDED	SOLVE(	SOLVE(
		FILT-	GROSS	GROSS	GROSS	GROSS	GROSS	GROSS	GROSS	GROSS
		RAHLE	ALPHA	ALPHA	ALPHA	ALPHA	ALPHA	ALPHA	ALPHA	ALPHA
		RESIDUE	AS	AS	AS	AS	AS	AS	AS	NATURAL
			U-NAT.	U-NAT.	CS-137	CS-137	/Y90	/Y90	METHOD	(U)
		(MG/L)	(UG/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(UG/L)
		(00530)	(00030)	(00040)	(03515)	(03516)	(00050)	(00060)	(09511)	(22703)
DEC.										
11...	1330	970	12	54	3.6	32	6.4	21	0.7	3.0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]



08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 16	1330	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		<u>Navicula</u>	4,300	100	
		TOTAL	4,300		
Nov 13	1430	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		<u>Navicula</u>		33	
		<u>Neidium</u>		33	
		Nitzschaceae			
		<u>Nitzschia</u>		33	
		TOTAL	210		
Dec 11	1330	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Oocystaceae			
		<u>Closteriopsis</u>		3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		<u>Caloneis</u>		3	
		<u>Navicula</u>		10	
		Gomphonemataceae			
		<u>Gomphonema</u>		10	
		Nitzschaceae			
		<u>Nitzschia</u>		63	
		Surirellaceae			
		<u>Surirella</u>		10	
		TOTAL	3,400		
Jan 21	1400	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		10	
		Pennales			
		Naviculaceae			
		<u>Navicula</u>		20	
		<u>Pinnularia</u>		10	
		Gomphonemataceae			
		<u>Gomphonema</u>		10	
		Nitzschaceae			
		<u>Nitzschia</u>		50	
		TOTAL	4,300		
Feb 18	1430	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Melosira</u>		23	
		Pennales			
		Diatomaceae			
		<u>Diatoma</u>		9	
		Naviculaceae			
		<u>Navicula</u>		23	
		Gomphonemataceae			
		<u>Gomphonema</u>		9	
		Nitzschaceae			
		<u>Nitzschia</u>		32	
		Surirellaceae			
		<u>Surirella</u>		5	
		TOTAL	2,200		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Nov 13	28	2.3	1.5	0.1	0.1	16000	Polyethylene strip

## RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	900	1290	780	783	760	792	---	477	393	415	---	---
2	1010	1110	783	778	755	1440	---	455	381	408	---	---
3	975	1040	790	800	780	1420	---	467	391	1020	---	---
4	975	980	785	805	795	1410	---	618	390	414	---	---
5	980	950	770	817	728	1230	---	451	393	460	---	---
6	980	900	763	825	756	925	---	436	629	405	---	1570
7	940	875	710	807	710	785	---	456	634	398	---	961
8	785	855	715	807	710	785	---	438	385	391	---	804
9	1050	843	770	832	712	685	---	453	383	355	---	640
10	955	817	755	815	770	668	---	453	395	354	---	716
11	935	803	737	792	809	752	---	441	388	403	---	880
12	865	793	737	770	795	752	---	459	424	338	---	743
13	1540	830	780	790	748	732	---	418	425	525	---	740
14	1260	820	757	802	745	665	---	417	423	592	---	898
15	1300	810	755	785	721	668	---	409	449	616	---	650
16	1200	807	755	840	685	655	---	405	378	509	764	592
17	1030	795	785	783	690	643	---	387	388	448	776	604
18	970	790	770	784	712	690	---	441	397	424	769	546
19	965	795	765	773	452	690	---	399	395	415	809	537
20	1010	785	757	760	758	721	---	397	391	413	827	556
21	985	780	775	754	758	---	---	382	416	455	743	557
22	950	775	782	757	730	---	---	377	412	444	1010	556
23	910	790	782	748	730	---	---	347	441	610	865	562
24	915	776	845	758	745	---	---	350	424	549	953	562
25	1330	792	770	751	756	---	---	381	408	565	802	560
26	1180	800	738	742	787	---	510	361	489	838	790	685
27	1040	803	747	750	775	---	485	372	524	937	738	595
28	965	807	743	750	785	---	480	368	417	---	738	---
29	1100	797	768	760	---	---	464	412	411	569	786	---
30	1090	783	701	757	---	---	462	400	422	1090	---	---
31	970	---	790	775	---	---	---	387	---	---	---	---
MONTH	1030	853	766	782	738	---	---	420	427	530	---	---
YEAR	MAX	1570	MIN	338	MEAN	708						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	10.5	6.0	3.0	9.0	10.0	---	17.0	21.0	25.0	---	---
2	19.5	11.0	6.0	4.0	12.0	11.0	---	19.0	19.0	26.5	---	---
3	14.0	10.0	9.0	2.0	7.0	10.0	---	15.0	21.0	25.0	---	---
4	16.5	12.0	10.0	3.0	9.5	11.0	---	14.0	21.5	25.0	---	---
5	18.0	10.0	10.0	3.0	9.0	9.0	---	16.0	24.5	25.0	---	---
6	17.0	10.0	10.0	2.0	7.0	13.0	---	16.0	21.0	27.0	---	19.5
7	17.0	13.0	10.0	1.0	7.0	13.0	---	12.0	22.0	25.0	---	22.0
8	16.0	14.0	4.0	2.0	7.0	13.0	---	19.0	17.0	25.5	---	20.5
9	16.0	13.0	3.0	3.0	10.0	13.0	---	17.0	19.0	26.5	---	24.5
10	17.0	10.0	3.0	3.0	8.0	13.5	---	19.0	21.0	25.0	---	22.5
11	17.0	12.0	1.0	4.0	10.5	11.0	---	22.0	20.5	27.0	---	21.0
12	13.0	11.0	3.0	4.0	11.0	10.0	---	15.0	19.0	22.0	---	18.0
13	15.0	10.0	3.0	1.0	10.0	11.0	---	15.0	25.0	21.5	---	15.5
14	15.0	11.0	4.0	2.0	10.0	11.0	---	15.5	25.0	27.0	---	21.0
15	14.0	10.0	4.0	1.0	8.0	11.0	---	17.0	26.0	24.0	---	24.5
16	14.0	9.0	5.0	4.0	11.0	8.0	---	16.0	20.5	26.0	27.0	24.5
17	15.0	12.0	5.0	4.0	7.5	11.0	---	19.0	20.0	22.0	20.0	24.5
18	16.0	13.0	5.5	6.0	8.0	14.0	---	20.5	21.5	27.0	24.5	24.0
19	15.0	10.0	5.0	1.0	10.0	15.5	---	15.5	24.0	26.0	19.5	22.5
20	18.0	10.5	3.0	7.0	10.0	15.0	---	14.5	23.0	24.5	23.0	24.5
21	15.5	10.0	3.0	1.0	8.0	---	---	13.5	18.0	27.0	29.0	18.0
22	15.0	10.0	6.0	10.0	6.0	---	---	14.0	25.5	27.5	20.0	17.0
23	16.0	10.0	3.0	1.0	4.0	---	---	20.0	24.0	26.0	23.0	24.0
24	16.0	10.0	2.0	---	8.0	---	---	20.0	24.0	27.0	26.0	18.0
25	17.0	9.0	10.0	---	11.0	---	---	16.0	23.0	27.0	25.5	22.0
26	15.0	8.0	0.0	9.0	9.0	---	15.0	23.0	25.0	27.0	23.0	19.0
27	15.0	9.0	1.0	7.0	11.0	---	15.0	20.0	23.0	25.0	24.5	19.5
28	14.0	9.0	0.0	3.0	11.0	---	17.0	16.5	25.0	---	20.0	22.5
29	14.0	5.0	4.0	5.0	---	---	17.0	15.0	25.0	25.0	20.0	15.0
30	12.0	4.0	4.0	3.0	---	---	11.0	15.5	25.0	26.0	---	19.0
31	12.0	---	3.0	7.0	---	---	---	15.5	---	---	---	---
MONTH	15.5	10.0	4.5	3.5	9.0	---	---	17.0	22.5	25.5	---	21.0
YEAR	MAX	29.0	MIN	0.0	MEAN	14.5						

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	100	915	247	777	42700	93600	485	3150	4120
2	90	540	131	590	19300	30700	485	2320	3040
3	73	415	82	514	8900	12400	494	3900	5290
4	73	383	75	460	6300	7820	494	3050	4070
5	85	485	111	440	5200	6180	480	2810	3640
6	112	925	280	465	10600	13300	475	2500	3210
7	110	750	223	506	4000	5460	475	2290	2940
8	120	545	177	514	5200	7220	518	1900	2660
9	208	15000	8420	542	12000	17600	514	2150	2980
10	274	7300	5400	494	3520	4690	542	2210	3230
11	334	3900	3520	530	3160	4520	582	2760	4340
12	390	13000	13700	534	2510	3620	554	3200	4790
13	525	47500	67300	510	4200	5780	550	3200	4750
14	579	45000	69300	522	2370	3340	542	1910	2800
15	714	30100	58000	518	2880	4030	578	1570	2450
16	590	15200	24200	542	2700	3950	582	2770	4350
17	400	9800	10600	534	2400	3460	578	2600	4060
18	346	11900	11100	570	2100	3230	554	1680	2510
19	342	4400	4060	546	2110	3110	554	3080	4610
20	278	2350	1760	546	2890	4260	566	3600	5500
21	282	2190	1670	542	6390	9350	554	2250	3370
22	266	1780	1280	514	7850	10900	550	1880	2790
23	355	24100	23100	510	3620	4980	542	2400	3510
24	485	25000	32700	514	4720	6550	562	2560	3880
25	560	32600	49300	518	3260	4560	610	8000	13200
26	420	27500	31200	690	3200	4230	598	4300	6940
27	360	17300	16800	514	2460	3410	598	3400	5490
28	520	13200	18500	506	2080	2840	570	1900	2920
29	475	13500	17300	502	3300	4470	580	2700	4230
30	495	18500	24700	494	3500	4670	570	1660	2550
31	515	12900	17900	---	---	---	586	1500	2370
MONTH	10467	---	513136	15758	---	294230	16922	---	126500
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	610	1970	3240	688	2900	5390	664	1780	3190
2	646	2800	4880	694	4000	7500	676	5760	10500
3	575	1980	3070	694	3240	6070	904	20000	51000
4	450	1430	1740	760	3790	7780	1180	17100	62300
5	450	2690	3270	754	2030	4130	1250	4500	15200
6	385	2050	2130	790	2300	4910	808	3020	6590
7	332	3380	3030	1180	2230	6620	712	5380	10300
8	348	1150	1080	1040	2090	5870	724	3700	7230
9	410	1280	1420	796	1730	3720	886	2460	5880
10	410	850	941	706	3070	5850	1060	6260	17900
11	480	1190	1540	676	4530	8270	1200	6850	22200
12	560	1630	2460	706	3690	7030	1110	5200	15600
13	440	1410	1680	718	2970	5760	1040	3110	8730
14	430	930	1080	724	1980	3870	910	1760	4320
15	480	2340	3030	730	2430	4790	966	3080	8030
16	455	1990	2440	808	1650	3600	1050	5320	15100
17	460	3890	4830	850	2270	5210	1010	6690	18200
18	440	5250	6240	820	1900	4210	826	4520	10100
19	460	5650	7020	832	1250	2810	676	4130	7540
20	505	3750	5110	760	2100	4310	570	2380	3660
21	530	1920	2750	730	2010	3960	361	1240	1210
22	570	4630	7130	778	1850	3890	0	0	0
23	595	5350	8590	820	2010	4450	0	0	0
24	628	3158	5340	820	1190	2630	0	0	0
25	540	3510	5120	760	1910	3920	0	0	0
26	535	3760	5430	772	2010	4190	0	0	0
27	550	3720	5520	676	2080	3800	0	0	0
28	590	6600	10500	670	2270	4110	0	0	0
29	628	4960	8410	---	---	---	0	0	0
30	610	2860	4710	---	---	---	0	0	0
31	616	2060	3430	---	---	---	0	0	0
MONTH	15718	---	127161	21672	---	138650	18583.00	---	304780.0

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	3590	8610	83500	3470	6220	58300
2	0	0	0	2580	7120	49600	3510	6210	58900
3	0	0	0	1890	6700	34200	3320	3520	31600
4	0	0	0	1960	5340	28300	2590	2910	20300
5	0	0	0	1800	6390	31100	2320	3590	22500
6	0	0	0	2070	5070	28300	1870	1730	8730
7	0	0	0	1720	4880	22700	1940	2810	14700
8	0	0	0	1860	3510	17600	2050	3040	16800
9	0	0	0	2090	4080	23000	2210	4320	25800
10	0	0	0	1690	4880	22300	2320	3180	19900
11	0	0	0	1670	4680	21100	1870	3380	17100
12	0	0	0	2020	6230	34000	1340	4990	18100
13	0	0	0	2120	6620	37900	1030	4030	11200
14	0	0	0	2090	6440	36300	1170	3560	11200
15	0	0	0	2090	4780	27000	1310	4440	15700
16	0	0	0	2500	5810	39200	1700	4820	22100
17	0	0	0	2470	5910	39400	1960	3050	16100
18	0	0	0	2730	6080	44800	1850	2950	14700
19	0	0	0	2930	6090	48200	1870	2780	14000
20	0	0	0	2860	6650	51400	1960	2210	11700
21	0	0	0	2520	6340	43100	2410	1800	11700
22	0	0	0	2970	4780	38300	1700	2920	12100
23	0	0	0	3300	4560	40600	1460	3050	12000
24	0	0	0	3530	5810	55400	1620	2880	12600
25	364	622	1690	4030	7100	77300	1540	2880	12000
26	1240	1240	4150	4120	4310	47900	1540	1980	8230
27	1410	2460	9370	3720	6000	60300	1380	1030	3840
28	2120	6650	38100	4210	9250	105000	1170	2330	8460
29	3020	6650	54200	2820	8280	63000	1460	3050	12000
30	3320	8500	76200	3070	6610	54800	1490	1560	6280
31	---	---	---	3470	6620	62000	---	---	---
MONTH	11474.00	---	183710.0	82490	---	1367600	57430	---	528640
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1380	2450	9130	0	0	0	0	0	0
2	1050	3550	10160	0	0	0	0	0	0
3	830	2110	4730	0	0	0	0	0	0
4	615	1040	1730	0	0	0	0	0	0
5	800	1810	3910	0	0	0	994	30900	193000.0
6	1250	2010	6780	0	0	0	2670	65800	478000.0
7	1550	3780	16300	0	0	0	2110	36900	210000.0
8	1320	6140	21900	0	0	0	1930	21500	112000.0
9	911	2490	6120	0	0	0	1220	16000	52700
10	884	1430	3410	0	0	0	2400	37500	283000.0
11	1240	2600	8860	0	0	0	2180	52800	313000.0
12	1980	7240	38700	0	0	0	4860	49900	630000.0
13	2170	9000	52700	0	0	0	3310	18900	175000.0
14	2880	10600	82400	0	0	0	2950	43200	363000.0
15	2290	16400	101000	85	16100	16100	1780	28200	136000.0
16	2050	9400	52000	288	43600	33900	1160	11900	37300
17	1970	9200	48900	257	21600	15000	1120	10400	31400
18	1970	7600	40400	165	11600	5170	1060	7880	22600
19	1760	5800	27600	138	19000	7080	866	7110	16600
20	1020	3850	10600	40	25000	2700	685	7470	13800
21	505	7700	10500	66	9340	13400	545	6780	9980
22	460	6500	8070	1230	60400	232000.0	575	5870	9110
23	716	8200	15900	648	29300	52100	470	3290	4180
24	278	12400	9310	505	42000	57300	271	4310	3150
25	470	12200	18400	535	19800	28600	203	7620	4180
26	250	11700	7900	250	11900	8030	162	5870	2570
27	41	13600	1510	99	9800	2620	138	5480	2040
28	1.2	1660	22	80	8000	1730	114	4700	1450
29	43	13800	1940	30	4310	363	69	4360	812
30	30	34400	3960	0	0	0	57	5970	919
31	1.2	8850	119	0	0	0	---	---	---
MONTH	32715.4	---	624901	4416.00	---	476093.0	33899.00	---	3105791
WTR YR 1975 TOTAL WATER DISCHARGE (CFS-DAYS)					321,544.40				
WTR YR 1975 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)					7,791,192.00				

## 08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DISE- MENT (MG/L) (80154)	SUS- PENDE DISE- MENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)
OCT.								
07...	0900	14.0	122	917	302	58	74	90
15...	0910	14.0	701	29000	54900	62	80	94
16...	1330	14.0	570	16600	25500	--	--	--
29...	0900	10.0	466	5770	7260	63	77	93
NOV.								
11...	0900	9.5	541	3250	4750	39	46	60
13...	1430	10.0	530	5690	8140	--	--	--
DEC.								
02...	0930	4.5	483	1500	1960	32	36	49
11...	1330	3.0	562	3450	5240	--	--	--
JAN.								
21...	1130	5.0	580	1610	2520	20	23	34
FEB.								
10...	1000	10.0	742	1630	3270	29	36	50
18...	1230	5.0	789	1510	3220	26	31	44
MAR.								
03...	1130	10.0	922	47200	117000	63	72	93
10...	1000	5.5	980	6230	16500	35	41	56
APR.								
28...	0900	6.0	1870	6870	34700	46	55	82
MAY								
27...	1115	15.5	3800	4000	41000	32	39	61
JUNE								
16...	0900	17.0	1850	5750	28700	--	--	--
30...	1130	25.0	1560	1170	4930	24	28	41
JULY								
21...	0900	19.0	607	5280	8650	--	--	--
30...	1919	29.5	30	45900	3720	--	--	--
AUG.								
19...	0915	22.0	138	10700	3990	75	86	97
19...	1921	26.0	112	31200	9430	75	91	98
SEP.								
06...	1515	19.5	3060	77400	639000	59	71	91
14...	1800	21.0	2290	31700	196000	63	72	87
22...	1818	18.0	513	6470	8960	39	48	61

DATE	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)
------	---	---	---	---	---	---	---	---

OCT.								
07...	--	--	--	93	97	99	99	100
15...	100	--	--	--	--	--	--	--
16...	--	--	--	94	--	--	--	--
29...	--	--	--	99	100	--	--	--
NOV.								
11...	--	--	--	97	100	--	--	--
13...	--	--	--	75	--	--	--	--
DEC.								
02...	90	100	--	--	--	--	--	--
11...	--	--	--	74	--	--	--	--
JAN.								
21...	70	96	100	--	--	--	--	--
FEB.								
10...	81	99	100	--	--	--	--	--
18...	71	97	100	--	--	--	--	--
MAR.								
03...	99	100	--	--	--	--	--	--
10...	92	100	--	--	--	--	--	--
APR.								
28...	98	99	100	--	--	--	--	--
MAY								
27...	93	99	100	--	--	--	--	--
JUNE								
16...	90	99	100	--	--	--	--	--
30...	83	97	100	--	--	--	--	--
JULY								
21...	98	100	--	--	--	--	--	--
30...	--	--	--	100	--	--	--	--
AUG.								
19...	--	--	--	99	100	--	--	--
19...	99	100	--	--	--	--	--	--
SEP.								
06...	99	100	--	--	--	--	--	--
14...	100	--	--	--	--	--	--	--
22...	82	97	100	--	--	--	--	--

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

## PARTICLE SIZE OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDEO SEDI- MENT CHARGE (T/DAY) (80155)	RED MAT. FALL DIAM. % FINER THAN (80158)	RED MAT. FALL DIAM. % FINER THAN (80159)	RED MAT. FALL DIAM. % FINER THAN (80160)	RED MAT. FALL DIAM. % FINER THAN (80161)	RED MAT. FALL DIAM. % FINER THAN (80162)	RED MAT. FALL DIAM. % FINER THAN (80163)
OCT.										
15...	0910	701	29000	54900	3	17	96	100	--	--
29...	0900	466	5770	7260	2	14	96	100	--	--
NOV.										
11...	0900	541	3250	4750	7	13	77	96	99	100
DEC.										
02...	0930	483	1500	1960	2	12	71	98	100	--
JAN.										
21...	1130	580	1610	2520	3	19	90	99	100	--
FEB.										
10...	1000	742	1630	3270	7	29	93	100	--	--
18...	1230	789	1510	3220	9	23	68	98	100	--
MAR.										
03...	1130	922	47200	117000	6	29	92	100	--	--
APR.										
28...	0900	1870	6870	34700	54	91	100	--	--	--
MAY										
27...	1115	3800	4000	41000	53	96	100	--	--	--
JUNE										
30...	1130	1560	1170	4930	2	8	87	100	--	--
JULY										
21...	0900	607	5280	8650	5	35	99	100	--	--
AUG.										
19...	0915	138	10700	3990	1	25	96	100	--	--
SEP.										
11...	0900	1760	--	--	35	83	100	--	--	--
22...	1818	513	6470	8960	5	32	91	100	--	--

## TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDEO SEDI- MENT CHARGE (T/DAY) (80155)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
OCT.									
15...	0910	14.0	701	29000	54900	55600	124	1.6	3.6
29...	0900	10.0	466	5770	7260	7550	102	1.5	3.0
NOV.									
11...	0900	9.5	541	3250	4750	5300	95	1.8	3.0
DEC.									
02...	0930	4.5	483	1500	1960	2230	92	2.3	2.3
JAN.									
21...	1130	5.0	580	1610	2520	3310	66	2.5	3.6
FEB.									
10...	1000	10.0	742	1630	3270	4090	84	2.4	3.7
18...	1230	5.0	789	1510	3220	4050	84	2.5	3.7
MAR.									
03...	1130	10.0	922	47200	117000	120000	86	2.6	4.1
APR.									
28...	0900	6.0	1870	6870	34700	36200	117	3.2	5.0
MAY									
27...	1115	15.5	3800	4000	41000	44300	135	4.3	6.5
JUNE									
30...	1130	25.0	1560	1170	4930	7060	125	2.4	5.2
JULY									
21...	0900	19.0	607	5280	8650	9650	92	1.5	4.3
AUG.									
19...	0915	22.0	138	10700	3990	7870	75	.82	2.2
SEP.									
22...	1818	18.0	513	6470	8960	10700	100	1.4	3.7

## 08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, N. MEX.

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, in Pedro Armendaris Grant, at gaging station, 1.0 mi (1.6 km) downstream from dam, 1.5 mi (2.4 km) upstream from Cochillo Negro River, and at mile 1,382.2 (2,224.0 km).

DRAINAGE AREA.--29,450 mi<sup>2</sup> (76,280 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) in closed basin in San Luis Valley, Colo.

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)
JULY									
30...	1331	1810	.15	.01	.16	.16	.03	.27	.46
AUG.									
12...	1405	1360	--	--	.23	--	.00	.31	.54
18...	1030	1370	--	--	.18	--	.07	.36	.61
20...	1010	1370	--	--	.21	.17	.03	.44	.68
25...	1030	1390	--	--	.19	--	.03	.44	.66
SEP.									
02...	1035	920	--	--	.22	--	.04	.53	.79
08...	1300	1400	--	--	.11	--	.00	.38	.49
15...	1350	16	--	--	.16	--	.00	.55	.71
22...	1355	0.1	--	--	.35	--	.00	.77	1.1
24...	1030	1320	--	--	.33	--	.01	.37	.71
29...	1230	15	--	--	.35	--	.03	.74	1.1

DATE	TOTAL PHOS- PHORUS (P) (00645)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (00671)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)
JULY								
30...	.17	.12	600	--	31.0	20.5	5	--
AUG.								
12...	.12	--	563	--	--	27.0	5	--
18...	.14	--	543	--	--	23.0	5	--
20...	.20	.13	555	--	26.0	22.5	3	--
25...	.16	--	539	--	--	23.0	11	--
SEP.								
02...	.09	--	537	--	--	23.5	10	--
08...	.15	--	548	--	--	23.0	7	--
15...	.17	--	547	--	--	24.0	20	--
22...	.17	--	622	--	--	24.0	2	--
24...	.12	--	610	7.9	17.0	21.0	15	5.1
29...	.15	--	658	--	--	23.0	30	--

08363500 RIO GRANDE AT LEASBURG DAM, NEAR LAS CRUCES, N. MEX.

LOCATION.--Lat 32°28'36", long 106°55'03", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 14, T.21 S., R.01 W., Dona Ana County, 1.2 mi (1.9 km) upstream from USBR gaging station which is 2.0 mi (3.2 km) downstream from Leasburg Dam, and 1.8 mi (2.9 km) southeast of Radium Springs.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Biological Analyses: April 1975 to current year.

REMARKS.--Bacteria data furnished by the New Mexico Environmental Improvement Agency.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPF- CIFIC CON- NUCL- ANCE (41CNU- MPOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)
APR. 20...	1400	713	8.7	17.5	8.6
MAY 04...	1430	696	8.7	17.0	8.6
AUG. 27...	1400	696	8.3	26.0	7.1
SEP. 22...	1445	583	7.5	20.0	7.6

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)
APR. 20...	1400	30
MAY 04...	1430	173
AUG. 27...	1400	26
SEP. 22...	1445	778



## 08363840 RIO GRANDE AT VINTON BRIDGE NEAR ANTHONY, TEX.

LOCATION.--Lat 31°57'32", long 106°36'17", El Paso County, at bridge on Farm Road 273, 480 ft (146 m) west of U.S. Highway 80, and 2.8 miles (4.5 km) south of Anthony.

DRAINAGE AREA.--28,680 mi<sup>2</sup> (74,280 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.  
Sediment records: July 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JULY 29...	1730	766	11	0	--	78	17	100	7.5	206	0	210
AUG. 20...	1700	845	12	0	0	73	14	87	8.0	196	0	180
SEP. 23...	1645	494	20	10	--	79	15	92	7.2	199	0	190

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RES- IDUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)
JULY 29...	76	.9	.14	.14	.90	1.1	1.2	.66	.08	.08	608	603	260
AUG. 20...	63	.6	.11	.11	.00	.81	.92	.40	.07	.07	540	535	240
SEP. 23...	72	.5	.55	.55	.04	1.5	2.1	.96	.11	.11	587	577	260

DATE	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AB- SORPTION RATIO (00931)	SPE- CIFIC CON- DUCTI- VITY (MICRO- MHOS) (00945)	PH (00490)	ATM TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00699)	DIS- SOLVED BORON (H) (UG/L) (01020)
JULY 29...	96	2.7	960	8.4	28.0	26.0	120	7.2	19	4.5	3.3	120
AUG. 20...	79	2.4	855	8.4	29.5	25.0	110	7.5	17	4.0	2.5	140
SEP. 23...	96	2.5	895	8.3	25.0	22.0	350	7.8	35	5.0	7.5	160

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COPPER (CO) (UG/L) (01037)	DIS- SOLVED COPPER (CO) (UG/L) (01035)	TOTAL ZINC (ZN) (UG/L) (01042)	DIS- SOLVED ZINC (ZN) (UG/L) (01040)
AUG. 20...	1700	4	4	140	10	0	20	0	50	0	10	4

DATE	TIME	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01044)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71900)	TOTAL NIUM (SE) (UG/L) (01147)	DIS- SOLVED NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
AUG. 20...	4900	0	<100	0	340	0	.0	.0	.0	0	0	90	10

08363840 RIO GRANDE AT VINTON BRIDGE NEAR ANTHONY, TEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCUCCI (COL- ONIFS PER 100 ML) (31679)
JULY 29...	1730	2900	360
AUG. 20...	1700	2500	1600
SEP. 23...	1645	2900	4000

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS- SED, SIEVE DIAM. % FINER THAN .062 MM (70331)
JULY 29...	1730	26.0	766	--	--	64
AUG. 20...	1700	25.0	845	460	1050	60
SEP. 23...	1645	22.0	494	1140	1520	74

08377900 RIO MORA NEAR TERRERO, N. MEX.  
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E2NE4 sec.22, T.18 N., R.12 E., San Miguel County, in Santa Fe National Forest, at gaging station 450 ft (140 m) upstream from bridge on State Highway 63, 600 ft (180 m) upstream from mouth, and 2.6 mi (4.2 km) north of Terreno:

DRAINAGE AREA.--53.2 mi<sup>2</sup> (137.8 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: November 1962 to current year.  
Sediment records: August 1967 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- SOLVED SULFATE (CF5) (00061)	DIS- SOLVED SILICA (5102) (CF5) (00955)	DIS- SOLVED CAL- CIUM (C6) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (M4) (MG/L) (00925)	DIS- SOLVED SODIUM (M4) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (M4) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAN- BONATE (CO3) (MG/L) (00445)
NOV. 21...	1542	15	5.4	14	1.3	2.1	.6	50	0
DEC. 16...	1400	7.9	6.3	16	1.6	2.0	.4	52	0
FEB. 10...	1000	9.3	6.1	12	2.4	13	.8	56	0
APR. 16...	0900	18	6.5	16	2.3	.8	.8	55	0
JUNE 05...	1129	165	4.7	11	1.3	.6	.4	31	0
JULY 10...	0945	34	7.2	14	3.0	.9	.5	45	0
SEP. 09...	1420	47	5.5	15	.7	.8	.5	44	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRIF NITRATE (N) (MG/L) (00630)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (CA+MG) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
NOV. 21...	7.3	.9	.2	.03	.00	63	58	45	4
DEC. 16...	9.0	1.6	.2	.08	.00	72	63	47	4
FEB. 10...	14	1.0	.2	.08	.00	87	77	40	0
APR. 16...	11	1.4	.2	.08	.01	76	68	54	9
JUNE 05...	5.7	.9	.1	.01	.01	46	40	33	1
JULY 10...	5.7	.6	.1	.01	.01	56	54	47	10
SEP. 09...	5.6	.1	.2	.03	.01	53	50	40	4

DATE	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00689)	CYANIDE (CN) (MG/L) (00720)
NOV. 21...	.1	99	8.0	6.0	.0	10.8	--	--	--
DEC. 16...	.1	104	7.6	1.0	.0	10.8	--	--	--
FEB. 10...	.9	110	7.5	5.0	.0	9.9	--	--	--
APR. 16...	.0	115	7.6	1.0	.0	10.8	--	--	.00
JUNE 05...	.0	70	7.9	24.0	8.0	8.8	--	--	--
JULY 10...	.1	90	8.5	22.0	12.0	8.2	--	--	--
SEP. 09...	.1	90	7.7	30.0	13.0	8.2	3.9	.6	.00

## RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, N. MEX.--Continued

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL BARIUM (BA) (UG/L) (01007)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL SILVER (AG) (UG/L) (01077)	TOTAL ZINC (ZN) (UG/L) (01092)
MAY 29...	1406	0	<10	0	<10	0	<10	110
JUNE 25...	1156	<100	<10	20	10	310	<10	40
SEP. 25...	1445	<100	<10	0	<10	0	<10	30

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BARIUM (BA) (UG/L) (01007)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL IRON (FE) (UG/L) (01045)
APR. 16...	0900	0	100	20	10	10	240
SEP. 09...	1420	1	<200	<10	0	10	0

DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL MERCURY (HG) (UG/L) (01060)	TOTAL SELF- NIUM (SF) (UG/L) (01147)	TOTAL SILVER (AG) (UG/L) (01077)	TOTAL ZINC (ZN) (UG/L) (01092)
APR. 16...		<100	10	.0	0	<10	40
SEP. 09...		<100	0	.0	0	<10	10

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILL- KALIF RESIDUE (MG/L) (00030)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00010)	SUS- PENDED GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS (PC/L) (00950)	SUS- PENDED GROSS BETA AS (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (U) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (00020)
SEP. 09...	1420	3	.3	<.4	1.2	<.4	.9	<.4	.02	.10

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIF PER 100 ML) (31679)
NOV. 21...	1642	1	1	5
DEC. 16...	1400	0	0	0
FEB. 10...	1000	0	0	2
APR. 16...	0900	2	0	5
JUNE 05...	1129	32	0	3
SEP. 09...	1420	7	2	20

08377900 RIO MORA NEAR TERRERO, N. MEX.--Continued

## PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	ALDRIN		CHLOR-DANE		DDD		DDE		DIT	
		TOTAL ALDRIN (UG/L) (39330)	IN MA- TERIAL (UG/KG) (39333)	TOTAL CHLOR- DANE (UG/L) (39350)	IN MA- TERIAL (UG/KG) (39351)	TOTAL DDD (UG/L) (39360)	IN MA- TERIAL (UG/KG) (39363)	TOTAL DDE (UG/L) (39365)	IN MA- TERIAL (UG/KG) (39368)	TOTAL DIT (UG/L) (39370)	IN MA- TERIAL (UG/KG) (39373)
SEP. 09...	1420	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
DATE	TIME	DI-FLDRIN		ENDRIN		HEPTA-CHLOR		HEPTA-CHLOR EPOXIDE		LINDANE	
		TOTAL DI- AZINON (UG/L) (39370)	IN MA- TERIAL (UG/KG) (39380)	TOTAL ENDRIN (UG/L) (39390)	IN MA- TERIAL (UG/KG) (39393)	TOTAL HEPTA- CHLOR (UG/L) (39410)	IN MA- TERIAL (UG/KG) (39413)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)	IN MA- TERIAL (UG/KG) (39423)	TOTAL LINDANE (UG/L) (39440)	IN MA- TERIAL (UG/KG) (39443)
SEP. 09...		.00	.00	.0	.00	.00	.0	.00	.0	.00	.0
DATE	TIME	TOTAL MALA-THION		PCR		TOX-APHENE		TOX-APHENE		TOX-APHENE	
		TOTAL MALA- THION (UG/L) (39530)	IN MA- TERIAL (UG/KG) (39533)	TOTAL PARA- THION (UG/L) (39540)	IN MA- TERIAL (UG/KG) (39543)	TOTAL PCR (UG/L) (39510)	IN MA- TERIAL (UG/KG) (39513)	TOTAL TOX- APHENE (UG/L) (39400)	IN MA- TERIAL (UG/KG) (39403)	TOTAL TOX- APHENE (UG/L) (39410)	IN MA- TERIAL (UG/KG) (39413)
SEP. 09...		.00	.00	.00	.0	0	0	0	0	.00	.00

## INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS		SUS- PENDED		SUS- PENDED	
		TEMPER- ATURE (DEG C) (00010)	DIS- CHARGE (CFS) (00061)	SEDIM- ENT (MG/L) (00154)	SEDIM- ENT (MG/L) (00154)	SEDIM- ENT (MG/L) (00154)	SEDIM- ENT (MG/L) (00154)
OCT. 11...	0945	6.0	12	2	2	2	2
NOV. 21...	1642	.0	15	1	1	1	1
27...	1030	.0	10	0	0	0	0
DEC. 16...	1400	.0	7.0	3	3	3	3
JAN. 15...	1140	.0	10	1	1	1	1
FEB. 10...	1000	.0	5.3	0	0	0	0
25...	1510	.0	6.6	0	0	0	0
MAR. 20...	1955	.0	8.4	0	0	0	0
APR. 15...	0900	.0	14	1	1	1	1
24...	1250	5.0	51	17	17	17	17
MAY 20...	1300	7.5	183	14	14	14	14
JUNE 05...	1129	8.0	185	5	5	5	5
17...	1120	8.0	108	2	2	2	2
JULY 10...	0945	12.0	34	1	1	1	1
15...	1300	12.5	30	5	5	5	5
AUG. 11...	1505	12.0	159	14	14	14	14
SEP. 09...	1420	13.0	47	7	7	7	7
11...	1240	10.0	40	7	7	7	7

## RIO GRANDE BASIN

08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County in Anton Chico Grant, at gaging station 2.1 mi (3.4 km) upstream from Canon Blanco, 2.3 mi (3.7 km) southeast of Anton Chico, 9.7 mi (15.6 km) downstream from Tecolote Creek, and at mile 816.8 (1,314.2 km).

DRAINAGE AREA.--1,050 mi<sup>2</sup> (2,720 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: August 1967 to current year.  
Sediment records: July 1974 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CF5) (00061)	DIS- SOLVED SILICA (5102) (MG/L) (00455)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED MANGANESE (MN) (01056)	DIS- SOLVED CALCIUM (CA) (00915)	DIS- SOLVED MAGNESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (00935)	BICARBONATE (HCO3) (MG/L) (00440)
OCT.										
1A...	1020	11	--	--	--	--	--	--	--	--
NOV.										
07...	1400	16	9.0	10	--	49	6.6	6.3	1.2	170
DEC.										
06...	1131	12	0.1	10	--	57	6.9	6.2	.8	190
JAN.										
17...	1232	11	3.1	0	--	57	7.0	6.4	1.0	192
FEB.										
26...	1333	41	6.3	10	--	52	6.4	7.3	.6	174
MAR.										
26...	0930	90	3.4	20	0	43	4.3	4.9	.9	135
APR.										
25...	1111	234	10	10	--	32	3.7	4.4	1.2	106
MAY										
21...	1030	401	5.8	30	--	31	3.1	2.9	.9	89
JUNE										
25...	1430	146	5.8	10	0	39	3.4	2.8	.8	123
JULY										
24...	1430	205	5.4	10	--	40	4.4	3.3	1.1	125
AUG.										
28...	0900	304	7.4	10	10	38	5.6	4.4	1.6	126
SEP.										
22...	1330	103	7.9	10	--	41	4.9	3.2	.8	132

DATE	CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00445)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00440)	DIS- SOLVED FLUORIDE (F) (MG/L) (00450)	DIS- SOLVED NITRATE (N) (MG/L) (00518)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)
OCT.										
1A...	--	--	--	--	--	--	--	--	--	--
NOV.										
07...	1	20	2.8	.2	.008	.00	.09	.08	.03	.24
DEC.										
06...	0	25	4.4	.2	.05	.00	.05	.05	.02	.11
JAN.										
17...	--	25	2.4	.2	.23	.01	.24	.24	.00	.25
FEB.										
26...	0	25	3.6	.2	.03	.00	.07	.03	.01	.15
MAR.										
26...	0	23	2.8	.3	.02	.00	.02	.02	.03	.25
APR.										
25...	0	18	3.0	.2	.07	.01	.08	.08	.00	1.2
MAY										
21...	0	13	1.9	.3	.05	.00	.09	.05	.00	.87
JUNE										
25...	0	13	.8	.1	.05	.00	.06	.05	.00	.30
JULY										
24...	0	16	1.7	.2	--	--	.10	.10	.03	1.3
AUG.										
28...	3	15	1.8	.3	--	--	.19	.16	.00	10.2
SEP.										
22...	0	15	1.5	.2	--	--	.03	.03	.00	.18

08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
OCT. 18...	--	--	--	--	--	--	--	--	322
NOV. 07...	.36	.02	.00	187	180	150	8	.2	314
DEC. 06...	.18	.01	.01	198	203	170	14	.2	352
JAN. 17...	.49	.12	.00	214	203	170	14	.2	350
FEB. 26...	.23	.05	.00	190	187	160	17	.3	340
MAR. 26...	.30	.17	.01	170	154	130	14	.2	260
APR. 25...	1.3	.32	.01	125	125	95	8	.2	210
MAY 21...	.96	.15	.03	98	104	90	17	.1	165
JUNE 25...	.36	.03	.00	130	128	110	11	.1	210
JULY 24...	1.4	.34	.00	135	137	120	15	.1	235
AUG. 28...	10	.33	.01	152	140	120	10	.2	235
SEP. 22...	.21	.05	.00	144	140	120	14	.1	250

DATE	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	DIS- SOLVED BORON (B) (01020)
OCT. 18...	--	--	14.0	--	--	--	--	--	--
NOV. 07...	8.4	17.0	14.5	10	7.6	12	5.4	--	30
DEC. 06...	8.2	13.0	7.5	10	10.2	1	4.4	--	30
JAN. 17...	8.6	6.0	5.0	7	9.5	6	3.2	--	20
FEB. 26...	8.2	10.0	10.0	20	9.4	7	5.8	--	10
MAR. 26...	8.2	15.5	8.0	85	9.8	12	7.1	--	20
APR. 25...	8.2	23.5	12.0	200	8.5	43	21	--	20
MAY 21...	8.1	30.0	15.0	88	7.9	25	15	--	20
JUNE 25...	8.3	38.0	26.0	18	6.6	9	2.2	--	10
JULY 24...	8.2	24.0	26.0	200	6.6	29	--	3.5	8
AUG. 28...	7.3	26.0	19.5	5400	6.6	330	--	5.8	10
SEP. 22...	8.4	19.0	18.5	20	8.2	7	--	1.3	30

08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.--Continued

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COBALT (CO) (UG/L) (01037)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL ZINC (ZN) (UG/L) (01092)
SEP. 11...	1215	<10	<10	<50	10	70	20

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
DEC. 06...	1131	0	0	30	--	0	--	<10	--	0	--	5
MAR. 26...	0930	4	0	20	10	1	2	0	<50	0	10	2
JUNE 25...	1430	4	0	10	<10	0	0	0	<50	0	<10	4
AUG. 28...	0900	47	1	10	<10	0	130	10	<50	0	220	2

DATE	TIME	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01000)	DIS- SOLVED MERCURY (HG) (UG/L) (01090)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 06...	--	10	--	3	--	--	--	--	--	0	0	--	30
MAR. 26...	0000	20	<100	0	300	0	.0	.0	.0	1	0	50	20
JUNE 25...	840	10	<100	0	30	0	.0	.0	.0	0	0	20	0
AUG. 28...	120000	10	400	0	7600	10	.2	.0	.0	1	0	700	10



08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCHI (COL- ONIES PER 100 ML) (31679)
NOV. 07...	1400	6	47
DEC. 06...	1131	23	14
JAN. 17...	1232	0	15
FEB. 26...	1333	0	14
MAR. 26...	0930	120	700
APR. 25...	1111	79	180
MAY 21...	1030	40	640
JUNE 25...	1430	160	330
JULY 24...	1430	1800	920
AUG. 28...	0900	11000	11000
SEP. 22...	1330	220	200

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)
NOV. 07...	1400	14.5	16	37	1.6	51
DEC. 06...	1131	7.5	12	24	.78	64
JAN. 17...	1232	5.0	11	20	.83	67
FEB. 26...	1333	10.0	41	79	8.7	92
MAR. 26...	0930	8.0	98	714	189	55
APR. 25...	1111	12.0	234	1280	809	50
MAY 21...	1030	15.0	401	1140	1230	34
JUNE 25...	1430	26.0	146	268	106	17
JULY 24...	1430	26.0	205	752	415	87
AUG. 28...	0900	14.5	304	11200	9190	94
SEP. 22...	1330	18.5	103	112	31	42

## RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.

LOCATION.--Lat. 34°56'36", long 104°41'55", in NW¼SE¼ sec. 3, T. 8 N., R. 21 E., Guadalupe County, 0.6 mi. (1.0 km) downstream from gaging station, which is 0.6 mi (1.0 km) upstream from bridge on U.S. Highway 66, in Santa Rosa, 1.9 mi (3.1 km) upstream from El Rito Creek, and at mile 756.56 (1,217.2 km).

DRAINAGE AREA.--2,650 mi<sup>2</sup> (6,860 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1905 to December 1906. November 1970 to December 1971.

Specific conductance: October 1964 to current year.

Water temperatures: October 1958 to current year.

Sediment records: October 1958 to current year.

## EXTREMES:

## Current year:

Specific conductance: Maximum daily, 2,200 micromhos Jan. 12, Feb. 22; minimum daily, 280 micromhos Sept. 12.

Water temperatures: Maximum, 33.0°C July 23; minimum, 0.5°C Jan. 14.

Sediment concentrations: Maximum daily, 16,700 mg/l July 13; minimum daily, 7 mg/l Mar. 2

Sediment discharge: Maximum daily, 69,300 tons (62,900 tonnes) July 13; minimum daily, .23 ton (.21 tonne) Mar. 2.

## Period of record:

Specific conductance: Maximum daily, 2,500 micromhos Jan. 18, 1974; minimum daily, 173 micromhos May 22, 1973.

Water temperatures: Maximum (1958-63, 1964-74), 38.0°C May 11, 1970; minimum, freezing point on several days during winter months of most years.

Sediment concentrations: Maximum daily, 31,400 mg/l Aug. 18, 1961; minimum daily, 3 mg/l Apr. 30, 1972.

Sediment discharge: Maximum daily, 344,000 tons (312,000 tonnes) July 30, 1971; minimum daily, .09 ton (.08 tonne) Apr. 30, 1972.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	1160	1740	1920	1760	1900	1730	488	360	1550	1300	1600
2	1730	1080	1720	1880	1800	1920	1740	535	393	1570	1100	1690
3	1800	1090	1770	2160	1560	1950	1770	598	426	1520	1270	1630
4	1800	1090	1690	2100	1820	1920	1770	683	470	1570	1270	1310
5	1780	1080	1690	1900	1940	1880	1800	762	470	1580	1290	1600
6	1810	1090	1710	1650	1980	1900	1810	641	429	1110	1350	1550
7	1620	1110	1690	1790	1950	1960	1830	466	395	1260	1370	752
8	1660	1130	1660	1950	1870	1910	1820	433	377	1560	1340	503
9	1720	1310	1840	1710	1940	1770	1820	443	362	1570	1360	552
10	1730	1540	1630	1680	1860	1610	1790	502	386	1600	1360	420
11	510	1510	1750	2080	1860	1420	1670	545	463	1570	1390	520
12	657	1540	1760	2200	1890	845	1670	554	319	1580	1380	280
13	827	1590	1770	2060	1910	915	1330	517	332	374	1350	390
14	1110	1680	1830	1680	1920	965	1080	389	387	460	1310	380
15	996	1670	2020	1680	1860	1140	1020	355	433	524	1340	410
16	1230	1640	1910	1850	1960	1280	612	336	457	489	791	450
17	1320	1590	1910	2040	1840	1280	472	320	498	558	1300	520
18	1460	1610	1790	1880	1840	1500	496	313	534	566	1340	600
19	1490	1640	1870	1820	1900	1520	434	313	503	520	1360	730
20	1470	1680	1820	1870	1980	1780	432	316	554	604	1380	840
21	1530	1680	1670	1890	1900	1820	490	328	563	670	1360	710
22	1540	1670	1740	1900	2200	1860	533	337	630	748	1080	790
23	1510	1680	1860	1960	2100	1880	594	332	727	1000	1160	950
24	1550	1630	1890	1860	1900	1880	540	331	878	717	1340	941
25	1590	1650	2140	1780	1740	1430	478	376	1130	695	1450	999
26	1020	1690	2020	1860	1810	1380	455	364	1300	581	1570	1110
27	1320	1680	2060	1880	1800	1540	402	395	1430	592	1610	1370
28	1420	1710	2080	1930	1880	1530	378	389	1510	888	1570	1420
29	915	1710	1540	1800	---	1480	386	404	1520	1100	1410	1390
30	820	1770	1690	1660	---	1320	428	394	1570	1230	1310	1390
31	950	---	1810	1740	---	1650	---	380	---	1290	1570	---
MONTH	1380	1490	1810	1870	1880	1590	1060	437	660	1020	1330	927
YEAR	MAX	2200	MIN	280	MEAN	1290						

## 08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

## WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	13.5	4.0	1.0	8.0	8.0	9.0	11.0	20.0	17.5	19.0	18.5
2	14.0	11.5	5.5	1.5	10.5	7.0	7.0	11.0	22.0	18.0	16.0	22.5
3	14.5	11.0	5.0	4.0	5.0	8.0	11.5	14.5	17.0	18.0	20.0	18.0
4	19.0	11.0	5.5	3.0	5.5	10.0	10.0	15.0	17.0	20.5	18.5	17.5
5	10.5	12.5	7.5	5.0	1.0	6.5	7.0	12.0	16.0	18.0	17.5	18.0
6	13.0	13.5	9.0	7.5	2.0	8.5	10.0	10.0	18.0	21.0	17.0	17.0
7	20.0	15.5	6.0	9.0	7.0	10.0	9.0	11.0	18.0	19.0	16.5	20.0
8	19.0	14.5	7.0	8.0	7.0	7.0	4.0	10.0	19.5	18.5	17.0	23.0
9	17.0	9.0	1.0	6.0	5.0	7.5	6.5	16.0	18.0	20.0	17.5	18.0
10	17.0	9.0	5.0	1.5	13.0	5.0	8.0	15.0	15.5	20.0	18.0	17.0
11	16.5	20.5	4.0	1.0	5.0	6.0	7.0	16.5	15.5	19.0	16.0	18.5
12	13.0	7.0	5.0	1.0	11.0	5.0	6.5	15.0	23.0	18.0	17.0	13.0
13	10.0	14.0	9.0	4.0	9.0	4.0	14.5	16.0	25.0	22.0	18.0	12.5
14	11.5	11.5	5.0	0.5	7.0	4.0	17.0	21.0	19.0	25.0	18.0	15.0
15	19.0	7.0	4.0	10.5	4.0	11.0	14.0	15.0	21.0	26.0	17.5	25.0
16	10.5	13.0	5.5	10.5	5.0	8.5	15.5	23.0	23.0	25.5	20.0	17.5
17	10.0	13.5	3.5	6.0	8.5	5.0	17.0	17.0	18.0	18.0	28.0	17.0
18	23.0	9.5	5.0	3.0	7.0	10.0	18.0	20.0	17.0	20.0	17.0	16.5
19	13.5	7.0	7.0	7.5	3.0	11.0	14.0	19.0	17.0	21.0	17.0	24.5
20	11.5	12.0	1.0	8.0	14.0	17.5	15.0	14.5	19.5	24.0	18.5	16.0
21	18.5	15.0	7.0	5.5	9.0	10.0	19.5	15.0	25.5	20.5	20.0	13.0
22	13.5	10.5	10.0	5.0	2.5	5.0	14.0	15.5	29.5	23.5	18.0	9.5
23	12.5	12.5	7.5	6.0	5.5	5.0	10.5	16.0	17.5	33.0	18.0	11.0
24	17.0	15.0	7.0	9.0	4.0	15.5	13.0	14.0	17.0	27.0	18.0	13.0
25	12.5	12.5	3.0	4.0	5.0	19.0	13.0	19.5	29.0	18.5	30.0	11.5
26	13.0	10.0	4.0	11.5	8.5	12.0	13.0	15.5	15.0	19.0	16.0	12.0
27	13.5	8.0	8.0	9.0	8.5	11.0	12.0	15.5	20.0	22.0	22.0	16.0
28	9.0	7.5	7.5	10.0	5.0	3.0	10.0	16.0	17.0	18.5	18.0	24.0
29	10.0	4.5	7.0	4.5	---	4.5	11.0	14.5	20.0	19.0	15.0	12.0
30	10.5	4.0	6.0	8.0	---	13.0	9.0	16.5	18.0	18.5	18.0	11.5
31	7.5	---	7.5	5.0	---	5.5	---	13.0	---	18.0	27.0	---
MONTH	14.0	11.0	6.0	5.5	6.5	8.5	11.0	15.5	19.5	21.0	19.0	16.5
YEAR	MAX	33.0	MIN	0.5	MEAN	13.0						

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	84	2.9	37	465	46	16	96	4.1
2	13	83	2.9	44	540	64	16	82	3.5
3	14	114	4.3	41	463	51	16	74	3.2
4	14	130	4.9	41	349	39	16	80	3.5
5	14	145	5.5	39	409	43	16	64	2.8
6	14	137	5.2	37	390	39	16	63	2.7
7	19	115	5.9	35	330	31	16	35	1.5
8	20	120	6.5	33	293	26	16	32	1.4
9	17	76	3.5	27	183	13	16	36	1.6
10	635	4470	23800	24	170	11	19	44	2.3
11	282	5230	5470	20	180	9.7	17	37	1.7
12	61	1550	255	20	171	9.2	17	40	1.8
13	46	1000	124	19	125	6.4	16	38	1.6
14	41	740	82	17	135	6.2	14	36	1.4
15	37	1050	105	17	107	4.9	13	34	1.2
16	29	476	37	16	117	5.1	16	38	1.6
17	24	350	23	16	144	6.2	17	64	2.9
18	20	270	15	16	190	8.2	14	162	6.1
19	20	255	14	16	107	4.6	14	37	1.4
20	19	187	9.6	16	92	4.0	14	46	1.7
21	19	171	8.8	16	109	4.7	19	37	1.9
22	19	202	10	14	125	4.7	17	34	1.6
23	19	135	6.9	16	94	4.1	14	29	1.1
24	19	135	6.9	17	138	6.3	14	27	1.0
25	24	330	21	17	90	4.1	10	25	0.68
26	37	1310	131	16	70	3.0	14	34	1.3
27	24	350	23	16	104	4.5	17	300	14
28	24	225	15	16	124	5.4	16	900	39
29	107	3230	1030	16	103	4.4	24	170	11
30	64	1750	302	14	107	4.0	22	38	2.3
31	46	840	104	---	---	---	19	30	1.5
MONTH	1754	---	31634.8	689	---	472.7	501	---	123.38

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14	53	2.0	16	18	.78	13	10	.35
2	16	73	3.2	14	13	.49	12	7	.23
3	11	62	1.8	14	14	.53	12	9	.29
4	12	74	2.4	14	13	.49	12	23	.75
5	12	102	3.3	13	19	.67	13	36	1.3
6	16	72	3.1	13	14	.49	13	14	.49
7	22	244	14	14	40	1.5	13	8	.28
8	19	487	25	16	28	1.2	16	10	.43
9	20	75	4.1	14	11	.42	22	32	1.9
10	16	30	1.3	14	13	.49	25	26	1.8
11	12	125	4.1	14	12	.45	39	385	41
12	10	33	.89	13	18	.63	88	2330	554
13	14	22	.83	13	10	.35	58	1360	213
14	24	40	2.6	13	15	.53	48	674	87
15	20	34	1.8	13	14	.49	33	347	31
16	18	34	1.7	16	13	.56	27	232	17
17	17	23	1.1	17	13	.60	27	207	15
18	17	18	.83	16	18	.78	22	173	10
19	16	14	.60	16	14	.60	20	132	7.1
20	14	21	.79	14	19	.72	16	127	5.5
21	14	28	1.1	13	18	.63	14	102	3.9
22	12	29	.94	10	20	.54	13	112	3.9
23	14	31	1.2	10	17	.46	12	92	3.0
24	13	25	.88	14	19	.72	14	99	3.7
25	14	17	.64	16	20	.86	25	212	14
26	13	18	.63	14	20	.76	25	200	13
27	13	18	.63	13	19	.67	17	152	7.0
28	13	26	.91	13	10	.35	22	218	13
29	13	24	.84	---	---	---	27	279	20
30	14	43	1.6	---	---	---	29	352	28
31	16	25	1.1	---	---	---	24	226	15
MONTH	469	---	85.91	390	---	17.76	751	---	1112.92

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	78	4.0	116	748	234	276	1530	1140
2	16	52	2.2	97	555	145	221	828	494
3	14	56	2.2	82	469	104	173	580	271
4	13	61	2.1	69	305	57	168	753	342
5	13	45	1.6	64	370	64	164	947	419
6	13	43	1.5	91	967	238	202	1050	573
7	14	52	2.0	156	1580	665	226	1010	616
8	14	47	1.8	151	1190	485	276	1120	835
9	14	42	1.6	134	851	308	299	1170	945
10	17	47	2.2	101	562	153	337	2520	3040
11	20	55	3.0	108	655	191	408	5150	5670
12	22	85	5.0	104	531	149	349	3110	2930
13	37	225	22	130	735	258	330	1550	1380
14	51	541	74	211	2110	1290	259	1030	720
15	124	2660	1500	270	2720	1980	202	755	412
16	312	6020	5070	281	2430	1840	182	471	231
17	264	4630	3300	312	2440	2060	168	519	235
18	221	4380	2610	336	2210	2000	164	414	183
19	287	4130	3200	342	2180	2010	134	423	153
20	287	7480	5800	330	2200	1960	123	345	115
21	221	1750	1040	312	1830	1540	108	306	89
22	173	1010	472	305	1600	1320	90	227	55
23	143	770	297	318	1540	1320	70	156	29
24	168	1400	635	349	1600	1510	54	157	23
25	164	1540	682	259	1390	972	25	75	5.1
26	156	1870	788	226	933	569	19	50	2.6
27	232	2540	1590	216	1000	583	16	37	1.6
28	270	3280	2390	281	1230	933	16	53	2.3
29	211	2290	1300	388	2550	2670	14	36	1.4
30	143	1220	471	375	3280	3320	14	69	2.6
31	---	---	---	362	1920	1880	---	---	---
MONTH	3653	---	31270.2	6876	---	32718	5087	---	20915.6

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18	48	2.3	24	287	19	16	191	8.3
2	25	60	4.1	25	376	25	16	122	5.3
3	31	91	7.6	22	184	11	17	127	5.8
4	29	28	2.2	20	185	10	18	580	28
5	55	935	298	19	200	10	16	158	6.8
6	44	1250	148	17	143	6.6	16	191	8.3
7	25	170	11	16	128	5.5	200	5850	3160
8	20	115	6.2	16	139	6.0	150	3100	1260
9	19	90	4.6	17	137	6.3	160	1760	760
10	20	42	2.3	17	106	4.9	120	3090	1000
11	25	187	13	17	118	5.4	250	1950	1320
12	94	1380	917	19	159	8.2	410	6550	7250
13	1110	16700	69300	22	126	7.5	310	5550	4650
14	312	11100	9350	25	135	9.1	240	2770	1790
15	130	6900	2420	24	108	7.0	180	1740	846
16	134	4680	1690	51	1500	253	140	1240	469
17	116	2950	924	27	132	9.6	115	660	205
18	138	3410	1270	24	91	5.9	80	390	84
19	151	2500	1020	22	85	5.0	70	235	44
20	119	2000	643	22	67	4.0	60	161	26
21	101	1230	335	26	238	25	75	882	179
22	61	775	128	43	571	69	52	412	58
23	41	360	40	25	255	17	50	206	28
24	54	1000	146	20	107	5.8	51	438	60
25	69	1520	283	17	83	3.8	35	197	19
26	113	4380	1430	17	80	3.7	25	129	8.7
27	64	3510	607	16	82	3.5	21	77	4.4
28	41	1250	138	26	696	66	21	99	5.6
29	27	392	29	20	685	37	21	90	5.1
30	22	234	14	25	931	63	20	84	4.5
31	20	213	12	18	366	18	---	---	---
MONTH	3228	---	91195.3	699	---	730.8	2955	---	23298.8
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)				27,052.00				
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)				233,576.17				

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (00154)	SUS- PENDED SEDIM- ENT (T/DAY) (00155)	SUS. SED. FALL DIAM. % FINEH THAN (002 MM) (70337)	SUS. SED. FALL DIAM. % FINEH THAN (004 MM) (70338)	SUS. SED. FALL DIAM. % FINEH THAN (016 MM) (70340)	SUS. SED. FALL DIAM. % FINEH THAN (062 MM) (70342)	SUS. SED. FALL DIAM. % FINEH THAN (125 MM) (70343)
OCT.										
10...	1630	14.5	1160	10690	33290	22	27	41	82	94
26...	0900	13.0	39	1540	162	68	84	92	--	--
MAR.										
12...	0915	5.0	91	2660	604	54	70	92	--	--
APR.										
16...	1915	16.0	401	5600	6960	36	44	69	90	96
25...	0857	9.0	107	1610	413	33	39	64	88	94
MAY										
14...	1455	21.0	187	1770	894	25	31	54	85	99
21...	0900	15.0	299	1920	1550	18	22	36	63	72
JUNE										
11...	0740	13.0	395	4710	5020	37	46	64	88	96
JULY										
13...	0900	17.0	2630	23300	165000	36	44	66	93	98
28...	1630	28.0	35	1310	124	15	16	18	--	--
SEP.										
07...	1100	20.0	200	14000	7560	47	60	82	94	97
24...	1630	22.5	51	367	51	65	75	91	--	--

## 08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)	SUS. SED. FALL DIAM. % FINER THAN (70336)
OCT.									
10...	100	--	--	--	--	--	--	--	--
26...	--	--	--	94	95	98	99	100	--
MAR.									
12...	--	--	--	97	98	99	100	--	--
APR.									
16...	99	100	--	--	--	--	--	--	--
25...	100	--	--	--	--	--	--	--	--
MAY									
14...	100	--	--	--	--	--	--	--	--
21...	89	99	100	--	--	--	--	--	--
JUNE									
11...	100	--	--	--	--	--	--	--	--
JULY									
13...	100	--	--	--	--	--	--	--	--
28...	--	--	--	19	20	24	88	98	100
SEP.									
07...	99	100	--	--	--	--	--	--	--
24...	--	--	--	93	96	99	100	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, at gaging station 9 mi (14.5 km) southeast of Puerto de Luna, 15.8 mi (25.4 km) upstream from Alamogordo Dam, and at mile 726.2 (1,168.5 km).

DRAINAGE AREA.--3,970 mi<sup>2</sup> (10,280 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1939 to September 1941, December 1942 to April 1943, November 1946 to June 1959, October 1967 to current year.

Water temperatures: June 1949 to June 1959, October 1967 to August 1969.

Sediment records: January 1948 to November 1958, July 1975 to current year.

REMARKS.--Prior to 1968 Water Year published as 8-3834. Pecos River at Puerto de Luna, N. Mex., which was located at bridge in the village of Puerto de Luna, 9 mi (14.5 km) northwest of the gaging station.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (STO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
NOV. 27...	1320	99	13	--	520	72	90	2.7	82	0	1500	140
JAN. 22...	1530	96	13	--	500	68	90	2.4	147	0	1400	130
MAR. 24...	1555	84	14	--	500	59	96	2.8	140	--	1500	140
APR. 08...	1530	78	14	30	550	66	93	2.8	135	--	1400	140
MAY 15...	1520	307	--	--	--	--	--	--	--	--	--	--
29...	1510	346	--	--	--	--	--	--	--	0	--	--
JUNE 12...	1610	343	--	--	--	--	--	--	--	--	--	--
JULY 08...	1530	94	--	--	--	--	--	--	--	0	--	--
24...	1010	325	12	0	480	48	44	3.7	124	0	1200	63
AUG. 07...	1435	72	--	--	--	--	--	--	--	0	--	--
27...	1400	69	14	10	540	69	83	2.7	121	0	1500	120
28...	1600	79	--	--	--	--	--	--	--	0	--	--
SEP. 23...	1445	108	12	20	380	47	58	2.4	148	0	1000	82

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00530)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUES AT 180 C) (MG/L) (70300)
NOV. 27...	.4	--	--	--	.01	--	--	--	--	--	--
JAN. 22...	.4	--	--	--	.05	--	--	--	--	--	--
MAR. 24...	.6	--	--	--	.01	--	--	--	--	--	--
APR. 08...	.6	--	--	--	.00	--	--	--	--	.02	2690
MAY 15...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
JUNE 12...	--	--	--	--	--	--	--	--	--	--	--
JULY 08...	--	--	--	--	--	--	--	--	--	--	--
24...	.4	.57	.01	.63	.58	.13	.16	.17	.21	.01	--
AUG. 07...	--	--	--	--	--	--	--	--	--	--	--
27...	.6	--	--	.02	.01	.00	.38	.40	.15	.02	--
28...	--	--	--	--	--	--	--	--	--	--	--
SEP. 23...	.4	--	--	.12	.12	.01	.90	1.0	.13	.02	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00980)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV.											
27...	2380	1600	1500	1.0	2720	7.7	--	11.5	--	--	--
JAN.											
27...	2240	1500	1400	1.0	2420	7.6	--	7.0	--	--	--
MAR.											
24...	2470	1700	1600	1.0	2770	--	--	14.0	--	--	--
APR.											
08...	2330	1600	1500	1.0	2790	--	--	13.0	--	--	110
MAY											
15...	--	--	--	--	1210	--	--	--	--	--	--
24...	--	--	--	--	1030	7.6	--	--	--	--	--
JUNE											
12...	--	--	--	--	894	--	--	--	--	--	--
JULY											
08...	--	--	--	--	2510	7.6	--	28.0	--	--	--
24...	1910	1400	1300	.5	2200	7.6	26.0	22.0	14000	6.9	60
AUG.											
07...	--	--	--	--	2690	7.5	--	27.5	--	--	--
27...	2390	1600	1500	.9	2600	8.1	31.0	27.0	80	6.7	100
28...	--	--	--	--	2650	7.7	--	28.0	--	--	--
SEP.											
23...	1660	1190	1000	.7	2000	7.9	30.0	22.0	130	8.0	80

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREPT- TOCOCCI (COL- ONIES PER 100 ML) (31679)
JULY			
24...	1010	32000	14000
AUG.			
27...	1400	77	95
SEP.			
23...	1445	320	700

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (00154)	SUS- PENDED SEDI- MENT CHARGE (T/DAY) (00155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
JULY						
24...	1010	22.0	325	6710	5890	98
AUG.						
27...	1400	27.0	69	189	35	79
SEP.						
23...	1445	22.0	135	401	146	81



08384500 PECOS RIVER BELOW SUMNER DAM, N. MEX.  
(Formerly published as Pecos River below Alamogordo Dam)

LOCATION.--Lat 34°36'15", long 104°23'14", in lot 1, sec.2, T.4 N., R.24 E., De Baca County, at gaging station 1,200 ft (366 m) downstream from Alamogordo Dam, 2.9 mi (4.7 km) upstream from Salada Creek, 4.6 mi (7.4 km) northeast of Guadalupe, 12.2 (19.6 km) northwest of Fort Sumner, and at mile 710.7 (1,143.5 km).

DRAINAGE AREA.--4,390 mi<sup>2</sup> (11,370 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analysis: June 1937 to January 1966.

Specific conductance: March 1972 to current year.

Water temperature: March 1972 to current year.

Sediment records: March 1972 to current year.

REMARKS.--Records of reservoir levels and contents furnished by Bureau of Reclamation.

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS DISCHARGE (CFS) (00061)	SUSPENDED SEDIMENT (MG/L) (80154)	SUSPENDED SEDIMENT DISCHARGE (T/DAY) (80155)	ELEVATION ABOVE MEAN SEA LEVEL (FT) (72020)	RESERVOIR STORAGE (AC-FT) (00054)
OCT.								
02...	1830	1960	16.5	74	104	21	4237	13010
03...	1800	2020	16.0	76	89	18	4237	13010
17...	1845	2040	15.5	31	14800	1240	4243	21230
18...	1830	1960	15.0	78	348	73	4243	21370
25...	0930	1990	15.0	.49	211	.28	4244	22260
28...	0805	2050	15.0	74	200	40	4244	22710
NOV.								
13...	1600	2030	12.0	.51	85	.12	4247	26920
MAR.								
17...	1045	2200	8.0	86	73	17	4257	49250
24...	0930	2250	9.0	95	99	25	4257	48730
31...	1045	2270	9.0	86	95	22	4257	48210
APR.								
20...	1800	2280	13.0	74	90	18	4258	50560
21...	1100	2280	12.5	78	193	41	4258	50820
28...	1100	2250	13.0	93	93	23	4259	52450
MAY								
07...	0900	2160	14.0	90	95	23	4259	54090
09...	1450	2270	--	86	92	21	4259	54650
09...	1540	2220	--	86	305	71	4259	54650
12...	0730	2150	14.0	84	146	33	4260	55210
15...	0915	2220	--	108	61	18	4260	55490
15...	1010	2190	--	108	192	56	4260	55490
15...	1231	2160	--	108	158	46	4260	55490
17...	1440	2190	--	84	128	29	4260	56040
22...	0800	2060	17.0	100	153	41	4261	58040
30...	0700	1950	17.0	112	89	27	4262	60950
30...	0900	1980	18.0	85	347	80	4262	60950
30...	1100	1960	18.0	85	376	86	4262	60950
JUNE								
04...	0700	2010	17.0	97	91	24	4262	63340
04...	0900	1970	18.0	902	463	1130	4262	63340
04...	1900	1950	18.0	1050	109	309	4262	63340
09...	1130	1880	19.0	1090	78	230	4259	54090
16...	1030	1730	20.5	1110	86	258	4255	42820
23...	0700	1700	21.0	1090	84	247	4248	29020
JULY								
01...	1045	1690	23.0	1090	108	318	4234	10600
01...	1540	1680	23.0	1110	103	309	4234	10600
02...	1500	1730	24.0	1090	107	315	4231	7610

08384500 PECOS RIVER BELOW SUMNER DAM, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHQS) (00095)	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT CHARGE (T/DAY) (80155)	ELE- VATION ABOVE MEAN SEA LEVEL (FT) (72020)	RESER- VOIR STORAGE (AC-FT) (00054)
JULY								
03...	0905	1740	24.0	1090	124	365	4226	4540
03...	1600	1750	24.0	98	167	44	4226	4540
04...	0925	1780	24.0	100	197	53	4226	4800
07...	0930	1850	24.0	61	224	37	4226	4480
07...	1600	1860	23.0	94	161	41	4226	4480
07...	1800	1860	23.5	86	150	35	4226	4480
08...	0800	1870	23.5	88	103	24	4227	4600
08...	1600	1850	24.0	88	115	27	4227	4500
09...	0800	1870	23.5	84	161	37	4227	4660
09...	1920	1860	23.0	84	142	32	4227	4660
10...	0730	1880	23.5	85	134	31	4227	4720
10...	1900	1910	24.5	78	84	18	4227	4720
11...	1400	1910	24.5	78	163	34	4227	4850
11...	1805	1920	24.0	78	136	29	4227	4850
12...	1050	1940	--	94	117	30	4227	4980
13...	1710	1950	24.0	85	118	27	4227	5050
14...	0730	1610	23.0	53	30900	4420	4231	7770
14...	1005	1790	23.5	87	13100	3080	4231	7770
14...	1155	1820	23.5	88	8170	1940	4231	7770
14...	1855	1890	23.0	90	1020	248	4231	7770
15...	1415	1870	24.0	90	197	48	4232	9050
16...	1430	1760	24.0	91	139	34	4233	9760
17...	0910	1720	22.5	91	195	48	4234	10040
18...	1340	1660	24.0	91	152	37	4234	10410
22...	0930	1470	23.5	98	114	30	4236	12180
23...	1025	1430	23.0	94	106	27	4237	13010
24...	0820	1380	22.5	96	155	40	4237	13220
25...	1405	1450	24.0	67	187	34	4237	13540
28...	1430	1560	24.0	62	166	28	4238	14090
29...	0900	1530	23.0	69	179	33	4238	14310
30...	0700	1510	22.5	69	138	260	4238	14310
AUG.								
04...	1425	1820	24.0	102	123	34	4239	15690
05...	0900	1760	23.5	100	113	31	4239	15570
06...	0825	1700	23.5	101	148	40	4239	15460
07...	1450	1660	24.0	98	130	34	4239	15460
13...	0900	1760	25.0	99	126	34	4238	14760
14...	0810	1850	23.0	99	102	27	4238	14650
15...	0900	1800	23.0	104	90	25	4238	14530
20...	0900	1860	22.5	74	90	18	4238	14650
22...	0852	1870	23.0	73	100	20	4238	14760
25...	0740	1920	22.5	74	84	17	4238	14680
27...	0900	2030	22.5	73	78	15	4238	14760
28...	1535	2000	23.0	72	85	17	4238	14760
29...	1905	1990	22.5	73	105	21	4238	14760
SEP.								
02...	1500	2030	23.5	88	105	25	4238	14650
03...	0930	2020	22.5	93	91	23	4238	14420
04...	0900	2040	22.5	84	95	22	4238	14420
08...	1830	2170	21.5	87	105	25	4238	14200
09...	0900	2140	--	88	182	43	4238	14650
18...	0910	1840	18.5	78	52	11	4243	20930
23...	0950	1740	13.0	80	37	8.0	4244	21820

08386000 PECOS RIVER NEAR ACME, N. MEX.

LOCATION.--Lat 33°32'10", long 104°22'34", in SW¼NW¼ sec.14, T.9 S., R.25 E., Chaves County, at gaging station, 3.0 mi (4.8 km) downstream from U.S. Highway 70, 3.7 mi (6.0 km) downstream from Salt Creek, 4.7 mi (7.6 km) southwest of Acme, 14 mi (22.5 km) northeast of Roswell, and at mile 591.2 (951.2 km).

DRAINAGE AREA.--11,380 mi<sup>2</sup> (29,470 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: May 1952 to August 1969.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.												
21...	1300	35	13	60	370	82	250	4.6	98	0	1200	370
NOV.												
12...	1050	34	13	--	410	89	330	4.4	98	0	1300	480
DEC.												
20...	1005	16	13	--	470	110	410	4.4	145	0	1500	630
JAN.												
02...	1400	34	11	--	410	87	370	4.0	135	0	1300	570
FEB.												
06...	1430	18	9.4	--	470	120	410	4.8	122	0	1400	640
MAR.												
07...	1030	7.6	7.1	--	520	140	570	5.6	116	--	1600	930
20...	1425	4.9	7.8	--	590	160	740	6.4	129	--	1800	1200
APR.												
07...	1050	16	9.8	10	570	130	440	6.4	117	--	1900	610
21...	1055	9.4	9.7	--	570	130	500	6.8	118	--	2000	710
MAY												
02...	1040	1.9	9.2	--	740	220	1200	9.7	143	--	2600	1900
16...	1155	1.6	7.9	--	740	190	810	9.1	108	--	2500	1200
28...	1000	.03	8.1	--	950	270	1700	13	140	--	3100	2900
JUNE												
09...	1005	772	12	--	450	70	110	4.5	114	--	1300	140
20...	0945	833	9.9	--	380	50	73	3.5	112	0	1000	100
JULY												
05...	1100	705	12	--	330	49	74	3.1	111	0	960	100
AUG.												
14...	1030	.79	--	--	--	--	--	--	--	0	--	--
SEP.												
15...	1125	97	9.6	--	250	53	190	3.6	114	0	810	100
18...	1115	21	--	--	--	--	--	--	--	0	--	--

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SOL OF TUMENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00000)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
OCT.												
21...	.5	.00	.00	2490	2340	1300	1200	3.1	3200	7.7	18.0	280
NOV.												
12...	.5	.11	--	--	2680	1400	1300	3.9	3700	7.9	12.0	--
DEC.												
20...	.5	.27	--	--	3210	1600	1500	4.4	4300	7.7	1.0	--
JAN.												
02...	.5	.27	--	--	2820	1400	1300	4.3	3840	7.8	5.0	--
FEB.												
06...	.5	.11	--	--	3070	1500	1400	4.5	4240	8.0	9.0	--
MAR.												
07...	.5	.02	--	--	3830	1400	1400	5.7	5370	--	11.0	--
20...	.5	.03	--	--	4570	2100	2000	7.0	6080	--	24.0	--
APR.												
07...	.7	.01	.02	4120	3730	2000	1900	4.3	4980	--	13.5	380
21...	.7	.01	--	--	3990	2000	1900	4.9	5205	--	7.0	--
MAY												
07...	.6	.02	--	--	6750	2800	2600	10	8760	--	22.0	--
16...	.7	.02	--	--	5510	2600	2500	6.9	7004	--	25.0	--
28...	.7	.04	--	--	9010	3500	3400	13	11400	--	21.0	--
JUNE												
09...	.6	.20	--	--	2140	1400	1300	1.3	2620	--	20.5	--
20...	.6	.06	--	--	1670	1200	1100	.9	2100	7.6	22.0	--
JULY												
05...	.5	.06	--	--	1500	1000	940	1.0	2070	7.4	23.5	--
AUG.												
14...	--	--	--	--	--	--	--	--	687	7.4	30.5	--
SEP.												
15...	.6	.50	--	--	1390	840	750	1.5	1870	7.2	20.5	--
18...	--	--	--	--	--	--	--	--	2340	7.5	23.5	--

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.  
(Irrigation, and surveillance network station)

LOCATION.--Lat 32°50'25", long 104°19'23", in NW¼ sec.18, T.17 S., R.27 E., Eddy County, at gaging station at bridge on State Highway 83, 4.3 mi (6.9 km) east of Artesia, 7.0 mi (11.3 km) north of mouth of Rio Pecos, 17 mi (27.4 km) north of McMillan Dam, and at mile 507.1 (815.9 km).

DRAINAGE AREA.--15,300 mi<sup>2</sup> (39,630 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: April 1949 to current year.

Sediment records: January 1949 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 14,900 mg/l Sept. 1-16; minimum, 1,050 mg/l Oct. 23-26.

Hardness: Maximum, 3,800 mg/l Sept. 1-16, June 1-7; minimum, 510 mg/l Oct. 23-26.

Specific conductance: Maximum daily, 24,100 micromhos Sept. 10; minimum daily, 1,160 micromhos Oct. 24.

Water temperatures: Maximum, 33.5°C Aug. 15; minimum, 3.0°C Jan. 14.

Sediment concentrations: Maximum daily, 17,900 mg/l July 24; minimum daily, 6 mg/l Jan. 20, 26.

Sediment discharge: Maximum daily, 60,900 tons (55,200 tonnes) July 24; minimum daily, .55 ton (0.5 tonne) May 17.

Period of record:

Dissolved solids: Maximum, 18,000 mg/l June 6, 1972; minimum, 461 mg/l May 31, 1963.

Hardness: Maximum, 4,740 mg/l May 3; minimum, 235 mg/l May 31, 1963.

Specific conductance: Maximum daily, 28,600 micromhos June 24, 1971; minimum daily, 464 micromhos Sept. 23, 1974.

Water temperatures: Maximum, 36.0°C July 27, 1966, July 25, 1969; minimum, freezing point on many days during winter months of most years.

