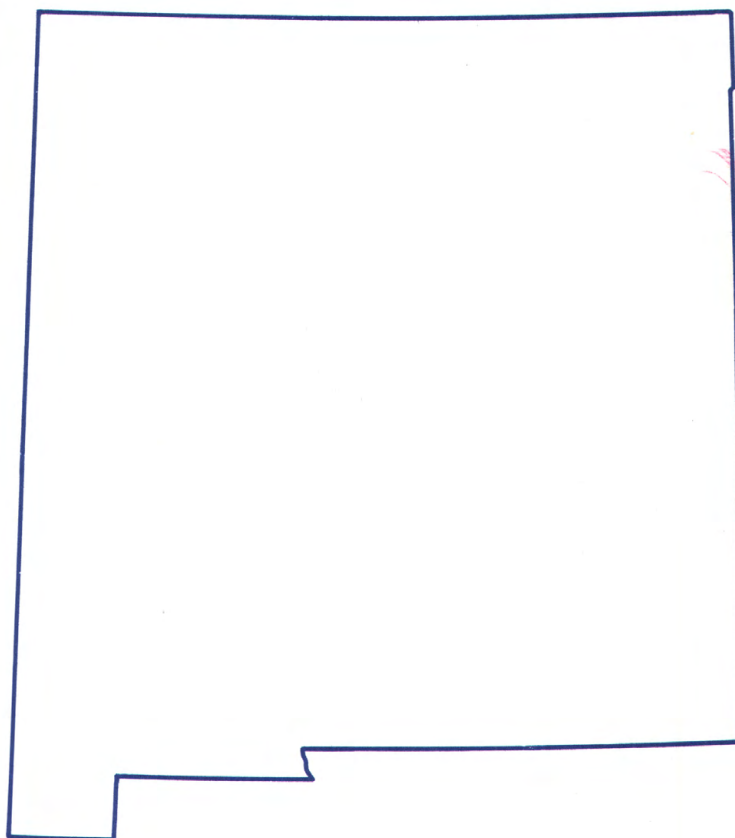
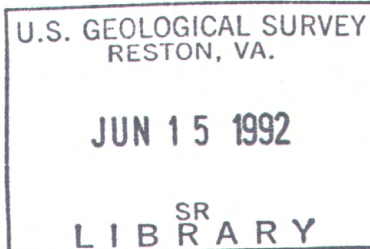


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Water Resources Data New Mexico Water Year 1991



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-91-1
Prepared in cooperation with the State of New Mexico
and with other agencies

CALENDAR FOR WATER YEAR 1991

1990

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13								2	3	4	5	6	7	8
14	15	16	17	18	19	20	4	5	6	7	8	9	10	9	10	11	12	13	14	15
21	22	23	24	25	26	27	11	12	13	14	15	16	17	16	17	18	19	20	21	22
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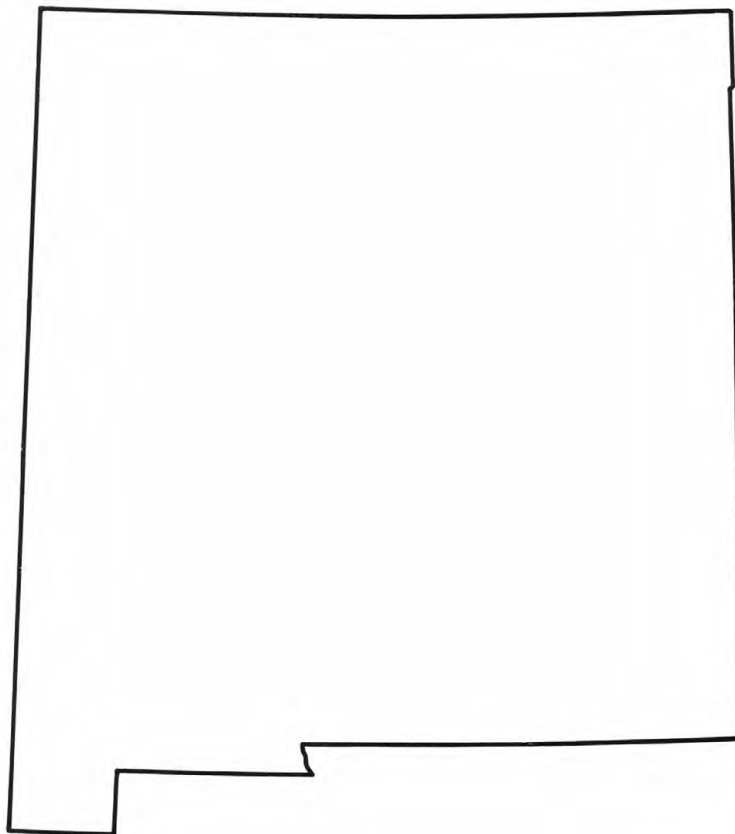
1991

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



Water Resources Data New Mexico Water Year 1991

by J.P.Borland, R.K.DeWees, R.L.McCracken, R.L.Lepp, D.Ortiz, and D.Shaul



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NM-91-1
Prepared in cooperation with the State of New Mexico
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

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U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

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Albuquerque, New Mexico 87110

1992

PREFACE

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

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

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

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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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

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DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations (gaging stations) in New Mexico have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Bennett Spring near Capulin, NM	07153410		1977-81
Dry Cimarron River near Guy, NM	07153500	545	1942-73
Dry Cimarron River near Folsom, NM	07154000	895	1927-33
Canadian River near Hebron, NM	07199000	229	1946-86
Chicorica Creek below Lake Maloya, NM	07199500	26	1945-51
Chicorica Creek near Yankee, NM	07199600	32.5	1975-79, 1984-87
East Fork Chicorica Creek near Yankee, NM	07199650	23.9	1984-87
Chicorica Creek below East Fork near Raton, NM	07200000	71	1945-51
Chicorica Creek near Raton, NM	07200500	87	1910-14, 1984-87
Una de Gato Creek near Raton, NM	07201400	80	1910-13
Una de Gato Creek below Throttle Dam near Raton, NM	07201420	49.5	1975-83
Una de Gato Creek near Hebron, NM	07201500	224	1946-50
Chicorica Creek near Hebron, NM	07202000	381	1945-52, 1983-87
Vermejo River near Colfax, NM	07203500	--	1945-50
McEvoy Creek near Eagle Nest, NM	07206200	1.95	1961-68
Tolby Creek near Eagle Nest, NM	07206300	8.5	1961-68
Clear Creek near Ute Park, NM	07206400*	7.44	1961-68
Cimarron Creek at Ute Park, NM	07206500	260	1907-50
Rayado Creek below Abreu's Ranch, near Cimarron, NM	07209000	75	1912-13
Rayado Creek near Miami, NM	07209500	76	1939-55
Rayado Creek near Springer, NM	07210000	--	1907-09
Uracca Creek near Cimarron, NM	07210500	6.3	1912-15
East Fork Ocate Creek at Ocate, NM	07212000	35	1914-28
Ocate Creek near Ocate, NM	07212500	--	1914
Colmor intake canal near Ocate, NM	07213000	--	1933-51
Sweetwater Creek near Colmor, NM	07213500	--	1914
Canadian River near Roy, NM	07214000	4,066	1936-65
Mora River near Holman, NM	07214500	57	1953-74
Vigil Canyon near Holman, NM	07214600	2.8	1956-63
Agua Fria Creek near Holman, NM	07214700	9.2	1956-63
Rio la Casa near Cleveland, NM	07214800	23	1956-70
La Cueva Canal at La Cueva, NM	07215000	--	1906-11
Cebolla River near Golondrinas, NM	07215600	64	1956-63
Mora River at Weber, NM	07216000	--	1903-04
Coyote Creek below Black Lake, NM	07217000	48	1952-63
Coyote Creek above Guadalupita, NM	07217100	71	1956-74
Coyote Creek at Guadalupita, NM	07217500	90	1920-23

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN -- Continued			
Mora River near Watrous, NM	07218100	521	1956-63, 1956-73
Sapello River at Sapello, NM	07218500	--	1903-04
Sapello canal at Sapello, NM	07218600	--	1956-70
Manuelitas Creek near Rociada, NM	07218700	52	1956-63
Sapello River at Sapello, NM	07220000	132	1915-21
Lake Isabel feeder canal near Sapello, NM	07220100	--	1956-75
Sapello River at Los Alamos, NM	07220500	144	1905-11
Sapello River near Watrous, NM	07220600	213	1956-63
Canadian River near Bell Ranch, NM	07222000	6,200	1915-17, 1927-39
Bell Ranch Canal near Conchas Dam, NM	07223000	--	1942-84
Canadian River below Conchas Dam, NM	07224500	7,417	1936-38, 1942-72
Pajarito Creek near Hanley, NM	07225100	310	1911-12
Pajarito Creek near Vigil Creek, near Hanley, NM	07225200	350	1912-13
Ute Creek near Bueyeros, NM	07226000	620	1949-54
Canadian River above New Mexico-Texas State line	07227140	12,616	1969-73
Tramperos Creek near Stead, NM	07227200*	556	1966-73
BRAZOS RIVER BASIN			
Running Water Draw near Clovis, NM	08080600*	109	1956-64
RIO GRANDE BASIN			
Latir Creek Outflow Lake	08254400		1987-88
Latir Creek Outflow Lake	08254425		1986-88
Costilla Creek near Amalia, NM	08254500	152	1949-59, 1961-81
Ute Creek near Amalia, NM	08255000	12	1949-59
Mesa ditch near Garcia, CO	08256500	--	1944-65, 1969-83
Middle ditch at Garcia, CO	08257000	--	1944-56
Association ditch at Costilla, NM	08258500	--	1955-71
Cerro Canal near Jaroso, CO	08259000	--	1944-72
Penasquito ditch at Costilla, NM	08260000	--	1955-61
Costilla Creek below diversion dam, at Costilla, NM	08260500	197	1952-86
Alire ditch at Garcia, CO	08261500	--	1944-59
Costilla Creek near Jaroso, CO (near Mouth, NM)	08262500	290	1912-13, 1948-61
Latir Creek near Cerro, NM	08263000	10	1937-70
Red River near Red River, NM	08264000	19.1	1940-64
Red River below Zwergle Damsite, near Red River, NM	08264500	25.7	1963-73
Red River below Questa, NM	08266500	180	1910-22
Red River at mouth, near Questa, NM	08267000	190	1950-78
Rio Hondo at Valdez, NM	08268000	38	1916-34
Rio Hondo at Damsite at Valdez, NM	08268200	40.3	1963-66
Arroyo Hondo at Arroyo Hondo, NM	08268500	65.6	1912-28, 1932-85
Acequia Madre at Taos, NM	08269500	--	1940-41