Sediment concentrations: Maximum daily, 21,300 mg/l Aug. 1, 1962; minimum daily, no flow on many days during July 1953, July and August 1954, July 1957, July to October 1964.

Sediment discharge: Maximum daily, 183,000 tons (166,000 tonnes) Sept. 26, 1955; minimum daily, 0 tons (0 tonnes) on many days during July 1953, July and August 1954, July 1957, July to October 1964.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASS- SODIUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (HC03) (MG/L) (00440)	DIS- SOLVED CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.												
01-12	92	16	10	550	210	1400	9.0	159	0	1700	2200	.6
13-16	398	12	--	300	64	360	5.6	150	0	840	580	.5
17-22	204	15	--	360	110	650	6.8	185	0	960	1100	.6
23-26	1460	8.8	--	150	34	170	4.3	136	0	350	260	.3
27-31	276	13	--	350	100	610	5.8	173	0	1000	980	.5
NOV.												
01-08	177	18	--	500	170	1000	8.5	226	0	1600	1700	.6
09-30	117	17	--	580	190	1300	10	227	0	1900	2200	.7
DEC.												
01-31	90	14	--	610	230	1400	12	229	0	1900	2300	.8
JAN.												
01-08	96	12	--	560	230	1300	11	218	0	2000	2200	1.1
09-31	69	10	--	620	270	1600	13	216	0	2000	2700	1.0
FEB.												
01-06	89	9.7	--	590	210	1500	12	182	--	1900	2500	.8
07-11	101	14	--	500	180	1100	10	202	--	1600	1900	.8
12-28	67	9.0	--	620	260	1600	13	193	--	2000	2700	.8
MAR.												
01-22	55	12	--	640	250	1600	13	190	--	2000	2700	.9
23-31	24	13	--	800	370	2600	22	214	--	2400	4400	.8
APR.												
01-11	78	8.2	--	700	330	2400	22	166	--	2600	3900	.8
12-25	40	6.7	60	670	290	1800	17	150	--	2300	3000	.8
26-30	26	6.0	--	720	320	2200	20	151	--	2700	3600	.8
MAY												
01-04	18	11	--	770	390	2500	23	183	--	2800	4200	.9
05-31	15	16	--	370	440	3300	31	201	--	3000	5300	.9
JUNE												
01-07	14	24	--	840	420	2900	12	125	--	2900	5000	.9
08-10	415	26	--	590	180	850	12	162	--	2000	1300	.9
11-14	714	17	--	470	73	170	5.5	142	--	1300	230	.7
15-30	784	15	--	390	56	110	4.3	125	--	1100	150	.6
JULY												
01-06	779	15	--	400	52	95	3.6	129	0	1000	140	.6
07-13	174	15	--	400	64	210	4.6	106	0	1100	340	.6
14-17	87	16	--	470	87	490	6.6	109	0	1300	770	.6
18-23	142	17	--	530	150	860	10	107	0	1600	1400	.6
24-28	445	14	--	200	34	160	5.0	138	0	560	200	.6
29-31	87	14	--	300	74	460	6.5	121	0	840	720	.7
AUG.												
01-04	54	15	--	400	110	590	7.3	129	0	1300	890	.7
05-09	39	15	--	480	140	930	10	130	0	1600	1500	.7
10-13	9.0	20	--	460	200	1500	17	169	0	2100	2200	.6
14-18	8.0	19	--	730	250	2100	24	176	0	2400	3400	.7
19-31	9.0	16	--	800	300	2700	28	167	0	3000	4400	.7
SEP.												
01-16	9.3	16	--	870	390	4100	47	196	0	3100	6300	.7
17-22	26	12	--	490	140	940	11	140	0	1600	1500	.8
23-27	23	13	--	600	210	1800	21	165	0	1900	2800	.8
28-30	39	13	--	510	160	930	11	132	0	1600	1500	.7
WTO. AVG.	--	14	--	426	116	631	7.4	156	--	1280	1020	.6
TIME WTO.												
AVG.	145	14	--	569	235	1630	15	180	--	1990	2650	.8
TOT. LOAD (TONS)	--	2010	--	60800	16600	89900	1060	22200	--	183000	146000	90

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS PER AC-FT) (70303)	DIS- SOLVED SOLIDS PER (TONS DAY) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
01-12	.37	.07	600	6490	6170	8.39	1530	2200	2100	13	9300	7.2
13-16	.49	--	--	--	2240	3.05	2410	1000	880	4.9	3340	7.4
17-22	1.9	--	--	--	3300	4.49	1820	1400	1200	7.7	5090	7.5
23-26	.82	--	--	--	1050	1.43	4140	510	400	3.3	1710	7.6
27-31	1.2	--	--	--	3150	4.28	2350	1300	1200	7.4	4860	7.5
NOV.												
01-08	1.8	--	--	--	5120	6.96	2450	1900	1700	9.9	7640	7.6
09-30	1.7	--	--	--	6320	8.60	2000	2200	2000	12	9400	7.5
DEC.												
01-31	1.8	--	--	--	6590	8.96	1600	2500	2300	12	9960	7.6
JAN.												
01-08	1.9	--	--	--	6430	8.74	1670	2300	2100	12	9240	7.6
09-31	1.1	--	--	--	7330	9.97	1370	2700	2500	14	11000	7.6
FEB.												
01-06	.89	--	--	--	6820	9.28	1640	2300	2200	14	9960	--
07-11	1.5	--	--	--	5410	7.36	1480	2000	1800	11	7710	--
12-28	.87	--	--	--	7300	9.93	1320	2600	2500	14	10400	--
MAR.												
01-22	1.1	--	--	--	7310	9.94	1090	2600	2500	14	11000	--
23-31	.41	--	--	--	10700	14.6	693	3500	3300	19	16100	--
APR.												
01-11	.14	--	--	--	10000	13.6	756	3100	3000	19	14600	--
12-25	.14	.09	730	8770	8160	11.1	881	2900	2700	15	11400	--
26-30	.15	--	--	--	9640	13.1	677	3100	3000	17	13400	--
MAY												
01-04	.19	--	--	--	10800	14.7	525	3500	3400	18	15400	--
05-31	.13	--	--	--	12600	17.1	510	2700	2600	27	18600	--
JUNE												
01-07	.10	--	--	--	12200	16.6	461	3800	3700	20	17800	--
08-10	.02	--	--	--	5040	6.85	5650	2200	2100	7.9	6800	--
11-14	.35	--	--	--	2340	3.18	4510	1500	1400	1.9	2870	--
15-30	.35	--	--	--	1890	2.57	4000	1200	1100	1.4	2400	--
JULY												
01-06	.27	--	--	--	1770	2.41	3720	1200	1100	1.2	2210	7.2
07-13	.53	--	--	--	2190	2.98	1030	1300	1200	2.6	2860	7.4
14-17	.28	--	--	--	3200	4.35	752	1500	1400	5.4	4420	7.5
18-23	.49	--	--	--	4620	6.28	1770	1900	1900	8.5	6360	7.5
24-28	.30	--	--	--	1240	1.69	1490	640	530	2.8	1820	7.7
29-31	.75	--	--	--	2480	3.37	583	1100	950	6.2	3680	7.6
AUG.												
01-04	.51	--	--	--	3380	4.60	493	1500	1300	6.7	4830	7.1
05-09	.37	--	--	--	4740	6.45	499	1800	1700	9.6	6850	7.2
10-13	.43	--	--	--	6580	8.95	160	2000	1800	15	9620	7.4
14-18	.35	--	--	--	9010	12.3	195	2900	2700	17	13000	7.2
19-31	.35	--	--	--	11300	15.4	275	3200	3100	21	15800	7.3
SEP.												
01-16	.53	--	--	--	14900	20.3	374	3800	3600	29	21300	6.9
17-22	.57	--	--	--	4770	6.49	335	1800	1700	9.6	6830	7.1
23-27	.35	--	--	--	7430	10.1	461	2400	2200	16	10900	7.2
28-30	.35	--	--	--	4790	6.51	504	1900	1800	9.2	6960	7.1
WTD. AVG.												
TIME WTD.	.72	--	--	--	3580	4.87	--	1540	1420	6.2	5120	--
AVG.	.79	--	--	--	7200	9.79	--	2380	2240	14	10500	--
TOT. LOAD (TONS)												
	103	--	--	--	511000	--	--	--	--	--	--	--

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-
		TANEONS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED			
		DIS-	SILICA	IRON	MANG-	CAL-	NE-	SODIUM	POT-			
		CHARGE	(SI02)	(FE)	(MANG)	(CA)	(MG)	(NA)	(K)	(HCO3)	(CO3)	(SO4)
		(CF'S)	(MG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
		(00001)	(00005)	(01046)	(01056)	(00015)	(00025)	(00030)	(00035)	(00040)	(00045)	(00045)
JULY												
16...	1200	83	14	10	--	480	120	490	7.0	92	0	1600
AUG.												
22...	1100	11	14	10	30	730	320	1300	19	131	0	2800
SEP.												
19...	1030	19	10	0	--	450	140	720	9.1	111	0	1700
		DIS-	DIS-	DIS-		TOTAL	TOTAL	DIS-	DIS-	DIS-		
		SOLVED	SOLVED	SOLVED	AMMONIA	ORGANIC	ORGANIC	SOLVED	SOLVED	SOLVED		
		CHLO-	FLUO-	NITRIT-	NITRO-	NITRO-	NITRO-	CHLO-	SOLIDS	SOLIDS		
		RIDE	RIDE	PLUS	GEN	GEN	GEN	RIDE	(RESI-	(SUM OF		
		(CL)	(F)	(N)	(N)	(N)	(N)	(P)	DUE AT	CONSTIT-	HARD-	
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	100 C)	TUENTS)	NESS	
		(00040)	(00050)	(00060)	(00061)	(00060)	(00060)	(00065)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
									(00067)	(00068)	(00069)	(00090)
JULY												
16...	000	.7	.01	.00	.60	.62	.63	.12	.00	3000	3560	1700
AUG.												
22...	3200	.4	.10	.02	.60	.67	.77	.23	.01	9130	9050	3100
SEP.												
19...	1000	.7	.30	.30	.04	.96	1.3	.11	.00	4090	4090	1700
		NON-	SODIUM	SPE-					CHEM-	DIS-	SUS-	DIS-
		CAR-	AD-	CIFIC	AIR	TEMPER-	TEMPER-	TUR-	ICAL	SOL-	PENDEO	SOLVED
		BONATE	SORP-	DUCT-	TEMPER-	ATURE	ATURE	BID-	OXYGEN	VED	ORGANIC	BORON
		HARD-	TION	ANCE	ATURE	(DEG C)	(DEG C)	ITY	DEMAND	ORGANIC	ORGANIC	
		NESS	RATIO	(MICRO-				(JTU)	(HIGH	CARBON	CARBON	
		(MG/L)		MHOS)	(UNITS)				LEVEL)	(C)	(C)	(B)
		(00090)	(00091)	(00095)	(00090)	(00020)	(00010)	(00070)	(MG/L)	(MG/L)	(MG/L)	(UG/L)
									(00340)	(00081)	(00089)	(01020)
JULY												
16...	1700	5.2	4400	8.0	31.0	26.5	50	7.4	37	8.1	3.0	310
AUG.												
22...	3000	15	12200	7.8	30.0	27.0	120	7.0	44	45	1.4	990
SEP.												
19...	1600	7.6	5100	7.6	24.0	24.0	40	6.8	28	3.9	1.4	410

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	SOLVED	COBALT	SOLVED	COPPER	SOLVED	
		(AS)	ARSENIC	BORON	MIUM	CAD-	MIUM	CHRO-	(CO)	COBALT	(CU)	COPPER	
		(UG/L)	(AS)	(B)	(CD)	(CD)	(CR)	(CR)	(UG/L)	(CO)	(UG/L)	(CU)	
		(01002)	(01000)	(01020)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)	
AUG. 22...	1100	2	1	990	20	0	40	20	200	0	30	2	
DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		IRON	SOLVED	SOLVED	MAN-	SOLVED	MERCURY	SOLVED	SELE-	SOLVED	ZINC	SOLVED	
		(FE)	IRON	LEAD	GANESE	MAN-	GANESE	MERCURY	NIUM	SELE-	NIUM	ZINC	ZINC
		(UG/L)	(FE)	(PB)	(MN)	(MN)	(HG)	(HG)	(SE)	(SE)	(ZN)	(ZN)	
		(01045)	(01046)	(01051)	(01049)	(01055)	(01056)	(71900)	(71890)	(01147)	(01145)	(01092)	(01090)
AUG. 22...	2600	10	100	0	250	30	.0	.0	3	3	40	20	

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
JULY 16...	1200	64	50
AUG. 22...	1100	67	120

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.---Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7400	6250	9040	9540	11000	10500	15300	13800	16700	2200	4500	19700
2	8000	7000	9040	9290	11000	9810	14000	15000	17100	2220	4500	19700
3	8440	7660	9040	9050	10700	9810	13800	15900	17200	2210	4880	19700
4	9000	7660	9040	8900	10700	9720	14900	16900	17400	2200	5750	19900
5	9390	7390	8960	8680	9820	9720	15800	17800	17700	2220	6580	19600
6	10000	7720	8960	8680	9700	10200	16800	19300	17600	2250	7380	18700
7	10100	7890	9120	9050	7380	10800	16300	19400	17000	2440	6890	19700
8	10100	7780	9200	9130	7480	10900	15300	19700	17400	2850	6750	20800
9	10200	8270	9360	9540	7750	10900	14400	18900	6460	3020	7380	22800
10	10200	8540	9630	10000	8290	11400	13600	18800	3670	3060	8740	24100
11	8780	8820	9630	10000	8850	11900	13600	18900	3280	2930	9290	23500
12	7940	8900	9630	10200	9470	11800	12600	20400	3010	2840	9810	21800
13	4600	9050	9810	10200	9550	11400	12500	21500	2720	3340	10500	21900
14	2650	9130	9900	10400	9820	11400	12300	18500	2650	4100	11700	21600
15	2420	9210	9900	10400	10300	11700	12200	17200	2580	4430	13200	21800
16	2840	9300	10000	11000	10900	11700	11700	16800	2560	4750	13300	22500
17	4030	9910	10000	10800	10900	12000	11900	17000	2550	4910	13300	8340
18	4240	10200	10100	11000	10900	12200	12200	17300	2530	5500	13400	5160
19	4860	9810	10200	11400	10700	12100	13300	17500	2490	6210	16500	5510
20	5190	9720	10100	11400	10900	12800	11900	17800	2400	6100	19300	5870
21	5650	9460	10300	11000	11200	13100	11100	19100	2360	6380	15700	6410
22	6140	9300	10200	11100	11000	13300	10900	19200	2350	7190	13000	7670
23	2900	9210	10300	10800	10700	14800	11000	18300	2320	6820	11300	9950
24	1160	9680	10300	10500	10700	15400	11900	17800	2230	1620	12600	13500
25	1690	8680	10300	10500	10700	15400	12600	18000	2340	1800	14100	12000
26	2190	8750	10000	10600	10400	15900	13100	18400	2240	2080	14400	11800
27	3320	9130	10100	10700	10300	15700	13500	20000	2280	2360	14100	9660
28	4430	8900	10000	11000	10600	15700	14400	20500	2260	2800	15200	7190
29	5190	8750	9900	11000	---	16500	14000	20200	2250	3280	16100	6870
30	5510	8820	9700	11100	---	17600	13800	19400	2230	3800	18500	6810
31	5710	---	10000	11100	---	17600	---	17300	---	4200	18400	---
MONTH	5940	8660	9730	10260	10060	12700	13360	18280	6590	3620	11520	15150
YEAR	MAX	24100	MIN	1160	MEAN	10490						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	17.0	8.0	7.0	12.0	19.0	16.0	25.0	29.5	26.5	32.0	26.5
2	18.0	17.5	6.5	6.0	11.0	19.0	11.0	23.0	30.0	27.0	28.0	28.0
3	21.0	18.5	10.5	8.0	10.0	13.0	11.5	26.5	28.5	25.5	28.0	25.0
4	21.5	18.5	9.5	8.0	10.0	11.0	16.5	23.0	30.0	25.0	31.0	25.0
5	20.0	17.0	9.5	4.0	14.0	18.0	15.5	23.0	26.5	25.0	27.5	23.5
6	18.0	13.5	11.0	8.0	9.0	16.5	14.0	19.0	28.0	28.0	30.5	23.0
7	20.0	13.0	12.0	9.0	11.0	17.5	16.5	23.5	20.0	26.5	29.0	24.0
8	22.0	11.0	9.0	7.0	14.0	14.5	14.5	25.0	25.5	28.0	30.0	27.0
9	23.0	12.0	8.5	9.0	8.0	11.0	11.5	27.0	24.0	25.5	27.5	28.5
10	23.0	11.0	6.5	6.0	10.0	16.5	16.5	21.0	24.0	27.5	27.0	30.5
11	21.0	10.0	9.0	4.0	14.0	14.5	14.0	26.5	22.0	26.0	28.5	29.0
12	18.5	7.0	10.0	4.0	14.0	9.0	11.5	23.5	23.0	23.0	27.0	17.0
13	19.0	14.0	9.0	5.0	11.0	15.0	13.0	22.0	24.5	23.0	26.0	17.5
14	16.5	11.0	8.0	3.0	10.0	15.0	13.5	23.0	26.0	28.0	26.5	23.5
15	16.5	10.0	4.0	5.0	8.0	14.5	14.0	28.0	25.0	23.5	33.5	20.5
16	15.0	11.0	8.0	9.0	13.0	9.0	22.0	24.5	25.0	26.0	32.0	23.5
17	16.0	13.0	9.0	10.0	11.5	10.0	20.0	28.0	24.5	25.0	29.0	29.0
18	17.5	13.0	10.0	5.0	10.0	13.5	17.0	22.0	25.5	28.0	31.5	27.0
19	21.0	15.5	6.0	10.0	11.0	15.0	16.0	24.5	23.0	32.0	30.5	27.0
20	26.0	11.0	5.0	7.0	11.5	20.5	16.0	21.0	25.5	28.0	28.0	24.0
21	17.5	10.0	9.0	9.0	11.0	17.5	17.5	22.0	24.5	28.0	27.0	19.0
22	19.0	13.5	7.0	6.0	6.5	19.5	18.5	18.5	24.0	24.0	28.5	18.0
23	17.0	12.0	11.0	10.0	4.0	17.5	18.0	22.5	25.5	26.0	29.5	24.0
24	19.5	13.5	6.0	7.0	8.0	12.0	17.5	20.0	24.0	26.0	27.0	23.0
25	18.5	9.5	12.0	8.0	13.5	15.5	21.0	28.0	25.0	25.0	25.0	17.0
26	17.0	9.0	4.0	10.0	10.0	16.0	21.0	23.0	25.5	27.5	28.5	24.0
27	17.0	12.5	5.0	10.0	15.0	12.5	18.5	25.5	26.5	25.5	24.0	24.0
28	17.0	11.0	9.0	15.0	15.0	12.0	23.0	20.0	26.0	30.5	29.0	23.5
29	16.5	10.0	7.0	12.0	---	8.5	19.5	18.5	26.0	30.0	32.0	25.5
30	17.0	8.5	10.0	9.0	---	7.5	17.0	15.0	26.5	28.5	27.0	23.0
31	16.0	---	9.0	10.0	---	13.0	---	21.5	---	31.5	22.5	---
MONTH	19.0	12.5	8.5	7.5	11.0	14.5	16.5	23.0	25.5	27.0	28.5	24.0
YEAR	MAX	33.5	MIN	3.0	MEAN	18.0						

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

OCTOBER				NOVEMBER				DECEMBER	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	124	268	90	217	690	404	106	15	4.3
2	111	35	10	185	418	209	104	31	8.7
3	98	48	13	185	357	178	104	16	4.5
4	88	33	7.8	190	317	163	104	18	5.1
5	83	57	13	170	326	150	104	51	14
6	88	36	8.6	163	275	121	98	58	15
7	83	46	10	158	185	79	97	33	8.6
8	81	28	6.1	151	185	75	96	13	3.4
9	83	29	6.5	146	100	39	91	15	3.7
10	83	29	6.5	141	57	22	91	28	6.9
11	80	20	4.3	134	70	25	96	23	6.0
12	96	770	200	130	93	33	91	19	4.7
13	453	2620	3570	125	57	19	90	24	5.8
14	458	4800	5940	122	38	13	88	21	5.0
15	390	7800	8210	119	53	17	87	19	4.5
16	291	4600	3610	109	77	23	87	18	4.2
17	278	2400	1800	103	30	8.3	87	12	2.8
18	234	1350	853	111	35	10	84	17	3.9
19	203	690	378	109	40	12	83	19	4.3
20	185	390	195	106	27	7.7	81	22	4.8
21	161	400	174	108	45	13	84	12	2.7
22	160	340	147	112	31	9.4	84	13	2.9
23	748	1760	3600	116	62	19	83	18	4.0
24	3200	2910	25100	116	31	9.7	80	14	3.0
25	1300	3600	12600	112	16	4.8	81	11	2.4
26	576	7610	11800	109	25	7.4	87	31	7.3
27	348	2200	2070	112	17	5.1	85	20	4.6
28	270	1050	765	114	20	6.2	84	31	7.0
29	298	1150	925	109	17	5.0	85	28	6.4
30	236	940	599	106	12	3.4	88	22	5.2
31	228	1190	733	---	---	---	90	17	4.1
MONTH	11115	---	83444.8	3988	---	1691.0	2800	---	169.8
JANUARY				FEBRUARY				MARCH	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	88	18	4.3	58	30	4.7	78	14	2.9
2	96	14	3.6	68	15	2.8	80	38	8.2
3	102	17	4.7	74	27	5.4	77	34	7.1
4	102	12	3.3	83	83	19	72	30	5.8
5	102	14	3.9	116	55	17	65	17	3.0
6	98	10	2.6	137	22	8.1	62	40	6.7
7	96	12	3.1	125	13	4.4	58	23	3.6
8	87	17	4.0	111	11	3.3	57	14	2.2
9	76	12	2.5	98	8	2.1	54	20	2.9
10	74	7	1.4	90	10	2.4	50	23	3.1
11	73	7	1.4	83	10	2.2	51	34	4.7
12	73	9	1.8	76	14	2.9	53	22	3.1
13	70	13	2.5	72	16	3.1	59	11	1.8
14	68	12	2.2	65	27	4.7	53	9	1.3
15	60	9	1.5	62	30	5.0	51	14	1.9
16	65	390	68	60	30	4.9	48	11	1.4
17	65	127	22	60	35	5.7	48	13	1.7
18	67	15	2.7	63	20	3.4	48	12	1.6
19	65	7	1.2	60	27	4.4	43	35	4.1
20	65	6	1.1	60	38	6.2	41	58	6.4
21	68	8	1.5	57	24	3.7	32	58	5.0
22	72	44	8.6	63	36	6.1	28	40	3.0
23	72	15	2.9	64	34	5.9	27	47	3.4
24	74	8	1.6	67	15	2.7	27	44	3.2
25	74	23	4.6	72	20	3.9	27	79	5.8
26	73	6	1.2	72	26	5.1	21	108	6.1
27	69	34	6.3	76	34	7.0	21	90	5.1
28	67	110	20	83	22	4.9	19	77	4.0
29	64	37	6.4	---	---	---	19	61	3.1
30	63	11	1.9	---	---	---	23	57	3.5
31	59	13	2.1	---	---	---	30	56	4.5
MONTH	2347	---	194.9	2175	---	151.0	1422	---	120.2



08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	29	72	5.6	21	16	.91	15	60	2.4
2	23	68	4.2	19	19	.97	14	60	2.3
3	21	51	2.9	17	24	1.1	14	47	1.8
4	21	48	2.7	16	26	1.1	16	35	1.5
5	23	54	3.4	14	28	1.1	14	26	.98
6	25	30	2.0	14	22	.83	12	29	.94
7	29	29	2.3	13	27	.95	10	21	.57
8	33	19	1.7	12	25	.81	70	583	512
9	32	19	1.6	11	23	.68	552	4100	6110
10	32	27	2.3	13	20	.70	623	3790	6380
11	39	26	2.7	14	16	.60	683	3960	7300
12	41	32	3.5	19	26	1.3	777	3570	7490
13	40	51	5.5	21	22	1.2	693	3170	5930
14	37	48	4.8	20	21	1.1	703	2980	5660
15	40	38	4.1	18	17	.83	724	2750	5380
16	43	29	3.4	17	15	.69	753	2860	5810
17	42	26	2.9	17	12	.55	746	2000	4030
18	43	34	3.9	16	15	.65	787	2090	4440
19	44	21	2.5	17	23	1.1	763	2240	4610
20	49	21	2.8	17	46	2.1	779	2250	4730
21	48	20	2.6	16	35	1.5	767	2210	4580
22	42	18	2.0	15	38	1.5	787	2170	4610
23	32	15	1.3	11	30	.89	811	1970	4310
24	28	16	1.2	12	43	1.4	866	2200	5140
25	27	15	1.1	10	32	.86	847	1950	4460
26	25	15	1.0	12	52	1.7	791	1640	3500
27	25	18	1.2	14	58	2.2	787	1800	4040
28	27	19	1.4	20	58	3.1	772	1820	3790
29	28	22	1.7	21	66	3.7	779	2010	4230
30	23	20	1.2	17	59	2.7	777	1830	3840
31	---	---	---	16	53	2.3	---	---	---
MONTH	991	---	79.5	490	---	41.12	16732	---	110892.5
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	765	1890	3900	92	544	135	4.0	445	4.8
2	770	2150	4470	52	329	46	3.8	500	5.1
3	777	2170	4550	37	274	27	4.4	471	5.6
4	813	2020	4430	37	269	27	4.4	481	5.7
5	849	1600	3670	80	291	63	4.7	367	4.7
6	698	1030	1940	55	264	39	5.9	534	8.5
7	283	1250	955	26	225	16	6.5	472	8.3
8	172	598	278	20	320	17	6.5	635	11
9	219	683	404	15	282	11	4.9	455	6.0
10	129	541	188	11	222	6.6	5.9	403	6.4
11	160	458	198	8.0	226	4.9	6.2	446	7.5
12	130	507	178	8.0	237	5.1	7.8	572	12
13	125	622	210	9.0	204	5.0	9.0	359	8.7
14	111	432	129	8.5	231	5.3	11	633	19
15	98	308	81	7.0	260	4.9	23	696	43
16	85	285	65	5.0	267	3.6	41	339	38
17	53	157	22	8.5	309	7.1	64	256	44
18	48	115	15	9.0	288	7.0	32	183	16
19	51	111	15	10	345	9.3	17	159	7.3
20	42	112	13	25	367	25	15	178	7.2
21	40	122	13	8.0	290	6.3	12	172	5.6
22	59	140	22	10	250	6.8	13	210	7.4
23	615	9230	25500	10	429	12	23	293	18
24	1260	17900	60900	7.0	414	7.8	12	283	9.2
25	446	10500	12600	6.5	407	7.1	19	198	10
26	238	7180	4610	6.0	426	6.9	25	192	13
27	151	4250	1730	6.8	362	6.6	35	185	17
28	130	2400	842	6.5	422	7.4	41	168	19
29	100	895	242	7.1	717	14	41	190	21
30	80	607	131	6.5	635	11	35	189	18
31	80	469	101	4.7	704	8.9	---	---	---
MONTH	9577	---	132402	602.1	---	559.6	533.0	---	407.0

WTR YR 1975 TOTAL WATER DISCHARGE (CFS-DAYS) 52,772.10  
WTR YR 1975 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 330,153.42

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)
OCT.								
14...	1420	16.5	483	5400	7040	49	64	67
25...	1320	19.0	985	3350	8910	44	56	78
30...	1120	17.0	230	902	560	50	73	85
JUNE								
09...	1430	16.0	585	4310	6810	--	--	--
18...	1735	25.5	799	2220	4790	--	--	--
30...	1730	26.5	789	1750	3730	--	--	--
JULY								
11...	1010	26.0	169	465	212	--	--	--
24...	1730	26.0	978	14800	39100	--	--	--
28...	1745	30.5	130	2110	741	--	--	--
AUG.								
22...	1100	27.0	11	102	3.0	--	--	--
SEP.								
19...	1030	24.0	19	118	6.1	79	81	82

DATE	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)	SUS. SED. SIEVE DIAM. % FINER THAN (70333)	SUS. SED. SIEVE DIAM. % FINER THAN (70334)
OCT.							
14...	95	100	--	--	--	--	--
25...	90	97	100	--	--	--	--
30...	--	--	--	88	98	100	--
JUNE							
09...	--	--	--	97	99	99	100
18...	91	99	100	--	--	--	--
30...	87	99	100	--	--	--	--
JULY							
11...	--	--	--	96	98	99	100
24...	99	100	--	--	--	--	--
28...	--	--	--	100	--	--	--
AUG.							
22...	--	--	--	98	100	--	--
SEP.							
19...	91	93	100	--	--	--	--

## 08405000 PECOS RIVER AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'42", long 104°13'17", in SE 1/4 sec. 7, T.22 S., R.27 E., Eddy County, immediately downstream from Lower Tansil Dam, which is approximately 0.2 mi (0.3 km) upstream from Dark Canyon, and 0.5 mi (0.8 km) downstream from the Greene Street Bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,100 mi<sup>2</sup> (46,900 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: May 1905 to April 1907, May 1937 to September 1946, July 1951 to current year.  
Water temperatures: July 1951 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 3,080 mg/l Mar. 10-21; minimum, 507 mg/l Oct. 23.  
Hardness maximum, 1,600 mg/l Jan. 1-31, Mar. 1-31; minimum, 260 mg/l Oct. 23.  
Specific conductance: Maximum daily, 4,430 micromhos Mar. 19; minimum daily, 734 micromhos Oct. 23.  
Water temperatures: Maximum, 32°C July 30, Aug. 1; minimum, 10.0°C Dec. 26.

## Period of record:

Dissolved solids: Maximum, 4,680 mg/l July 1-31, 1974; minimum, 335 mg/l Oct. 21, 1969.  
Hardness: Maximum, 2,400 mg/l July 1-31; minimum, 216 mg/l Oct. 21, 1969.  
Specific conductance: Maximum daily, 6,800 micromhos Aug. 3, 1974; minimum daily, 401 micromhos Sept. 23, 1974.  
Water temperatures: Maximum, 38.0°C May 28, 1969; minimum, freezing point Dec. 18, 1965.

REMARKS.--Prior to impoundment above Lower Tansil Dam in January 1970 samples were collected at gage on Greene Street Bridge. Additional samples were collected at 08405200 Pecos River below Dark Canyon for comparison with those collected at this station. Mean daily discharges are estimated from the gage below Dark Canyon.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	HICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.												
01-05	51	12	--	120	34	95	4.2	137	0	330	150	.3
06-16	147	11	--	160	38	120	3.9	121	0	460	200	.3
17-22	273	15	--	230	69	210	4.3	167	0	660	330	.5
23..	10600	9.0	--	77	17	67	3.4	125	0	170	100	--
24-31	1050	9.4	10	170	44	200	5.5	125	0	460	350	.3
NOV.												
01-09	284	12	--	270	72	250	6.0	148	0	720	420	.1
10-30	107	16	--	350	97	320	6.1	178	0	1000	570	.2
DEC.												
01-31	109	17	--	420	110	360	5.7	190	0	1300	610	.7
JAN.												
01-31	102	14	--	440	120	370	5.8	186	0	1300	640	.9
FEB.												
01-28	83	15	--	440	100	380	5.5	192	--	1200	630	.7
MAR.												
01-09	99	16	--	430	120	390	5.3	200	--	1300	620	.5
10-21	53	20	--	440	110	440	5.3	209	--	1300	650	.6
22-31	15	19	--	420	140	400	5.3	201	--	1200	730	.9
APR.												
01-30	36	17	--	400	110	360	5.6	192	--	1200	580	.8
MAY												
01-31	31	18	--	400	130	380	6.0	167	--	1300	620	.8
JUNF												
01-30	20	16	--	380	130	370	5.7	166	--	1200	630	.8
JULY												
01-31	25	9.3	--	350	110	350	4.9	155	0	1200	530	.7
AUG.												
01-31	18	17	--	350	120	360	5.1	165	0	1200	580	.7
SEP.												
01-30	22	18	--	340	120	400	7.6	170	0	1200	600	.7
WTD. AVG.	--	12	--	251	64	235	5.0	152	--	724	391	.5
TIME WTD.												
AVG.	116	16	--	370	109	349	5.6	174	--	1150	571	.7
TOT. LOAD (TONS)	--	1420	--	28800	7750	26900	572	17500	--	83100	44900	43

08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (00671)	DIS- SOLVED BORON (B) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (070300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (070301)	DIS- SOLVED SOLIDS (TONS PER (070303)	DIS- SOLVED SOLIDS (TONS PER (070302)	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
01-05	.94	--	--	--	817	1.11	113	440	330	2.0	1280	7.6
06-16	.68	--	--	--	1060	1.44	421	560	460	2.2	1600	7.7
17-22	.85	--	--	--	1610	2.19	1190	860	720	3.1	2390	7.5
23...	.43	--	--	--	507	.69	14500	260	160	1.8	754	7.8
24-31	.55	.93	250	1100	1300	1.77	3690	610	510	3.5	2030	7.5
NOV.												
01-09	.76	--	--	--	1830	2.49	1400	970	850	3.5	2730	7.5
10-30	1.2	--	--	--	2450	3.33	708	1300	1200	3.9	3530	7.6
DEC.												
01-31	.87	--	--	--	2920	3.97	859	1500	1300	4.0	4000	8.1
JAN.												
01-31	.79	--	--	--	2990	4.07	823	1600	1400	4.0	4190	7.8
FEB.												
01-28	.93	--	--	--	2870	3.90	643	1500	1400	4.3	4130	--
MAR.												
01-09	1.2	--	--	--	2990	4.07	799	1600	1400	4.3	4130	--
10-21	2.6	--	--	--	3080	4.19	441	1600	1400	4.9	4200	--
22-31	2.1	--	--	--	3020	4.11	126	1600	1500	4.3	4040	--
APR.												
01-30	1.1	--	--	--	2770	3.77	269	1500	1300	4.1	3850	--
MAY												
01-31	1.2	--	--	--	2940	4.00	246	1500	1400	4.2	3990	--
JUNE												
01-30	1.2	--	--	--	2820	3.84	152	1500	1300	4.2	3950	--
JULY												
01-31	.53	--	--	--	2630	3.58	178	1300	1200	4.2	3520	7.7
AUG.												
01-31	.88	--	--	--	2720	3.70	132	1400	1200	4.2	3700	7.3
SEP.												
01-30	1.1	--	--	--	2780	3.78	165	1300	1200	4.8	3750	7.6
WTD. AVG.	.75	--	--	--	1770	2.40	--	909	782	3.3	2540	--
TIME WTD.												
AVG.	1.0	--	--	--	2660	3.62	--	1370	1230	4.1	3690	--
TOT. LOAD (TONS)	86	--	--	--	293000	--	--	--	--	--	--	--

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	882	2420	3770	3990	4130	4090	4000	4060	3740	3940	3520	3910
2	1000	2470	3920	4010	3660	4010	4000	4100	3700	3930	3550	3890
3	1160	2490	3830	4070	3850	4000	3970	4160	3710	3900	3560	3840
4	1240	2610	3770	4080	4020	3980	3880	4180	3710	3910	3560	3800
5	1440	2610	3770	4080	4100	3950	3740	4180	3740	3480	3580	3840
6	1620	2690	3920	4120	4110	4020	3690	4110	3740	3670	3600	3840
7	1370	2810	3870	4130	4120	4080	3730	4180	3720	3730	3600	3610
8	1200	2880	3830	4180	4150	4070	3680	4060	3830	3770	3630	3740
9	1230	2970	3840	4120	4180	4060	3650	4050	3860	3800	3630	3780
10	1220	3060	3900	4160	4170	4180	3640	4070	3940	3840	3660	3810
11	1400	3130	3930	4150	4130	4270	3650	4020	4030	3780	3680	3800
12	1510	3140	3900	4130	4170	4310	3650	3970	4090	3180	3680	3730
13	1630	3230	3890	4120	4140	4260	3640	3910	4090	3530	3710	3670
14	1630	3250	3890	4080	4120	4240	3620	3890	4090	3630	3710	3710
15	1790	3300	3920	4050	4110	4260	3620	3880	4090	3690	3710	3710
16	2060	3430	3920	4070	4110	4270	3660	3860	4020	3730	3710	3710
17	2600	3410	3960	4050	4140	4240	3700	3850	4020	3730	3720	3710
18	2390	3410	4020	4080	4130	4380	3790	3820	4010	3730	3740	3720
19	2080	3450	4040	4100	4150	4430	3830	3810	3990	3700	3750	3730
20	2060	3430	4060	4120	4170	4210	3940	3810	3940	3690	3760	3740
21	2100	3550	4040	4200	4210	4230	3950	3810	3980	3670	3780	3730
22	2390	3540	4040	4200	4160	4270	3970	3790	3980	3230	3800	3720
23	734	3650	4090	4180	4090	4290	4020	3790	3950	3110	3770	3720
24	1490	3700	4090	4160	4110	4290	4070	3810	3950	3170	3780	3720
25	1980	3650	4090	4200	4120	4310	4090	3800	3950	3160	3780	3720
26	1900	3700	4040	4180	4110	4350	4070	3800	3950	3270	3800	3720
27	2090	3720	4060	4180	4090	4330	4050	3800	3930	3360	3840	3720
28	2170	3710	4040	4180	4050	4310	4050	3790	3920	3420	3840	3730
29	2240	3700	3990	4200	---	4170	4030	3740	3920	3490	3870	3730
30	2280	3720	3960	4200	---	3950	4040	3740	3880	3520	3870	3750
31	2410	---	3980	4140	---	3990	---	3740	---	3520	3820	---
MONTH	1720	3230	3950	4120	4100	4190	3850	3920	3920	3590	3710	3750
YEAR	MAX	4430	MIN	734	MEAN	3670						

08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	17.0	15.0	14.0	15.0	17.0	16.5	19.5	23.0	29.0	32.0	28.0
2	20.0	18.0	15.0	13.0	14.0	17.0	15.0	22.0	24.0	28.0	31.0	28.0
3	20.0	17.5	16.0	13.0	14.0	17.5	16.5	22.0	24.0	28.0	30.0	27.5
4	20.5	17.5	15.5	13.0	14.5	17.5	15.5	22.5	25.0	28.0	29.0	27.5
5	22.0	17.5	15.0	12.5	15.0	18.0	18.0	21.0	26.0	28.0	31.0	27.0
6	20.0	18.0	15.0	12.5	14.0	17.0	18.0	21.0	27.0	29.0	30.0	26.0
7	19.0	17.0	16.0	12.5	13.5	20.5	16.5	20.0	24.5	28.0	29.0	27.0
8	19.0	14.5	14.5	12.5	15.0	15.0	15.0	22.0	26.0	30.0	28.0	27.0
9	21.0	14.0	13.5	13.0	13.0	14.5	14.5	23.0	25.0	30.0	28.0	27.5
10	20.0	15.0	14.0	12.5	12.5	14.5	16.5	21.5	24.0	29.0	28.0	26.5
11	22.0	15.0	13.5	13.0	13.5	14.5	15.0	22.0	24.0	29.0	27.0	28.0
12	20.5	15.5	14.0	10.5	13.5	14.0	14.0	23.0	23.0	26.5	28.0	23.5
13	20.5	17.0	14.0	13.0	14.0	13.5	16.5	22.0	25.5	28.0	28.0	22.0
14	19.0	15.5	14.0	13.5	13.5	13.5	17.5	23.0	26.5	27.5	28.0	20.5
15	18.5	15.0	14.0	13.5	14.0	13.5	18.0	24.0	27.5	27.0	27.5	20.5
16	18.5	16.0	13.5	12.5	14.0	14.5	19.0	23.0	27.0	27.5	28.5	27.0
17	20.0	16.5	14.0	13.5	14.0	14.0	20.0	24.0	26.0	26.0	29.0	25.5
18	21.5	15.0	13.5	14.0	13.5	14.0	18.5	24.0	25.0	27.0	29.5	25.0
19	24.0	18.0	13.0	13.0	14.0	13.0	19.0	24.0	25.0	28.0	29.5	25.0
20	22.0	17.0	13.0	13.0	14.0	17.5	19.0	23.0	26.5	28.0	29.5	24.0
21	22.0	17.5	13.0	13.5	14.0	17.0	20.0	23.5	27.5	27.0	29.0	22.5
22	22.0	17.5	12.5	13.0	12.5	17.0	20.0	24.0	28.0	28.0	30.0	22.0
23	15.0	18.0	13.0	13.0	12.0	15.5	20.5	22.5	28.0	27.5	29.0	22.5
24	18.0	17.0	12.0	14.0	13.0	13.0	20.0	24.0	27.0	28.0	30.0	21.5
25	18.0	16.0	11.0	15.5	14.0	14.5	20.5	24.0	26.5	28.0	28.5	22.0
26	18.5	17.0	10.0	15.0	17.0	14.5	21.0	23.5	28.0	29.0	28.0	20.5
27	18.0	17.5	13.0	14.5	15.0	13.0	20.0	24.0	28.5	29.5	28.0	22.0
28	18.0	18.0	14.0	15.0	15.5	13.5	18.0	24.0	28.0	29.5	27.5	22.5
29	18.0	14.0	14.5	15.5	---	13.0	19.0	24.0	28.0	30.0	28.0	22.5
30	17.5	16.5	14.0	14.5	---	16.5	19.0	22.5	27.5	32.0	28.5	22.5
31	17.0	---	13.0	15.0	---	14.0	---	23.5	---	30.0	29.0	---
MONTH	19.5	16.5	13.5	13.5	14.0	15.0	18.0	23.0	26.0	28.5	29.0	24.5
YEAR	MAX	32.0	MIN	10.0	MEAN	20.0						

## 08405200 PECOS RIVER BELOW DARK CANYON, AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'37", long 104°12'58", in NE¼SW¼NW¼ sec.8, T.22 S., R.27 E., Eddy County, at gaging station, 700 ft (210 m) downstream from mouth of Dark Canyon, 0.3 mi (0.5 km) downstream from lower Tansil Dam and Bataan recreational area, and 0.8 mi (1.3 km) downstream from bridge on U.S. Highway 62-180 in Carlsbad, and at mile 459.0 (738.5 km).

DRAINAGE AREA.--18,550 mi<sup>2</sup> (48,040 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: February 1972 to current year.

REMARKS.--Samples collected at this station for comparison with those collected at 08405000 Pecos River at Carlsbad, N. Mex.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000061)	SPECIFIC CONDUCTANCE (MICRO- MHO/S) (000095)	TEMPERATURE (DEG C) (00010)
OCT.				
23...	1430	9366	846	17.0
24...	1540	2040	1500	--
29...	1400	337	2320	18.0
JAN.				
04...	0940	154	4040	9.0
FEB.				
03...	1445	99	4050	8.0
APR.				
03...	1400	26	3780	16.0
MAY				
02...	1200	37	4100	16.5
10...	1100	54	4020	7.5
12...	1410	33	3960	11.5

08405260 PECOS RIVER BELOW SIX MILE DAM, N. MEX.

LOCATION.--Lat 32°22'56", long 104°08'20", in SE¼NW¼ sec. 24, T.22 S., R.27 E., Eddy County, 0.4 mi (0.6 km) below Six Mile Dam, 6.0 mi (9.7 km) southeast of Carlsbad, and at mile 453.8 (730.2 km).

DRAINAGE AREA.--18,560 mi<sup>2</sup> (48,070 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1975 to current year.  
Sediment records: July 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JULY 17...	1200	25	7.7	0	--	360	120	380	6.5	158	0	1100
AUG. 21...	1000	25	13	20	30	390	170	450	8.1	174	0	1400
SEP. 18...	0930	29	17	20	--	360	140	370	6.1	193	0	1200

	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRIF PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)
JULY 17...	630	.7	.03	.02	.36	1.9	2.3	.62	.25	3080	2680	1400
AUG. 21...	740	.6	.46	.36	.04	1.8	2.2	.35	.19	3380	3260	1700
SEP. 18...	620	.5	.57	.56	1.4	1.8	4.3	.85	.49	1530	2810	1500

DATE	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00600)	AIR TEMPERATURE (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	DIS-SOLVED OXYGEN (MG/L) (00300)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	SUSPENDED ORGANIC CARBON (C) (MG/L) (00689)	DIS-SOLVED BORON (B) (UG/L) (01020)
JULY 17...	1300	4.4	3700	7.9	32.0	26.0	13	8.5	47	6.4	5.7	290
AUG. 21...	1500	4.8	4200	8.2	27.5	25.5	40	7.8	41	22	.2	300
SEP. 18...	1300	4.2	3050	8.4	30.0	25.0	3	8.9	28	7.2	2.8	280

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	SOLVED					
		(AS)	ARSENIC	BORON	MIUM	CAD-	MIUM	CHRO-					
		(UG/L)	(AS)	(B)	(CD)	(CD)	(CH)	(CH)					
AUG.	21...	1000	2	1	300	10	0	20	10	50	0	10	1
DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		IRON	SOLVED	SOLVED	MAN-	SOLVED	MAN-	SOLVED					
		(FE)	IRON	LEAD	GANESE	GANESE	MERCURY	MERCURY					
		(UG/L)	(FE)	(PB)	(MN)	(MN)	(HG)	(HG)					
AUG.	21...	1000	2	1	300	10	0	20	10	50	0	10	1

08405260 PECOS RIVER BELOW SIX MILE DAM, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCEI (COL- ONIES PER 100 ML) (31679)
JULY 17...	1200	0	0
AUG. 21...	1000	140	80
SEP. 18...	0930	420	700

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANFOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SFDI- MENT DTS- CHARGE (T/DAY) (A0155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
JULY 17...	1200	26.0	25	24	1.6	87
AUG. 21...	1000	25.5	25	34	2.3	48
SEP. 18...	0930	25.0	29	20	1.6	84



08406500 PECOS RIVER NEAR MALAGA, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 32°12'26", Long 104°01'22", in SW¼NW¼NE¼ sec. 19, T.24 S., R.29 E., Eddy County, 2.5 mi (4.0 km) upstream from gaging station near Malaga, which is 3.1 mi (5.0 km) southeast of Malaga, 4.3 mi (6.9 km) downstream from Black River, and at mile 432.0 (695.1 km).

DRAINAGE AREA.--19,190 mi<sup>2</sup> (49,700 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: February 1959 to current year.

Sediment records: July 1969 to August 1972.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 5,470 mg/l June 1-23; minimum, 414 mg/l Oct. 23-24.

Hardness: Maximum, 2,200 mg/l May 1-10, June 1-23, 27-30; minimum, 240 mg/l Oct. 23-24.

Specific conductance: Maximum daily, 8,230 micromhos July 1, 4; minimum daily, 638 micromhos Oct. 23.

Water temperatures: Maximum, 31.0°C June 26; minimum, 5.0°C Jan. 12.

## Period of record:

Dissolved solids: Maximum, 18,700 mg/l June 7, 1966; minimum, 344 mg/l Oct. 21, 1969.

Hardness: Maximum, 3,110 mg/l June 7, 1966; minimum, 235 mg/l Oct. 21, 1969.

Specific conductance: Maximum daily, 8,230 micromhos June 7, 1966; minimum daily, 450 micromhos Sept. 21, 1941.

Water temperatures: Maximum, 34.0°C June 25, 1964; minimum, 3.0°C Jan. 13, 1963.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of heavy local rains.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.												
01-06	206	16	--	270	100	540	15	165	0	840	850	.5
07-08	253	14	--	200	62	240	7.1	153	0	570	390	.4
09-22	86	12	--	300	100	470	11	148	0	960	790	.6
23-24	5520	7.9	--	72	15	41	3.2	125	0	140	71	.2
25-31	1110	9.6	20	170	46	210	5.6	132	0	460	340	.3
NOV.												
01-12	320	14	--	290	100	360	8.4	167	0	860	620	.1
13-30	163	16	--	390	130	510	11	173	0	1200	830	.7
DEC.												
01-31	157	17	--	440	130	510	11	202	0	1400	850	.7
JAN.												
01-31	130	16	--	470	150	530	13	203	--	1500	890	.7
FEB.												
01-28	100	13	--	470	140	570	11	168	--	1400	920	.7
MAR.												
01-20	94	11	--	500	89	850	22	114	--	1500	1200	.8
21-31	40	9.0	--	450	150	630	13	132	--	1600	1000	.7
APR.												
01-30	46	11	50	520	190	810	20	147	--	1800	1300	.9
MAY												
01-10	37	15	--	550	200	970	26	155	--	1900	1600	.9
11-21	51	14	--	510	200	810	19	153	--	1800	1300	.9
22-31	32	15	--	530	200	920	24	161	--	1800	1500	.8
JUNE												
01-23	29	14	--	550	200	1000	25	154	--	1900	1700	.9
24-26	54	11	--	450	170	790	20	129	--	1600	1400	.8
27-30	28	15	--	550	200	1000	25	157	--	1800	1700	.9
JULY												
01-21	38	13	--	530	200	940	25	154	0	1800	1600	.7
22-31	57	9.4	--	470	180	750	18	141	0	1600	1300	.7
AUG.												
01-27	27	17	--	530	180	1000	27	328	0	1800	1600	.8
28-31	46	16	--	530	160	830	21	147	0	1700	1300	.8
SEP.												
01-30	36	17	--	500	190	920	25	156	0	1800	1500	.8
10-D. AVG.	--	12	--	308	96	416	11	156	--	953	680	.5
ME WTD.												
AVG.	136	14	--	465	156	724	18	173	--	1540	1180	.7
10-T. LOAD (TONS)	--	1640	--	41200	12800	55600	1410	20900	--	127000	90800	65

08406500 PECOS RIVER NEAR MALAGA, N. MEX.---Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRITE PLUS PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED (TONS PER AC-FT) (MG/L) (70303)	DIS- SOLVED (TONS PER DAY) (MG/L) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
01-06	2.2	--	--	--	2720	3.70	1510	1100	970	7.1	4050	7.7
07-08	1.5	--	--	--	1570	2.14	1070	750	620	3.8	2450	7.7
09-22	1.7	--	--	--	2720	3.70	632	1200	1100	6.0	3957	7.5
23-24	.53	--	--	--	414	.56	6170	240	140	1.1	663	7.8
25-31	.75	.05	150	1320	1310	1.78	3930	610	500	3.7	2020	7.6
NOV.												
01-12	1.5	--	--	--	2340	3.18	2020	1100	960	4.6	3460	7.5
13-30	1.8	--	--	--	3180	4.32	1400	1500	1400	5.7	4720	7.5
DEC.												
01-31	1.9	--	--	--	3470	4.72	1470	1600	1400	5.5	4990	7.8
JAN.												
01-31	2.0	--	--	--	3680	5.00	1290	1800	1600	5.5	5090	--
FEB.												
01-28	1.9	--	--	--	3620	4.92	977	1800	1600	5.9	4990	--
MAR.												
01-20	1.8	--	--	--	4240	5.77	1080	1600	1500	9.2	5410	--
21-31	1.3	--	--	--	3920	5.33	423	1700	1600	6.6	6480	--
APR.												
01-30	1.4	.07	430	4990	4730	6.43	587	2100	2000	7.7	6760	--
MAY												
01-10	1.6	--	--	--	5350	7.28	534	2200	2100	9.0	7210	--
11-21	1.5	--	--	--	4740	6.45	653	2100	2000	7.7	6360	--
22-31	1.6	--	--	--	5080	6.91	439	2100	2000	8.6	7040	--
JUNE												
01-23	1.5	--	--	--	5470	7.44	428	2200	2100	9.3	7560	--
24-26	1.5	--	--	--	4510	6.13	658	1800	1700	8.1	6140	--
27-30	1.2	--	--	--	5370	7.30	406	2200	2100	9.3	7540	--
JULY												
01-21	.86	--	--	--	5190	7.06	533	2100	2000	8.8	7430	7.5
22-31	.74	--	--	--	4400	5.98	677	1900	1800	7.5	6230	7.8
AUG.												
01-27	1.4	--	--	--	5320	7.24	388	2100	1800	9.6	7520	7.1
28-31	1.0	--	--	--	4630	6.30	575	2000	1900	8.1	6600	7.4
SEP.												
01-30	1.4	--	--	--	5040	6.85	490	2000	1900	8.9	7070	7.2
WTD. AVG.	1.3	--	--	--	2560	3.48	--	1160	1030	4.8	3670	--
TIME WTD.												
AVG.	1.5	--	--	--	4190	5.70	--	1800	1660	7.3	5910	--
TOT. LOAD (TONS)	173	--	--	--	342000	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3200	3050	4790	4860	4950	5620	6340	7250	6980	8230	6710	7350
2	3650	3070	4790	4780	4930	5760	6260	7250	7190	8100	6710	7290
3	3990	3030	4790	4740	4930	5760	6540	7250	7290	8030	6840	7450
4	4300	3140	4880	4700	4880	5820	6670	7200	7190	8230	6930	7540
5	4700	3510	4880	4720	4950	5770	6460	7250	7190	7970	7070	--
6	4660	3680	4950	4780	5020	5760	6500	7410	7070	7790	7170	7450
7	2220	3810	4900	4860	5050	5610	6480	7360	7290	7030	7220	6540
8	2690	3420	4860	5050	5050	5440	6300	7460	7290	7080	7380	6820
9	3360	3530	4840	5190	5020	5100	6340	7690	7320	7390	7430	6940
10	4040	3680	4810	5170	5000	5220	6420	7740	7480	7430	7430	7070
11	4440	3840	4810	5270	4980	5350	6620	6170	7590	7560	7480	710
12	4570	3980	4860	5290	5050	5440	6500	6360	7720	7670	7650	678
13	4700	4120	4860	5370	5120	5410	6460	6650	7720	7450	7760	674
14	4590	4140	4860	5240	5150	5410	6380	6480	7780	6940	7700	664
15	4070	4260	4860	5240	5200	5380	6140	6520	7660	6850	7650	646
16	4070	4420	4860	5270	5170	5300	6260	6520	7660	7130	7700	655
17	4300	4340	4880	5020	5170	5360	6460	6520	7660	7080	7940	664
18	3550	4400	4860	5020	5150	5270	6750	6520	7720	7030	7940	678
19	3490	4470	4900	4930	5120	5220	6750	6200	7890	7080	8000	701
20	3760	4490	4930	4950	5280	5520	6800	6400	7480	7080	7880	717
21	3920	4590	4810	4950	5470	6020	6750	6480	7380	6990	7820	717
22	4200	4610	4860	4980	5440	5770	6670	6780	7550	5900	7760	726
23	638	4710	4840	5000	5440	5860	6890	6960	8020	6140	7760	722
24	653	4750	4860	4950	5440	6090	6980	7010	5500	6000	7760	720
25	1470	4770	4900	4930	5500	6460	7030	7050	6770	6110	7820	726
26	2070	4730	4790	4930	5470	6930	6940	7150	6860	6220	8060	727
27	2000	4800	4750	4930	5610	7160	7030	7250	6300	7940	7330	733
28	2540	4750	4770	4930	5610	7260	7130	7150	7500	6340	5620	738
29	2940	4800	4840	4950	---	7520	7230	7280	7480	6380	7320	738
30	2910	4840	4880	5020	---	7260	7230	7250	7650	6540	7070	737
31	2970	---	4840	4930	---	6840	---	7150	---	6670	7120	--
MONTH	3380	4130	4850	5000	5180	5890	6650	6960	7370	7060	7440	707
YEAR	MAX	8230	MIN	638	MEAN	5910						

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	17.0	8.0	8.5	13.0	16.0	17.0	22.0	21.5	28.5	30.0	27.0
2	21.0	17.5	9.5	8.0	12.0	14.0	14.0	22.5	27.0	27.0	30.0	26.0
3	21.0	17.0	8.0	7.5	12.0	17.0	17.5	22.5	26.0	28.5	28.0	26.0
4	22.0	16.5	10.5	7.5	12.0	13.5	13.5	21.5	27.0	28.0	27.0	27.0
5	23.0	16.5	10.5	8.0	11.0	14.0	18.5	22.0	29.0	28.0	29.0	25.0
6	21.0	15.0	11.0	7.0	10.0	14.5	17.0	22.0	30.0	26.5	28.0	24.0
7	20.0	15.0	10.5	9.0	9.0	16.0	18.0	23.0	26.0	30.0	28.0	22.5
8	22.0	14.0	10.0	8.0	11.0	13.5	17.0	24.0	23.5	30.0	28.0	26.0
9	22.0	15.0	9.0	10.0	10.0	13.0	18.5	24.0	---	30.0	25.5	26.5
10	22.5	14.0	9.5	7.5	9.5	15.0	15.0	22.5	26.0	25.5	24.0	27.0
11	21.0	15.0	9.0	8.0	13.0	13.5	15.0	26.0	27.0	28.5	26.0	25.5
12	21.0	15.0	8.5	5.0	13.0	13.5	13.5	24.5	23.5	25.0	25.0	20.0
13	21.0	15.5	---	7.0	13.0	12.0	18.0	24.5	25.0	25.0	24.5	19.0
14	18.0	14.0	8.5	8.0	12.0	12.0	17.0	25.5	28.0	27.0	25.0	19.0
15	18.0	13.0	---	6.0	13.0	12.5	20.0	23.0	25.0	26.0	24.5	23.5
16	17.0	13.0	8.5	7.0	11.0	13.0	17.0	25.0	29.0	26.0	24.0	23.0
17	18.0	12.0	9.0	8.0	11.0	13.0	18.5	25.0	24.0	26.0	25.5	26.5
18	18.5	12.0	8.5	7.0	10.0	15.5	15.5	24.0	26.0	24.0	25.5	24.5
19	21.0	14.0	8.0	8.0	10.0	14.5	15.5	25.0	27.5	25.5	25.0	23.0
20	21.0	13.0	8.0	8.0	11.5	16.5	18.0	22.5	26.0	25.0	25.5	24.0
21	22.0	13.0	9.0	8.0	11.0	18.0	17.5	26.0	29.5	25.5	28.0	21.0
22	23.0	13.5	9.0	8.0	9.5	18.0	21.5	25.0	25.0	27.5	30.0	22.0
23	21.0	15.0	9.0	8.0	8.0	15.0	19.5	25.0	29.0	27.0	30.0	18.5
24	20.0	12.5	8.5	8.0	11.0	14.0	23.0	27.0	25.0	29.5	26.0	18.0
25	22.0	13.0	8.5	8.0	10.5	14.5	21.0	23.0	29.5	27.5	28.0	20.0
26	22.0	13.0	7.0	10.0	11.0	15.0	22.0	26.5	31.0	27.0	27.0	20.0
27	22.5	12.0	7.0	10.5	11.5	14.0	19.5	26.5	28.5	27.5	24.0	23.0
28	21.0	12.0	8.0	11.0	12.5	16.0	18.0	23.0	29.0	30.0	27.0	19.5
29	21.0	10.0	9.0	11.5	---	12.5	23.0	25.0	25.0	30.5	26.0	24.0
30	18.0	9.5	10.0	11.5	---	12.0	21.5	21.5	25.0	28.5	25.0	19.5
31	17.0	---	9.0	11.0	---	12.5	---	19.0	---	25.5	28.0	---
MONTH	20.5	14.0	9.0	8.5	11.0	14.5	18.0	24.0	26.5	27.0	26.5	23.0
YEAR	MAX	31.0	MIN	5.0	MFAN	18.5						

## 08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.

LOCATION.--Lat 32°11'19", long 103°58'43", in ~~SW 1/4~~ sec. 27, T. 24 S., R. 29 E., Eddy County, 0.2 mi (0.3 km) downstream from gaging station, which is 550 ft (168 m) upstream from Pierce Canyon Crossing, and 6 mi (9.7 km) southeast of Malaga.

DRAINAGE AREA.--19,260 mi (49,880 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: March 1938 to September 1941, October 1951 to current year.  
Water temperatures: October 1952 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 12,500 mg/l June 23-25; minimum, 538 mg/l Oct. 24-25.  
Hardness: Maximum, 2,400 mg/l Apr. 17-30, June 1-25, July 1-6; Sept. 1-30; minimum, 290 mg/l Oct. 24-25.  
Specific conductance: Maximum daily, 30,500 micromhos June 23; minimum daily, 795 micromhos Oct. 24.  
Water temperatures: Maximum, 31.5°C Aug. 23; minimum, 6.0°C Jan. 12, 15.

## Period of record:

Dissolved solids: Maximum, 40,900 mg/l Aug. 1-7, 1966; minimum, 280 mg/l Sept. 21, 1941.  
Hardness: Maximum, 4,850 mg/l Aug. 16, 1969; minimum, 202 mg/l Sept. 21, 1941.  
Specific conductance: Maximum daily, 66,000 micromhos Aug. 1, 2, 1966; minimum daily, 433 micromhos Sept. 21, 1941.  
Water temperatures: Maximum 35.0°C July 6, 1968; minimum, 2.0°C Jan. 13, 1963, Jan. 6, 1971, Jan. 5, 1972, and Jan. 10, 1973.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of heavy local rains.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (000660)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NF- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00938)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.												
01-06	190	15	--	270	120	1100	42	175	0	860	1900	.5
07-08	412	12	--	210	81	350	11	162	0	640	580	.4
09-22	110	12	--	300	120	1100	36	154	0	980	1700	.5
23...	6920	14	--	290	110	420	12	184	0	890	700	.5
24-25	3750	7.4	--	86	19	65	3.9	128	0	180	110	.2
26-31	967	9.9	50	180	54	310	9.7	132	0	510	580	.3
NOV.												
01-11	351	14	--	290	100	620	20	166	0	860	1100	.5
12-30	159	15	--	380	140	930	33	168	0	1300	1500	.6
DEC.												
01-31	154	16	--	420	150	930	31	198	0	1400	1500	.7
JAN.												
01-07	172	15	--	450	160	930	31	193	--	1500	1500	2.0
08-31	120	12	--	470	160	1100	38	176	--	1500	1700	1.0
FEB.												
01-28	103	6.8	--	440	160	1200	48	113	--	1500	1900	.7
MAR.												
01-09	96	8.2	--	470	200	1600	61	96	--	1500	2700	.7
10-13	110	4.4	--	450	180	1100	38	83	--	1700	1800	.7
14-18	88	5.1	--	460	190	1300	46	97	--	1800	2100	.7
19-25	65	4.9	--	450	200	1600	58	93	--	1800	2500	.7
26-31	35	6.1	--	470	220	2100	74	116	--	2000	3400	.7
APR.												
01-16	52	10	20	520	240	2200	87	147	--	1900	3500	.8
17-30	40	11	--	550	260	2300	92	154	--	1900	3700	.8
MAY												
01-31	42	12	--	520	250	2500	99	146	--	1900	4000	.8
JUNE												
01-22	28	11	--	540	260	2700	120	135	--	2100	4400	.8
23-25	47	11	--	500	280	3600	160	138	--	2000	5900	.7
26-30	28	11	--	470	220	2500	110	114	--	1800	4100	.7
JULY												
01-06	30	13	--	560	250	3200	130	133	0	2100	5300	.7
07-20	41	15	--	520	240	2600	110	134	0	2000	4300	.8
21-31	59	14	--	480	230	2200	89	134	0	1900	3700	.8
AUG.												
01-16	32	14	--	490	240	2700	110	126	0	1900	4400	.7
17-27	29	14	--	490	270	3200	110	141	0	2000	5400	.8
28-31	45	14	--	530	240	2400	100	152	0	2000	3900	.8
SEP.												
01-30	38	16	--	570	240	2400	99	141	0	2000	4000	.8
WTD. AVG.												
TIME WTD.	--	12	--	326	125	913	34	153	--	1080	1490	.6
AVG.	142	12	--	462	198	1810	71	146	--	1650	2950	.8
TOT. LOAD (TONS)												
	--	1650	--	45700	17500	128000	4740	21500	--	151000	209000	81

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.---Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00995)	PH (UNITS) (00400)
OCT.												
01-06	2.3	--	--	--	4400	5.98	2260	1200	1100	14	7750	7.7
07-08	1.8	--	--	--	1970	2.68	2190	860	730	5.2	3170	7.9
09-22	1.6	--	--	--	4330	5.89	1290	1200	1100	14	7140	7.6
23--	.65	--	--	--	2530	3.44	47300	1200	1000	9.3	3790	8.0
24-25	.73	--	--	--	538	.73	5450	290	190	1.7	923	7.9
26-31	.87	.05	160	1760	1640	2.23	4280	670	560	5.2	2740	7.9
NOV.												
01-11	1.5	--	--	--	3090	4.20	2930	1100	960	8.0	4830	7.5
12-30	1.7	--	--	--	4390	5.97	1880	1500	1400	10	6860	7.4
DEC.												
01-31	1.8	--	--	--	4550	6.19	1890	1700	1500	9.9	7160	7.9
JAN.												
01-07	2.0	--	--	--	4690	6.38	2180	1800	1600	9.6	7020	--
08-31	1.8	--	--	--	5080	6.91	1650	1800	1700	11	7900	--
FEB.												
01-28	.66	--	--	--	5310	7.22	1480	1800	1700	12	8310	--
MAR.												
01-09	.82	--	--	--	6590	8.96	1710	2000	1900	16	10000	--
10-13	.97	--	--	--	5320	7.24	1580	1900	1800	11	7780	--
14-18	.90	--	--	--	5950	8.89	1410	1900	1900	13	8700	--
19-25	.93	--	--	--	6660	9.06	1170	1900	1900	16	9550	--
26-31	.92	--	--	--	8330	11.3	787	2100	2000	20	11700	--
APR.												
01-16	1.1	.08	740	9030	8540	11.6	1200	2300	2200	20	13095	--
17-30	.98	--	--	--	8890	12.1	960	2400	2300	20	13652	--
MAY.												
01-31	.93	--	--	--	9360	12.7	1060	2300	2200	23	14300	--
JUNE												
01-22	.76	--	--	--	10200	13.9	771	2400	2300	24	16000	--
23-25	.83	--	--	--	12500	17.0	1590	2400	2300	32	19000	--
26-30	.79	--	--	--	9270	12.6	701	2100	2000	24	14200	--
JULY												
01-06	.68	--	--	--	11600	15.8	940	2400	2300	28	17400	7.2
07-20	.69	--	--	--	9860	13.4	1090	2300	2200	24	14800	7.2
21-31	1.4	--	--	--	8690	11.8	1380	2100	2000	21	13100	7.2
AUG.												
01-16	.60	--	--	--	9920	13.5	857	2200	2100	25	15100	6.9
17-27	.54	--	--	--	11600	15.8	908	2300	2200	29	17600	7.1
28-31	.76	--	--	--	9260	12.6	1130	2300	2200	22	14100	7.3
SEP.												
01-30	.92	--	--	--	9400	12.8	964	2400	2300	21	14000	7.2
WTD. AVG.	1.1	--	--	--	4050	5.51	--	1330	1200	9.8	6290	--
TIME WTD.												
AVG.	1.1	--	--	--	7240	9.84	--	1960	1850	17	11100	--
TOT. LOAD (TONS)	160	--	--	--	568000	--	--	--	--	--	--	--

## RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.---Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5440	4190	6930	6670	7510	9300	13300	15100	12700	18200	17200	15900
2	6520	4150	6930	7010	7460	9640	12900	13200	17200	19200	15400	17000
3	6820	4100	6840	6960	7740	9550	13600	14100	15500	15700	13800	20300
4	7840	4040	6840	6790	7630	9810	13300	14200	14400	16700	13600	14100
5	8200	4360	6930	6790	---	9810	12400	15500	12900	18300	13100	15400
6	9380	5260	6930	6530	7310	9810	13100	15800	13100	16800	13400	14800
7	2930	5750	7170	6670	7360	9810	14200	14900	14000	14800	17500	14700
8	3480	6170	6980	6880	7570	10400	14800	14600	16200	13800	16900	17000
9	4570	4440	6890	7190	7850	11000	12100	20000	13800	15300	13300	14900
10	5590	4840	6860	7800	7460	7570	11300	18200	18000	13000	13500	12300
11	6600	5260	6860	7480	7740	7520	14600	16000	15800	14200	14900	13800
12	7390	5750	6860	7690	7910	8090	13400	14400	16200	13300	16100	13200
13	8270	6020	---	7480	7790	8220	10800	12500	13600	14800	15800	13300
14	8900	6170	7030	7740	7910	8410	11300	11300	14100	16100	15100	13600
15	9550	6360	---	8270	8090	8480	11800	12400	15300	14900	16100	12300
16	8270	6480	6800	8090	8620	9060	12000	15300	13600	23300	14700	12400
17	7450	6560	6840	7690	8280	8550	---	14400	15300	14900	20100	12600
18	7610	6440	6930	8210	8910	8690	14000	12400	18500	13600	15100	12400
19	6860	6520	6840	7860	8350	8980	15800	11200	19600	11100	15600	14200
20	6000	6600	6750	7480	8350	8690	12100	17500	16500	14200	17000	15500
21	5830	6650	7070	7330	8350	9380	13100	12200	16300	13100	15400	13200
22	6070	6690	6750	7590	8350	10500	13100	11000	14700	13300	14200	12400
23	3700	6650	6710	7190	8620	10300	12200	15100	30500	13900	18800	13600
24	795	6870	6840	7590	8690	11300	13200	12600	20200	11600	17500	13600
25	1030	7010	6670	7590	8410	10200	13200	12300	14200	12400	14900	13300
26	2050	7050	6890	7330	8910	11600	13100	16300	12800	12600	25900	13700
27	2230	7010	7070	7480	8350	12000	13200	16600	12100	12900	18200	12600
28	2610	6960	6980	7430	8350	13400	15000	13900	14500	14800	14500	13500
29	3720	6960	6890	7430	---	12600	15000	13600	15300	13100	14700	16100
30	4510	6780	7030	7240	---	11800	14200	15800	17300	11800	13500	13700
31	4170	---	7070	7710	---	11700	---	13900	---	13800	13100	---
MONTH	5630	5940	6900	7390	8070	9880	13170	14220	15810	14690	15770	14180
YEAR	MAX	30500	MIN	795	MEAN	11000						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	18.0	9.0	8.5	11.0	14.0	16.0	22.0	21.0	30.0	30.0	29.0
2	20.0	16.5	9.0	8.0	12.0	14.0	16.5	22.0	26.0	29.0	30.0	25.0
3	19.5	17.5	8.0	7.5	12.0	17.0	14.0	22.0	25.0	27.5	28.0	27.0
4	20.0	16.5	10.0	7.0	12.0	13.5	13.0	21.5	26.5	26.5	27.0	26.0
5	20.5	15.0	10.5	7.5	11.0	13.0	15.0	22.0	26.5	28.0	25.5	27.0
6	21.5	14.5	10.5	7.0	11.0	14.5	16.5	19.0	29.0	27.5	29.5	25.0
7	19.5	14.0	10.5	9.0	10.0	15.0	18.0	19.0	27.0	31.0	29.0	23.0
8	20.5	14.0	10.0	8.0	11.0	14.0	12.0	24.0	23.0	27.5	29.0	25.5
9	22.0	15.0	9.5	10.0	10.0	13.5	14.5	24.0	26.0	30.5	24.5	26.0
10	22.0	14.0	7.0	7.0	9.0	14.0	16.0	23.0	25.0	26.0	24.5	28.0
11	21.0	14.5	9.0	7.0	10.0	14.0	16.0	18.0	26.0	29.0	25.5	26.0
12	20.0	14.5	9.0	6.0	10.0	13.0	13.0	23.0	25.0	26.0	25.0	21.0
13	19.5	14.0	---	7.0	10.0	11.0	14.0	22.0	26.0	25.0	25.0	18.0
14	19.0	14.0	9.0	8.0	11.5	12.5	19.0	26.0	24.0	28.0	25.5	18.5
15	17.5	13.0	---	6.0	11.5	12.0	18.5	23.5	24.5	26.0	25.0	20.0
16	17.5	13.0	9.0	7.0	11.5	12.0	18.0	25.0	28.5	27.0	25.0	21.5
17	18.0	12.0	8.5	8.0	11.0	13.0	19.0	22.5	28.0	26.5	26.5	22.5
18	18.0	12.5	8.5	8.0	9.5	17.0	17.0	24.0	26.5	24.5	26.0	25.0
19	18.0	13.5	8.0	8.0	10.0	15.0	14.0	25.5	25.5	26.0	25.0	24.0
20	18.0	13.5	8.5	8.0	11.5	17.0	16.5	23.0	25.5	25.0	25.0	25.0
21	19.0	13.0	8.0	8.0	11.0	18.5	17.5	22.0	29.5	25.0	27.5	21.0
22	19.0	14.0	8.0	8.0	10.0	17.5	19.5	25.0	25.0	26.0	27.0	22.0
23	18.5	15.0	9.0	8.0	6.5	15.5	20.0	25.0	29.5	27.0	31.5	18.0
24	16.0	13.0	8.0	8.0	10.0	13.5	22.0	25.5	29.0	29.5	27.0	18.0
25	17.0	12.5	8.0	9.0	10.5	14.0	20.0	23.5	27.0	27.0	29.0	20.0
26	18.0	11.5	7.0	10.0	11.5	15.0	22.0	26.0	26.5	27.0	29.0	18.0
27	18.0	11.5	6.5	11.0	11.5	14.5	20.0	24.5	29.5	28.5	24.5	24.0
28	18.0	12.0	7.0	11.0	12.5	15.5	19.0	23.5	30.5	30.5	26.0	19.5
29	17.0	10.0	9.0	11.0	---	12.5	22.0	24.0	25.5	28.5	27.0	25.0
30	17.0	11.0	10.0	12.0	---	11.0	21.0	20.5	25.0	30.0	27.0	20.0
31	17.0	---	10.0	12.0	---	12.0	---	19.0	---	28.0	27.0	---
MONTH	19.0	14.0	9.0	8.5	10.5	14.0	17.5	23.0	26.5	27.5	27.0	23.0
YEAR	MAX	31.5	MIN	6.0	MEAN	18.5						

08407500 PECOS RIVER AT RED BLUFF, N. MEX.  
(National stream-quality accounting network,  
and surveillance network station)

LOCATION.--Lat 32°04'30", long 104°02'21", in SW¼NW¼NE¼ sec. 1, T.26 S., R.28 E., Eddy County, 2 mi (3.2 km) downstream from gaging station which is at Red Bluff, 0.2 mi (0.3 km) downstream from Red Bluff Draw, 1.6 mi (2.6 km) northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 mi (8.4 km) north of the New Mexico-Texas state line, 5.5 mi (8.8 km) upstream from Delaware River, and at mile 411.3 (661.8 km).

DRAINAGE AREA.--19,540 mi<sup>2</sup> (50,600 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: October 1952 to current year.

Sediment records: July 1969 to current year.

#### EXTREMES:

Current year:

Specific conductance: Maximum daily, 20,100 micromhos Aug. 25; minimum daily, 868 micromhos Oct. 24.

Water temperatures: Maximum, 31.0°C July 29-Aug. 2; minimum, 5.0°C Dec. 25-26, Jan. 12-13.

Period of record:

Specific conductance: Maximum daily, 51,400 micromhos June 20, 1972; minimum daily, 268 micromhos Sept. 19, 1946.

Water temperatures: Maximum, 36.0°C July 31, 1966, July 13, 1970; minimum, 1.0°C Jan. 10, 11, 1962, Jan. 13, 1963.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of heavy local rains.

#### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	RICAR-	
		TANFOUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SIOP) (MG/L) (00955)	SOLVED IRON (FF) (MG/L) (01046)	SOLVED MAN- GANESE (MN) (MG/L) (01056)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)		
OCT.											
11...	0925	96	9.1	10	--	310	140	2100	55	166	
NOV.											
14...	1650	178	9.9	10	--	360	130	1400	26	171	
DEC.											
12...	1141	160	8.6	20	60	440	170	1200	34	179	
JAN.											
08...	1452	124	11	20	--	470	150	1200	34	186	
FEB.											
13...	1629	108	1.3	10	--	440	170	1400	48	99	
MAR.											
05...	1444	78	.7	10	90	480	200	2000	63	78	
APR.											
17...	1312	49	3.5	10	--	530	290	2400	87	100	
MAY											
15...	1730	57	11	20	--	520	230	2400	97	157	
JUNE											
10...	0900	30	6.1	10	30	550	270	2700	110	121	
JULY											
17...	1600	43	11	20	--	540	290	2800	110	110	
AUG.											
21...	1300	25	10	10	30	480	290	2900	120	98	
SEP.											
18...	1430	38	9.8	10	--	490	230	2400	90	89	
DATE		CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
OCT.											
11...	0	1100	3400	.5	.57	.05	.62	.62	.12	1.5	
NOV.											
14...	0	1200	2300	.6	.92	.03	1.0	.95	.03	.73	
DEC.											
12...	0	1400	2000	.7	1.1	.04	1.1	1.1	.06	1.1	
JAN.											
08...	0	1600	2000	.7	1.3	.05	1.3	1.3	.04	.82	
FEB.											
13...	0	1600	2300	.6	.02	.00	.04	.02	.02	.59	
MAR.											
05...	0	1700	3300	.6	.00	.02	.02	.02	.02	1.6	
APR.											
17...	0	2000	4200	.8	.02	.01	.11	.03	.12	1.2	
MAY											
15...	0	1900	3900	.8	.27	.04	.32	.31	.09	1.1	
JUNE											
10...	0	2000	4300	.8	.01	.01	.02	.02	.08	1.1	
JULY											
17...	0	2000	4700	.9	--	--	.02	.01	.00	1.2	
AUG.											
21...	0	2100	4900	.8	--	--	.05	.05	.00	.84	
SEP.											
18...	0	2100	3800	.7	--	--	.00	.00	.00	1.8	

## 08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (006600)	TOTAL PHOS- PHORUS (P) (006664)	DIS- SOLVED ORTH-O- PHOS- PHORUS (P) (006671)	DIS- SOLVED SOLIDS GUF AT 100 C (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	HARD- NESS (MG/L) (00702)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (00400)
OCT.										
11...	2.2	.11	.04	7260	7200	1400	1200	25	11900	8.4
NOV.										
14...	1.9	.06	.01	5840	5520	1400	1200	16	9070	8.3
DEC.										
12...	2.3	.09	.01	5720	5350	1800	1700	12	8480	8.1
JAN.										
08...	2.2	.09	.05	8600	5560	1800	1600	12	7800	8.6
FEB.										
13...	.65	.14	.01	6260	6010	1800	1700	14	9000	8.8
MAR.										
05...	1.6	.08	.01	7930	7700	2000	2000	19	11000	8.6
APR.										
17...	1.4	.07	.02	9280	9560	2500	2400	21	10200	8.3
MAY										
15...	1.5	.06	.05	9600	9140	2200	2100	22	13300	8.0
JUNE										
10...	1.2	.07	.00	10400	10000	2500	2400	24	14000	8.1
JULY										
17...	1.2	.04	.00	10900	10500	2500	2500	24	14800	8.0
AUG.										
21...	.89	.03	.01	11300	10900	2400	2300	26	16200	8.0
SEP.										
18...	1.8	.04	.00	9280	9170	2200	2100	22	12500	8.2

DATE	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (00640)	DIS- SOL- VED ORGANIC CARBON (C) (00681)	SUS- PENDED ORGANIC CARBON (C) (00689)	DIS- SOLVED BORON (B) (01020)
OCT.									
11...	20.5	20.5	20	10.5	140	11	--	--	490
NOV.									
14...	8.0	14.0	10	14.4	90	10	--	--	420
DEC.									
12...	19.5	6.5	9	14.0	27	14	--	--	320
JAN.									
08...	19.5	9.0	3	14.8	82	6.6	--	--	440
FEB.									
13...	20.0	11.5	6	18.6	87	12	--	--	480
MAR.									
05...	25.5	15.0	6	15.8	13	14	--	--	590
APR.									
17...	34.0	20.0	1	12.0	130	12	--	--	760
MAY									
15...	25.0	24.0	2	8.1	120	6.5	--	--	810
JUNE									
10...	27.0	24.5	2	7.0	190	9.6	--	--	880
JULY									
17...	28.0	26.0	4	8.9	140	--	6.0	2.1	900
AUG.									
21...	36.0	27.0	12	7.0	170	--	38	.7	960
SEP.									
18...	31.0	26.5	4	12.2	100	--	6.1	1.0	780

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (01027)	TOTAL CHRO- MIUM (CR) (01034)	TOTAL COBALT (CO) (01037)	TOTAL COPPER (CU) (01042)	TOTAL MAN- GANESE (MN) (01055)	TOTAL ZINC (ZN) (01092)
MAR.							
13...	1145	30	10	50	30	100	70
JUNE							
20...	1115	40	20	200	40	50	110



## 08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED ARSENIC (AS) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
DEC. 12...	1141	1	0	320	<10	1	10	<10	50	2	10	12
MAR. 05...	1444	2	2	590	10	0	10	20	<50	2	40	3
JUNE 10...	0900	2	2	880	<10	0	20	10	100	0	20	1
AUG. 21...	1300	2	2	960	30	0	30	10	300	0	20	2

	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01060)	DIS- SOLVED MERCURY (HG) (UG/L) (01060)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 12...	120	20	100	1	80	60	<.1	<.1	2	2	60	40
MAR. 05...	360	10	100	0	170	90	.0	.0	2	2	40	10
JUNE 10...	490	10	100	0	160	30	.0	.0	2	2	20	10
AUG. 21...	310	10	200	1	140	30	.0	.0	1	1	50	30

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M (00573)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (3222R)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (3222B)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STERE- TOCUCCT (COL- ONIES PER 100 ML) (31679)
OCT. 11...	0925	74000	--	--	--	--	40	56
NOV. 14...	1650	30000	--	--	--	--	35	21
DEC. 12...	1141	200000	--	--	--	--	0	0
JAN. 08...	1452	7500	--	--	--	--	0	2
FEB. 13...	1629	57000	--	--	--	--	3	5
MAR. 05...	1444	150000	--	--	--	--	0	35
APR. 17...	1312	34000	--	--	--	--	9	15
MAY 15...	1730	38000	--	--	--	--	34	31
JUNE 10...	0900	52000	--	--	--	--	13	28
JULY 17...	1600	39000	12	13	5.0	.7	0	28
AUG. 21...	1300	21000	--	--	--	--	14	17
SEP. 18...	1430	230000	--	--	--	--	5	4

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 11	0925	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		<u>Pediastrum</u>		3	
		Coelastraceae			
		<u>Coelastrum</u>		1	
		Occystaceae			
		<u>Ankistrodesmus</u>		1	
		<u>Chlorella</u>		22	
		<u>Occystis</u>		1	
		<u>Tetraedron</u>		<1	
		Scenedesmaceae			
		<u>Actinastrum</u>		1	
		<u>Crucigenia</u>		3	
		<u>Scenedesmus</u>		8	
		Zygnematales			
		Desmidiaceae			
		<u>Closterium</u>		2	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		<u>Phacus</u>		<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		<u>Synedra</u>		1	
		Achnanthaceae			
		Achnanthes		1	
		Naviculaceae			
		Gyrosigma		<1	
		Nitzschiaceae			
		<u>Nitzschia</u>		1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>		4	
		<u>Agmenellum</u>		9	
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Lyngbya</u>		43	
TOTAL			74,000		

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov 14	1650	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Tetrasporales			
		Palmellaceae			
		<u>Sphaerocystis</u>		4	
		Chlorococcales			
		Coelastraceae			
		<u>Coelastrum</u>		5	
		Oocystaceae			
		<u>Ankistrodesmus</u>		5	
		<u>Dictyosphaerium</u>		1	
		<u>Kirchneriella</u>		<1	
		<u>Quadrifida</u>		5	
		<u>Treubaria</u>		<1	
		<u>Chodatella</u>		1	
		Scenedesmaceae			
		<u>Actinastrum</u>		7	
		<u>Crucigenia</u>		6	
		<u>Scenedesmus</u>		10	
		<u>Tetrastrum</u>		1	
		EUGLENOPHYTA			
		Cryptophyceae			
		Cryptomonadales			
		Cryptomonadaceae			
		<u>Cryptomonas</u>		<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		7	
		Pennales			
		Fragilariaceae			
		<u>Synedra</u>		<1	
		Nitzschaceae			
		<u>Nitzschia</u>		2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>		43	
		TOTAL	30,000		
Dec 12	1141	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Tetrasporales			
		Palmellaceae			
		<u>Sphaerocystis</u>		2	
		Chlorococcales			
		Oocystaceae			
		<u>Ankistrodesmus</u>		1	
		<u>Tetraedron</u>		<1	
		Scenedesmaceae			
		<u>Actinastrum</u>		<1	
		<u>Scenedesmus</u>		1	
		Zygnematales			
		Desmidiaceae			
		<u>Closterium</u>		1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		88	
		<u>Melosira</u>		4	
		Pennales			
		Naviculaceae			
		<u>Amphiprora</u>		<1	
		Nitzschaceae			
		<u>Nitzschia</u>		<1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Anacystis</u>		4	
		TOTAL	200,000		

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan 08	1452	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas		1	
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		4	
		Tetradron		1	
		Scenedesmaceae			
		Scenedesmus		2	
		Zygnematales			
		Desmidiaceae			
		Closterium		1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		49	
		Melosira		35	
		Pennales			
		Naviculaceae			
		Amphiprora		1	
		Navicula		4	
		Nitzschia		2	
		Surirellaceae			
		Surirella		2	
		TOTAL	7,500		
Feb 13	1629	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Polyblepharidaceae			
		Chlamydomonas		<1	
		Chlorococcales			
		Coelastraceae			
		Ankistrodesmus		1	
		Occystia		<1	
		Scenedesmaceae			
		Scenedesmus		4	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Phacus		<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		85	
		Pennales			
		Naviculaceae			
		Navicula		1	
		Gomphonemataceae			
		Gomphonema		<1	
		Nitzschaceae			
		Nitzschia		1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis		7	
		TOTAL	57,000		
Mar 08	1444	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		<1	
		Scenedesmaceae			
		Scenedesmus		1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		98	
		Pennales			
		Naviculaceae			
		Navicula		<1	
		TOTAL	150,000		

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr 17	1312	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		3	
		Occystis		6	
		Scenedesmaceae			
		Scenedesmus		15	
		Microactiniaceae			
		Microactinium		3	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		71	
		Pennales			
		Naviculaceae			
		Amphiprora		1	
		Surirellaceae			
		Surirella		1	
		TOTAL	34,000		
May 15	1730	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas		4	
		Chlorococcales			
		Coelastraceae			
		Coelastrum		6	
		Occystaceae			
		Ankistrodesmus		3	
		Occystis		3	
		Scenedesmaceae			
		Actinastrum		5	
		Scenedesmus		20	
		PYRRHOPHYTA			
		Dinophyceae			
		Peridinales			
		Glenodiniaceae			
		Glenodinium		<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		5	
		Melosira		2	
		Rhizosoleniaceae			
		Rhizosolenia		1	
		Chaetoceraceae			
		Chaetoceros		<1	
		Pennales			
		Achnanthaceae			
		Achnanthes		<1	
		Cocconeis		1	
		Nitzschaceae			
		Nitzschia		5	
		Surirellaceae			
		Surirella		<1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis		10	
		Incerta		20	
		Agmenellum		13	
		TOTAL	38,000		

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jun 10	0900	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		7	
		Franceia		<1	
		Kirchneriella		1	
		Oocystis		2	
		Scenedesmaceae			
		Scenedesmus		5	
		PYRRHOPHYTA			
		Dinophyceae			
		Dinocapsales			
		Gloeodiniaceae			
		Gloeodinium		3	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		6	
		Melosira		1	
		Pennales			
		Naviculaceae			
		Navicula		1	
		Gomphonemataceae			
		Gomphonema		1	
		Cymbellaceae			
		Cymbella		<1	
		Nitzschaceae			
		Nitzschia		2	
		Surirellaceae			
		Surirella		<1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis		10	
		Agmenellum		57	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya		4	
		TOTAL	52,000		
Jul 17	1600	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Chlorella	410	1	
		Kirchneriella	650	2	
		Oocystis	2,000	5	
		Tetrasedron	160	<1	
		Scenedesmaceae			
		Scenedesmus	1,300	3	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	82	<1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,700	7	
		Pennales			
		Naviculaceae			
		Navicula	82	<1	
		NITZSCHACEAE			
		Nitzschia	3,100	8	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	12,000	32	
		Anacystis	3,400	9	
		Oscillatoriales			
		Nostocaceae			
		Anabaena	650	2	
		Oscillatoriaceae			
		Lyngbya	12,000	30	
		Spirulina	320	1	
		TOTAL	39,000		

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug 21	1300	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		<u>Dictyosphaerium</u>	290	1	
		<u>Oocystis</u>	430	2	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coccinodiscaceae			
		<u>Cyclotella</u>	3,700	17	
		Pennales			
		Nitzschaceae			
		<u>Nitzschia</u>	73	<1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Agmenellum</u>	2,000	10	
		<u>Anacystis</u>	870	4	
		<u>incerta</u>	10,000	49	
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Oscillatoria</u>	3,200	15	
		PYRRHOPHYTA			
		Dinophyceae			
		Peridinales			
		Glenodiniaceae			
		<u>Glenodinium</u>	140	1	
		TOTAL	21,000		
Sep 18	1430	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		<u>Ankistrodesmus</u>	1,400	1	
		<u>Oocystis</u>		<1	
		Scenedesmaceae			
		<u>Scenedesmus</u>	2,800	1	
		Zygnematales			
		Desmidiaceae			
		<u>Cosmarium</u>	1,400	1	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Pennales			
		Nitzschaceae			
		<u>Nitzschia</u>	37,000	16	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		<u>Agmenellum</u>	28,000	13	
		<u>Anacystis</u>	100,000	46	
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Oscillatoria</u>	51,000	23	
		TOTAL	230,000		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Jul 17	37	13	12	5.0	0.7	250	Polyethylene strip

## 08407500 PECOS RIVER AT RED BLUFF, N. MEX.---Continued

SPECIFIC CONDUCTANCE (MICROHMOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	5750	8750	7980	8690	10200	16900	16400	17800	15100	12300	16900
2	12500	5530	8750	8390	8700	10200	16300	16500	15600	14200	13400	15500
3	13900	5280	8750	8000	8720	10700	13900	16800	15600	14200	13300	15400
4	14900	5150	8610	7830	8740	11100	14900	16200	16700	16200	13300	14600
5	15300	5680	8610	7630	8660	11100	15400	16900	16600	16200	14100	14700
6	16500	7120	8680	7620	8690	11700	15600	17300	16100	15300	14100	14600
7	3370	8390	8540	7560	8380	11500	16600	16500	16600	14900	14700	14800
8	4930	8970	8540	7700	8620	11400	14700	16500	17600	17600	14900	16300
9	6750	6540	8610	8370	8770	11200	14700	12700	17000	17200	15300	15600
10	8900	5450	8470	8570	8990	10700	15600	18000	15400	16800	15500	15000
11	11100	6460	8400	8890	9210	10700	17200	15100	15200	16100	15100	14800
12	12700	8460	8270	9420	8850	8540	16300	12700	15600	15300	15100	15200
13	14000	8460	8200	9040	9160	8680	14200	14600	16300	15800	15500	14900
14	14600	8810	8200	9230	9180	9130	13900	16200	16600	13300	16000	14800
15	13200	8970	8270	9230	9180	9550	15600	14800	17000	13000	16400	13800
16	13800	9120	8200	9090	9450	9630	12900	14300	18500	15600	16700	13800
17	13400	9450	8270	9180	9920	10200	13600	14200	18800	15600	16700	13300
18	12900	8890	8140	9300	9920	10300	13600	9540	19200	15500	17800	13300
19	10900	8890	8200	9280	9630	9910	14500	8310	18600	15800	14300	12200
20	8220	8740	8250	8760	10200	10100	14500	7050	17400	15800	15700	11700
21	7600	8670	8390	8670	9790	10100	14500	11700	18100	16300	16600	11700
22	7970	8740	8320	8350	9710	10100	16100	12900	17900	14100	17600	11900
23	10400	8890	8460	8390	9680	10900	18400	13300	18100	12500	18700	12200
24	868	9040	8000	8370	10100	11800	16600	13600	9890	12300	19600	12800
25	882	9200	7920	8410	10200	11700	15800	13800	9040	13600	20100	14200
26	2000	9200	8050	8610	10100	12800	15800	13900	13600	12600	19500	14100
27	2440	9120	8050	8490	9730	12900	15200	14200	17000	12500	18300	13300
28	2660	9120	8170	8390	10200	13800	15200	14800	17400	11600	17500	13200
29	5120	8740	8110	8470	---	14800	15600	15200	15000	12000	17500	13500
30	6460	8890	7920	8550	---	15200	16100	15100	15100	11800	16300	14300
31	5900	---	7980	8980	---	15700	---	15900	---	12300	16600	---
MONTH	9200	7990	8330	8540	9320	11170	15340	14350	16280	14550	16080	14080
YEAR	MAX	20100	MIN	868	MEAN	12110						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	17.0	7.5	7.0	11.5	15.5	17.0	21.5	26.0	29.0	31.0	27.5
2	20.0	17.5	8.0	7.0	11.5	15.5	17.0	23.0	26.0	29.0	31.0	27.5
3	20.5	17.5	8.0	7.0	11.5	15.5	16.5	24.0	26.0	29.5	29.5	26.0
4	26.5	16.5	9.0	7.0	11.5	15.0	17.0	23.5	26.0	28.5	29.5	27.0
5	22.5	15.5	9.0	7.0	11.0	16.0	18.0	22.0	28.5	29.0	29.5	27.0
6	22.5	14.0	9.0	7.5	10.5	16.0	17.0	22.0	29.0	30.5	29.0	26.0
7	20.5	14.0	9.0	7.5	10.5	16.0	17.5	22.0	27.0	29.0	28.5	26.0
8	21.5	14.0	9.0	8.0	11.5	15.5	17.0	22.0	28.0	30.0	28.0	26.5
9	21.5	14.5	8.0	8.0	10.5	15.0	17.0	22.0	27.5	30.5	28.0	27.0
10	21.5	14.5	8.0	7.0	10.0	14.5	18.5	21.0	26.5	29.0	28.5	27.5
11	21.5	14.5	8.0	7.0	11.5	15.0	16.5	22.5	25.5	29.0	27.5	27.0
12	21.0	14.5	7.5	5.0	12.0	12.0	13.5	24.5	26.5	27.5	27.5	22.5
13	20.5	14.5	8.0	5.0	12.0	13.0	16.0	23.0	27.0	29.0	28.0	20.0
14	18.5	13.5	8.0	6.0	12.0	13.0	17.5	24.0	28.0	28.0	27.5	24.5
15	17.5	12.5	7.0	6.0	12.0	13.5	19.0	26.0	27.5	28.5	28.5	21.5
16	18.0	12.0	6.5	6.5	13.0	14.0	20.0	26.0	28.0	28.0	29.0	23.5
17	19.5	12.0	7.0	8.0	11.5	13.0	21.0	26.5	28.0	26.0	28.5	25.0
18	21.0	12.5	7.0	9.0	11.5	15.0	19.0	22.0	27.0	27.0	29.0	27.0
19	20.0	13.0	6.5	9.0	11.5	16.0	18.5	22.5	27.5	29.5	29.0	26.5
20	20.0	13.0	7.0	7.5	11.5	16.5	21.0	22.0	28.0	27.5	29.0	24.5
21	19.0	13.0	7.0	8.0	11.0	17.5	21.0	24.0	27.5	27.0	28.5	22.0
22	18.5	14.0	8.0	7.0	9.0	17.0	21.0	23.0	27.0	28.0	29.0	22.0
23	18.0	14.0	9.0	7.0	8.0	16.5	23.0	25.0	27.0	29.5	29.5	22.0
24	17.0	13.0	7.0	8.0	9.5	16.5	22.0	27.0	26.0	29.5	29.5	21.0
25	18.0	11.5	5.0	9.0	11.0	17.5	21.5	26.0	27.5	28.5	28.0	21.0
26	18.0	11.0	5.0	10.0	13.0	17.5	21.5	25.0	30.0	28.0	28.0	21.5
27	18.0	11.0	6.0	10.5	13.5	16.0	21.0	24.0	29.5	29.5	26.0	22.0
28	16.5	10.0	6.5	11.5	14.0	13.5	21.0	24.0	29.5	30.0	28.0	23.0
29	17.5	9.5	8.5	11.0	---	12.0	21.5	22.0	28.5	31.0	28.0	22.0
30	17.5	8.0	9.0	11.0	---	14.0	21.5	22.5	28.0	31.0	28.5	22.0
31	17.5	---	9.0	10.5	---	15.5	---	23.5	---	31.0	27.0	---
MONTH	19.5	13.5	7.5	8.0	11.5	15.0	19.0	23.5	27.5	29.0	28.5	24.5
YEAR	MAX	31.0	MIN	5.0	MEAN	19.0						



08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (00154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (00155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT.						
11...	0925	20.5	96	49	1.3	79
NOV.						
14...	1650	14.0	178	80	3.8	10
DEC.						
12...	1141	6.5	160	47	20	46
JAN.						
08...	1452	9.0	124	19	6.4	66
FEB.						
13...	1629	11.5	108	23	6.7	98
MAR.						
05...	1444	15.0	78	35	7.4	97
APR.						
17...	1312	20.0	49	25	3.3	89
MAY						
15...	1730	24.0	57	33	5.1	76
JUNE						
10...	0900	24.5	30	26	2.1	88
JULY						
17...	1600	26.0	43	13	1.5	53
AUG.						
21...	1300	27.0	25	9	.61	78
SEP.						
18...	1430	26.5	38	26	2.7	96

## TULAROSA VALLEY BASIN

08481500 RIO TULAROSA NEAR BENT, N. MEX.  
(National stream-quality accounting network station)

LOCATION.--Lat 33°08'41", long 105°53'50", in S&M sec.32, T.13 S., R.11 E., Otero County at gaging station 50 ft (15 m) downstream from bridge on U.S. highway 70, 2.6 mi (4.2 km) west of Bent, and 8.5 mi (13.7 km) northeast of Tularosa.

DRAINAGE AREA.--120 mi<sup>2</sup> (310 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: May 1963 to current year.  
Sediment records: February 1975 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00954)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)	HICAR- MONATE (HCO3) (MG/L) (00440)
OCT.										
09...	1710	9.9	16	--	--	220	61	43	1.8	230
30...	1625	13	16	20	--	250	57	47	2.6	274
NOV.										
21...	0900	12	15	--	--	230	64	51	2.0	258
DEC.										
11...	1000	11	14	--	--	220	62	46	1.8	262
JAN.										
03...	1600	12	14	--	--	210	62	47	1.7	245
FEB.										
12...	1526	12	13	30	--	220	67	47	1.4	247
13...	1025	12	--	--	--	--	--	--	--	--
MAR.										
04...	1457	12	13	10	30	220	61	48	1.6	230
APR.										
04...	0950	12	--	--	--	--	--	--	--	--
16...	1321	11	12	10	--	220	68	50	1.8	239
MAY										
07...	1200	12	--	--	--	--	--	--	--	--
14...	1315	14	13	10	--	210	52	52	1.9	236
JUNE										
11...	0820	9.5	14	40	30	360	66	48	1.5	253
JULY										
18...	1200	10	15	0	--	200	57	43	1.4	200
AUG.										
20...	1200	11	14	10	0	250	67	38	3.7	233
SEP.										
19...	1430	11	15	0	--	200	57	41	1.6	215

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
OCT.										
09...	0	570	58	.5	--	--	--	.46	--	--
30...	0	620	65	.7	--	--	--	1.8	--	--
NOV.										
21...	0	580	70	.5	--	--	--	.54	--	--
DEC.										
11...	0	560	65	.5	--	--	--	.38	--	--
JAN.										
03...	0	540	69	.4	--	--	--	.39	--	--
FEB.										
12...	0	620	64	.4	.22	.00	.42	.22	.00	.20
13...	--	--	--	--	--	--	--	--	--	--
MAR.										
04...	0	550	70	.4	.32	.01	.36	.33	.01	.25
APR.										
04...	--	--	--	--	--	--	--	--	--	--
16...	0	600	71	.5	.43	.00	.44	.43	.02	.27
MAY										
07...	--	--	--	--	--	--	--	--	--	--
14...	0	580	59	.5	.21	.00	.24	.21	.03	.25
JUNE										
11...	0	920	62	.5	.45	.01	.48	.46	.01	.71
JULY										
18...	0	530	58	.5	--	--	.40	.40	.00	.43
AUG.										
20...	0	700	57	.5	--	--	.55	.55	.00	1.9
SEP.										
19...	0	540	54	.5	--	--	.48	.48	.00	.62

08481500 RIO TULAROSA NEAR BENT, N. MEX.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (006600)	TOTAL PHOS- PHORUS (P) (006655)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (006671)	DIS- SOLVED SOLIDS (RFSI- DUE AT 180 C) (070300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (070301)	HARD- NESS (CA+MG) (009000)	NON- CAR- BONATE HARD- NESS (MG/L) (009002)	SODIUM AD- SORP- TION RATIO (009031)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (000955)	PH (UNITS) (000400)
OCT.										
09...	--	--	--	--	1090	880	610	.7	1470	7.8
30...	--	--	.10	1240	1200	860	640	.7	1610	7.7
NOV.										
21...	--	--	--	--	1140	840	630	.8	1580	7.7
DEC.										
11...	--	--	--	--	1100	800	590	.7	1500	7.7
JAN.										
03...	--	--	--	--	1070	780	580	.7	1460	7.7
FEB.										
12...	.62	.01	.03	1160	1160	830	630	.7	1528	8.3
13...	--	--	--	--	--	--	--	--	1480	--
MAR.										
04...	.62	.02	.01	1130	1080	800	610	.7	1480	8.4
APR.										
04...	--	--	--	--	--	--	--	--	1470	--
16...	.73	.02	.01	1240	1140	830	630	.8	1610	7.8
MAY										
07...	--	--	--	--	--	--	--	--	1480	--
14...	.52	.03	.03	1170	1090	740	550	.8	1500	8.2
JUNE										
11...	1.2	.24	.00	1600	1600	1200	960	.6	2100	8.1
JULY										
18...	.83	.09	.01	1120	1010	730	570	.7	1360	7.9
AUG.										
20...	2.5	.66	.00	1300	1250	900	710	.6	1520	7.8
SEP.										
19...	1.1	.16	.00	1640	1020	730	560	.7	1400	7.7

DATE	AIR TEMPER- ATURE (DEG C) (006200)	TEMPER- ATURE (DEG C) (000100)	TUR- BID- ITY (JTU) (000070)	DIS- SOLVED OXYGEN (MG/L) (003000)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (003400)	TOTAL ORGANIC CARBON (C) (006800)	DIS- SOL- VED ORGANIC CARBON (C) (006810)	SUS- PENDED ORGANIC CARBON (C) (006889)	DIS- SOLVED BORON (B) (010200)
OCT.									
09...	--	18.0	--	--	--	--	--	--	--
30...	--	11.0	--	--	--	--	--	--	50
NOV.									
21...	--	7.0	--	--	--	--	--	--	--
DEC.									
11...	--	3.0	--	--	--	--	--	--	--
JAN.									
03...	--	5.0	--	--	--	--	--	--	--
FEB.									
12...	13.0	9.5	20	9.6	5	3.3	--	--	40
13...	--	7.0	--	--	--	--	--	--	--
MAR.									
04...	15.0	13.5	6	8.7	6	5.1	--	--	50
APR.									
04...	--	7.0	--	--	--	--	--	--	--
16...	27.0	16.0	4	8.1	9	2.0	--	--	50
MAY									
07...	--	6.0	--	--	--	--	--	--	--
14...	29.0	20.5	17	7.8	8	9.6	--	--	50
JUNE									
11...	26.0	12.5	160	8.5	21	7.1	--	--	50
JULY									
18...	25.0	21.5	60	7.5	7	--	2.7	.9	60
AUG.									
20...	24.5	19.0	180	7.2	72	--	9.6	.4	50
SEP.									
19...	27.0	21.0	110	7.5	8	--	2.7	1.6	60

TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (010020)	DIS- SOLVED ARSENIC (AS) (UG/L) (010000)	DIS- SOLVED BORON (B) (UG/L) (010200)	TOTAL CAD- MIUM (CD) (UG/L) (010270)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (010250)	TOTAL CHRO- MIUM (CR) (UG/L) (010340)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (010330)	TOTAL COBALT (CO) (UG/L) (010370)	DIS- SOLVED COBALT (CO) (UG/L) (010350)	TOTAL COPPER (CU) (UG/L) (010420)	DIS- SOLVED COPPER (CU) (UG/L) (010400)
MAR.												
04...	1457	0	1	50	<10	0	10	10	<50	2	20	1
JUNE												
11...	0820	2	1	50	<10	0	20	0	<50	0	10	1
AUG.												
20...	1200	14	2	50	10	0	50	0	50	0	50	2

08481500 RIO TULAROSA NEAR BENT, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL IRON (PP) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL GALLIUM (GA) (UG/L) (01055)	DIS- SOLVED GALLIUM (GA) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL NIUM (SE) (UG/L) (01147)	DIS- SOLVED NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR. 04...	850	10	100	0	40	30	.1	.1	1	1	30	10
JUNE 11...	6900	10	100	0	210	30	.0	.0	2	1	40	10
AUG. 20...	25000	10	100	1	950	0	.0	.0	2	1	110	0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CFLL'S PER ML) (00950)	PERI- PHYTO- TON BIOMASS (ASH WEIGHT G/50 M) (00972)	PERI- PHYTON BIOMASS (DRY WEIGHT G/50 M) (00973)	UNCON- FECTED PERI- PHYTON CHLORO- PHYLL A G/50 M (02224)	UNCON- FECTED PERI- PHYTON CHLORO- PHYLL B G/50 M (02226)	FECAL COLI- FORM (COL. PER 100 ML) (031616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (031679)
FEB. 12...	1526	880	--	--	--	--	1	60
MAR. 04...	1457	1700	8.8	9.3	1.5	.2	0	35
APR. 16...	1321	570	1.7	2.0	.0	.0	2	5
MAY 14...	1315	1700	--	--	--	--	12	200
JUNE 11...	0820	1300	--	--	--	--	260	1300
JULY 18...	1200	1200	13	13	1.6	.2	7	120
AUG. 20...	1200	0	--	--	--	--	68	72
SEP. 19...	1430	30	--	--	--	--	85	94

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb 12	1526	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		1	
		Pennales			
		Fragilariaceae			
		Synedra		25	
		Achnanthaceae			
		Achnanthes		37	
		Gomphonemataceae			
		Gomphonema		5	
		Nitzschaceae			
		<u>Nitzschia</u>		2	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		<u>Lyngbya</u>		30	
		TOTAL	880		
Mar 04	1457	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Achnanthes		40	
		Naviculaceae			
		Navicula		43	
		Gomphonemataceae			
		Gomphonema		3	
		Nitzschaceae			
		Nitzschia		11	
		Surirellaceae			
		<u>Surirella</u>		3	
		TOTAL	1,700		

08481500 RIO TULAROSA NEAR BENT, N. MEX.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr 16	1321	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Achnantheaceae			
		Achnanthes		11	
		Naviculaceae			
		Navicula		42	
		Nitzschaceae			
		Nitzschia		47	
		TOTAL	570		
May 14	1315	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		Synedra		3	
		Achnantheaceae			
		Achnanthes		47	
		Naviculaceae			
		Navicula		20	
		Gomphonemataceae			
		Gomphonema		1	
		Cymbellaceae			
		Cymbella		12	
		Nitzschaceae			
		Nitzschia		17	
		TOTAL	1,700		
Jun 11	0820	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Achnantheaceae			
		Achnanthes		33	
		Naviculaceae			
		Navicula		33	
		Gomphonemataceae			
		Gomphonema		7	
		Nitzschaceae			
		Nitzschia		20	
		Surirellaceae			
		Surirella		7	
		TOTAL	1,300		
Jul 18	1200	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Achnantheaceae			
		Achnanthes	610	49	
		Gomphonemataceae			
		Gomphonema	36	3	
		Naviculaceae			
		Navicula	540	43	
		Nitzschaceae			
		Nitzschia	36	3	
		Surirellaceae			
		Surirella	36	3	
		TOTAL	1,200		
Sep 19	1430	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	30	100	
		TOTAL	30		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Mar 04	20	9.3	8.8	1.5	0.2	330	Polyethylene strip
Apr 16	43	2.0	1.7	0.0	0.0	0.0	"
Jul 18	37	13.0	13.0	1.6	0.2	440	"

## TULAROSA VALLEY BASIN

08481500 RIO TULAROSA NEAR BENT, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DISE- MENT (MG/L) (80154)	SUS- PENDE MENT CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)
FEB.						
12...	1526	9.5	12	93	3.0	69
MAR.						
04...	1457	13.5	12	53	1.7	48
04...	1629	13.0	12	516	17	86
04...	1635	13.0	12	845	27	90
04...	1730	12.5	12	110	3.6	65
APR.						
16...	1321	16.0	11	38	1.1	34
MAY						
14...	1315	20.5	14	100	3.8	74
JUNE						
11...	0820	12.5	9.5	404	10	66
JULY						
18...	1200	21.5	10	148	4.0	87
AUG.						
20...	1200	19.0	11	1240	37	89
SEPT.						
19...	1430	21.0	11	279	8.3	89

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## RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DISE- MENT (MG/L) (80154)	SUS- PENDE MENT CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)
OCT.						
11...	0925	20.5	46	49	1.3	79
NOV.						
14...	1650	14.0	178	80	38	10
DEC.						
12...	1141	6.5	160	47	20	46
JAN.						
04...	1452	9.0	124	19	6.4	66
FEB.						
13...	1629	11.5	108	23	6.7	98
MAR.						
05...	1444	15.0	78	75	7.4	97
APR.						
17...	1317	20.0	49	25	3.3	89
MAY						
15...	1730	24.0	57	33	5.1	76
JUNE						
10...	0906	24.5	30	26	2.1	88
JULY						
17...	1600	26.0	43	13	1.5	53
AUG.						
21...	1300	27.0	25	4	.61	78
SEPT.						
18...	1430	26.5	34	26	2.7	94

## SAN JUAN RIVER BASIN

443

09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.  
(Irrigation network station)

LOCATION.--Lat 36°48'05", long 107°41'51", in N½ sec.20, T.30 N., R.8 W., San Juan County, at gaging station, 0.5 mi (0.8 km) upstream from Gobernador Canyon, 0.8 mi (1.3 km) northeast of Archuleta, 7.2 mi (11.6 km) downstream from Navajo Dam, and at mile 291.4 (468.9 km).

DRAINAGE AREA.--3,260 sq mi<sup>2</sup> (8,440 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: December 1954 to current year.

Water temperatures: December 1954 to January 1969.

Sediment records: December 1954 to September 1965.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MNI) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
23...	1300	486	11	10	--	33	5.7	17	2.1	100
NOV.										
22...	0915	468	10	0	--	34	5.5	15	1.5	109
DEC.										
20...	1015	504	11	10	--	33	6.6	16	1.8	102
JAN.										
24...	1030	536	5.6	10	--	35	6.1	16	2.3	108
FEB.										
21...	1015	490	8.4	0	--	34	6.9	17	2.0	109
MAR.										
10...	1330	492	9.9	10	0	38	7.6	18	1.8	110
APR.										
08...	1615	500	8.7	10	--	35	7.3	20	2.3	112
MAY										
06...	1930	2050	9.6	10	--	33	7.6	19	2.5	103
JUNE										
06...	0915	2540	9.1	10	--	34	7.2	18	2.2	111
JULY										
08...	1130	2280	12	10	--	37	6.9	17	2.1	103
AUG.										
15...	0945	1540	10	10	--	34	7.5	16	2.2	106
SEPT.										
18...	1245	1550	10	30	--	32	6.5	14	2.2	94

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RINE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
OCT.										
23...	0	54	2.7	.2	.06	.00	.06	.06	.08	.23
NOV.										
22...	0	46	3.0	.2	.09	.00	.09	.09	.01	.14
DEC.										
20...	0	56	3.1	.2	.11	.00	.15	.11	.03	.09
JAN.										
24...	0	56	3.0	.2	.11	.01	.13	.12	.00	.28
FEB.										
21...	0	54	3.9	.4	.07	.00	.07	.07	.01	.35
MAR.										
10...	0	72	4.6	.3	.04	.00	.04	.04	.00	.35
APR.										
08...	0	60	3.8	.2	.08	.00	.11	.08	.01	.22
MAY										
06...	5	63	3.8	.2	.03	.00	.03	.03	.00	.19
JUNE										
06...	0	59	3.1	.2	.00	.02	.04	.02	.00	.34
JULY										
08...	0	61	3.1	.2	--	--	.04	.04	.00	.34
AUG.										
15...	0	61	3.2	.2	--	--	.11	.11	.00	.30
SEPT.										
18...	1	52	3.0	.3	--	--	.16	.16	.00	.47

09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOD- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.										
23...	.37	.04	.00	183	179	110	24	.7	295	8.4
NOV.										
22...	.24	.04	.00	182	171	110	21	.6	285	7.7
DEC.										
20...	.27	.02	.01	194	178	110	26	.7	292	9.3
JAN.										
24...	.41	.04	.01	182	178	110	21	.7	320	8.2
FEB.										
21...	.43	.05	.01	188	186	110	21	.7	315	8.0
MAR.										
10...	.39	.03	.03	205	206	130	36	.7	320	8.4
APR.										
08...	.34	.01	.01	192	193	120	26	.8	320	8.9
MAY										
06...	.22	.02	.01	188	195	110	21	.8	292	8.8
JUNE										
06...	.38	.12	.00	192	188	110	24	.7	320	7.9
JULY										
08...	.38	.02	.01	191	190	120	36	.7	315	8.6
AUG.										
15...	.41	.01	.00	178	187	120	29	.6	310	8.2
SEP.										
18...	.63	.03	.03	177	168	110	28	.6	280	8.4

DATE	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	FLOW- RATE (GPM) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (MG/L) (00689)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT.									
23...	9.0	8.0	5	10.3	10	7.2	--	--	0
NOV.									
22...	7.5	4.5	4	10.5	0	3.3	--	--	40
DEC.									
20...	-1.0	4.5	5	11.1	7	3.4	--	--	20
JAN.									
24...	.0	3.0	10	8.6	11	3.8	--	--	20
FEB.									
21...	.0	2.0	3	11.0	1	5.4	--	--	20
MAR.									
10...	9.0	5.0	4	11.6	12	6.0	--	--	20
APR.									
08...	4.0	6.5	6	12.4	18	4.0	--	--	30
MAY									
06...	6.0	6.0	12	12.0	7	.0	--	--	20
JUNE									
06...	19.0	6.0	11	10.8	7	4.9	--	--	20
JULY									
08...	27.0	8.5	4	12.5	5	--	2.8	.2	20
AUG.									
15...	21.5	8.0	12	9.1	2	--	3.5	.3	20
SEP.									
18...	26.0	11.0	6	11.8	8	--	5.0	.4	40

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
MAR.												
10...	1330	0	0	20	<10	0	15	10	<50	0	10	1



09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (Pb) (UG/L) (01051)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	TOTAL MANG- NESE (Mn) (UG/L) (01055)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	TOTAL MERCURY (Hg) (UG/L) (71090)	DIS- SOLVED MERCURY (Hg) (UG/L) (71090)	TOTAL NIUM (SF) (UG/L) (01147)	DIS- SOLVED NIUM (SF) (UG/L) (01145)	TOTAL ZINC (Zn) (UG/L) (01092)	DIS- SOLVED ZINC (Zn) (UG/L) (01090)
MAR. 10...	350	10	<100	0	20	0	0	0	2	2	30	30

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)
JUN 04...	0915	1800

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jun 06	0915	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		90	
		Fragillariaceae			
		Synedra		5	
		Naviculaceae			
		Navicula		5	
		TOTAL	1,800		

## SAN JUAN RIVER BASIN

09357300 SAN JUAN RIVER ABOVE ANIMAS RIVER, AT FARMINGTON, N. MEX.

LOCATION.--Lat 36°43'10", long 108°12'45", in NE¼SE¼NE¼ sec.20, T.29 N., R.13 W., San Juan County, 100 ft (30 m) upstream from mouth of Animas River, at south edge of Farmington, and at mile 99 (159 km).

DRAINAGE AREA.--5,800 mi<sup>2</sup> (15,000 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: March 1963 to current year.

REMARKS.--Discharges are estimated from the streamflow records of the San Juan River at Farmington and Animas River at Farmington stations.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000611)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (009551)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (009151)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (009251)	DIS- SOLVED SODIUM (NA) (MG/L) (009301)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (009351)	RICIN- ONATE (HC03) (MG/L) (004401)	CAR- BONATE (C03) (MG/L) (004451)	DIS- SOLVED SULFATE (S04) (MG/L) (009451)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (009401)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (009501)
OCT.												
23...	1750	644	10	60	6.3	81	3.2	147	0	230	6.3	.3
NOV.												
21...	1715	473	10	57	7.4	45	2.2	127	0	150	4.9	.2
DEC.												
17...	1645	605	10	56	8.7	43	2.1	121	0	150	4.4	.2
JAN.												
22...	1630	722	11	49	8.0	36	2.4	120	0	120	4.0	.2
FEB.												
20...	1600	590	8.7	55	9.0	53	2.8	130	0	180	6.7	.3
MAR.												
10...	1700	1360	8.2	55	7.4	110	3.3	187	--	250	5.6	.4
APR.												
10...	1500	554	8.7	52	9.0	42	2.4	127	0	140	6.3	.2
MAY												
08...	1130	2340	8.9	40	7.7	24	2.1	117	0	81	4.1	.2
JUNE												
03...	1130	1600	8.5	39	7.6	24	2.3	116	0	80	4.8	.3
JULY												
08...	1745	2050	9.5	44	8.0	24	2.2	114	0	88	4.1	.3
AUG.												
13...	1615	1570	9.8	63	8.6	45	3.3	145	0	160	4.9	.3
SEP.												
18...	0800	1640	10	39	7.4	24	2.2	110	0	85	3.4	.2

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (006311)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (703011)	HAND- NESS (CA+MG) (MG/L) (009001)	NON- CAR- BONATE HAND- NESS (MG/L) (009021)	SODIUM AD- SORP- TION RATIO (009311)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS) (000951)	PH (004001)	AIR TEMPER- ATURE (DEG C) (000201)	TEMPER- ATURE (DEG C) (000101)	DIS- SOLVED OXYGEN (MG/L) (003001)	DIS- SOLVED BORON (H) (010201)
OCT.											
23...	.26	471	180	59	2.7	764	8.2	15.0	11.0	10.0	60
NOV.											
21...	.24	340	170	46	1.5	552	8.2	15.0	8.5	10.5	40
DEC.											
17...	.26	335	180	81	1.4	531	8.2	5.0	5.0	10.5	50
JAN.											
22...	.54	292	160	57	1.3	450	8.4	.0	.5	12.5	20
FEB.											
20...	.15	380	170	68	1.7	580	8.6	7.5	5.5	10.1	50
MAR.											
10...	.28	533	170	14	3.7	814	--	--	--	--	70
APR.											
10...	.16	324	170	63	1.4	520	7.7	15.0	11.0	--	50
MAY											
08...	.05	226	130	36	.9	350	8.4	15.0	8.5	10.1	30
JUNE											
03...	.07	224	130	34	.9	340	8.2	27.0	10.0	9.6	30
JULY											
08...	.05	237	140	49	.9	355	8.3	29.0	16.0	8.6	20
AUG.											
13...	.15	365	190	74	1.3	570	8.1	27.0	14.0	7.5	30
SEP.											
18...	.20	226	130	38	.9	365	8.0	16.0	12.0	8.7	30

## 09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.

LOCATION.--Lat 36°43'17", long 108°12'05", in SW¼SW¼ sec. 15, T.29 N., R.13 W., San Juan County, at gaging station, in Boyd City Park, 900 ft (274 m) upstream from bridge on former State Highway 17, 0.4 mi (0.6 km) downstream from bridge on State Highway 17, and 1.5 mi (2.4 km) upstream from mouth. Prior to Nov. 1, 1973 at site 900 ft (274 m) downstream.

DRAINAGE AREA.--1,360 mi<sup>2</sup> (3,520 km<sup>2</sup>), approximately.

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

Specific conductance: October 1941 to current year.

Water temperatures: December 1950 to current year.

Sediment records: December 1950 to current year.

## EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,050 micromhos Oct. 11; minimum daily, 146 micromhos July 11.

Water temperatures: Maximum, 26.0°C Aug. 30; minimum, freezing point on several days during December, January and February.

Sediment concentrations: Maximum daily, 13,300 mg/l Oct. 29; minimum daily, 15 mg/l Aug. 1, 2.

Sediment discharge: Maximum daily, 112,000 tons (102,000 tonnes) May 16; minimum daily, 4.8 tons (4.4 tonnes) Oct. 4.

Period of record:

Specific conductance: Maximum daily, 1,980 micromhos Aug. 19, 1944; minimum daily, 146 micromhos July 11, 1975.

Water temperatures: Maximum, 32.0°C Aug. 26, 1966; minimum, freezing point on many days during winter months (each year).

Sediment concentrations: Maximum daily, 36,800 mg/l July 23, 1954; minimum daily, 1 mg/l on several days during September 1956, September 1958, and September 1974.

Sediment discharge: Maximum daily, 337,000 tons (306,000 tonnes) July 23, 1954; minimum daily, less than .50 ton (.45 tonne) on many days during 1955-57, 1959, 1960, 1963, 1972, and 1974.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- SOLVED CHLORIDE (CFS) (000661)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)
OCT.										
23...	1530	510	8.2	20	--	110	12	50	4.7	196
NOV.										
21...	1600	255	8.0	10	--	110	15	40	3.5	191
DEC.										
17...	1330	244	8.8	50	--	110	18	42	3.1	193
JAN.										
22...	1445	245	9.2	10	--	110	16	40	3.5	213
FEB.										
20...	1430	246	8.0	0	--	110	17	43	3.6	188
MAR.										
10...	1600	770	6.8	30	0	50	9.6	27	3.9	133
APR.										
10...	1400	564	6.9	10	--	73	16	22	2.6	177
MAY										
08...	1000	1050	6.8	10	--	58	11	14	1.8	148
JUNE										
03...	0845	5550	4.9	40	--	34	4.9	5.6	1.0	90
JULY										
08...	1515	4810	6.3	30	--	26	4.2	5.0	1.0	65
AUG.										
13...	1435	910	6.5	10	--	67	11	23	3.2	154
SEP.										
18...	0945	542	8.0	10	--	79	11	27	3.1	172

DATE	CARBONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)
OCT.										
23...	0	230	26	.4	.05	.01	.06	.06	.13	7.2
NOV.										
21...	0	200	26	.4	.09	.00	.20	.09	.01	.07
DEC.										
17...	0	220	27	.4	.25	.01	.29	.26	.03	.10
JAN.										
22...	0	210	29	.5	.41	.04	.50	.45	.13	.44
FEB.										
20...	0	240	29	.6	.19	.00	.22	.19	.04	.24
MAR.										
10...	0	110	10	.2	.39	.01	.52	.40	.13	5.4
APR.										
10...	0	130	13	.3	.23	.01	.27	.24	.04	.24
MAY										
08...	0	91	7.0	.2	.14	.00	.14	.14	.01	.25
JUNE										
03...	0	39	3.0	.2	.04	.04	.08	.08	.00	.30
JULY										
08...	0	36	2.8	.3	--	--	.09	.08	.00	.30
AUG.										
13...	0	120	14	.4	--	--	.10	.06	.00	3.2
SEP.										
18...	0	130	17	.4	--	--	.12	.12	.00	.72

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT. 23...	7.4	1.8	.01	546	538	320	160	1.2	833	8.2
NOV. 21...	.28	.03	.01	516	498	340	180	1.0	779	8.4
DEC. 17...	.42	.06	.02	526	526	350	190	1.0	789	8.6
JAN. 22...	1.1	.17	.03	527	525	340	170	.9	800	8.9
FEB. 20...	.50	.08	.01	546	545	340	190	1.0	810	8.6
MAR. 10...	6.0	2.8	.03	288	285	160	55	.9	450	8.1
APR. 10...	.55	.20	.02	354	352	250	100	.6	560	8.2
MAY 08...	.40	.13	.02	261	263	190	69	.4	415	8.2
JUNE 03...	.38	.08	.00	139	137	110	31	.2	240	7.9
JULY 08...	.39	.14	.00	115	114	82	29	.2	205	8.0
AUG. 13...	3.3	.87	.01	314	321	210	86	.7	510	8.0
SEP. 18...	.84	.13	.01	378	361	240	100	.8	580	8.3

DATE	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	WATER TEMPER- ATURE (DEG C) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (00681)	SUS- PENDED ORGANIC CARBON (C) (00689)	DIS- SOLVED BORON (B) (01020)
OCT. 23...	15.0	13.0	25.00	--	210	47	--	--	20
NOV. 21...	14.0	9.5	3	10.6	8	6.1	--	--	100
DEC. 17...	7.0	2.5	20	12.4	4	2.5	--	--	80
JAN. 22...	4.0	.5	30	--	6	7.9	--	--	90
FEB. 20...	9.0	6.5	20	10.9	2	5.8	--	--	80
MAR. 10...	9.5	5.5	1000	10.6	150	40	--	--	40
APR. 10...	12.0	9.0	130	9.5	16	5.2	--	--	50
MAY 08...	13.0	6.5	54	10.4	9	5.4	--	--	30
JUNE 03...	20.0	9.5	58	9.7	13	5.1	--	--	10
JULY 08...	31.0	15.0	36	8.6	5	--	2.2	1.2	20
AUG. 13...	24.0	21.0	3400	7.1	210	--	3.9	27	50
SEP. 18...	20.0	15.0	25	8.5	7	--	3.2	1.3	80

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBAL- T (CO) (UG/L) (01037)
MAR. 10...	1400	45	1	40	<10	0	92	10	50
JUNE 03...	0845	--	--	10	--	--	--	--	--
10...	0735	--	--	--	--	--	--	--	--
10...	1500	--	--	--	--	--	--	--	--
12...	0640	--	--	--	--	--	--	--	--

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANGANESE (MN) (UG/L) (01055)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)
MAR. 10...	0	160	2	100000	30	200	0	3300	0
JUNE 03...	--	110	7	--	40	200	1	--	--
10...	--	100	--	--	--	700	--	--	--
10...	--	80	--	--	--	500	--	--	--
12...	--	40	--	--	--	200	--	--	--

DATE	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71490)	TOTAL SILVER (AG) (UG/L) (01147)	DIS- SOLVED SILVER (AG) (UG/L) (01145)	TOTAL SILVER (AG) (UG/L) (01077)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR. 10...	0	0	7	2	--	--	870	30
JUNE 03...	--	--	--	--	<10	0	330	0
10...	--	--	--	--	<10	--	840	--
10...	--	--	--	--	<10	--	860	--
12...	--	--	--	--	<10	--	310	--

SPECIFIC CONDUCTANCE (MICRONHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	888	775	762	741	795	580	705	472	272	178	364	635
2	859	810	782	787	795	655	700	468	230	166	382	678
3	970	778	772	705	780	758	692	444	225	158	383	734
4	852	775	765	782	730	670	692	442	215	159	393	631
5	932	795	770	785	605	685	710	373	211	161	407	720
6	970	808	742	775	765	675	563	374	184	176	426	715
7	933	815	746	765	785	653	545	407	185	175	451	604
8	941	815	732	764	830	631	528	441	214	164	424	738
9	914	726	759	754	750	460	548	413	212	178	547	756
10	980	800	715	781	785	590	545	468	202	179	546	634
11	1050	740	752	800	782	650	616	435	213	146	546	685
12	985	747	729	807	785	647	624	291	230	175	547	593
13	803	787	767	778	807	675	627	298	229	189	455	591
14	877	730	795	802	755	685	584	303	194	212	449	572
15	840	680	750	796	808	725	613	294	189	224	498	578
16	814	664	756	758	785	688	484	268	179	238	530	582
17	724	655	732	735	790	676	566	260	187	224	532	586
18	811	688	761	725	785	673	589	255	188	228	548	609
19	820	750	800	742	815	655	598	266	205	228	548	615
20	800	730	785	665	809	581	581	244	229	222	636	642
21	802	691	709	780	780	582	600	255	249	249	572	646
22	840	725	735	802	765	498	524	284	272	264	620	---
23	824	739	725	802	790	619	440	311	225	271	586	---
24	814	755	766	805	783	627	423	364	224	280	615	571
25	811	748	807	738	755	643	430	360	282	304	610	586
26	799	754	830	803	760	645	384	317	187	351	677	628
27	988	730	763	805	780	668	364	282	177	333	580	609
28	794	725	725	795	748	678	380	255	174	370	593	593
29	771	723	780	817	---	670	455	225	180	354	638	605
30	689	774	782	687	---	678	457	262	182	372	620	656
31	765	---	720	790	---	695	---	---	---	349	---	---
MONTH	860	748	759	770	775	646	552	338	212	235	524	635
YEAR	MAX	1050	MIN	146	MEAN	587						

## 09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	10.0	3.5	0.0	3.0	8.0	5.5	13.0	11.5	15.0	22.0	19.5
2	21.0	10.0	4.0	1.0	3.0	8.0	4.5	12.0	12.0	15.5	23.0	21.5
3	19.0	7.0	5.0	0.0	4.0	8.5	4.0	10.0	12.0	16.0	23.5	21.0
4	23.0	8.0	6.0	0.0	5.0	7.0	6.0	9.0	13.0	16.0	22.0	24.5
5	24.0	9.0	5.5	0.5	5.0	7.0	3.5	9.5	13.0	15.5	23.5	21.5
6	23.0	9.0	5.5	0.0	1.0	8.5	2.5	7.5	13.0	15.0	23.0	20.0
7	22.0	10.0	2.5	0.0	7.0	7.0	2.0	8.5	16.5	16.0	23.5	17.0
8	---	10.0	4.0	0.0	3.0	6.0	2.5	12.0	12.5	16.0	24.0	19.5
9	---	9.0	4.0	0.0	4.0	6.0	4.0	14.0	16.5	15.0	23.5	20.0
10	---	9.0	2.5	0.5	6.0	8.0	4.0	15.0	11.5	17.5	23.0	21.0
11	---	9.0	4.0	0.0	5.0	6.0	8.5	13.0	7.5	15.5	25.0	20.0
12	---	8.0	3.5	0.0	6.0	6.0	6.0	11.5	12.0	17.5	24.0	20.0
13	---	8.0	0.0	0.0	4.0	7.5	5.0	10.5	12.0	14.0	21.0	17.0
14	---	9.0	1.0	0.5	5.0	7.0	6.5	11.5	11.5	18.0	20.0	18.5
15	---	9.0	1.0	0.5	4.0	6.0	7.0	12.0	12.0	15.0	20.5	18.5
16	---	9.0	3.5	0.0	4.5	7.5	9.5	11.0	10.5	16.0	20.0	19.5
17	---	8.0	3.0	0.0	4.0	8.5	10.0	11.0	10.0	17.0	19.5	20.0
18	18.0	9.0	3.0	0.5	3.5	8.0	8.5	9.0	15.0	17.5	20.0	19.5
19	16.0	9.0	3.0	0.5	1.5	12.0	11.0	11.5	11.0	18.5	19.0	19.5
20	15.0	8.0	2.0	0.5	1.5	12.0	11.0	10.5	11.5	18.5	19.5	18.0
21	15.0	8.0	2.0	0.0	2.0	11.0	13.0	10.5	12.0	19.5	21.0	17.0
22	15.0	8.0	2.0	0.0	1.0	7.0	14.0	10.0	15.0	18.5	22.0	---
23	14.0	8.0	2.0	0.0	0.0	4.5	12.5	10.0	14.0	18.0	23.0	---
24	14.0	7.0	1.0	0.0	5.0	9.0	12.5	10.0	13.0	20.0	21.0	15.0
25	15.0	8.0	0.5	0.0	6.0	7.0	12.5	10.5	11.0	19.5	21.0	16.0
26	14.0	7.0	2.0	2.5	7.0	6.5	9.0	13.5	12.5	18.5	25.0	14.5
27	10.0	6.5	1.5	1.0	6.5	7.5	6.5	9.5	13.0	19.5	19.5	15.5
28	11.0	5.0	0.5	4.0	6.0	7.0	9.0	8.5	15.0	14.0	21.0	15.0
29	9.0	4.5	2.0	2.0	---	2.5	8.0	9.5	12.0	19.0	21.0	16.5
30	9.0	4.0	1.5	3.0	---	5.0	8.5	10.0	14.0	20.0	26.0	18.0
31	8.0	---	0.5	3.0	---	6.5	---	---	---	16.0	---	---
MONTH	---	8.0	2.5	0.5	4.0	7.5	7.5	11.0	12.5	17.0	22.0	18.5
YEAR	MAX	26.0	MIN	0.0	MEAN	10.5						

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	118	31	9.4	430	830	964	248	55	37
2	106	28	8.0	450	850	1030	244	55	37
3	106	26	7.4	480	1620	2100	260	75	79
4	104	17	4.8	430	1510	1750	272	69	51
5	94	21	5.3	380	710	728	288	69	54
6	91	23	5.7	325	320	281	280	57	43
7	81	23	5.0	300	337	273	256	47	32
8	87	300	70	280	290	219	260	49	34
9	81	150	13	290	240	180	242	41	27
10	114	250	77	320	263	227	228	38	23
11	199	1270	682	300	189	153	220	40	24
12	213	480	276	270	172	125	224	53	32
13	252	660	444	260	134	94	220	55	33
14	220	310	184	290	150	117	213	71	42
15	206	150	83	270	110	80	228	94	58
16	206	130	72	260	104	73	210	89	50
17	202	89	49	260	102	72	218	78	45
18	196	53	33	200	95	72	236	83	53
19	192	55	29	290	88	63	224	74	45
20	176	40	14	260	78	59	224	53	32
21	176	40	10	200	76	53	252	45	28
22	195	652	905	260	77	54	244	99	65
23	556	7400	11300	270	66	48	216	63	37
24	414	5400	6600	260	60	42	196	49	26
25	345	1850	1720	245	46	30	182	41	20
26	308	500	415	230	56	36	176	55	26
27	639	11200	23500	240	54	35	228	117	72
28	504	7400	10100	244	42	28	228	105	65
29	817	13300	34800	244	45	30	248	159	106
30	742	9010	22000	244	60	40	228	77	47
31	500	1120	1510	---	---	---	220	72	43
MONTH	8240	---	114972.1	9948	---	9064	1725	---	1371

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	230	59	37	220	164	97	345	2160	2010
2	230	43	27	224	130	79	480	3650	4840
3	232	53	33	220	81	48	493	4310	5830
4	238	87	56	216	82	48	355	2620	2510
5	250	171	115	224	129	78	504	1700	2310
6	250	196	132	202	140	81	734	1970	3900
7	242	309	202	192	101	52	794	2650	5840
8	248	230	154	206	145	81	863	8590	20900
9	250	254	171	236	128	82	814	5950	13100
10	245	68	45	232	164	103	750	4240	8590
11	232	68	43	228	185	114	591	3000	4790
12	232	86	54	220	162	96	591	2550	4070
13	240	95	62	224	195	118	577	3090	4810
14	240	113	73	236	356	227	570	2700	4160
15	248	129	86	244	237	156	734	3880	8550
16	250	248	167	248	163	109	640	3840	6640
17	250	285	192	228	156	96	654	3070	5420
18	250	326	220	213	134	77	522	2100	2960
19	250	328	221	210	147	83	510	1930	2660
20	250	459	310	216	110	64	626	2690	4550
21	248	403	270	232	163	102	734	3730	7390
22	245	328	217	232	215	135	1000	4730	13600
23	240	279	181	236	209	133	710	972	1860
24	242	338	221	206	124	69	546	849	1250
25	238	313	201	240	169	110	474	717	918
26	220	196	116	244	228	150	474	1100	1410
27	220	149	89	288	292	227	498	640	861
28	220	105	62	284	202	155	480	410	531
29	210	114	65	---	---	---	414	443	495
30	220	187	111	---	---	---	390	348	366
31	230	170	106	---	---	---	375	333	337
MONTH	7390	---	4039	6401	---	2970	18242	---	147458
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	380	364	354	1080	1410	4110	3220	510	4430
2	375	379	384	1070	1170	3380	3860	1150	12000
3	355	301	289	1080	2220	6470	5070	1840	25200
4	380	504	517	1280	1980	6840	5550	2110	31600
5	522	3970	6200	1630	990	4360	6150	2740	45500
6	654	4300	7590	1650	500	2230	7040	1890	35900
7	782	10800	1290	430	1500	1500	7300	1120	22100
8	689	2170	4040	1030	790	2200	6740	870	15800
9	612	935	1540	897	985	2390	6280	1180	20000
10	546	1000	1470	924	990	2470	5910	995	15900
11	558	1560	2350	1250	2680	9040	4690	480	6080
12	633	2000	3420	2300	8250	51200	3830	348	3600
13	619	1200	2010	2940	2200	17500	3980	683	7340
14	766	4320	8930	3360	2020	18300	4830	980	12800
15	978	6230	16500	4080	6990	77000	5860	1130	17900
16	1210	10600	36100	4650	8890	112000	6560	1510	26700
17	978	5940	15700	4780	3800	49000	6850	910	16800
18	838	2190	4960	4750	3280	42100	5820	560	8800
19	750	1220	2470	4350	2400	28200	5080	664	9110
20	758	1470	3010	4280	1290	14900	3360	500	4540
21	879	3550	8430	4200	2250	25500	2760	282	2100
22	1090	4400	12900	3620	4470	43700	2540	363	2490
23	1300	5080	17800	2800	1500	11300	2790	540	4070
24	1430	4290	16600	2260	200	1220	3240	883	7720
25	1740	2480	11700	2080	720	4040	3940	700	7450
26	2260	1900	11600	2500	1470	9920	4220	965	11000
27	2220	2890	17300	3600	2720	26400	4020	558	6060
28	1800	3660	17800	4250	1400	16100	4340	610	7150
29	1360	3050	11200	4000	1010	10900	4570	1710	21100
30	1150	2360	7330	3280	565	5000	4540	857	10500
31	---	---	---	3080	460	3830	---	---	---
MONTH	28592	---	261294	84341	---	613100	144940	---	421740

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

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

DAY	JULY				AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	4570	567	7000	1060	15	43	270	51	36	
2	4900	560	7410	1050	15	43	264	43	31	
3	5260	760	10800	1040	43	121	234	30	19	
4	5410	600	8760	1020	22	61	237	41	26	
5	5120	230	3180	1000	208	562	254	104	71	
6	4640	310	3880	970	20	52	234	138	87	
7	4590	250	3100	890	22	53	234	91	57	
8	4520	240	2930	800	45	97	275	1120	832	
9	4380	300	3550	720	26	51	435	2450	2880	
10	4320	160	1870	660	26	46	405	210	230	
11	4360	80	942	640	34	59	455	1870	3210	
12	4220	130	1480	700	51	96	706	2630	5710	
13	3600	1460	14200	910	2700	6630	662	660	1180	
14	3110	610	5120	800	791	1710	650	1210	2120	
15	2840	310	2380	720	155	301	710	5810	11100	
16	2660	241	1730	650	79	141	638	2100	3620	
17	3060	353	2920	570	95	154	590	585	932	
18	3190	130	1120	490	46	67	530	130	166	
19	2750	208	1540	440	67	89	485	150	196	
20	2410	102	664	410	77	88	465	104	131	
21	2200	102	606	410	96	108	440	133	158	
22	1980	160	855	440	74	88	465	114	143	
23	1820	140	688	420	77	85	400	74	79	
24	1660	254	1140	425	42	46	380	64	66	
25	1500	103	417	395	153	153	352	50	48	
26	1430	42	162	360	68	61	316	42	36	
27	1270	73	250	310	62	47	307	32	27	
28	1160	35	110	306	50	38	290	34	27	
29	1050	32	91	303	55	41	269	32	23	
30	976	32	84	246	40	30	249	24	16	
31	1060	38	109	289	53	40	---	---	---	
MONTH	96016	---	89088	19494	---	11201	12201	---	33277	
WTR YR 1975	TOTAL WATER DISCHARGE (CFS-DAYS)				442,030.00					
WTR YR 1975	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)				1,709,574.10					

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS DISCHARGE (CFS) (00061)	SUSPENDED SEDIMENT DISCHARGE (MG/L) (00154)	SUSPENDED SEDIMENT DISCHARGE (T/DAY) (00155)	SUSPENDED SEDIMENT % FINEER THAN (70337)	SUSPENDED SEDIMENT % FINEER THAN (70338)	SUSPENDED SEDIMENT % FINEER THAN (70340)	SUSPENDED SEDIMENT % FINEER THAN (70342)
OCT.									
11...	1549	--	173	1360	635	62	77	97	--
23...	1530	13.0	510	6800	9450	45	58	80	93
30...	1355	--	682	7110	13100	45	60	84	95
NOV.									
21...	1600	9.5	255	95	65	--	--	--	--
MAR.									
02...	1415	8.0	414	3120	7490	31	39	59	79
10...	1600	5.5	770	6150	12800	37	44	64	83
22...	1345	7.0	1250	8520	28800	31	42	62	78
APR.									
10...	1400	9.0	564	1060	1610	--	--	--	34
25...	1530	12.5	1850	2230	11100	11	15	23	51
MAY									
12...	1400	11.5	2570	4910	68800	9	12	19	36
JUNE									
03...	1745	14.5	5550	1430	27400	6	8	14	34
09...	1300	11.5	6250	1130	22400	--	--	--	42
JULY									
04...	1515	15.0	4810	353	4580	--	--	--	46
AUG.									
13...	1435	21.0	910	4610	11300	64	78	96	--
SEP.									
09...	1630	20.0	405	1740	1990	57	72	92	--
18...	0945	15.0	542	148	217	--	--	--	--



## 09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)	SUS. SED. SIEVE DIAM. % FINER THAN (70333)	SUS. SED. SIEVE DIAM. % FINER THAN (70334)	SUS. SED. SIEVE DIAM. % FINER THAN (70335)
OCT.									
11...	--	--	--	--	99	99	100	--	--
23...	94	94	99	100	--	--	--	--	--
30...	99	100	--	--	--	--	--	--	--
NOV.									
21...	--	--	--	--	58	86	96	100	--
MAR.									
02...	87	89	99	100	--	--	--	--	--
10...	94	100	--	--	--	--	--	--	--
22...	86	97	100	--	--	--	--	--	--
APR.									
10...	54	87	98	100	--	--	--	--	--
25...	75	93	100	--	--	--	--	--	--
MAY									
12...	50	63	91	100	--	--	--	--	--
JUNE									
03...	53	71	94	100	--	--	--	--	--
09...	89	96	99	100	--	--	--	--	--
JULY									
08...	60	77	98	100	--	--	--	--	--
AUG.									
13...	--	--	--	--	99	100	--	--	--
SEP.									
09...	--	--	--	--	98	99	99	100	--
18...	--	--	--	--	87	91	94	99	100

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 36°43'22", long 108°13'30", in SE¼ sec.17, T.29 N., R.13 W., San Juan County, at gaging station, 360 ft (110 m) downstream from highway bridge, 4,000 ft (1,200 m) downstream from Animas River, and 1 mi (1.6 km) west of Farmington, and at mile 251.4 (404.5 km).

DRAINAGE AREA.--7,240 mi<sup>2</sup> (18,750 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: May 1962 to current year.  
Water temperatures: June 1962 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 673 mg/l Mar. 1-4; minimum, 154 mg/l July 8.  
Hardness: Maximum, 240 mg/l Nov. 1-30, Mar. 1-4; minimum, 100 mg/l July 8.  
Specific conductance: Maximum daily, 1,330 micromhos Oct. 27; minimum daily, 235 micromhos July 3.  
Water temperatures: Maximum, 19.5°C Aug. 4; minimum, freezing point on several days during October, December and January.

## Period of record:

Dissolved solids: Maximum, 1,720 mg/l Aug. 8, 1970; minimum, 103 mg/l May 11-15, 1962.  
Hardness: Maximum, 820 mg/l Aug. 6, 1968; minimum, 65 mg/l May 11-15, 1962.  
Specific conductance: Maximum daily, 2,290 micromhos Aug. 8, 1970; minimum daily, 154 micromhos May 13, 1962.  
Water temperatures: Maximum, 33.0°C July 6, 1967; minimum, freezing point on several days during December and January of most years.

REMARKS.--Daily chemical samples are collected by transversing the stream cross section.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NIUM (Mg) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.												
01-31	887	23	--	77	7.6	90	4.3	166	0	250	15	1.2
NOV.												
01-30	877	12	--	78	12	50	3.2	162	0	180	15	.3
DEC.												
01-31	820	12	--	73	11	44	2.4	154	0	180	17	.3
JAN.												
01-31	915	10	--	68	12	41	2.9	152	0	170	15	.4
FEB.												
01-28	841	10	--	74	11	53	3.9	152	0	200	14	.2
MAR.												
01-04	1730	12	--	79	9.2	140	4.9	247	--	280	13	.6
05-31	1320	10	--	69	11	52	3.3	164	--	160	13	.3
APR.												
01-10	1090	9.4	--	67	12	39	2.8	155	--	140	11	.3
11-16	2440	11	--	56	9.6	36	3.0	149	--	120	8.0	.3
17-30	2960	9.3	--	49	9.5	23	.2	135	--	91	6.0	.1
MAY												
01-12	3490	9.3	--	50	9.5	20	2.2	134	--	79	5.8	.2
13-31	5550	7.9	--	42	6.0	15	1.9	116	--	60	4.2	.2
JUNE												
01-04	5900	6.9	--	43	6.1	13	1.8	120	--	62	4.4	.3
05-10	8510	6.7	--	40	6.1	10	1.9	107	--	52	3.8	.3
11-19	7140	6.5	--	37	5.0	11	2.1	97	--	56	3.6	.3
20-24	4660	6.8	--	42	6.4	14	1.8	109	--	66	4.5	.2
25-30	6360	4.7	--	41	4.9	11	1.9	98	--	53	5.9	.2
JULY												
01-14	6550	6.8	--	36	5.6	12	1.6	91	0	49	3.8	.2
15-17	5150	9.9	--	51	5.9	37	2.5	136	0	96	5.9	.1
18-31	3820	8.9	--	43	7.8	19	2.1	110	0	72	5.8	.2
AUG.												
01-08	3000	9.8	--	45	8.2	21	2.3	119	0	80	6.7	.2
09-13	2310	10	--	51	8.4	30	3.0	142	0	99	7.4	.1
14-30	1830	10	--	49	8.9	27	2.5	131	0	97	8.0	.2
SEP.												
01-07	1600	8.4	0	48	8.1	27	2.5	126	0	97	5.7	.1
08-12	2370	11	0	66	8.1	62	3.7	191	0	170	8.5	.4
13-30	1960	7.0	0	51	8.7	27	2.6	137	0	110	7.6	.3
WTD. AVG.	--	8.8	--	50	7.7	26	2.3	126	--	96	7.2	.1
TIME WTD.												
AVG.	2400	11	--	60	9.3	40	2.7	142	--	139	11	.3
TOT. LOAD (TONS)	--	20900	--	117000	18200	62400	5350	296000	--	227000	16900	652

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.												
01-31	.44	--	70	--	552	.75	1320	220	84	2.6	852	7.8
NOV.												
01-30	.49	--	50	--	433	.59	1030	240	110	1.4	675	7.8
DEC.												
01-31	.51	--	--	--	418	.57	925	230	100	1.3	658	7.8
JAN.												
01-31	.59	--	40	--	397	.54	981	220	95	1.2	617	7.9
FEB.												
01-28	.57	--	50	--	444	.60	1010	230	110	1.5	693	8.0
MAR.												
01-04	2.9	--	80	--	673	.92	3140	240	33	4.0	1050	--
05-31	.78	--	50	--	403	.55	1440	220	83	1.5	650	--
APR.												
01-10	.45	--	40	--	360	.49	1060	220	90	1.2	579	--
11-16	.57	--	30	--	320	.44	2110	180	57	1.2	512	--
17-30	.30	--	30	--	256	.35	2050	160	51	.8	421	--
MAY												
01-12	.22	--	30	--	243	.33	2290	160	54	.7	398	--
13-31	.20	--	30	--	195	.27	2920	130	34	.6	329	--
JUNE												
01-04	.28	--	30	--	198	.27	3150	130	34	.5	316	--
05-10	.27	--	20	--	175	.24	4020	130	37	.4	321	--
11-19	.16	--	40	--	170	.23	3280	110	33	.5	273	--
20-24	.16	--	30	--	196	.27	2470	130	42	.5	319	--
25-30	.08	--	30	--	171	.23	2940	120	42	.4	280	--
JULY												
01-14	.20	--	30	--	161	.22	2850	110	38	.5	267	7.2
15-17	.72	--	50	--	279	.38	3880	150	40	1.3	456	7.6
18-31	.24	--	80	--	214	.29	2210	140	49	.7	352	7.3
AUG.												
01-08	.33	--	40	--	233	.32	1890	150	49	.8	387	7.3
09-13	.31	--	40	--	281	.38	1750	160	45	1.0	468	7.7
14-30	.24	--	40	--	268	.36	1320	160	52	.9	446	7.7
SEP.												
01-07	.14	.00	40	--	260	.35	1120	150	50	1.0	411	7.7
08-12	.79	.01	30	--	427	.58	2730	200	42	1.9	659	7.6
13-30	.02	.00	40	--	282	.38	1490	160	51	.9	437	8.0
TD. AVG.	.32	--	39	--	262	.36	--	155	53	.9	425	--
IME WTD.												
AVG.	.43	--	45	--	345	.47	--	188	72	1.2	547	--
DT. LOAD (TONS)	762	--	90	--	619000	--	--	--	--	--	--	--

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)
OCT.										
23...	1730	1050	10	--	--	70	7.5	72	3.5	158
NOV.										
21...	1700	660	10	--	--	65	8.7	45	2.4	138
DEC.										
17...	1530	830	9.8	--	--	65	10	43	2.2	138
JAN.										
22...	1715	967	11	--	--	67	10	38	2.8	147
FEB.										
20...	1645	830	8.5	--	--	70	11	51	2.8	147
MAR.										
10...	1730	2130	6.7	30	0	49	7.7	69	3.4	147
APR.										
10...	1545	1010	8.0	--	--	62	11	34	2.5	148
MAY										
08...	1221	3260	8.4	--	--	46	8.5	22	2.2	129
JUNE										
03...	1200	5950	6.4	--	--	36	6.4	14	1.6	103
JULY										
08...	1815	6760	6.5	--	--	33	5.0	11	1.4	77
AUG.										
13...	1700	2320	9.8	--	--	58	8.7	39	3.3	119
SEP.										
18...	0845	2030	10	--	--	42	7.0	24	2.3	113

## SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE (N) (00618)	DIS- SOLVED NITRITE (N) (00613)	TOTAL NITRITE PLUS NITRATE (N) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (00631)	AMMONIA NITRO- GEN (N) (00610)
OCT.									
23...	0	220	12	.4	--	--	--	.26	--
NOV.									
21...	0	160	8.5	--	--	--	--	.23	--
DEC.									
17...	0	160	8.2	.2	--	--	--	.28	--
JAN.									
22...	0	150	13	.3	--	--	--	.57	--
FEB.									
20...	0	200	12	.3	--	--	--	.16	--
MAR.									
19...	0	180	8.3	.5	.48	.01	.58	.49	.15
APR.									
10...	0	140	10	.2	--	--	--	.19	--
MAY									
08...	0	86	5.3	.2	--	--	--	.08	--
JUNE									
03...	0	59	2.7	.2	--	--	--	.03	--
JULY									
08...	0	55	3.7	.3	--	--	--	.04	--
AUG.									
13...	0	150	6.7	.3	--	--	--	.14	--
SEP.									
18...	0	91	4.0	.2	--	--	--	.19	--

DATE	TOTAL ORGANIC NITRO- GEN (N) (00605)	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (00300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (00301)	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (00902)	SODIUM AD- SORP- TION RATIO (00931)
OCT.									
23...	--	--	--	--	--	474	210	80	2.2
NOV.									
21...	--	--	--	--	--	369	200	87	1.4
DEC.									
17...	--	--	--	--	--	368	200	87	1.3
JAN.									
22...	--	--	--	--	--	367	210	88	1.1
FEB.									
20...	--	--	--	--	--	424	220	100	1.5
MAR.									
10...	3.5	4.2	4.0	.03	407	399	150	34	2.4
APR.									
10...	--	--	--	--	--	342	200	79	1.0
MAY									
08...	--	--	--	--	--	243	150	44	.8
JUNE									
03...	--	--	--	--	--	177	120	32	.6
JULY									
08...	--	--	--	--	--	154	100	40	.5
AUG.									
13...	--	--	--	--	--	335	180	83	1.3
SEP.									
18...	--	--	--	--	--	237	130	41	.9

## 09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CTIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00460)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 23...	750	8.1	15.0	12.0	--	10.0	--	--	50
NOV. 21...	598	8.3	15.0	6.5	--	10.4	--	--	50
DEC. 17...	587	8.2	6.0	4.0	--	11.1	--	--	50
JAN. 22...	575	8.4	1.0	.0	--	12.5	--	--	40
FEB. 20...	620	8.4	5.5	5.0	--	10.4	--	--	50
MAR. 10...	665	8.3	8.5	7.0	4600	9.8	340	92	50
APR. 10...	550	8.0	14.0	10.5	--	9.4	--	--	50
MAY 08...	376	9.1	17.0	9.5	--	9.8	--	--	30
JUNE 03...	300	8.0	28.0	11.0	--	9.5	--	--	20
JULY 08...	255	8.1	29.0	16.0	--	8.6	--	--	0
AUG. 13...	530	8.1	27.5	19.0	--	7.2	--	--	30
SEP. 18...	370	8.1	16.5	12.0	--	8.9	--	--	30

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
MAR. 10...	1730	30	1	50	10	0	380	0	300	0	550	4

DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR. 10...	310000	30	400	0	12000	0	.5	.1	3	2	1900	30

## 09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604	688	623	626	683	990	637	422	354	256	374	417
2	626	744	620	597	780	963	613	402	297	252	375	407
3	691	746	638	576	666	1140	595	---	323	235	386	402
4	---	692	657	624	668	920	617	426	314	241	386	387
5	---	681	670	608	662	667	565	381	313	258	418	421
6	697	691	663	603	672	---	575	376	281	256	390	403
7	703	676	656	606	648	654	562	383	279	263	391	372
8	722	675	647	602	639	765	529	399	274	257	391	659
9	728	688	649	590	664	693	546	398	288	271	452	915
10	741	670	647	594	669	671	543	392	273	271	502	541
11	942	667	646	616	696	646	480	387	286	273	455	561
12	892	636	651	606	718	646	483	371	306	300	549	496
13	1050	655	639	615	687	673	575	348	293	302	420	474
14	753	653	633	593	668	625	510	342	255	309	420	452
15	700	642	627	565	741	654	458	313	254	497	424	458
16	673	636	653	578	735	608	518	331	263	365	426	445
17	651	641	639	587	714	601	459	301	267	522	425	415
18	660	634	651	588	671	600	437	299	261	321	490	435
19	660	716	652	---	685	578	431	311	269	324	444	382
20	656	765	621	586	652	575	424	307	302	329	520	426
21	644	647	628	596	647	568	444	312	331	336	507	398
22	670	655	627	595	626	550	431	311	338	340	422	---
23	778	651	611	595	631	571	406	333	301	347	455	---
24	851	676	619	592	610	568	402	354	303	343	443	428
25	685	638	625	610	660	574	394	364	275	372	445	427
26	679	627	622	616	662	584	427	329	261	378	454	433
27	1330	629	621	627	654	588	418	302	283	384	425	424
28	791	637	620	637	642	627	426	302	266	378	431	418
29	766	642	613	623	---	627	393	332	312	385	429	410
30	746	621	623	636	---	591	402	334	268	378	419	400
31	685	---	621	685	---	601	---	---	---	365	---	---
MONTH	751	667	636	606	673	671	490	350	290	326	435	457
YEAR	MAX	1330	MIN	235	MEAN	529						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	9.0	3.0	0.0	3.0	6.0	5.5	11.5	12.0	16.0	18.5	13.5
2	17.0	9.0	4.0	1.0	3.0	7.0	4.0	11.0	11.0	16.0	18.0	15.5
3	18.0	7.0	5.0	1.0	5.0	6.0	4.5	8.5	12.5	16.0	19.0	16.5
4	---	7.0	5.5	0.0	5.0	6.0	6.0	8.0	12.5	15.5	19.5	17.0
5	---	9.0	6.5	0.0	7.0	7.0	4.0	8.5	13.5	15.0	18.0	16.5
6	17.0	9.0	5.0	0.0	3.0	---	2.0	7.5	13.5	15.5	18.5	16.0
7	16.0	9.0	2.5	3.0	3.5	7.0	2.0	9.0	12.0	15.0	18.0	16.0
8	---	9.0	4.0	1.5	4.0	6.0	1.5	11.5	12.0	15.5	17.5	17.0
9	---	9.0	3.5	0.0	4.0	6.0	4.5	12.5	12.0	15.0	16.0	16.5
10	---	8.0	2.5	0.5	6.0	6.0	10.5	12.0	12.0	16.0	16.5	15.0
11	---	8.0	3.0	0.0	6.0	6.0	7.0	11.0	10.0	16.5	17.0	16.5
12	---	7.0	3.0	0.0	6.0	7.0	5.5	10.0	12.0	17.0	19.0	16.0
13	---	7.0	0.0	0.0	5.0	8.5	4.5	11.0	12.5	13.5	18.0	13.5
14	---	8.0	1.0	0.5	5.0	8.5	6.5	12.5	11.0	15.0	16.0	17.0
15	---	8.0	1.0	0.5	3.5	6.0	7.0	11.5	11.5	15.5	17.5	16.0
16	---	8.0	3.0	2.0	5.0	7.0	7.5	11.0	10.5	14.5	17.0	15.0
17	0.0	7.0	3.5	0.0	3.0	8.0	9.0	10.0	10.5	17.0	16.5	15.0
18	15.0	9.0	3.0	1.0	4.0	9.0	6.0	9.5	10.0	16.5	16.0	16.0
19	14.0	8.0	3.0	---	2.0	8.0	9.0	9.0	11.5	17.0	16.5	16.0
20	13.0	7.0	2.0	1.0	0.5	7.0	2.0	10.0	11.5	17.5	15.5	14.5
21	14.0	7.0	3.0	0.5	2.0	7.0	11.0	10.5	12.0	18.0	15.0	12.0
22	13.0	7.0	3.0	0.0	1.0	6.5	11.5	10.0	14.0	18.5	16.0	12.5
23	14.0	7.0	1.0	2.0	6.5	9.0	10.0	10.0	13.5	17.0	17.5	13.0
24	12.0	7.0	0.0	2.5	5.0	7.5	12.0	11.0	13.0	18.0	17.0	14.5
25	12.0	7.0	0.5	1.5	7.0	6.5	12.0	10.0	14.0	17.5	16.0	12.0
26	12.0	6.0	1.0	4.0	7.5	6.0	8.5	12.5	12.5	18.0	16.0	11.0
27	10.0	6.0	1.5	3.0	7.0	6.0	6.0	11.0	12.0	18.5	15.0	12.0
28	10.0	4.5	0.0	3.0	6.0	5.5	9.0	10.0	15.0	18.0	16.5	11.5
29	8.0	4.0	2.0	2.0	---	2.5	10.0	9.5	12.0	18.0	16.0	12.5
30	8.0	4.0	1.0	4.0	---	5.5	11.0	10.0	14.5	18.0	16.0	14.0
31	8.0	---	1.0	4.0	---	7.0	---	12.0	---	18.5	---	---
MONTH	---	7.5	2.5	1.5	4.5	6.5	7.0	10.5	12.0	16.5	17.0	14.5
YEAR	MAX	19.5	MIN	0.0	MEAN	9.5						

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.