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
North channel of Rio Pueblo de Taos at Taos, NM	08270000	80	1936-41
Rio Pueblo de Taos at Taos, NM	08270500	80	1936-41
Tenorio ditch near Arroyo Seco, NM	08271500	--	1935-50
Rio Lucero diversions near Arroyo Seco, NM	08272000	--	1932-33
Indian ditch near Arroyo Seco, NM	08272500	--	1934-50
Seco ditch near Arroyo Seco, NM	08273000	--	1934-50
Juan Manuel ditch near Arroyo Seco, NM	08273500	--	1935-50
Prado ditch near Arroyo Seco, NM	08274000	--	1934-50
Rio Lucero below diversions, near Arroyo Seco, NM	08274500	25	1934-41
Rio Fernando de Taos near Taos, NM	08275000	71.7	1912-17, 1927-28, 1962-80
Rio Pueblo de Taos near Ranchito, NM	08275300	199	1957-80
Rio Chiquito near Talpa, NM	08275600	37.0	1957-80
Rio Pueblo de Taos at Los Cordovas, NM	08276000	359	1910-65
Carson Reservoir near Carson, NM	08277000	190	1940-60
Picuris ditch near Penasco, NM	08277500	--	1936-41
Pueblo Creek near Penasco, NM	08278000	--	1936-41
Alcalde ditch at Chamita, NM	08280000	--	1936-41
San Rafael ditch at Alcalde, NM	08280500	--	1936-41
Acequia Madre at Alcalde, NM	08281000	--	1936-41
Rio Grande above San Juan Pueblo, NM	08281100	10,530	1963-87
Rio Chama near Chama, NM	08281500	--	1912-16
Rio Brazos near Brazos, NM	08282000	--	1913-17
Chavez Creek near Brazos, NM	08282500	--	1914-15
Rio Brazos at Brazos, NM	08283000	--	1912-13
Rio Chama at Park View, NM	08283500	405	1912-15, 1916, 1924-55
Rito de Tierra Amarilla at Tierra Amarilla, NM	08284000	49.7	1914-15
Willow Creek near Park View, NM	08284500	193	1936-71
Rio Nutrias near Cebolla, NM	08286000	--	1914-15
Canjilon Creek near Canjilon, NM	08286600		1911-12, 1913
Rio Chama at Abiquiu, NM	08287100	--	1895-97
Rio Chama near Abiquiu, NM	08287500	2,284	1941-67
El Rito Creek near El Rito, NM	08288000*	50.5	1931-51
Rio Vallecitos at Vallecitos, NM	08288500	--	1911-14
Santa Clara ditch near Espanola, NM	08290500	--	1936-41
Santa Cruz River at Riverside, NM	08291500	188	1942-51
Hill Acequia at head, near Espanola, NM	08292500	--	1940-41
Hill Acequia near Espanola, NM	08293000	--	1940
Guachupangue ditch near Espanola, NM	08293500	--	1936-41
San Ildefonso ditch near Espanola, NM	08294000	--	1940-41
Rio Nambe at Nambe Falls, NM	08294300	25.1	1963-78
Nambe Canal near Nambe, NM	08294500	--	1932-51

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
Rio Nambe near Nambe, NM	08295000*	38.2	1932-51
Rio En Medio near Santa Fe, NM	08295200	.63	1963-73
Llano Frio ditch near Nambe, NM	08295500	--	1936-50
Llano ditch near Nambe, NM	08296000	--	1936-50
Mioses Pena ditch near Nambe, NM	08296500	--	1936-38
Mocha ditch at Nambe, NM	08297000	--	1936-50
Comunidad ditch at Nambe, NM	08297500	--	1936-50
Ortiz ditch at Nambe, NM	08298000	--	1936-50
Canyon ditch near Nambe, NM	08298500	--	1936-50
Acequia Rincon near Nambe, NM	08299000	--	1936-50
Las Joyas ditch near Nambe, NM	08299500	--	1936-50
Trujillo ditch near Nambe, NM	08300000	--	1936-45
Barranco Alto ditch near Nambe, NM	08300500	--	1936-50
Pojoaque River at Pojoaque Bridge, near Nambe, NM	08301000	--	1936-41
Jacona ditch near Nambe, NM	08301500	--	1936-39
Jacona ditch near San Ildefonso, NM	08302000	--	1940-48
North Fork Tesuque Creek near Santa Fe, NM	08302200	1.60	1962-73
Middle Fork Tesuque Creek near Santa Fe, NM	08302300	.43	1961-73
South Fork Tesuque Creek near Santa Fe, NM	08302400	.47	1962-73
Tesuque Creek above diversions near Santa Fe, NM	08302500	11.7	1936-52
Cajon Grande ditch near Santa Fe, NM	08303000	--	1936-41
De La Cruz ditch near Santa Fe, NM	08303500	--	1936-41
Acequia Madre near Santa Fe, NM	08304000	--	1936-41
Acequia Madre at head, near Santa Fe, NM	08304050	--	1936-41
Little Tesuque Creek near Santa Fe, NM	08304100	.64	1962-73
Little Tesuque Creek tributary No. 4 near Santa Fe, NM	08304200	.69	1964-73
Little Tesuque Creek tributary No. 3 near Santa Fe, NM	08304300	.65	1963-73
Little Tesuque Creek tributary No. 2 near Santa Fe, NM	08304400	.45	1962-73
Little Tesuque Creek near Santa Fe, NM	08305000	7.06	1936-41
Rio Tesuque at Tesuque, near Santa Fe, NM	08305500	--	1938-41
Acequia Medio near Santa Fe, NM	08306000	--	1936-46
Acequia Medio at waste, near Santa Fe, NM	08306500	--	1936-38
Hubbard ditch near Santa Fe, NM	08307500	--	1938-41
Mitchell ditch near Santa Fe, NM	08308000	--	1936-51
Post ditch near Tesuque Pueblo, NM	08308500	--	1936-41
Qwiyo ditch near Tesuque Pueblo, NM	08309000	--	1936-41
Corral ditch near Tesuque Pueblo, NM	08309500	--	1936-41
Acequia Indios near San Ildefonso, NM	08310000	--	1936-41
Acequia de la Otra Banda near San Ildefonso, NM	08310500	--	1936-41
El Rancho ditch near San Ildefonso, NM	08311000	--	1936-41
San Antonio ditch near San Ildefonso, NM	08311500	--	1936-41
Well ditch at San Ildefonso, NM	08312000	--	1937, 1938-51
Ortiz ditch at San Ildefonso, NM	08312500	--	1936-41
Pojoaque River near San Ildefonso Pueblo, NM	08312600	184	1972-79

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
Rito de los Frijoles near Los Alamos, NM	08313300	8.9	1959-63
Rito de los Frijoles in Bandelier National Monument, NM	08313350*	17.5	1963-69, 1977-82
Cochiti East Side Main Canal near Cochiti, NM	08313500	--	1936-37, 1954-60
Sili Main Canal near Cochiti, NM	08314000	--	1937-39, 1954-60
Rio Grande at Cochiti, NM	08314500	14,600	1924-70
Santa Fe River at Monument Rock, near Santa Fe, NM	08315000	14	1910
Galisteo Creek above Galisteo Reservoir, NM	08317850	567	1970-76
Galisteo Creek at Domingo, NM	08318000	640	1941-71
San Felipe east side acequia near Domingo, NM	08318500	--	1936-41
Rito San Antonio near Los Alamos, NM	08319500	--	1949-50
Redondo Creek near Jemez Springs, NM	08319945	12.1	1982-85
Sulfur Creek near Jemez Springs, NM	08319950	38.0	1982-85
Jemez River near Jemez Springs, NM	08320000	--	1949-50
East Fork Jemez River near Los Alamos, NM	08320500	--	1949-50
East Fork Jemez River near Jemez Springs, NM	08321000	--	1949-50
Jemez River below East Fork, near Jemez Springs, NM	08321500	173	1951-90
Rio Las Vacas near Cuba, NM	08322000	--	1939-41
Rio Cebolla near Jemez Springs, NM	08322500	--	1939
Rio Guadalupe near Jemez Springs, NM	08323500	230	1938-42, 1949-50
Jemez east side ditch near Jemez, NM	08324500	--	1936-41
Jemez west side ditch near Jemez, NM	08325000	--	1936-41
Antonio Pecos ditch near Jemez, NM	08325500	--	1936-41
San Ysidro ditch near San Ysidro, NM	08326000	--	1936-41
Jemez River at San Ysidro, NM	08326500	854	1937-41
Zia ditch near San Ysidro, NM	08327000	--	1936-41
Zia Reservoir near San Ysidro, NM	08327500	2.4	1954-60
Jemez River above Jemez Canyon Dam, NM	08328000	961	1953-58
Piedra Lisa Arroyo near Bernalillo, NM	08329100	4.1	1955-74
Rio Grande near Bernalillo, NM	08329500	17,300	1941-69
Tijeras Arroyo at Albuquerque, NM	08330500*	75.3	1921-22, 1943-49
Tijeras Arroyo at Kirtland Air Force Base, NM	08330560	80.6	1987-88
Tijeras Arroyo below South Diversion Channel Inlet near Albuquerque, NM	08330800	--	1974-88
Rio Grande near Isleta, NM	08331000	17,900	1925-29, 1936-38
North Pajarito Arroyo at Albuquerque, NM	08331130	.58	1979-87
North Pajarito Arroyo at Albuquerque, NM	08331140	.81	1979-83
Rio Grande near Belen, NM	08331500	18,230	1941-57
Rio Grande near Bernardo, NM	08332000	19,230	1936-39, 1941-64
Lower San Juan Riverside drain near Bernardo, NM	08332030	--	1954-75
La Jara Creek near La Jara, NM	08332500	--	1932-33
Rio Puerco near Cabezón, NM	08333000	360	1943-51
Rio Puerco at Cabezón, NM	08333500	397	1944-51

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
Papers Wash near Star Lake Trading Post, NM	08334300	20.3	1978-82
Arroyo Chico near Guadalupe, NM	08340500	1,390	1943-86
Rio Puerco near Guadalupe, NM	08341000	1,860	1943
Bluewater Creek below Bluewater Dam, NM	08341500	201	1951-63
Bluewater Creek near Bluewater, NM	08342000	209	1912-19, 1927-72
San Mateo Creek near San Mateo, NM	08342600	75.6	1977-82
Arroyo del Puerto near San Mateo, NM	08342700	96.8	1980-82
McCartys south side ditch near San Fidel, NM	08344000	--	1940-42, 1950-51
McCartys north side ditch near San Fidel, NM	08344500	--	1940-42, 1950-51
Acomita Reservoir outlet near San Fidel, NM	08345000	--	1938-41
Rio San Jose near San Fidel, NM	08345500	2,310	1936-42, 1950-51
Seama-Paraje ditch near Casa Blanca, NM	08346000	--	1937-41
Casa Blanca ditch at Casa Blanca, NM	08346500	--	1937-41
New Laguna ditch wasteway near Casa Blanca, NM	08347000	--	1937-41
New Laguna ditch near New Laguna, NM	08347500	--	1937-41
Rio San Jose near Casa Blanca, NM	08348000	--	1936-41
Encinal Creek near Casa Blanca, NM	08348500*	6.19	1937-39
Laguna ditch at New Laguna, NM	08349000	--	1936-41
Paguate Creek near Laguna, NM	08349500	--	1937-41
Paguate Reservoir outlet near Laguna, NM	08350000	--	1940-41
Rio San Jose near Laguna, NM	08350500	3,040	1937-41, 1973-76
Mesita ditch near Laguna, NM	08351000	--	1936-41
Rio Puerco at Rio Puerco, NM	08352500	6,590	1909-12, 1934-76
Alamo Creek near Alamo, NM	08353130	22.4	1983-85
Rio Salado near Alamo, NM	08353150	540	1983-85
Rio Salado near San Acacia, NM	08354000	1,380	1947-84
Rio Grande at San Acacia, NM	08355000	26,770	1936-64
Nogal Arroyo Floodway near Socorro, NM	08355200	--	1969-77
Arroyo de la Matanza near Socorro, NM	08355300	46.0	1969-77
Rio Grande at San Antonio, NM	08355500	27,400	1951-57
Socorro Main Canal South near San Antonio, NM	08356000	--	1937-38, 1948-71
San Antonio Riverside Drain near San Antonio, NM	08356500	--	1948-71
Elmendorf Interior Drain near San Antonio, NM	08357000	--	1936-38, 1948-71
San Antonio Riverside Drain near San Marcial, NM	08357500	--	1948-71
Rio Grande Conveyance Channel below heading, near San Marcial, NM	08358000	--	1953-57
Rio Grande at San Marcial, NM	08358500	27,700	1895-1964
Milligan Gulch near San Marcial, NM	08358550	413	1968-78
Rio Grande Conveyance Channel at mouth of Nogal Canyon, near Truth or Consequences, NM	08359000	--	1953-57
Rio Grande at the narrows, in Elephant Butte Reservoir, NM	08359500	28,500	1951-57

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
Alamosa Creek near Monticello, NM	08360000*	403	1931-42
Las Cruces Arroyo near Las Cruces, NM	08363600	13.5	1958-66
Tortugas Arroyo near Las Cruces, NM	08363700	20.7	1962-74
Rio Grande at Vinton Bridge near Anthony, TX	08363840	28,680	1970-74
Pecos River near Cowles, NM	08378000	189	1910-19
Pecos River near San Jose, NM	08379000	539	1939-40
Tecolote Creek near San Pablo, NM	08379200	83	1960-65
South Fork Gallinas Creek near El Porvenir, NM	08380000	25	1911-20
Gallinas Creek at Montezuma, NM	08381000	87	1903, 1904-66
Storrie feeder canal near Las Vegas, NM	08381500	--	1949-52
Gallinas River near Lourdes, NM	08382000	313	1951-63
Pecos River near Colonias, NM	08382700	2,340	1970-74
Pecos River above Los Esteros Dam Site, near Santa Rosa, NM	08382800	2,430	1965-77
Pecos River near Fort Sumner, NM	08385500	5,300	1904-10, 1912-13, 1921-23
Pecos River below Fort Sumner, NM	08385520	5,600	1957-58, 1962-70
Pecos River below Yeso Arroyo, near Fort Sumner, NM	08385620	7,000	1965-68
Pecos River above Huggins Creek, near Roswell, NM	08385640	7,800	1965-68
F. Herrera ditch S. at Hollywood, NM	08386900		1973-84
Rio Ruidoso near Glencoe, NM	08387500	--	1910-11
Eagle Creek near Alto, NM	08387800	15.7	1969-80
Rio Ruidoso at Hondo, NM	08388000	290	1930-55
Rio Bonito at Angus, NM	08388500	45.5	1930-31
Rio Bonito at Hondo, NM	08389500	295	1930-55
Rio Hondo at Hondo, NM	08390000	--	1930-31
Rio Hondo at Picacho, NM	08390100	715	1908-9, 1956-62
Rio Hondo at Hondo Reservoir site, near Roswell, NM	08392500	970	1903-5
Rio Hondo below reservoir outlet, near Roswell, NM	08393000	--	1908
Taylor-Moore ditch near Roswell, NM	08393100	--	1905
Rocky Arroyo above Two Rivers Reservoir near Roswell, NM	08393200	31	1963-80
Rocky Arroyo below Rocky Dam, near Roswell, NM	08393300	65	1963-80
Rio Hondo at Roswell, NM	08393500	--	1903-6
North Spring River at Roswell, NM	08393600	19.5	1958-77
Pecos River near Roswell, NM	08394000	--	1903-6
Pecos River near Hagerman, NM	08394100	13,360	1968-90
Rio Felix at old highway bridge near Hagerman, NM	08394500	932	1939-87
Rio Felix near Hagerman, NM	08395000	934	1932-39
Cottonwood Creek near Lake Arthur, NM	08396000	199	1932-65
Rio Penasco at Elk, NM	08397450	--	1910-11

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Period of record
RIO GRANDE BASIN -- Continued			
Rio Penasco near Elk, NM	08397500	--	1911
Rio Penasco near Dunken, NM	08397600*	583	1956-62
Pecos River below McMillan Dam, NM	08401000	16,990	1906-09, 1910-11, 1939-40, 1946-88
Pecos River above Seven Rivers near Lakewood, NM	08401100	17,000	1974-87
Pecos River below Avalon Dam, NM	08404500	--	1940
Pecos River at Carlsbad, NM	08405000	18,100	1903-09, 1907-08, 1914-15, 1920-69
Rattlesnake Springs near White City, NM	08405300	--	1961-62
Black River at Malaga, NM	08406000	360	1939-40
MIMBRES RIVER BASIN			
Mimbres River at McKnight Dam Site, near Mimbres, NM	08476300	97.3	1963-72
Bear Canyon near Mimbres, NM	08476500	14.5	1937-55
Mimbres River near Mimbres, NM	08477000	152	1921-76
Mimbres River near Faywood, NM	08477500	440	1909-11, 1912-14, 1916-17, 1920-21, 1927-55, 1963-68
Mimbres River near Spalding, NM	08477530	472	1963-68
San Vicente Arroyo at Silver City, NM	08477600	26.5	1953-65
Rio de Arena near Hurley, NM	08477700	16	1913-14
Stevens Creek near Fort Bayard, NM	08478004	--	1907-12, 1912-14
Cameron Creek at Fort Bayard, NM	08478008	--	1911-13
Cameron Creek near Hurley, NM	08478012	46	1913-14
Whitewater Creek at Hurley, NM	08478016	35	1913-14
Wamel Canal at head, near Deming, NM	08478300	--	1963-68
Mimbres River below Wamel heading near Deming, NM	08478400	1,101	1963-68
TULAROSA VALLEY			
Three Rivers near Three Rivers, NM	08480600	6.9	1956-58
Indian Creek near Three Rivers, NM	08480700*	6.8	1956-58
Indian Creek flume near Three Rivers, NM	08480800	--	1956-58
Indian Creek at Mouth, near Three Rivers, NM	08480900	10.9	1956-58
Rio Tularosa at Mescalero, NM	08481300	--	1910-11
Rio Tularosa near Tularosa, NM	08482000	--	1938-47
Rio La Luz near La Luz, NM	08483000	30	1911-12
Rio Fresnal near Mountain Park, NM	08484000	44	1911-12
Rio La Luz at La Luz, NM	08484500	74	1910-13
Alamogordo-La Luz ditch at La Luz, NM	08485000	--	1934-49
Alamo Creek at Woods Ranch, near Alamogordo, NM	08485500	--	1931-37