LOCATION.--Lat 36°46'24", long 108°26'26", in SE¼ sec.32, T.30 N., R.15. W, San Juan County, at gaging station, 0.6 mi (1.0 km) downstream from Westwater Arroyo, 0.7 mi (1.1 km) upstream from highway to San Juan Power Plant, and 14 mi (22 km) west of Farmington.

DRAINAGE AREA.--73.8 mi<sup>2</sup> (191 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: September 1974 to current year.  
Sediment records: October 1974 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
06...	1743	--	--	--	--	--	--	--	--	--
20...	1730	--	8.8	--	--	160	130	450	8.6	157
24...	1330	.20	.0	0	--	200	260	900	8.2	118
27...	1700	--	13	--	--	72	16	160	7.3	184
NOV.										
03...	1530	--	7.4	--	--	200	92	440	6.8	30
21...	1430	.50	--	--	--	--	--	--	--	--
DEC.										
01...	1730	--	--	--	--	--	--	--	--	--
18...	1345	.15	24	16000	980	530	330	1400	14	0
22...	1500	--	--	--	--	--	--	--	--	--
29...	1530	--	--	--	--	--	--	--	--	--
JAN.										
05...	1415	--	.4	--	--	430	160	720	17	76
12...	--	--	--	--	--	--	--	--	--	--
19...	--	--	8.9	--	--	430	620	2200	13	317
23...	1330	1.0	4.3	10	--	510	120	850	19	66
26...	1430	--	--	--	--	--	--	--	--	--
FEB.										
02...	1500	--	--	--	--	--	--	--	--	--
16...	1450	--	--	--	--	--	--	--	--	--
22...	1230	.10	7.8	0	--	570	--	840	21	0
23...	1530	--	3.9	--	--	330	--	1300	12	245
MAR.										
02...	1820	--	1.3	--	--	460	100	1000	16	57
09...	1525	--	--	--	--	--	--	--	--	--
11...	1100	.20	6.2	10	270	510	160	1000	18	134
15...	1615	--	4.4	--	--	490	110	950	20	60
23...	1515	--	--	--	--	--	--	--	--	--
30...	1545	--	--	--	--	--	--	--	--	--
APR.										
06...	1440	--	--	--	--	--	--	--	--	--
11...	0930	.50	5.9	10	--	460	100	1200	20	89
13...	1600	--	--	--	--	--	--	--	--	--
20...	1430	--	--	--	--	--	--	--	--	--
21...	1515	--	11	--	--	370	91	630	9.4	10
27...	1515	--	--	--	--	--	--	--	--	--
MAY										
04...	1430	--	--	--	--	--	--	--	--	--
07...	1001	--	22	30	--	550	220	1000	20	21

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.---Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (CO3) (MG/L) (00445)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
OCT.										
06...	--	--	--	--	--	--	--	--	--	--
20...	0	--	1400	200	.7	--	--	--	9.5	--
24...	0	--	2800	340	.6	--	--	--	20	--
27...	0	--	390	28	.9	--	--	--	4.1	--
NOV.										
03...	0	--	1600	140	.7	--	--	--	7.9	--
21...	0	--	--	--	--	--	--	--	--	--
DEC.										
01...	--	--	--	--	--	--	--	--	--	--
18...	0	--	4800	530	1.2	24	.00	25	24	.67
22...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
JAN.										
05...	0	--	2700	260	1.2	--	--	--	12	--
12...	--	--	--	--	--	--	--	--	--	--
19...	0	--	6400	830	1.1	--	--	--	66	--
23...	42	6	2900	270	.9	--	--	--	5.9	--
26...	--	--	--	--	--	--	--	--	--	--
FEB.										
02...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
22...	15	9	3500	340	1.3	--	--	--	13	--
23...	0	--	5000	380	2.0	--	--	--	40	--
MAR.										
02...	0	--	3100	380	1.1	--	--	--	7.4	--
09...	--	--	--	--	--	--	--	--	--	--
11...	0	--	3400	340	.1	10	.54	11	11	.06
15...	0	--	3200	310	1.0	--	--	--	6.8	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR.										
06...	--	--	--	--	--	--	--	--	--	--
11...	0	--	3400	310	.8	6.7	.16	7.0	6.9	.12
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
21...	0	--	2400	160	.9	--	--	--	3.7	--
27...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	--	--	--	--	--	--	--	--	--	--
07...	0	--	3800	300	1.1	7.6	.09	7.7	7.7	.24



09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	TOTAL ACIDITY AS H+	SODIUM AD- SORP- TION RATIO (00931)
OCT.										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	2480	930	810	--	6.4
24...	--	--	--	.00	--	4660	1600	1500	--	9.9
27...	--	--	--	--	--	796	250	95	--	4.4
NOV.										
03...	--	--	--	--	--	2540	880	850	--	6.5
21...	--	--	--	--	--	--	--	--	--	--
DEC.										
01...	--	--	--	--	--	--	--	--	--	--
18...	.63	26	.87	.51	8210	7760	2700	2700	6.4	12
22...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
JAN.										
05...	--	--	--	--	--	4380	1700	1600	--	7.5
12...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	11000	3600	3300	--	14
23...	--	--	--	.02	--	4780	1800	1600	--	8.8
26...	--	--	--	--	--	--	--	--	--	--
FEB.										
02...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	.21	--	5570	2300	2300	--	7.6
23...	--	--	--	--	--	7910	3200	3000	--	10
MAR.										
02...	--	--	--	--	--	5120	1600	1600	--	11
09...	--	--	--	--	--	--	--	--	--	--
11...	1.2	12	.32	.05	5710	5550	1900	1800	--	9.9
15...	--	--	--	--	--	5150	1700	1600	--	10
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR.										
06...	--	--	--	--	--	--	--	--	--	--
11...	.69	7.8	.20	.05	6050	5570	1600	1500	--	13
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	3690	1300	1300	--	7.6
27...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	--	--	--	--	--	--	--	--	--	--
07...	.96	8.9	.46	.10	6410	5960	2300	2300	--	9.1

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000095)	PH (UNITS) (000400)	AIR TEMPER- ATURE (DEG C) (000020)	TEMPER- ATURE (DEG C) (000010)	TUR- BID- ITY (JTU) (000070)	DIS- SOLVED OXYGEN (MG/L) (000300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT.									
06...	3340	--	--	14.0	--	--	--	--	--
20...	3330	7.7	--	14.0	--	--	--	--	290
24...	5730	7.7	--	16.0	--	--	--	--	340
27...	1150	8.3	--	8.0	--	--	--	--	120
NOV.									
03...	3190	6.9	--	9.0	--	--	--	--	310
21...	7910	3.2	--	11.0	--	--	--	--	--
DEC.									
01...	5970	--	--	1.5	--	--	--	--	--
18...	9370	2.6	-2.0	.0	10	11.2	37	12	1000
22...	8890	--	--	.0	--	--	--	--	--
29...	5350	--	--	.5	--	--	--	--	--
JAN.									
05...	5380	7.7	--	.5	--	--	--	--	970
12...	12000	--	--	.0	--	--	--	--	--
19...	12200	--	--	2.0	--	--	--	--	690
23...	5630	10.4	--	.0	--	--	--	--	990
26...	5610	--	--	.0	--	--	--	--	--
FEB.									
02...	12200	--	--	2.0	--	--	--	--	--
16...	6410	--	--	.5	--	--	--	--	--
22...	6810	10.2	--	--	--	--	--	--	1000
23...	8820	8.2	--	1.5	--	--	--	--	580
MAR.									
02...	6400	7.6	--	10.5	--	--	--	--	860
09...	6260	--	--	40.0	--	--	--	--	--
11...	6600	8.	5.5	6.5	60	10.5	39	31	950
15...	6060	8.0	--	13.0	--	--	--	--	960
23...	5170	--	--	9.5	--	--	--	--	--
30...	5170	--	--	14.0	--	--	--	--	--
APR.									
06...	6540	--	--	21.0	--	--	--	--	--
11...	6800	7.6	7.0	6.0	8	10.4	25	11	850
13...	6970	--	--	18.0	--	--	--	--	--
20...	6970	--	--	21.0	--	--	--	--	--
21...	4550	6.7	--	13.5	--	--	--	--	580
27...	4550	--	--	13.5	--	--	--	--	--
MAY									
04...	6270	--	--	21.0	--	--	--	--	--
07...	6770	7.7	9.0	8.5	13	10.1	32	14	770

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
MAY										
11...	1530	--	5.3	--	--	490	150	980	21	34
JUNE										
01...	1500	--	--	--	--	--	--	--	--	--
04...	1200	--	--	--	--	--	--	--	--	--
04...	1500	.59	14	0	10	500	130	800	22	40
08...	1515	--	--	--	--	--	--	--	--	--
15...	1430	--	4.7	--	--	510	500	1300	20	62
20...	1500	--	--	--	--	--	--	--	--	--
JULY										
04...	1830	--	--	--	--	--	--	--	--	--
06...	1500	--	--	--	--	--	--	--	--	--
09...	1515	.03	3.0	30	--	510	190	1700	22	46
11...	1120	--	--	--	--	--	--	--	--	--
27...	1850	--	9.9	--	--	530	230	1400	29	13
AUG.										
14...	1600	.50	14	20	460	400	250	1400	29	15
31...	1630	--	9.1	--	--	510	200	1200	24	15
SEP.										
17...	1500	.18	25	4200	--	680	250	1400	22	1
21...	1200	--	37	--	--	550	320	1500	25	0

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
MAY										
11...	0	3400	270	1.2	--	--	--	4.5	--	--
JUNE										
01...	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
04...	0	3200	170	1.1	4.6	.00	4.7	4.6	.06	1.0
08...	--	--	--	--	--	--	--	--	--	--
15...	0	5500	400	.8	--	--	--	21	--	--
20...	--	--	--	--	--	--	--	--	--	--
JULY										
04...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
09...	0	4600	740	1.1	--	--	11	10	.04	1.1
11...	--	--	--	--	--	--	--	--	--	--
27...	0	4300	470	1.3	--	--	--	9.6	--	--
AUG.										
14...	0	4000	560	1.3	--	--	11	10	.25	1.4
31...	0	4000	380	1.1	--	--	--	8.5	--	--
SEP.										
17...	0	4700	500	1.3	--	--	7.7	7.7	.36	1.6
21...	0	5500	520	1.6	--	--	--	8.9	--	--

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	TOTAL ACIDITY AS H+ (MG/L) (71825)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
MAY										
11...	--	--	--	--	5350	1800	1800	--	9.9	6270
JUNE										
01...	--	--	--	--	--	--	--	--	--	5340
04...	--	--	--	--	--	--	--	--	--	6000
04...	5.8	.34	.09	5040	4880	1800	1800	--	8.2	5490
08...	--	--	--	--	--	--	--	--	--	6080
15...	--	--	--	--	8360	3300	3300	--	9.8	9220
20...	--	--	--	--	--	--	--	--	--	7410
JULY										
04...	--	--	--	--	--	--	--	--	--	9190
06...	--	--	--	--	--	--	--	--	--	8800
09...	12	.17	.04	8210	7830	2100	2000	--	16	8800
11...	--	--	--	--	--	--	--	--	--	7330
27...	--	--	--	--	7020	2300	2300	--	13	8200
AUG.										
14...	13	.23	.05	7010	6710	2000	2000	--	14	7700
31...	--	--	--	--	6370	2100	2100	--	11	7130
SEP.										
17...	9.7	1.5	1.0	8000	7620	2700	2700	1.1	12	7700
21...	--	--	--	--	8510	2700	2700	13	13	10600

DATE	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDEO ORGANIC CARBON (C) (MG/L) (00689)	DIS- SOLVED BORON (R) (UG/L) (01020)
MAY										
11...	8.7	--	--	--	--	--	--	--	--	630
JUNE										
01...	--	--	30.0	--	--	--	--	--	--	--
04...	--	--	24.5	--	--	--	--	--	--	--
04...	8.1	29.0	30.5	130	6.5	31	8.2	--	--	910
08...	--	--	32.5	--	--	--	--	--	--	690
15...	8.5	--	32.0	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
JULY										
04...	--	--	--	--	--	--	--	--	--	--
06...	--	--	26.5	--	--	--	--	--	--	--
09...	9.6	33.0	33.0	11	7.7	35	--	9.0	.4	1200
11...	--	--	24.5	--	--	--	--	--	--	--
27...	5.9	--	--	--	--	--	--	--	--	1400
AUG.										
14...	7.6	32.0	31.0	130	6.3	49	--	16	1.4	1000
31...	6.0	--	26.5	--	--	--	--	--	--	1100
SEP.										
17...	4.4	30.0	26.5	35	7.4	46	--	27	.5	790
21...	2.4	--	26.5	--	--	--	--	--	--	830

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

1974 DATA NOT PREVIOUSLY PUBLISHED

TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL LITHIUM (LI) (UG/L) (01132)
AUG. 13...	1500	230

TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED ARSENIC (AS) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)
OCT. 24...	1330	1	--	340	--	--	--	--	--
NOV. 21...	1430	1	--	--	--	--	--	--	--
DEC. 18...	1345	9	13	1000	30	0	0	20	100
JAN. 23...	1330	0	--	990	--	--	--	--	--
FEB. 22...	1230	0	--	1000	--	--	--	--	--
MAR. 11...	1100	5	0	950	10	0	54	20	<50
JUNE 04...	1500	10	4	910	10	0	20	20	<50
AUG. 14...	1600	8	2	1000	20	0	0	0	100

DATE	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL LITHIUM (LI) (UG/L) (01132)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)
OCT. 24...	--	--	--	--	0	<100	--	110	--
NOV. 21...	--	--	--	--	--	200	--	200	--
DEC. 18...	6	130	100	23000	16000	100	7	--	260
JAN. 23...	--	--	--	--	10	100	--	240	--
FEB. 22...	--	--	--	--	0	--	--	--	--
MAR. 11...	0	40	7	11000	10	<100	0	--	--
JUNE 04...	0	40	7	6900	0	100	0	--	--
AUG. 14...	2	40	11	5200	20	100	0	--	--

DATE	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01000)	DIS- SOLVED MERCURY (HG) (UG/L) (01090)	TOTAL SELF- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
OCT. 24...	--	--	--	--	18	--	--	--
NOV. 21...	--	--	--	--	--	--	--	--
DEC. 18...	990	980	.1	<.1	18	13	200	180
JAN. 23...	--	--	--	--	12	--	--	--
FEB. 22...	--	--	--	--	16	--	--	--
MAR. 11...	470	270	.0	.0	18	18	40	30
JUNE 04...	160	10	.2	.0	22	21	40	10
AUG. 14...	740	460	.0	.0	17	17	130	30

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILT- HABLE RESIDUE	DIS- SOLVED GROSS ALPHA AS	SUS- PENDED GROSS ALPHA AS	DIS- SOLVED GROSS BETA AS	SUS- PENDED GROSS BETA AS	DIS- SOLVED GROSS BETA AS	SUS- PENDED GROSS BETA AS	DIS- SOLVED RA-226 RADON METHOD (PC/L)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)
		(MG/L) (00530)	(UG/L) (00030)	(UG/L) (00040)	(PC/L) (03515)	(PC/L) (03516)	(PC/L) (00050)	(PC/L) (00060)	(PC/L) (09511)	(UG/L) (22703)
DEC. 18...	1345	68	<49	2.4	65	1.1	55	.9	.11	12

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ON)FS (PER 100 ML) (31679)
DEC. 18...	1345	1300	0	0
APR. 11...	0930	1300	--	--
MAY 07...	1001	2900	13	200
JUNE 04...	1500	3100	410	1000
JULY 09...	1515	47000	120	550
AUG. 14...	1600	1600	150	180
SEP. 17...	1500	2000	0	0

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Dec 18	1345	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula		7	
		Gomphonemataceae			
		Gomphonema		1	
		Nitzschaceae			
		Nitzschia		18	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya		74	
		TOTAL			
Apr 11	0930	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Amphiprora		7	
		Navicula		51	
		Nitzschaceae			
		Nitzschia		18	
		Surirellaceae			
		Surirella		24	
		TOTAL	1,300		
May 07	1001	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Amphiprora		3	
		Navicula		33	
		Nitzschaceae			
		Nitzschia		14	
		Surirellaceae			
		Surirella		1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		49	
		TOTAL	2,900		

09367561 SHUMWAY ARROYO NEAR WATERFLOW, N. MEX.---Continued

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jun 04	1500	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula		7	
		Nitzschiaceae			
		Nitzschia		93	
		TOTAL	3,100		
Jul 09	1515	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Oocystaceae			
		Kirchneriella	590	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	190	<1	
		Pennales			
		Achnanthaceae			
		Achnanthes		<1	
		Naviculaceae			
		Amphiprora	190	<1	
		Navicula	30,000	64	
		Nitzschiaceae			
		Nitzschia	590	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	7,900	17	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	7,500	16	
		PYRRHOPHYTA			
		Dinophyceae			
		Gymnodiniales			
		Gymnodiniaceae			
		Gymnodinium		<1	
		TOTAL	47,000		
Aug 14	1600	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Achnanthes	70	4	
		Cymbellaceae			
		Epithemia	70	4	
		Naviculaceae			
		Navicula	600	37	
		Nitzschiaceae			
		Hantzschia	70	4	
		Nitzschia	810	50	
		TOTAL	1,600		

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sep 17	1500	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	170	8	
		Nitzschaceae			
		Nitzschia	510	25	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	1,300	67	
		TOTAL	2,000		

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)
OCT.						
24...	0800	--	.16	462	.20	85
24...	0805	--	.16	6003	2.6	63
26...	1700	--	.13	23700	8.3	94
27...	0800	--	3.2	42500	367	87
27...	0900	--	3.2	14700	127	92
27...	1000	--	20	14600	788	92
30...	0845	5.0	2.0	6140	33	89
JUNE						
04...	1200	24.5	--	3640	--	--
04...	1500	30.5	.59	317	.50	63
06...	0730	12.0	.31	1010	.85	73
JULY						
04...	1830	--	--	19100	--	--
09...	1515	33.0	.03	43	.00	24
11...	1120	24.5	--	1510	--	--
SEP.						
14...	1600	31.0	58	231	36	98
17...	1500	26.5	.18	279	.14	--



## 09367930 HUNTER WASH AT BISTI TRADING POST, N. MEX.

LOCATION.—Lat 36°16'37", long 108°15'12", in NE¼NE¼ sec. 31, T.24 N., R.13 W., San Juan County, at gaging station, 150 ft (46 m) upstream from road crossing at Bisti Trading Post and 35 mi (56 km) south of Farmington.

DRAINAGE AREA.—45.6 mi<sup>2</sup> (118.1 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: October 1974 to current year.  
Sediment records: October 1974 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.											
31...	1800	E110	--	--	--	--	--	--	--	--	--
31...	1830	E410	--	--	--	--	--	--	--	--	--
APR.											
13...	1030	2.1	--	--	--	--	--	--	--	--	--
14...	1030	.03	--	--	--	--	--	--	--	--	--
JULY											
11...	1330	.52	16	36	2.4	280	5.8	65	23	640	9.8
14...	1015	.15	17	41	3.7	340	6.3	139	0	710	21
15...	1000	.03	--	--	--	--	--	--	--	--	--
16...	1100	71	15	43	3.9	250	4.2	202	0	470	10
17...	1000	.52	--	--	--	--	--	--	--	--	--
AUG.											
13...	0930	--	--	--	--	--	--	--	--	--	--
13...	1230	--	13	9.6	.9	120	3.6	167	0	160	9.7
SEP.											
03...	1630	18	12	22	4.2	110	3.8	156	0	110	8.5
04...	1130	.10	--	--	--	--	--	--	--	--	--
05...	1100	.10	16	4.7	1.4	98	2.9	162	0	92	6.2
05...	1500	.10	--	--	--	--	--	--	--	--	--
08...	1030	.30	20	8.2	.6	180	3.8	183	0	220	12
08...	1400	.10	21	8.0	1.0	170	4.2	136	0	230	18
08...	1900	--	--	--	--	--	--	--	--	--	--
12...	1600	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF TENTHS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
OCT.										
31...	--	--	--	--	--	--	608	--	--	--
31...	--	--	--	--	--	--	770	--	--	--
APR.										
13...	--	--	--	--	--	--	1190	--	--	--
14...	--	--	--	--	--	--	1200	--	--	--
JULY										
11...	1.0	.89	1050	100	8	12	1530	9.8	--	80
14...	1.5	4.0	1230	120	4	14	1780	7.6	15.0	110
15...	--	--	--	--	--	--	1380	--	15.0	--
16...	1.0	6.4	925	120	0	9.8	1360	7.9	14.0	90
17...	--	--	--	--	--	--	1370	--	15.5	--
AUG.										
13...	--	--	--	--	--	--	584	--	--	--
13...	1.2	1.9	409	28	0	9.9	622	8.3	--	170
SEP.										
03...	.9	1.7	356	72	0	5.6	955	7.5	--	210
04...	--	--	--	--	--	--	500	--	--	--
05...	.7	2.4	313	18	0	10	953	8.2	--	140
05...	--	--	--	--	--	--	482	--	--	--
08...	.9	4.9	558	23	0	16	962	7.6	--	200
08...	1.1	4.9	542	24	0	15	958	7.5	--	210
08...	--	--	--	--	--	--	1650	--	--	--
12...	--	--	--	--	--	--	705	--	--	--

E--ESTIMATE

09367930 HUNTER WASH AT BISTI TRADING POST, N. MEX.--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDE GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (DIRECT FLUORO- METRIC) (PC/L) (80010)
SEP. 04-12	25000	11	2100	8.5	690	6.9	550	.06	3.4

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)
OCT.										
31...	1800	--	E110	177000	E53000	--	--	--	--	58
31...	1830	--	E410	206000	E230000	--	--	--	--	48
APR.										
13...	1030	--	2.1	41100	233	--	--	--	--	98
14...	1030	--	.03	50900	4.1	--	--	--	--	E98
JULY										
08...	1900	--	E410	168000	E190000	--	--	--	--	67
08...	1905	--	E110	148000	E44000	--	--	--	--	65
09...	1700	--	.10	57900	16	--	--	--	--	83
10...	1145	29.5	.01	11900	.32	--	--	--	--	74
11...	1330	--	.52	50200	70	--	--	--	--	100
11...	1510	31.0	.34	9360	8.6	--	--	--	--	100
14...	1015	15.0	.15	86	.03	--	--	--	--	90
15...	1000	15.0	.03	30100	2.4	--	--	--	--	98
15...	1600	--	.01	31500	.85	--	--	--	--	94
16...	1100	14.0	71	28900	5540	--	--	--	--	99
16...	1600	15.0	2.1	28300	160	--	--	--	--	99
17...	1000	15.5	.52	30100	42	--	--	--	--	99
17...	1400	15.5	.10	28600	7.7	--	--	--	--	99
AUG.										
12...	0930	--	.10	6660	1.8	--	--	--	--	100
12...	1430	--	.10	6360	1.7	--	--	--	--	100
SEP.										
03...	1630	--	18	4750	231	--	--	--	--	--
04...	1130	--	.10	4880	1.3	--	--	--	--	--
05...	1100	--	.10	12300	3.3	--	--	--	--	--
05...	1500	--	.10	12300	3.3	--	--	--	--	--
08...	1030	--	.30	15900	13	--	--	--	--	--
08...	1400	--	.10	16000	4.3	--	--	--	--	--
09...	1900	--	418	174000	196000	71	88	98	100	--
11...	1950	--	E110	96600	E28700	--	--	--	--	76
11...	2000	--	E410	253000	E280000	--	--	--	--	82
11...	2200	--	E65	E180000	E31600	--	--	--	--	32
12...	0900	14.5	3.2	26200	226	--	--	--	--	94
12...	1100	--	2.8	26800	203	--	--	--	--	--
12...	1500	--	1.7	29300	134	--	--	--	--	--

E--ESTIMATE

## SAN JUAN RIVER BASIN

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9368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.  
(National stream-quality accounting network,  
surveillance, 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, at gaging station 3 mi (5 km) west of Shiprock, 6 mi (10 km) downstream from Chaco River, and at mile 215.0 (345.9 km) (revised).

DRAINAGE AREA.--12,900 mi<sup>2</sup> (33,400 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: February 1941 to September 1945, July 1957 to current year.

Water temperatures: December 1950 to current year.

Sediment records: December 1950 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 732 mg/l Sept. 9-12; minimum, 169 mg/l July 9.

Hardness: Maximum, 340 mg/l Nov. 21; minimum, 110 mg/l June 25-30, July 9.

Specific conductance: Maximum daily, 1,390 micromhos Sept. 9; minimum daily, 257 micromhos June 15.

Water temperatures: Maximum, 21.0°C on several days during August and September; minimum, freezing point on many days during December and January.

Sediment concentrations: Maximum daily, 59,500 mg/l Oct. 28; minimum daily, 71 mg/l Oct. 6.

Sediment discharge: Maximum daily, 870,000 tons (789,000 tonnes) Oct. 28; minimum daily, 66 tons (60 tonnes) Oct. 10.

## Period of record:

Dissolved solids (1941-45, 1957-75): Maximum, 2,980 mg/l July 30, 31, 1959; minimum, 115 mg/l June 21-28, 30, 1944.

Hardness (1941-45, 1957-75): Maximum, 1,100 mg/l July 30, 31, 1959; minimum, 70 mg/l June 21-28, 30, 1944.

Specific conductance (1957-75): Maximum daily, 4,360 micromhos July 31, 1959; minimum daily, 188 micromhos June 6, 1958.

Water temperatures: Maximum, 34.0°C July 20, 1968; minimum, freezing point on many days during winter months of most years.

Sediment concentrations: Maximum daily, 114,000 mg/l Aug. 11, 1967; minimum daily, 2 mg/l May 4, 1963.

Sediment discharge: Maximum daily, 2,000,000 tons (1,810,000 tonnes) Aug. 11, 1967; minimum daily, 1 ton (.91 tonne) on several days during July and September 1959, September 1962, May and July 1963.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- CHARGE (CFS) (000600)	DIS- SOLVED SILICA (SI02) (000955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED POT- ASSIUM (K) (00935)	DIS- SOLVED TOTAL DICAR- BONATE (HCO3) (00440)	DIS- SOLVED TOTAL MONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
OCT.												
01-31	1030	37	--	78	8.7	120	5.1	201	0	390	21	1.3
NOV.												
01-30	912	11	--	91	17	66	3.4	174	0	250	21	.4
DEC.												
01-31	872	10	--	82	16	58	3.0	165	0	230	20	.3
JAN.												
01-31	920	10	--	73	16	55	3.0	160	0	210	18	.5
FEB.												
01-28	849	8.9	--	82	18	68	3.2	166	--	260	21	.3
MAR.												
01-02	1600	12	--	82	15	68	3.4	168	--	230	17	.3
03-04	2020	10	--	71	9.5	110	4.2	194	--	260	13	.5
05-31	1340	9.3	--	78	14	61	3.3	165	--	210	15	.4
APR.												
01-06	1020	9.3	--	77	17	51	3.2	168	--	200	15	.3
07-08	1560	8.8	--	65	15	37	2.8	150	--	160	11	.3
09-13	2060	9.1	--	66	13	61	3.1	151	--	190	12	.3
14-30	3170	9.0	--	52	12	27	2.6	135	--	110	7.7	.3
MAY												
01-11	3130	9.2	--	55	12	27	2.4	133	--	110	7.7	.3
12-31	5270	7.8	--	47	9.2	19	1.9	116	--	79	5.7	.3
JUNE												
01-04	5300	7.6	--	43	7.7	17	1.8	112	--	77	5.5	.3
05-08	10300	6.7	--	38	5.8	12	1.7	100	--	58	3.8	.3
09-19	6520	6.7	--	37	5.7	13	1.6	95	--	63	4.0	.4
20-24	4240	7.4	--	43	6.8	18	1.8	107	--	81	6.1	.3
25-30	5780	6.4	--	36	6.0	14	1.5	88	--	66	4.4	.3
JULY												
01-10	6630	6.5	--	38	5.6	14	1.7	87	--	65	4.2	.2
11-13	7120	10	--	73	8.4	48	3.4	153	--	190	6.4	.4
14-16	5320	8.5	--	44	5.8	21	2.0	105	--	93	5.6	.3
17-18	6280	13	--	69	6.8	120	4.4	213	--	280	10	.6
19-31	3810	9.1	--	47	7.9	22	2.0	112	--	95	7.3	.3
AUG.												
01-10	3040	5.3	--	41	9.4	26	2.2	85	11	100	7.0	.3
11-12	2660	5.8	--	57	12	43	3.0	135	0	160	13	.4
15-21	1920	3.9	--	46	11	34	2.5	88	3	140	10	.4
22-31	1650	6.8	--	59	11	40	2.8	112	11	150	11	.3
SEP.												
01-08	1560	9.6	0	61	12	40	3.0	154	0	150	11	.4
09-12	3390	15	10	91	9.3	140	5.0	262	0	330	12	.5
13-17	2440	8.0	0	59	9.1	55	3.5	155	0	160	11	.4
18-30	1690	6.3	0	52	11	36	2.5	110	5	140	10	.3
WTD. AVG.	--	9.2	--	55	9.8	37	2.5	128	--	132	9.2	.4
TIME WTD.												
AVG.	2420	11	--	66	12	52	3.0	147	--	181	14	.4
TOT. LOAD (TONS)	--	21800	--	129000	23100	87000	5880	303000	--	314000	21800	868

## 09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DIS- SOLVED NITRIF PLUS NITRATE (N) (MG/L) (00671)	DIS- SOLVED ORTHOPHOS- PHATE (P) (MG/L) (00671)	DIS- SOLVED AMMONIUM (N) (MG/L) (01020)	DIS- SOLVED SILICA (SiO2) (MG/L) (70300)	DIS- SOLVED (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS) PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS) PER DAY) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
NOV.												
01-31	.06	--	90	--	671	.91	1870	230	63	3.4	1010	7.5
DEC.												
01-30	.77	--	--	--	549	.75	1350	300	160	1.7	840	7.9
JAN.												
01-31	.68	--	--	--	504	.69	1190	270	140	1.5	787	8.0
FEB.												
01-31	.67	--	50	--	467	.64	1160	250	120	1.5	711	8.1
MAR.												
01-24	.67	--	130	--	546	.74	1250	280	140	1.8	840	--
APR.												
01-02	1.2	--	70	--	516	.70	2230	270	130	1.8	802	--
03-04	1.6	--	80	--	581	.79	3170	220	57	3.3	887	--
05-31	.77	--	70	--	476	.65	1720	250	120	1.7	746	--
MAY												
01-06	.53	--	90	--	458	.62	1260	260	120	1.4	723	--
07-08	.50	--	70	--	176	.51	1580	220	100	1.1	595	--
09-13	.53	--	70	--	431	.59	2400	220	94	1.8	689	--
14-30	.32	--	100	--	289	.39	2470	180	69	.9	474	--
JUNE												
01-11	.24	--	60	--	290	.39	2450	190	78	.9	455	--
12-31	.19	--	40	--	228	.31	3240	160	60	.7	369	--
JULY												
01-04	.11	--	20	--	216	.29	3090	140	47	.6	345	--
05-08	.13	--	50	--	176	.24	4490	120	37	.5	293	--
09-19	.10	--	50	--	179	.24	3150	120	38	.5	296	--
20-24	.14	--	20	--	218	.30	2580	140	48	.7	349	--
25-30	.08	--	30	--	178	.24	2780	110	42	.6	294	--
AUG.												
01-10	.13	--	30	--	179	.24	3200	120	47	.6	283	--
11-13	.38	--	90	--	417	.57	8020	220	91	1.6	639	--
14-16	.23	--	70	--	233	.32	3350	130	48	.8	370	--
17-18	.30	--	120	--	610	.81	10380	200	76	1.7	911	--
19-31	.16	--	40	--	247	.34	2540	150	58	.8	393	--
SEP.												
01-10	.04	--	70	--	244	.33	2080	140	53	1.0	398	8.9
11-12	.18	--	160	--	362	.49	2400	190	81	1.4	587	8.1
15-21	.02	--	120	--	294	.40	1520	160	83	1.2	484	8.9
22-31	.11	--	130	--	348	.47	1550	190	82	1.3	552	8.7
WTD. AVG.	.27	--	65	--	320	.44	--	178	71	1.1	502	--
TIME WTD. AVG.	.40	--	78	--	415	.56	--	216	94	1.5	643	--
TOT. LOAD (TONS)	642	--	143	--	758000	--	--	--	--	--	--	--

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L) (00555)	DIS- SOLVED IRON (FE) (MG/L) (01045)	DIS- SOLVED MANGANESE (MANG) (MG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	WTD. AVG. SODIUM (MG/L) (00440)
OCT.									
24...	1030	1660	10	30	--	87	8.7	100	4.9
NOV.									
21...	1130	728	9.1	10	--	110	17	74	3.3
DEC.									
18...	1030	842	10	10	0	82	18	58	2.6
JAN.									
23...	1045	874	7.0	10	--	78	14	51	3.1
FEB.									
20...	1000	836	8.9	40	--	86	18	71	3.3
MAR.									
12...	1030	1470	8.2	10	0	72	14	68	3.0
APR.									
10...	1030	1170	8.1	10	--	71	18	40	2.9
MAY									
07...	1515	3250	8.3	10	--	53	11	27	2.7
JUNE									
04...	1045	6650	5.8	0	0	37	6.3	14	1.6
JULY									
09...	1200	6180	7.8	10	--	33	5.8	14	1.5
AUG.									
14...	1010	2250	9.7	0	10	64	11	38	3.1
SEP.									
17...	1030	1970	10	10	--	61	10	36	2.9

## SAN JUAN RIVER BASIN

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09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CAR- BONATE (C03) (00445)	DIS- SOLVED SULFATE (S04) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE (N) (00618)	DIS- SOLVED NITRITE (N) (00613)	TOTAL NITRITE PLUS NITRATE (N) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (00631)	AMMONIA NITRO- GEN (N) (00610)	TOTAL ORGANIC NITRO- GEN (N) (00605)
OCT.										
24...	0	290	19	.5	.66	.01	.67	.67	.04	14
NOV.										
21...	0	300	23	.3	.60	.00	.62	.60	.08	.17
DEC.										
18...	0	230	18	.3	.54	.01	.86	.55	.11	.66
JAN.										
23...	0	200	17	.3	.54	.01	.65	.55	.12	.39
FEB.										
20...	0	270	21	.4	.55	.01	.68	.56	.11	.35
MAR.										
12...	0	220	15	.3	.45	.01	.53	.46	.03	3.3
APR.										
10...	0	180	13	.3	.47	.01	.54	.48	.01	.45
MAY										
07...	0	110	7.7	.2	.25	.00	.82	.25	.57	.63
JUNE										
04...	0	62	3.6	.2	.07	.01	.10	.08	.00	.20
JULY										
09...	0	65	3.9	.3	--	--	.13	.12	.03	.27
AUG.										
14...	0	150	11	.4	--	--	.54	.53	.00	2.9
SEP.										
17...	0	140	11	.3	--	--	.34	.32	.00	1.2

DATE	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
OCT.										
24...	15	6.4	.02	640	616	250	96	2.7	938	8.1
NOV.										
21...	.87	.15	.01	650	635	340	190	1.7	938	8.4
DEC.										
18...	1.6	.13	.06	543	504	280	140	1.5	789	8.2
JAN.										
23...	1.2	.14	.05	462	454	250	120	1.4	680	8.4
FEB.										
20...	1.1	.08	.08	591	564	290	150	1.8	840	8.4
MAR.										
12...	3.8	2.4	.05	488	479	240	110	1.9	740	8.3
APR.										
10...	1.0	.29	.04	425	414	250	120	1.1	670	8.4
MAY										
07...	2.0	.25	.02	292	287	180	68	.9	444	8.1
JUNE										
04...	.30	.31	.16	178	180	120	37	.6	300	7.8
JULY										
09...	.43	.16	.01	173	169	110	44	.6	280	8.2
AUG.										
14...	3.4	.76	.01	347	360	210	88	1.2	550	8.1
SEP.										
17...	1.5	.33	.04	343	339	190	84	1.1	430	8.1

## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	SUS- PENDED ORGANIC CARBON (C) (MG/L) (00689)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT. 24...	12.0	11.0	7200	--	400	110	--	--	80
NOV. 21...	10.0	7.0	40	10.5	6	6.8	--	--	90
DEC. 18...	3.5	.5	30	12.1	11	5.7	--	--	70
JAN. 23...	-3.0	.0	20	12.8	10	9.2	--	--	60
FEB. 20...	4.5	1.0	30	11.4	9	8.6	--	--	160
MAR. 12...	6.0	5.5	1400	10.4	90	29	--	--	50
APR. 10...	13.0	7.5	150	10.2	12	5.9	--	--	110
MAY 07...	--	9.5	170	9.6	39	10	--	--	80
JUNE 04...	25.0	12.5	180	10.4	18	8.5	--	--	40
JULY 09...	27.5	16.0	50	10.0	10	--	2.8	.2	40
AUG. 14...	28.0	20.0	1400	7.9	84	--	8.9	22	60
SEP. 17...	22.0	16.0	260	0.2	18	--	--	2.2	90

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COBALT (CO) (UG/L) (01037)	TOTAL COPPER (CU) (UG/L) (01042)
SEP. 26...	1100	<10	30	<50	120

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-		DIS-		DIS-
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	SOLVED	TOTAL	SOLVED	TOTAL	SOLVED
		(AS)	ARSENIC	BORON	MIUM	MIUM	MIUM	MIUM	COBALT	COBALT	COPPER	COPPER
		(UG/L)	(AS)	(B)	(CD)	(CD)	(CR)	(CO)	(CO)	(CU)	(CU)	(CU)
		(01002)	(01000)	(01020)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)
DEC. 18...	1030	2	1	70	<10	0	0	<10	50	1	20	15
MAR. 12...	1030	38	1	50	<10	0	140	10	50	0	170	3
JUNE 04...	1045	42	0	40	<10	0	0	0	<50	0	80	2
AUG. 14...	1010	56	0	60	<10	0	10	0	50	0	90	2

DATE	TIME	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-		DIS-		DIS-
		IRON	SOLVED	LEAD	SOLVED	MAN-	SOLVED	MERCURY	SOLVED	SELE-	SOLVED	TOTAL	SOLVED
		(FE)	IRON	(PB)	LEAD	GANESE	GANESE	(HG)	MERCURY	NIUM	NIUM	ZINC	ZINC
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(SE)	(UG/L)	(UG/L)	(UG/L)
		(01045)	(01046)	(01051)	(01049)	(01055)	(01056)	(71900)	(71890)	(01147)	(01145)	(01092)	(01090)
DEC. 18...	3100	10	<100	0	130	0	<.1	<.1	2	1	30	0	
MAR. 12...	130000	10	100	0	3600	0	.0	.0	3	3	570	30	
JUNE 04...	18000	0	200	0	1000	0	.1	.1	1	1	690	0	
AUG. 14...	50000	0	<100	0	1100	10	.1	.0	2	2	350	20	

## 09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (U/L) (00030)	SUS- PENDED GROSS ALPHA AS (U/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS (PC/L) (00050)	SUS- PENDED GROSS BETA AS (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (U/L) (22703)
MAR. 12...	1030	1400	8.3	120	6.5	50	5.2	43	.06	2.3

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M (00573)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (32226)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (32226)	CHLORO- PHYLL A (U/L) (32230)	CHLORO- PHYLL B (U/L) (32231)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
OCT. 24...	1030	8500	--	--	--	--	--	--	19000	8200
NOV. 21...	1130	1400	--	--	--	--	--	--	1600	260
DEC. 18...	1030	4600	3.1	3.8	--	--	4.1	.7	2400	1200
JAN. 23...	1045	8100	--	--	--	--	--	--	1600	520
FEB. 20...	1000	2400	--	--	--	--	--	--	1100	550
MAR. 12...	1030	1800	--	--	--	--	--	--	360	110
APR. 10...	1030	1700	.2	.6	.0	.0	--	--	63	140
MAY 07...	1515	1300	.5	1.4	.1	.0	--	--	330	1100
JUNE 04...	1045	1700	--	--	--	--	--	--	770	920
JULY 09...	1200	490	--	--	--	--	--	--	300	380
AUG. 14...	1010	6600	6.9	8.8	21	2.2	--	--	3100	650
SEP. 17...	1030	830	--	--	--	--	--	--	1100	980

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 24	1030	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		<u>Cyclotella</u>		17	
		Pennales			
		Diatomaceae			
		Diatoma		33	
		Naviculaceae			
		<u>Frustulia</u>		17	
		<u>Navicula</u>		33	
		TOTAL	8,500		

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Nov 21	1130	CHRYSOPHYTA			Sediment Sampler
		Chrysophyceae			
		Chrysomonadales			
		Ochromonadaceae			
		Dinobryon		1	
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		5	
		Fragilariaceae			
		Synedra		8	
		Achnanthaceae			
		Cocconeis		6	
		Rhoicosphenia		5	
		Naviculaceae			
		Navicula		28	
		Gomphonemataceae			
		Gomphonema		10	
		Cymbellaceae			
		Cymbella		8	
		Nitzschaceae			
		Nitzschia		18	
		Surirellaceae			
		Surirella		6	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		6	
		TOTAL	1,800		
Dec 18	1030	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		19	
		Fragilariaceae			
		Synedra		7	
		Achnanthaceae			
		Cocconeis		2	
		Rhoicosphenia		7	
		Naviculaceae			
		Navicula		36	
		Gomphonemataceae			
		Gomphonema		10	
		Cymbellaceae			
		Cymbella		2	
		Nitzschaceae			
		Nitzschia		2	
		Surirellaceae			
		Surirella		14	
		TOTAL	4,600		
Jan 23	1045	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma		3	
		Fragilariaceae			
		Fragilaria		1	
		Achnanthaceae			
		Achnanthes		1	
		Cocconeis		1	
		Rhoicosphenia		<1	
		Naviculaceae			
		Navicula		83	
		Gomphonemataceae			
		Gomphonema		8	
		Cymbellaceae			
		Cymbella		<1	
		Nitzschaceae			
		Nitzschia		2	
		Surirellaceae			
		Surirella		1	
		TOTAL	8,100		



BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON				
Date	Time	Organism	Count (cells/ml)	Percent of total
Feb 20	1000	CHRYSOPHYTA		
		Bacillariophyceae		
		Pennales		
		Diatomaceae		
		<u>Diatoma</u>		3
		Achnanthes		
		<u>Achnanthes</u>		6
		<u>Cocconeis</u>		6
		Naviculaceae		
		<u>Navicula</u>		45
		Gomphonemataceae		
		<u>Gomphonema</u>		29
		Nitzschaceae		
		<u>Nitzschia</u>		6
Mar 12	1030	Surirellaceae		
		<u>Surirella</u>		3
		TOTAL	2,400	
		CHRYSOPHYTA		
		Bacillariophyceae		
		Pennales		
		Diatomaceae		
		<u>Diatoma</u>		33
		Naviculaceae		
		<u>Navicula</u>		33
		Gomphonemataceae		
		<u>Gomphonema</u>		33
		TOTAL	1,800	
Apr 10	1030	CHRYSOPHYTA		
		Bacillariophyceae		
		Pennales		
		Diatomaceae		
		<u>Diatoma</u>		7
		Naviculaceae		
		<u>Caloneis</u>		4
		<u>Navicula</u>		48
		Gomphonemataceae		
		<u>Gomphonema</u>		4
		Cymbellaceae		
		<u>Cymbella</u>		7
		Nitzschaceae		
		<u>Nitzschia</u>		19
May 07	1515	Surirellaceae		
		<u>Surirella</u>		11
		TOTAL	1,700	
		CHRYSOPHYTA		
		Bacillariophyceae		
		Pennales		
		Diatomaceae		
		<u>Diatoma</u>		67
		Nitzschaceae		
		<u>Nitzschia</u>		33
		TOTAL	1,300	
Jun 04	1045	CHRYSOPHYTA		
		Bacillariophyceae		
		Pennales		
		Tabellariaceae		
		<u>Tabellaria</u>		4
		Diatomaceae		
		<u>Diatoma</u>		38
		Fragillariaceae		
		<u>Synedra</u>		15
		<u>Hantzschia</u>		12
		Naviculaceae		
		<u>Navicula</u>		4
		<u>Pinnularia</u>		4
		Cymbellaceae		
		<u>Cymbella</u>		12
		Surirellaceae		
		<u>Surirella</u>		12
		TOTAL	1,700	

## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.---Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jul 09	1200	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Crucigenia		<1	
		Scenedesmus	61	13	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Cocconeis	30	6	
		Diatomaceae			
		Diatoma	180	38	
		Fragilariaceae			
		Fragilaria	30	6	
		Synedra		<1	
		Gomphonemataceae			
		Gomphonema		<1	
		Naviculaceae			
		Navicula	150	31	
		Pinnularia		<1	
		Nitzschia			
		Nitzschia	30	6	
		Surirellaceae			
		Surirella		<1	
		TOTAL	490		
Sep 17	1030	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Chlorococcaceae			
		Closterium	34	4	
		Cosmarium	34	4	
		CHRYSTOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira		<1	
		Pennales			
		Achnanthaceae			
		Achnanthes	69	8	
		Cocconeis	69	8	
		Rhodocosphenia	69	8	
		Diatomaceae			
		Diatoma	270	33	
		Fragilariaceae			
		Synedra	100	13	
		Naviculaceae			
		Navicula	100	13	
		Nitzschia			
		Nitzschia	69	8	
		TOTAL	830		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Dec 18	27	3.8	3.1	4.1	0.7	170	Polyethylene strip
Apr 10	29	0.6	0.2	0.0	0.0	---	"
May 07	27	1.4	0.5	0.1	0.0	15000	"
Aug 14	36	8.8	6.9	21.0	2.2	---	"

## 09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.---Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821	1200	764	742	856	776	708	456	361	282	384	529
2	825	955	782	697	856	772	713	454	361	277	398	504
3	817	921	782	701	793	868	718	442	315	277	394	504
4	817	850	827	689	787	875	718	442	321	273	381	508
5	909	848	827	691	781	755	689	442	296	268	384	548
6	911	821	829	711	817	755	689	444	285	278	388	624
7	1030	819	798	711	817	778	590	442	286	280	427	566
8	1030	838	796	693	836	778	590	452	273	282	395	538
9	1030	837	792	690	836	782	634	452	324	316	399	1390
10	1030	---	791	744	829	776	654	438	289	321	417	928
11	972	---	774	758	823	778	654	440	295	626	590	928
12	974	791	774	707	811	784	713	367	323	635	582	1010
13	1200	805	776	695	804	784	713	365	323	629	---	736
14	1200	803	776	714	884	778	479	356	284	354	---	559
15	960	782	771	723	877	761	481	358	257	350	456	470
16	884	777	762	689	884	761	474	358	259	398	481	549
17	862	778	775	688	---	729	474	359	265	889	462	536
18	858	781	775	664	862	722	495	358	272	900	471	481
19	843	896	759	666	817	671	495	358	280	350	490	517
20	841	896	758	674	817	671	493	341	348	360	502	526
21	1020	924	720	674	775	629	490	340	348	360	508	495
22	1020	921	722	689	781	629	483	374	367	379	609	500
23	929	796	727	691	754	691	486	372	325	378	612	503
24	932	794	730	672	752	684	451	399	325	390	542	493
25	839	766	729	675	752	693	451	399	301	389	536	491
26	840	778	725	748	763	693	442	353	301	417	504	464
27	1130	780	729	750	763	748	436	354	290	411	548	463
28	1130	776	731	782	763	748	436	326	277	400	552	475
29	808	774	721	782	---	748	434	363	272	411	551	513
30	808	764	721	787	---	727	434	372	271	409	530	477
31	825	---	743	786	---	727	---	383	---	413	531	---
MONTH	939	838	764	712	811	744	557	392	303	410	484	594
YEAR	MAX	1390	MIN	257	MEAN	627						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.0	3.0	0.0	3.0	7.0	6.0	9.0	15.0	18.0	20.0	20.0
2	16.0	8.0	4.0	0.0	2.0	7.0	7.0	10.0	16.0	16.0	20.0	21.0
3	17.0	7.0	4.0	0.0	3.0	5.0	9.0	10.0	16.0	16.0	19.0	20.0
4	17.0	7.0	3.0	0.0	3.0	4.0	10.0	11.0	15.0	17.0	18.0	20.0
5	16.0	8.0	3.0	0.0	2.0	5.0	10.0	10.0	16.0	17.0	19.0	19.0
6	16.0	8.0	4.0	0.0	3.0	7.0	11.0	9.0	15.0	17.0	19.0	19.0
7	17.0	7.0	3.0	0.0	3.0	8.0	9.0	8.0	14.0	18.0	20.0	18.0
8	18.0	7.0	3.0	0.0	6.0	9.0	8.0	10.0	14.0	18.0	20.0	18.0
9	16.0	8.0	2.0	0.0	8.0	8.0	6.0	11.0	14.0	18.0	20.0	17.0
10	15.0	---	2.0	0.0	5.0	6.0	6.0	12.0	14.0	19.0	19.0	17.0
11	15.0	---	2.0	0.0	6.0	5.0	5.0	14.0	14.0	18.0	20.0	16.0
12	16.0	8.0	2.0	0.0	6.0	6.0	6.0	13.0	15.0	18.0	21.0	17.0
13	15.0	8.0	1.0	0.5	5.0	7.0	8.0	12.0	16.0	17.0	21.0	18.0
14	14.0	8.0	1.0	0.0	4.0	7.0	8.0	11.0	16.0	18.0	21.0	17.0
15	15.0	8.0	1.0	0.0	3.0	8.0	8.0	11.0	16.0	18.0	20.0	17.0
16	15.0	8.0	1.0	0.0	2.0	9.0	7.0	12.0	16.0	16.0	21.0	17.0
17	14.0	8.0	1.0	0.0	2.0	8.0	7.0	12.0	17.0	17.0	21.0	18.0
18	15.0	8.0	2.0	0.0	3.0	9.0	8.0	11.0	17.0	18.0	21.0	17.0
19	14.0	7.0	2.0	0.0	4.0	8.0	9.0	11.0	14.0	19.0	20.0	16.0
20	14.0	7.0	2.0	0.0	5.0	8.0	11.0	11.0	15.0	19.0	20.0	15.0
21	13.0	7.0	2.0	0.0	3.0	8.0	12.0	10.0	16.0	19.0	20.0	15.0
22	13.0	6.0	2.0	0.0	2.0	8.0	11.0	10.0	16.0	20.0	19.0	15.0
23	13.0	6.0	1.0	0.0	3.0	7.0	10.0	11.0	17.0	20.0	19.0	15.0
24	13.0	6.0	1.0	0.0	5.0	8.0	10.0	11.0	18.0	20.0	19.0	15.0
25	13.0	6.0	1.0	0.0	6.0	7.0	11.0	12.0	18.0	19.0	20.0	14.0
26	13.0	6.0	0.0	1.0	6.0	7.0	10.0	12.0	17.0	18.0	20.0	15.0
27	11.0	5.0	0.0	3.0	7.0	5.0	9.0	13.0	17.0	19.0	20.0	16.0
28	12.0	5.0	0.0	2.0	7.0	6.0	8.0	13.0	17.0	19.0	19.0	17.0
29	10.0	4.0	1.0	3.0	---	6.0	8.0	12.0	16.0	18.0	19.0	17.0
30	9.0	4.0	1.0	3.0	---	8.0	7.0	13.0	16.0	18.0	19.0	16.0
31	9.0	---	0.0	2.0	---	9.0	---	14.0	---	18.0	19.0	---
MONTH	14.5	7.0	2.0	0.5	4.0	7.0	8.5	11.5	16.0	18.0	20.0	17.0
YEAR	MAX	21.0	MIN	0.0	MEAN	10.5						

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	620	140	234	1240	4750	15900	794	161	345
2	620	125	209	1220	7100	23400	806	172	374
3	580	116	182	1530	6870	28400	836	204	460
4	605	104	170	1160	2800	8770	848	254	582
5	620	86	144	1040	1390	3900	881	260	618
6	540	71	104	962	750	1950	954	285	734
7	498	480	645	916	925	2290	909	224	550
8	353	660	629	854	670	1540	930	215	540
9	318	230	197	867	540	1260	874	258	609
10	387	80	66	962	2730	7090	982	233	567
11	605	2270	3850	842	1220	2770	895	177	428
12	540	2380	3470	818	720	1590	916	177	438
13	1520	22900	109000	800	510	1100	895	205	495
14	1330	33400	131000	824	540	1200	867	228	534
15	686	8900	16500	923	630	1570	909	276	677
16	652	3920	7230	909	6280	15400	867	268	627
17	642	1550	2690	982	7250	17700	836	241	544
18	625	3200	5400	895	1600	3870	874	325	767
19	600	1440	2330	874	264	623	842	183	416
20	585	900	1420	674	267	486	830	281	630
21	610	23000	37900	722	380	741	842	950	2160
22	686	29500	58900	818	403	890	881	650	1550
23	1320	31500	112000	848	348	797	888	1300	3120
24	1720	25800	120000	842	324	737	895	1680	4060
25	1060	15800	45200	848	210	481	888	1190	2850
26	867	8000	18700	830	208	466	881	1230	2930
27	2460	37500	370000	812	254	557	840	1280	2900
28	5000	59500	870000	800	209	451	860	1250	2900
29	1840	20400	107000	830	197	441	860	1440	3340
30	2120	24800	142000	800	185	400	860	610	1420
31	1360	7300	26800	---	---	---	860	345	801
MONTH	31889	---	2193970	27362	---	146770	27020	---	38966
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	888	296	710	842	2220	5050	1300	2510	10300
2	938	235	595	835	1380	3110	1910	5700	29400
3	842	198	450	795	477	1020	2150	15000	103000
4	867	299	700	770	178	370	1880	20300	103000
5	902	367	894	784	170	360	1360	16800	61700
6	895	366	884	751	222	450	1170	16700	52800
7	909	353	866	754	497	1010	1230	19500	64800
8	946	293	748	793	375	803	1270	19800	67900
9	962	334	868	854	442	1020	1640	11500	50900
10	954	282	726	850	323	741	2650	4710	34800
11	888	250	599	834	308	694	1840	4120	20500
12	888	424	1020	870	469	1100	1480	4890	19500
13	881	315	749	879	601	1430	1270	4110	14100
14	923	252	628	882	549	1310	1140	3120	9600
15	954	249	641	911	488	1200	1230	2480	8240
16	1010	467	1270	930	419	1050	1240	2270	7600
17	1050	588	1670	890	578	1390	1240	2130	7130
18	1060	465	1330	869	439	1030	1170	2100	6630
19	1050	415	1180	835	348	785	1110	1420	4260
20	994	540	1450	835	413	931	1170	1930	6100
21	986	710	1890	857	195	451	1370	4340	16100
22	962	640	1660	890	175	421	1700	5070	23300
23	946	680	1740	895	249	602	1620	2820	12300
24	946	425	1090	874	305	720	1310	2350	8310
25	902	359	874	842	301	684	1190	1380	4430
26	860	381	885	854	360	830	1170	995	3140
27	848	371	849	888	491	1180	1220	975	3210
28	830	259	580	902	520	1270	1160	870	2720
29	788	168	357	---	---	---	1130	703	2140
30	788	269	572	---	---	---	1070	1280	3700
31	867	322	754	---	---	---	1000	950	2570
MONTH	28524	---	29229	23765	---	31012	43390	---	764180

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	993	553	1480	3100	875	7320	4260	1560	17900
2	998	490	1320	2980	993	7990	4460	1190	14300
3	964	585	1520	2880	1160	9020	5480	1800	26600
4	938	725	1840	2820	1130	8600	6980	1880	35400
5	978	2090	5520	3550	1600	15300	9030	2400	58500
6	1230	3380	11200	3680	1440	14300	10700	2490	71900
7	1560	2130	8970	3440	1430	13300	11300	2310	70500
8	1570	1600	6780	3060	2670	22100	10000	1150	31100
9	1310	1270	4490	2660	2240	16100	8110	1100	24100
10	1200	1090	3530	2810	1180	8950	8000	523	11300
11	1940	725	3800	3480	860	8080	6410	1400	24200
12	2780	5610	42100	4120	2430	27000	4610	1500	18700
13	3080	7050	58600	5180	1860	26000	4390	1690	20000
14	2730	4290	31600	5320	843	12100	4920	3000	39900
15	3200	1990	17200	5860	610	9650	6030	2860	46600
16	4110	1900	21100	6800	620	11400	7130	2190	42200
17	3520	1270	12100	6900	608	11300	8650	1320	30800
18	3220	1770	15400	7010	540	10200	7110	1330	25500
19	3080	1880	15600	6260	605	10200	6310	2720	46300
20	2820	2100	16000	5900	660	10500	4670	1330	16800
21	2950	2280	18200	5610	590	8940	3940	845	8990
22	2920	2440	19200	5120	548	7580	3780	1130	11500
23	3180	2540	21800	4340	615	7210	4080	915	10100
24	3550	2650	25400	3810	1510	15500	4710	990	12600
25	3700	2580	25800	3580	1870	18100	5510	1930	28700
26	3400	2200	20200	4000	950	10300	5650	1780	27200
27	2900	2280	17900	4860	858	11300	5410	1310	19100
28	2570	1580	11000	5790	878	13700	5750	1590	24700
29	2880	1570	12200	5790	268	4190	6140	1720	28500
30	3150	1130	9610	4820	240	3120	6210	1370	23000
31	---	---	---	4250	1130	13000	---	---	---
MONTH	73421	---	461460	139780	---	372350	189730	---	866990
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6010	1070	17400	3270	1890	16700	1370	308	1140
2	6370	1580	27200	3310	538	4810	1350	487	1780
3	6820	1420	26100	3190	585	5040	1370	150	555
4	7450	2580	51900	3080	725	6030	1440	94	365
5	7700	1070	22200	3070	2090	17300	1710	1310	6050
6	6540	920	16200	2900	1840	14400	1710	4600	20800
7	6540	1140	20100	2900	1250	9790	1680	1930	8750
8	6340	411	7040	2780	1420	10700	1840	1400	6960
9	6300	490	8330	2810	1050	7970	3640	52300	566000
10	6220	1170	19600	3050	810	6670	2740	42700	316000
11	6620	4500	80400	3250	2200	19300	2510	38400	260000
12	8350	18400	442000	2080	3280	18400	4680	50200	682000
13	6380	11300	195000	1020	2170	5980	3440	25200	243000
14	5350	2600	37600	2340	2340	14800	2500	5200	35100
15	5600	7200	109000	2280	1130	6960	2190	2520	14900
16	5000	11100	150000	2100	305	1730	2100	3230	18300
17	6900	43200	836000	1960	292	1550	1970	2530	13500
18	5660	39900	610000	1860	894	4490	1910	1730	8920
19	4440	3280	39300	1810	309	1510	1790	1360	6570
20	4170	2180	24500	1650	465	2070	1730	1720	8030
21	3830	1260	13000	1810	1010	4940	1780	1490	7160
22	3640	2390	23500	1940	3580	18800	1790	1270	6140
23	3750	1680	17000	1970	3750	19900	1720	2450	11400
24	4080	1400	15400	1960	1470	7780	1690	885	4040
25	3900	1230	13000	1730	1020	4760	1670	768	3460
26	4000	751	8110	1550	665	2780	1640	1580	7000
27	3990	1840	19800	1490	472	1900	1600	1330	5750
28	3730	1210	12200	1580	321	1370	1570	1090	4620
29	3430	1630	15100	1440	120	467	1560	1560	6570
30	3310	3030	27100	1460	320	1260	1520	1100	4510
31	3300	1880	16800	1420	487	1870	---	---	---
MONTH	165720	---	2920880	69060	---	242027	60210	---	2279370

WTR YR 1975 TOTAL WATER DISCHARGE (CFS-DAYS) 879,871.00

WTR YR 1975 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 10,347,204.00

## 09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDIM- ENT (MG/L) (80154)	SUS- PENDEO SEDIM- ENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)
OCT.									
13...	1700	15.0	2230	30200	182000	65	77	94	99
24...	1030	11.0	1660	22600	101000	--	--	--	--
27...	1700	11.0	1910	52600	271000	54	60	71	89
NOV.									
21...	1130	7.0	728	373	733	--	--	--	--
DEC.									
18...	1030	.5	842	362	823	--	--	--	--
JAN.									
23...	1045	.0	874	744	1760	--	--	--	--
FEB.									
02...	1800	2.0	867	1220	2860	--	--	--	62
20...	1000	1.0	836	497	1120	--	--	--	--
MAR.									
03...	1800	5.0	2880	21500	167000	51	62	81	97
12...	1030	5.5	1700	9800	45000	19	25	33	56
APR.									
10...	1030	7.5	1170	1620	5120	--	--	--	34
26...	1800	10.0	2980	1990	16000	29	35	54	--
MAY									
07...	1515	9.5	3250	2280	20000	10	12	15	26
13...	1800	12.0	5490	1910	28300	18	23	32	74
JUNE									
04...	1045	12.5	6660	1890	34000	7	9	13	26
07...	1800	14.0	10600	1970	56400	10	11	17	36
JULY									
09...	1200	16.0	6180	314	9240	--	--	--	--
12...	1800	18.0	7050	10500	200000	47	57	74	--
17...	1800	17.0	6780	42100	771000	48	59	73	92
AUG.									
13...	1010	20.0	1730	2310	10800	47	59	81	94
SEPT.									
13...	1800	18.0	3050	19300	159000	61	69	82	96
17...	1030	16.0	1970	1750	9310	28	32	38	69

DATE	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)
OCT.									
13...	100	--	--	--	--	--	--	--	--
24...	--	--	--	--	92	--	--	--	--
27...	97	100	--	--	--	--	--	--	--
NOV.									
21...	--	--	--	--	48	--	--	--	--
DEC.									
18...	--	--	--	--	35	--	--	--	--
JAN.									
23...	--	--	--	--	26	--	--	--	--
FEB.									
02...	84	97	100	--	--	--	--	--	--
20...	--	--	--	--	27	--	--	--	--
MAR.									
03...	100	--	--	--	--	--	--	--	--
12...	77	88	98	100	--	--	--	--	--
APR.									
10...	69	86	93	100	--	--	--	--	--
26...	--	--	--	--	92	99	100	--	--
MAY									
07...	55	92	100	--	--	--	--	--	--
13...	94	100	--	--	--	--	--	--	--
JUNE									
04...	38	81	100	--	--	--	--	--	--
07...	55	100	--	--	--	--	--	--	--
JULY									
09...	--	--	--	--	57	71	92	100	--
12...	--	--	--	--	86	90	93	99	100
17...	96	99	100	--	--	--	--	--	--
AUG.									
13...	98	100	--	--	--	--	--	--	--
SEPT.									
13...	99	100	--	--	--	--	--	--	--
17...	95	100	--	--	--	--	--	--	--

## 09395500 PUERCO RIVER AT GALLUP, N. MEX.

LOCATION.--Lat 35°31'48", long 108°44'21", in SW 1/4 sec. 15, T.15 N., R.18 W., McKinley County, 0.5 mi (0.8 km) upstream from crest-stage gage at Gallup which is north of the Santa Fe RR freight depot, 1,500 ft upstream from Second Street Bridge at Gallup, N. Mex.

DRAINAGE AREA.--558 mi<sup>2</sup> (1,445 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: March 1975 to current year.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)
MAR.												
12...	1155	--	4.7	10	14	2.5	88	1.8	123	--	100	14
JULY												
01...	1600	1.0	14	--	26	6.2	210	4.6	338	--	220	24
AUG.												
05...	1130	2.0	12	--	48	9.4	170	5.5	299	--	250	31
14-15	--	--	9.3	0	80	13	78	6.3	181	--	230	15
16-31	--	--	9.8	0	64	12	140	6.2	269	--	260	19
SEP.												
01-30	--	--	8.5	--	64	10	100	6.1	231	0	190	14
		DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00950)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED HARD- NESS (MG/L) (01020)
MAR.												
12...		.6	.01	.00	303	286	45	0	5.7	493	--	3.0
JULY												
01...		1.0	3.2	--	--	487	90	0	9.6	1030	--	29.5
AUG.												
05...		.9	.80	--	--	678	160	0	5.9	1030	--	21.5
14-15		.8	1.0	.02	550	526	250	110	2.1	810	--	--
16-31		.9	.63	.04	551	648	210	0	4.2	982	--	--
SEP.												
01-30		.7	4.4	--	--	527	200	12	3.1	810	7.6	--

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)
SEP. 01-30	120	9

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (00040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (00315)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (00316)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (00060)	DIS- SOLVED GROSS HA-226 (PC/L) (00511)	DIS- SOLVED GROSS FLUORO- MEL- NIO (PC/L) (00010)
SEP. 01-30	40000	500	2300	63	1100	50	850	.33	230

09395500 PUERCO RIVER AT CALLUP, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											---	939
2											---	946
3											---	941
4											---	815
5											---	861
6											---	850
7											---	863
8											---	702
9											---	895
10											---	871
11											---	882
12											---	884
13											---	637
14											732	639
15											888	636
16											970	693
17											960	687
18											967	697
19											1080	702
20											921	720
21											793	718
22											963	863
23											980	863
24											1030	861
25											1030	857
26											1060	853
27											987	859
28											1030	855
29											1030	861
30											963	861
31											955	---
MONTH											---	810
YEAR	MAX	1080	MIN	636	MEAN	868						

WATER TEMPERATURE (DEG. °C), (ONCE-DAILY MEASUREMENT), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											---	20.5
2											---	23.5
3											---	17.0
4											---	12.5
5											---	17.5
6											---	12.5
7											---	15.5
8											---	17.0
9											---	19.5
10											---	15.0
11											---	10.5
12											---	19.0
13											---	15.0
14											23.5	12.0
15											25.0	21.5
16											25.0	23.5
17											24.0	20.5
18											23.0	18.0
19											21.0	17.5
20											15.0	20.0
21											23.0	15.5
22											24.0	14.5
23											24.5	15.0
24											23.5	17.5
25											25.0	12.0
26											23.0	12.5
27											22.0	12.5
28											21.5	13.0
29											25.5	13.0
30											15.5	13.5
31											23.0	---
MONTH											---	16.0
YEAR	MAX	25.5	MIN	10.5	MEAN	18.5						



09430600 MOCOLLON CREEK NEAR CLIFF, N. MEX.  
(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", in SE¼ sec.13, T.13 S., R.18 W., Grant County, at gaging station 12 mi (19 km) upstream from mouth, and 14.2 mi (23 km) north of Cliff.

DRAINAGE AREA.--69 mi<sup>2</sup> (179 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: February 1967 to current year.  
Sediment records: October 1968 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-
		TAKEOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED		
		DIS-	SILICA	CAL-	MAG-	SODIUM	POTAS-		
		CHARGE	(SiO <sub>2</sub> )	(CA)	(MG)	(NA)	(K)	(HCO <sub>3</sub> )	(CO <sub>3</sub> )
		(CFS)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
		(000061)	(000945)	(000915)	(000925)	(000930)	(000935)	(000440)	(000445)
OCT.									
17...	1730	9.2	19	11	.6	5.9	.6	35	0
DEC.									
12...	1600	5.7	18	12	2.4	5.5	.6	36	0
FEB.									
19...	1630	22	18	9.5	2.5	5.1	.9	29	0
APR.									
23...	1717	75	18	7.9	1.9	4.7	1.2	18	0
JUNE									
17...	1919	2.0	21	11	2.2	7.6	1.0	51	0
AUG.									
21...	1414	.41	21	16	2.7	6.6	1.0	52	0
DATE		DIS-	DIS-	TOTAL	DIS-	DIS-			
		SOLVED	SOLVED	DIFFER-	SOLVED	SOLVED			
		SULFATE	CHLO-	PLUS	TEST-	SUM OF			
		(SO <sub>4</sub> )	RIDE	NITRATE	180 C	CONSTIT-			
		(MG/L)	(CL)	(N)	(P)	UENTS			
		(000945)	(MG/L)	(MG/L)	(MG/L)	(MG/L)			
						(70300)			
OCT.									
17...	16	1.5	.4	.01	.02	.80	.72	30	1
DEC.									
12...	19	2.2	.4	.00	.03	.81	.78	40	10
FEB.									
19...	21	1.9	.3	.00	.02	.74	.73	34	10
APR.									
23...	16	1.9	.2	.01	.02	.66	.61	28	13
JUNE									
17...	16	1.4	.4	.00	.02	.89	.86	37	0
AUG.									
21...	16	2.6	.4	.04	.04	.93	.90	46	3
DATE		SODIUM	SPE-		AIR	TEMPER-	DIS-	TOTAL	
		AD-	CIFIC		TEMPER-	ATURE	SOLVED	ORGANIC	
		SORP-	DUCT-	PH	ATURE	ATURE	OXYGEN	CARBON	CYANIDE
		TION	ANCE		(DEG C)	(DEG C)	(MG/L)	(C)	(CN)
		RATIO	(MICRO-	(UNITS)	(000020)	(000010)	(000300)	(000680)	(000720)
		(000931)	MHOS)	(000400)					
OCT.									
17...	.5	100	8.4	16.5	13.0	9.0	3.7	.00	
DEC.									
12...	.4	109	7.5	9.0	1.0	11.6	--	--	
FEB.									
19...	.4	99	7.5	9.5	4.0	10.8	--	--	
APR.									
23...	.4	75	7.7	19.5	10.0	9.5	--	.01	
JUNE									
17...	.5	111	7.5	26.5	17.5	7.8	--	--	
AUG.									
21...	.4	134	8.0	29.0	25.0	7.5	--	--	

## GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL BARIUM (BA) (UG/L) (01007)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL SILVER (AG) (UG/L) (01077)	TOTAL ZINC (ZN) (UG/L) (01092)
APR. 24...	0830	0	<10	0	10	40	<10	40
AUG. 28...	1500	<100	<10	0	<10	0	<10	20

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BARIUM (BA) (UG/L) (01007)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL IRON (FE) (UG/L) (01045)
OCT. 17...	1730	0	<100	<10	0	180	50
APR. 23...	1717	0	0	<10	0	<10	110

DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	TOTAL SILVER (AG) (UG/L) (01077)	TOTAL ZINC (ZN) (UG/L) (01092)
OCT. 17...	300	0	0	0	<10	40	
APR. 23...	<100	10	0	0	<10	70	

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FIL- TRABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (U-NAT.) (80030)	SUS- PENDED GROSS ALPHA AS (U-NAT.) (80040)	DIS- SOLVED GROSS BETA AS (CS-137) (PC/L) (03515)	SUS- PENDED GROSS BETA AS (CS-137) (PC/L) (03516)	DIS- SOLVED GROSS HETA AS (Y90) (PC/L) (80050)	SUS- PENDED GROSS BETA AS (Y90) (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
OCT. 17...	1730	<1	<.4	<.4	1.3	<.4	1.0	<.4	.01	.02

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
OCT. 17...	1730	13	1	24
DEC. 17...	1600	0	0	1
FEB. 19...	1630	19	0	3
APR. 23...	1717	2	1	4
JUN. 17...	1419	100	2	65
AUG. 21...	1414	13	4	150

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

## PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	ALDRIN		CHLOR-DANE		DDD		DDE		
		TOTAL ALDRIN (UG/L) (39330)	IN BOTTOM MA- TERIAL (UG/KG) (39733)	TOTAL CHLOR- DANE (UG/L) (39350)	IN BOTTOM MA- TERIAL (UG/KG) (39351)	TOTAL DDD (UG/L) (39360)	IN BOTTOM MA- TERIAL (UG/KG) (39363)	TOTAL DDE (UG/L) (39365)	IN BOTTOM MA- TERIAL (UG/KG) (39368)	TOTAL DDT (UG/L) (39370)
OCT. 17...	1730	.00	.0	.0	0	.00	.0	.00	.0	.00
DATE	TIME	DI- AZINON		DI- FLOXIN		ENDRIN		HEPTA- CHLOR		
		TOTAL DI- AZINON (UG/L) (39570)	IN BOTTOM MA- TERIAL (UG/KG) (39571)	TOTAL DI- FLOXIN (UG/L) (39380)	IN BOTTOM MA- TERIAL (UG/KG) (39383)	TOTAL ENDRIN (UG/L) (39390)	IN BOTTOM MA- TERIAL (UG/KG) (39393)	TOTAL HEPTA- CHLOR (UG/L) (39410)	IN BOTTOM MA- TERIAL (UG/KG) (39413)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
OCT. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
DATE	TIME	LINDANE		MALA- THION		METHYL PARA- THION		PARA- THION		
		TOTAL LINDANE (UG/L) (39340)	IN BOTTOM MA- TERIAL (UG/KG) (39343)	TOTAL MALA- THION (UG/L) (39530)	IN BOTTOM MA- TERIAL (UG/KG) (39531)	TOTAL METHYL PARA- THION (UG/L) (39600)	IN BOTTOM MA- TERIAL (UG/KG) (39601)	TOTAL PARA- THION (UG/L) (39540)	IN BOTTOM MA- TERIAL (UG/KG) (39541)	TOTAL PCB (UG/L) (39516)
OCT. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DATE	TIME	TOX- APHENE		2,4-D		2,4,5-T		SILVEX		
		TOTAL TOX- APHENE (UG/L) (39400)	IN BOTTOM MA- TERIAL (UG/KG) (39403)	TOTAL 2,4-D (UG/L) (39730)	IN BOTTOM MA- TERIAL (UG/KG) (39731)	TOTAL 2,4,5-T (UG/L) (39740)	IN BOTTOM MA- TERIAL (UG/KG) (39741)	TOTAL SILVEX (UG/L) (39760)	IN BOTTOM MA- TERIAL (UG/KG) (39761)	
OCT. 17...	0	0	0	.00	0	.00	0	.00	0	

## INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE		SUS- PENDE SEDI- MENT DIS- CHARGE	
		TEMPER- ATURE (DEG C) (00010)	(CFS) (00061)	(MG/L) (80154)	(T/DAY) (80155)
OCT. 10...	0915	14.0	3.0	4	.03
17...	1730	13.0	9.2	1	.02
NOV. 07...	1145	8.0	16	3	.13
DEC. 06...	1555	5.0	6.1	1	.02
12...	1600	1.0	5.7	2	.03
JAN. 24...	1410	3.0	12	2	.06
FEB. 12...	1415	5.0	25	0	.00
19...	1430	4.0	22	1	.06
28...	1025	3.0	37	0	.00
MAR. 12...	1450	5.0	64	1	.17
29...	1055	1.0	38	2	.20
APR. 16...	1230	8.0	74	0	.00
23...	1440	11.0	81	2	.44
23...	1717	10.0	75	2	.40
MAY 14...	1620	26.0	36	4	.39
JUNE 10...	1610	20.0	3.1	2	.02
17...	1919	17.5	2.0	18	.10
JULY 16...	1630	18.0	7.1	2	.04
26...	1110	19.0	5.2	5	.07
AUG. 08...	1105	21.0	.74	7	.01
21...	1414	25.0	.41	3	.00
27...	1210	19.0	.81	3	.01
SEP. 12...	1250	14.0	195	30	16
23...	1600	15.0	13	3	.10

09431100 MANGAS CREEK BELOW MANGAS SPRINGS, N. MEX.

LOCATION.--Lat 32°50'57", long 108°31'13", in SE¼SW¼ sec.5, T.17 S., R.16 W., Grant County, 0.1 mi (0.2 km) upstream from Blacksmith Canyon and 15 mi (24 km) southeast of Gila.