Station name	Station number	Drainage area (mi ²)	Period of record
TULAROSA VALLEY -- Continued			
Alamogordo water supply near Alamogordo, NM	08486000	--	1932-51
Tularosa Valley tributary near White Sands, NM	08486250	17.2	1965-74
Tularosa Valley tributary at White Sands, NM	08486260	21.0	1965-74
SALT BASIN			
Sacramento River near Sunspot, NM	08492900	12.8	1984-89
San Juan River at Rosa, NM	09350500	1,990	1895-99, 1910-65
Los Pinos River at Ignacio, CO	09354000		1910-61
Martinez ditch near Archuleta, NM	09355200	--	1955-57
Citizens ditch near Turley, NM	09356000	--	1938, 1951-58
San Juan River near Blanco, NM	09356500	3,560	1907-09, 1910, 1927-55
Canon Largo near Blanco, NM	09356565	1,700	1977-81
San Juan River at Bloomfield, NM	09357000	5,410	1909, 1910-11, 1927-31, 1955-63
San Juan River at Hammond Bridge near Bloomfield, NM	09357100	5,540	1978-81
Gallegos Canyon near Farmington, NM	09357250	290	1978-81
Animas River at Aztec, NM	09364000	1,270	1904, 1907-15
Shumway Arroyo near Fruitland, NM	09367555	62.8	1975-82
Chaco Wash near Star Lake Trading Post, NM	09367660	59.0	1978-82
Chaco Wash at East Boundary at Chaco Canyon National Monument, NM	09367676	364	1980-82
Fajada Wash at Chaco Canyon National Monument, NM	09367678	199	1980-83
Gallo Wash at Chaco National Monument, NM	09367682	36.2	1978-81
Chaco Wash near Pueblo Bonito at bridge at Chaco Canyon National Monument, NM	09367683	619	1980-83
Ah-shi-sle-pah Wash near Kimbeto, NM	09367685	8.2	1977-84
Kim-me-ni-oli Wash near Crownpoint, NM	09367687	228	1982-83
Kim-me-ni-oli Wash near Lake Valley, NM	09367689	400	1982-83
De-na-zin Wash near Bisti Trading Post, NM	09367710	184	1975-82
Black Springs Wash near Mexican Springs, NM	09367900*	7.55	1979-82
Hunter Wash at Bisti Trading Post, NM	09367930*	45.6	1975-82
Teec-ni-di-tso Wash near Burnham Trading Post, NM	09367934	7.2	1978-82
Burnham Wash near Burnham, NM	09367936	8.6	1978-82
Chaco River near Burnham, NM	09367938	3,640	1978-82
LITTLE COLORADO RIVER BASIN			
Largo Creek near Mangas, NM	09386050	63	1959-66
Zuni River at Black Rock, NM	09387000	828	1910-30
Zuni River at New Mexico-Arizona State line	09387300	1,314	1985-87, 1987-89
Puerco River near Church Rock, NM	09395350	193	1978-82
Puerco River at Gallup, NM	09395500*	558	1940-46, 1977-82
Whitewater Arroyo near Cheechilgeetho, NM	09395700	78.5	1964-67

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DISCONTINUED SURFACE-WATER DISCHARGE STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Period of record
GILA RIVER BASIN			
Gila River near Silver City, NM	09430000	1,600	1912-19
Sapello Creek below Lake Roberts, near Silver City, NM	09430150	78	1964-71
Gila River near Cliff, NM	09431000	2,435	1942-51
Trout Creek near Luna, NM	09442653	27.1	1968-86
San Francisco River near Alma, NM	09443000	1,546	1904-07, 1909-10, 1912-14, 1964-86
Whitewater Creek near Mogollon, NM	09443500	34	1909-23

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1990 water year. Daily records of (c) chemical, (m) microbiological, (s) sediment, or (t) water temperature were collected and published for the record shown for each station.

An inventory of chemical data analyzed prior to 1962 can be found in U.S. Geological Survey Water-Supply Paper 1786, "Inventory of Published and Unpublished Chemical Analyses of Surface Water in the Continental United States and Puerto Rico, 1961."

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
Dry Cimarron River near Guy, NM	07153500	545	c,s,t	1964-74
Canadian River near Hebron, NM	07199000	229	c	1966-81
Chicorica Creek near Yankee, NM	07199600	32.5		1975-79
Una de Gato Creek below Throttle Dam near Raton, NM	07201420	49.5	c,s	1975-84
Chicorica Creek near Hebron, NM	07202000	381	c	1975-81
Vermejo River near Dawson, NM	07203000	301	c,s	1964-84
Cimarron River below Eagle Nest Dam, NM	07206000	167	c,s	1975-84
Canadian River near Taylor Springs, NM	07211500	2,850	b,c,s	1966-75
Conchas Canal below Conchas Dam, NM	07223300	--	c	1964-77
Canadian River at Logan, NM	07227000		c,t	1962-63
Plaza Largo canal below Barranca Creek near Tucumcari, NM	07227073	602	c	1965-66
Revuelto Creek below Plaza Largo Creek near Tucumcari, NM	07227080	672	c	1965-66
Canadian River near Glenrio, NM	07227125	--	c,s,t	1965-66
Canadian River above New Mexico-Texas State Line	07227140	12,616	b,c,s	1969-73; 1975-86
Rio Grande above Culebra Creek near Lobatos, CO	08249200		b,c,t	1962-69
Costilla Creek near Costilla, NM	08255500	195	c,s	1966-76
Rio Grande near Cerro, NM	08263500	8,440	c,m,s	1977; 1979-87
Rio Grande above Red River near Cerro, NM	08263510	--	c,m,s	1979-81
Red River near Red River, NM	08264000	19.1	s	1963
Red River below Zwergle Damsite near Red River, NM	08264500	28.9	c,m,s	1962-65; 1979-82
Red River at MolyCorp Mine near Red River, NM	08264970	78.3	c,m,s	1979-82
Red River near Questa, NM	08265000	113	c,m,s	1979-87
Cabresto Creek near Questa, NM	08266000	36.7	c,m,s	1979-82
Red River below Questa, NM	08266500	160	c,m,s	1979-87
Red River above State Fish Hatchery near Questa, NM	08266790	175	c,m,s	1979-87
Red River at Fish Hatchery near Questa, NM	08266800	185	c,k,s,t	1966-77
Red River below Fish Hatchery, near Questa, NM	08266820	185	c,m,s	1978-87
Red River at mouth, near Questa, NM	08267000	190	c,m,s	1966-68; 1979-85
Rio Grande above Rio Hondo at Dunn Bridge, NM	08267400	8,690	c,m,s	1979-87
Rio Hondo at Damsite at Valdez, NM	08268200	40.3	s	1962-65
Arroyo Hondo at Arroyo Hondo, NM	08268500	65.6	c,m,s	1979-82
Rio Grande del Rancho near Talpa, NM	08275500	83	s	1962-65
Rio Grande above San Juan Pueblo, NM	08281100	10,550	c,m,s	1987-88
Willow Creek near Park View, NM	08284500	193	c,s	1962-65
Rio Chama above Abiquiu Reservoir, NM	08286500	1,600	c,k,s,t	1963-85
Rio Chama below Abiquiu Dam, NM	08287000	2,147	c,k,s,t	1963-85
Rio Ojo Caliente at La Madera, NM	08289000	419	c	1976-77
Rio Nambe at Nambe Falls, near Nambe, NM	08294300	25.1	s	1962-65
Rito de los Frijoles in Bandelier National Monument, NM	08313350	18.1	b,c,m,s,t	1977-82

DISCONTINUED SURFACE-WATER-QUALITY STATIONS -- Continued

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
Rio Grande below Cochiti Dam, NM	08317400	14,900	c,s,t	1974-84; 1985-88
Galisteo Creek below Galisteo Dam, NM	08317950	597	c,k,s,t	1971-78
Galisteo Creek at Domingo, NM	08318000	640	c,s,t	1962-71
Jemez River below East Fork near Jemez Springs, NM	08321500	173	c,s	1963-67
Jemez River below Jemez Canyon Dam, NM	08329000	1,038	c,s	1966-88
Piedra Lisa Arroyo near Bernalillo, NM	08329100	4.1	c,s	1962-74
Rio Grande near Bernalillo, NM	08329500	17,300	c,s,t	1962-69
Tijeras Arroyo near Albuquerque, NM	08330600	133	c	1979
Rio Grande Conveyance Channel near Bernardo, NM	08331990	--	c,k,s,t	1962-75
Rio Grande near Bernardo, NM	08332000	19,230	c,s,t	1962-64
Bernardo Interior Drain near Bernardo, NM	08332050	--	c,s,t	1965-68
San Pablo Creek near Cuba, NM	08332700	12.8	c,s	1982
Papers Wash near Star Lake Trading Post, NM	08334300		c,m,s	1978-82
Arroyo Chico near Guadalupe, NM	08340500	1,390	c,s	1978-86
Rio San Jose at Grants, NM	08343000	1,020	c,s	1980
Rio Salado near San Acacia, NM	08354000	1,380	c,s	1962-84
Socorro Main Canal North at San Acacia, NM	08354500	--	s	1985
Rio Grande below Elephant Butte Dam, NM	08361000	29,450		1975-82
Rio Grande below Caballo Dam, NM	08362500	30,700	c	1966-68
Rio Grande at Leasburg Dam, NM	08363500		b,c,m	1975-79
Rio Grande at Vinton Bridge near Anthony, TX	08363840	28,680	b,c,m,s	1975-78
Pecos River near Pecos, NM	08378500	189	c	1970-73
Pecos River near Anton Chico, NM	08379500	1,050	b,c,m,s	1967-77
Pecos River below Sumner Dam, NM	08384500	4,390	b,c,m,s,t	1962-66; 1972-87
Rio Hondo at Diamond A Ranch near Roswell, NM	08390500	947	c,s	1962
Hagerman Canal at Dexter, NM	08393800	--	c	1964-67
Rio Penasco at Dayton, NM	08398500	1,060	s	1962-72
Pecos River (Kaiser Channel) near Lakewood, NM	08399500		c	1968-70; 1978-79
Lake McMillan near Lakewood, NM	08400500	16,990	c	1962-67; 1978-79
Pecos River below McMillan Dam, NM	08401000	16,990	c	1962-66; 1978-79
Pecos River at Ford Crossing above Major Johnson Springs, NM	08401300	16,990	c	1962-67
Pecos River at Damsite 3 near Carlsbad, NM	08402000	17,980	c,t	1962-67
Pecos River at Carlsbad, NM	08405000	18,100	c,k,t	1962-87
Pecos River below Sixmile Dam near Carlsbad, NM	08405260	18,650	b,c,m,s	1975-77
Pecos River below Red Bluff Dam, near Orla, TX	08410100		c,t	1962-63
Mimbres River at McKnight Damsite near Mimbres, NM	08476300	97.3	c,s	1967-72
Mimbres River at Mimbres, NM	08477110	184	b,c,m,s	1978-86
Rio Blanco near Pagosa Springs, CO	09343000	58	s	1962-65
Navajo River above Chromo, CO	09344300	96.4	s	1962-65
Navajo River at Edith, CO	09346000	172	b,c,s	1969-74
San Juan River near Carracas, CO	09346400	1,230	b,c,s	1969-73
Piedra River near Arboles, CO	09349800	629	b,c,s	1969-73
Los Pinos River at La Boca, CO	09354500	510	b,c,s	1969-73
Canon Largo near Blanco, NM	09356565	1,700	c,m,s	1978-81