DRAINAGE AREA.--177 mi<sup>2</sup> (458 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: April 1970 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000601)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
NOV. 19...	1505	2.6	35	--	60	13	28	2.8	225	0	45	11
JAN. 08...	1340	2.9	33	--	71	13	27	2.7	257	0	46	12
MAR. 05...	1630	2.6	28	10	70	14	28	2.7	242	--	53	11
MAY 16...	1445	2.4	30	--	68	13	27	1.6	239	--	51	2.4
JULY 02...	1420	1.8	32	--	70	13	28	1.9	245	--	56	14
SEP. 18...	1055	3.7	31	--	63	14	29	4.3	247	12	73	14

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIF- PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70360)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV. 19...	.5	5.0	--	--	328	200	15	.9	510	8.2	16.5	--
JAN. 08...	.4	5.4	--	--	356	230	19	.8	564	8.0	13.5	--
MAR. 05...	.7	5.8	.07	348	353	230	34	.8	555	--	16.0	50
MAY 16...	.5	5.3	--	--	335	220	27	.8	537	--	18.0	--
JULY 02...	.6	4.8	--	--	358	230	27	.8	545	--	--	--
SEP. 18...	.4	4.9	--	--	404	270	42	.8	623	8.4	21.0	--

09431500 GILA RIVER NEAR REDROCK, N. MEX.  
(Surveillance and radiochemical network station)

LOCATION.--Lat 32°43'37", long 108°40'30", in W½ sec.23, T.18 S., R.18 W., Grant County, at gaging station 0.2 mi (0.3 km) downstream from Copper Canyon, 0.2 mi (0.3 km) upstream from lower end of box canyon, 4.7 mi (7.6 km) northeast of Redrock, and 14 mi (23 km) downstream from Mangas Creek, and at mile 539.2 (867.6 km).

DRAINAGE AREA.--2,829 mi<sup>2</sup> (7,327 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: July 1967 to current year.  
Sediment records: July 1974 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
17...	1100	91	38	20	--	38	6.5	33	2.2	170
NOV.										
14...	1700	146	37	30	--	32	6.8	30	1.9	149
DEC.										
12...	1100	80	34	10	0	39	8.1	34	1.9	178
JAN.										
22...	1111	70	36	10	--	39	7.8	34	2.0	178
FEB.										
19...	1100	206	32	20	--	29	6.4	25	1.6	126
MAR.										
27...	1230	490	29	20	0	26	4.3	17	1.2	88
APR.										
23...	1130	438	30	10	--	21	4.8	18	1.6	86
MAY										
15...	1620	247	--	--	--	--	--	--	--	--
28...	1414	142	32	20	--	30	6.5	21	2.4	141
JUNE										
17...	1331	72	31	10	0	27	7.3	32	2.4	153

DATE	CAN- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
OCT.									
17...	0	34	14	2.1	.14	.00	.16	.14	.07
NOV.									
14...	0	31	13	2.2	.16	.01	.17	.17	.04
DEC.									
12...	0	34	17	2.2	.07	.00	.07	.07	.04
JAN.									
22...	0	37	15	2.3	.19	.01	.25	.20	.04
FEB.									
19...	0	32	12	1.9	.12	.00	.14	.12	.01
MAR.									
27...	0	28	7.2	1.4	.08	.00	.09	.08	.01
APR.									
23...	0	26	7.0	1.3	.04	.00	.05	.04	.00
MAY									
15...	--	--	--	--	--	--	--	--	--
28...	0	32	10	2.0	.00	.00	.02	.00	.00
JUNE									
17...	0	34	11	2.1	.01	.00	.01	.01	.02

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED NITRO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (00309)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (00301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
OCT.									
17...	.43	.66	.24	.06	--	252	120	0	1.3
NOV.									
14...	.39	.60	.15	.04	228	228	110	0	1.3
DEC.									
12...	.18	.29	.05	.01	255	258	130	0	1.3
JAN.									
22...	.24	.53	.10	.05	251	262	130	0	1.3
FEB.									
19...	.10	.31	.07	.07	201	203	99	0	1.1
MAR.									
27...	.19	.20	.10	.06	172	158	83	10	.8
APR.									
23...	.17	.22	.10	.06	155	153	72	2	.9
MAY									
15...	--	--	--	--	--	--	--	--	--
28...	.32	.34	.08	.08	213	212	100	0	1.2
JUNE									
17...	.32	.35	.05	.06	248	237	120	0	1.3

## GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICROMHOS) (000995)	PH (UNITS) (00400)	AIR TEMPERATURE (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	DIS-SOLVED OXYGEN (MG/L) (00300)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)
OCT. 17...	344	8.1	20.0	13.0	30	9.4	7	3.4	50
NOV. 14...	343	8.2	15.5	12.5	2	9.3	10	3.0	60
DEC. 12...	396	8.3	7.5	3.5	6	11.9	8	3.1	50
JAN. 22...	394	8.3	9.5	5.0	10	11.4	13	1.9	50
FEB. 19...	303	8.2	10.5	5.0	10	11.0	10	4.1	20
MAR. 27...	228	7.7	5.0	5.5	23	10.8	6	4.0	30
APR. 23...	207	7.9	23.0	12.0	24	9.5	7	15	40
MAY 15...	253	--	--	21.5	--	--	--	--	--
JUNE 20...	303	8.3	22.5	19.0	10	8.5	6	2.5	5
JUNE 17...	369	8.3	35.0	23.0	3	8.0	6	2.3	40

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CADMIUM (CD) (UG/L) (01027)	TOTAL CHROMIUM (CR) (UG/L) (01034)	TOTAL COBALT (CO) (UG/L) (01037)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL MANGANESE (MN) (UG/L) (01055)	TOTAL ZINC (ZN) (UG/L) (01092)
SEP. 19...	1015	<10	0	<50	30	490	900

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL	DIS-	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-
		ARSENIC	SOLVED	SOLVED	CAD-	SOLVED	CHRO-	SOLVED	COBALT	SOLVED	COPPER	SOLVED
		(AS)	(AS)	(B)	MIUM	MIUM	MIUM	MIUM	(CO)	(CO)	(CU)	(CU)
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
		(01002)	(01000)	(01020)	(01027)	(01025)	(01034)	(01030)	(01037)	(01035)	(01042)	(01040)
DEC. 12...	1100	2	2	50	<10	1	<10	<10	<50	3	<10	4
MAR. 27...	1230	2	2	30	10	1	0	0	<50	0	<10	0
JUNE 17...	1331	0	0	40	<10	0	0	0	<50	0	10	2

DATE	TIME	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	TOTAL	DIS-	
		IRON	SOLVED	LEAD	SOLVED	MAN-	SOLVED	MERCURY	SOLVED	SELE-	SOLVED	
		(FE)	(FE)	(PB)	(PB)	GANESE	GANESE	(HG)	(HG)	NIUM	NIUM	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		(01045)	(01046)	(01051)	(01049)	(01055)	(01056)	(71900)	(71890)	(01147)	(01145)	
DEC. 12...	380	10	<100	0	20	0	<.1	<.1	0	0	50	20
MAR. 27...	2109	20	<100	0	70	0	.1	.1	1	0	30	30
JUNE 17...	290	10	<100	0	20	0	.0	.0	0	0	10	10

09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NON- FILT- RAHLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (00040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
DEC. 12...	1100	19	10	.9	4.0	1.5	3.3	1.3	.03	1.2
APR. 23...	1130	76	<1.3	11	2.0	5.2	1.7	4.2	.03	.4

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FFCAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCT (COL. ONIFS PER 100 ML) (31679)
OCT. 17...	1100	150	530
NOV. 14...	1700	10	30
DEC. 12...	1100	7	100
JAN. 22...	1111	9	59
FEB. 19...	1100	1	41
MAR. 27...	1230	7	120
APR. 23...	1130	30	140
MAY 28...	1414	2	50
JUNE 17...	1331	21	120

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (00154)	SUS- PENDED SEDI- MENT CHARGE (T/DAY) (00155)	SUS. SED. SIEVE DIAM. % FINER #62 MM (70331)
OCT. 17...	1100	13.0	91	106	26	86
NOV. 14...	1700	12.5	146	114	45	58
DEC. 12...	1100	3.5	80	31	6.7	67
JAN. 22...	1111	5.0	70	33	6.2	74
FEB. 19...	1100	5.0	206	235	131	16
MAR. 27...	1230	5.5	490	209	276	33
APR. 23...	1130	12.0	438	205	242	35
MAY 28...	1414	19.0	142	29	11	60
JUNE 17...	1331	23.0	72	14	2.7	79

## GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.  
(Surveillance network station)

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼ sec.23, T.12 S., R.20 W., Catron County, at gaging station 0.2 mi (0.3 km) upstream from hot springs, 5 mi (8 km) south of Glenwood, 6 mi (10 km) downstream from Whitewater Creek, and at mile 511.5 (823.0 km).

DRAINAGE AREA.--1,653 mi<sup>2</sup> (4,281 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: April 1963 to current year.  
Sediment records: April 1963 to July 1967, July 1970 to current year.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANFOUS DIS- CHANGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00245)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESEF (MNI) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESI- UM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L) (00440)
OCT.										
14...	1109	36	17	20	--	36	7.9	30	2.4	194
NOV.										
15...	1200	35	36	10	--	34	8.7	27	1.5	177
DEC.										
13...	1000	29	15	10	0	30	9.9	28	2.4	177
JAN.										
23...	1010	24	10	0	--	39	9.5	35	2.9	201
FEB.										
20...	1100	46	34	30	--	39	10	29	2.3	205
MAR.										
28...	1130	202	28	30	0	30	7.1	16	1.6	130
APR.										
24...	1030	228	30	10	--	24	6.4	15	1.9	112
MAY										
28...	1845	61	30	30	--	24	6.4	18	2.3	118
JUNE										
18...	1111	28	35	10	0	33	8.6	27	2.6	154

DATE	CAN- RONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
OCT.									
18...	0	12	18	.4	.08	.00	.13	.08	.05
NOV.									
15...	0	14	17	.3	.14	.05	.20	.19	.04
DEC.									
13...	4	13	23	.4	.14	.00	.15	.14	.04
JAN.									
23...	0	14	30	.4	.33	.02	.38	.35	.01
FEB.									
20...	0	13	17	.4	.16	.00	.16	.16	.03
MAR.									
28...	0	20	6.1	.4	.10	.00	.10	.10	.01
APR.									
24...	0	20	6.5	.3	.05	.00	.07	.05	.00
MAY									
28...	0	16	12	.3	.08	.00	.08	.08	.01
JUNE									
18...	0	15	21	.4	.10	.00	.11	.10	.01



09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ORGANIC NITRO- GEN (N) (00605)	TOTAL NITRO- GEN (N) (00600)	TOTAL PHOS- PHORUS (P) (00665)	DJS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (00300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (00301)	HARD- NESS (CA,MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
OCT.									
18...	.12	.30	.07	.04	234	240	120	0	1.2
NOV.									
15...	.29	.53	.13	.05	226	227	120	0	1.1
DEC.									
13...	.11	.30	.07	.02	229	242	140	0	1.0
JAN.									
23...	.20	.59	.09	.06	259	262	140	0	1.3
FEB.									
20...	.16	.35	.09	.09	240	246	140	0	1.1
MAR.									
28...	.20	.31	.24	.06	187	174	100	0	.7
APR.									
24...	.23	.30	.23	.09	162	160	86	0	.7
MAY									
28...	.29	.38	.07	.07	168	168	86	0	.8
JUNE									
18...	.59	.71	.07	.05	226	219	120	0	1.1

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (00340)	TOTAL ORGANIC CARBON (C) (00680)	DIS- SOLVED BORON (H) (01020)
OCT.									
18...	376	8.2	23.0	17.0	10	9.4	3	2.0	60
NOV.									
15...	351	8.1	20.5	13.5	10	9.3	8	2.0	40
DEC.									
13...	380	8.5	12.0	8.5	5	11.9	4	2.9	30
JAN.									
23...	416	8.3	3.5	4.0	3	10.7	24	6.2	40
FEB.									
20...	384	8.6	13.0	10.0	20	10.5	4	7.0	20
MAR.									
28...	260	7.8	9.5	7.0	45	10.2	10	4.5	20
APR.									
24...	248	7.7	18.5	9.0	34	10.2	11	15	20
MAY									
28...	265	8.0	14.0	15.5	5	8.5	6	2.3	40
JUNE									
18...	350	7.9	27.5	21.0	4	8.5	11	2.0	20

1974 DATA NOT PREVIOUSLY PUBLISHED

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL CAD- MIUM (CD) (01027)	TOTAL CHRO- MIUM (CR) (01034)	TOTAL COBALT (CO) (01037)	TOTAL COPPER (CU) (01042)	TOTAL MAN- GANESE (MN) (01055)	TOTAL ZINC (ZN) (01092)
SEP.							
20...	0930	<10	0	<50	10	180	900

## GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.--Continued

## TRACE ELEMENT ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL IRON (FE) (01045)	DIS- SOLVED IRON (FE) (01046)	TOTAL LEAD (PB) (01051)	DIS- SOLVED LEAD (PB) (01049)	TOTAL MANGANESE (MN) (01055)	DIS- SOLVED MANGANESE (MN) (01056)	TOTAL MERCURY (HG) (01090)	DIS- SOLVED MERCURY (HG) (01090)	TOTAL SELENIUM (SE) (01147)	DIS- SOLVED SELENIUM (SE) (01145)	TOTAL ZINC (ZN) (01092)	DIS- SOLVED ZINC (ZN) (01090)
DEC. 13...	260	10	<100	1	30	0	<.1	<.1	0	0	50	20
MAR. 28...	6400	30	<100	0	220	0	.1	.1	0	0	20	20
JUNE 18...	510	10	<100	0	--	0	.1	.0	0	0	40	0

## BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	SITREP- FOCOCCI (COL- ONIES PER 100 ML) (31679)
OCT. 18...	1100	12	120
NOV. 15...	1200	13	79
DEC. 13...	1000	1	21
JAN. 23...	1010	1	30
FEB. 20...	1100	4	52
MAR. 23...	1130	10	160
APR. 24...	1030	100	550
MAY 28...	1045	200	700
JUNE 18...	1111	40	420

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DFG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (00154)	SUS- PENDE SEDIM- ENT (T/DAY) (00155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT. 18...	1100	17.0	34	35	3.4	90
NOV. 15...	1200	13.5	35	30	2.8	93
DEC. 13...	1000	8.5	29	11	.86	86
JAN. 23...	1010	8.0	24	11	.71	87
FEB. 20...	1100	10.0	46	38	4.7	98
MAR. 23...	1130	7.0	202	451	246	31
APR. 24...	1030	9.0	228	370	228	27
MAY 28...	1045	15.5	61	285	47	5
JUNE 18...	1111	21.0	28	15	1.1	59

EXPLANATION: Partial-record stations or miscellaneous sites in this table are listed in downstream order by parts if an eight-digit number has been assigned. They are followed by miscellaneous sites in ascending latitude-longitude identification numbers.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07202500 EAGLE TAIL DITCH NEAR MAXWELL, N. MEX.  
(LAT 36°38'55", LONG 104°33'31".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
SEP. 16...	1425	.02	51	22	39	80	0	230

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) {00940}	HARD- NESS (CA+MG) (MG/L) {00900}	NON- CAR- BONATE HARD- NESS (MG/L) {00902}	SODIUM AD- SORP- TION RATIO {00931}	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) {00095}	PH (UNITS) {00400}	TEMPER- ATURE (DEG C) {00010}
SEP. 16...	5.7	220	150	1.2	632	8.0	26.5

07218000 COYOTE CREEK NEAR GOLONDRINAS, N. MEX.  
(LAT 35°55'00", LONG 105°09'49".10)

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)
JULY 22...	1000	20	50	57	17	27	2.9

DATE	TIME	SODIUM AD- SORP- TION RATIO (MG/L) (00900)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JULY 22...	210	.8	480	7.5	19.0	70

DATE	TIME	TOTAL ALUM- INUM (AL) (UG/L) (01105)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	TOTAL BARIUM (BA) (UG/L) (01007)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	TOTAL BERYL- LIUM (BE) (UG/L) (01012)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)
JULY 22...	1000	2900	30	3	1	<100	<100	<10	<10	--	180	70
22...	1003	--	10000	--	--	--	200	--	0	<3	--	70
22...	1004	--	60	--	--	--	120	--	0	<3	--	50

DATE	TIME	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)
JULY 22...	<10	0	10	0	<50	0	10	3	--	--	--	3100	20
22...	--	<5	--	7	--	3	--	5	2	<4	--	6000	--
22...	--	<5	--	<3	--	<3	--	2	0	<3	--	30	--

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07218000 COYOTE CREEK NEAR GOLONDRINAS, N. MEX.--Continued

DATE	TOTAL LEAD (Pb) (UG/L) (01051)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	TOTAL LITHIUM (Li) (UG/L) (01132)	DIS- SOLVED LITHIUM (Li) (UG/L) (01130)	TOTAL MANGANESE (Mn) (UG/L) (01055)	DIS- SOLVED MANGANESE (Mn) (UG/L) (01056)	TOTAL MERCURY (Hg) (UG/L) (71900)	DIS- SOLVED MERCURY (Hg) (UG/L) (71890)	TOTAL MOLYB- DENUM (Mo) (UG/L) (01062)	DIS- SOLVED MOLYB- DENUM (Mo) (UG/L) (01060)	TOTAL NICKEL (Ni) (UG/L) (01067)	DIS- SOLVED NICKEL (Ni) (UG/L) (01065)
JULY												
22...	100	1	0	0	210	50	.0	.0	1	0	50	4
22...	--	4	--	16	--	250	--	--	--	4	--	10
22...	--	<3	--	10	--	50	--	--	--	4	--	<3

DATE	TOTAL SILF- NIUM (Sf) (UG/L) (01147)	DIS- SOLVED SILF- NIUM (Sf) (UG/L) (01145)	TOTAL SILVER (Ag) (UG/L) (01077)	DIS- SOLVED SILVER (Ag) (UG/L) (01075)	TOTAL SILVER (Sf) (UG/L) (01082)	DIS- SOLVED SILVER (Sf) (UG/L) (01080)	TOTAL TIN (Sn) (UG/L) (01100)	DIS- SOLVED TIN (Sn) (UG/L) (01150)	TOTAL VANAD- IUM (V) (UG/L) (01065)	DIS- SOLVED VANAD- IUM (V) (UG/L) (01092)	TOTAL ZINC (Zn) (UG/L) (01090)	DIS- SOLVED ZINC (Zn) (UG/L) (01160)
JULY												
22...	0	0	<10	0	390	420	--	--	--	40	10	--
22...	--	--	--	0	--	390	<3	630	10	--	20	15
22...	--	--	--	0	--	390	<3	5	<3.0	--	10	<4

DATE	TIME	DIS- SOLVED RA-226 (RADON METHOD) (PCL/L) (00511)	DIS- SOLVED URANIUM (U) (UG/L) (A0020)
JULY			
22...	1000	.29	1.9
22...	1002	.06	2.1
22...	1003	.22	2.2
22...	1004	.06	2.1

 07223500 CONCHAS LAKE AT CONCHAS DAM, N. MEX.  
 (LAT 35°24'10", LONG 104°11'25".10)

		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
DATE	TIME			
JUNE 24...	1235	827	8.5	22.0
		TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)		
DATE	TIME			
JUNE 24...	1235	360		

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

497

08267000 RED RIVER AT MOUTH, NEAR QUESTA, N. MEX.  
(LAT 36°38'53", LONG 105°41'34".00)

DATE	TIME	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
JULY			
22...	1600	.02	.28
22...	1602	.02	.44
22...	1603	.07	.59
22...	1604	.03	.46

08284160 AZOTEA TUNNEL AT OUTLET, NEAR CHAMA, N. MEX.  
(LAT 36°51'12", LONG 106°40'18".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)
OCT.					
02...	1215	1.0	526	12.0	1
MAY					
28...	1045	969	158	--	--
29...	0835	782	122	--	--
31...	0815	588	113	--	--
JUNF					
05...	0830	960	78	--	--

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)	SUS. SED. SIEVE DIAM. % FINER THAN (70333)
OCT.								
02...	1215	12.0	1.0	6	.02	26	65	100
MAY								
28...	1045	--	969	229	549	--	--	--
29...	0835	--	782	183	386	--	--	--
31...	0815	--	588	88	140	--	--	--
JUNF								
05...	0830	--	960	587	1520	--	--	--

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

08289000 RIO OJO CALIENTE AT LA MADERA, N. MEX.  
(LAT 36°20'59", LONG 106°02'37".10)

		DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)						
JULY 22...		0930	10	50	68	22	64	6.9					
DATE		TIME	HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)					
JULY 22...		260	1.7	715	7.6	18.0	210						
DATE	TIME	TOTAL ALUM- INIUM (AL) (UG/L) (01105)	DIS- SOLVED ALUM- INIUM (AL) (UG/L) (01106)	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	TOTAL BARIUM (BA) (UG/L) (01007)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	TOTAL BERYL- LIUM (BE) (UG/L) (01012)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	
JULY 22...	0930	270	10	7	5	<100	<100	<10	<10	--	230	210	
23...	0933	--	1000	--	--	--	120	--	0	<5	--	160	
23...	0934	--	30	--	--	--	110	--	0	<5	--	150	
DATE	TIME	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)
JULY 22...	10	0	10	10	<50	0	30	1	--	--	--	500	10
23...	--	0	--	<4	--	<2	--	2	<2	<4	--	--	640
23...	--	0	--	<4	--	<2	--	2	<2	<4	--	--	40
DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL LITHIUM (LI) (UG/L) (01132)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71900)	TOTAL MOLYB- DENUM (MO) (UG/L) (01062)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	TOTAL NICKEL (NI) (UG/L) (01067)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)
JULY 22...	100	0	100	150	60	50	50	0	0	0	0	<50	3
23...	--	<4	--	150	--	64	--	--	--	--	7	--	4
23...	--	<4	--	150	--	45	--	--	--	--	6	--	<2
DATE	TIME	TOTAL SILV- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SILV- NIUM (SE) (UG/L) (01145)	TOTAL SILVER (AG) (UG/L) (01077)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL STRON- TIUM (SR) (UG/L) (01082)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TAN- IUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
JULY 22...	0	0	<10	0	550	630	--	--	--	--	120	10	--
23...	--	--	--	0	--	600	<5	37	4.0	--	10	<7	--
23...	--	--	--	0	--	650	<5	3	3.0	--	40	<7	--
DATE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (U-NAT. (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS (U-NAT. (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (CS-137 (UG/L) (03515)	SUS- PENDED GROSS BETA AS (CS-137 (UG/L) (03516)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS (AS SR90 (PC/L) (00060)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00060)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00060)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00060)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00060)	DIS- SOLVED GROSS BETA AS (AS SR90 (PC/L) (00060)
JULY 23...	0930	14	41	1.0	14	4.8	11	4.2	1.3	14	14	14	14
23...	0932	<1	38	<1	12	1.2	9.4	1.1	1.5	14	14	14	14
23...	0933	--	--	--	--	--	--	--	--	15	15	15	15
23...	0934	--	--	--	--	--	--	--	--	12	15	15	15

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[illegible]

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

 08302500 TESUQUE CREEK ABOVE DIVERSIONS, NEAR SANTA FE, N. MEX.  
 (LAT 35°44'20", LONG 105°54'20".10)

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
DATE	TIME											
FER. 04...	1415	1.0	13	30	14	2.9	5.1	1.1	50	8.4	7.6	.1
		DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MICRO- MHOS) (00931)	SPE- CIFIC CON- DUCT- ANCE (MG/L) (0095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
DATE	TIME											
FER. 04...	.04	77	47	6	.3	140	8.0	6.0	.5	11.2	1.6	0
						FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIFS PER 100 ML) (31679)					
				DATE		TIME						
						FER. 04...	1415	1	5			

 08317200 SANTA FE RIVER ABOVE COCHITI LAKE, N. MEX.  
 (LAT 35°32'49", LONG 106°13'41".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	
FER. 04...	0915	9.4	28	60	160	60	9.4	68	8.2	
DATE	TIME	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)
FER. 04...	343	39	27	.6	2.7	4.5	392	436	190	
DATE	TIME	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MICRO- MHOS) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (0095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
FER. 04...	0	2.2	700	8.2	4.5	1.5	11.4	29	190	



QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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08317200 SANTA FE RIVER ABOVE COCHITI LAKE, N. MEX.--Continued

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED RADIUM (RA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)
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FEB. 04...	0915	10	100	190	0	0	15	60
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DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED NIUM (SF) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
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FEB. 04...	<100	1	160	.2	0	0	30
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DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCT (COL- ONIES PER 100 ML) (31679)
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FEB. 04...	0915	600000	122000
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08317850 GALISTEO CREEK ABOVE GALISTEO RESERVOIR, N. MEX.  
(LAT 35°26'58", LONG 106°09'08".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED TAS- SODIUM (NA) (K) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
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FEB. 04...	1130	2.0	15	10	170	49	150	2.9	223	730	24	.8
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DATE	TIME	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	TOTAL ORGANIC CARBON (C) (MG/L) (00640)	DIS- SOLVED BORON (B) (UG/L) (01020)
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FEB. 04...	.34	1250	630	440	2.6	1710.	8.2	4.5	6.5	10.6	6.3	160
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DATE	TIME	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCT (COL- ONIES PER 100 ML) (31679)
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FEB. 04...	1130	23	20
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QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

08321500 JEMEZ RIVER BELOW EAST FORK, NEAR JEMEZ SPRINGS, N. MEX.  
(LAT 35°49'39", LONG 106°38'51".10)

DATE	TIME	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
NOV. 14...	1315	50	60	0	15	3.0	17	2.8	71	13	6.4	.9
DATE	TIME	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (UNITS) (00400)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV. 14...	.1	.01	.03	133	144	50	0	1.0	176	7.7	4.5	40
DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED MANG- NESE (MG) (01056)	DIS- SOLVED MANG- NESE (MG) (01056)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)		
NOV. 14...	1315	0	<100	40	1	0	1	60				
DATE	TIME	TOTAL LEAD (Pb) (UG/L) (01051)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (MG) (01900)	DIS- SOLVED SELF- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)			
NOV. 14...		<100	4	80	0	<.1	0	<1	<10			
DATE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00030)	SUS- PENDEO GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDEO GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA /Y90 (PC/L) (00050)	SUS- PENDEO GROSS BETA /Y90 (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (00020)		
JUNE 07...	1400	--	--	--	--	--	--	--	.03	.20		
07...	1430	10	<1.3	<.4	4.7	.4	3.8	<.4	.03	.21		
07...	1500	9	2.2	<.4	4.5	<.4	4.0	<.4	.04	.25		

08323000 RIO GUADALUPE AT BOX CANYON, NEAR JEMEZ, N. MEX.  
(LAT 35°43'52", LONG 106°45'44".00)

DATE	TIME	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
NOV. 14...	0955	23	110	0	40	3.4	10	2.0	152	7.1	2.5	.4
DATE	TIME	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (UNITS) (00400)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV. 14...	.0	.01	.01	151	164	110	0	.4	254	7.9	3.0	30

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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08323000 RIO GUADALUPE AT BOX CANYON, NEAR JEMEZ, N. MEX.--Continued

		DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)		
NOV. 14...	0955	8	<100	30	0	0	0	110		
DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	
NOV. 14...	<100	3	<10	0	<.1	0	<1	<10		
DATE	TIME	TOTAL NON- FIL- TABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS /Y90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS /Y90 (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (00911)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
NOV. 14...	0955	4	8.4	.6	3.7	.6	3.0	.5	1.1	1.7

08324000 JEMEZ RIVER NEAR JEMEZ, N. MEX.  
(LAT 35°39'42", LONG 106°44'34".00)

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FF) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NES- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
NOV. 14...	0910	38	190	0	48	5.1	60	9.8	203	15	71	.9
DATE	TIME	DIS- SOLVED NITRATE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV. 14...	.3	.05	.03	341	350	140	0	2.2	584	7.4	4.0	570
DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)				
NOV. 14...	0910	50	100	570	0	0	1	190				
DATE	TIME	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)			
NOV. 14...		<100	2	700	0	<.1	0	<1	<10			

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## 08324000 JEMEZ RIVER NEAR JEMEZ, N. MEX.--Continued

DATE	TIME	TOTAL NON- FILF- RAHLF RESIDUE (MG/L) (009530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS HETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS HETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS HETA AS AS SR90 (PC/L) (80050)	SUS- PENDED GROSS HETA AS AS SR90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (UG/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (22703)	DIS- SOLVED URANIUM (U) (80020)
NOV. 14...	0910	9	19	3.9	15	2.3	12	2.1	1.8	.9	--
JULY 23...	1630	--	--	--	--	--	--	--	1.0	--	1.1
23...	1632	--	--	--	--	--	--	--	.80	--	1.2
23...	1633	--	--	--	--	--	--	--	.98	--	1.2
23...	1634	--	--	--	--	--	--	--	.85	--	1.2

 08332000 RIO GRANDE NEAR BERNARDO, N. MEX.  
 (LAT 34°25'00", LONG 106°48'00".10)

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
		TANFOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED
		DIS-	SILICA	CAL-	NE-	TAS-	PO-	HICAR-	SOLVED
		CHARGE	(SI02)	CIUM	SIUM	SODIUM	SIUM	MONATE	SULFATE
		(CFS)	(MG/L)	(CA)	(MG)	(NA)	(K)	(HCO3)	(SO4)
		(00061)	(00955)	(00915)	(00925)	(00930)	(00935)	(00440)	(00945)
FEB.									
26...	0900	629	24	64	9.6	52	5.9	202	110

 08352500 RIO PUERCO AT RIO PUERCO, N. MEX.  
 (LAT 34°47'38", LONG 106°59'20".10)

DATE	TIME	DIS- SOLVED RA-226 (RADON METHOD) (UG/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
JUNE 03...	0800	.08	5.7	--
03...	0830	.09	--	4.7
03...	0900	.37	--	.95
03...	0930	.11	7.9	--

 08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX.  
 (LAT 33°34'10", LONG 104°22'20".10)

DATE	TIME	TOTAL 2.4-M (UG/L) (39730)	TOTAL 2.4.5-T (UG/L) (39740)	TOTAL SILVEX (UG/L) (39760)
MAY 14...	0700	.00	.00	.00
21...	0830	.00	.00	.00
28...	1000	.00	.00	.18
JUNE 04...	0730	.00	.00	.86
18...	1100	.00	.00	.00

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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08386070 PECOS RIVER AT TATUM BRIDGE, NEAR ROSWELL, N. MEX.  
(LAT 33°23'50", LONG 104°23'40".10)

DATE	TIME	TOTAL 2+4-D (UG/L) (39730)	TOTAL 2+4+5-T (UG/L) (39740)	TOTAL SILVEX (UG/L) (39760)
MAY				
14...	0700	.00	.00	.00
21...	0430	.00	.00	.01
28...	0800	.00	.00	.03
JUNE				
04...	0930	.00	.00	.03
18...	0900	.00	.00	.00

08401200 SOUTH SEVEN RIVERS NEAR LAKEWOOD, N. MEX.  
(LAT 32°35'19", LONG 104°25'17".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
OCT.				
23...	1215	78	2770	14.0

08401900 ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, N. MEX.  
(LAT 32°30'23", LONG 104°22'28".00)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00955)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED PO- SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.									
23...	1230	1380	.3	19	7.7	2.3	1.9	59	43
31...	1120	14	11	140	51	13	2.8	203	340
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED RHOM (R) (MG/L) (01020)
OCT.									
23...		.1	.05	104	79	31	.1	172	20
31...		.5	5.9	702	560	390	.2	1050	140

08405450 BLUE SPRINGS ABOVE DIVERSIONS, N. MEX.  
(LAT 32°11'05", LONG 104°17'05".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
OCT.					
11...	1420	11	14	1400	20.0
18...	1510	12	16	1330	21.5
NOV.					
04...	1600	13	22	1450	18.5
14...	1325	--	16	1420	--
25...	1315	14	12	1280	17.5
DEC.					
12...	0900	14	16	1440	--
27...	1220	14	16	1350	17.0
JAN.					
18...	1300	13	20	1390	19.0
FEB.					
03...	1330	15	12	1360	18.0
25...	1330	--	18	1450	13.0
JUNE					
17...	1430	12	14	1450	23.0
JULY					
30...	1200	12	14	1460	22.5
SEP.					
23...	1245	11	16	1620	18.0

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, COLO.  
(LAT 37°12'11", LONG 106°48'45".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT (MG/L) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)	SUS. SED. SIEVE DIAM. % FINER THAN (70333)
OCT.								
02...	0915	6.0	13	3	.11	58	73	100
MAY								
11...	1300	--	119	147	47	--	--	--
11...	1320	--	148	1060	424	--	--	--
11...	1400	--	43	256	30	--	--	--
15...	1015	--	337	390	355	--	--	--
15...	1040	--	710	1610	3090	--	--	--
15...	1120	--	98	473	125	--	--	--
20...	1120	--	72	197	38	--	--	--
20...	1135	--	307	1910	1580	--	--	--
20...	1225	--	100	4930	1330	--	--	--
28...	1850	--	81	118	26	--	--	--
28...	1908	--	365	137	135	--	--	--
28...	1935	--	57	3830	589	--	--	--
JUNE								
02...	1850	--	230	1110	689	--	--	--
02...	1908	--	800	3260	7040	--	--	--
02...	1935	--	198	1240	663	--	--	--
05...	1850	--	337	1500	1360	--	--	--
05...	1908	--	1010	5540	15100	--	--	--
05...	1935	--	322	1670	1450	--	--	--
JULY								
10...	1045	--	130	56	20	--	--	--
10...	1115	--	560	413	624	--	--	--
10...	1215	--	28	156	12	--	--	--

09344450 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, COLO.  
(LAT 37°31'48", LONG 106°44'16".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT (MG/L) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)
OCT.							
02...	1100	7.0	31	7	.59	58	100
MAY							
11...	1030	--	112	1680	508	--	--
11...	1045	--	338	1240	1130	--	--
11...	1140	--	90	218	53	--	--
18...	1315	--	96	170	44	--	--
18...	1330	--	280	630	476	--	--
18...	1430	--	192	175	91	--	--

09345250 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, COLO.  
(LAT 37°04'26", LONG 106°49'04".00)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT (MG/L) (80155)
MAY					
12...	1100	4.4	1000	12	
12...	1125	40	754	81	
12...	1145	3.6	447	4.3	

09346000 NAVAJO RIVER AT EDITH, COLO.  
(LAT 37°00'10", LONG 106°54'25".00)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)
OCT.					
02...	1030	30	324	6.0	4

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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09357000 SAN JUAN RIVER AT BLOOMFIELD, N. MEX.  
(LAT 36°42'00", LONG 107°59'10".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FF) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAR. 10...	1600	2.3	20	38	6.3	100	2.8	111	0	240	5.6

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH0- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 10...	.5	.03	.00	450	120	30	4.0	670	8.5	7.0	60	

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAR. 10...	1600	160	190	60	20	300	310	1.0	1

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00154)
MAR. 10...	1600	7.0	45000	68	

09367700 ALAMO WASH NEAR TANNER LAKE, N. MEX.  
(LAT 36°14'07", LONG 108°10'52".00)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00154)
OCT. 31...	--	--	E500	67300	E91000	96	
SEP. 08...	--	--	E500	144000	190000	67	
08...	1410	20.0	E5.0	50700	E680	100	
12...	1330	--	E3.0	21100	E170	100	

E--ESTIMATE

09367710 DE-NA-ZIN WASH NEAR BISTI TRADING POST, N. MEX.  
(LAT 36°13'51", LONG 108°11'57".00)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
MAR. 13...	1215	310	5.5
AUG. 13...	1220	220	29.5
SEP. 03...	1650	322	19.0
09...	1030	527	--
09...	1300	682	22.5
11...	1300	588	--
12...	1100	571	20.0
12...	1130	536	--

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
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09367710 DE-NA-ZIN WASH NEAR BISTI TRADING POST, N. MEX.--Continued

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDFO SEDI- MENT (MG/L) (80154)	SUS- PENDFO SEDI- MENT (MG/L) (80155)	SUS- PENDFO SEDI- MENT (MG/L) (80155)	SUS- PENDFO SEDI- MENT (MG/L) (80155)
MAR.							
13...	1215	5.5	E.30	28900	E23		100
JULY							
10...	0945	26.5	F7.0	20500	E390		99
10...	1145	--	F5.0	12600	E170		68
11...	0945	26.5	F10	23700	E640		95
AUG.							
13...	1220	29.5	E.50	11100	E15		99
SEP.							
03...	1650	19.0	F10	29300	E790		99
09...	1030	--	F5.0	26600	E360		99
09...	1300	22.5	E1.0	55700	E150		100
11...	1300	--	F5.0	14900	E200		100
12...	1100	20.0	F3.0	12600	F100		99
12...	1130	--	E1.0	5630	F15		75

E--ESTIMATE

 PECOS RIVER AT FIRST FORD, N. MEX.  
 (LAT 32°10'42", LONG 103°59'50".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
NOV.				
18...	1140	--	1680	13.0
DEC.				
27...	1000	--	1740	6.5
31...	1230	--	1660	9.5
JAN.				
07...	1235	127	1680	7.5
14...	1030	--	1950	6.0
21...	1520	--	1800	5.5
29...	1030	--	1800	12.5
FEB.				
05...	1015	--	1840	15.5
11...	1050	--	1940	11.5
25...	1010	--	2140	--
MAR.				
04...	1525	--	2490	16.0
18...	1010	--	3000	11.0
25...	1000	--	3280	13.5
APR.				
01...	1010	--	3850	14.0
08...	1200	--	5500	15.5
15...	1205	--	3150	--
22...	1155	--	3850	21.0
29...	1535	--	4020	22.0
MAY				
06...	1510	--	4650	21.0
11...	1230	--	1820	7.5
13...	1125	--	3750	--
JUNE				
03...	1200	--	4820	25.0
10...	1245	--	5800	16.0
17...	1125	--	4550	26.5
23...	1430	--	5500	30.0
30...	1100	--	5420	26.0
JULY				
07...	1305	--	4350	30.0
AUG.				
04...	1120	--	4500	27.0
12...	1110	--	5150	26.5
21...	1450	--	4800	27.5
28...	1130	--	3150	26.0
SEP.				
06...	1340	--	3800	25.0
15...	1510	59	3120	24.0
23...	1030	--	3600	17.5
30...	1030	--	4820	20.0



QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
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ANDERSON (NE DEPRESSION) LAKE NEAR MALAGA, N. MEX.  
(LAT 32°11'55", LONG 104°00'35".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	THROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
DEC. 16...	1010	--	--	141000	--	213000	18.5	--	--
FEB. 11...	1015	--	--	152000	--	219000	12.0	--	--
APR. 18...	1015	120000	5000	180000	40	227000	--	--	25000
MAY 06...	1245	--	--	186000	--	221000	25.0	1.176	--
JULY 07...	1145	--	--	175000	--	213000	30.5	1.158	--

PECOS RIVER AT FISHING ROCK CROSSING, N. MEX.  
(LAT 32°13'05", LONG 104°00'08".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
OCT.					
04...	1130	--	1000	4500	20.0
11...	1300	--	910	4320	20.5
18...	1230	--	965	4550	19.0
NOV.					
18...	1330	157	825	4410	16.0
25...	1045	--	905	4730	13.0
DEC.					
02...	1010	--	895	4860	10.0
20...	1135	--	885	4810	7.0
31...	1400	142	850	4910	9.5
JAN.					
07...	1030	118	850	4860	7.5
14...	1220	--	935	5490	7.5
21...	1540	--	920	6290	6.0
FEB.					
11...	1215	--	930	5020	10.5
18...	1230	--	995	5260	12.0
25...	1145	--	1060	5550	4.0
MAR.					
04...	1610	--	1160	5050	15.5
05...	1230	120	900	5000	5.5
18...	1120	--	1060	5480	12.5
25...	1010	--	1270	6060	14.5
APR.					
01...	1135	--	1740	7570	14.0
08...	1300	--	1380	6600	15.0
15...	1400	--	1400	6600	--
22...	1140	--	1550	7010	19.5
29...	1450	--	1610	7300	20.0
MAY					
06...	1430	--	1680	7570	20.5
11...	1330	--	1000	5200	8.5
JUNE					
03...	1235	--	1670	7460	25.0
10...	1215	--	1720	7760	--
13...	1220	--	1340	6170	21.5
17...	1245	--	1840	7650	26.0
20...	1335	--	1380	6560	23.0
23...	1515	--	1810	7880	28.0
30...	1145	--	1670	7560	26.5

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
JULY				
07...	1410	1860	8150	28.0
14...	1220	1760	7770	26.0
21...	1115	1520	6990	25.0
28...	1145	1340	6390	27.5
AUG.				
04...	1225	1560	7060	27.5
12...	1120	1740	7750	25.0
21...	1230	1910	8350	27.0
SEP.				
06...	1420	1770	7830	24.0
15...	1625	1420	6730	21.0
23...	0930	1640	7460	18.5
30...	1130	1670	7600	20.0

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

HARROUN CANAL AT FISHING ROCK CROSSING, N. MEX.  
(LAT 32°13'20", LONG 104°00'50".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
MAR. 04...	1615	765	4510	16.0

LAGUNA GRANDE, EDDY COUNTY, N. MEX.  
(LAT 32°19'00", LONG 103°59'30".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 17...	1100	120000	11000	193000	80	234000	8700

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°20'15", LONG 103°55'10".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 16...	1540	57000	12000	104000	50	187000	1.120	870

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°21'00", LONG 103°57'40".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 18...	1300	82000	16000	149000	60	217000	1.164	4900

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°21'50", LONG 103°57'00".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 17...	1800	82000	17000	150000	100	220000	1.170	5900

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°22'00", LONG 103°55'10".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 16...	1635	94000	20000	172000	60	226000	1.186	11000

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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INDUSTRIAL WASTEWATER DISCHARGE, EDDY COUNTY, N. MEX.  
(LAT 32°23'40", LONG 103°56'05".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 18...	1600	E5.0	100000	30000	193000	60	232000	12000

E--ESTIMATE

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°28'15", LONG 103°56'40".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 16...	1520	53000	8800	98500	40	179000	1.112	3700

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°29'00", LONG 103°47'20".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 22...	1000	110000	21000	200000	80	238000	35000
22...	1005	120000	11000	191000	40	235000	23000

INDUSTRIAL WASTEWATER DISCHARGE, EDDY COUNTY, N. MEX.  
(LAT 32°29'25", LONG 103°56'20".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 18...	1000	97000	50000	216000	130	275000	38000

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°32'10", LONG 103°57'10".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 19...	1630	95000	43000	198000	100	238000	40000

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°34'10", LONG 103°57'50".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 19...	1715	3200	310	8080	10	24200	3300

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

UNNAMED POND, LEA COUNTY, N. MEX.  
(LAT 32°34'20", LONG 103°48'40".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 18...	1700	99000	31000	205000	210	245000	9900

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°34'30", LONG 103°49'10".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 18...	1630	12000	3500	21000	10	58300	1.028	1700

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°35'40", LONG 103°59'15".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 19...	1830	45000	21000	84700	40	168000	1.103	4700

HACKBERRY LAKE, EDDY COUNTY, N. MEX.  
(LAT 32°38'10", LONG 103°56'00".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 20...	1400	340	150	500	9.0	1930	210

UNNAMED POND, EDDY COUNTY, N. MEX.  
(LAT 32°39'20", LONG 103°56'20".10)

DATE	TIME	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 19...	1200	100000	29000	198000	60	248000	6000

JEMEZ RIVER BELOW JEMEZ SPRINGS, N. MEX.  
(LAT 35°46'10", LONG 106°41'32".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00000)	TEMPER- ATURE (DEG C) (00010)
JULY 15...	1335	66	459	8.8	--
AUG. 07...	1305	128	790	7.5	24.0

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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JEMEZ RIVER BELOW SODA DAM, N. MEX.  
(LAT 35°47'21", LONG 106°41'13".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JULY 15...	1240	8.0	373	7.8

EAST FORK JEMEZ RIVER ABOVE SAN ANTONIO CREEK, N. MEX.  
(LAT 35°49'41", LONG 106°38'38".10)

DATE	TIME	DIS- SOLVED URANIUM (U) (UG/L) (80020)
NOV. 12...	1300	.23

SAN ANTONIO CREEK ABOVE SULPHUR CREEK, N. MEX.  
(LAT 35°51'18", LONG 106°38'19".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
AUG. 08...	1110	3.0	180	8.7	18.0

DATE	TIME	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
NOV. 12...	1155	.4

REDONDO CREEK ABOVE SULPHUR CREEK, N. MEX.  
(LAT 35°52'36", LONG 106°37'42".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
JULY 15...	1000	24	154	7.6	12.0
JULY 15...	1030	1.0	137	9.6	17.5
AUG. 07...	1050	18	144	7.7	13.5
SEP. 25...	0935	22	144	7.7	4.0

DATE	TIME	DIS- SOLVED URANIUM (U) (UG/L) (80020)
NOV. 12...	0910	.10

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

 SULPHUR CREEK ABOVE REDONDO CREEK, N. MEX.  
 (LAT 35°52'39", LONG 106°37'54".10)

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
------	------	--	---	--------------------------	--

JULY 15...	1020	11	717	4.0	15.0
AUG. 07...	1100	9.0	643	3.0	12.5
SEP. 25...	0940	10	738	2.9	4.5

DATE	TIME	DIS- SOLVED UMANIUM (U) (UG/L) (00020)
NOV. 12...	0925	.67

 TANNER LAKE NEAR PUEBLO ALTO TRADING POST, N. MEX.  
 (LAT 35°57'38", LONG 107°34'00".10)

DATE	TIME	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
SEP. 22...	1320	14	8.3	1.2	140	4.1	104	0	210	5.6

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
SEP. 22...	.7	1.7	443	26	0	12	560	7.6	16.0	310	

 POND 0.5 MILE NORTHWEST OF COSTILLA LAKE, N. MEX.  
 (LAT 35°57'48", LONG 107°36'29".10)

DATE	TIME	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
SEP. 22...	1300	10	23	.6	72	3.1	140	0	84	4.0

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
SEP. 22...	.6	.73	270	60	0	4.0	320	7.6	15.5	40	

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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CHACO WASH NEAR COSTILLA LAKE, N. MEX.  
(LAT 35°58'12", LONG 107°31'22".10)

		DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
DATE	TIME										
SEP. 22...	1345	13	5.0	1.2	60	1.7	65	0	81	4.8	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (R) (MG/L) (01020)
SEP. 22...	.7	2.2	209	17	0	6.3	309	7.4	14.0	230	

COAL CREEK ABOVE TANNER LAKE, NEAR BISTI TRADING POST, N. MEX.  
(LAT 36°14'04", LONG 108°07'47".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT (MG/L) (80154)	SUS- PENDEO SEDI- MENT (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
SEP. 09...	1200	15.5	E3.0	12600	E100	100

KIMBETO WASH AT STATE HIGHWAY 44, N. MEX.  
(LAT 36°14'32", LONG 107°43'18".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT (MG/L) (80154)	SUS- PENDEO SEDI- MENT (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT. 29...	1530	4.0	E25	32100	E2170	90

HUNTER WASH TRIBUTARY AT ROAD CROSSING 1.3 MILES SOUTH OF BISTI TRADING POST, N. MEX.  
(LAT 36°15'34", LONG 108°15'11".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
MAY 06...	--	--	--	1430	--
SEP. 09...	0900	E2.0	--	808	19.0
12...	--	--	--	577	--

E--ESTIMATE

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

HUNTER WASH TRIBUTARY AT ROAD CROSSING 1.3 MILES SOUTH OF BISTI TRADING POST, N. MEX.--Continued

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80155)	SUS. SED. SIEVE DIAM. % FINER #62 MM (70331)
APR. 12...	--	--	E20	27400	E1500	--
JULY 10...	1315	--	E7.0	43600	E820	96
10...	1900	--	E20	33800	E1800	98
10...	1905	--	E50	49100	E6600	83
11...	--	--	E20	55900	E3000	79
SEP. 09...	0900	19.0	E2.0	44700	E241	100
12...	1500	--	E20	40500	E2200	97
12...	1505	--	E50	152000	E21000	99

 CHACO RIVER BELOW BURNHAM BRIDGE, N. MEX.  
 (LAT 36°21'57", LONG 108°33'57".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MANG) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
OCT. 31...	0940	9.0	20	0	19	1.4	150	3.3	250	150
DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE MICRO- MHOS (MG/L) (00095)	TEMPER- ATURE (DEG C) (00010)
OCT. 31...	6.8	.0	.04	.01	463	53	0	9.0	798	5.5

 KUTZ CANYON AT STATE HIGHWAY 44 BRIDGE, NEAR BLOOMFIELD, N. MEX.  
 (LAT 36°40'05", LONG 107°59'30".10)

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
OCT. 29...	1620	E18	716	9.0	
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS. SED. SIEVE DIAM. % FINER #62 MM (70331)
OCT. 29...	1620	9.0	F18	70800	3440

E--ESTIMATE



QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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CANYON LARGO NEAR BLANCO, N. MEX.  
(LAT 36°41'24", LONG 107°45'21".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
MAR. 10...	1245	E900	3	0	9	70	--	160	3.6	304	0	310
10...	1500	900	5.0	10	--	25	4.2	150	2.4	74	14	290
DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 10...	6.5	.6	.08	.00	711	210	0	4.8	1100	7.6	12.0	80
10...	6.9	.7	.00	.00	535	80	0	7.3	854	9.0	9.0	70

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (H) (UG/L) (01020)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (MG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAR. 10...	1245	--	--	90	20	0	--	--	9	--	--
10...	1500	440	230	70	--	10	700	630	--	2.1	1

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE MENT (MG/L) (00154)	SUS- PENDE MENT (MG/L) (00155)	SUS- PENDE MENT (MG/L) (00155)
MAR. 10...	1245	12.0	E900	135000	E320000	60
10...	1500	9.0	E900	109000	E265000	64

CHACO RIVER AT HOGBACK GAP, N. MEX.  
(LAT 36°42'39", LONG 108°31'51".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NE- SIUM (MG) (MG/L) (00915)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00925)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAR. 11...	1255	1.0	1.3	40	130	84	590	9.3	28	0	1600	130
APR. 01...	1600	2.0	.1	100	500	100	510	13	0	45	2200	200

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 11...	1.3	6.1	.00	2590	670	650	9.9	3600	8.7	8.5	1100
APR. 01...	12	7.1	.00	3610	1700	1600	5.4	4250	9.6	8.0	1900

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (H) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (MG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAR. 11...	1255	65	1500	1100	40	200	190	.4	9
APR. 01...	1600	7	3100	1900	100	200	250	.1	100

E--ESTIMATE

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SHUMWAY ARROYO ABOVE DUNLAP FARM, NEAR WATERFLOW, N. MEX.  
(LAT 36°46'31", LONG 108°26'10".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT.											
06...	1745	--	--	--	--	--	--	--	--	--	--
13...	1615	--	--	--	--	--	--	--	--	--	--
20...	1735	.4	160	120	470	6.3	153	0	1500	200	.7
NOV.											
03...	1535	--	--	--	--	--	--	--	--	--	--
13...	1700	--	--	--	--	--	--	--	--	--	--
17...	1620	16	410	260	1200	14	0	0	4100	410	1.3
24...	1631	--	--	--	--	--	--	--	--	--	--
DEC.											
01...	1740	--	--	--	--	--	--	--	--	--	--
08...	1150	--	--	--	--	--	--	--	--	--	--
19...	1650	21	480	300	1200	18	0	0	4700	470	1.4
22...	1515	--	--	--	--	--	--	--	--	--	--
29...	1600	12	450	160	730	14	70	0	2800	260	1.3
JAN.											
05...	1430	--	--	--	--	--	--	--	--	--	--
12...	--	6.0	420	630	2100	16	320	0	6200	800	.9
19...	--	--	--	--	--	--	--	--	--	--	--
26...	1440	8.1	490	170	770	15	89	0	2900	270	1.0
FEB.											
02...	1515	--	--	--	--	--	--	--	--	--	--
16...	1500	7.2	470	220	930	17	132	0	3400	320	1.5
23...	1540	--	--	--	--	--	--	--	--	--	--
MAR.											
02...	1822	1.6	450	100	1000	17	61	0	3200	380	.9
09...	1530	--	--	--	--	--	--	--	--	--	--
15...	1620	4.5	490	100	970	18	59	0	3100	310	.9
23...	1520	--	--	--	--	--	--	--	--	--	--
30...	1450	--	--	--	--	--	--	--	--	--	--
APR.											
06...	1445	--	--	--	--	--	--	--	--	--	--
13...	1610	--	--	--	--	--	--	--	--	--	--
20...	1445	--	--	--	--	--	--	--	--	--	--
27...	1540	11	370	100	630	9.9	12	0	2400	150	.9
MAY											
04...	1440	--	--	--	--	--	--	--	--	--	--
11...	1535	5.1	490	140	950	19	31	0	3200	260	1.0
JUNE											
01...	1520	--	--	--	--	--	--	--	--	--	--
08...	1530	--	--	--	--	--	--	--	--	--	--
15...	1515	37	460	530	860	18	289	0	4600	180	.4
22...	1505	--	--	--	--	--	--	--	--	--	--
JULY											
06...	1705	--	--	--	--	--	--	--	--	--	--
27...	1840	11	530	240	1400	29	10	0	4500	470	1.4
AUG.											
31...	1615	9.8	510	200	1200	24	14	0	4100	380	1.0
SEPT.											
07...	1900	8.5	530	190	1200	40	21	0	3900	420	1.0

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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SHUMWAY ARROYO ABOVE DUNLAP FARM, NEAR WATERFLOW, N. MEX.--Continued

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	TOTAL ACIDITY AS H+ (MG/L) (71825)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (01020)
OCT.										
06...	--	--	--	--	--	--	2580	--	16.0	--
13...	--	--	--	--	--	--	2450	--	16.0	--
20...	4.5	2550	890	770	--	6.8	3320	8.5	15.0	290
NOV.										
03...	--	--	--	--	--	--	3250	--	7.5	--
13...	--	--	--	--	--	--	6710	--	9.5	--
17...	17	6490	2100	2100	2.2	11	7340	3.6	9.0	740
24...	--	--	--	--	--	--	7850	--	5.5	--
DEC.										
01...	--	--	--	--	--	--	5960	--	5.0	--
08...	--	--	--	--	--	--	9030	--	5.0	--
19...	23	7300	2400	2400	8.5	11	9190	2.5	.0	1100
22...	--	--	--	--	--	--	8560	--	.0	--
29...	11	4510	1800	1700	--	7.5	5230	6.7	.0	--
JAN.										
05...	--	--	--	--	--	--	5200	--	.0	--
12...	64	10600	3600	3400	--	15	12500	7.5	.0	630
19...	--	--	--	--	--	--	12000	--	2.0	--
26...	12	4720	1900	1900	--	7.6	5690	7.3	.0	820
FEB.										
02...	--	--	--	--	--	--	5580	--	1.5	--
16...	14	5490	2100	2000	--	8.9	6470	7.8	1.0	1300
23...	--	--	--	--	--	--	8620	--	1.5	--
MAR.										
02...	7.6	5210	1500	1500	--	11	6320	7.7	9.0	890
09...	--	--	--	--	--	--	6310	--	3.0	--
15...	7.1	5050	1600	1600	--	10	6030	7.7	14.5	950
23...	--	--	--	--	--	--	5300	--	8.0	--
30...	--	--	--	--	--	--	5300	--	--	--
APR.										
06...	--	--	--	--	--	--	6520	--	20.5	--
13...	--	--	--	--	--	--	6330	--	18.0	--
20...	--	--	--	--	--	--	6290	--	20.5	--
27...	3.4	3690	1300	1300	--	7.5	4510	6.6	13.5	570
MAY										
04...	--	--	--	--	--	--	6250	--	20.5	--
11...	5.1	5100	1800	1800	--	9.7	6190	9.0	28.0	630
JUNE										
01...	--	--	--	--	--	--	5360	--	30.0	--
08...	--	--	--	--	--	--	6130	--	33.0	--
15...	2.3	6840	3300	3100	--	6.5	7230	7.6	31.5	420
22...	--	--	--	--	--	--	7410	--	29.5	--
JULY										
06...	--	--	--	--	--	--	8800	--	28.5	--
27...	10	7230	2300	2300	.8	13	8310	4.3	--	1400
AUG.										
31...	8.7	6470	2100	2100	--	11	7110	6.0	25.5	1100
SEPT.										
07...	8.1	6340	2100	2100	--	11	7110	5.9	28.0	1100

POND IN SAN JUAN MINE PIT, N. MEX.  
(LAT 36°46'41", LONG 108°24'56".10)

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
APR.											
02...	0900	.0	110	4.7	1.5	110	5.1	107	32	120	4.4
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (01020)
APR.											
02...	.7	.10	.00	332	18	0	11	536	9.5	18.0	70
DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (Pb) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (MG) (UG/L) (71900)	TOTAL NITRUM (SE) (UG/L) (01147)		
APR.											
02...	0900	2	120	70	110	<100	6	.1	1		

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PUMP CANYON AT ARCHULETA, N. MEX..  
(LAT 36°46'55", LONG 107°44'10".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAR. 10...	1410	15	4.0	20	75	5.9	67	3.3	1	23	310	6.8

DATE	DIS- SOLVED FLUO- RIDE (P) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 10...	4	00	00	496	210	170	2.0	725	9.9	9.0	30

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAR. 10...	1410	200	130	30	20	300	180	.7	3

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE- D SEDI- MENT (MG/L) (00154)	SUS- PENDE- D SEDI- MENT CHARGE (T/DAY) (00155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR. 10...	1410	9.0	15	25700	1040	77

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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POWERPLANT ARROYO BELOW SAN JUAN POWERPLANT RESERVOIR, N. MEX.  
(LAT 36°47'06", LONG 108°26'26", 10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.												
06...	1800	--	7.5	--	400	1500	4000	12	498	0	12000	1400
13...	--	--	3.4	--	390	940	2300	16	282	0	8300	750
13...	1630	--	--	--	--	--	--	--	--	--	--	--
20...	1800	--	--	--	--	--	--	--	--	--	--	--
NOV.												
03...	1540	--	--	--	--	--	--	--	--	--	--	--
13...	1715	--	6.5	--	420	1400	3700	7.5	514	0	12000	1300
17...	1630	--	--	--	--	--	--	--	--	--	--	--
24...	1643	--	--	--	--	--	--	--	--	--	--	--
DEC.												
01...	1750	--	--	--	--	--	--	--	--	--	--	--
08...	1210	--	--	--	--	--	--	--	--	--	--	--
15...	1715	--	--	--	--	--	--	--	--	--	--	--
22...	1530	--	7.5	--	390	1300	3600	9.5	491	0	11000	1200
29...	1615	--	--	--	--	--	--	--	--	--	--	--
JAN.												
05...	1505	--	9.5	--	350	1200	3200	11	431	0	10000	1000
11...	1600	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
26...	1500	--	--	--	--	--	--	--	--	--	--	--
26...	1530	--	--	--	--	--	--	--	--	--	--	--
FEB.												
02...	1600	--	7.8	--	480	160	790	16	70	0	3000	280
16...	1520	--	1.6	--	370	710	1500	17	258	0	5600	490
23...	1600	--	--	--	--	--	--	--	--	--	--	--
MAR.												
02...	1830	--	1.5	--	470	100	960	17	59	0	3200	380
09...	1540	--	--	--	--	--	--	--	--	--	--	--
15...	1645	--	4.1	--	470	100	940	18	60	0	3200	310
23...	1535	--	--	--	--	--	--	--	--	--	--	--
30...	1515	--	--	--	--	--	--	--	--	--	--	--
APR.												
11...	0900	.20	1.8	20	410	530	1100	16	204	0	4900	230
13...	1700	--	--	--	--	--	--	--	--	--	--	--
20...	1500	--	--	--	--	--	--	--	--	--	--	--
27...	1550	--	4.4	--	440	520	880	15	236	0	4500	180
MAY												
01...	1455	--	--	--	--	--	--	--	--	--	--	--
07...	1234	--	4.7	10	440	500	880	17	244	0	4300	190
11...	1600	--	3.3	--	450	520	890	16	227	0	4500	170
JUNE												
05...	1700	.10	4.2	20	450	500	920	18	237	0	4500	170
08...	1600	--	--	--	--	--	--	--	--	--	--	--
15...	1500	--	2.1	--	500	510	1300	20	53	0	5500	420
22...	1515	--	--	--	--	--	--	--	--	--	--	--
JULY												
06...	1845	--	--	--	--	--	--	--	--	--	--	--
13...	1220	--	--	--	--	--	--	--	--	--	--	--
20...	1440	--	--	--	--	--	--	--	--	--	--	--
27...	1830	--	22	--	460	510	810	18	302	0	4300	170
AUG.												
03...	1635	--	--	--	--	--	--	--	--	--	--	--
10...	1540	--	--	--	--	--	--	--	--	--	--	--
14...	1515	--	--	--	--	--	--	--	--	--	--	--
15...	1500	1.0	--	--	--	--	--	--	--	--	--	--
17...	1215	--	--	--	--	--	--	--	--	--	--	--
24...	1817	--	--	--	--	--	--	--	--	--	--	--
31...	1600	--	9.9	--	540	200	1200	24	51	0	4000	380
SEP.												
07...	1850	--	--	--	--	--	--	--	--	--	--	--
14...	1550	--	--	--	--	--	--	--	--	--	--	--
17...	1715	--	--	--	--	--	--	--	--	--	--	--
21...	1620	--	2.9	--	430	480	840	16	224	0	4300	160

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## POWERPLANT ARROYO BELOW SAN JUAN POWERPLANT RESERVOIR, N. MEX.--Continued

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (000950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (WEST- DUE AT 100 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
OCT.												
06...	1.7	--	--	--	160	--	--	--	--	--	--	20300
13...	.9	--	--	--	88	--	--	--	--	--	--	13200
13...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
03...	--	--	--	--	--	--	--	--	--	--	--	--
13...	1.6	--	--	--	140	--	--	--	--	--	--	19700
17...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
01...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
22...	.5	--	--	--	150	--	--	--	--	--	--	18400
29...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
05...	1.3	--	--	--	130	--	--	--	--	--	--	16600
11...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
02...	.9	--	--	--	12	--	--	--	--	--	--	4820
16...	2.7	--	--	--	2.2	--	--	--	--	--	--	8830
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
02...	1.8	--	--	--	7.4	--	--	--	--	--	--	5190
09...	--	--	--	--	--	--	--	--	--	--	--	--
15...	.9	--	--	--	6.8	--	--	--	--	--	--	5100
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
11...	.3	--	--	--	21	--	--	--	--	.60	--	7380
13...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.3	--	--	--	21	--	--	--	--	--	--	6750
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	--
07...	.2	18	.07	18	18	.04	.32	18	.02	.01	7780	6530
11...	.3	--	--	--	20	--	--	--	--	--	--	6750
JUNE												
05...	.3	17	.00	17	17	.02	.81	18	.01	.01	7710	6760
08...	--	--	--	--	--	--	--	--	--	--	--	--
15...	.8	--	--	--	21	--	--	--	--	--	--	8370
22...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
06...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.4	--	--	--	4.6	--	--	--	--	--	--	6460
AUG.												
03...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
31...	1.0	--	--	--	8.8	--	--	--	--	--	--	6420
SEP.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
21...	.3	--	--	--	14	--	--	--	--	--	--	6400

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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POWERPLANT ARROYO BELOW SAN JUAN POWERPLANT RESERVOIR, N. MEX.--Continued

DATE	HARD- NESS (CA+MG) (000900)	NON- CAR- BONATE HARD- NESS (MG/L) (000902)	SODIUM AD- SORP- TION RATIO (000931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
OCT.												
06...	7200	6800	21	20300	8.3	--	18.0	--	--	--	--	1100
13...	4800	4600	14	14000	8.3	--	20.0	--	--	--	--	800
13...	--	--	--	13500	--	--	20.0	--	--	--	--	--
20...	--	--	--	17900	--	--	15.0	--	--	--	--	--
NOV.												
03...	--	--	--	16900	--	--	12.5	--	--	--	--	--
13...	6800	6400	20	19000	8.3	--	9.0	--	--	--	--	990
17...	--	--	--	18200	--	--	11.0	--	--	--	--	--
24...	--	--	--	18200	--	--	8.5	--	--	--	--	--
DEC.												
01...	--	--	--	18100	--	--	7.5	--	--	--	--	--
08...	--	--	--	16900	--	--	6.0	--	--	--	--	--
15...	--	--	--	18100	--	--	1.0	--	--	--	--	--
22...	6300	5900	20	18100	7.8	--	5.5	--	--	--	--	760
29...	--	--	--	16900	--	--	.0	--	--	--	--	--
JAN.												
05...	5800	5500	18	17300	8.0	--	.0	--	--	--	--	590
11...	--	--	--	6390	--	--	.0	--	--	--	--	--
12...	--	--	--	17600	--	--	2.5	--	--	--	--	--
19...	--	--	--	17600	--	--	3.0	--	--	--	--	--
26...	--	--	--	12300	--	--	1.0	--	--	--	--	--
26...	--	--	--	6290	--	--	4.5	--	--	--	--	--
FEB.												
02...	1900	1800	8.0	5660	7.2	--	2.0	--	--	--	--	810
16...	3800	3600	11	9730	8.0	--	2.0	--	--	--	--	430
23...	--	--	--	8670	--	--	2.0	--	--	--	--	--
MAR.												
02...	1600	1600	11	6370	7.9	--	10.5	--	--	--	--	850
09...	--	--	--	8610	--	--	2.0	--	--	--	--	--
15...	1600	1500	10	6060	7.7	--	15.0	--	--	--	--	950
23...	--	--	--	19400	--	--	5.0	--	--	--	--	--
30...	--	--	--	19300	--	--	8.0	--	--	--	--	--
APR.												
11...	3200	3000	8.5	8000	8.3	--	7.5	--	--	--	--	400
13...	--	--	--	6420	--	--	15.5	--	--	--	--	--
20...	--	--	--	6380	--	--	20.0	--	--	--	--	--
27...	3200	3000	6.7	7330	8.0	--	14.0	--	--	--	--	730
MAY												
01...	--	--	--	7150	--	--	22.0	--	--	--	--	--
07...	3200	3000	6.8	6480	7.8	14.0	13.0	2	9.1	12	15	440

DATE	HARD- NESS (CA+MG) (000900)	NON- CAR- BONATE HARD- NESS (MG/L) (000902)	SODIUM AD- SORP- TION RATIO (000931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAY											
11...	3300	3100	6.8	7200	8.1	--	--	--	--	--	630
JUNE											
05...	3200	3000	7.1	7300	8.0	32.0	20.0	2	20	5.8	410
08...	--	--	--	7200	--	--	33.0	--	--	--	--
15...	3300	3300	9.8	9030	8.3	--	28.5	--	--	--	640
22...	--	--	--	7050	--	--	20.5	--	--	--	--
JULY											
06...	--	--	--	7100	--	--	22.5	--	--	--	--
13...	--	--	--	7050	--	--	19.0	--	--	--	--
20...	--	--	--	6910	--	--	22.5	--	--	--	--
27...	3200	3000	6.2	7140	7.3	--	--	--	--	--	410
AUG.											
03...	--	--	--	6910	--	--	23.0	--	--	--	--
10...	--	--	--	7050	--	--	28.0	--	--	--	--
14...	--	--	--	7000	--	--	--	--	--	--	--
15...	--	--	--	11100	8.2	--	15.0	--	--	--	--
17...	--	--	--	6870	--	--	19.0	--	--	--	--
24...	--	--	--	6920	--	--	20.0	--	--	--	--
31...	2200	2100	11	7180	7.2	--	26.0	--	--	--	1000
SEP.											
07...	--	--	--	7130	--	--	28.5	--	--	--	--
14...	--	--	--	6780	--	--	24.0	--	--	--	--
17...	--	--	--	7100	--	--	20.0	--	--	--	--
21...	3100	2900	6.6	6670	7.7	--	24.5	--	--	--	410

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (MG) (UG/L) (01190)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
APR.									
11...	0900	0	440	400	20	<100	190	.0	17
AUG.									
15...	1500	0	490	--	--	200	200	.2	65

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SAN JUAN POWERPLANT RESERVOIR AT DAM, N. MEX.  
(LAT 36°47'12", LONG 108°26'40".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAY 14...	1200	.9	70	62	30	95	3.0	70	9	380	22
AUG. 15...	1445	2.6	20	55	18	71	3.2	85	0	260	23

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAY 14...	.3	.41	.00	639	280	210	2.5	953	8.5	14.0	50
AUG. 15...	.3	.06	.00	475	210	140	2.1	797	7.9	--	70

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAY 14...	1200	0	90	50	70	<100	30	.0	3
AUG. 15...	1445	0	110	70	20	<100	20	.1	2

SAN JUAN POWERPLANT RESERVOIR AT WEST SHORE, N. MEX.  
(LAT 36°47'20", LONG 108°27'16".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAY 14...	1045	.3	100	94	37	120	4.0	112	0	510	32

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
MAY 14...	1045	0	120	80	100	<100	30	.0	1



QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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WESTWATER ARROYO AT SAN JUAN POWERPLANT, N. MEX.  
(LAT 36°47'37", LONG 108°25'47".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01045)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	HICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
OCT.										
27...	1515	--	--	--	--	--	--	--	--	--
NOV.										
13...	1450	--	--	--	--	--	--	--	--	--
17...	1415	--	--	--	--	--	--	--	--	--
24...	1424	--	--	--	--	--	--	--	--	--
DEC.										
08...	1445	--	--	--	--	--	--	--	--	--
15...	1500	--	--	--	--	--	--	--	--	--
APR.										
02...	1000	.10	14	60	530	83	790	17	1	0
MAY										
07...	1111	--	25	1000	540	190	890	20	0	0
JUNE										
05...	1630	.20	16	770	480	110	700	20	2	0
15...	1530	--	4.5	--	550	200	960	22	1	0
22...	1530	--	--	--	--	--	--	--	--	--
JULY										
06...	1750	--	--	--	--	--	--	--	--	--
13...	1215	--	--	--	--	--	--	--	--	--
20...	1430	--	--	--	--	--	--	--	--	--
27...	1815	--	17	--	460	160	900	25	0	0
AUG.										
03...	1630	--	--	--	--	--	--	--	--	--
10...	1530	--	--	--	--	--	--	--	--	--
17...	1200	--	--	--	--	--	--	--	--	--
24...	1800	--	--	--	--	--	--	--	--	--
31...	1540	--	13	--	530	130	830	27	0	0
SEP.										
07...	1840	--	--	--	--	--	--	--	--	--
14...	1540	--	--	--	--	--	--	--	--	--
17...	1645	--	--	--	--	--	--	--	--	--
21...	1610	--	34	--	430	270	960	27	0	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
OCT.									
27...	--	--	--	--	--	--	--	--	--
NOV.									
13...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
DEC.									
08...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
APR.									
02...	3100	150	.9	--	--	--	3.9	--	--
MAY									
07...	3800	200	1.3	7.0	.00	7.0	7.0	.62	.15
JUNF									
05...	3000	150	.9	4.5	.00	4.5	4.5	.24	.33
15...	4000	220	1.3	--	--	--	5.0	--	--
22...	--	--	--	--	--	--	--	--	--
JULY									
06...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
27...	3500	240	1.3	--	--	--	6.7	--	--
AUG.									
03...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
31...	3400	260	1.1	--	--	--	4.9	--	--
SEP.									
07...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
21...	5100	250	1.5	--	--	--	.12	--	--

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

## WESTWATER ARROYO AT SAN JUAN POWERPLANT, N. MEX.--Continued

DATE	TOTAL NITRO- GEN (N) (006600)	TOTAL PHOS- PHORUS (P) (006665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (006711)	DIS- SOLVED (RESI- DUE AT 180 C) (0070300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (0070301)	HARD- NESS (CA+MG) (009000)	NON- CAR- BONATE HARD- NESS (009002)	TOTAL ACIDITY AS H+ (71825)	SODIUM AD- SORP- TION RATIO (00931)
OCT.									
27...	--	--	--	--	--	--	--	--	--
NOV.									
13...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
DEC.									
08...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
APR.									
02...	--	--	.05	--	4700	1700	1700	--	8.4
MAY									
07...	7.8	1.1	.59	6000	5700	2100	2100	2.8	8.4
JUNE									
05...	5.1	.44	.21	4380	4500	1700	1700	1.2	7.5
15...	--	--	--	--	5980	2200	2200	--	8.9
22...	--	--	--	--	--	--	--	--	--
JULY									
06...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	5340	1800	1800	4.2	9.2
AUG.									
03...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	5220	1900	1900	1.4	8.4
SEP.									
07...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	7110	2200	2200	33	8.9

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (00680)	DIS- SOLVED BORON (B) (01020)
OCT.									
27...	1150	--	--	8.0	--	--	--	--	--
NOV.									
13...	6480	--	--	8.0	--	--	--	--	--
17...	7180	--	--	9.5	--	--	--	--	--
24...	7850	--	--	4.5	--	--	--	--	--
DEC.									
08...	8870	--	--	4.5	--	--	--	--	--
15...	9440	--	--	.0	--	--	--	--	--
APR.									
02...	5550	5.1	--	8.0	--	--	--	--	830
MAY									
07...	6020	3.3	14.0	20.0	28	7.9	4.3	16	700
JUNE									
05...	5200	3.3	32.0	26.0	14	--	35	14	530
15...	7550	4.3	--	20.5	--	--	--	--	860
22...	6050	--	--	28.5	--	--	--	--	--
JULY									
06...	5200	--	--	20.0	--	--	--	--	--
13...	4100	--	--	28.5	--	--	--	--	--
20...	5920	--	--	31.0	--	--	--	--	--
27...	6460	2.8	--	--	--	--	--	--	1200
AUG.									
03...	6120	--	--	29.0	--	--	--	--	--
10...	7010	--	--	30.0	--	--	--	--	--
17...	4630	--	--	27.5	--	--	--	--	--
24...	6580	--	--	24.0	--	--	--	--	--
31...	5930	3.9	--	25.5	--	--	--	--	1100
SEP.									
07...	5930	--	--	20.0	--	--	--	--	--
14...	6940	--	--	26.0	--	--	--	--	--
17...	10000	--	--	23.5	--	--	--	--	--
21...	12600	1.9	--	28.0	--	--	--	--	230

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FF) (UG/L) (01046)	TOTAL LEAD (PR) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (MG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
APR.									
02...	1000	6	850	830	60	<100	170	.5	14

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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GOBERNADOR WASH AT ARCHULETA, N. MEX.  
(LAT 36°47'43", LONG 107°42'25".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAR. 10...	1430	.50	.8	60	290	44	230	5.8	25	0	1300	19
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 10...	.5	.00	.00	1900	910	890	3.3	2450	8.7	10.5	70	
DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)			
MAR. 10...	1430	29	130	70	60	<100	70	.2	1			
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (00154)	SUS- PENDE SEDI- MENT (MG/L) (00155)	SUS- PENDE SEDI- MENT (MG/L) (00155)	SUS- PENDE SEDI- MENT (MG/L) (00155)	SUS- PENDE SEDI- MENT (MG/L) (00155)	SUS- PENDE SEDI- MENT (MG/L) (00155)			
MAR. 10...	1430	10.5	.50	3660	4.9	96						

MCCABE RESERVOIR NEAR KIRTLAND, N. MEX.  
(LAT 36°48'01", LONG 108°22'20".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
JUNE 05...	1715	13	150	6.5	1.4	370	5.6	359	27	430	16	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH0- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JUNE 05...	1.7	.06	.00	1050	22	0	34	1590	9.4	18.0	170	
DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)			
JUNE 05...	1715	3	230	170	150	<100	9	.1	3			

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

POND IN WESTWATER ARROYO WATERSHED, 1.0 MILE EAST OF SAN JUAN POWERPLANT, N. MEX.  
(LAT 36°48'08", LONG 108°25'14".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
APR. 02...	0930	2.3	30	34	7.4	140	6.7	202	13	170	44

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 02...	.7	.16	.00	519	120	0	5.7	835	8.9	120

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
APR. 02...	0930	4	140	120	30	<100	20	.0	1

WESTWATER ARROYO ABOVE SAN JUAN MINE, N. MEX.  
(LAT 36°48'43", LONG 108°25'50".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)
MAR. 12...	0935	E1.0	487	3.0

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (MG/L) (80155)	SUS- PENDE SEDIM- ENT (MG/L) (80155)	SUS- PENDE SEDIM- ENT (MG/L) (80155)
MAR. 12...	0935	3.0	E1.0	1020	E2.8	89	

E--ESTIMATE

QUALITY OF SURFACE WATER AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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POND IN SHUMWAY ARROYO WATERSHED, 2.0 MILES NORTHEAST OF SAN JUAN POWERPLANT, N. MEX.  
(LAT 36°49'28", LONG 108°24'44".10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
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APR.	02...	0945	.9	10	4.7	3.5	58	7.0	12	62	38	5.5
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DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHOS- (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (00900)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (00400)	DIS- SOLVED BORON (B) (MG/L) (01020)
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APR.	02...	.5	.06	.00	186	26	0	4.9	346	10.1	70
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DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (01900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
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APR.	02...	0945	2	130	70	10	<100	6	.1	1
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WESTWATER ARROYO 3.0 MILES NORTH OF SAN JUAN POWERPLANT, N. MEX.  
(LAT 36°50'29", LONG 108°26'58".10)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
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MAR.	12...	0935	51.0	.3	150	10	8.7	440	3.8	321	49	440	170
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DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHOS- (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (00900)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
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MAR.	12...	.9	1.4	.00	1290	61	0	25	2120	9.2	3.0	130
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DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BORON (B) (UG/L) (01022)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL LITHIUM (LI) (UG/L) (01132)	TOTAL MERCURY (HG) (UG/L) (01900)	TOTAL SELE- NIUM (SE) (UG/L) (01147)
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MAR.	12...	0935	10	180	130	150	<100	30	.2	4
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DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (00154)	SUS- PENDE SEDI- MENT (MG/L) (00154)	SUS- PENDE SEDI- MENT (MG/L) (00154)	SUS- PENDE SEDI- MENT (MG/L) (00154)
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MAR.	12...	0935	3.0	51.0	1360	53.7	98
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E--ESTIMATE

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE): 000 EXRV-Unknown age, Extrusive rocks; 000 HLFS-Unknown age, Hell-To-Finish Formation; 110 AVMB-Cenozoic age, Quarternary, Alluvium, Bolson Deposits and other Surface Deposits; 110 BLSC-Cenozoic age, Quarternary, Bolson fill; 112 SMTF-Cenozoic age, Quarternary, Pleistocene, Santa Fe Group; 112 VLLS-Cenozoic age, Quarternary, Pleistocene, Valles Rhyolite of Tewa Group; 124 ANMS-Cenozoic age, Tertiary, Eocene, Animas Formation; 124 SNJS-Cenozoic age, Tertiary, Eocene, San Jose Formation; 125 NCMN-Cenozoic age, Tertiary, Paleocene, Nacimiento Formation; 210 MCDK-Mesozoic age, Cretaceous, Mancos Shale, Lower Part, and Dakota Sandstone, Undivided; 211 CLFH-Mesozoic age, Upper Cretaceous, Cliff House Sandstone (Includes La Ventana Tongues in NW Sandoval Co); 211 FRLD-Mesozoic age, Upper Cretaceous, Fruitland Formation; 211 GLLP-Mesozoic age, Upper Cretaceous, Gallup Sandstone; 211 MVRD-Mesozoic age, Upper Cretaceous, Mesaverde Group; 211 PCCF-Mesozoic age, Upper Cretaceous, Pictured Cliffs Sandstone; 221 BLFF-Mesozoic age, Upper Jurassic, Bluff Sandstone of Morrison Formation; 221 ENRD-Mesozoic age, Upper Jurassic, Entrada Sandstone, Upper Sandy Member, of San Rafael Group; 221 MRSN-Mesozoic age, Upper Jurassic, Morrison Formation; 221 WSRC-Mesozoic age, Upper Jurassic, Westwater Canyon Sandstone Member of Morrison Formation; 231 CHNL-Mesozoic age, Upper Triassic, Chinle Formation; 310 GLRT-Paleozoic age, Permian, Glorieta Sandstone Member of San Andres Formation of Manzano Group; 310 YESO-Paleozoic age, Permian, Yeso Formation, Manzano Group; 312 CLBR-Paleozoic age, Ochoa, Culebra Dolomite Member of Rustler Formation; 312 CSTL-Paleozoic age, Ochoa, Castile Formation; 312 RSLR-Paleozoic age, Ochoa, Rustler Formation; 313 SAGC-Paleozoic age, Guadalupe, San Andres Limestone and Glorieta Sandstone; 313 SADR-Paleozoic age, Guadalupe, San Andres Limestone of Manzano Group; 318 ABO L-Paleozoic age, Leonard, Abo Sandstone (Lower Tongue); 325 MDER-Paleozoic age, Des Moines, Madera Limestone; 326 MGDL-Paleozoic age, Atoka, Magdalena Group; 400 PCMB-Paleozoic age, Precambrian, Precambrian.