DISCONTINUED SURFACE-WATER-QUALITY STATIONS -- Continued

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Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
San Juan River at Bloomfield, NM	09357000	5,410	s,t	1962-64
San Juan River at Hammond Bridge near Bloomfield, NM	09357100	5,540	b,c,m,s	1978-81
Gallegos Canyon near Farmington, NM	09357250	290	c,m,s	1978-81
San Juan River above Animas River at Farmington, NM	09357300	5,800	c	1966-79
La Plata River at Colorado-New Mexico State line	09366500	331	b,c,m,s	1970-73
Shumway Arroyo near Fruitland, NM	09367555	62.8	b,c,m,s	1976; 1978-82
Shumway Arroyo near Waterflow, NM	09367561	73.8	b,c,m,s	1974-84; 1986
Chaco Wash near Star Lake Trading Post, NM	09367660	59	c,s	1978-82
Chaco Wash at East Boundary at Chaco Canyon National Monument, NM	09367676	364	c,s	1981-82
Fajada Wash at Chaco Canyon National Monument, NM	09367678	199	c,s	1981-84
Chaco Wash at Chaco Canyon National Monument, NM	09367680	578	c,s	1976-84
Gallo Wash at Chaco Canyon National Monument, NM	09367682	36.2	c,s	1979
Chaco Wash near PB at bridge at Chaco Canyon National Monument, NM	09367683	619	c,s	1981-84
Ah-shi-sle-pah Wash near Kimbeto, NM	09367685	8.21	c,s	1977-83
Kim-me-ni-oli Wash near Crownpoint, NM	09367687	228	b,c,s	1981-83
Kim-me-ni-oli Wash near Lake Valley, NM	09367689	400	b,c,s	1981-83
De-na-zin Wash near Bisti Trading Post, NM	09367710	184	c,s	1975-82
Black Springs Wash near Mexican Springs, NM	09367900	7.05	c,s	1981-82
Hunter Wash at Bisti Trading Post, NM	09367930	45.6	c,s	1975-82
Teec-ni-di-tso Wash near Burnham, NM	09367934	7.2	c,m,s,t	1978-82
Burnham Wash near Burnham, NM	09367936	8.6	c,m,s,t	1978-82
Chaco River near Burnham, NM	09367938	3,640	c,m,s,t	1978-82
Chaco River near Waterflow, NM	09367950	4,350	c,s	1976-89
San Juan River near Bluff, UT	09379500	23,000	c,s,t	1962-68
Puerco River near Church Rock, NM	09395350	193	c,s	1979
Foster Canyon near Continental Divide, NM	09395381	16.8	c	1988
Puerco River at Gallup, NM	09395500	558	c,k,s,t	1975-77; 1979-84
Gila River near Gila, NM	09430500	1,864	c,s,t	1963-67
Mangas Creek below Mangas Springs, NM	09431100		c,m,s	1970-86
Sunset Canal above New Mexico-Arizona State line	09433500	--	b,c,s	1969-72
New Model Canal above New Mexico-Arizona State line	09436500	--	b,c,s	1969-72
Gila River at New Mexico-Arizona State line	09438000	3,349	b,c,s	1968-73
San Francisco River near Glenwood, NM	09444000	1,653	b,c,s	1963-85
San Francisco River at Clifton, AZ	09445000	2,766	s	1963-67
Dry Beaver Creek near Rimrock, AZ	09505350	139	s	1964-65

INTRODUCTION

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

Water-resources data for the current year for New Mexico consist of records of discharge and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 167 gaging stations and contents for 26 lakes and reservoirs; water quality for 59 gaging stations, 8 partial-record stations, and 168 wells; and water levels at 115 observation wells. Also included are 110 crest-stage, partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. Three seepage investigations were made during the year. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating Federal, State, and local agencies in New Mexico.

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

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports for each State. Water-quality records for water years 1964 through 1974 were similarly released in separate reports. Beginning with water year 1975, data for streamflow, water quality, and ground water were combined in reports published annually for each State. These reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NM-91-1." These Water-Data Reports are for sale by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22151.

COOPERATION

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

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

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

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

New Mexico State Highway and Transportation Department, Louis Medrano, Secretary.

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

Costilla Creek Compact Commission, E.L. Martinez, Commissioner for New Mexico;
Hal Simpson, Commissioner for Colorado.

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

City of Albuquerque, Louis E. Saavedra, Mayor.

Rio San Jose Flood Control District, Michael W. Shaw, Chairman.

City of Santa Rosa, Peter Campos, Mayor.

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

Village of Ruidoso, Ronald Wicker, Manager.

Financial assistance for the collection of water-resources data published in this report was provided by the Corps of Engineers, U.S. Army, for 25 gaging stations; by the Bureau of Reclamation, U.S. Department of Interior, for 7 gaging stations; by the Bureau of Indian Affairs, U.S. Department of Interior, for 15 gaging stations; and by the Bureau of Land Management, U.S. Department of Interior, for 2 gaging stations.

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

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

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1991

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Perennial streams in New Mexico generally are in mountainous regions in the north-central, south-central, and southwestern parts of the State. Other perennial streams include the San Juan and Animas Rivers in northwestern New Mexico, which originate in the San Juan Mountains of southwestern Colorado. When flow is not regulated by releases from dams, several reaches of the Pecos River south of Santa Rosa have perennial flow that is maintained by relatively large spring runoff. Large discharges in perennial streams normally are the result of spring snowmelt in the mountains, which may last several months.

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

Hydrologic conditions during water year 1991 were variable across New Mexico throughout the year. October through December precipitation and snowpack were generally near average to above average. The snowpack declined in January and February, but heavy March snowstorms resulted in the snowpack increasing to average or above average. April was dry with above-average temperatures that caused a decline in snowpack conditions. Rainfall across the State began in May and continued throughout the remainder of the water year. In June, all rainfall-gaging stations measured some precipitation and more than half measured above-average rainfall. In particular, rainfall-gaging stations in the northeastern section of New Mexico and the north-central mountains measured rainfall amounts in excess of 200 percent of average. In July the eastern portions of the State, in addition to the north-central mountains, had reported above-average rainfall. Carlsbad and Roswell reported three and four times the normal precipitation for the month, respectively. The above-normal precipitation continued through August across the State and provided the basis generally for a very wet water year in New Mexico.

Streamflow in New Mexico has been near normal or greater than normal since 1979, and the increased precipitation that began late in water year 1990 carried into water year 1991. Discharges recorded in October on the Pecos (station 08378500), Delaware (08408500), and Gila (station 09430500) Rivers were 208, 655, and 190 percent of normal, respectively. During the subsequent winter months, when discharges generally decline, discharges at all reporting index stations remained above normal. In particular, the gaging station Gila River near Gila measured runoff in December and January that was 490 percent of the median. As the spring runoff began, coupled with the early spring and summer rainfall, discharges began to increase and at the end of the water year ranged from 418 percent to 99 percent of normal at the gaging stations on the Pecos and Delaware Rivers. Discharges at three of the four index stations were above normal throughout the entire water year. The only below-normal runoff during the year was for 4 months at the index station on the Delaware River in the extreme southeastern corner of New Mexico.

Discharges for water year 1991 at four index streamflow-gaging stations compared with median annual discharge for water years 1961-90 at the same stations are listed below:

Station number	Station name	Median annual discharge in acre-ft		1991 discharge as a percentage of median
		water years 1961-90	water year 1991	
08276500	Rio Grande below Taos Junction Bridge	491,900	608,500	124
08378500	Pecos River near Pecos	66,870	120,000	179
08408500	Delaware River near Red Bluff	5,320	4,370	82
09430500	Gila River near Gila	102,900	223,400	217

Reservoir storage of the State's surface waters at the beginning of water year 1991 was at less-than-normal levels. These levels generally increased during the year because of above-normal precipitation. The combined storage of Elephant Butte and Caballo Reservoirs was 58 percent of capacity at the end of October. Storage remained near this level until January when it increased to 66 percent of capacity. This was also the percentage of capacity for the combined storage at the end of September. Similarly, storage at Conchas Lakes was 60 percent of capacity at the end of October; it decreased to 55 percent in May, then increased to 87 percent by the end of September.

The combined storage of 13 major reservoirs in the State increased by 861,000 acre-feet during water year 1991 totaling 4,725,000 acre-feet by September 30, 1991. The total combined capacity of these 13 reservoirs is 8,537,000 acre-feet.