REMARKS.--Ground-water sites in this table are segregated by county which appear alphabetically. The sites are then listed in ascending local identifiers (see p. 15).

## BERNALILLO COUNTY

LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (MG/L) (01046)	DIS-SOLVED MANGANESE (MN) (MG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	
COLE SP NW CEDAR CRESTNM	350807106231301		SP	75-06-05	1135	325MDER	11	20	0	120	
SEDILLO GRANT	345632107300701		GW	75-06-05	0930	211MVRD	9.5	40	200	140	
09N,01W,04.432	350155106563801		GW	75-06-05	1015	1125NTF	13	20	70	45	
11N,05E,14.242	351023106223501		SP	75-06-05	1250	325MDER	28	290	60	49	
DATE OF SAMPLE	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHATE (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
75-06-05	4.8	3.6	.7	372	0	15	2.4	.2	.0	.12	.342
75-06-05	53	1100	28	565	0	2300	210	1.5	.9	.01	4120
75-06-05	13	1000	7.1	897	0	1300	200	3.4	.8	.00	3030
75-06-05	7.8	45	1.8	259	0	30	3.2	3.5	.0	.00	296
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM SULFATE RATIO (MG/L) (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (MG/L) (00095)	PH	TEMPERATURE (DEG C) (00010)	DIS-SOLVED AMMONIA (NH) (MG/L) (01020)	DIS-SOLVED LITHIUM (LI) (MG/L) (01130)			
75-06-05	320	14	.1	580	7.1	10.0	10	0			
75-06-05	570	100	20	5430	8.4	--	1600	880			
75-06-05	170	0	34	4360	8.1	--	1800	330			
75-06-05	150	0	1.6	485	7.4	--	30	80			

## CATRON COUNTY

LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)
125.20W,23.321	331441108525201		SP	74-12-05	1915	000EXRV	73	200	12	135
DATE OF SAMPLE	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	BROMIDE (BR) (MG/L) (71870)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED AMMONIA (NH) (MG/L) (01020)	DIS-SOLVED LITHIUM (LI) (MG/L) (01130)		
74-12-05	0	310	.4	1200	7.3	35.0	200			
LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	DIS-SOLVED AMMONIA (NH) (MG/L) (01020)	DIS-SOLVED LITHIUM (LI) (MG/L) (01130)		
125.20W,23.321	331441108525201		SP	74-12-05	1915		200	310		

## DONA ANA COUNTY

LOCAL IDENTIFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
17S.05W.01.122	325150107183001	GW	75-08-08	1700	112SNTF	--	--	60	21.50			
18S.05W.10.212	324547107201701	GW	74-12-01	--	112SNTF	--	--	--	43.80			
19S.02W.26.223	323755107003501	GW	75-06-13	1530	112SNTF	16	105	292	70.00			
19S.04W.12.421A	324014107115701	GW	75-06-13	1930	112SNTF	11	160	292	70.00			
		GW	75-02-14	1100	112SNTF	--	--	--	--			
		GW	75-06-25	1201	112SNTF	--	--	21	31.00			
19S.04W.12.421B	324014107115702	GW	75-09-22	1200	112SNTF	--	--	21	--			
		GW	75-02-14	1230	112SNTF	--	--	--	--			
		GW	75-06-25	1202	112SNTF	--	--	67	12.00			
		GW	75-09-22	1201	112SNTF	--	--	67	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)	DIS-SOLVED SILICA (SiO2) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)
75-08-08	20	60	21	10	0	88	14	84	5.3	257	0	170
74-12-01	200	503	16	--	--	7.2	140	140	9	129	--	110
75-06-13	260	280	43	10	190	120	13	770	9.9	278	--	1500
75-06-13	130	150	29	0	100	290	21	230	7.1	57	--	1100
75-02-14	--	--	--	--	--	600	150	--	--	457	0	2100
75-06-25	17	21	--	--	--	670	160	--	--	478	--	2300
75-09-22	17	21	--	--	--	470	120	950	--	488	0	1900
75-02-14	--	--	--	--	--	170	29	--	--	295	0	400
75-06-25	63	67	--	--	--	150	24	--	--	278	--	360
75-09-22	63	67	--	--	--	120	21	120	--	185	0	330
DATE OF SAMPLE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRATE PLUS BROMIDE (NR) (MG/L) (71870)	DIS-SOLVED NITRITE (NR) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA, MG) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)
75-08-08	52	.6	--	1.3	.01	--	567	280	67	2.2	950	6.9
74-12-01	50	1.6	--	.06	--	--	390	18	0	14	681	9.0
75-06-13	220	4.6	--	.17	.01	--	2820	350	130	18	3700	--
75-06-13	93	.7	--	.08	.02	--	1800	810	760	3.5	2400	--
75-02-14	1100	--	--	--	--	--	--	2100	1700	--	7290	7.9
75-06-25	1300	--	--	--	--	--	--	2300	1900	--	6000	--
75-09-22	1000	--	--	--	--	--	--	1700	1300	10	6000	7.4
75-02-14	140	--	--	--	--	--	--	540	300	--	1590	7.9
75-06-25	110	--	--	--	--	--	--	470	250	--	1300	--
75-09-22	100	--	--	--	--	--	--	390	230	2.7	1300	7.5
DATE OF SAMPLE	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED AMMONIUM (H) (UG/L) (01020)								
75-08-08	20.0	--	--	--								
74-12-01	--	--	--	--								
75-06-13	27.0	--	--	700								
75-06-13	25.5	--	--	360								
75-02-14	14.0	--	--	--								
75-06-25	20.0	--	--	--								
75-09-22	19.0	--	--	--								
75-02-14	16.5	--	--	--								
75-06-25	20.0	--	--	--								
75-09-22	18.0	--	--	--								

## DONA ANA COUNTY--Continued

LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	TOTAL DEPTH OF WELL (FT)	DEPTH BELOW LAND SURFACE (FT)				
											(00059)	(72004)	(72008)	(72019)
19S.04W.12.421C	324014107115703		GW	75-02-14	1300	1125NTF	--	--	--	--				
			GW	75-06-25	1203	1125NTF	--	--	125	13.00				
19S.04W.12.421D	324014107115704		GW	75-09-22	1202	1125NTF	--	--	125	--				
			GW	75-02-14	1130	1125NTF	--	--	--	--				
			GW	75-06-25	1204	1125NTF	--	--	46	13.00				
19S.04W.12.421F	324014107115705		GW	75-09-22	1203	1125NTF	--	--	46	--				
			GW	75-02-14	1200	1125NTF	--	--	--	--				
			GW	75-06-25	1205	1125NTF	--	--	30	13.00				
20S.02E.35.244	323126104430001		GW	75-09-22	1204	1125NTF	--	--	30	--				
			GW	75-05-14	1200	1125NTF	950	20	791	--				
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)			
75-02-14	--	--	--	--	--	470	73	--	63	0	3100			
75-06-25	121	125	--	--	--	120	74	--	63	--	3400			
75-09-22	121	125	--	--	--	450	66	1100	66	0	3400			
75-02-14	--	--	--	--	--	210	28	--	330	0	520			
75-06-25	42	46	--	--	--	190	28	--	324	--	530			
75-09-22	42	46	--	--	--	190	27	150	331	0	490			
75-02-14	--	--	--	--	--	570	140	--	381	0	1700			
75-06-25	26	30	--	--	--	640	130	--	387	--	2100			
75-09-22	26	30	--	--	--	650	140	620	376	0	1700			
75-05-14	277	430	26	20	--	44	32	98	4.2	193	0	240		
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA,MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)			
75-02-14	140	--	--	--	--	--	--	1500	1400	--	5380	7.0		
75-06-25	180	--	--	--	--	--	--	600	550	--	6000	--		
75-09-22	190	--	--	--	--	--	--	1400	1300	13	6000	7.0		
75-02-14	120	--	--	--	--	--	--	640	370	--	1740	7.7		
75-06-25	130	--	--	--	--	--	--	590	320	--	1550	--		
75-09-22	130	--	--	--	--	--	--	590	310	2.7	1650	7.3		
75-02-14	940	--	--	--	--	--	--	2000	1700	--	5720	7.5		
75-06-25	1000	--	--	--	--	--	--	2100	1800	--	5000	--		
75-09-22	1000	--	--	--	--	--	--	2200	1900	5.8	5500	7.2		
75-05-14	38	.7	--	.98	.01	598	583	240	83	2.7	900	7.1		
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)										
75-02-14	17.5	--	--	--										
75-06-25	19.5	--	--	--										
75-09-22	17.0	--	--	--										
75-02-14	18.0	--	--	--										
75-06-25	18.0	--	--	--										
75-09-22	18.0	--	--	--										
75-02-14	17.5	--	--	--										
75-06-25	18.0	--	--	--										
75-09-22	18.0	--	--	--										
75-05-14	27.0	--	--	250										



## DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
S.01W.10.213	323901106450101	GW	74-12-04	1540	000EXRV	--	--	--	--			
S.05E.32.222	322635106264401	GW	74-12-18	1000	110BLSN	--	--	--	--			
		GW	75-06-24	1600	110BLSN	--	--	513	211			
S.01E.05.142	322537106515201	GW	75-06-02	1000	112SNTF	27	2	406	--			
		GW	75-06-02	1330	112SNTF	5.0	1	406	--			
S.02E.31.444	322045106461001	GW	75-06-30	--	112SNTF	--	--	655	225			
S.05E.05.313	321510106274101	GW	74-12-17	1700	110BLSN	--	--	--	--			
		GW	75-06-25	1110	110BLSN	--	--	513	267			
S.05E.07.342	322415106281801	GW	74-12-17	1610	110BLSN	--	--	--	--			
		GW	75-06-25	1000	110BLSN	--	--	444	376			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
74-12-04	--	--	74	--	--	--	1100	170	444	0	--	--
74-12-18	513	513	39	30	0	49	11	33	3.7	148	0	80
75-06-24	--	--	37	0	0	51	14	34	4.4	147	--	81
75-06-02	300	320	33	50	50	28	2.7	150	24	359	--	72
75-06-02	210	230	33	10	80	36	3.1	130	24	302	--	80
75-06-30	456	596	28	10	0	64	20	130	7.9	211	--	120
74-12-17	513	513	37	60	0	30	6.9	24	2.1	119	0	42
75-06-25	--	--	35	50	0	32	9.4	26	2.4	122	--	45
74-12-17	444	444	33	10	0	30	3.6	34	1.8	121	0	44
75-06-25	--	--	32	0	0	36	5.5	33	2.3	128	--	45
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH0- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
74-12-04	1600	--	2.8	--	--	--	--	--	--	--	6100	6.7
74-12-18	25	.9	--	2.0	.01	--	323	170	49	1.1	504	7.9
75-06-24	30	.8	--	2.4	.00	--	335	190	64	1.1	517	--
75-06-02	40	.7	--	.06	.26	--	529	81	0	7.3	860	--
75-06-02	43	1.0	--	.06	.06	--	500	100	0	5.6	815	--
75-06-30	168	.7	--	.03	.01	635	635	240	69	3.6	950	--
74-12-17	9.8	.3	--	.93	.01	--	215	100	2	1.0	322	8.1
75-06-25	15	.3	--	.96	.02	--	230	120	19	1.0	326	--
74-12-17	9.5	.4	--	1.5	.01	--	223	90	0	1.6	336	8.1
75-06-25	12	.4	--	1.7	.00	--	237	110	8	1.4	345	--
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
74-12-04	52.5	--	--	780								
74-12-18	--	--	--	40								
75-06-24	--	--	--	50								
75-06-02	19.0	--	--	250								
75-06-02	19.0	--	--	210								
75-06-30	23.5	--	--	160								
74-12-17	--	--	--	20								
75-06-25	--	--	--	20								
74-12-17	--	--	--	30								
75-06-25	--	--	--	20								

## DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
22S.05E.15.22)	321401106245201	GW	74-12-17	1410	1108LSN	--	--	--	--			
22S.05E.16.11)	322403106263901	GW	75-06-24	1525	1108LSN	--	--	--	140			
		GW	74-12-17	1540	1108LSN	--	--	--	--			
22S.05E.20.11)	322311106274101	GW	75-06-24	1505	1108LSN	--	--	328	228			
		GW	74-12-17	1130	1108LSN	--	--	--	--			
22S.05E.29.412	322155106270201	GW	75-06-24	1435	1108LSN	--	--	330	283			
		GW	74-12-17	1050	1108LSN	--	--	--	--			
22S.05E.33.244	322108106254701	GW	75-06-25	0855	1108LSN	--	--	570	276			
		GW	74-12-17	1000	1108LSN	--	--	--	--			
		GW	75-06-24	1400	1108LSN	--	--	400	280			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVE SULFA (SO4) (MG/L) (00945)
74-12-17	300	300	8.1	40	0	8.7	.1	500	5.8	54	22	310
75-06-24	--	--	49	40	0	39	4.7	38	4.6	131	--	73
74-12-17	328	328	24	10	0	26	3.6	24	2.1	85	0	41
75-06-24	--	--	23	30	0	29	5.2	24	2.8	86	--	44
74-12-17	330	330	36	50	10	36	6.4	28	2.1	108	0	49
75-06-24	--	--	35	10	0	39	7.9	30	2.8	110	--	55
74-12-17	570	570	35	40	20	30	5.3	24	2.0	106	0	42
75-06-25	--	--	30	10	20	30	7.4	25	3.0	104	--	44
74-12-17	430	430	1.0	10	10	42	1.0	120	5.1	17	0	120
75-06-24	--	--	1.8	0	0	38	1.6	110	6.6	29	--	120
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH
74-12-17	540	.6	--	.03	.01	--	1420	22	0	46	2620	9
75-06-24	15	.3	--	.99	.03	--	293	120	9	1.5	404	
74-12-17	12	.3	--	1.0	.02	--	179	80	10	1.2	279	8
75-06-24	16	.3	--	1.2	.02	--	192	94	23	1.1	293	
74-12-17	17	.3	--	2.6	.01	--	240	120	31	1.1	368	8
75-06-24	22	.3	--	3.0	.00	--	260	130	40	1.1	387	
74-12-17	11	.3	--	.78	.01	--	205	97	10	1.1	310	8
75-06-25	16	.3	--	.38	.02	--	208	110	20	1.1	312	
74-12-17	170	.6	--	.01	.01	--	465	110	96	5.0	882	8
75-06-24	150	.6	--	.05	.00	--	443	100	78	4.8	828	
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
74-12-17	--	--	--	140								
75-06-24	--	--	--	40								
74-12-17	--	--	--	40								
75-06-24	--	--	--	30								
74-12-17	23.5	--	--	20								
75-06-24	--	--	--	20								
74-12-17	23.5	--	--	20								
75-06-25	--	--	--	30								
74-12-17	22.6	--	--	60								
75-06-24	--	--	--	50								

## DONA ANA COUNTY--Continued

LOCAL IDENT- IFY FILTER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	6FO- LOGIC UNIT	INSTAN-	PUMP	TOTAL	DEPTH	DEPTH	DEPTH
							TANFOUS FLOW RATE (GPM) (720059)	OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (720041)				
23S.01F.04.434	32194610650289		GW	75-05-26	1330	112SNTF	37	3	717		--	
			GW	75-05-26	1740	112SNTF	33	2	717		--	
			GW	75-05-26	2015	112SNTF	21	1	717		--	
23S.01F.10.134	321921106500001		GW	75-02-14	1530	110AVMB	--	--	--	--	--	
	321921106500101		GW	75-06-25	1200	112SNTF	--	--	10		2.00	
	321921106500102		GW	75-06-25	1520	112SNTF	--	--	26		2.00	
	321921106500101		GW	75-09-22	1200	112SNTF	--	--	26		--	
	321921106500102		GW	75-09-22	1201	112SNTF	--	--	10		--	
23S.01F.10.1346	321921106500002		GW	75-02-14	1600	110AVMB	--	--	--	--	--	
23S.01F.11.214	321937106482803		GW	75-08-06	1130	112SNTF	12	110	700		12.50	
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (STO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESI- UM (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED RICA- RONATE (HCO3) (MG/L) (00440)	DIS- SOLVED CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-05-26	677	697	24	10	5	56	8.7	47	3.5	153	--	75
75-05-26	520	540	23	0	150	51	7.0	45	3.2	148	--	68
75-05-26	325	355	23	0	150	54	6.8	46	3.7	150	--	74
75-02-14	--	--	--	--	--	54	11	--	--	200	0	150
75-06-25	6.0	10	--	--	--	100	19	--	--	220	--	210
75-06-25	22	26	--	--	--	91	17	--	--	191	--	240
75-09-22	22	26	--	--	--	130	24	150	--	227	0	300
75-09-22	6.0	10	--	--	--	58	12	98	--	215	0	160
75-02-14	--	--	--	--	--	89	17	--	--	204	0	240
75-08-06	640	660	35	10	50	38	7.9	170	12	297	0	100
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITR- ATE (NR) (MG/L) (01870)	DIS- SOLVED NITR- ATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	
75-05-26	52	.4	--	.04	.01	--	342	180	50	1.5	600	--
75-05-26	40	.4	--	.11	.01	318	311	160	35	1.6	540	--
75-05-26	48	.4	--	.05	.01	--	330	160	40	1.6	580	--
75-02-14	38	--	--	--	--	--	--	180	16	--	719	7.8
75-06-25	110	--	--	--	--	--	--	330	150	--	1000	--
75-06-25	110	--	--	--	--	--	--	300	140	--	1000	--
75-09-22	180	--	--	--	--	--	--	420	240	3.2	1420	7.8
75-09-22	53	--	--	--	--	--	--	190	18	3.1	800	7.9
75-02-14	97	--	--	--	--	--	--	290	120	--	1080	7.8
75-08-06	120	1.4	--	.20	.06	636	632	130	0	6.6	1100	9.0
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BOD (B) (UG/L) (01020)								
75-05-26	20.0	--	--	90								
75-05-26	19.5	--	--	60								
75-05-26	18.5	--	--	60								
75-02-14	--	--	--	--								
75-06-25	18.0	--	--	--								
75-06-25	18.0	--	--	--								
75-09-22	17.0	--	--	--								
75-09-22	19.5	--	--	--								
75-02-14	--	--	--	--								
75-08-06	21.0	--	--	240								

QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

LOCAL IDENTIFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
23S.01E.11.214	321937106482802	GW	75-08-06	2000	112SNTF	7.5	255	700	12.00			
	321937106482801	GW	75-08-07	1410	112SNTF	12	160	700	13.00			
23S.01E.11.223	321936106481601	GW	75-08-07	1600	112SNTF	--	--	305	--			
23S.01E.13.411	321828106473702	GW	75-06-24	1201	112SNTF	--	--	48	25.00			
	321828106473703	GW	75-06-24	1202	112SNTF	--	--	345	25.00			
		GW	75-09-22	1200	112SNTF	--	--	345	--			
23S.01E.13.411A	321828106473701	GW	75-02-13	1650	110AVMB	--	--	--	--			
		GW	75-04-02	1400	110AVMB	--	--	45	24.57			
	321828106473704	GW	75-09-18	1200	112SNTF	--	--	45	--			
23S.01E.34.423	321539106492205	GW	75-02-13	1600	110AVMB	--	--	--	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTER-VAL (FT) (72016)	DIS-SOLVED SILICA (SiO2) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MANGANESE) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)
75-08-06	510	530	26	10	100	37	7.2	67	8.8	160	0	60
75-08-07	384	404	25	960	250	62	10	55	6.1	168	0	82
75-08-07	300	305	23	20	280	46	8.5	41	7.6	158	0	51
75-06-24	44	48	--	--	--	150	45	--	--	440	--	540
75-06-24	341	345	--	--	--	140	25	--	--	239	--	210
75-09-22	341	345	--	--	--	130	23	64	--	236	0	180
75-02-13	--	--	--	--	--	140	26	--	--	242	0	210
75-04-02	40	45	--	--	--	120	30	--	--	351	--	380
75-09-18	41	45	--	--	--	190	48	220	--	386	0	590
75-02-13	--	--	--	--	--	100	16	--	--	266	--	200
DATE OF SAMPLE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)
75-08-06	59	.6	--	.08	.03	341	345	120	0	2.6	650	9.0
75-08-07	70	.5	--	.21	.00	382	396	200	58	1.7	590	8.7
75-08-07	50	.4	--	.06	.00	--	306	150	20	1.5	550	8.5
75-06-24	190	--	--	--	--	--	--	560	200	--	2100	--
75-06-24	150	--	--	--	--	--	--	450	260	--	1200	--
75-09-22	140	--	--	--	--	--	--	420	230	1.4	1150	8.0
75-02-13	150	--	--	--	--	--	--	460	260	--	1210	8.1
75-04-02	160	--	--	--	--	--	--	420	140	--	1930	--
75-09-18	200	--	--	--	--	--	--	670	360	3.7	2050	7.7
75-02-13	91	--	--	--	--	--	--	320	97	--	1130	--
DATE OF SAMPLE	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)								
75-08-06	20.5	--	--	90								
75-08-07	20.5	--	--	80								
75-08-07	--	--	--	--								
75-06-24	22.0	--	--	--								
75-06-24	21.5	--	--	--								
75-09-22	19.0	--	--	--								
75-02-13	--	--	--	--								
75-04-02	21.0	--	--	--								
75-09-18	21.0	--	--	--								
75-02-13	18.0	--	--	--								

## DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
23S.01E.34.423	321539106492201	GW	75-02-13	1700	112SNTF	--	--	--	--			
		GW	75-06-25	1201	112SNTF	3.0	9	9.0	3.00			
	321539106492205	GW	75-06-25	1205	112SNTF	2.0	15	133	4.00			
	321539106492201	GW	75-09-18	1200	112SNTF	--	--	9.0	--			
	321539106492205	GW	75-09-18	1204	112SNTF	--	--	133	--			
23S.01E.34.423R	321539106492202	GW	75-02-13	1640	110AVMB	--	--	--	--			
		GW	75-06-25	1202	112SNTF	2.0	6	18	2.00			
		GW	75-09-18	1201	112SNTF	--	--	18	--			
23S.01F.34.423C	321539106492204	GW	75-02-13	1625	110AVMB	--	--	--	--			
	321539106492203	GW	75-02-13	1641	112SNTF	--	--	--	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-02-13	--	--	--	--	--	64	16	--	--	234	0	190
75-06-25	5.0	9.0	--	--	--	98	23	--	--	230	--	200
75-06-25	129	133	--	--	--	99	16	--	--	250	--	210
75-09-18	5.0	9.0	--	--	--	78	19	71	--	236	0	150
75-09-18	129	133	--	--	--	110	16	120	--	253	0	210
75-02-13	--	--	--	--	--	71	16	--	--	201	0	180
75-06-25	14	18	--	--	--	79	17	--	--	197	--	160
75-09-18	14	18	--	--	--	70	14	83	--	223	0	150
75-02-13	--	--	--	--	--	59	12	--	--	214	0	160
75-02-13	--	--	--	--	--	54	13	--	--	195	0	160
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (BR) (MG/L) (71870)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH0- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH
75-02-13	63	--	--	--	--	--	--	230	38	--	947	7.7
75-06-25	110	--	--	--	--	--	--	340	150	--	1020	--
75-06-25	120	--	--	--	--	--	--	310	110	--	1060	--
75-09-18	58	--	--	--	--	--	--	270	79	1.9	840	7.5
75-09-18	130	--	--	--	--	--	--	340	130	2.8	900	7.9
75-02-13	73	--	--	--	--	--	--	240	75	--	917	7.8
75-06-25	85	--	--	--	--	--	--	270	110	--	840	--
75-09-18	55	--	--	--	--	--	--	230	50	2.4	750	7.5
75-02-13	59	--	--	--	--	--	--	200	24	--	846	7.9
75-02-13	65	--	--	--	--	--	--	190	30	--	851	8.0
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-02-13	--	--	--	--								
75-06-25	19.0	--	--	--								
75-06-25	19.0	--	--	--								
75-09-18	21.0	--	--	--								
75-09-18	18.0	--	--	--								
75-02-13	--	--	--	--								
75-06-25	19.5	--	--	--								
75-09-18	23.0	--	--	--								
75-02-13	18.0	--	--	--								
75-02-13	18.0	--	--	--								

QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

LOCAL IDENT- 1- FIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)
23S.01E.34.423C	321539106442204	GW	75-06-25	1203	112SNTF	1.0	9	35	4.00
	321539106492203	GW	75-06-25	1204	112SNTF	2.0	13	12	4.00
	321539106492204	GW	75-09-18	1202	112SNTF	--	--	35	--
23S.01E.35.424	321544106480801	GW	75-09-18	1203	112SNTF	--	--	72	--
		GW	75-06-19	--	112SNTF	1470	--	80	28.00
23S.02E.05.113	322028106455501	GW	75-06-27	--	112SNTF	900	--	676	--
23S.02E.05.321	322013106454401	GW	75-06-27	--	112SNTF	--	--	620	--
23S.02E.07.411	321914106462501	GW	75-06-30	--	112SNTF	900	--	381	78.00
23S.02E.08.422	321918106450601	GW	75-06-27	--	112SNTF	--	--	682	325
23S.02E.09.332	321843106444801	GW	75-06-27	--	112SNTF	--	--	--	--

DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-06-25	31	35	--	--	--	63	13	--	--	194	--	170
75-06-25	68	72	--	--	--	57	11	--	--	196	--	160
75-09-18	31	35	--	--	--	69	14	94	--	202	0	170
75-09-18	68	72	--	--	--	72	13	100	--	206	0	180
75-06-19	--	--	29	10	--	280	43	250	11	365	--	760
75-06-27	--	--	28	10	0	47	14	120	8.5	235	--	110
75-06-27	392	438	27	10	0	47	17	99	10	213	--	110
75-06-30	281	381	26	50	50	54	12	49	9.9	158	--	79
75-06-27	--	--	29	10	0	96	27	87	9.1	179	--	190
75-06-27	--	--	29	40	0	73	20	79	8.1	178	--	140

DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (CA+MG) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-06-25	63	--	--	--	--	--	--	210	52	--	480	--
75-06-25	52	--	--	--	--	--	--	190	27	--	740	--
75-09-18	63	--	--	--	--	--	--	230	64	2.7	870	7.6
75-09-18	81	--	--	--	--	--	--	230	64	2.9	920	7.8
75-06-19	260	.4	--	.50	--	--	1820	880	580	3.7	2600	--
75-06-27	90	.7	--	.01	.01	526	534	180	0	3.9	780	--
75-06-27	82	.7	--	.12	.02	500	499	190	13	3.1	740	--
75-06-30	62	.5	--	.01	.02	375	371	180	55	1.6	550	--
75-06-27	130	.6	--	.30	.01	703	658	350	200	2.0	950	--
75-06-27	92	.6	--	.89	.03	547	534	260	120	2.1	800	--

DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
75-06-25	21.0	--	--	--
75-06-25	19.0	--	--	--
75-09-18	19.5	--	--	--
75-09-18	19.0	--	--	--
75-06-19	18.5	--	--	250
75-06-27	23.0	--	--	160
75-06-27	26.5	--	--	150
75-06-30	19.5	--	--	70
75-06-27	23.0	--	--	120
75-06-27	23.0	--	--	100

QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

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LOCAL IDENT- I- FIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)		
23S.02E.16.114	321842106444801		GW	75-06-30	--	112SNTF	1050	--	680	235		
23S.02E.16.314	321819106445201		GW	75-06-30	--	112SNTF	--	--	608	200		
23S.02E.17.243	321832106451301		GW	75-06-30	--	112SNTF	--	--	700	178		
23S.02E.17.433	321853106452101		GW	75-06-27	--	112SNTF	--	--	730	230		
23S.02E.18.313	321818106470401		GW	75-02-12	1330	112SNTF	--	--	--	--		
	321818106470301		GW	75-06-23	1201	112SNTF	--	--	160	27.00		
			GW	75-09-18	1200	112SNTF	3.0	--	160	--		
23S.02E.18.313A	321818106470402		GW	75-02-13	1130	110AVMB	--	--	--	--		
	321818106470302		GW	75-06-23	1202	112SNTF	--	--	78	27.00		
			GW	75-09-18	1201	112SNTF	2.0	--	78	--		
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SODIUM SODIUM (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-06-30	--	--	28	30	30	65	17	68	8.6	171	--	110
75-06-30	381	591	28	30	80	58	12	59	6.8	159	--	88
75-06-30	410	510	27	30	20	36	9.4	62	7.9	154	--	63
75-06-27	230	315	28	30	20	45	15	63	6.8	163	--	88
75-02-12	--	--	--	--	--	100	18	--	--	215	0	150
75-06-23	157	160	--	--	--	110	17	--	--	208	--	160
75-09-18	157	160	--	--	--	100	16	54	--	213	0	150
75-02-13	--	--	--	--	--	140	19	--	--	349	--	300
75-06-23	75	78	--	--	--	130	18	--	--	343	--	290
75-09-18	75	78	--	--	--	130	18	130	--	344	0	300
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (CA,MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH		
75-06-30	81	.6	--	.52	.03	469	465	230	92	1.9	680	--
75-06-30	73	.7	--	.01	.01	412	404	190	64	1.8	600	--
75-06-30	52	.7	--	.00	.01	333	334	130	2	2.4	480	--
75-06-27	60	.8	--	.30	.01	380	388	170	40	2.1	580	--
75-02-12	80	--	--	--	--	--	--	320	140	--	880	8.0
75-06-23	82	--	--	--	--	--	--	340	170	--	800	--
75-09-18	80	--	--	--	--	--	--	320	140	1.3	840	7.9
75-02-13	83	--	--	--	--	--	--	430	140	--	1330	--
75-06-23	86	--	--	--	--	--	--	400	120	--	1120	--
75-09-18	85	--	--	--	--	--	--	400	120	2.8	1220	7.9
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-06-30	24.5	--	--	110								
75-06-30	26.0	--	--	90								
75-06-30	25.5	--	--	80								
75-06-27	24.0	--	--	100								
75-02-12	19.0	--	--	--								
75-06-23	20.0	--	--	--								
75-09-18	20.0	--	--	--								
75-02-13	20.0	--	--	--								
75-06-23	21.5	--	--	--								
75-09-18	22.0	--	--	--								

## DONA ANA COUNTY--Continued

LOCAL IDENTIFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
235.02F.18.313A	321818106470403	Gw	75-02-12	1400	110AVMB	--	--	--	--			
	321818106470303	Gw	75-06-23	1203	112SNTF	--	--	48	27.00			
		Gw	75-04-18	1202	112SNTF	--	--	48	--			
235.02F.18.313C	321818106470404	Gw	75-02-12	1430	116AVMB	--	--	--	--			
	321818106470304	Gw	75-06-23	1204	112SNTF	--	--	37	27.00			
		Gw	75-09-18	1203	112SNTF	--	--	35	--			
235.02F.18.313D	321818106470305	Gw	75-09-18	1205	112SNTF	--	--	28	1.00			
235.02F.21.221	321747106441701	Gw	75-06-30	--	112SNTF	500	--	393	237			
235.02F.34.334	3215571064935101	Gw	75-09-08	1200	112SNTF	--	--	235	--			
235.02F.34.412	3215551064432201	Gw	75-09-08	1200	112SNTF	40	45	486	181			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTER-VAL (FT) (72016)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)
75-02-12	--	--	--	--	--	170	25	--	--	360	0	410
75-06-23	44	48	--	--	--	190	26	--	--	258	--	540
75-09-18	45	48	--	--	--	220	27	160	--	329	0	550
75-02-12	--	--	--	--	--	230	31	--	--	316	0	640
75-06-23	2.5	35	--	--	--	210	28	--	--	312	--	530
75-09-18	25	35	--	--	--	210	27	160	--	334	0	550
75-09-18	18	28	--	--	--	220	35	170	--	426	0	540
75-06-30	250	393	36	20	0	140	31	110	9.6	271	--	180
75-09-08	--	--	--	--	--	39	7.5	100	--	217	0	97
75-09-08	--	--	--	--	--	66	13	180	--	319	0	140
DATE OF SAMPLE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)
75-02-12	97	--	--	--	--	--	--	530	240	--	1590	7.9
75-06-23	110	--	--	--	--	--	--	580	370	--	1500	--
75-09-18	110	--	--	--	--	--	--	660	390	2.7	1700	7.7
75-02-12	100	--	--	--	--	--	--	700	440	--	1900	7.4
75-06-23	110	--	--	--	--	--	--	640	380	--	1400	--
75-09-18	100	--	--	--	--	--	--	640	360	2.8	1840	7.6
75-09-18	100	--	--	--	--	--	--	690	340	2.8	1870	7.5
75-06-30	220	.4	--	.11	.03	890	861	480	260	2.2	1150	--
75-09-08	54	--	--	--	--	--	--	130	0	3.8	570	7.9
75-09-08	170	--	--	--	--	--	--	220	0	5.3	1020	7.5
DATE OF SAMPLE	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)								
75-02-12	--	--	--	--								
75-06-23	23.0	--	--	--								
75-09-18	22.0	--	--	--								
75-02-12	25.0	--	--	--								
75-06-23	25.0	--	--	--								
75-09-18	--	--	--	--								
75-09-18	--	--	--	--								
75-06-30	24.0	--	--	130								
75-09-08	22.0	--	--	--								
75-09-08	36.5	--	--	--								



## DONA ANA COUNTY--Continued

LOCAL IDENTIFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
24S.01E.04.123	321422106515303	GW	75-01-30	1203	112SNTF	19	--	--	--			
	321422106515302	GW	75-02-01	1202	112SNTF	2.0	--	--	--			
	321422106515301	GW	75-02-02	1201	112SNTF	--	--	--	--			
24S.01E.13.221A	321335106472101	GW	75-08-04	1455	112SNTF	--	--	700	--			
24S.01W.22.123	321233106560001	GW	75-03-06	1430	110AVMB	--	--	--	--			
24S.01W.25.422	321128106531601	GW	75-02-03	--	112SNTF	--	--	370	371			
24S.02E.08.144	321408106454101	GW	75-06-19	--	112SNTF	1860	--	--	--			
24S.02E.17.322	321308106453801	GW	75-08-05	1400	112SNTF	--	5	--	--			
24S.02E.21.123	321239106444501	GW	75-08-04	1435	112SNTF	--	--	--	--			
24S.02E.35.244	321044106420001	GW	75-07-16	1200	112SNTF	--	--	138	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)
75-01-30	1380	1400	27	30	60	20	2.8	140	13	288	0	73
75-02-01	754	774	21	60	130	66	7.6	110	4.3	172	0	170
75-02-02	568	588	18	10	110	56	8.9	110	4.1	150	0	160
75-08-04	--	--	23	20	--	47	6.6	47	3.3	155	0	62
75-03-06	--	--	30	10	70	50	10	270	35	316	--	160
75-02-03	--	--	26	--	--	26	4.4	110	6.1	167	0	110
75-06-19	--	--	26	0	--	160	27	240	8.0	327	--	550
75-08-05	--	--	24	40	0	160	24	63	4.8	185	0	220
75-08-04	--	--	24	10	--	100	19	57	4.2	222	0	160
75-07-16	132	136	--	20	10	89	16	180	29	192	0	220
DATE OF SAMPLE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (SUM OF RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED TUEENTS (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)
75-01-30	40	2.3	--	.04	.05	462	461	62	0	7.8	736	8.3
75-02-01	91	.5	--	.02	.04	577	556	200	59	3.4	909	8.0
75-02-02	94	.6	--	.02	.04	548	476	180	57	3.6	884	8.1
75-08-04	41	.3	--	.01	.00	303	307	140	17	1.7	490	7.1
75-03-06	230	2.4	--	2.4	.04	--	954	170	0	9.1	1610	--
75-02-03	57	.9	--	.05	.05	431	423	83	0	5.3	688	8.0
75-06-19	150	.5	--	.50	--	--	1330	510	240	4.6	2000	--
75-08-05	180	.3	--	.02	.01	327	767	500	350	1.2	540	7.1
75-08-04	78	.3	--	.08	.01	564	552	330	150	1.4	840	7.1
75-07-16	220	--	--	--	--	--	--	290	130	4.6	1500	7.1
DATE OF SAMPLE	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)								
75-01-30	21.0	--	--	180								
75-02-01	19.0	--	--	100								
75-02-02	19.0	--	--	100								
75-08-04	19.0	--	--	80								
75-03-06	23.0	--	--	--								
75-02-03	--	--	--	--								
75-06-19	19.5	--	--	290								
75-08-05	19.0	--	--	80								
75-08-04	20.0	--	--	50								
75-07-16	24.5	--	--	120								

QUALITY OF GROUND WATER  
 DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
245.02E.36.121	321046106415604	GW	75-07-17	1100	112SNTF	33	120	823	16.00			
	321046106415603	GW	75-07-17	1735	112SNTF	25	120	823	15.00			
	321046106415602	GW	75-07-18	1000	112SNTF	22	90	823	16.40			
	321046106415601	GW	75-09-18	1330	112SNTF	--	75	823	14.00			
245.02E.03.224	321003106430201	GW	74-11-06	1204	112SNTF	25	--	--	--			
		GW	74-11-07	1201	112SNTF	8.0	--	--	--			
		GW	74-11-07	1203	112SNTF	20	--	--	--			
		GW	74-11-07	1207	112SNTF	20	--	--	--			
245.02E.04.422	320946106440801	GW	75-06-19	--	112SNTF	920	--	90	35.00			
245.03E.08.214	320908106391601	GW	75-06-19	--	112SNTF	--	--	250	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-07-17	745	765	27	40	30	24	5.9	74	12	168	0	63
75-07-17	507	527	36	20	50	40	10	66	14	161	0	69
75-07-18	392	412	39	30	130	45	12	61	19	160	0	67
75-09-18	257	277	40	20	180	67	14	120	29	170	0	140
74-11-06	1760	1720	30	10	0	18	.1	180	2.2	83	2	200
74-11-07	298	318	26	360	90	42	9.3	63	2.9	152	0	63
74-11-07	1180	1200	17	120	240	45	3.8	94	4.1	120	0	100
74-11-07	598	618	28	510	10	36	8.8	59	3.2	153	0	55
75-06-19	--	--	31	0	--	170	24	170	8.0	294	--	450
75-06-19	--	--	52	10	--	170	42	510	48	547	--	390
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (NR) (MG/L) (71870)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	
75-07-17	41	1.0	--	.12	.08	--	331	84	0	3.5	560	7.3
75-07-17	68	1.0	--	.15	.03	387	384	140	9	2.4	670	7.3
75-07-18	80	1.5	--	.05	.01	--	404	160	31	2.1	700	7.3
75-09-18	160	1.9	--	.13	.91	--	657	230	86	3.5	1150	7.1
74-11-06	100	3.5	--	.64	.00	589	580	45	0	12	956	8.4
74-11-07	55	.4	--	.34	.01	464	339	140	15	2.3	574	7.9
74-11-07	74	.3	--	.50	.00	395	400	130	32	3.6	644	8.1
74-11-07	47	.4	--	.11	.00	322	314	130	4	2.3	527	8.3
75-06-19	140	.5	--	.37	--	--	1140	520	280	3.2	1700	--
75-06-19	610	1.8	--	5.7	--	--	2120	600	150	9.1	3350	--
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-07-17	23.3	--	--	110								
75-07-17	22.0	--	--	70								
75-07-18	21.3	--	--	90								
75-09-18	21.0	--	--	100								
74-11-06	26.0	--	--	230								
74-11-07	18.0	--	--	90								
74-11-07	20.0	--	--	120								
74-11-07	18.0	--	--	90								
75-06-19	19.5	--	--	200								
75-06-19	30.0	--	--	820								

QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

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LOCAL IDENT- IFY FIFR	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)
25S.03F.31.111	320548106405401	GW	75-06-19	--	112SNTF	730	--	--	--
26S.01W.25.000	320054106533901	GW	75-03-31	1600	112SNTF	--	--	--	--
26S.02E.12.421	320336106411101	GW	75-02-13	1415	112SNTF	--	--	--	--
		GW	75-06-24	1201	112SNTF	--	--	18	7.00
		GW	75-09-18	1200	112SNTF	--	--	18	--
26S.02E.12.421A	320336106411102	GW	75-02-13	1330	112SNTF	--	--	--	--
		GW	75-06-24	1202	112SNTF	--	--	24	7.00
		GW	75-09-18	1201	112SNTF	--	--	24	--
26S.02E.12.421B	320336106411103	GW	75-02-13	1320	112SNTF	--	--	--	--
		GW	75-06-24	1203	112SNTF	--	--	35	7.00

DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)
75-06-19	--	--	33	10	--	260	49	300	17	433	--	700
75-03-31	--	--	40	30	10	13	10	170	11	261	--	100
75-02-13	--	--	--	--	--	100	17	--	--	276	0	270
75-06-24	14	18	--	--	--	110	19	--	--	229	--	300
75-09-18	14	18	--	--	--	93	17	110	--	209	0	220
75-02-13	--	--	--	--	--	82	18	--	--	209	0	220
75-06-24	20	24	--	--	--	78	14	--	--	192	--	200
75-09-18	20	24	--	--	--	88	16	110	--	209	0	230
75-02-13	--	--	--	--	--	80	15	--	--	206	0	210
75-06-24	31	35	--	--	--	82	15	--	--	200	--	220

DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-06-19	310	.4	--	.56	--	--	1890	850	500	4.5	2800	--
75-03-31	90	1.5	--	.03	.06	--	565	74	0	8.6	902	--
75-02-13	81	--	--	--	--	--	--	320	94	--	1130	7.6
75-06-24	88	--	--	--	--	--	--	350	170	--	1200	--
75-09-18	110	--	--	--	--	--	--	300	130	2.8	1020	7.7
75-02-13	75	--	--	--	--	--	--	280	110	--	1010	8.0
75-06-24	70	--	--	--	--	--	--	250	95	--	922	--
75-09-18	81	--	--	--	--	--	--	290	110	2.8	1000	7.8
75-02-13	72	--	--	--	--	--	--	260	91	--	967	7.9
75-06-24	74	--	--	--	--	--	--	270	100	--	920	--

DATE OF SAMPLE	TEMPER- ATURE (DFG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
75-06-19	19.0	--	--	270
75-03-31	--	--	--	--
75-02-13	--	--	--	--
75-06-24	18.0	--	--	--
75-09-18	19.5	--	--	--
75-02-13	19.0	--	--	--
75-06-24	20.5	--	--	--
75-09-18	19.0	--	--	--
75-02-13	19.0	--	--	--
75-06-24	20.5	--	--	--

QUALITY OF GROUND WATER  
 DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
26S.02E.12.421B	320336106411105	GW	75-09-18	1202	112SNTF	--	--	35	--			
26S.02E.12.421C	320336106411104	GW	75-02-13	1300	112SNTF	--	--	--	--			
		GW	75-06-24	1204	112SNTF	--	--	86	7.00			
		GW	75-09-18	1203	112SNTF	--	--	86	--			
26S.02E.12.421D	320336106411105	GW	75-02-13	1230	112SNTF	--	--	--	--			
		GW	75-06-24	1205	112SNTF	--	--	155	7.00			
		GW	75-09-18	1204	112SNTF	--	--	155	--			
26S.03E.01.344	320405106373101	GW	75-02-13	0930	112SNTF	--	--	--	--			
		GW	75-06-24	1201	112SNTF	--	--	27	10.00			
		GW	75-09-18	1200	112SNTF	--	--	26	--			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-09-18	11	35	--	--	--	81	14	100	--	200	0	210
75-02-13	--	--	--	--	--	71	14	--	--	183	--	200
75-06-24	73	76	--	--	--	75	14	--	--	178	--	200
75-09-18	82	86	--	--	--	73	14	98	--	187	0	200
75-02-13	--	--	--	--	--	68	15	--	--	175	0	170
75-06-24	151	155	--	--	--	72	14	--	--	164	--	180
75-09-18	151	155	--	--	--	64	13	80	--	172	0	170
75-02-13	--	--	--	--	--	95	36	--	--	767	0	1400
75-06-24	16	26	--	--	--	76	29	--	--	753	--	1100
75-09-18	22	26	--	--	--	84	32	1100	--	748	0	1000
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITR- ITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITR- ATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-09-18	71	--	--	--	--	--	--	260	96	2.7	920	8.0
75-02-13	72	--	--	--	--	--	--	240	85	--	917	--
75-06-24	71	--	--	--	--	--	--	250	99	--	850	--
75-09-18	70	--	--	--	--	--	--	240	87	2.8	900	7.9
75-02-13	58	--	--	--	--	--	--	230	86	--	816	8.0
75-06-24	59	--	--	--	--	--	--	240	100	--	750	--
75-09-18	58	--	--	--	--	--	--	210	72	2.4	780	8.1
75-02-13	1000	--	--	--	--	--	--	390	0	--	6170	8.1
75-06-24	920	--	--	--	--	--	--	310	0	--	5500	--
75-09-18	870	--	--	--	--	--	--	340	0	26	5500	8.0
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-09-18	19.0	--	--	--								
75-02-13	19.0	--	--	--								
75-06-24	20.5	--	--	--								
75-09-18	19.5	--	--	--								
75-02-13	--	--	--	--								
75-06-24	21.0	--	--	--								
75-09-18	19.5	--	--	--								
75-02-13	--	--	--	--								
75-06-24	18.0	--	--	--								
75-09-18	22.0	--	--	--								

## DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)		
26S.03E.03.344A	320405106373102	GW	75-02-13	1000	112SNTF	--	--	--	--	--		
		GW	75-06-24	1202	112SNTF	--	--	--	36	10.00		
		GW	75-09-18	1201	112SNTF	--	--	--	36	--		
26S.03E.03.344B	320405106373103	GW	75-02-13	1045	112SNTF	--	--	--	--	--		
		GW	75-06-24	1203	112SNTF	--	--	--	48	9.00		
		GW	75-09-18	1202	112SNTF	--	--	--	48	--		
26S.03E.03.344C	320405106373104	GW	75-02-13	1025	112SNTF	--	--	--	--	--		
		GW	75-06-24	1204	112SNTF	--	--	--	75	11.00		
		GW	75-09-18	1203	112SNTF	--	--	--	75	--		
26S.03E.03.344D	320405106373105	GW	75-02-13	1100	112SNTF	--	--	--	--	--		
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-02-13	--	--	--	--	--	180	71	--	--	613	0	920
75-06-24	26	36	--	--	--	150	55	--	--	626	--	970
75-09-18	32	36	--	--	--	120	43	820	--	510	0	700
75-02-13	--	--	--	--	--	150	57	--	--	515	0	750
75-06-24	45	48	--	--	--	130	55	--	--	431	--	680
75-09-18	44	48	--	--	--	150	58	640	--	405	0	640
75-02-13	--	--	--	--	--	53	45	--	--	495	0	200
75-06-24	72	75	--	--	--	130	55	--	--	446	--	250
75-09-18	71	75	--	--	--	130	50	330	--	253	0	280
75-02-13	--	--	--	--	--	110	49	--	--	453	0	200
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-02-13	830	--	--	--	--	--	--	740	240	--	5130	7.7
75-06-24	810	--	--	--	--	--	--	600	88	--	4500	--
75-09-18	750	--	--	--	--	--	--	480	58	16	4300	7.8
75-02-13	780	--	--	--	--	--	--	610	190	--	4720	7.7
75-06-24	780	--	--	--	--	--	--	550	200	--	4000	--
75-09-18	770	--	--	--	--	--	--	610	280	11	4300	7.6
75-02-13	400	--	--	--	--	--	--	320	0	--	2440	7.6
75-06-24	480	--	--	--	--	--	--	550	190	--	2600	--
75-09-18	500	--	--	--	--	--	--	530	320	6.2	2350	7.2
75-02-13	400	--	--	--	--	--	--	440	110	--	2320	7.4
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-02-13	19.0	--	--	--								
75-06-24	21.5	--	--	--								
75-09-18	19.5	--	--	--								
75-02-13	14.0	--	--	--								
75-06-24	20.0	--	--	--								
75-09-18	19.0	--	--	--								
75-02-13	18.0	--	--	--								
75-06-24	20.5	--	--	--								
75-09-18	20.0	--	--	--								
75-02-13	--	--	--	--								

## DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
26S.03E.03.344D	320405106373105	GW	75-06-24	1205	112SNTF	--	--	150	12.00			
		GW	75-09-18	1204	112SNTF	--	--	150	--			
26S.03E.08.143	320340106394201	GW	75-09-01	1810	112SNTF	--	--	1700	--			
		GW	75-09-02	1200	112SNTF	--	--	170	27.00			
		GW	75-09-03	1200	112SNTF	--	--	1700	--			
		GW	75-09-04	0900	112SNTF	--	--	--	--			
		GW	75-09-04	1200	112SNTF	--	--	1700	--			
26S.03E.26.224	320110106355401	GW	75-06-12	1200	112SNTF	350	--	--	--			
26S.03E.35.243A	320017106360501	GW	75-06-16	--	112SNTF	--	--	450	--			
27S.01W.32.000	315542106575701	GW	75-03-31	1500	112SNTF	--	--	--	217			
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED PO- TAS- SIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
75-06-24	147	150	--	--	--	120	46	--	--	473	--	190
75-09-18	146	150	--	--	--	120	41	310	--	402	0	200
75-09-01	1634	1654	15	540	30	14	8	140	4.0	184	0	120
75-09-02	1410	1430	30	50	0	11	1.2	83	3.4	93	0	80
75-09-03	945	965	27	0	60	24	9.2	88	4.8	138	0	110
75-09-04	645	685	38	0	60	22	7.3	180	9.5	318	0	140
75-09-04	480	420	38	10	30	24	20	160	4.3	324	1	120
75-06-12	42	62	39	10	0	84	27	310	35	359	0	220
75-06-16	--	--	41	30	--	49	8.1	320	12	276	--	160
75-03-31	--	--	48	70	0	2.6	1.2	300	5.4	525	--	100
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRITE PLUS PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (CA+MG) (MG/L) (00900)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-06-24	400	--	--	--	--	--	--	490	100	--	2200	--
75-09-18	410	--	--	--	--	--	--	470	140	6.2	2200	7.2
75-09-01	57	.8	--	1.0	.02	--	447	38	0	9.9	730	8.1
75-09-02	44	.5	--	.18	.01	292	300	33	0	6.3	490	7.5
75-09-03	46	.4	--	.48	.01	354	380	98	0	3.9	620	7.4
75-09-04	52	.7	--	.50	.01	563	605	85	0	8.5	950	8.3
75-09-04	56	.7	--	.37	.01	562	586	140	0	5.8	950	9.0
75-06-12	360	1.0	--	1.9	.01	--	1260	320	26	7.5	2110	7.1
75-06-16	320	.9	--	.02	--	--	1050	160	0	11	1800	--
75-03-31	42	7.5	--	9.0	.27	--	806	11	0	39	1210	--
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-06-24	22.5	--	--	--								
75-09-18	22.0	--	--	--								
75-09-01	27.0	--	--	--								
75-09-02	24.5	--	--	90								
75-09-03	27.0	--	--	110								
75-09-04	23.5	--	--	170								
75-09-04	23.0	--	--	180								
75-06-12	20.5	--	--	--								
75-06-16	26.0	--	11	280								
75-03-31	--	--	--	--								

QUALITY OF GROUND WATER

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DONA ANA COUNTY--Continued

LOCAL IDENT- I- FTR	STATION	NUMMER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)		
275.03E.09.242	315830106380801		GW	75-06-19	1700	112SNTF	1500	--	--	--		
275.03E.20.324	315631106393301		GW	75-07-24	1200	112SNTF	--	--	60	--		
275.03E.20.432	315622106391703		GW	75-07-24	0945	112SNTF	30	65	700	13.00		
	315622106391702		GW	75-07-24	1400	112SNTF	32	80	700	12.00		
	315622106391701		GW	75-07-24	1700	112SNTF	23	65	700	12.00		
295.03E.02.122	315426106362501		GW	75-06-19	1100	112SNTF	1450	--	--	--		
295.03E.12.341	314746106353601		GW	74-12-03	--	112SNTF	--	--	--	--		
295.03E.12.422	314759106345701		GW	74-12-04	--	112SNTF	--	--	--	--		
295.03E.13.223	313505106472303		GW	75-08-01	1200	112SNTF	--	--	450	180		
	313505106472302		GW	75-08-01	1200	112SNTF	--	--	450	180		
295.04E.18.233	313505106472301		GW	75-08-01	1200	112SNTF	--	--	450	--		
	314710106342201		GW	74-12-03	--	112SNTF	--	--	--	--		
DATE OF SAMPLE	DEPTH TO TOP OF INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	
75-06-19	--	--	24	10	--	86	17	110	6.4	233	--	210
75-07-24	55	60	36	30	90	24	5.0	200	3.3	213	0	210
75-07-24	640	660	40	20	0	7.3	.5	87	1.3	95	0	84
75-07-24	450	470	40	30	0	6.3	.7	170	1.8	207	0	140
75-07-24	195	215	41	50	10	7.7	1.5	200	2.3	291	0	160
75-06-19	--	--	41	20	--	120	10	230	4.3	231	--	420
74-12-03	--	--	29	--	--	38	3.3	100	5.0	90	0	190
74-12-04	--	--	--	--	--	250	11	--	--	37	0	990
75-08-01	390	410	21	30	100	170	8.9	740	7.6	41	0	1200
75-08-01	300	320	31	20	100	290	6.9	750	9.2	32	0	1500
75-08-01	214	234	8.8	20	330	140	23	390	12	67	0	780
74-12-03	--	--	26	--	--	130	24	220	23	103	0	460
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (71870)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
75-06-19	79	.5	--	.14	--	--	649	280	94	2.8	1050	--
75-07-24	97	1.1	--	.02	.01	--	682	81	0	9.7	1150	7.5
75-07-24	35	1.5	--	.04	.01	--	304	20	0	8.4	490	7.4
75-07-24	59	2.1	--	.07	.01	--	523	19	0	17	890	7.6
75-07-24	44	2.2	--	.14	.02	--	603	25	0	17	1000	7.7
75-06-19	180	.8	--	.16	--	--	1130	370	180	5.2	1800	--
74-12-03	39	.7	--	2.2	.04	476	459	110	36	4.2	731	8.0
74-12-04	520	--	--	--	--	--	--	670	640	--	3630	8.0
75-08-01	610	1.3	--	.35	.00	--	2780	460	430	15	3450	7.9
75-08-01	580	1.0	--	.15	.01	--	3180	750	730	12	3700	8.0
75-08-01	300	.9	--	3.5	.00	--	1700	440	390	8.1	2200	7.7
74-12-03	220	.9	--	12	.04	1220	1210	420	340	4.7	1840	8.0
DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)								
75-06-19	20.5	--	--	130								
75-07-24	--	--	--	--								
75-07-24	33.3	--	--	180								
75-07-24	30.5	--	--	360								
75-07-24	25.6	--	--	360								
75-06-19	20.0	--	--	220								
74-12-03	13.5	1	--	--								
74-12-04	13.5	--	--	--								
75-08-01	29.5	--	--	--								
75-08-01	29.0	--	--	--								
75-08-01	29.5	--	--	--								
74-12-03	25.5	3	--	--								

QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)		
215.01W.10.213	323001106450101		GW	74-12-04	1540	--	--	780	--	--		
225.02F.31.444	322045106461001		GW	75-06-30	--	1	100	160	1	--		
235.01F.04.434	321946106502801		GW	75-05-26	1740	4	0	60	1	--		
235.01E.11.214	321937106442803		GW	75-08-06	1130	2	<200	240	0	--		
	321937106442802		GW	75-08-06	2000	--	<200	90	0	--		
	321937106442801		GW	75-08-07	1410	4	<200	80	0	--		
235.02F.05.113	322028106455501		GW	75-06-27	--	1	0	160	0	--		
235.02F.05.321	322013106454401		GW	75-06-27	--	1	100	150	1	--		
235.02F.07.411	321914106442501		GW	75-06-30	--	3	0	70	0	--		
235.02F.08.422	321914106450601		GW	75-06-27	--	1	0	120	0	--		
DATE OF SAMPLE	HF XA- VALENT CHROM- MIUM (CRM) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- TOTAL IRON (FF) (UG/L) (01045)	DIS- SOLVED IRON (FF) (UG/L) (01046)	TOTAL LEAD (PR) (UG/L) (01051)	DIS- SOLVED LEAD (PR) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED SILV- NIUM (SF) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)
74-12-04	--	--	--	--	--	--	1100	--	--	--	--	--
75-06-30	0	1	--	10	100	0	--	0	.0	--	0	0
75-05-26	0	0	--	0	<100	1	--	150	.0	--	0	0
75-08-06	0	1	--	10	--	1	--	50	--	--	1	0
75-08-06	0	1	--	10	<100	0	--	100	.0	--	0	0
75-08-07	0	1	--	960	--	3	--	250	.0	--	1	0
75-06-27	0	0	--	10	<100	0	--	0	.0	--	0	0
75-06-27	0	0	--	10	<100	0	--	0	.0	--	0	0
75-06-30	0	0	--	50	100	0	--	50	.0	--	0	0
75-06-27	0	0	--	10	<100	0	--	0	.0	--	2	0
DATE OF SAMPLE	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	74-12-04	75-06-30	75-05-26	75-08-06	75-08-06	75-08-07	75-06-27	75-06-27	75-06-30	75-06-27	
		--	10	0	20	90	70	10	0	0	0	



QUALITY OF GROUND WATER  
DONA ANA COUNTY--Continued

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LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
23S.02E.09.332	321843106444801	GW	75-06-27	--	1	100	100	0	--
23S.02E.16.114	321842106444401	GW	75-06-30	--	2	100	110	1	--
23S.02E.16.314	321819106445201	GW	75-06-30	--	2	0	90	0	--
23S.02E.17.243	321832106451301	GW	75-06-30	--	1	0	80	0	--
23S.02E.17.433	321853106452101	GW	75-06-27	--	2	0	100	1	--
23S.02E.21.221	321757106441701	GW	75-06-30	--	2	0	130	0	--
23S.02E.34.334	321557106435101	GW	75-09-08	1200	--	--	--	--	--
	321527106435101	GW	75-09-08	1200	--	--	--	--	--
23S.02E.34.412	321555106432201	GW	75-09-08	1200	--	--	--	--	--
24S.01E.08.123	321422106515303	GW	75-01-30	1203	2	<100	180	0	--
	321422106515302	GW	75-02-01	1202	2	<100	100	0	--
	321422106515301	GW	75-02-02	1201	0	<100	100	1	--
24S.07E.36.121	321046106415603	GW	75-07-17	1735	5	<200	70	1	--
25S.02E.03.224	321083106430201	GW	74-11-06	1204	7	<100	230	--	--
		GW	74-11-07	1201	5	<100	90	11	--
		GW	74-11-07	1203	0	<100	120	14	--
		GW	74-11-07	1207	2	<100	90	--	--
24S.03E.08.143	320340106394201	GW	75-09-02	1200	6	<200	90	0	10
		GW	75-09-03	1200	3	<200	110	0	10
		GW	75-09-04	0900	7	<200	170	0	10
		GW	75-09-04	1200	6	<200	180	0	10

DATE OF SAMPLE	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01900)	DIS- SOLVED MERCURY (HG) (UG/L) (01890)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)
75-06-27	0	0	--	40	<100	0	--	0	.0	--	1	0
75-06-30	0	0	--	30	<100	0	--	30	.0	--	1	0
75-06-30	0	0	--	30	<100	0	--	80	.0	--	1	0
75-06-30	0	0	--	30	<100	0	--	20	.0	--	0	0
75-06-27	0	0	--	30	<100	0	--	20	.0	--	0	0
75-06-30	0	0	--	20	<100	0	--	0	.0	--	2	0
75-09-08	--	--	60	--	--	--	--	--	--	--	--	--
75-09-08	--	--	60	--	--	--	--	--	--	--	--	--
75-09-08	--	--	2000	--	--	--	--	--	--	--	--	--
75-01-30	0	2	--	30	<100	3	--	60	.2	--	0	1
75-02-01	0	1	--	60	<100	2	--	130	.0	--	0	0
75-02-02	0	1	--	10	<100	0	--	110	.0	--	1	0
74-07-17	0	2	--	20	<100	1	--	50	--	--	0	0
74-11-06	0	--	--	10	<100	--	--	0	<.1	--	--	--
74-11-07	0	5	--	360	<100	11	--	90	<.1	--	--	1
74-11-07	0	2	--	120	<100	5	--	240	<.1	--	0	1
74-11-07	0	--	--	510	<100	--	--	10	.1	--	0	--
75-09-02	0	2	--	50	--	1	--	0	--	.0	0	0
75-09-02	0	0	--	0	--	2	--	60	--	.0	0	0
75-09-04	0	0	--	0	--	1	--	60	--	.7	0	0
75-09-04	0	0	--	10	--	2	--	30	--	.0	0	0

DATE  
OF  
SAMPLE

DIS-  
SOLVED  
ZINC  
(ZN)  
(UG/L)  
(01090)

75-06-27 0  
75-06-30 0  
75-06-30 10  
75-06-30 10  
75-06-27 10

75-06-30 0  
75-09-08 --  
75-09-08 --  
75-09-08 --  
75-01-30 50

75-02-01 20  
75-02-02 20  
75-07-17 0  
74-11-06 0  
74-11-07 10

74-11-07 20  
74-11-07 10  
75-09-02 0  
75-09-03 10  
75-09-04 0

75-09-04 0

## EDDY COUNTY

LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEOLOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (72004)	PUMP OR FLOW PERIOD TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)		
21S.27E.24.23243	322755104081401		GW	75-04-09	0900	312RSLR	--	--	275	56.00		
			GW	75-04-12	1000	312RSLR	5.0	30	307	--		
			GW	75-06-05	1000	312RSLR	300	14	1377	100		
21S.29E.12.400	322925103562001		GW	75-04-18	1000	312CLBR	--	--	--	--		
21S.31E.35.4214	322559103443401		GW	75-09-14	1230	312CSTL	--	--	2714	--		
			GW	75-09-14	1430	312CSTL	--	--	2718	--		
			GW	75-09-14	1505	--	--	--	--	--		
			GW	75-09-14	1530	312CSTL	--	--	2718	--		
22S.30E.18.110	322340103554501		SP	75-04-18	1700	--	--	--	--	--		
23S.29E.04.430	321940103593501		SP	75-04-19	1300	--	--	--	--	--		
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE (FT) (72016)	DIS-SOLVED SILICA (SiO2) (MG/L) (00955)	DIS-SOLVED IRON (FF) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	RICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	TOTAL SULFIDE (S) (MG/L) (00745)
75-04-09	252	260	21	--	--	600	240	400	25	157	--	--
75-04-12	247	307	17	--	--	1300	230	110	1920	--	--	--
75-06-05	1075	1377	16	--	--	1200	480	11000	290	277	--	--
75-04-18	--	--	--	--	--	--	--	27000	3800	--	--	--
75-09-14	2675	2718	16	10	9500	600	440	120000	4500	2600	0	580
75-09-14	2675	2718	12	3000	11000	340	460	120000	3600	--	0	590
75-09-14	--	--	--	--	--	360	380	120000	4700	--	--	--
75-09-14	2675	2718	20	3500	11000	340	460	120000	3600	--	0	530
75-04-18	--	--	--	--	--	--	--	56000	12000	--	--	--
75-04-19	--	--	--	--	--	--	--	110000	11000	--	--	--
DATE OF SAMPLE	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMINE (BR) (MG/L) (71870)	IODINE (I) (MG/L) (71865)	DIS-SOLVED NITRIT-PLUS NITRATE (N) (MG/L) (00831)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUE- NTS) (MG/L) (70301)
75-04-09	2300	600	.9	--	--	2.6	--	--	--	--	--	4280
75-04-12	1200	740	.4	--	--	1.7	--	--	--	--	--	4540
75-06-05	4100	18000	2.2	--	--	.01	--	--	--	--	--	35200
75-04-18	--	56000	--	20	--	--	--	--	--	--	--	--
75-09-14	16000	180000	.5	460	17	--	1000	100	2.8	1.4	337000	327000
75-09-14	15000	180000	.4	340	26	--	690	290	2.9	2.6	333000	--
75-09-14	--	--	--	--	--	--	--	--	--	--	--	--
75-09-14	12000	180000	.1	450	12	--	850	110	2.5	2.4	324000	--
75-04-18	--	100000	--	40	--	--	--	--	--	--	--	--
75-04-19	--	173000	--	70	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	DENSITY (GM/ML AT 20 C) (71820)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)	
75-04-09	2500	2400	3.5	5310	--	--	--	--	--	--	--	
75-04-12	3300	1700	1.8	8840	--	--	--	--	--	--	--	
75-06-05	5000	4700	6.8	50300	--	--	--	--	--	--	--	
75-04-18	--	--	--	116000	--	--	--	1.062	--	--	1200	
75-09-14	3300	1200	908	225000	6.0	--	1200	--	5500	780	3000000	
75-09-14	2700	2700	997	230000	6.0	--	360	--	6300	710	2000000	
75-09-14	2500	--	1050	227000	6.0	--	--	--	--	--	--	
75-09-14	2700	2700	997	224000	6.0	--	500	--	6600	460	2000000	
75-04-18	--	--	--	184000	--	--	--	1.117	--	--	5300	
75-04-19	--	--	--	233000	--	--	--	--	--	--	7600	

QUALITY OF GROUND WATER  
EDDY COUNTY--Continued

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PUMP													OR FLOW	TOTAL	DEPTH						
LOCAL IDENTIFIER													PERIOD PRIOR TO SAMPLING	DEPTH OF WELL	BELOW LAND SURFACE						
STATION NUMBER													DATE OF SAMPLE	TIME	GEOLOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	(72004)	(72008)	(72019)		
24S,29F,1A,133 USGS NO 8													321305103595101	GW	74-10-04	1005	312CLRR	--	--	203	--
														GW	74-12-16	1015	312CLRR	--	--	203	--
														GW	75-04-18	1000	312CLRR	--	--	203	--
														GW	75-05-20	1510	312CLRR	--	--	203	--
														GW	75-07-07	1250	312CLRR	--	--	203	--
24S,29F,1A,133A													321305103594901	GW	74-12-16	1330	110AVMB	--	--	--	--
24S,29F,19,222													321234104005401	GW	74-12-17	1215	--	--	--	34.04	
														GW	75-07-14	1525	--	--	--	35.48	
24S,29F,20,122													321234104002601	GW	74-12-17	1055	--	--	--	57.11	
														GW	75-07-14	1415	--	--	--	57.55	
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	TOTAL SULFIDE (S) (MG/L) (00745)									
74-10-04	--	--	--	--	--	--	--	--	--	--	--	--									
74-12-16	--	--	--	--	--	--	--	--	--	--	--	--									
75-04-18	--	--	--	--	--	--	91000	3500	--	--	--	--									
75-05-20	--	--	--	--	--	--	--	--	--	--	--	--									
75-07-07	--	--	--	--	--	--	--	--	--	--	--	--									
74-12-16	--	--	--	--	--	--	--	--	--	--	--	--									
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--									
75-07-14	--	--	--	--	--	--	--	--	--	--	--	--									
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--									
75-07-14	--	--	--	--	--	--	--	--	--	--	--	--									
DATE OF SAMPLE	DIS-SOLVED SULFATE (S04) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	IODIDE (I) (MG/L) (71865)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)									
74-10-04	--	141000	--	--	--	--	--	--	--	--	--	--									
74-12-16	--	141000	--	--	--	--	--	--	--	--	--	--									
75-04-18	--	144000	--	30	--	--	--	--	--	--	--	--									
75-05-20	--	142000	--	--	--	--	--	--	--	--	--	--									
75-07-07	--	142000	--	--	--	--	--	--	--	--	--	--									
74-12-16	--	540	--	--	--	--	--	--	--	--	--	--									
74-12-17	--	21000	--	--	--	--	--	--	--	--	--	--									
75-07-14	--	20600	--	--	--	--	--	--	--	--	--	--									
74-12-17	--	53500	--	--	--	--	--	--	--	--	--	--									
75-07-14	--	27800	--	--	--	--	--	--	--	--	--	--									
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	DENSITY (GM/ML AT 20 C) (71820)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)										
74-10-04	--	--	--	213000	--	20.0	--	1.156	--	--	--										
74-12-16	--	--	--	209000	--	19.5	--	1.149	--	--	--										
75-04-18	--	--	--	213000	--	--	--	1.158	--	--	15000										
75-05-20	--	--	--	208000	--	20.0	--	1.148	--	--	--										
75-07-07	--	--	--	213000	--	21.0	--	1.158	--	--	--										
74-12-16	--	--	--	4190	--	19.0	--	--	--	--	--										
74-12-17	--	--	--	58200	--	19.0	--	1.028	--	--	--										
75-07-14	--	--	--	58000	--	20.5	--	1.028	--	--	--										
74-12-17	--	--	--	116000	--	19.5	--	1.062	--	--	--										
75-07-14	--	--	--	120000	--	22.0	--	1.064	--	--	--										