Surface-Water Quality

Dissolved-solids concentrations in water at selected streamflow-gaging stations were below normal throughout the State during the water year. Median values of specific conductance for water year 1991 at selected daily stations compared with median values of specific conductance for water years 1980-90 at the same stations are listed below:

Station number	Station name	Median specific conductance, in microsiemens per centimeter at 25 °Celsius		1991 median as a percentage of 1980-90 median
		water years 1980-90	water year 1991	
08313000	Rio Grande at Otowi Bridge	318	312	98
08330000	Rio Grande at Albuquerque	398	394	99
08354900	Rio Grande FW at San Acacia	630	533	85
08396500	Pecos River near Artesia	7,710	4,970	64
09364500	Animas River at Farmington	540	494	91

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1991

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Suspended-sediment loads for water year 1991 at three index stations compared with median suspended-sediment loads for water years 1980-89 at the same stations are listed below:

Station number	Station name	Median suspended-sediment load, in tons		1991 load as a percentage of 1980-89 median
		water years 1980-89	water year 1991	
08313000	Rio Grande at Otowi	1,467,300	3,863,612	264
08330000	Rio Grande at Albuquerque	576,700	1,293,966	225
08396500	Pecos River near Artesia	310,615	394,832	128

Ground-Water Levels

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

Hydrographs of water levels in wells (fig. 2) in the four quadrants of the State illustrate the water-level trends for the last 20 years. A decrease in ground-water withdrawals for agriculture and mining operations may be responsible for the general rise in water levels in the well in Cibola County. The wells in Luna, Union, and Chaves Counties are in areas of intensive irrigation. The water level in the Luna County well (Mimbres Valley) remained about the same as in the previous year, but continued to be higher than average for the past 20 years. The water level in the well in Union County continued to decline, which is typical of wells on the High Plains of northeastern New Mexico. The water level in the recorder well in Chaves County has yearly fluctuations that are typical of water levels in wells in the Roswell artesian basin. The water levels in the vicinity of this well have also risen since the mid-1970's, probably resulting from both a decrease in withdrawals for irrigation and an increase in recharge to the aquifer.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network includes 57 sites in small drainage basins around the country whose purpose is to provide hydrologic and water-quality data for basins in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins that have been developed, and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Included in this program are stations 08377900, Rio Mora near Terrero; and 09430600, Mogollon Creek near Cliff.

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

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity. Included in this program are the hydrologic bench-mark stations.

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

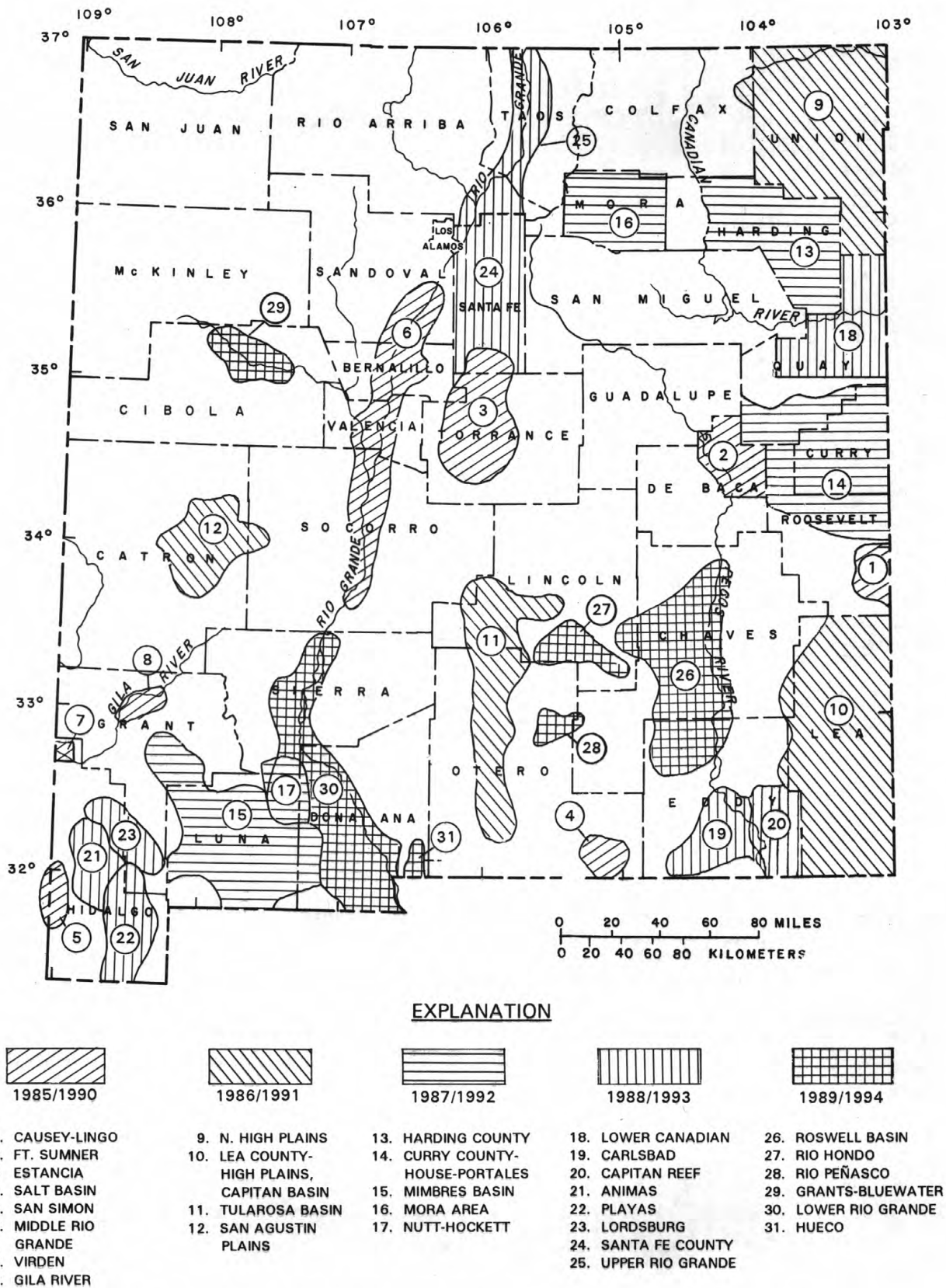


Figure 1.--Areas of 5-year ground-water-level monitoring and years measured or scheduled for measurement.

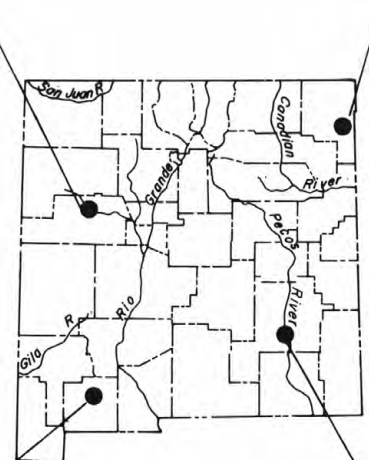
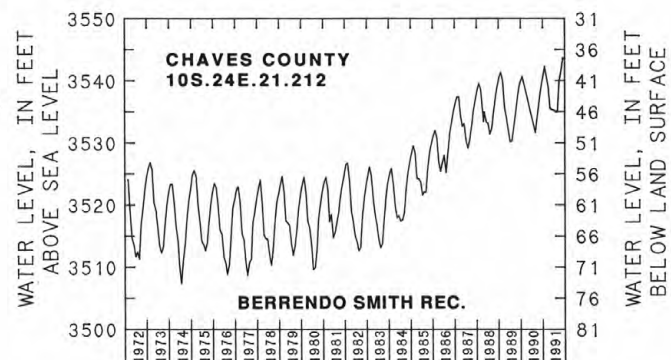
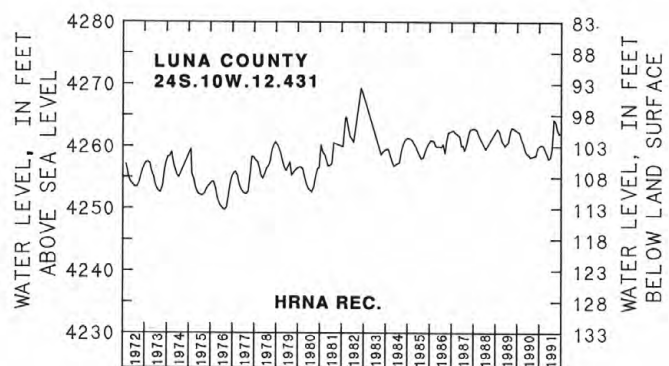
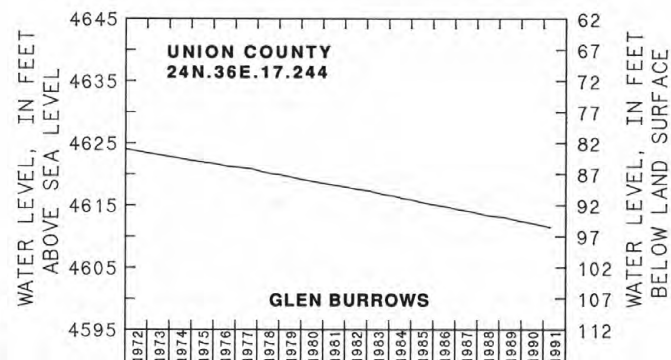
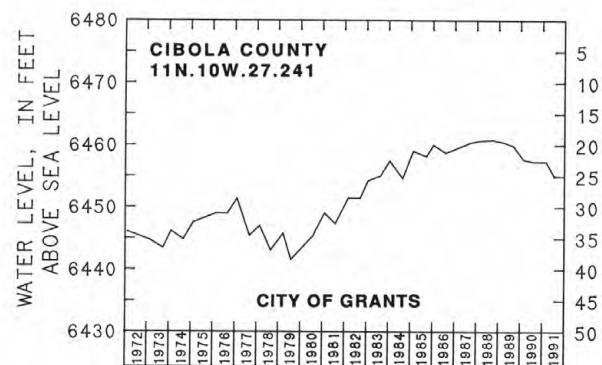


Figure 2.--Ground-water-level trends for the last 20 years or period of record.

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1990

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

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1990 water year, which began October 1, 1989, and ended September 30, 1990. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 5 and 6. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream-Order System

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

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

Latitude-Longitude System

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

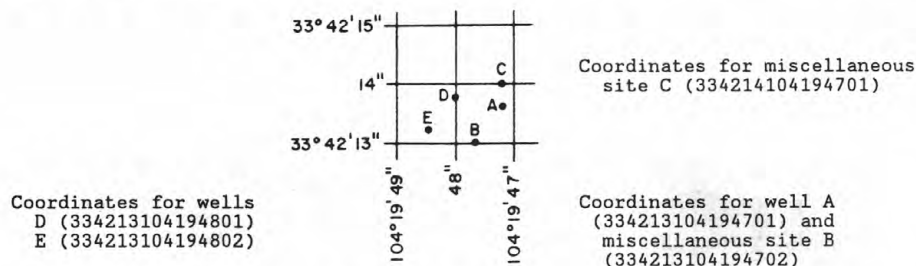


Figure 3.--System for numbering wells, springs, and miscellaneous sites.

Local Well Numbers

To provide an additional means of identification and a cross reference to records in older reports, most wells and springs have been assigned a local identifier based on the system of public land surveys. In areas covered by such surveys, the local identifier consists of a series of numbers and letters separated by periods, giving the township, range, section, and tract within a section, in that order. The letters N or S locate the township north or south of the New Mexico base line. The letters E or W locate the range east or west of the New Mexico principal meridian. A zero in a tract number indicates that the well or spring is centrally positioned or has not been located accurately enough to be placed within a tract or quarter section. Three digits in a tract number will locate a well or spring to the nearest 10-acre tract, and six digits will locate a site to the nearest 0.16-acre tract. This numbering system is illustrated in WDR NM-75-1 and WSP 1855. On the Navajo Reservation, where public land surveys have not been made, the local identifier is based on a different system of letters and numbers. In the example NR032.0156x0736, the first two letters indicate that the well is on the Navajo Reservation. The three-digit number to the left of the decimal indicates one of a series of special quadrangle maps on which the well is located. The two numbers to the right of the decimal separated by the letter x are the coordinates of the well in hundredths of a mile from the northeast corner of the area on the map. The first coordinate indicates the distance west; the second the distance south. The above well is located on map 032, 1.56 miles west and 7.36 miles south of the northeast corner.

Records of Stage and Water Discharge

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

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

Data Collection and Computation

The data obtained at a complete-record gaging station consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Continuous records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations, or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

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

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

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

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

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

Data Presentation

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

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1991

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

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

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

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values of less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

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

Other Data Available

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

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

Records of Surface-Water Quality

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

Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records of surface-water quality appear in this report are shown in figure 6.

Arrangement of Records

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

On-Site Measurements and Sample Collection

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

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

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

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

Water Temperature

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

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

Sediment

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

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

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

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

Laboratory Measurements

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in the near future.

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

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

Data Presentation

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

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

LOCATION.--See "Data presentation" under "Records of stage and water discharge"; same comments apply.

DRAINAGE AREA.--See "Data presentation" under "Records of stage and water discharge"; same comments apply.

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

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

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

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

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

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

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

Remark Codes

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

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

Records of Ground-Water Levels

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

Data Collection and Computation

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

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

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1991

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

Records of Ground-Water Quality

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

Data Collection and Computation

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

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

WATER RESOURCES DATA FOR NEW MEXICO, WATER YEAR 1991

Data Presentation

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

Access to WATSTORE Data

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

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

General inquiries about WATSTORE may be directed to:

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

Parameter Codes

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C + or - 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, coccil 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 + or - 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

Cubic feet per second per square mile [(ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT³/S, ft³/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

Discharge-weighted average: See Weighted average.

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

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

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

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

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

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

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

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

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

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

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

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

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

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

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

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meters (m²), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Milligrams of carbon per area or volume per unit time [mg C/(m².time)] for periphyton and macrophytes and [mg C/(m³.time)] for phytoplankton are the units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Applications of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. McCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. Scott Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathburn, N. Yotsukura, G.W. Parker, and L.L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
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- 3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
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- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
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- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
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- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

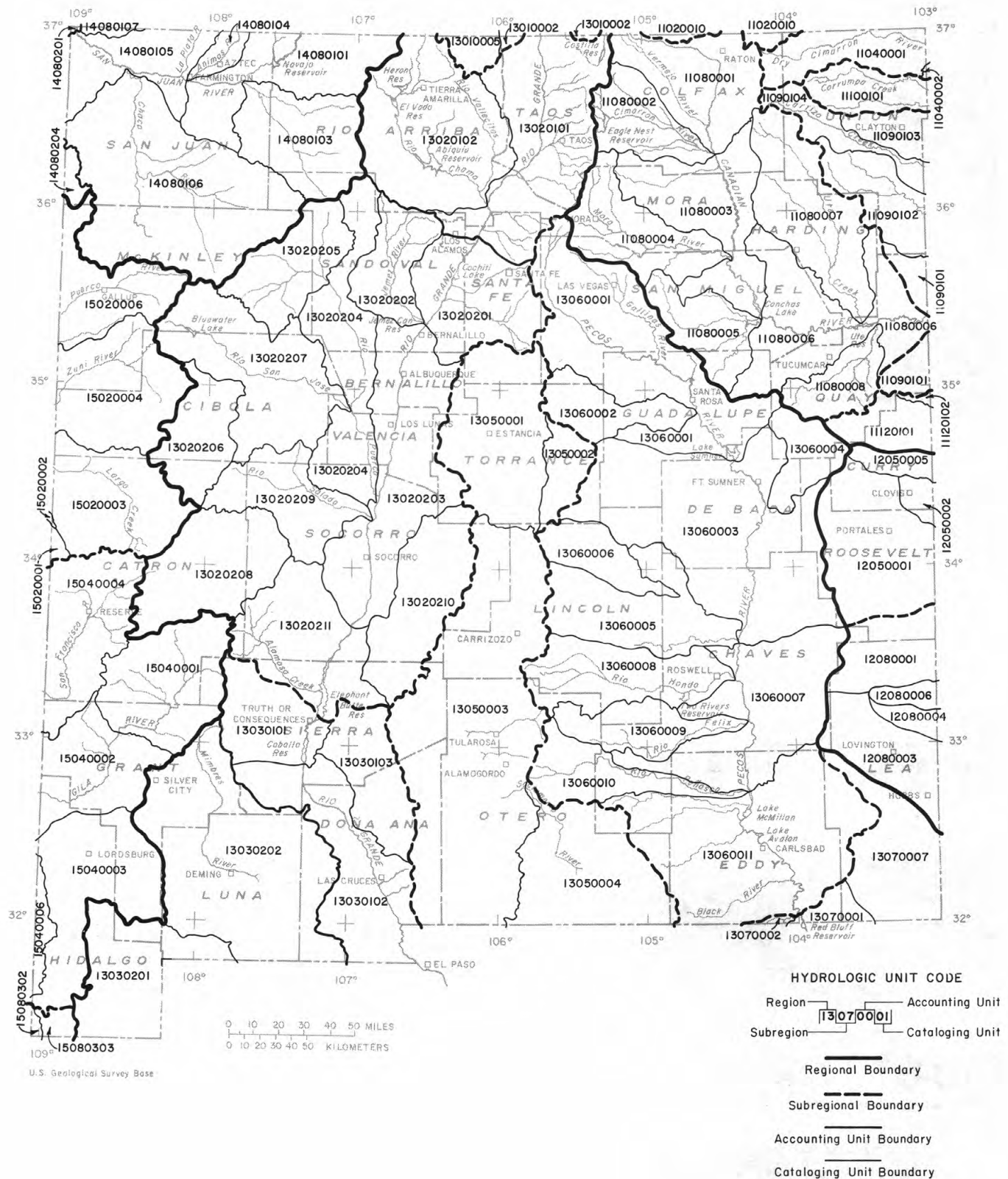


Figure 4.-- Location of hydrologic units.