## QUALITY OF GROUND WATER

EDDY COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)			
24S.29E.20.134	320215104004201	GW	74-12-16	0940	312CLBR	--	--	--	--			
		GW	75-07-14	1400	312CLBR	--	--	--	61.80			
24S.29E.20.322	321209104002101	GW	74-12-17	1110	312CLBR	--	--	--	--			
		GW	75-07-14	1435	312CLBR	--	--	--	59.90			
24S.29E.20.412	321210104001501	GW	74-12-17	1125	110AVMB	--	--	--	59.66			
		GW	75-07-14	1450	110AVMB	--	--	--	60.33			
24S.29E.20.431	321157104001501	GW	74-12-16	1000	312RSLR	--	--	--	64.55			
		GW	75-07-14	1040	312RSLR	--	--	--	65.10			
24S.29E.20.432A	321157104000601	GW	74-12-17	1135	312RSLR	--	--	--	--			
		GW	75-07-14	1500	312RSLR	--	--	--	55.90			
DATE OF SAMPLE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	IODIDE (I) (MG/L) (71865)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
74-12-16	-- 173000	--	--	--	--	--	--	--	--	--	--	--
75-07-14	-- 172000	--	--	--	--	--	--	--	--	--	--	--
74-12-17	-- 152000	--	--	--	--	--	--	--	--	--	--	--
75-07-14	-- 157000	--	--	--	--	--	--	--	--	--	--	--
74-12-17	-- 102000	--	--	--	--	--	--	--	--	--	--	--
75-07-14	-- 99000	--	--	--	--	--	--	--	--	--	--	--
74-12-16	-- 106000	--	--	--	--	--	--	--	--	--	--	--
75-07-14	-- 99000	--	--	--	--	--	--	--	--	--	--	--
74-12-17	-- 112000	--	--	--	--	--	--	--	--	--	--	--
75-07-14	-- 112000	--	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00905)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DENSITY (GM/ML AT 20 C) (71820)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (MG/L) (01020)	
74-12-16	--	--	--	223000	--	19.0	--	1.178	--	--	--	
75-07-14	--	--	--	225000	--	22.0	--	1.184	--	--	--	
74-12-17	--	--	--	217000	--	19.5	--	1.162	--	--	--	
75-07-14	--	--	--	219000	--	21.5	--	1.168	--	--	--	
74-12-17	--	--	--	181000	--	19.5	--	1.140	--	--	--	
75-07-14	--	--	--	179000	--	--	--	1.112	--	--	--	
74-12-16	--	--	--	184000	--	--	--	1.116	--	--	--	
75-07-14	--	--	--	177000	--	22.0	--	1.111	--	--	--	
74-12-17	--	--	--	192000	--	19.5	--	1.126	--	--	--	
75-07-14	--	--	--	192000	--	22.0	--	1.126	--	--	--	

## EDDY COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	TOTAL DEPTH OF WELL (FT)	DEPTH BELOW LAND SURFACE (FT)		
							(00059)	(72004)	(72008)	(72019)		
24S.29E.29.141	321128104003301		GW	74-12-16	1115	312CLRR	--	--	--	--		
			GW	75-07-15	1340	312CLRR	--	--	--	33.02		
24S.29E.29.143	321122104003301		GW	74-12-16	1125	312CLRR	--	--	--	24.23		
			GW	75-07-15	1355	312CLRR	--	--	--	25.22		
24S.29E.29.213	321134104001701		GW	74-12-16	1020	312CLRR	--	--	--	52.50		
			GW	75-07-15	1125	312CLRR	--	--	--	53.66		
24S.29E.29.241	321128104000201		GW	74-12-16	1030	312RSLR	--	--	--	55.91		
			GW	75-07-15	1145	312RSLR	--	--	--	56.43		
24S.29E.29.413	321108104001801		GW	74-12-16	1100	110AVMB	--	--	--	--		
			GW	75-07-15	1315	110AVMB	--	--	--	6.93		
DATE OF SAMPLE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	IODIDE (I) (MG/L) (71865)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
74-12-16	--	20100	--	--	--	--	--	--	--	--	--	--
75-07-15	--	19800	--	--	--	--	--	--	--	--	--	--
74-12-16	--	16900	--	--	--	--	--	--	--	--	--	--
75-07-15	--	17000	--	--	--	--	--	--	--	--	--	--
74-12-16	--	56000	--	--	--	--	--	--	--	--	--	--
75-07-15	--	53500	--	--	--	--	--	--	--	--	--	--
74-12-16	--	55000	--	--	--	--	--	--	--	--	--	--
75-07-15	--	55000	--	--	--	--	--	--	--	--	--	--
74-12-16	--	9800	--	--	--	--	--	--	--	--	--	--
75-07-15	--	9800	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DENSITY (GM/ML AT 20 C) (71820)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)	
74-12-16	--	--	--	58500	--	19.5	--	1.028	--	--	--	
75-07-15	--	--	--	52600	--	21.0	--	1.025	--	--	--	
74-12-16	--	--	--	47300	--	19.0	--	1.023	--	--	--	
75-07-15	--	--	--	47000	--	21.0	--	1.022	--	--	--	
74-12-16	--	--	--	120000	--	19.0	--	1.064	--	--	--	
75-07-15	--	--	--	120000	--	21.0	--	1.065	--	--	--	
74-12-16	--	--	--	118000	--	19.0	--	1.063	--	--	--	
75-07-15	--	--	--	114000	--	21.0	--	1.064	--	--	--	
74-12-16	--	--	--	33400	--	16.5	--	1.016	--	--	--	
75-07-15	--	--	--	30300	--	19.0	--	1.014	--	--	--	

## EDDY COUNTY--Continued

LOCAL IDENT- I- FIFR		STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)	
24S.29E.29.433		32105104001801		GW	74-12-16	1050	110AVMB	--	--	--	--	
24S.29E.30.222		321143104005601		GW	75-07-15	1300	110AVMB	--	--	--	6.44	
				GW	74-12-16	1235	110AVMB	--	--	--	18.70	
				GW	75-07-15	1535	110AVMB	--	--	--	19.33	
24S.29E.30.222A		321142104005601		GW	74-12-16	1245	110AVMB	--	--	--	13.82	
				GW	75-07-15	1555	110AVMB	--	--	--	14.80	
24S.29E.30.242		321130104005601		GW	74-12-16	1225	110AVMB	--	--	--	14.65	
				GW	75-07-15	1520	110AVMB	--	--	--	16.15	
24S.29E.30.242A		321129104005601		GW	74-12-16	1215	110AVMB	--	--	--	13.09	
				GW	75-07-15	1510	110AVMB	--	--	--	14.60	
26S.29E.22.330		320118104574401		GW	75-03-25	--	312RSLR	1860	--	115	--	
DATE OF SAMPLE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	IODIDE (I) (MG/L) (71865)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
74-12-16	--	10400	--	--	--	--	--	--	--	--	--	--
75-07-15	--	12600	--	--	--	--	--	--	--	--	--	--
74-12-16	--	15300	--	--	--	--	--	--	--	--	--	--
75-07-15	--	15000	--	--	--	--	--	--	--	--	--	--
74-12-16	--	16100	--	--	--	--	--	--	--	--	--	--
75-07-15	--	15700	--	--	--	--	--	--	--	--	--	--
74-12-16	--	11100	--	--	--	--	--	--	--	--	--	--
75-07-15	--	12600	--	--	--	--	--	--	--	--	--	--
74-12-16	--	11200	--	--	--	--	--	--	--	--	--	--
75-07-15	--	12900	--	--	--	--	--	--	--	--	--	--
75-03-25	--	2100	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DFG C) (00010)	TUR- BID- ITY (JTU) (00070)	DENSITY (GM/ML AT 20 C) (71820)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)	
74-12-16	--	--	--	33100	--	6.5	--	1.015	--	--	--	
75-07-15	--	--	--	38800	--	19.0	--	1.018	--	--	--	
74-12-16	--	--	--	44400	--	19.5	--	1.021	--	--	--	
75-07-15	--	--	--	44700	--	20.0	--	1.021	--	--	--	
74-12-16	--	--	--	45000	--	19.5	--	1.021	--	--	--	
75-07-15	--	--	--	44700	--	20.0	--	1.021	--	--	--	
74-12-16	--	--	--	34400	--	19.5	--	1.016	--	--	--	
75-07-15	--	--	--	38200	--	20.0	--	1.018	--	--	--	
74-12-16	--	--	--	33900	--	19.5	--	1.015	--	--	--	
75-07-15	--	--	--	37600	--	20.0	--	1.018	--	--	--	
75-03-25	--	--	--	8400	--	--	--	--	--	--	370	

QUALITY OF GROUND WATER  
EDDY COUNTY--Continued

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LOCAL IDENT- I- FIFTH	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED HOLURON (H) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
P15.31E.35.4214	322559103443401		GW	75-09-14	1230	220	220	3000000	750	2
			GW	75-09-14	1430	170	170	2000000	8	1
			GW	75-09-14	1530	170	170	2000000	4	2

DATE OF SAMPLE	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MANG- NESE (MN) (UG/L) (01055)
75-09-14	2300	2000	0	1	550	0	10	10	4000	2	190000	10000
75-09-14	2300	2000	0	0	440	1	5500	3000	2200	1	210000	11000
75-09-14	2000	1800	1	3	90	0	5500	3500	1900	0	210000	11000

DATE OF SAMPLE	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71000)	DIS- SOLVED MERCURY (HG) (UG/L) (71000)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
75-09-14	9500	.0	.0	0	0	2000	1600
75-09-14	11000	.0	.0	0	0	2000	30
75-09-14	11000	.0	.0	0	0	2000	30

LOCAL IDENT- I- FIFTH	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL NON- FILIT- WABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)
P15.31E.35.4214	322559103443401		GW	75-09-14	1230	10000	<3400	<110	6500	110
			GW	75-09-14	1430	7400	<5300	92	5600	110
			GW	75-09-14	1505	5700	<4200	110	5500	43
			GW	75-09-14	1530	6800	<4700	<96	5900	86
				DATE OF SAMPLE		DIS- SOLVED GROSS BETA AS (PC/L) (00050)	SUS- PENDED GROSS BETA AS (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (00511)	DIS- SOLVED URANIUM (U) (UG/L) (00020)	
				75-09-14	5100	RT	<.40	7.0		
				75-09-14	4500	90	<.40	1.8		
				75-09-14	4400	36	<.40	1.8		
				75-09-14	4400	75	<.40	1.7		

## GRANT COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MAN- GANESE (MNI) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
GILA HOT SPRINGS,NM	331155108121601		SP	74-12-05	1450	000EXHV	72	--	--	--
18S.10W.13.111	324457107500401		SP	74-12-05	1105	000EXRV	56	10	0	3.3
20S.11W.20.243	323409107595001		SP	74-12-05	0835	000EXRV	41	60	0	34

DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIT- PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
74-12-05	--	120	3.5	101	0	--	100	--	.2	--	--
74-12-05	.6	94	1.3	107	0	65	17	18	.0	.22	.05
74-12-05	7.4	79	7.6	277	0	49	17	5.9	.1	.04	.01

DATE OF SAMPLE	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
74-12-05	--	--	--	620	7.5	61.0	100
74-12-05	11	0	13	455	8.3	60.5	50
74-12-05	120	0	3.2	603	7.1	53.5	70

LOCAL IDENT- I- FIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED LITHIUM (LI) (MG/L) (01130)	DIS- SOLVED MAN- GANESE (MNI) (MG/L) (01056)
GILA HOT SPRINGS,NM	331155108121601		SP	74-12-05	1450	100	--	220	--
18S.10W.13.111	324457107500401		SP	74-12-05	1105	50	10	100	0
20S.11W.20.243	323409107595001		SP	74-12-05	0835	70	60	130	0



## MCKINLEY COUNTY

LOCAL IDENT- 1- FIFTH	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GFW- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (720059)	OR FLOW PERIOD TO SAM- PLING (MIN) (720004)	TOTAL DEPTH OF WELL (FT) (720008)	DEPTH BELOW LAND SURFACE (FT) (72019)		
NAVAJO RESERVATION												
	355038108445601		GW	74-10-02	1115	110AVMB	--	--	--	--		
	355426108250501		GW	74-10-02	1335	221WSHC	--	--	--	--		
14N.15W.27.311	345335108245301		GW	75-05-14	1920	310GLRT	69	--	3229	978		
14N.11W.07.344	352149108023801		GW	75-03-12	1645	110AVMB	--	--	175	75.00		
14N.13W.20.4322	352532108140001		GW	75-03-13	1245	310YF50	--	--	--	--		
14N.13W.33.3341	352341104133501		GW	75-03-13	0945	310GLRT	--	--	809	--		
14N.13W.20.4321	352532108140001		GW	75-03-13	1230	310GLRT	--	--	--	--		
14N.13W.27.342	352438108121501		GW	75-03-13	1110	310GLRT	--	--	--	--		
16N.10W.02.230	353850107514101		GW	75-05-23	1500	221WSHC	300	560	--	275		
16N.18W.07.111	353757108473101		GW	75-06-26	1030	211GLLP	599	180	2148	615		
DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (MG/L) (00955)	DIS- SOLVED IRON (PPM) (01046)	DIS- SOLVED MANG- NESE (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESE (MG/L) (00925)	DIS- SOLVED TAS- SIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED SULFATE (MG/L) (00945)
74-10-02	--	--	35	20	50	75	5.9	48	1.8	272	0	58
74-10-02	--	--	10	50	10	5.8	1.1	720	3.1	1130	237	11
75-05-14	--	--	15	10	100	120	36	47	7.0	257	--	300
75-03-12	--	--	11	10	30	18	6.3	100	3.0	301	--	42
75-03-13	--	--	9.5	10	20	44	5.1	43	2.5	266	--	40
75-03-13	--	--	9.7	20	0	91	16	10	1.4	279	--	85
75-03-13	--	--	9.8	50	0	1.6	.1	150	2.0	326	--	58
75-03-13	--	--	16	10	30	150	28	11	1.8	177	0	350
75-05-23	--	--	15	1300	60	31	17	250	4.3	271	--	450
75-06-26	1415	2895	15	160	30	12	2.1	310	2.7	223	35	388
DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED VITRIT- PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (PFS)- DUE AT 180 C (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	HARD- NESS (MG/L) (00902)	TOTAL ACIDITY AS H+ (MG/L) (71825)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
74-10-02	23	.4	.33	.04	--	183	210	0	--	1.4	613	7.8
74-10-02	180	8.8	.09	.05	--	1730	19	0	--	72	2820	8.5
75-05-14	19	.7	.00	.03	--	667	450	240	--	.9	949	--
75-03-12	8.2	.5	.00	.01	--	337	71	0	--	5.2	564	--
75-03-13	3.8	.3	.02	.01	--	279	130	0	--	1.6	480	--
75-03-13	4.7	.1	.00	.01	--	356	290	64	--	.3	581	--
75-03-13	15	.2	.41	.06	--	399	4	0	--	31	661	--
75-03-13	4.8	.4	.08	.66	--	652	490	350	--	.2	1020	7.3
75-05-23	12	.4	.02	.01	--	915	150	0	--	9.0	1450	--
75-06-26	60	.8	.08	.00	906	928	39	0	--	22	1500	8.5
				DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)						
				74-10-02	27.5	--						
				74-10-02	27.5	--						
				75-05-14	36.0	30						
				75-03-12	--	--						
				75-03-13	20.0	--						
				75-03-13	16.0	--						
				75-03-13	--	--						
				75-03-13	--	--						
				75-05-23	24.5	--						
				75-06-26	32.5	110						

QUALITY OF GROUND WATER  
MCKINLEY COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)
17N.12W.30.240	35402910A090301	GW	74-10-29	1520	221WSRC	--	--	--	--
18N.17W.23.000	35463010A370101	GW	74-10-29	1740	211GLLP	--	--	--	--
19N.08W.04.223	355435107411101	SP	75-09-22	1615	211CLFH	--	--	--	--
19N.17W.19.300	355104109400501	GW	75-03-12	1020	221MRSN	--	--	--	--
20N.06W.29.414	355558107293401	GW	75-09-22	1430	211CLFH	--	--	550	--
20N.06W.32.230	325523107293501	GW	75-03-11	1630	221WSRC	--	--	--	--
	355521107293401	GW	75-04-24	1330	221WSRC	200	77	--	180
20N.07W.20.140	355703105361101	GW	75-09-22	1220	110AVMR	--	--	--	--
20N.07W.20.1441	355708107361401	GW	75-01-05	1530	110AVMR	--	--	--	--
20N.08W.19.340	3556371073A3501	SP	75-09-22	1540	211CLFH	--	2	--	--

DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
74-10-29	--	--	19	10	10	12	4.1	120	2.3	252	0	93
74-10-29	--	--	10	10	0	3.4	.5	530	2.3	289	22	720
75-09-22	--	--	18	--	--	280	170	72	3.6	0	0	1500
75-03-12	--	--	21	0	0	1.8	.2	140	1.1	184	12	130
75-09-22	--	--	2.8	--	--	3.6	.6	1000	4.4	1280	207	590
75-03-11	--	--	--	--	--	24	4.7	710	--	762	--	880
75-04-24	--	--	33	170	90	67	5.8	850	8.9	615	--	1400
75-09-22	--	--	12	--	--	450	370	600	7.0	393	0	3400
75-01-05	--	--	10	10	--	120	44	230	6.4	318	0	710
75-09-22	--	--	15	--	--	130	89	23	2.6	459	0	350

DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	TOTAL ACIDITY AS H+ (MG/L) (71825)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH
74-10-29	3.4	.4	.05	.00	--	379	47	0	--	7.6	601	8.3
74-10-29	98	1.3	.22	.01	--	1530	11	0	--	71	2310	8.9
75-09-22	11	.4	.68	--	--	2060	1400	1400	.1	.8	2200	4.3
75-03-12	5.8	.3	.05	.04	--	403	5	0	--	26	644	9.1
75-09-22	180	6.8	.04	--	--	2630	11	0	--	129	3000	9.2
75-03-11	94	--	--	--	--	--	79	0	--	35	3280	--
75-04-24	62	7.7	.03	.08	--	2740	190	0	--	27	3950	--
75-09-22	54	.3	9.5	--	--	5130	2600	2300	--	5.1	5290	7.4
75-01-05	21	.4	.67	.00	--	1300	480	220	--	4.6	--	8.3
75-09-22	12	.2	.12	--	--	849	690	310	--	.4	1050	7.2

DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
74-10-29	--	--
74-10-29	--	--
75-09-22	9.0	150
75-03-12	35.0	--
75-09-22	18.5	500
75-03-11	--	--
75-04-24	65.0	--
75-09-22	15.0	290
75-01-05	--	70
75-09-22	15.5	40

QUALITY OF GROUND WATER

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MCKINLEY COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)
08N.15W.27.311	345335108245301		GW	75-05-14	1920	11	--	30	--	--
16N.18W.07.111	353757108473101		GW	75-06-26	1830	2	0	110	0	0
20N.06W.32.230	355521107293401		GW	75-04-24	1330	--	--	--	--	--

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01055)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED NIUM (SF) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
75-05-14	--	10	--	--	50	100	--	--	--	--
75-06-26	0	160	<100	1	--	30	.0	0	1	10
75-04-24	--	170	--	--	450	90	--	--	--	--

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (UG/L) (00030)	SUS- PENDED GROSS ALPHA AS (UG/L) (00040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (03516)
16N.18W.07.111	353757108473101		GW	75-06-28	1830	2	19	.6	4.2	<.4

DATE OF SAMPLE	DIS- SOLVED GROSS BETA AS SR90 (PC/L) (00050)	SUS- PENDED GROSS BETA AS SR90 (PC/L) (00060)	DIS- SOLVED RA-226 (RADON METHOD) (U) (UG/L) (00511)	DIS- SOLVED URANIUM (U) (UG/L) (00020)
75-06-28	3.7	<.4	.30	.02

## RIO ARRIBA COUNTY

LOCAL IDENTIFICATION	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEOLOGIC UNIT	DIS-SOLVED SILICA (SiO2) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)
JUAN BAUTISTA VALDEZ GRA	361110106234701	GW	75-04-18	1215	112SNTF	--	--	--	--
LORATO GRANT	361147106141301	GW	75-04-18	0950	110AVMB	39	40	20	28
OJO CALIENTE IRON SPRING	361816106030801	SP	74-12-03	0950	--	--	--	--	--
PIEDRA LUMBRE GRANT	361315106300501	GW	75-04-18	1235	110AVMB	2.2	210	30	24
TOWN OF ARIQUITU GRANT	361231106185301	GW	75-04-18	1005	110AVMB	48	30	10	92
	361224106185001	GW	75-04-18	1015	112SNTF	--	--	--	--
21N.02E.14.433	360237106413901	GW	74-11-26	1000	31RARO L	--	--	--	--
22N.03E.04.411	361006106370601	GW	75-04-18	1410	231CHNL	--	--	--	--
22N.07E.23.213	360742106094101	GW	75-04-18	0930	110AVMB	34	10	10	65
23N.04E.31.111	361117106334301	GW	75-04-18	1345	110AVMB	44	100	5	300

DATE OF SAMPLE	DIS-SOLVED MAGNESIUM (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
75-04-18	--	--	--	410	0	--	--	--	.1	--	--	--
75-04-18	3.8	160	.6	292	0	110	40	1.4	.3	2.5	.09	539
74-12-03	--	890	--	207	0	--	270	--	1.4	--	--	--
75-04-18	8.0	1100	3.1	196	22	1800	140	2.2	.7	.01	.02	3200
75-04-18	23	76	4.5	587	0	10	6.8	.5	.1	.12	.10	551
75-04-18	--	--	--	261	0	--	--	--	.0	--	--	--
74-11-26	--	--	--	--	--	--	--	--	.0	--	--	--
75-04-18	--	220	.7	476	30	69	9.3	--	.0	--	--	--
75-04-18	7.0	260	2.6	252	0	250	210	4.1	.5	1.1	.06	965
75-04-18	46	140	5.3	280	0	960	7.4	.4	.1	1.3	.08	1650

DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AD-SORPTION RATIO (00931)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS) (00995)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
75-04-18	--	--	--	629	7.7	--	70
75-04-18	86	0	7.5	825	7.8	--	110
74-12-03	--	--	--	3900	6.6	40.0	1500
75-04-18	93	0	50	4620	9.2	--	400
75-04-18	320	0	1.8	859	7.4	--	160
75-04-18	--	--	--	405	7.8	--	50
74-11-26	--	--	--	540	--	6.0	--
75-04-18	--	--	--	909	9.1	--	720
75-04-18	190	0	8.2	1500	7.9	--	1400
75-04-18	940	710	2.0	2030	7.4	--	280

LOCAL IDENTIFICATION	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LITHIUM (LI) (UG/L) (01130)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)
JUAN BAUTISTA VALDEZ GRA	361110106234701	GW	75-04-18	1215	70	--	--	90	--
LORATO GRANT	361147106141301	GW	75-04-18	0950	110	--	40	60	20
OJO CALIENTE IRON SPRING	361816106030801	SP	74-12-03	0950	1500	--	--	3300	--
PIEDRA LUMBRE GRANT	361315106300501	GW	75-04-18	1235	400	--	210	170	30
TOWN OF ARIQUITU GRANT	361231106185301	GW	75-04-18	1005	160	--	30	50	10
	361224106185001	GW	75-04-18	1015	50	--	--	30	--
21N.02E.14.433	360237106413901	GW	74-11-26	1000	--	1	--	--	--
22N.03E.04.411	361006106370601	GW	75-04-18	1410	720	--	--	50	--
22N.07E.23.213	360742106094101	GW	75-04-18	0930	1400	--	10	820	10
23N.04E.31.111	361117106334301	GW	75-04-18	1345	280	--	100	90	5
	361122106332601	GW	75-04-18	1255	920	--	10	240	0
23N.04E.31.131	361116106332401	GW	75-04-18	1320	670	--	--	130	--

## QUALITY OF GROUND WATER

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## RIO ARriba COUNTY--continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)
23N.04E.31.112	361122106332601		GW	75-04-18	1255	110AVMB	11	10	0	26
23N.04E.31.131	361116106332401		GW	75-04-18	1320	231CHNL	--	--	--	--
23N.07W.14.100	36133A107354901		GW	74-10-24	--	124ANMS	13	20	10	1.7
24N.02W.28.100	361712107033301		GW	74-10-23	1245	124SNJS	10	10	0	1.7
24N.05W.23.400	361744107191901		GW	74-10-24	1620	124SNJS	7.6	10	0	2.5
25N.03W.33.300	36205H107092101		GW	74-10-24	1500	124SNJS	13	10	2000	450
26N.04W.23.400	362806107125901		GW	74-10-17	1615	124SNJS	8.3	10	0	51
29N.06W.20.300	364227107292601		GW	74-11-17	1215	124SNJS	17	10	940	480
29N.06W.35.000	364105107252H01		GW	74-10-27	1230	124SNJS	13	10	0	54
29N.07W.04.3143	364505107345601		GW	74-10-16	1507	124SNJS	20	10	960	530
29N.07W.05.3132	364510107360301		GW	74-10-16	1445	124SNJS	22	10	70	540
29N.07W.23.3012	363844107394001		GW	74-10-27	1400	124SNJS	19	0	1600	230

DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
75-04-18	11	690	2.9	466	0	860	190	1.8	1.7	4.6	2050
75-04-18	--	--	--	804	0	--	--	--	3	--	--
74-10-24	.0	250	.9	318	31	230	7.5	1.3	.21	.70	695
74-10-23	.0	190	1.1	376	--	100	2.4	.6	.05	.01	491
74-10-24	.2	290	3.0	305	9	370	6.1	1.0	.02	.00	840
74-10-24	230	550	6.0	303	0	2800	89	.1	.05	.01	4290
74-10-17	17	340	1.6	413	0	580	11	.7	.97	.01	1220
74-11-17	49	490	4.4	484	0	2000	66	.4	.59	.00	3350
74-10-27	10	360	1.6	756	0	320	12	1.3	.93	.21	1150
74-10-16	15	220	2.9	322	--	1600	7.8	.6	.07	.01	2560
74-10-16	17	110	2.4	189	0	1500	8.5	.5	.02	.00	2290
74-10-27	34	140	3.5	697	--	320	18	.5	--	.02	1120

DATE OF SAMPLE	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MICRO- MHOS) (00931)	SPE- CIFIC CON- DUCT- ANCE (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
75-04-18	110	0	29	3240	8.3	--	920
75-04-18	--	--	--	1220	8.3	--	670
74-10-24	4	0	53	1130	9.1	--	--
74-10-23	4	0	40	815	--	--	--
74-10-24	7	0	47	1300	8.7	--	--
74-10-24	2100	1900	5.3	4890	7.8	--	--
74-10-17	200	0	11	1770	8.0	--	--
74-11-17	1400	1000	5.7	3960	7.6	--	--
74-10-27	180	0	12	1780	8.2	--	--
74-10-16	1400	1100	2.6	2990	--	--	--
74-10-16	1400	1200	1.3	2620	7.6	--	--
74-10-27	710	140	2.3	1630	--	--	--

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
21N.02E.14.433	360237106413901		GW	74-11-26	1000	5.4

## SANDOVAL COUNTY

LOCAL IDENTIFICATION	STATION	NUMBER	SITF	DATE OF SAMPLE	TIME	GFO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)
MONTANO GRANT	351414106585801		GW	75-06-05	1145	221MRSN	--	--	--	--
500A DAM	354728106410900		SP	75-06-08	1330	--	--	--	--	--
10N.02E.21.412	350443106435501		GW	75-04-11	1418	112SNTF	--	--	--	820
			GW	75-04-11	1507	112SNTF	--	--	--	1220
10N.02E.22.143	350447106431601		GW	75-04-14	1010	112SNTF	--	--	--	788
			GW	75-04-14	1053	112SNTF	--	--	--	1188
12N.02E.14.433	351546106420501		GW	74-12-12	1100	112SNTF	1000	5602	637	--
12N.02E.25.421	351422106404201		GW	74-12-12	1125	112SNTF	650	5370	373	--
12N.03E.30.121	351446106400601		GW	74-12-12	1045	112SNTF	1000	5356	420	--
13N.03E.25.244	351942106340101		GW	75-02-21	1245	112SNTF	--	--	--	--
13N.03E.36.123	351900106344101		GW	75-02-21	1330	112SNTF	--	--	--	--
13N.04E.30.231	351948106332301		GW	75-02-21	1230	112SNTF	--	--	--	--
15N.01E.26.222	353030106474501		GW	75-05-22	1320	110AVMB	--	--	--	--
15N.01E.09.414	353234106500801		SP	75-05-22	1430	231CHNL	--	--	--	--
15N.01E.10.141	353249106493301		SP	75-05-22	1450	231CHNL	--	--	--	--

DATE OF SAMPLE	DIS-SOLVED SILICA (MG/L) (00955)	DIS-SOLVED IRON (PPM) (01046)	DIS-SOLVED MANGANESE (PPM) (01056)	DIS-SOLVED CALCIUM (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG/L) (00925)	DIS-SOLVED SODIUM (MG/L) (00930)	DIS-SOLVED POTASSIUM (MG/L) (00935)	RICAR-BONATE (MG/L) (00440)	CAR-BONATE (MG/L) (00445)	DIS-SOLVED SULFATE (MG/L) (00945)	DIS-SOLVED CHLORIDE (MG/L) (00940)	DIS-SOLVED FLUORIDE (MG/L) (00950)
75-06-05	--	--	--	--	--	3200	10	497	0	--	2100	--
75-06-08	5.8	0	30	230	23	980	190	721	0	43	1500	.4
75-04-11	--	--	--	--	--	--	--	--	--	--	--	--
75-04-11	--	--	--	--	--	--	--	--	--	--	--	--
75-04-14	--	--	--	--	--	--	--	--	--	--	--	--
75-04-14	--	--	--	--	--	--	--	--	--	--	--	--
74-12-12	50	10	0	18	3.5	53	5.0	127	--	43	6.8	.4
74-12-12	70	80	0	28	5.0	36	7.6	156	0	35	7.3	.3
74-12-12	60	70	0	31	5.9	30	6.4	142	0	37	7.4	.4
75-02-21	--	--	--	--	--	150	10	212	--	220	260	.5
75-02-21	29	10	70	98	15	55	5.8	223	0	170	47	.4
75-02-21	--	--	--	--	--	110	11	118	--	170	290	.7
75-05-22	--	--	--	--	--	1400	8.7	--	--	--	260	--
75-05-22	--	--	--	--	--	2300	100	--	--	--	2100	--
75-05-22	--	--	--	--	--	1800	88	--	--	--	1700	--
DATE OF SAMPLE	BROMIDE (PPM) (MG/L) (71870)	DIS-SOLVED NITRATE (PPM) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHATE (PPM) (MG/L) (00671)	DIS-SOLVED SOLIDS (MG/L) (70300)	DIS-SOLVED SOLIDS (MG/L) (70301)	NON-CARBONATE HARDNESS (MG/L) (00900)	SODIUM CARBONATE HARDNESS (MG/L) (00902)	SPE-CIFIC CONDUCTANCE (MICHO-SMOS) (00095)	PH	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (MG/L) (01020)	
75-06-05	6.9	--	--	--	--	--	--	12700	8.2	26.0	2300	
75-06-08	--	.03	.01	--	3330	670	78	6080	6.7	29.0	--	
75-04-11	--	--	--	--	--	--	--	397	--	26.0	210	
75-04-11	--	--	--	--	--	--	--	402	--	34.5	230	
75-04-14	--	--	--	--	--	--	--	426	--	23.0	260	
75-04-14	--	--	--	--	--	--	--	423	--	40.5	260	
74-12-12	--	5.0	.04	263	265	59	0	3.0	367	19.5	150	
74-12-12	--	.03	.05	264	267	91	0	1.6	352	13.0	80	
74-12-12	--	1.4	.04	251	255	100	0	1.3	348	16.0	80	
75-02-21	1.7	--	--	--	--	--	--	1400	--	--	810	
75-02-21	.3	.58	.07	--	533	310	130	1.4	860	7.7	110	
75-02-21	2.0	--	--	--	--	--	--	1350	--	--	440	
75-05-22	.9	--	--	--	--	--	--	6000	--	--	1700	
75-05-22	8.3	--	--	--	--	--	--	12000	--	15.0	5200	
75-05-22	8.1	--	--	--	--	--	--	9600	--	16.0	9900	

## SANDOVAL COUNTY--Continued

LOCAL IDENTIFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)
15N.01E.16.233	353152106504901	SP	74-10-18	1300	231CHNL	--	--	--	--
15N.01E.21.134	353058106504601	SP	75-05-22	1105	231CHNL	--	--	--	--
15N.01E.21.141	353104106503601	SP	75-05-22	1145	231CHNL	--	--	--	--
15N.02E.14.SONA DAM SP W	354728106411101	SP	75-07-15	1235	--	--	--	--	--
		SP	75-08-07	1220	--	--	--	--	--
15N.02E.23.JEMFZ SP WEST	354619106412501	SP	75-07-15	1250	--	--	--	--	--
		SP	75-08-07	1255	--	--	--	--	--
15N.03E.04.321	354912106373601	SP	74-12-13	1120	112VLLS	--	--	--	--
		SP	74-12-13	1126	112VLLS	--	--	--	--
15N.04E.36.113	351900106283801	GW	75-02-21	1055	112SNTF	--	--	--	--
15N.03E.32.1FST HOLE 1	354943106385801	GW	75-07-15	1130	--	--	--	42.53	--
15N.03E.32.1FST HOLE 2	354943106385802	GW	75-07-15	1115	--	--	--	67.30	--
20N.01E.06.233	355935106522901	SP	74-11-26	0845	318ARO L	--	--	--	--
21N.02W.09.124	360407107032201	GW	74-10-22	1015	124SNJS	--	--	--	--
23N.04W.07.412	361413107172901	GW	74-10-21	1210	--	--	--	--	--
23N.06W.22.300	361235107374001	GW	74-10-24	1000	124SNJS	--	--	--	--

DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)
74-10-18	--	--	--	--	--	3900	140	--	--	--	2800	--
75-05-22	--	--	--	--	--	4100	180	--	--	--	3100	--
75-05-22	--	--	--	--	--	3900	170	--	--	--	3000	--
75-07-15	--	--	--	--	--	--	--	--	--	--	1490	--
75-08-07	--	--	--	--	--	--	--	--	--	--	1510	--
75-07-15	--	--	--	--	--	--	--	--	--	--	832	--
75-08-07	--	--	--	--	--	--	--	--	--	--	840	--
74-12-13	54	20	0	12	4.8	25	1.4	88	--	6.8	28	.9
74-12-13	--	--	--	--	--	25	1.3	--	--	--	18	--
75-02-21	24	40	0	71	7.3	12	1.4	238	0	26	3.6	.3
75-07-15	--	--	--	--	--	--	--	--	--	--	238	--
75-07-15	--	--	--	--	--	--	--	--	--	--	55	--
74-11-26	--	--	--	--	--	--	--	--	--	--	--	--
74-10-22	16	20	70	74	11	48	3.9	178	0	190	3.4	.3
74-10-21	8.1	10	0	2.5	.9	260	1.1	401	21	220	5.2	.7
74-10-24	8.3	10	40	140	1.5	300	2.5	100	0	920	5.1	.5

DATE OF SAMPLE	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (009631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (008671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TWEENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (MG/L) (01020)
74-10-18	10	--	--	--	--	--	--	--	20000	--	18.0	8200
75-05-22	5.5	--	--	--	--	--	--	--	18000	--	14.0	8500
75-05-22	7.0	--	--	--	--	--	--	--	17600	--	19.0	7800
75-07-15	--	--	--	--	--	--	--	--	5780	6.8	46.0	--
75-08-07	--	--	--	--	--	--	--	--	5760	7.0	50.0	--
75-07-15	--	--	--	--	--	--	--	--	3250	8.7	72.0	--
75-08-07	--	--	--	--	--	--	--	--	3540	7.3	--	--
74-12-13	.1	.50	.12	--	179	50	0	1.5	255	--	31.0	--
74-12-13	--	--	--	--	--	--	--	--	217	--	--	--
75-02-21	.0	.14	.01	--	264	210	15	.4	440	7.3	17.5	30
75-07-15	--	--	--	--	--	--	--	--	2670	7.1	16.0	--
75-07-15	--	--	--	--	--	--	--	--	600	8.4	19.0	--
74-11-26	--	--	--	--	--	--	--	--	--	--	8.0	--
74-10-22	--	.05	.00	--	435	230	84	1.4	672	8.1	--	--
74-10-21	--	.04	.02	--	717	6	0	45	1140	--	--	--
74-10-24	--	.24	.00	--	430	160	280	6.9	1970	7.6	--	--





## SANDOVAL COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)
SODA DAM	354728106410900	SP	75-06-08	1330	--	--	--	--	--
12N.02E.14.433	351546106420501	GW	74-12-12	1100	<1	12	<.4	6.9	1.4
12N.02E.25.421	351422106404201	GW	74-12-12	1125	<1	12	<.4	8.4	<.4
12N.03E.30.121	351446106400601	GW	74-12-12	1045	<1	7.4	<.4	7.6	1.1
13N.03E.36.123	351900106344101	GW	75-02-21	1330	<1	15	<.4	12	.4
15N.01E.10.310	353238106499901	SP	74-11-12	1600	--	--	--	--	--
16N.01W.01.421	353844106531901	SP	74-12-02	0950	--	--	--	--	--
18N.02E.14.442	354729106411001	GW	74-11-12	1440	1	1900	2.8	530	1.0
18N.02E.23.432	354618106412601	SP	74-11-12	1500	2	150	<.4	120	<.4
18N.02E.26.334	354522106420001	GW	74-11-26	1600	1	130	.6	32	1.2
18N.03E.04.321	354912106373601	SP	74-12-13	1120	--	--	--	--	--
18N.04E.36.113	351900106283801	GW	75-02-21	1055	76	8.3	<.4	2.0	<.4
19N.03E.17.431	355226106383101	GW	74-12-13	1005	--	--	--	--	--
19N.03E.32.331	354949106385601	GW	74-11-26	1300	--	--	--	--	--
		GW	74-11-26	1330	1	<25	.4	35	1.4
19N.03E.32.341	354946106384601	SP	74-11-12	1420	--	--	--	--	--
20N.01E.06.233	355935106522901	SP	74-11-26	0845	--	--	--	--	--
20N.02E.27.222	355634106421401	SP	74-11-12	1110	--	--	--	--	--
20N.03E.29.123	355623106383601	SP	74-11-12	1010	4	1.9	2.2	2.5	1.7

DATE OF SAMPLE	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
75-06-08	--	--	230	.6	--
74-12-12	5.7	1.4	.09	9.0	--
74-12-12	7.3	<.4	.04	2.4	--
74-12-12	6.6	1.0	.12	4.1	--
75-02-21	9.9	.4	.08	2.4	--
74-11-12	--	--	--	.8	--
74-12-02	--	--	--	3.2	--
74-11-12	420	.9	160	.8	--
74-11-12	96	<.4	13	.8	--
74-11-26	27	1.1	.10	23	--
74-12-13	--	--	--	--	.55
75-02-21	1.7	<.4	.09	.9	--
74-12-13	--	--	--	--	.16
74-11-26	--	--	--	1.4	--
74-11-26	29	1.3	4.3	4.9	--
74-11-12	--	--	--	.7	--
74-11-26	--	--	--	26	--
74-11-12	--	--	--	.4	--
74-11-12	2.3	1.5	.03	<.4	--

## QUALITY OF GROUND WATER

## SAN JUAN COUNTY

LOCAL INFORMATION		STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM)	PUMP FLOW PERIOD TO SAMPLING (MIN)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF WELL (FT)	
1- FIFTH								(00059)	(72004)	(72000)	(72008)	
SITE MIN INDIAN RE COTTON												
21N.09W.16.230		36S254108224601		GW	75-07-10	1645	211CLFH	2.0	--	--	--	
21N.13W.06.1121		36S313107473401		GW	75-05-05	1822	221WSRC	300	382	--	5076	
23N.09W.01.2321		36S521108161301		GW	74-10-29	1130	211GLLP	--	--	--	--	
23N.14W.14.1312		361534107441401		GW	74-10-25	1410	124ANMS	--	--	--	--	
		361305108182001		GW	74-10-28	1600	211CLFH	--	--	--	--	
24N.10W.12.2223												
24N.10W.08		361936107505401		GW	74-10-25	1535	124ANMS	--	--	--	--	
26N.11W.33.2142		36S3029107551601		GW	74-10-26	--	125NCNN	--	--	--	--	
27N.11W.11.300		362618108001601		GW	74-10-28	1230	124ANMS	--	--	--	--	
27N.12W.16.1444		363510107583801		GW	74-10-26	1000	124ANMS	--	--	--	--	
		363444108064201		GW	74-10-26	1400	124ANMS	--	--	--	--	
DATE OF SAMPLE	DEPTH OF FLOW SURFACE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DIST-SOLVED SILICA (SI02) (MG/L)	DIST-SOLVED IRON (FF) (UG/L)	DIST-SOLVED MANGANESE (MN) (UG/L)	DIST-SOLVED CALCIUM (CA) (MG/L)	DIST-SOLVED MAGNESIUM (MG) (MG/L)	DIST-SOLVED SODIUM (NA) (MG/L)	DIST-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	HYDROXIDE (OH) (MG/L)
75-07-10	--	--	21	40	--	60	42	92	2.9	410	0	--
75-05-05	--	4508	30	30	300	340	5.0	770	8.0	57	--	--
74-10-29	--	--	16	10	0	4.2	.7	580	3.6	518	19	--
74-10-25	--	--	11	30	0	2.0	.0	250	.8	327	28	--
74-10-28	--	--	9.9	0	70	30	27	360	4.7	384	0	--
74-10-25	--	--	13	0	0	6.2	.1	190	.8	274	50	--
74-10-26	--	--	9.5	10	10	2.0	.0	280	1.0	336	47	--
74-10-28	--	--	12	10	0	1.0	.0	210	.6	342	21	--
74-10-26	--	--	15	10	0	45	2.2	290	2.4	239	0	--
74-10-26	--	--	13	10	20	19	.5	210	1.3	299	0	--
DATE OF SAMPLE	TOTAL SULFIDE (MG/L)	DIST-SOLVED SULFATE (SO4) (MG/L)	DIST-SOLVED CHLORIDE (CL) (MG/L)	DIST-SOLVED FLUORIDE (F) (MG/L)	DIST-SOLVED NITRATE (N) (MG/L)	DIST-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (MG/L)	DIST-SOLVED NITRATE PLUS NITRITE (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
75-07-10	--	150	35	.3	--	--	--	.00	--	--	--	--
75-05-05	--	2400	14	2.3	--	--	--	.01	--	.05	--	--
74-10-29	--	480	240	3.0	--	--	--	.01	--	--	--	--
74-10-25	--	240	8.0	.9	--	--	--	.22	--	--	--	--
74-10-28	--	650	9.7	.1	--	--	--	.44	--	--	--	--
74-10-25	--	110	4.1	.4	--	--	--	.09	--	--	--	--
74-10-26	--	240	11	1.9	--	--	--	.09	--	--	--	--
74-10-28	--	130	8.0	.7	--	--	--	.15	--	--	--	--
74-10-26	--	520	4.4	1.3	--	--	--	.03	--	--	--	--
74-10-26	--	260	6.4	1.2	--	--	--	.05	--	--	--	--
DATE OF SAMPLE	DIST-SOLVED PHOSPHORUS (P) (MG/L)	DIST-SOLVED AMMONIUM NITRATE (NH4) (MG/L)	DIST-SOLVED SULFATES (MG/L)	NON-CALCIUM SULFATES (MG/L)	SODIUM CHLORIDE (MG/L)	SODIUM SULFATE (MG/L)	SPECIFIC CONDUCTIVITY (MICRO-MHOS) (UNITS)	TEMPERATURE (DEG C)	PH	TOTAL DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	DIST-SOLVED BORON (B) (UG/L)
75-07-10	.01	--	406	320	0	2.2	985	7.6	17.0	--	--	110
75-05-05	.05	--	3600	870	820	11	4350	--	57.0	--	--	--
74-10-29	.00	--	1600	13	0	69	2530	8.5	--	--	--	--
74-10-25	.06	--	703	5	0	49	1130	9.2	--	--	--	--
74-10-28	.01	--	1280	198	0	11	1940	8.2	--	--	--	--
74-10-25	.04	--	510	16	0	21	832	9.4	--	--	--	--
74-10-26	.01	--	759	5	0	55	1200	9.1	--	--	--	--
74-10-28	.02	--	553	3	0	58	920	9.3	--	--	--	--
74-10-26	.01	--	998	120	0	11	1540	8.2	--	--	--	--
74-10-26	.00	--	659	50	0	13	1050	8.2	--	--	--	--

QUALITY OF GROUND WATER  
SAN JUAN COUNTY--Continued

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LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	ELEV. OF LAND SURFACE DATE (FT, ABOVE MSL) (72000)	TOTAL DEPTH OF WELL (FT) (72008)
29N.10W.26.320	363753107521701	GW	74-10-16	1300	125NCMN	--	--	--	--
29N.15W.04.242 PS SOUTH	364534108244801	GW	75-07-11	0930	211PCCF	--	--	--	250
30N.15W.06.111 WESTWATER	365059108275901	SP	75-08-15	1400	--	--	--	--	--
30N.15W.10.444 PS WELL A	364916108234301	GW	74-12-19	1045	211PCCF	--	--	5335	600
30N.15W.15.444 PS WELL C	364826108234301	GW	74-12-17	0935	211FRLD	--	--	5260	60
		GW	74-12-19	1115	211FRLD	--	--	5260	60
30N.15W.16.331 PS WELL D	364835108254601	GW	74-12-17	0900	211FRLD	--	--	5260	30
		GW	74-12-19	1200	211PCCF	--	--	5260	30
30N.15W.27.422 PS WELL H	364705108234301	GW	74-12-17	1235	211PCCF	--	--	5230	450
		GW	74-12-19	1245	211PCCF	--	--	5230	450

DATE OF SAMPLE	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	HY- DROX- IDE (OH) (MG/L) (71830)
74-10-16	--	--	18	10	310	500	16	690	5.5	136	0	--
75-07-11	117	--	10	80	--	1.6	0	2400	350	0	704	500
75-08-15	--	--	20	0	--	65	86	440	2.5	534	0	--
74-12-19	--	--	20	240	0	1.9	1.6	1600	16	2400	463	--
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	--	--	11	20	790	380	110	1900	9.4	373	0	--
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	--	--	10	40	720	440	330	6400	11	875	0	--
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	--	--	11	70	110	30	22	4000	11	990	0	--

DATE OF SAMPLE	TOTAL SUL- FIDE (S) (MG/L) (00745)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
74-10-16	--	2600	15	1.1	--	--	--	.00	--	--	--	--
75-07-11	--	930	1700	1.0	--	--	--	.19	--	--	--	--
75-08-15	--	840	150	.9	--	--	--	.50	--	--	--	--
74-12-19	170	19	840	2.8	.00	.00	.00	.00	1.0	1.0	2.0	.20
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	.2	4000	32	.4	1.9	.67	4.1	4.0	.00	.53	4.7	.04
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	.0	8100	4000	1.1	21	.27	29	21	.54	2.0	32	.05
74-12-17	--	--	--	--	--	--	--	--	--	--	--	--
74-12-19	1.6	4400	2400	2.3	.00	.00	.00	.00	4.4	.30	4.7	.09

DATE OF SAMPLE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
74-10-16	.01	--	3910	1300	1200	8.3	4580	7.7	--	--	--
75-07-11	.01	--	6400	4	0	523	15100	12.3	19.5	--	--
75-08-15	.01	--	1370	520	78	8.4	2890	8.3	--	--	--
74-12-19	3.1	4150	4200	11	0	207	6690	9.1	19.0	10	12
74-12-17	--	--	--	--	--	--	7910	7.0	13.0	--	--
74-12-19	.03	7730	7450	1400	1100	22	9110	7.0	13.0	5	10
74-12-17	--	--	--	--	--	--	25400	7.3	12.5	--	--
74-12-19	.04	21100	20400	2500	1800	56	25600	7.2	14.0	4	200
74-12-17	--	--	--	--	--	--	15100	8.1	15.1	--	--
74-12-19	.07	11400	11400	170	0	135	16100	8.0	19.5	10	72

DATE OF SAMPLE	DIS- SOLVED BORON (B) (MG/L) (01020)
74-10-16	--
75-07-11	400
75-08-15	620
74-12-19	1300
74-12-17	--
74-12-19	180
74-12-17	--
74-12-19	1100
74-12-17	--
74-12-19	990



QUALITY OF GROUND WATER

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SAN JUAN COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL ALUM- INUM (AL) (UG/L) (01105)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01009)	TOTAL BORON (B) (UG/L) (01022)
HTC MTH INDIAN RE COTTON	36525410A224401	GW	75-07-10	1645	--	--	0	--	160
29N,15W,04,242 PS SOUTH	36453410R244401	GW	75-07-11	0930	--	--	13	--	500
39N,15W,10,444 PS WFL A	36491610R234301	GW	74-12-19	1045	900	20	1	1	--
39N,15W,15,444 PS WFL C	36492610R234301	GW	74-12-17	0935	--	--	0	--	240
		GW	74-12-19	1115	500	10	1	0	--
39N,15W,16,331 PS WFL D	36483510R254401	GW	74-12-17	0900	--	--	1	--	1100
		GW	74-12-19	1200	300	10	1	1	--
39N,15W,27,422 PS WFL B	36470510R234301	GW	74-12-17	1235	--	--	0	--	1100
		GW	74-12-19	1245	400	0	0	0	--
39N,15W,32,333 PS WFL F	36455410R265401	GW	74-12-17	1400	--	--	7	--	170
		GW	74-12-19	1330	1800	0	1	1	--

DATE OF SAMPLE	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	TOTAL COBALT COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT COBALT (CO) (UG/L) (01035)	TOTAL COPPER COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER COPPER (CU) (UG/L) (01040)	TOTAL IRON IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON IRON (FE) (UG/L) (01046)	TOTAL LEAD LEAD (PB) (UG/L) (01051)
75-07-10	110	--	--	--	--	--	--	--	--	--	40	<100
75-07-11	400	--	--	--	--	--	--	--	--	--	80	800
74-12-19	1300	10	2	0	0	<50	0	40	1	890	240	200
74-12-17	--	--	--	--	--	--	--	--	--	--	--	<100
74-12-19	180	20	3	20	10	50	6	10	8	1500	20	200
74-12-17	--	--	--	--	--	--	--	--	--	--	--	300
74-12-19	1100	80	18	50	30	150	0	50	11	1300	40	300
74-12-17	--	--	--	--	--	--	--	--	--	--	--	100
74-12-19	990	20	0	20	0	50	0	30	0	720	70	100
74-12-17	--	--	--	--	--	--	--	--	--	--	--	<100
74-12-19	70	<10	0	0	0	<50	0	30	2	4000	0	<100

DATE OF SAMPLE	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL LITHIUM (LI) (UG/L) (01132)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MANG- ANESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- ANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL MOLYB- DENUM (MO) (UG/L) (01062)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)
75-07-10	--	40	--	--	--	.0	--	--	--	0	--	--
75-07-11	--	270	--	--	--	.0	--	--	--	1	--	--
74-12-19	2	160	170	10	0	<.1	<.1	0	0	0	0	6.6
74-12-17	--	190	--	--	--	.0	--	--	--	2	--	--
74-12-19	1	100	200	770	790	<.1	<.1	5	5	7	2	.0
74-12-17	--	280	--	--	--	.1	--	--	--	0	--	--
74-12-19	3	280	280	830	720	<.1	<.1	1	2	2	2	29
74-12-17	--	320	--	--	--	.0	--	--	--	0	--	--
74-12-19	27	300	320	110	110	<.1	<.1	0	1	2	1	22
74-12-17	--	30	--	--	--	.2	--	--	--	0	--	--
74-12-19	2	40	40	90	0	<.1	<.1	8	4	1	1	.0

DATE OF SAMPLE	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
75-07-10	--	--
75-07-11	--	--
74-12-19	40	0
74-12-17	--	--
74-12-19	30	40
74-12-17	--	--
74-12-19	90	100
74-12-17	--	--
74-12-19	20	20
74-12-17	--	--
74-12-19	30	8

## SAN JUAN COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)
30N.15W.10.444 PS WELL A	364916108234301		GW	74-12-19	1045	63	<33	1.8	24	1.3
30N.15W.27.422 PS WELL B	364705108234301		GW	74-12-19	1245	21	<94	3.4	<52	2.1
30N.15W.32.333 PS WELL F	364554108265401		GW	74-12-19	1330	310	<7.0	13	4.9	9.3
DATE OF SAMPLE	DIS- SOLVED GROSS BETA AS SH90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SH90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RANDOM METHOD) (U) (UG/L) (22703)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DATE OF SAMPLE	TIME	74-12-19	74-12-19	74-12-19	74-12-19
	19	1.2	.57	.7						
	<42	1.8	.19	1.9						
	3.9	7.9	.05	2.8						

## SANTA FE COUNTY

LOCAL IDENT- IFIER	STATION	NUMRFH	SITE	DATE OF SAMPLE	TIME	Geo- Logic UNIT	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)		
14N 08E 08 12411	352730106070701		GW	75-03-01	1230	400PCMB	28	420	270	260		
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00425)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAN- RONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (F) (MG/L) (00948)	DIS- SOLVED FLUO- RIDE (F) (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)		
75-03-01	45	45	4.5	223	0	670	17	.5	.05	.00	.06	.05
DATE OF SAMPLE	AMMONIA NITRO- GEN (N) (00610)	TOTAL ORGANIC NITRO- GEN (N) (00605)	TOTAL NITRO- GEN (N) (00600)	PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTH0. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF FUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	
75-03-01	.00	.04	.10	.01	.03	1290	1180	830	650	.7	1550	7.7
		DATE OF SAMPLE	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	CYANIDE (CN) (MG/L) (00720)	DIS- SOLVED BORON (B) (UG/L) (01020)				
		75-03-01	18.0	6	3	1.7	.00	70				
LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)		
14N 08E 08 12411	352730106070701		GW	75-03-01	1230	3	<100	70	0	0		
DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01044)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MANG- ANESE (MN) (UG/L) (01056)	TOTAL MERCURY (MG) (UG/L) (71900)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)			
75-03-01	10	420	<100	3	270	.0	1	0	20			

## SIERRA COUNTY

LOCAL IDENT- I- FILE#	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN-	PUMP	PERIOD	TOTAL	DIS-	
							TANEOUS FLOW RATE (GPM) (00059)	OR FLOW METER TO SAM- PLING (MIN) (72004)	DEPTH OF WELL (FT) (72008)	SOLVED SILICA (SI02) (MG/L) (00955)		
14S.04W.04.212	330740107151101		SP	74-12-04	1135	110AVMB	--	--	--	--	--	
15S.06W.31.211	325800107294501		GW	75-05-16	1300	1125NTF	150	--	36	260	35	
17S.04W.29.343	324744107163601		SP	74-12-04	1230	000HLFS	--	--	--	--	33	
DATE OF SAMPLE	DIS- SOLVED IRON (FF) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED BROMIDE (BR) (MG/L) (71870)
74-12-04	--	--	--	--	740	--	213	0	--	1400	--	1.9
75-05-16	--	--	81	14	57	2.1	273	--	130	20	.5	--
74-12-04	10	0	45	15	300	18	355	0	290	170	7.3	.5
DATE OF SAMPLE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00531)	DIS- SOLVED NITRO- GENE (SUM OF PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SULFIDE (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)			
74-12-04	--	--	--	--	--	--	4500	6.8	40.0	300	--	--
75-05-16	2.8	--	487	260	36	1.5	750	--	21.5	--	--	--
74-12-04	.11	.01	1060	170	0	9.9	1660	7.2	34.0	330	--	--
LOCAL IDENT- I- FILE#	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED IRON (R) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)			
14S.04W.04.212	330740107151101		SP	74-12-04	1135	300	--	1100	--			
17S.04W.29.343	324744107163601		SP	74-12-04	1230	330	10	310	0			

## SUCORRO COUNTY

LOCAL IDENT- I- FILE#	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
03S.01W.16.323	340248106570101		GW	74-12-04	0915	000EXRV	57	157	0	16
	DATE OF SAMPLE	BROMIDE (BR) (MG/L) (71870)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)				
	74-12-04	.5	360	7.1	31.5	90				
LOCAL IDENT- I- FILE#	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME		DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)		
03S.01W.16.323	340248106570101		GW	74-12-04	0915		90	60		

## QUALITY OF GROUND WATER

## TAOS COUNTY

LOCAL IDENTIFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	
MANNY HOT SPRING NM	363030105432501		SP	74-12-03	1320	000EXRV	58	40	0	27	
PONCE DE LEON SPRING NM	361925105362001		SP	74-12-03	1640	400PCMR	54	20	0	11	
DATE OF SAMPLE	DIS-SOLVED MAGNESIUM (MG) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
74-12-03	5.7	130	9.2	202	0	130	56	3.8	.5	.34	522
74-12-03	1.7	150	4.6	79	0	120	92	18	.7	.00	491
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)				
74-12-03	91	0	5.9	794	6.9	34.0	270				
74-12-03	32	0	11	786	7.8	32.0	500				

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)
MANNY HOT SPRING NM	363030105432501	SP	74-12-03	1320		270	40	290	0
PONCE DE LEON SPRING NM	361925105362001	SP	74-12-03	1640		500	20	250	0

## TORRANCE COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	
SPR+CAMPGROUND+CAPILLO	344159106240401		SP	75-06-05	0815	326MGDL	3.4	16000	230	28	
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
75-06-05	1.1	.8	1.0	120	0	2.3	.9	.1	.0	.00	113
DATE OF SAMPLE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)				
75-06-05	74	0	.0	151	6.4	6.5	2				
LOCAL IDENT- IFIER	STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)		
SPR+CAMPGROUND+CAPILLO	344159106240401		SP	75-06-05	0815	2	16000	0	230		



## QUALITY OF GROUND WATER

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## VALENCIA COUNTY--Continued

LOCAL IDENTIFIER	STATION	NUMRER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)		
06N.03W.35.341	344150107103301		SP	75-05-16	1430	325MDER	--	--	--	--		
07N.02E.07.11414	345111106464101		GW	75-03-12	1500	1125NIF	--	--	--	--		
07N.02E.07.11414A	345113106464101		GW	75-07-13	1640	1125NIF	16346	--	2578	2628		
			GW	75-07-16	1030	1125NIF	--	--	--	--		
			GW	75-07-16	1115	1125NIF	--	--	--	--		
			GW	75-07-16	1140	1125NIF	--	--	--	--		
			GW	75-07-16	1400	1125NIF	16346	200	1288	1368		
07N.04W.03.344	345122107144801		SP	75-05-28	1045	231CHNL	--	--	--	--		
07N.04W.11.431	345038107133801		SP	75-05-28	1015	231CHNL	--	--	--	--		
07N.05W.2R.113	344833107223201		GW	75-05-28	1530	231CHNL	--	--	--	--		
DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (MG/L) (01046)	DIS-SOLVED MANGANESE (MN) (MG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)
75-05-16	15	220	240	760	420	5400	100	2420	0	3100	7380	.7
75-03-12	39	20	0	17	6.4	84	4.0	180	0	90	12	1.1
75-07-13	58	210	0	4.3	.6	150	2.4	280	17	66	8.0	1.6
75-07-16	74	160	30	15	.9	120	6.6	145	0	150	16	1.4
75-07-16	70	--	--	10	.9	120	6.1	130	0	150	16	1.3
75-07-16	67	90	30	18	.8	130	6.3	145	0	170	14	1.2
75-07-16	68	70	0	13	1.0	130	6.0	146	0	160	13	1.2
75-05-28	--	--	--	--	--	700	4.3	--	--	--	490	--
75-05-28	--	--	--	--	--	300	15	--	--	--	320	--
75-05-28	8.8	70	320	580	140	220	17	471	0	2000	110	2.3
DATE OF SAMPLE	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (00618)	DIS-SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
5-05-16	9.0	--	--	--	.37	--	--	--	--	.10	--	18300
5-03-12	--	.30	.00	.34	.30	.00	.01	.35	.01	.04	342	345
5-07-13	--	.02	.03	.05	.05	.04	1.4	1.5	.08	.04	468	447
5-07-16	--	--	--	--	.78	--	--	--	--	.01	492	460
5-07-16	--	--	--	--	.68	--	--	--	--	--	--	441
5-07-16	--	--	--	--	.87	--	--	--	--	.01	502	483
5-07-16	--	.83	.08	.91	.91	.00	.38	1.3	2.4	.02	524	469
5-05-28	1.6	--	--	--	--	--	--	--	--	--	--	--
5-05-28	1.0	--	--	--	--	--	--	--	--	--	--	--
5-05-28	.4	--	--	--	.00	--	--	--	--	.03	--	3310
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (MG/L) (01020)		
75-05-16	3600	1600	39	26000	6.7	16.5	--	--	--	4100		
75-03-12	69	0	4.4	511	7.7	18.5	1	4	1.8	150		
75-07-13	13	0	18	625	9.0	32.5	80	85	24	540		
75-07-16	41	0	8.1	655	8.8	29.5	--	--	--	360		
75-07-16	29	0	9.8	634	8.7	29.5	--	--	--	--		
75-07-16	48	0	8.1	671	8.7	29.0	--	--	--	350		
75-07-16	37	0	9.4	688	8.6	29.0	2800	75	31	450		
75-05-28	--	--	--	7950	--	--	--	--	--	1800		
75-05-28	--	--	--	4370	--	16.0	--	--	--	860		
75-05-28	2000	1600	2.1	3710	6.9	18.0	--	--	--	750		

## QUALITY OF GROUND WATER

VALENCIA COUNTY--Continued

LOCAL IDENTIFIER	STATION	NUMER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTER-VAL (FT) (72016)		
ANTONIO SEDILLO GRANT	345122107051001		SP	75-04-22	1010	210MCDK	--	--	--	--		
			SP	75-04-22	1011	210MCDK	--	--	--	--		
	345108107051501		SP	75-04-22	1050	231CHNL	--	--	--	--		
	345032107052701		SP	75-04-22	1135	231CHNL	--	--	--	--		
	344952107054701		SP	75-04-22	1300	313SADG	--	--	--	--		
SEDILLO GRANT 04N.06W.05.414 05N.06W.06.443 06N.02W.06.431	344855107052201		SP	75-05-16	1045	313SADG	--	--	--	--		
	345028107014301		GW	75-06-05	0830	211MVRD	--	--	--	--		
	344112107291701		SP	75-05-28	1230	231CHNL	--	--	--	--		
	344100107301501		SP	75-05-28	1400	231CHNL	--	--	--	--		
	344612107051501		SP	75-06-05	0740	325MDER	--	--	--	--		
DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)
75-04-22	30	10	40	110	160	11000	320	1910	175	7400	12000	3.5
75-04-22	--	--	--	--	--	--	--	--	--	--	--	--
75-04-22	23	10	60	490	140	9100	260	2950	0	5600	9000	3.0
75-04-22	32	10	40	140	160	9400	320	1920	0	6200	10000	2.4
75-04-22	26	10	60	380	230	12000	310	1960	54	9100	12000	2.2
75-05-16	23	80	40	340	230	9500	280	1490	0	7400	10000	2.2
75-06-05	15	90	40	92	30	2200	33	464	0	2600	1500	1.3
75-05-28	13	5000	250	660	82	210	23	536	0	1800	170	2.1
75-05-28	--	--	--	--	--	310	24	--	--	--	150	--
75-06-05	--	--	--	--	--	3100	36	962	--	--	4400	--
DATE OF SAMPLE	DIS-SOLVED BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (00618)	DIS-SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (70300)	DIS-SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)
75-04-22	28	--	--	--	.00	--	--	--	--	.40	--	32200
75-04-22	28	--	--	--	--	--	--	--	--	--	--	--
75-04-22	6.2	--	--	--	.10	--	--	--	--	.22	--	26100
75-04-22	25	--	--	--	.24	--	--	--	--	.20	--	27300
75-04-22	29	--	--	--	.02	--	--	--	--	.24	--	35100
75-05-16	19	--	--	--	.13	--	--	--	--	.16	--	28600
75-06-05	4.8	--	--	--	4.2	--	--	--	--	.03	--	6730
75-05-28	.5	--	--	--	.00	--	--	--	--	.03	--	3230
75-05-28	.4	--	--	--	--	--	--	--	--	--	--	--
75-06-05	9.4	--	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARDNESS (CA+MG) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)		
75-04-22	930	0	157	41500	9.1	--	--	--	--	18000		
75-04-22	--	--	--	--	--	--	--	--	--	--		
75-04-22	1800	0	93	34100	7.7	14.0	--	--	--	13000		
75-04-22	1000	0	129	36800	8.3	13.5	--	--	--	14000		
75-04-22	1900	200	120	45000	8.7	--	--	--	--	17000		
75-05-16	1800	580	98	37000	8.3	21.5	--	--	--	14000		
75-06-05	350	0	51	9420	8.3	--	--	--	--	3700		
75-05-28	2800	1500	2.1	3710	6.9	24.5	--	--	--	770		
75-05-28	--	--	--	3890	--	--	--	--	--	960		
75-06-05	--	--	--	1040	8.7	15.0	--	--	--	2500		

## VALENCIA COUNTY

LOCAL IDENTIFIER		STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO TOP OF SAMPLE INTERVAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT) (72016)	
ANTONIO SEVILLO GRANT		345614107071201		GW	75-04-21	1430	000EXRV	--	--	--	--	
		344830107040401		GW	75-05-16	1200	1125NTF	--	--	--	--	
ANTONIO SEDILLA GRANT		344936107050601		SP	75-04-22	1420	313SADG	--	--	--	--	
ANTONIO SEDILLO GRANT		345412107035801		SP	75-04-21	1000	221MRSN	--	--	--	--	
		345556107054901		SP	75-04-21	1115	221BLFF	--	--	--	--	
		345549107062401		SP	75-04-21	1200	221BLFF	--	--	--	--	
		345312107052501		SP	75-04-21	1430	221BLFF	--	--	--	--	
		345128107061401		SP	75-04-21	1545	3135ADG	--	--	--	--	
		345201107050701		SP	75-04-21	1645	210MCBK	--	--	--	--	
		345140107045501		SP	75-04-22	0930	231CHNL	--	--	--	--	
DATE OF SAMPLE	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (MG/L) (01046)	DIS-SOLVED MANGANESE (MN) (MG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)
75-04-21	31	170	20	250	100	530	12	219	0	1400	350	.8
75-05-16	13	1200	40	410	110	520	34	117	0	1900	480	1.3
75-04-22	27	10	30	390	170	8600	230	2720	0	5900	9900	2.7
75-04-21	22	2000	240	570	150	8300	280	2900	0	6100	7800	3.5
75-04-21	17	40	40	260	130	7400	440	1700	0	5100	7700	2.4
75-04-21	30	10	20	270	100	560	12	232	0	1500	380	.8
75-04-21	19	20	220	560	350	11000	320	1530	0	8900	11000	3.8
75-04-21	21	10	5	560	200	1300	31	643	0	2800	1100	1.3
75-04-21	20	10	40	210	110	10000	280	--	--	6700	11000	3.5
75-04-22	22	20	130	350	350	9300	260	2460	0	6200	10000	3.6
DATE OF SAMPLE	BROMIDE (BR) (MG/L) (71870)	DIS-SOLVED NITRATE (N) (MG/L) (00618)	DIS-SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS-SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLUBLE PHOSPHORUS DUE TO AMMONIA (P) (MG/L) (70300)	DIS-SOLVED SOLUBLE FLUORIDE (F) (MG/L) (70301)
75-04-21	1.3	--	--	--	1.1	--	--	--	--	.07	--	2790
75-05-16	.9	--	--	--	4.5	--	--	--	--	.03	--	3550
75-04-22	10	--	--	--	.60	--	--	--	--	.22	--	26600
75-04-21	.8	--	--	--	.80	--	--	--	--	.18	--	24700
75-04-21	12	--	--	--	.04	--	--	--	--	.17	--	22000
75-04-21	.8	--	--	--	1.1	--	--	--	--	.08	--	2970
75-04-21	27	--	--	--	.06	--	--	--	--	.17	--	33000
75-04-21	2.1	--	--	--	.02	--	--	--	--	.08	--	6320
75-04-21	11	--	--	--	.02	--	--	--	--	.27	--	--
75-04-22	24	--	--	--	.10	--	--	--	--	.22	--	27700
DATE OF SAMPLE	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AND SORPTION RATIO (00931)	SPECIAL CIFIC CONDUCTANCE (MICRO-MHOS) (00995)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (MG/L) (01020)		
75-04-21	1000	800	7.2	3900	7.8	--	--	--	--	700		
75-05-16	1570	1400	5.9	4660	7.7	19.0	--	--	--	1500		
75-04-22	1700	0	91	34300	7.8	11.5	--	--	--	14000		
75-04-21	2000	0	80	32600	7.1	24.0	--	--	--	15000		
75-04-21	1700	0	94	30100	8.3	--	--	--	--	17900		
75-04-21	1100	900	7.4	4030	7.9	16.5	--	--	--	690		
75-04-21	2800	1600	90	41400	7.3	--	--	--	--	14000		
75-04-21	2200	1600	12	8530	7.6	--	--	--	--	1800		
75-04-21	900	--	139	37000	8.6	--	--	--	--	14000		
75-04-22	2300	2800	84	36500	8.9	13.5	--	--	--	14000		

## VALENCIA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMMER	SITE	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH BELOW LAND SURFACE (FT) (72019)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)		
04N,03W,15,413	345531107002701		GW	75-05-28	1700	3135ADG	--	--	--	--		
04N,05W,17,213	345531107230651		GW	75-06-12	0920	231CHNL	--	--	--	--		
04N,05W,17,442	350106107101601		GW	75-06-12	0850	3135ADG	--	--	--	--		
04N,06W,04,433	350156107283201		GW	75-06-12	1020	221ENRD	--	--	--	--		
19N,07W,33,234	350360107343801		GW	75-06-12	1140	221ENRD	--	--	--	--		
DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
75-05-28	--	--	--	--	--	3300	110	--	--	--	2700	--
75-06-12	--	--	--	--	--	12000	7.8	--	--	--	27000	--
75-06-12	--	--	--	--	--	2900	31	--	--	--	2000	--
75-06-12	--	--	--	--	--	870	6.8	--	--	--	80	--
75-06-12	--	--	--	--	--	2800	9.3	--	--	--	210	--
DATE OF SAMPLE	BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
75-05-28	6.9	--	--	--	--	--	--	--	--	--	--	--
75-06-12	45	--	--	--	--	--	--	--	--	--	--	--
75-06-12	4.3	--	--	--	--	--	--	--	--	--	--	--
75-06-12	4	--	--	--	--	--	--	--	--	--	--	--
75-06-12	4	--	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (MG/L) (01020)		
75-05-28	--	--	--	15800	--	--	--	--	--	8700		
75-06-12	--	--	--	65000	--	18.5	--	--	--	2800		
75-06-12	--	--	--	13000	--	26.0	--	--	--	3400		
75-06-12	--	--	--	4200	--	15.0	--	--	--	840		
75-06-12	--	--	--	8500	--	21.0	--	--	--	1400		
LOCAL IDENT- IFIER	STATION	NUMMER	SITE	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)		
ANTONIO SEDILLO GRANT	345614107071201		GW	75-04-21	1430	--	--	--	700	170		
	344030107040401		GW	75-05-16	1200	--	--	--	1500	1200		
ANTONIO SEDILLA GRANT	344936107050601		SP	75-04-22	1420	--	--	--	13000	10		
ANTONIO SEDILLO GRANT	345412107035801		SP	75-04-21	1000	--	--	--	13000	2000		
	345556107054901		SP	75-04-21	1115	--	--	--	17000	40		
DATE OF SAMPLE	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MANG- NESE (MN) (UG/L) (01055)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)		
75-04-21	410	--	20	--	--	--	--	--	--	--		
75-05-16	530	--	40	--	--	--	--	--	--	--		
75-04-22	9800	--	30	--	--	--	--	--	--	--		
75-04-21	9200	--	240	--	--	--	--	--	--	--		
75-04-21	20000	--	40	--	--	--	--	--	--	--		

## VALENCIA COUNTY--Continued

LOCAL IDENTIFIER		STATION	NUMBER	SITE	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (R) (UG/L) (01020)	TOTAL CADMIUM (CD) (UG/L) (01027)	
ANTONIO SEDILLO GRANT		345549107062401		SP	75-04-21	1200	--	--	--	690	--	
		345312107052501		SP	75-04-21	1430	--	--	--	14000	--	
		345128107061401		SP	75-04-21	1545	--	--	--	1800	--	
		345201107050701		SP	75-04-21	1645	--	--	--	14000	--	
		345140107045501		SP	75-04-22	0930	--	--	--	14000	--	
		345122107051001		SP	75-04-22	1010	--	1000	--	18000	--	
		345108107051501		SP	75-04-22	1050	--	--	--	13000	--	
		345032107052701		SP	75-04-22	1135	--	--	--	14000	--	
		344952107054701		SP	75-04-22	1300	--	--	--	17000	--	
		344855107052201		SP	75-05-16	1045	--	--	--	14000	--	
DATE OF SAMPLE	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	TOTAL CHROMIUM (CR) (UG/L) (01034)	DIS-SOLVED CHROMIUM (CR) (UG/L) (01030)	HEXAVALENT CHROMIUM (CR6) (UG/L) (01032)	TOTAL COBALT (CO) (UG/L) (01037)	DIS-SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED LEAD (PB) (UG/L) (01049)
75-04-21	--	--	--	--	--	--	--	--	10	--	--	--
75-04-21	--	--	--	--	--	--	--	--	20	--	--	--
75-04-21	--	--	--	--	--	--	--	--	10	--	--	--
75-04-21	--	--	--	--	--	--	--	--	10	--	--	--
75-04-22	--	--	--	--	--	--	--	--	20	--	--	--
75-04-22	--	--	--	--	--	--	--	--	10	--	--	--
75-04-22	--	--	--	--	--	--	--	--	10	--	--	--
75-04-22	--	--	--	--	--	--	--	--	10	--	--	--
75-05-16	--	--	--	--	--	--	--	--	80	--	--	--
DATE OF SAMPLE	DIS-SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MANGANESE (MN) (UG/L) (01055)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS-SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELENIUM (SE) (UG/L) (01147)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)		
75-04-21	440	--	20	--	--	--	--	--	--	--		
75-04-21	9600	--	220	--	--	--	--	--	--	--		
75-04-21	1200	--	5	--	--	--	--	--	--	--		
75-04-21	11000	--	40	--	--	--	--	--	--	--		
75-04-22	9000	--	130	--	--	--	--	--	--	--		
75-04-22	11000	--	40	--	--	--	--	--	--	--		
75-04-22	8800	--	60	--	--	--	--	--	--	--		
75-04-22	10000	--	40	--	--	--	--	--	--	--		
75-04-22	10000	--	60	--	--	--	--	--	--	--		
75-05-16	9600	--	40	--	--	--	--	--	--	--		

## VALENCIA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMRER	SITF	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)		
SFDILLG GWANT	345028107014301		GW	75-06-05	0830	--	--	--	3700	--		
05N,06W,04,414	344112107291701		SP	75-05-28	1230	--	--	--	770	--		
05N,06W,06,443	344100107301501		SP	75-05-28	1400	--	--	--	960	--		
06N,02W,06,431	344612107051501		SP	75-06-05	0740	--	--	--	2500	--		
06N,03W,35,341	344150107103301		SP	75-05-16	1430	--	--	--	4100	--		
07N,02E,07,11414	345111106464101		GW	75-03-12	1500	--	7	--	150	--		
07N,02E,07,11414A	345113106464101		GW	75-07-13	1640	75	60	--	540	<10		
			GW	75-07-16	1030	--	19	0	360	--		
			GW	75-07-16	1140	--	23	0	350	--		
			GW	75-07-16	1400	68	24	--	450	10		
DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	TOTAL COBALT (CO) (UG/L) (01037)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)
75-06-05	--	--	--	--	--	--	--	--	90	--	--	--
75-05-28	--	--	--	--	--	--	--	--	5000	--	--	--
75-05-28	--	--	--	--	--	--	--	--	--	--	--	--
75-06-05	--	--	--	--	--	--	--	--	--	--	--	--
75-05-16	--	--	--	--	--	--	--	--	220	--	--	--
75-03-12	0	--	--	1	--	--	3	--	20	<100	4	
75-07-13	1	110	50	--	<50	0	210	46	38000	210	100	5
75-07-16	0	--	--	0	--	--	180	--	160	1600	8	
75-07-16	0	--	--	0	--	--	50	--	90	2300	2	
75-07-16	0	290	50	--	100	1	2200	34	170000	70	1100	4
DATE OF SAMPLE	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)		
75-06-05	2100	--	40	--	--	--	--	--	--	--		
75-05-28	560	--	250	--	--	--	--	--	--	--		
75-05-28	720	--	--	--	--	--	--	--	--	--		
75-06-05	910	--	--	--	--	--	--	--	--	--		
75-05-16	2790	--	240	--	--	--	--	--	--	--		
75-03-12	--	--	0	.0	--	--	1	0	--	20		
75-07-13	--	200	0	.0	.0	0	0	--	100	20		
75-07-16	--	--	30	1.2	--	--	2	0	--	30		
75-07-16	--	--	30	.2	--	--	2	0	--	20		
75-07-16	--	6400	0	.0	.0	2	2	--	700	30		

QUALITY OF GROUND WATER

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VALENCIA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMER	SITE	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL CAD- MIUM (CD) (UG/L) (01027)
07N.04W.03.344	345122107144801		SP	75-05-28	1045	--	--	--	1800	--
07N.04W.11.431	345038107133801		SP	75-05-28	1015	--	--	--	860	--
07N.05W.28.113	344833107223201		GW	75-05-28	1530	--	--	--	750	--
08N.03W.15.413	345503107082701		GW	75-05-28	1700	--	--	--	8700	--
08N.05W.17.213	344531107230601		GW	75-06-12	0920	--	--	--	2800	--
09N.05W.12.442	350106107183601		GW	75-06-12	0850	--	--	--	3400	--
09N.06W.04.433	350154107283201		GW	75-06-12	1020	--	--	--	840	--
10N.07W.33.234	350308107343801		GW	75-06-12	1140	--	--	--	1400	--

DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	TOTAL CORAL (CO) (UG/L) (01037)	DIS- SOLVED CORAL (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)
75-05-28	--	--	--	--	--	--	--	--	--	--	--	--
75-05-28	--	--	--	--	--	--	--	--	--	--	--	--
75-05-28	--	--	--	--	--	--	--	--	30	--	--	--
75-05-28	--	--	--	--	--	--	--	--	--	--	--	--
75-06-12	--	--	--	--	--	--	--	--	--	--	--	--
75-06-12	--	--	--	--	--	--	--	--	--	--	--	--
75-06-12	--	--	--	--	--	--	--	--	--	--	--	--
75-06-12	--	--	--	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
75-05-28	870	--	--	--	--	--	--	--	--	--
75-05-28	550	--	--	--	--	--	--	--	--	--
75-05-28	480	--	320	--	--	--	--	--	--	--
75-05-28	5400	--	--	--	--	--	--	--	--	--
75-06-12	1600	--	--	--	--	--	--	--	--	--
75-06-12	600	--	--	--	--	--	--	--	--	--
75-06-12	120	--	--	--	--	--	--	--	--	--
75-06-12	250	--	--	--	--	--	--	--	--	--

LOCAL IDENT- IFIER	STATION	NUMER	SITE	DATE OF SAMPLE	TIME	TOTAL NON- FILL- ABLE RESIDUE (MG/L) (00530)	DIS- SOLVED GROSS ALPHA AS (U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS (U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS (CS-137 (PC/L) (03516)
ANTONIO SEDILLA GRANT	344936107050601		SP	75-04-22	1420	--	--	--	--	--
ANTONIO SEDILLO GRANT	345412107035801		SP	75-04-21	1000	--	--	--	--	--
	345108107051501		SP	75-04-22	1050	--	--	--	--	--
06N.03W.35.341	344150107103301		SP	75-05-16	1430	--	--	--	--	--
07N.02E.07.11414A	345113106464101		GW	75-07-13	1640	93	1.3	30	5.5	9.8
			GW	75-07-16	1400	5500	7.1	960	5.5	340

DATE OF SAMPLE	DIS- SOLVED GROSS BETA AS SR90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SR90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (U) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
75-04-22	--	--	--	9.8
75-04-21	--	--	--	9.1
75-04-22	--	--	--	8.9
75-05-16	--	--	--	25
75-07-13	4.4	4.8	.02	5.7
75-07-16	4.4	270	.07	3.7





### SECTION 3. GROUND WATER RECORDS

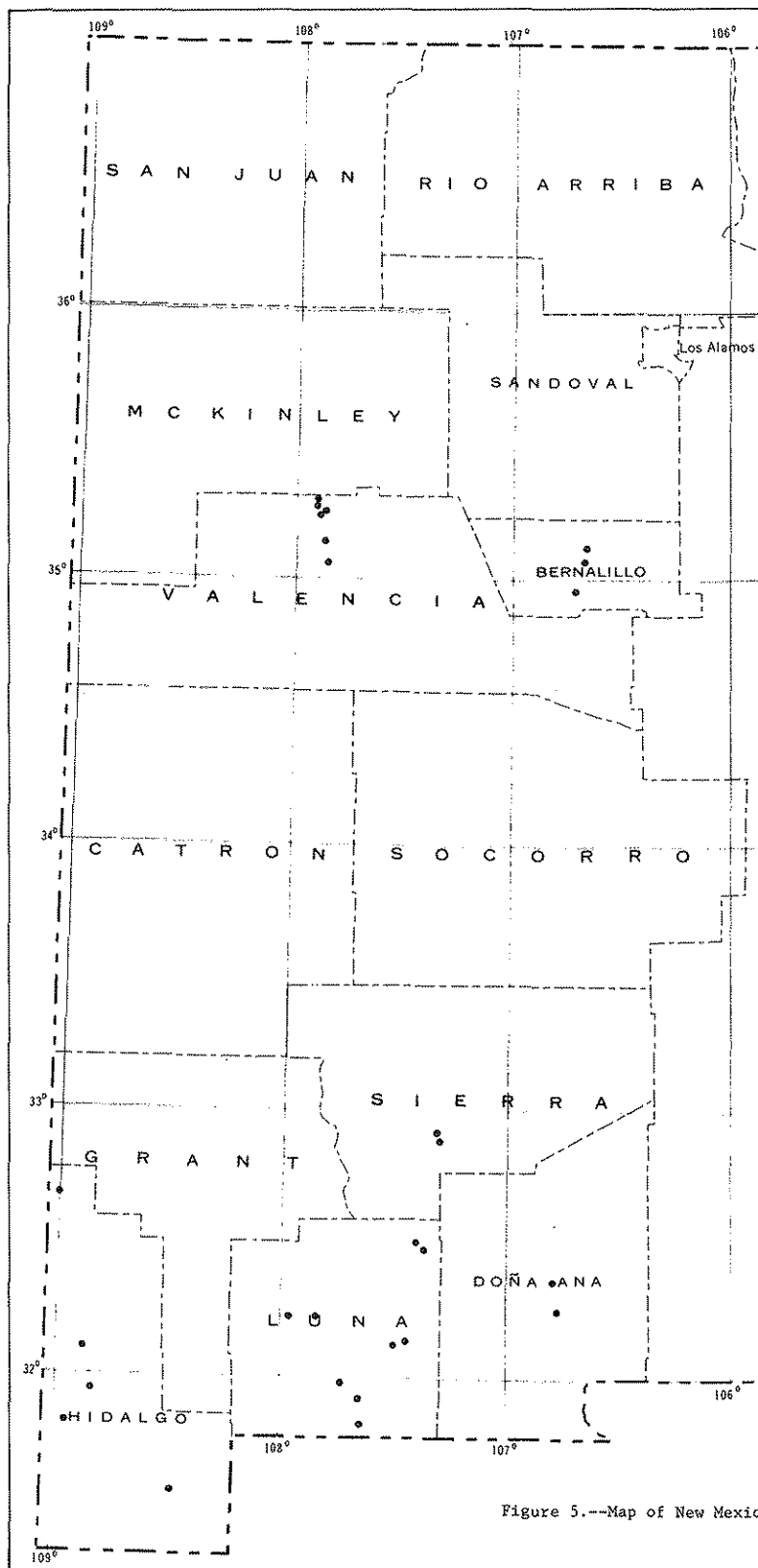
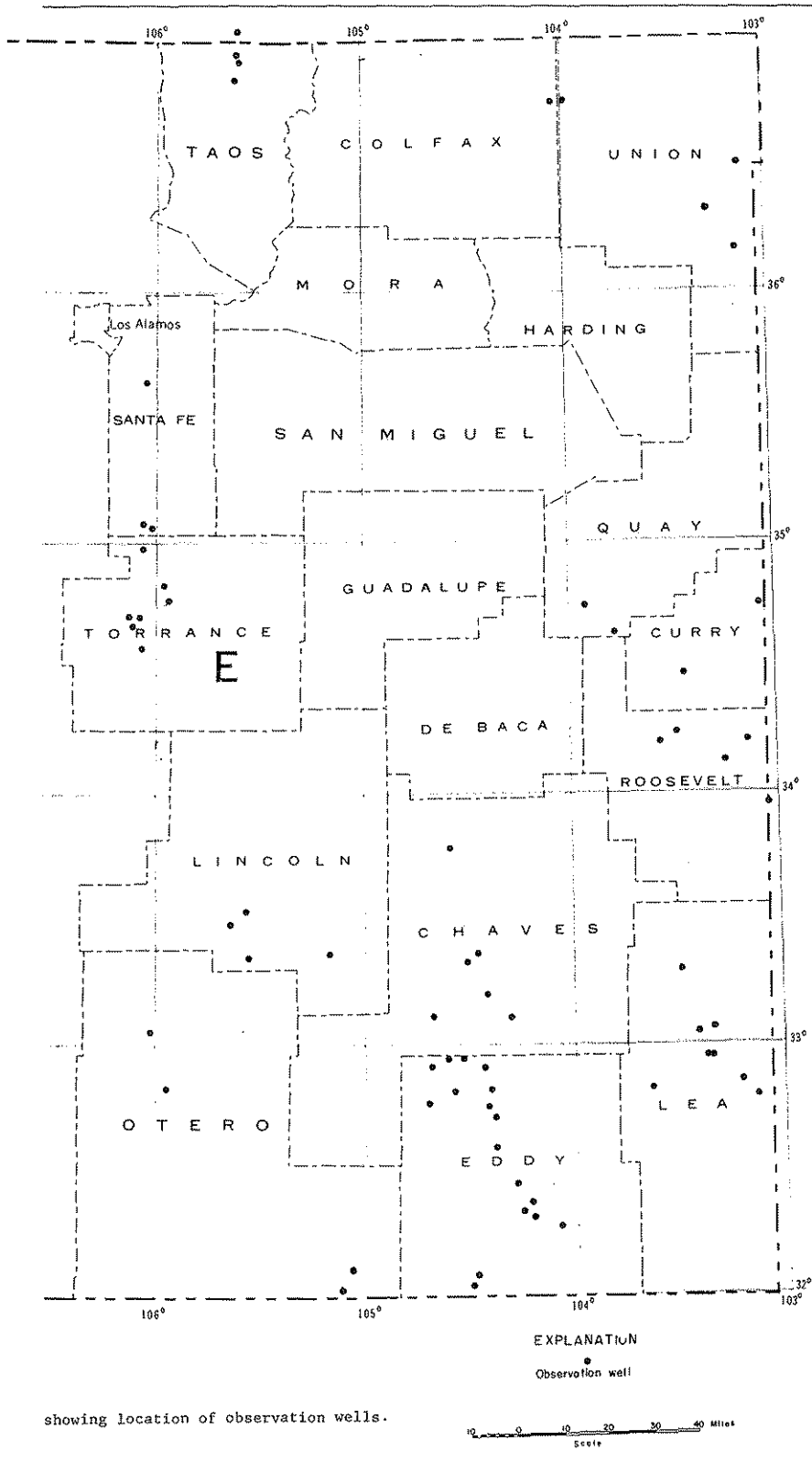


Figure 5.--Map of New Mexico



## GROUND-WATER LEVELS

Bernalillo County

## Albuquerque Area

345730106431001. Local number 9N.2E.34.322. Denison Farm. Drilled irrigation water-table well in Santa Fe Group, diam 12 in (30 cm), depth unknown, cased to 12 ft (4 m). Lsd 4,910 ft (1,497 m) above msl. MP top of casing 1.38 ft (0.42 m) above lsd. Highest water level 11.22 ft (3.42 m) below lsd, Aug. 10, 1973; lowest 16.30 ft (4.97 m) below lsd, Jan. 12, 1967. Records available: 1956-75.

Jan. 23, 1975, 12.59; Aug. 8, 1975, 12.27.

350655106395001. Local number 10N.2E.12.223. City of Albuquerque. Drilled observation water-table well in alluvium and Santa Fe Group, diam 6 in (15 cm), depth 950 ft (290 m). Lsd 4,962 ft (1,512 m) above msl. MP top north side of casing, 6.00 ft (1.83 m) above lsd. Highest water level 12.10 ft (3.69 m) below lsd, Apr. 16, 1953; lowest 34.74 ft (10.59 m) below lsd, Aug. 31, 1964. Records available: 1953, 1957-75.

Jan. 23, 1975, 29.44; Aug. 8, 1975, 32.10.

350415106403001. Local number 10N.2E.24.413. City of Albuquerque. Drilled observation water-table well in alluvium and Santa Fe Group, diam 6 in (15 cm), depth and casing information not available. Lsd 4,945 ft (1,507 m) above msl. MP top east side of casing, 5.50 ft (1.68 m) above lsd. Highest water level 17.83 ft (5.43 m) below lsd, Aug. 8, 1975; lowest 22.51 ft (6.86 m) below lsd, Oct. 7, 1961. Records available: 1956-75.

Jan. 23, 1975, 17.93; Aug. 8, 1975, 17.83.

Chaves County

## Roswell Basin

334645104344501. Local number 7S.23E.23.244. Jess Corn. Drilled irrigation artesian well in San Andres Limestone of Permian age, diam 14 in (36 cm), depth 426 ft (130 m), cased to 426 ft (130 m). Lsd 3,810 ft (1,161 m) above msl. MP lower outer edge of mouth of discharge pipe, 3.71 ft (1.13 m) above lsd. Highest water level 239.83 ft (73.10 m) below lsd, May 26, 1951; lowest 285.65 ft (87.07 m) below lsd, Aug. 23, 1972. Records available: 1951-60; 1962-66; 1968-75.

Jan 17, 1975, 284.05; Aug. 13, 1975, (well being pumped).

331930104261001. Local number 11S.25E.29.34333. Valle Ranch. Drilled irrigation water-table well in valley fill, depth 160 ft (49 m), cased to 160 ft (49 m). Lsd 3,535 ft (1,077 m) above msl. MP edge of pumpbase, southeast corner, at lsd. Highest water level 16.20 ft (4.94 m) below lsd, Jan. 13, 1975; lowest 20.36 ft (6.21 m) below lsd, Aug. 22, 1974. Records available: 1974-75.

Jan. 13, 1975, 16.20; Aug. 13, 1975, (well being pumped).

332200104270001. Local number 12S.25E.9.422. Cumberland townsite. Drilled unused water-table well in valley fill, diam 10 in (25 cm), reported depth 90 ft (27 m), cased to 90 ft (27 m). Lsd 3,564 ft (1,086 m) above msl. MP top of 3/4-in (1.9 cm) pipe collar, 0.62 ft (0.19 m) above lsd. Highest water level 38.64 ft (11.78 m) below lsd, Oct. 16, 1941; lowest 83.06 ft (25.32 m) below lsd, Aug. 21, 1973. Records available: 1937-75.

Jan 13, 1975, 77.43; Aug. 13, 1975, 78.16.

331205104245101. Local number 12S.25E.23.344. Orchard Park "A". Drilled observation artesian well in San Andres Limestone, diam 9 to 7 in (23 to 18 cm), depth 930 ft (283 m), depth to San Andres aquifer 710 ft (216 m), 9-in (23-cm) casing 0-304 ft (0-93 m), 7-in (18-cm) casing 304-714 ft (93-218 m). Lsd 3,539.00 ft (1,078.69 m) above msl. MP top of recorder shelf, 2.90 ft (0.88 m) above lsd. Highest water level 24.55 ft (7.48 m), Feb. 5, 1975; lowest 174.04 ft (53.04 m), June 5, 1973. Records available: 1946-75.

331205104245101.--Continued

Highest water level for the day, from recorder graph, 1975												
Day	Oct.	Nov. 1974	Dec.	Jan.	Feb.	Mar.	Apr.	May 1975	June	July	Aug.	Sept.
5	47.60	37.48	31.55	27.81	24.55	29.34	115.03	105.03	138.18	139.42	100.34	129.64
10	44.60	35.67	30.70	27.15	24.94	32.22	127.75	98.03	134.11	141.74	113.49	117.36
15	43.70	34.58	29.97	26.84	25.79	51.86	.....	95.03	128.04	131.03	140.65	82.47
20	41.00	33.47	28.28	26.27	26.67	85.44	.....	92.43	130.74	126.79	148.64	84.17
25	39.61	32.96	28.82	27.07	26.23	94.78	121.51	116.40	124.35	88.59	144.68	83.75
Eom	37.74	32.19	28.41	26.75	25.79	76.67	117.75	135.25	125.96	71.94	131.62	85.91

330700104402501. Local number 14S.23E.8.144. M. D. Kincaid. Drilled stock water-table well in San Andres Limestone of Permian age, diam 8 in (20 cm), depth 460 ft (140 m), casing information not available. Lsd 3,845 ft (1,173 m) above msl. MP top of casing, 1.00 ft (0.30 m) above lsd. Highest water level 257.55 ft (78.50 m) below lsd, Feb. 9, 1943; lowest 327.34 ft (99.77 m) below lsd, Aug. 28, 1967. Records available: 1940-75.

Jan. 10, 1975, 316.67; Aug. 18, 1975, 319.05.

330640104174501. Local number 14S.26E.12.433b. C. B. Donaghay. Drilled irrigation water-table well in valley fill, diam 13 in (33 cm), depth 125 ft (38 m), cased 0-125 ft (0-38 m), perforated 50-115 ft (15-35 m). Lsd 3,396.4 ft (1,035.2 m) above msl. MP top of casing, at lsd. Highest water level 12.50 ft (3.81 m), Jan. 22, 1942; lowest 23.77 ft (7.25 m), Aug. 25, 1967. Records available: 1940-75.

Aug. 13, 1975, 20.53.

#### Colfax County

##### Capulin Basin

364500104031501. Local number 29N.27E.16.222. John King. 200 ft (61 m) north of U.S. Highway 64-87. Drilled unused water-table well in alluvium, diam 8 in (20 cm), depth 120 ft (37 m), cased to 120 ft (37 m). Lsd 6,821.5 ft (2,079.2 m) above msl. MP top of casing, 1.50 ft (0.46 m) above lsd. Highest water level 4.65 ft (1.42 m) below lsd, Feb. 3, and Aug. 24, 1960; lowest 9.37 ft (2.86 m) below lsd, Aug. 13, 1975. Records available: 1957-69, 1971-75.

Jan. 23, 1975, 7.93; Aug. 13, 1975, 9.37.

#### Costilla County (in Colorado)

##### Sunshine Valley

375655105354001. Local number 1N.74E.33.322. Waller and Allen. Drilled unused water-table well in Santa Fe Group, diam 15 in (38 cm), depth 232 ft (71 m), casing information not available. Lsd 7,495 ft (2,284 m) above msl. MP edge of hole inside pumpcase 2.00 ft (0.60 m) above lsd (since 1971). Highest water level 101.82 ft (31.03 m) below lsd, Aug. 26, 1968; lowest 134.87 ft (41.11 m) below lsd, Aug. 19, 1971. Records available: 1966-75.

Feb. 4, 1975, 129.23; Aug. 14, 1975, 129.39.

Curry County

## Clovis Area

342815103270001. Local number 3N.34E.23.433. Monte Matlock. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 16 in (41 cm), depth 418 ft (127 m), cased to 418 ft (127 m), perforated 365-418 ft (111-127 m). Lsd 4,432 ft (1,351 m) above msl. MP top of casing level with concrete base, 0.40 ft (0.12 m) above lsd (since 1967). Highest water level 340.62 ft (103.82 m) below lsd, Mar. 16, 1957; lowest 346.84 ft (105.72 m) below lsd, Aug. 11, 1975. Records available: 1954-75.

Jan. 3, 1975, 346.37; Aug. 11, 1975, 346.84.

344500103052001. Local number 6N.37E.8.333. Paul Harrison. Drilled irrigation water-table well, diam 16 in (41 cm), depth 400 ft (121 m). Lsd 4,430 ft (1,340 m) above msl. MP southeast anchor bolt hole .10 ft (.03 m) above concrete base and .70 ft (.21 m) above lsd. Highest water level 289.30 ft (88.13 m) below lsd, Jan. 3, 1975; lowest 289.90 ft (88.36 m) below lsd, Jan. 3, 1974. Records available: 1974-75.

Jan. 3, 1975, 289.30; Aug. 11, 1975, (well being pumped).

Dona Ana County

## Rincon and Mesilla Valleys

322210106483001. Local number 22S.1E.26.411. H. Worthhiem Estate. Drilled irrigation water-table in valley fill, diam 18 in (46 cm), depth 107 ft (33 m), cased to 107 ft (33 m). Lsd 3,920 ft (1,195 m) above msl. MP top of east side of casing, 1.50 ft (0.46 m) above lsd. Highest water level 11.32 ft (3.45 m) below lsd, Aug. 25, 1969; lowest 25.57 ft (7.79 m) below lsd, Apr. 25, 1957. Records available: 1957-75.

Jan. 9, 1975, 13.18; Aug. 5, 1975, 12.71.

321620106461501. Local number 23S.2E.31.213. New Mexico State University. Drilled irrigation water-table well in valley fill, diam 14 in (36 cm), reported depth 70 ft (21 m), cased to 70 ft (21 m). Lsd 3,880 ft (1,183 m) above msl. MP top of 5/8-in (.63-cm) hole in pumpbase, 1.08 ft (0.33 m) above lsd. Highest water level 13.16 ft (4.01 m) below lsd, Dec. 3, 1947; lowest 29.12 ft (8.88 m) below lsd, Jan. 7, 1958. Records available 1947-48, 1957-75.

Jan. 8, 1975, 21.90; Aug. 5, 1975, 21.55.

Eddy County

## Roswell Basin

325510104410001. Local number 16S.23E.15.323. D. W. Runyan. Drilled stock water-table well in San Andres Limestone of Permian age, diam 10 in (25 cm), depth 1,485 ft (453 m), cased. Lsd 3,900 ft (1,189 m) above msl. MP top of casing, 0.70 ft (0.21 m) above msl. Highest water level 211.87 ft (64.58 m) below lsd, Mar. 25, 1945; lowest 277.60 ft (84.61 m) below lsd, Aug. 5, 1971. Records available: 1940-65, 1970-71, 1974-75.

Jan. 15, 1975, 273.58; Aug. 6, 1975, 274.76.

325735104360701. Local number 16S.24E.4.23123. Ellis Hunlic. Drilled irrigation artesian well in San Andres Limestone, diam unavailable, depth 610 ft (186 m). Lsd 3,623 ft (1,104 m) above msl. MP south-west side of pump, 1.50 ft (0.46 m) above lsd. Highest water level 90.85 ft (26.69 m) below lsd, Jan. 16, 1970; lowest 100.54 ft (30.64 m) below lsd, Aug. 27, 1974. Records available: 1969-75.

Jan. 15, 1975, 92.87; Aug. 7, 1975, (well being pumped).

325712104314501. Local number 16S.25E.6.313. Frank Childress. Drilled unused water-table well in valley fill, diam 20 in (51 cm), depth 39 ft (12 m), cased to 39 ft (12 m). Lsd 3,600 ft (1,097 m) above msl. MP top of 20-in (51-cm) wood cribbing, 0.40 ft (0.12 m) above lsd. Highest water level 24.41 ft (7.44 m) below lsd, July 17, 1961; lowest 30.62 ft (9.33 m) below lsd, Aug. 9-10, 1954. Records available: 1937-66, 1968-75.

Jan. 20, 1975, 29.72; Aug. 6, 1975, 30.01

325445104253501. Local number 16S.26E.19.211. H. V. Parker. Drilled irrigation water-table well in valley fill, diam 12 in (30 cm), depth 107 ft (33 m), cased to 107 ft (33 m). Lsd 3,397.9 ft (1,035.7 m) above msl. MP hole in top of pump, west side, .30 ft (.09 m) above top of casing (since 1975). Highest water level 9.34 ft (2.85 m) below lsd, Jan. 15, 1942; lowest 109.00 ft (33.22 m) below lsd, Aug. 31, 1972. Records available 1938-75.

Jan. 20, 1975, 97.20; Aug. 25, 1975, 104.82.

324831104435701. Local number 17S.23E.30.13244. Village of Hope. Drilled public-supply artesian well in principal artesian aquifer, diam 16 in (40 cm), depth 600 ft (183 m), cased to 558 ft (170 m), perforated 490-558 ft (152-170 m). Lsd 4,095 ft (1,248 m) above msl. MP top of 2-in (5.1-cm) pipe extending out of north side of concrete base, 2.00 ft (0.61 m) above lsd. Highest water level 546.15 ft (116.47 m) below lsd, Dec. 31, 1968; lowest 553.18 ft (168.61 m) below lsd, Aug. 7, 1974. Records available: 1968, 1970-75.

Jan. 13, 1975, 548.82; Aug. 6, 1975 548.05.

324930104234501. Local number 17S.26E.21.112. Western Land Co., Inc. Drilled irrigation water-table well in Artesia Group, diam 12 in (30 cm), depth 242 ft (74 m), cased to 242 ft (74 m). Lsd 3,373 ft (1,028 m) above msl. MP 3/4-in (1.9-cm) plug on discharge pipe, 2.00 ft (0.61 m) above lsd. Highest water level 43.23 ft (13.18 m) below lsd, Jan. 13, 1955; lowest 106.28 ft (32.39 m) below lsd, Aug. 16, 1974. Records available: 1938-45, 1947-58, 1960-63, 1965-75.

Jan. 14, 1975, 87.10; Aug. 13, 1975, 100.90

324615104421001. Local number 18S.23E.5.333. Joe Clements. Drilled stock water-table well in San Andres Limestone of Permian age, diam 6 in (15 cm), depth 500 ft (152 m), surface casing. Lsd 4,007.6 ft (1,221.5 m) above msl. MP top of casing, 0.40 ft (0.12 m) above lsd. Highest water level 385.50 ft (117.50 m) below lsd, July 21, 1945; lowest 478.73 ft (145.92 m) below lsd, Jan. 14, 1969. Records available: 1945-75.

Jan. 13, 1975, 471.17; Aug. 13, 1975, 741.84.

324624104244501. Local number 18S.26E.6.442a. Artesia "A". Drilled observation artesian well in San Andres Limestone, diam 9 in (23 cm), depth 1,008 ft (307 m), cased to 726 ft (221 m), depth to artesian aquifers 768 ft (234 m), 820 ft (250 m), 889 ft (271 m), and 999 ft (305 m). Lsd 3,402.10 ft (1,036.96 m) above msl. MP top of recorder shelf, 3.40 ft (1.04 m) above lsd. Highest water level 71.79 ft (21.88 m) below lsd, Jan. 26, 1962; lowest 209.15 ft (63.75 m) below lsd, July 31, 1966. Records available: 1961-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov. 1974	Dec.	Jan.	Feb.	Mar.	Apr.	May 1975	June	July	Aug.	Sept.
5	133.28	....	104.59	95.84	89.32	89.83	132.99	133.56	146.89	157.67	149.40	161.92
10	129.55	....	102.88	94.48	88.28	92.59	137.87	140.21	149.24	155.86	164.01	154.16
15	126.11	....	101.41	93.85	87.77	97.77	134.05	135.33	146.38	147.20	172.11	144.80
20	123.02	....	100.15	92.72	88.92	104.74	132.73	135.03	155.56	142.79	170.28	146.63
25	.....	....	98.84	91.59	88.16	111.67	131.44	144.14	153.09	140.71	164.83	145.69
From	.....	....	97.17	90.48	88.12	115.21	135.34	145.54	154.37	143.66	162.58	145.16

324325104233001. Local number 18S.26E.28.121a. Town of Dayton. Drilled observation water-table well in valley fill, diam 8 in (20 cm), depth 250 ft (76 m), cased to 182 ft (55 m), casing slotted 92-182 ft (28-55 m). Lsd 3,403 ft (1,037 m) above msl. MP top of casing, 0.06 ft (0.02 m) above lsd. Highest water level 59.79 ft (18.22 m) below lsd, Feb. 5, 1952; lowest 116.65 ft (35.55 m) below lsd, Dec. 31, 1974. Records available: 1951-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov. 1974	Dec.	Jan.	Feb.	Mar.	Apr.	May 1975	June	July	Aug.	Sept.
5	.....	116.49	116.52	116.56	.....	116.49	116.60	116.58	116.71	116.67	116.80	116.87
10	.....	116.51	116.48	116.61	115.00	116.49	116.61	116.68	116.71	116.73	116.80	116.84
15	.....	116.43	116.57	116.68	.....	116.52	116.62	116.65	116.69	116.75	116.82	116.88
20	.....	116.59	116.63	116.57	116.45	116.56	116.64	116.61	116.72	116.75	116.84	116.87
25	116.50	116.47	116.63	116.68	116.53	116.48	116.60	116.68	116.64	116.78	116.79	116.83
From	116.50	116.57	116.65	116.80	116.54	116.51	116.66	116.67	116.74	116.80	116.86	116.87

323540104232001. Local number 20S.26E.8.12111. Moutry well. Drilled irrigation water-table well in valley fill, diam 13 in (33 cm), depth 364 ft (111 m), casing information unavailable. Lsd 2,386 ft (1,002 m) above msl. MP top of basal flange of pump head, 0.29 ft (.06 m) above lsd. Highest water level 25.87 ft (7.89 m), Jan. 2, 1943; lowest 87.48 ft (26.66 m), Aug. 5, 1974. Records available: 1938-75.

Jan. 15, 1975, 67.75.

#### Carlsbad Area

322640104165801. Local number 21S.27E.32.112. L. E. Loman. Drilled domestic and irrigation artesian well in Capitan Limestone of Permian age, diam 6 in (15 cm), reported depth 305 ft (93 m). Lsd 3,112 ft (949 m) above msl. MP top of casing, 0.40 ft (0.12 m) above lsd. Highest water level 4.64 ft (1.41 m), Jan. 17, 1950; lowest 17.35 ft (5.29 m), Aug. 9, 1974. Records available: 1947-75.

Jan. 10, 1975, 8.42; Aug. 7, 1975, 14.48.

322120104151501. Local number 22S.26E.36.111. Carlsbad Airfield 2. Drilled unused water-table well in alluvium, diam 12 in (30 cm), depth 260 ft (79 m), cased to 260 ft (79 m). Lsd 3,225 ft (983 m) above msl. MP top of recorder platform, 2.70 ft (.83 m) above lsd. Highest water level 131.50 ft (40.08 m) below lsd, Oct. 14, 1942; lowest 207.75 ft (63.32 m) below lsd, Aug. 25, 1973. Records available: 1942-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov. 1974	Dec.	Jan.	Feb.	Mar.	Apr.	May 1975	June	July	Aug.	Sept.
5	....	.....	169.00	168.09	166.39	164.00	170.42	175.00	180.40	184.72	184.15	186.78
10	....	.....	169.40	167.40	165.95	164.40	171.40	176.67	180.99	184.40	184.00	186.97
15	....	169.69	169.28	167.40	165.40	164.77	172.90	176.75	181.84	183.87	184.93	186.00
20	....	170.02	169.08	167.09	165.21	165.69	174.23	178.45	182.81	183.40	185.67	186.11
25	....	170.08	169.00	166.00	165.21	166.92	174.85	179.67	183.00	183.00	186.10	185.00
End	....	170.06	168.40	166.63	165.97	168.93	175.33	180.28	184.39	183.72	186.00	185.36

322231104131001. Local number 22S.27E.22.421. Enea Grandi. Drilled irrigation water-table well in alluvium, diam 16 in (41 cm), reported depth 150 ft (46 m), cased. Lsd 3,100 ft (945 m) above msl. MP top of casing, 1.20 ft (0.37 m) above lsd. Highest water level 21.43 ft (6.53 m) below lsd, Sept. 15, 1950; lowest 71.23 ft (21.71 m) below lsd, Sept. 20, 1965. Records available: 1947-63, 1970-75.

Jan. 10, 1975, 50.70; Aug. 7, 1975 (well pumping).

321930104113301. Local number 23S.27E.09.211. J. A. Cox. Drilled irrigation water-table well, diam 16 in (41 cm), depth 200 ft (60.9 m). Lsd 3,150 ft (960 m) above msl. MP top of casing, under pumpbase, 1.25 ft (.41 m) above lsd. Highest water level 41.70 ft (12.71 m) below lsd, Sept. 15, 1950; lowest 68.22 ft (20.79 m) below lsd, Jan. 28, 1969. Records available 1950-53, 1956-75.

Jan. 16, 1975, 60.55.

321740104035501. Local number 23S.28E.23.133. A. R. Donaldson. Drilled irrigation water-table well in alluvium, diam 16 in (41 cm), depth 148 ft (45 m), cased. Lsd 3,029 ft (921 m) above msl. MP bottom edge of north 1/2-in (1.27 cm) hole in west side of pumpbase, 0.80 ft (.24 m) above lsd. Highest water level 38.25 ft (11.66 m) below lsd, Sept. 14, 1950; lowest 70.73 ft (21.56 m) below lsd, Aug. 2, 1972. Records available: 1947-75.

Jan. 10, 1975, 50.94; Aug. 7, 1975, 62.94.

320602104285201. Local number 25S.24E.27.421. Walker Hood. Drilled irrigation water-table in alluvium, diam 16 in (41 cm), depth 101 ft (31 m), uncased. Lsd 3,791 ft (1,128 m) above msl. MP northwest corner of pumpbase, 1.00 ft (.31 m) above lsd. Highest water level 55.22 ft (16.83 m) below lsd, Sept. 21, 1966; lowest 85.10 ft (25.93 m) below lsd, Aug. 25, 1967. Records available: 1952-67, 1969-75.

Jan. 16, 1975, 55.94; Aug. 28, 1975, 62.50.



320257104295201. Local number 26S.24E.9.441. John Mayes. Drilled irrigation water-table well in alluvium, diam 12 in (30 cm), depth 100 ft (30 m), cased to 85 ft (26 m). Lsd 3,749.4 ft (1,142.8 m) above msl. MP top of air-line flange support, 1.40 ft (.43 m) above lsd. Highest water level 42.29 ft (12.89 m) below lsd, Nov. 8, 1955; lowest 54.98 ft (16.76 m) below lsd, Sept. 8, 1965. Records available: 1952-75.

Jan. 16, 1975, 45.71; Aug. 7, 1975, 46.16.

#### Hidalgo County

##### Virden Valley

324053108594101. Local number 19S.21W.3.414. Jones, Clouse, Jensen. Drilled irrigation water-table well in valley fill, diam 20 in (51 cm), depth 72 ft (22 m). MP hole inside pumpshell, .90 ft (.27 m) above lsd. Highest water level 10.64 ft (3.24 m) below lsd, Jan. 24, 1973; lowest 14.54 ft (4.43 m) below lsd, Sept. 12, 1974. Records available: 1971-75.

Jan. 1, 1975, 10.84; Sept. 9, 1975, 11.07.

##### Animas Valley

320700108515001. Local number 25S.20W.24.313. Rudiger and Jundt. Drilled irrigation water-table well in bolson deposits, diam 16 in (41 cm), depth 320 ft (98 m), cased to 320 ft (98 m). Lsd 4,221.43 ft (1,286.69 m) above msl. MP top of casing, 0.43 ft (0.13 m) above lsd. Highest water level 42.43 ft (12.93 m) below lsd, Apr. 1, 1948; lowest 106.45 ft (32.45 m) below lsd, Aug. 12, 1970. Records available: 1948-75.

Jan. 8, 1975, 98.43; Sept. 9, 1975, 104.86.

315645108493501. Local number 27S.19W.20.343. Felix Gauthier. Drilled irrigation water-table well in bolson deposits, diam 16 in (41 cm), depth 358 ft (109 m) cased to 358 ft (109 m). Lsd 4,420 ft (1,347 m) above msl. MP top edge of 1½-in (3.16 cm) pipe in concrete pumpbase, 1.25 ft (.38 m) above lsd. Highest water level 131.90 ft (40.20 m) below lsd, July 29, 1949; lowest 172.87 ft (52.69 m) below lsd, Sept. 9, 1975. Records available: 1949-75.

Jan. 13, 1975, 170.35; Sept. 9, 1975, 172.87.

##### San Simon Creek Valley

315010108570001. Local number 28S.21W.30.222. C. L. Johnston. Drilled irrigation water-table well in bolson deposits, diam 8 in (20 cm), depth 471 ft (143 m) cased to 471 ft (143 m). Lsd 4,440 ft (1,355 m) above msl. MP hole in west side of casing 0.70 ft (0.21 m) above lsd. Highest water level 110.88 ft (33.80 m) below lsd, Jan. 15, 1969; lowest 117.18 ft (35.72 m) below lsd, Jan. 10, 1975. Records available: 1968-75.

Jan. 10, 1975, 117.18

##### Playas Valley

313502108275001. Local number 31S.16W.33.233. U-Bar Ranch. Drilled observation water-table well completed in bolson deposits, diam 16 in (41 cm), depth 654 ft (199 m), 16-in (41-cm) casing. Lsd 4,400 ft (1,341 m) above msl. MP is bottom edge of shelf, 4.03 ft (1.23 m) above lsd. Highest water level 44.66 ft (13.61 m) below lsd, Apr. 18-20, & 30, 1973; lowest 58.90 ft (17.95 m) below lsd, June 26-27, 1974. Records available: 1971-75.

Highest water level for the day, from recorder graph, 1974-75											
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
		1974						1975			
5	54.14	51.44	50.71	50.35	.....	51.96	55.29	57.54	55.60	54.75	53.31
10	53.38	51.24	50.63	50.20	.....	52.25	56.07	.....	55.67	55.14	52.95
15	52.85	51.10	50.61	50.28	50.56	52.55	56.97	56.67	55.69	55.25	53.50
20	52.39	50.99	50.49	50.20	51.05	52.84	57.54	56.36	55.64	54.98	53.22
25	52.04	50.85	50.39	.....	51.46	53.29	57.33	56.27	55.20	55.03	52.52
End	51.69	50.78	50.37	.....	51.67	54.36	57.31	55.81	55.02	55.01	52.29

Lea County

## Tatum-Lovington-Hobbs Area

331740103285001. Local number 12S.34E.11.413. A. D. Jones Estate. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 15 in (38 cm), depth 87 ft (27 m). Lsd 4,150 ft (1,265 m) above msl. NP top of concrete pumpbase, 0.80 ft (0.24 m) above lsd. Highest water level 29.57 ft (9.01 m) below lsd, May 24, 1949; lowest 33.82 ft (10.31 m) below lsd, Aug. 13, 1974. Records available: 1949-75.

Jan. 7, 1975, 33.70; Aug. 12, 1975, 33.46.

330325103245501. Local number 14S.35E.33.433. W. A. Anderson. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 6 in (15 cm), depth 62 ft (19 m), not cased. Lsd 4,013.61 ft (1,223.35 m) above msl. NP top of concrete collar on well, 1.00 ft (.30 m) above lsd. Highest water level 39.65 ft (12.09 m) below lsd, May 21, July 25, 1951 and Jan. 9, May 24, 1952; lowest 46.84 ft (14.28 m) below lsd, Aug. 13, 1974. Records available: 1929-75.

Jan. 7, 1975, 46.18; Aug. 12, 1975, 45.19.

330400103193401. Local number 14S.36E.32.121. E. T. Howell. Drilled irrigation water-table well in Ogallala Formation, diam 16 in (41 cm), depth and casing unknown. Lsd 3,990 ft (1,216 m) above msl. NP top of concrete pumpbase, 0.50 ft (0.15 m) above lsd. Highest water level 53.38 ft (15.9 m) below lsd, Jan. 19, 1949; lowest 70.09 ft (21.36 m) below lsd, Jan. 14, 1971. Records available: 1949-66, 1968-75.

Jan. 7, 1975, 67.17.

325703103213201. Local number 16S.36E.4.322. City of Lovington. Drilled unused water-table well in Ogallala Formation, diam 13 in (33 cm), depth 212 ft (65 m); perforated 80-208 ft (24-63 m). Lsd 3,926 ft above msl. NP top of shelf, 4.00 ft (1.22 m) above lsd. Highest water level 65.20 ft (19.87 m) below lsd, Dec. 25, 1974; lowest 67.10 ft (20.45 m) below lsd, Aug. 15, 25, 1972. Records available: 1971-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
		1974						1975				
5	66.20	65.96	65.30	65.51	65.55	65.50	.....	65.39	65.51	65.55	65.53	65.43
10	66.14	65.89	65.60	65.62	65.53	65.49	.....	65.42	65.51	65.56	65.52	65.42
15	66.13	65.80	65.26	65.63	65.52	65.49	.....	65.44	65.52	65.55	65.51	65.41
20	66.10	65.80	65.61	65.58	65.51	65.48	.....	65.42	65.55	65.54	65.49	65.40
25	66.09	65.70	65.20	65.58	65.53	65.49	65.49	65.48	65.55	65.55	65.45	65.40
Dom	65.91	65.70	65.51	65.58	65.52	.....	65.39	65.51	65.56	65.53	65.45	65.40

325658103200001. Local number 16S.37E.11.111. H. J. Taylor. Drilled irrigation water-table well in Ogallala Formation of Pliocene age, diam 16 in (41 cm), reported depth 118 ft (36 m). Lsd 3,900 ft (1,189 m) above msl. NP top of 1-in (2.54-cm) hole in southwest side of pump 1.34 ft (.41 m) above lsd. Highest water level 31.93 ft (9.73 m) below lsd, Jan. 23, 1949; lowest 73.56 ft (23.95 m) below lsd, Sept. 13, 1965. Records available: 1949-75.

Jan. 7, 1975, 73.45; Aug. 13, 1975, (well being pumped).

324947103371001. Local number 17S.33E.13.341. Potash Co. of America. Drilled observation water-table well in Ogallala Formation of Pliocene age, diam 6 in (15 cm), depth 252 ft (77 m), cased to 252 ft (77 m). Lsd 4,124 ft (1,257 m) above msl. NP top of casing, 1.10 ft (.34 m) above lsd. Equipped with recording gage. Highest water level 146.00 ft (44.50 m) below lsd, Jan. 21, 1953; lowest 166.46 ft (50.74 m) below lsd, Aug. 12, 1975. Records available: 1952-75.

Jan. 8, 1975, 165.46; Aug. 12, 1975, 166.46

325132103112501. Local number 17S.38E.7.111a. L. R. Sebring. Drilled irrigation water-table well in Ogallala Formation of Pliocene age, diam 16 in (41 cm), reported depth 125 ft (38 m), cased. Lsd 3,740 ft (1,140 m) above msl. NP edge of small pipe projecting from west side of pump, 0.96 ft (0.29 m) above concrete pumpbase and 1.91 ft (.58 m) above lsd (since 1971). Highest water level 35.59 ft (10.85 m) below lsd, Mar. 21, 1952; lowest 69.60 ft (21.21 m) below lsd, Aug. 3, 1971. Records available: 1951-75.

Jan. 7, 1975, 64.17; Aug. 13, 1975, 66.40.

324745103082001. Local number 17S.38E.34.113. W. E. Busby. Drilled irrigation water-table well in Ogallala Formation of Pliocene age, diam 12 in (30 cm), depth 125 ft (38 m), cased to 90 ft (27 m). Lsd 3,660 ft (1,116 m) above msl. MP top of  $\frac{1}{2}$ -in (1.3-cm) hole in pumpbase, 0.34 ft (16 cm) above lsd. Highest water level 24.78 ft (7.55 m) below lsd, Jan. 15, 1944; lowest 48.85 ft (14.89 m) below lsd, Aug. 13, 1975. Records available: 1943-75.

Jan. 7, 1975, 48.18; Aug. 13, 1975, 48.85.

#### Lincoln County

##### Hondo Valley

333015105382201. Local number 9S.13E.25.113. M. W. Coll. 0.4 mi (0.6 km) southwest of intersection of Magado Creek and State Highway 48. Drilled irrigation and domestic water-table well in alluvium, diam 3 in (20 cm), depth 90 ft (27 m), cased to 40 ft (12 m). Lsd 6,750 ft (2,057 m) above msl. MP top of casing, at lsd. Highest water level 18.04 ft (5.50 m) below lsd, Nov. 26, 1953; lowest 44.36 ft (13.52 m) below lsd, Aug. 13, 1971. Records available: 1955-75.

Jan. 23, 1975, 26.68; Aug. 21, 1975, 27.78.

333242105340701. Local number 9S.14E.10.132. Village of Capitan. East end of village on south side of U.S. Highway 380. Drilled public-supply water-table well in Mancos Shale of Late Cretaceous age, diam 8 in (20 cm), depth 324 ft (99 m), cased to 271 ft (83 m). Lsd about 6,340 ft (1,932 m) above msl. MP top of breather hole on west side of pumpbase, 1.00 ft (.30 m) above lsd. Highest water level 38.39 ft (11.70 m) below lsd, Aug. 14, 1973; lowest 69.77 ft (21.27 m) below lsd, Nov. 28, 1956. Records available: 1955-75.

Aug. 21, 1975, 40.50.

332145105333001. Local number 11S.14E.15.431. E. H. Fuchs. 0.1 mi (0.16 km) west of Valley View Motel. Drilled unused water-table well in alluvium, diam 8 in (20 cm), depth 90 ft (27 m), casing information unavailable. Lsd 6,200 ft (1,890 m) above msl. MP top of east edge of 8-in (20-cm) casing, 1.00 ft (.30 m) above lsd. Highest water level 57.16 ft (17.42 m) below lsd, Mar. 26, 1958; lowest 63.75 ft (19.43 m) below lsd, Aug. 10, 1970. Records available: 1955-75.

Jan. 23, 1975, 62.30; Aug. 20, 1975, 58.29.

332157105094101. Local number 11S.18E.16.444. Lincoln County Livestock Co. 0.4 mi (0.6 km) south of Picacho bridge on east side of Casey Canyon Rd. Drilled domestic and stock water-table well in Yeso Formation of Permian age, diam 12 in (30 cm), depth 125 ft (38 m), cased to 110 ft (34 m). Lsd 5,010 ft (1,526 m) above msl. MP top of casing, 0.50 ft (.15 m) above lsd. Highest water level 50.40 ft (15.36 m) below lsd, Aug. 14, 1973; lowest 60.18 ft (18.34 m) below lsd, Jan. 15, 1959. Records available: 1955-75.

Jan. 23, 1975, 53.43; Aug. 20, 1975, 50.75.

#### Luna County

##### Mimbres Valley

323110107235001. Local number 20S.5W.31.334. Leonard Farms (formerly Jack Carter). Drilled irrigation water-table well in valley fill, diam 16 in (41 cm), depth 421 ft (128 m), perforated 221-421 ft (67-128 m). Lsd 4,486.6 ft (1,367.5 m) above msl. MP  $\frac{1}{2}$ -in (1.3-cm) pipe west side of pump base, 1.00 ft (.30 m) above lsd, (since Jan. 1973). Highest water level 54.69 ft (16.67 m) below lsd, Jan. 19, 1959; lowest 100.46 ft (30.62 m) below lsd, Sept. 8, 1975. Records available: 1959-75.

Sept. 8, 1975, 100.46.

322930107221001. Local number 21S.5W.8.444. Leonard Farms (formerly listed as Jack Carter). Drilled irrigation water-table well in valley fill, diam 16 in (41 cm), depth 435 ft (133 m), cased to 435 ft (133 m). Lsd 4,530 ft (1,381 m) above msl. MP hole in NE side of pump shell, 1.60 ft (.49 m) above lsd. Highest water level 102.06 ft (31.11 m) below lsd, Jan. 17, 1962; lowest 145.06 ft (44.21 m) below lsd, Sept. 8, 1975. Records available: 1961-75.

Jan. 21, 1975, 145.06; Sept. 8, 1975, (well being pumped).

321352107493901. Local number 24S.10W.12.431. Steve Hrna. Dug and drilled unused water-table well in valley fill, diam 36 in (91 cm) to 12 in (30 cm), reported depth 132 ft (40 m), cased. Lsd 4,330 ft (1,319 m) above msl. MP top of recorder shelter shelf, 1.36 ft (.42 m) above lsd. Highest water level 77.61 ft (23.66 m) below lsd, May 6-13, 1940; lowest 112.07 ft (34.16 m) below lsd, July 31, 1966. Records available: 1939-75.

Highest water level for the day, from recorder graph, 1974-75.												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
		1974						1975				
5	....	....	....	....	.....	107.73	109.17	109.80	110.81	110.78	110.86	110.78
10	....	....	....	....	107.10	107.84	109.39	110.20	110.79	110.84	110.82	110.62
15	....	....	....	....	107.03	108.20	109.71	110.39	110.69	110.80	110.82	110.60
20	....	....	....	....	107.28	108.46	109.77	110.48	110.72	110.86	110.81	110.43
25	....	....	....	....	107.50	108.57	109.74	110.66	110.70	110.01	110.68	110.28
Eom	....	....	....	....	107.66	108.95	109.91	110.81	110.84	110.86	110.74	110.16

321415107565501. Local number 24S.11W.14.122. Charles Waldrop. Drilled irrigation water-table well in valley fill, diam 12 in (30 cm), reported depth 210 ft (64 m), cased to 198 ft (60 m). Lsd 4,405 ft (1,343 m) above msl. MP top of 1-in (2.5-cm) hole in pumpbase, 0.80 ft (.24 m) above lsd. Highest water level 107.66 ft (32.82 m) below lsd, Jan. 23, 1952; lowest 190.38 ft (58.03 m) below lsd, May 11, 1956. Records available: 1951-75.

Jan. 14, 1975, 178.63; Sept. 9, 1975, 176.73.

321015107260501. Local number 25S.6W.2.111. C. W. Johnson, Jr. Drilled irrigation artesian well in valley fill, diam 16 in (41 cm), depth 235 ft (72 m), perforated 180-235 ft (55-72 m), gravel packed. Lsd 4,220 ft (1,282 m) above msl. MP top of casing, 1.30 ft (.40 m) above lsd. Highest water level 0.45 ft (0.14 m) below lsd, Mar. 14, 1953; lowest 81.96 ft (24.93 m) below lsd, Aug. 2, 1974. Records available: 1952-75.

Jan. 14, 1975, 42.82; Sept. 9, 1975, 73.44.

320915107294501. Local number 25S.6W.7.211. H. C. Telles. Drilled irrigation water-table well in valley fill, diam 16 in (41 cm), depth 230 ft (70 m), cased to 230 ft (70 m). Lsd 4,084.22 ft (1,244.87 m) above msl. MP hole in pumpbase 1.20 ft (.37 m) above lsd (since Jan. 15, 1966). Highest water level 65.34 ft (19.92 m) below lsd, Mar. 14, 1953; lowest 122.16 ft (37.23 m) below lsd, Aug. 13, 1970. Records available: 1953-75.

Jan. 13, 1975, 91.51; Sept. 9, 1975, 92.37.

315525107374501. Local number 27S.8W.35.122. Mrs. M. M. Gibson. Drilled unused irrigation water-table well in valley fill, diam 12 in (30 cm) to 8 in (20 cm), depth 550 ft (168 m), cased to 550 ft (168 m), perforated 155-550 ft (47-168 m). Lsd 4,070 ft (1,241 m) above msl. MP top of casing 0.20 ft (0.06 m) above lsd (since Jan. 1966). Highest water level 20.84 ft (6.35 m) below lsd, Mar. 16, 1953; lowest 96.61 ft (29.45 m) below lsd, Aug. 10, 1972. Records available: 1952-75.

Jan. 16, 1975, 75.41; Sept. 9, 1975, 93.21.

315905107425001. Local number 27S.9W.1.431. I. G. Burns. Drilled irrigation water-table well in valley fill, diam 16 in (41 cm), depth 62 ft (19 m), cased to 62 ft (19 m). Lsd 4,135 ft (1,260 m) above msl. MP top edge of rectangular hole in pumpbase, 0.65 ft (0.20 m) above lsd. Highest water level 30.61 ft (9.33 m) below lsd, Jan. 19, 1954; lowest 44.35 ft (13.52 m) below lsd, Aug. 12, 1970. Records available: 1954-75.

Jan. 16, 1975, 36.22; Sept. 8, 1975, 36.66.

314938107371401. Local number 28S.8W.36.411. M. R. Hemley. Drilled irrigation water-table well in valley fill; used for domestic purposes, diam 16 in (41 cm), depth 250 ft (76 m), cased to 250 ft (76 m). Lsd 4,008 ft (1,222 m) above msl. MP top of casing 1.85 ft (.56 m) above lsd. Highest water level 16.67 ft (5.09 m) below lsd, Aug. 26, 1969; lowest 27.85 ft (8.49 m) below lsd, Jan. 14, 1966. Records available: 1961-75.

Jan. 17, 1975, 19.23; Sept. 9, 1975, 19.03.

#### Quero County

##### Tularosa-Alamogordo Area

330324106011201. Local number 14S.10E.31.144. Luther Watson. Drilled irrigation water-table well in bolson deposits, diam 17 in (43 cm), depth 230 ft (70 m), cased 16 in (41 cm) to 14 in (36 cm), 0-130 ft (0-40 m). Lsd 4,450 ft (1,356 m) above msl. MP top edge of 1-in (2.5-cm) hole in pumpbase, 0.70 ft (.21 m) above lsd. Highest water level 73.75 ft (22.48 m) below lsd, Apr. 8, 1952; lowest 124.54 ft (37.96 m) below lsd, Aug. 19, 1975. Records available: 1952-75.

Feb. 13, 1975, 108.45; Aug. 19, 1975, 124.54.

324853105582501. Local number 17S.9E.24.343. U.S. Air Force. About 0.75 mi (1.2 km) west of Holloman AFB pumping station. Drilled public-supply water-table well in bolson deposits, diam 10 in (25 cm), depth 236 ft (72 m), cased to 236 ft (72 m). Lsd 4,144 ft (1,263 m) above msl. MP top of 1½-in (3.8-cm) pipe with screw plug at south side of concrete base, 2.10 ft (.64 m) above lsd. Highest water level 61.42 ft (18.72 m) below lsd, Apr. 7, 1960; lowest 80.54 ft (24.55 m) below lsd, Aug. 28, 1967. Records available: 1955-75.

Feb. 14, 1975, 73.26; Aug. 19, 1975, 75.67.

#### Crow Flats Basin (Salt Basin)

320650105034801. Local number 26S.18E.21.331. Frank Gentry. Drilled irrigation water-table well in bolson deposits, diam 18 in (46 cm), depth 544 ft (165 m). Lsd 4,000 ft (1,216 m) above msl. MP top of casing 2.50 ft (.75 m) above lsd. Highest water level 33.64 ft (10.25 m) below lsd, Jan. 15, 1957; lowest 57.36 ft (17.48 m) below lsd, Sept. 16, 1964. Records available: 1956-75.

Jan. 30, 1975, 52.33.

320040105064501. Local number 26S.18E.28.113. Frank Gentry. Drilled irrigation artesian well in Bone Spring limestone of Permian age (Leonard Series), diam 18 in (46 cm), depth 394 ft (120 m), cased to 333 ft (101 m). Lsd 3,650 ft (1,113 m) above msl. MP top of casing, 2.00 ft (.60 m) above lsd. Highest water level 31.50 ft (9.60 m) below lsd, Feb. 13, 1965; lowest 55.72 ft (16.98 m) below lsd, Jan. 14, 1972. Records available: 1956-75.

Jan. 17, 1975, 51.44.

#### Quay County

##### House Area

343810103463001. Local number 5N.30E.18.331. W. C. and H. J. Lee. Drilled irrigation water-table well in Ogallala Formation of Pliocene age, diam 16 in (41 cm), depth 75 ft (23 m), cased to 60 ft (18 m). Lsd 4,640 ft (1,414 m) above msl. MP top of concrete pump base 0.50 ft (0.15 m) above lsd. Highest water level 34.76 ft (10.60 m) below lsd, Mar. 28, 1946; lowest 51.49 ft (15.69 m) below lsd, Aug. 11, 1969. Records available: 1944-75.

Jan. 4, 1975, 45.46; Aug. 11, 1975, 49.46.

344350103553001. Local number 6N.28E.24.233. G. B. Irwin. Drilled irrigation water-table well in Ogallala Formation of Pliocene age, diam 16 in (41 cm), reported depth 131 ft (40 m), cased to 131 ft (40 m). Lsd 4,790 ft (1,460 m) above msl. MP top of 2-in (5.0-cm) opening in concrete base, 1.21 ft (.37 m) above lsd. Highest water level 77.97 ft (23.77 m) below lsd, Mar. 27, 1944; lowest 113.50 ft (34.60 m) below lsd Aug. 20, 1971. Records available: 1944-75.

Jan. 3, 1975, 93.66; Aug. 11, 1975, 99.58.

Roosevelt County

## Portales Valley

341400103353701. Local number 1S.32E.16.112. Dorsey Nash. Drilled unused irrigation water-table well in Ogallala Formation, diam 16 in (41 cm), depth unknown, surface casing. Lsd 4,010 ft (1,249 m) above msl. MP edge of center hole in old car wheel, 0.30 ft (0.10 m) above lsd. Highest water level 66.78 ft (20.35 m) below lsd, Jan. 17, 1961; lowest 82.99 ft (25.30 m) below lsd, Jan. 3, 1975. Records available: 1961-75.

Jan. 3, 1975, 82.99.

341530103292001. Local number 1S.33E.4.1121. Owner unknown. Drilled unused irrigation water-table well in Ogallala Formation, diam 12 in (30 cm), depth unknown. Lsd 4,109 ft (1,252 m) above msl. MP top of casing level with 4' X 4' (1 m X 1 m) concrete base 1.00 ft (.30 m) above lsd. Highest water level 79.07 ft (24.10 m) below lsd, Jan. 8, 1973; lowest 82.12 ft (25.03 m) below lsd, Aug. 12, 1975. Records available: 1973-75.

Jan. 4, 1975, 81.44; Aug. 12, 1975, 82.12.

341317103083301. Local number 1S.36E.14.31111. "Coldwater" recorder. Owner--City of Portales. Drilled unused observation water-table well, diam 18 in (46 cm), depth 208 ft (63 m), 18-in (46-cm) casing to 103 ft (31 m), 16-in (41-cm) casing to 208 ft (63 m). Lsd 4,932 ft (1,229 m) above msl. MP top of casing, .70 ft (.21 m) below top of concrete base which is .80 ft (.24 m) above lsd. Highest water level 54.74 ft (16.68 m) below lsd, May 30, 1972; lowest 63.89 ft (19.47 m) below lsd, May 23, 1974. Records available: 1972-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
		1974						1975				
5	57.06	....	....	58.68	58.39	58.33	58.66	58.74	59.34	59.81	59.86	62.36
10	58.42	....	....	58.62	58.48	58.29	58.41	58.95	59.55	59.88	60.35	60.78
15	58.22	....	....	58.61	58.56	58.21	58.32	59.59	59.67	59.88	60.20	60.14
20	57.63	....	....	59.08	58.56	58.30	58.42	60.50	59.67	59.97	60.20	60.15
25	57.81	....	....	58.87	58.44	58.66	58.57	59.01	59.75	59.99	60.24	60.14
End	....	....	....	58.39	58.39	58.66	58.69	58.92	59.75	59.90	60.41	60.20

340740103145501. Local number 2S.35E.23.111. P. O. Boxier. Drilled irrigation water-table well in valley fill, diam, depth, and casing information unavailable. Lsd 3,963 ft (1,208 m) above msl. MP top of concrete pumpbase, 1.50 ft (.46 m) above lsd. Highest water level 21.32 ft (6.50 m) below lsd, Mar. 27, 1951; lowest 49.26 ft (15.01 m) below lsd, Aug. 11, 1969. Records Available: 1949-75.

Jan. 4, 1975, 40.24; Aug. 12, 1975, (well being pumped).

## Causey-Lingo Area

335655103032001. Local number 6S.38E.21.233. C. C. Harvey. Drilled irrigation water-table well in undifferentiated Cretaceous rocks, diam 16 in (41 cm), depth 140 ft (43 m), cased to 140 ft (43 m), casing slotted 100-140 ft (30-43 m). Lsd 3,927 ft (1,197 m) above msl. MP top of 1-in (2.5-cm) hole in north side of pump, 2.10 ft (.64 m) above lsd. Highest water level 87.18 ft (26.57 m) below lsd, Jan. 13, 1956; lowest 98.50 ft (30.02 m) below lsd, Aug. 13, 1974. Records available: 1956-75.

Jan. 6, 1975, 96.57; Aug. 12, 1975, 95.55.

Santa Fe County

## Estancia Valley

350525106025001. Local number 10N.8E.13.133. W. R. Irby. Drilled irrigation water-table well in valley fill, diam unknown, reported depth 513 ft (156 m), casing information unavailable. Lsd 6,265 ft (1,910 m) above msl. MP lower inside edge of hole in south side of casing, 0.45 ft (0.14 m) above lsd. Highest water level 86.75 ft (26.44 m) below lsd, Feb. 22, 1950; lowest 121.27 ft (36.96 m) below lsd, Feb. 22, 1973. Records available: 1950-75.

Feb. 1, 1975, 118.50; July 29, 1975, (well pumped recently) 130.28.

350340106005001. Local number 10N.9E.29.130. Glen Terry. Drilled irrigation water-table well in Glorieta Sandstone of Permian age, diam 14 in (36 cm), reported depth 200 ft (61 m), cased to 140 ft (43 m). Lsd 6,240 ft (1,902 m) above msl. MP top edge of 3-in (7.5-cm) pipe on north side of pump, 1.30 ft (.40 m) above lsd. Highest water level 55.13 ft (16.80 m) below lsd, Feb. 18, 1949; lowest 92.50 ft (28.19 m) below lsd, Aug. 17, 1970. Records available: 1949-75.

Feb. 1, 1975, 87.80; July 29, 1975, (well being pumped).

#### Santa Fe Area

353810106025501. Local number 16N.8E.12.131. Santa Fe Country Club. Drilled unused well in Ancha Formation (?) and Tesuque (?) Formation, diam 5 in (13 cm), depth 400 ft (122 m), cased. Lsd 6,420 ft (1,957 m) above msl. MP top of 3/8-in (.95-cm) hole in cover plate, 0.20 ft (0.06 m) above lsd. Highest water level 250.33 ft (76.30 m) below lsd, Feb. 20, 1975; lowest 272.06 ft (82.92 m) below lsd, Aug. 10, 1966. Records available: 1951, 1953-75.

Feb. 20, 1975, 250.33; July 31, 1975, 250.44.

#### Sierra County

##### Hot Springs Area

325550107184001. Local number 15S.05W.24.312. Seco Tambien recorder. William M. Dawson. Hot Springs area. Drilled unused irrigation water-table well in valley fill equipped with continuous recorder May 1974, diam 16 in (41 cm), depth and casing information unavailable. Lsd 4,279 ft (1,304 m) above msl. MP top of casing 1.20 ft (.36 m) above lsd. Highest water level 25.13 ft (7.66 m) below lsd, Sept. 11, 1975; lowest 36.82 ft (11.22 m) below lsd, July 16-17, 1975. Records available: 1974-75.

Highest water level for the day, from recorder graph, 1974-75												
Day	Oct.	Nov. 1974	Dec.	Jan.	Feb.	Mar.	Apr.	May 1975	June	July	Aug.	Sept.
5	30.72	28.89	30.48	....	....	29.49	31.56	33.87	35.40	36.54	31.24	29.29
10	30.42	28.96	30.82	....	30.52	29.79	31.06	34.20	35.63	36.67	30.66	26.05
15	30.04	29.15	31.14	....	29.75	30.15	32.32	34.43	35.85	36.80	30.42	27.95
20	29.75	29.45	31.45	....	29.32	30.50	32.62	34.65	36.05	36.56	30.26	29.90
25	29.37	29.80	31.74	....	29.24	30.83	33.05	34.89	36.21	35.00	29.97	29.94
End	28.96	30.13	31.94	....	29.32	31.23	33.50	35.19	36.39	32.55	29.52	29.93

#### Rincon Valley

325350107175501. Local number 16S.5W.25.211. U.S. Government. Drilled unused water-table well in valley fill, diam 10 in (25 cm), depth 32 ft (10 m), cased to 32 ft (10 m). Lsd 4,050 ft (1,234 m) above msl. MP top of casing, 3.00 ft (.91 m) above lsd. Highest water level 11.30 ft (3.44 m) below lsd, Apr. 17, 1947; lowest 27.78 ft (8.47 m) below lsd, Jan. 6, 1958. Records available: 1946-48, 1957-75.

Jan. 8, 1975, 13.03; Aug. 12, 1975, 23.99.

#### Taos County

##### Sunshine Valley

365036105355301. Local number 30N.13E.18.1121. Owner unknown. Drilled observation water-table well in valley fill, diam 10 in (25 cm), depth 500 ft (152 m), cased to 500 ft (152 m). Lsd 7,600 ft (2,316 m) above msl. MP top of casing, 2.00 ft (.60 m) above msl. Highest water level 70.00 ft (21.34 m) below lsd, Aug. 14, 1975; lowest 77.04 ft (23.48 m) below lsd, Feb. 8, 1974. Records available: 1973-75.

Feb. 4, 1975, 76.25; Aug. 14, 1975, 70.00

365655105354001. Local number 1S.73E.19.422. Spring Bros. Drilled unused water-table well in Santa Fe Group, diam 16 in (41 cm), depth 446 ft (136 m), cased to 446 ft (136 m). Lsd 7,657 ft (2,334 m) above msl. MP top of casing 1.18 ft (.36 m) above lsd. Highest water level 193.95 ft (59.11 m) below lsd, June 5, 1957; lowest 219.94 ft (67.04 m) below lsd, Aug. 2, 1961. Records available: 1955-65, 1967-75.

Feb. 4, 1975, 194.82; Aug. 14, 1975, 195.35.

365410105345401. Local number 2S.73E.5.222. Owner unknown. Drilled domestic and stock water-table well in Santa Fe Group, diam 6-in (15-cm) plastic pipe, depth unknown. Lsd 7,537 ft (2,313 m) above msl. MP 1-in (2.5-cm) hole in plate over casing, 10 ft (3 m) above top of casing, 1 ft (.3 m) above lsd. Highest water level 77.54 ft (26.63 m) below lsd, Aug. 14, 1975; lowest 81.33 ft (24.79 m) below lsd, Feb. 21, 1974. Records available: 1974-75.

Feb. 4, 1975, 80.64; Aug. 14, 1975, 77.54.

#### Torrance County

##### Estancia Valley

343458106042001. Local number 4N.8E.11.433. F. D. Breedlove. Drilled unused water-table well in valley fill, diam 16 in (41 cm), reported depth 180 ft (55 m), cased to 160 ft (49 m). Lsd 6,148 ft (1,874 m) above msl. MP top of casing at high point on northwest side of well, 0.70 ft (0.21 m) above lsd. Highest water level 82.93 ft (25.28 m) below lsd, May 2, 1951; lowest 115.60 ft (35.23 m) below lsd, Feb. 4, 1975. Records available: 1950-75.

Feb. 4, 1975, 115.60; Aug. 6, 1975, (well being pumped).

344016106064701. Local number 5N.8E.3.424. A. T. Austin. Drilled irrigation water-table well in valley fill, diam 16 in (41 cm), reported depth 204 ft (62 m), cased to 93 ft (30 m). Lsd 6,214 ft (1,894 m) above msl. MP top of casing, 0.80 ft (0.24 m) above lsd. Highest water level 62.03 ft (18.91 m) below lsd, Mar. 23, 1948; lowest 113.04 ft (34.46 m) below lsd, Jan. 18, 1972. Records available: 1948-75.

Feb. 8, 1975, 106.94; Aug. 6, 1975, (well being pumped).

344234106074901. Local number 6N.8E.32.212. Revis Strong. Drilled irrigation water-table well in valley fill, diam 18 in (46 cm), reported depth 209 ft (64 m), cased to 84 ft (26 m). Lsd 6,165 ft (1,879 m) above msl. MP top of 1½-in (3.8-cm) hole in pumpbase, 0.04 ft (0.01 m) above lsd. Highest water level 23.22 ft (7.08 m) below lsd, Feb. 18, 1947; lowest 59.51 ft (18.14 m) below lsd, Feb. 8, 1975. Records available: 1947-75.

Feb. 8, 1975, 59.51; Aug. 6, 1975, (well being pumped).

344622105575501. Local number 6N.9E.11.211. R. O. Brown. Drilled irrigation water-table well in valley fill, diam 18 in (46 cm), reported depth 148 ft (45 m), cased to 140 ft (43 m). Lsd 6,086 ft (1,855 m) above msl. MP top of casing, 0.75 ft (0.23 m) above lsd. Highest water level 5.07 ft (1.55 m) below lsd, May 4, 1949; lowest 19.65 ft (5.99 m) below lsd, Aug. 6, 1975. Records available: 1949-75.

Feb. 11, 1975, 10.03; Aug. 6, 1975, 19.65.

344937106092201. Local number 7N.7E.13.4312. Woodrow Clements. Drilled unused water-table well in Madera Formation (old CO<sub>2</sub> well), diam 7 in (18 cm), depth and casing information unavailable. Lsd 6,500 ft (1,980 m) above msl. MP top of casing at concrete slab level which is 0.2 ft (0.06 m) above lsd. Highest water level 110.28 ft (33.61 m) below lsd, Aug. 19, 1974; lowest 110.35 ft (33.63 m) below lsd, Feb. 8, 1975. Records available: 1973-75.

Feb. 8, 1975, 110.35; Aug. 6, 1975, 110.33.

345231106043601. Local number 8N.8E.35.322. A. C. Hibner. Drilled irrigation water-table well in valley fill (?), diam 16 in (41 cm), reported depth 223 ft (69 m), cased to 110 ft (34 m). Lsd 6,240 ft (1,902 m) above msl. MP top of casing, 0.75 ft (0.23 m) above lsd. Highest water level 50.12 ft (15.28 m) below lsd, May 28, 1947; lowest 98.88 ft (30.14 m) below lsd, Aug. 18, 1971. Records available: 1947-75.

Feb. 11, 1975, 93.56; Aug. 6, 1975, 96.84.



345900106034301. Local number 9N.8E.24.334. Valley Land & Irr. Co. Drilled unused water-table well in valley fill, diam 16 in (41 cm), depth unknown. Lsd 6,380 ft (1,944 m) above msl. MP top of casing south side, 0.50 ft (0.15 m) above lsd. Highest water level 64.67 (19.71 m) below lsd, Feb. 23, 1973; lowest 84.57 ft (25.78 m) below lsd, Aug. 6, 1975. Records available: 1973-75.

Feb. 12, 1975, 67.50; Aug. 6, 1975, 84.57.

#### Union County

##### Clayton Area

360940103083501. Local number 19N.36E.23.244. Stevens. Drilled unused irrigation water-table well in Dakota and Purgatoire Sandstone, diam 14 in (36 cm), depth 206 ft (62 m). Lsd 4,326 ft (1,318 m) above msl. MP top of casing 1.00 ft (.30 m) above lsd. Highest water level 145.22 ft (44.26 m) below lsd, Mar. 17, 1971; lowest 155.65 ft (47.44 m) below lsd, Mar. 24, 1970. Records available: 1970-75.

Jan. 22, 1975, 145.31.

361910103170501. Local number 24N.36E.17.244. Glen Burrows. Drilled unused irrigation water-table well in Ogallala Formation, diam 10 in (25 cm), depth 231 ft (70.4 m). Lsd 4,707 ft (1,434 m) above msl. MP top of casing, 1.30 ft (0.40 m) above lsd. Highest water level 81.38 ft (24.30 m) below lsd, May 8, 1968; lowest 84.84 ft (25.86 m) below lsd, Jan. 22, 1975. Records available: 1968, 1971-75.

Jan. 22, 1975, 84.84.

363005103081001. Local number 26N.36E.7.142. J. E. Armes. Drilled unused irrigation water-table well in Dakota, Purgatoire, and Mokrisson Sandstone, diam 16 in (41 cm), depth 770 ft (234 m). Lsd 4,980 ft (1,517 m) above msl. MP top of 16-in (41-cm) casing level with concrete base, 1.00 ft (.30 m) above lsd. Highest water level 127.41 ft (38.83 m) below lsd, Mar. 17, 1971; lowest 166.76 ft (50.83 m) below lsd, Feb. 6, 1974. Records available: 1967, 1971-75.

Jan. 21, 1975, 159.70.

##### Capulin Basin

364430103595501. Local number 29N.28E.18.341. City of Raton. 300 ft (91 m) north of U.S. Highway 64-87 at Capulin. Drilled irrigation water-table well in cinders, diam 16 in (41 m), depth 78 ft (24 m). Lsd 6,821.2 ft (2,079.1 m) above msl. MP edge of 2-in (5-cm) hole in west side of steel plate, at lsd. Highest water level 28.01 ft (8.54 m) below lsd, Feb. 8, 1974; lowest 34.90 ft (10.64 m) below lsd, Jan. 31, 1973. Records available: 1951, 1957-75.

Jan. 23, 1975, 34.84; Aug. 13, 1975, 33.72.

#### Valencia County

##### Grants-Bluewater Area

350400107510501. Local number 10N.10W.26.331. Monico Mirabal. Drilled irrigation water-table well in Glorieta Sandstone of Permian age, diam 16 in (41 cm), depth 216 ft (66 m), cased to 216 ft (66 m). Lsd 6,455 ft (1,967 m) above msl. MP top of 1/2-in (1.3-cm) hole in pumpbase, 1.00 ft (.30 m) above lsd. Highest water level 22.15 ft (6.75 m) below lsd, Apr. 2, 1968; lowest 32.77 ft (9.99 m) below lsd, Aug. 23, 1966. Records available: 1952-75.

Jan. 16, 1975, 29.17; Aug. 6, (well being pumped).

350925107523001. Local number 12N.10W.27.241. City of Grants. Drilled industrial water-table well in San Andres Limestone of Permian age, diam 16 to 12 in (41-30 cm), depth 158 ft (48 m), perforated to 58 ft (18 m). Lsd 6,480 ft (1,975 m) above msl. MP top of 1-in (2.5-cm) hole in pumpbase, 1.35 ft (.41 m) above lsd. Highest water level 19.86 ft (6.05 m) below lsd, Feb. 20, 1953; lowest 39.08 ft (11.91 m) below lsd, Aug. 1, 1972. Records available: 1953-75.

Jan. 16, 1975, 32.46; Aug. 6, 1975, 33.58.

351400107524201. Local number 12N.10W.29.434. A. R. Card. Drilled unused artesian well in San Andres limestone of Permian age, diam 18 in (46 cm), reported depth 205 ft (62 m), cased 0-150 ft (0-46 m), perforated 93-130 ft (28-40 m). Lsd 6,552 ft (1,997 m) above msl. MP lower edge of hole in north side of casing, 2.20 ft (.67 m) above lsd. Highest water level 65.46 ft (19.95 m) below lsd, Oct. 14, 1944; lowest 107.61 ft (32.80 m) below lsd, Aug. 6, 1975. Records available 1944-75.

Jan. 16, 1975, 98.60; Aug. 6, 1975, 107.61.

351730107535001. Local number 12N.11W.9.221. J. Church Co. Drilled unused water-table well in San Andres Limestone of Permian age, diam 18 in (46 cm), depth 500 ft (152 m), cased to 500 ft (152 m). Lsd 6,649 ft (2,027 m) above msl. MP top of casing at low point, 2.22 ft (.68 m) above lsd. Highest water level 115.70 ft (35.27 m) below lsd, Feb. 27, 1947; lowest 193.51 ft (58.98 m) below lsd, June 30, 1957. Records available: 1946-75.

Highest water level for the day from recorder graph, 1974-75												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
		1974						1975				
5	142.20	143.00	143.68	143.99	143.37	143.63	143.49	142.59	142.07	141.60	141.92	141.04
10	142.32	143.12	143.78	143.65	143.45	143.46	143.41	142.77	141.88	141.66	141.78	140.93
15	142.64	143.17	143.91	143.98	143.55	143.45	143.40	142.80	141.68	141.62	141.62	141.11
20	142.64	143.46	144.11	143.63	143.57	143.61	143.21	142.43	141.62	141.69	141.40	.....
25	142.80	143.49	144.06	143.57	143.70	143.35	142.97	142.47	141.62	141.69	141.09	.....
Eom	142.85	143.66	144.01	143.36	143.79	143.40	143.00	142.25	141.64	141.86	141.02	.....

351650107535001. Local number 12N.11W.9.424. George Rowley. Drilled unused artesian well in San Andres Limestone and Yeso Formation of Permian age, diam 16 in (41 cm), reported depth 505 ft (154 m), 16-in (41-cm) casing to 175 ft (53 m), 12-in (30-cm) casing to 325 ft (99 m). Lsd 6,642 ft (2,024 m) above msl. MP top of casing, 3.05 ft (.93 m) above lsd. Highest water level 93.75 ft (28.58 m) below lsd, May 10, 1946; lowest 139.05 ft (42.38 m) below lsd, Aug. 1, 1957. Records available: 1946-75.

Jan. 16, 1975, 119.06; Aug. 6, 1975, 123.03.

351610107514501. Local number 12N.11W.14.213. Duane Berryhill. Drilled unused water-table well in alluvium of Quaternary age, diam 4 in (10 cm), depth 130 ft (40 m), surface casing 5 ft (1.5 m). Lsd 6,605.4 ft (2,013.3 m) above msl. MP top of 4-in (10-cm) down spout, 3.70 ft (1.13 m) above lsd (since Feb. 10, 1966). Highest water level 85.83 ft (26.16 m) below lsd, Aug. 3, 1967; lowest 101.39 ft (30.90 m) below lsd, June 10, 1954. Records available: 1949-75.

Jan. 16, 1975, 86.96; Aug. 6, 1975, 86.69.

Note.--Measurements were discontinued in 1974-75 for the following wells:

Chaves County, Roswell Basin - 331915104275001 - Local number 11S.25E.29.444.  
 Curry County, Clovis Area - 344710103031501 - Local number 7N.37E.32.131.  
 Hidalgo County, Virden Valley - 324040108592001 - Local number 19S.21W.2.333.  
 Lincoln County, Hondo Valley - 331903104593001 - Local number 11S.20E.31.123.  
 Roosevelt County, Portales Valley - 341555103253001 - Local number 1N.33E.36.400C.

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