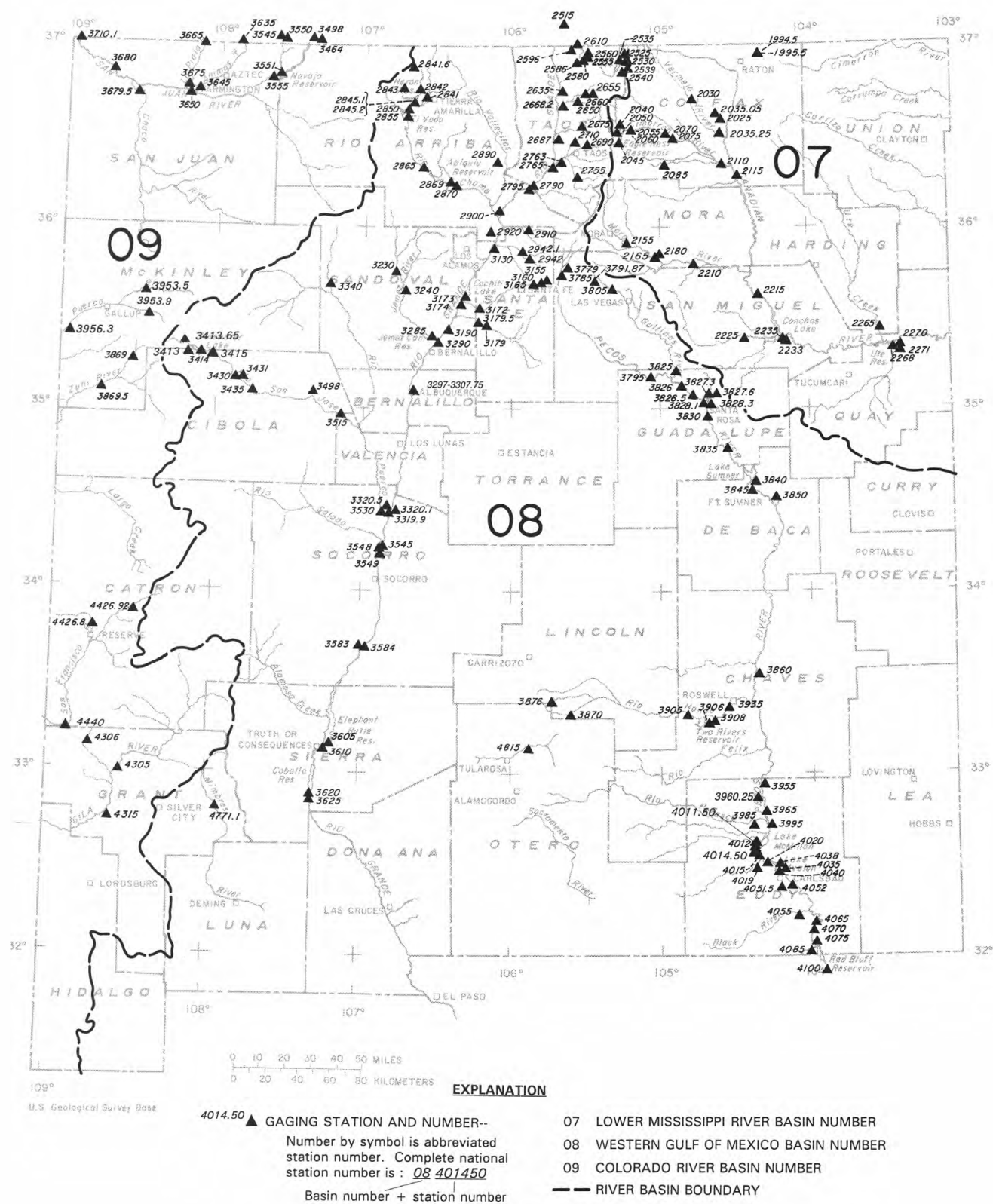
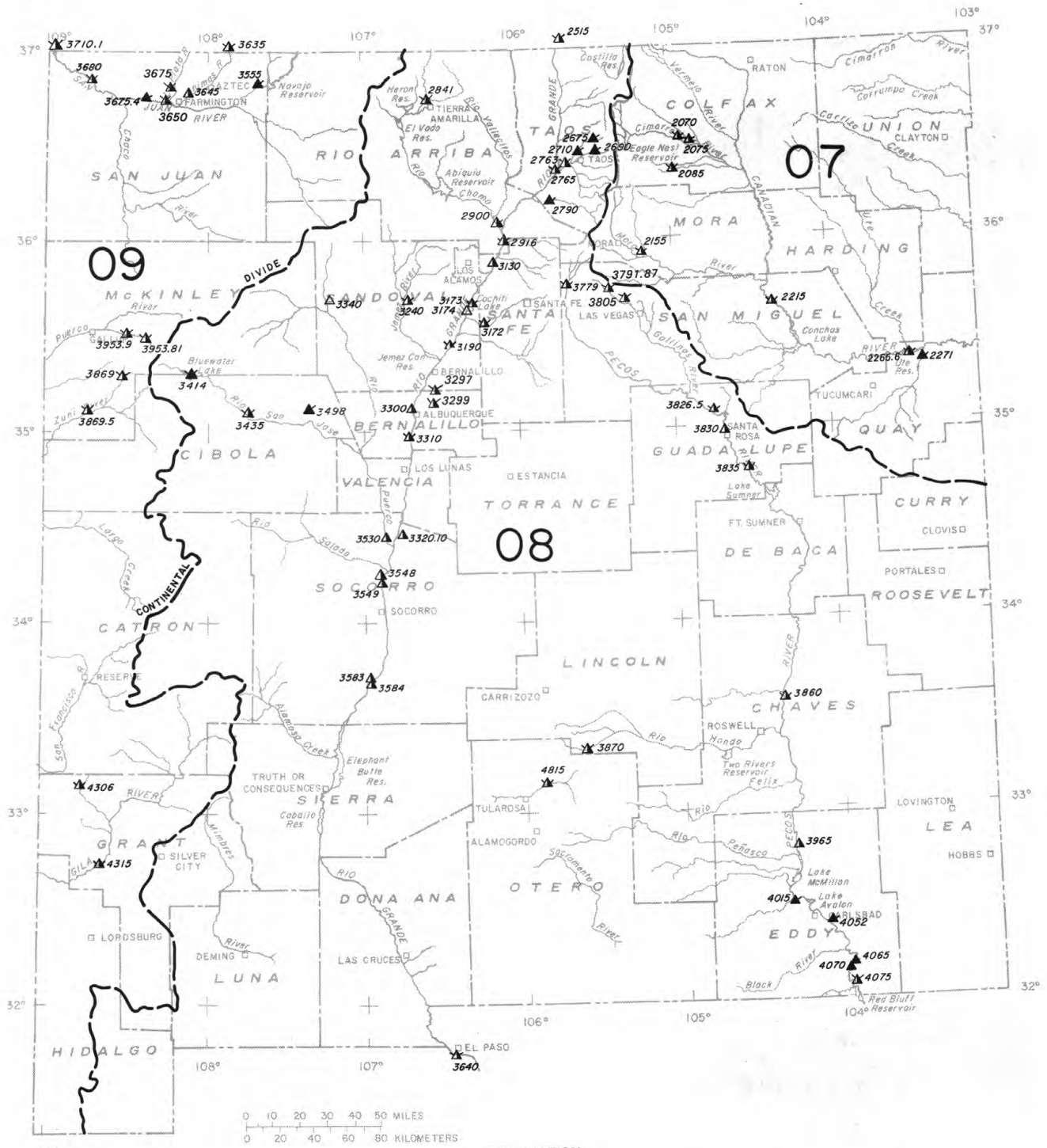


Figure 5.--Location of surface-water gaging stations.



U.S. Geological Survey Base

STATION AND SAMPLING FREQUENCY

CHEMICAL QUALITY:	▲ Daily	▲ Other than daily
SUSPENDED SEDIMENT:	△ Daily	△ Other than daily
CHEMICAL QUALITY AND SUSPENDED SEDIMENT:	▲ Both daily	▲ Both other than daily
	▲ Daily chemical quality and other than daily suspended sediment	▲ Daily suspended sediment and other than daily chemical quality

EXPLANATION**BASIN AND STATION NUMBER**

07	LOWER MISSISSIPPI RIVER BASIN NUMBER
08	WESTERN GULF OF MEXICO BASIN NUMBER
09	COLORADO RIVER BASIN NUMBER
—	RIVER BASIN BOUNDARY
3953.81 ▲	STATION AND NUMBER--Number by symbol is abbreviated station number. Complete national station number is: <u>09 395381</u>
	Basin number + station number

Figure 6.--Location of surface-water-quality stations.

HYDROLOGIC-DATA STATION RECORDS

LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07199450 LAKE MALOYA NEAR RATON, NM

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

DRAINAGE AREA.--20.8 mi².

PERIOD OF RECORD.--May 1975 to September 1987 (monthend contents only), October 1987 to current year.

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,530 acre-ft, May 6, elevation, 7,500.59 ft; minimum contents, 2,220 acre-ft, many days.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2370	2320	2310	2260	e2230	e2230	2320	2510	2290	2380	2350	2370
2	2360	2330	2310	2260	e2230	e2230	2320	2510	2280	2380	2340	2370
3	2350	2330	2310	2260	e2230	e2230	2330	2520	2270	2380	2340	2370
4	2350	2330	2310	2250	e2230	e2230	2350	2520	2270	2380	2350	2370
5	2350	2330	2310	2250	e2230	e2230	2370	2520	2270	2370	2350	2370
6	2350	2330	2310	e2250	e2230	e2230	2420	2530	2290	2370	2350	2360
7	2350	2330	2300	e2250	e2230	e2230	2440	2510	2310	2370	2350	2360
8	2350	2330	2300	e2240	e2230	e2230	2450	e2480	2330	2360	2350	2350
9	2360	2330	2300	e2240	e2230	e2230	2460	e2470	2350	2350	2350	2350
10	2360	2330	2300	e2240	e2230	e2230	e2460	e2460	2380	2350	2350	2350
11	2360	2330	2300	e2240	e2230	e2230	e2460	e2450	2410	2350	2340	2350
12	2360	2330	2300	e2230	2230	e2230	2470	e2440	2420	2350	2340	2350
13	2360	2330	2300	2230	2230	e2240	2470	e2430	2430	2340	2340	2340
14	2360	2330	2300	2230	2230	e2240	2480	e2420	2430	2340	2340	2340
15	2360	2330	2300	2230	2220	e2240	2480	e2410	2430	2330	2330	2330
16	2350	2330	2300	e2230	2220	e2240	2480	e2400	2430	2330	2330	2330
17	2350	2330	2300	e2220	2220	e2240	2480	e2390	2430	2320	2330	2320
18	2350	2330	2300	2220	2220	e2240	2480	e2380	2430	2320	2330	2310
19	2350	2330	2300	2220	2220	e2240	2480	e2370	2430	2310	2330	2310
20	2340	2330	2300	2220	2220	e2240	2480	e2370	2420	2310	2340	2310
21	2340	2330	2300	e2220	2220	e2250	2470	e2360	2430	2300	2350	2310
22	2340	2330	2290	e2220	2220	e2250	2470	e2350	2430	2330	2350	2300
23	2340	2320	2290	2220	e2220	e2250	2480	e2350	2430	2340	2350	2300
24	2340	2320	2290	2220	e2220	e2250	2490	e2340	2430	2350	2350	2300
25	2340	2320	2280	2220	e2220	e2250	e2490	e2330	2420	2370	2350	2290
26	2330	2320	2280	2230	e2220	e2250	2500	e2330	2420	2380	2360	2290
27	2330	2320	2280	2230	e2220	2270	2500	e2320	2420	2370	2370	2290
28	2330	2320	2270	2230	e2220	2270	2500	e2310	2410	2370	2370	2290
29	2330	2310	2270	2230	---	2290	2500	e2300	2400	2370	2370	2290
30	2320	2310	2270	e2230	---	2310	2500	e2300	2390	2360	2370	2290
31	2320	---	2260	e2230	---	2320	---	2290	---	2360	2370	---
MAX	2370	2330	2310	2260	2230	2320	2500	2530	2430	2380	2370	2370
MIN	2320	2310	2260	2220	2220	2230	2320	2290	2270	2300	2330	2290
(†)	7498.50	---	7497.93	---	---	7498.50	7500.33	7498.24	7499.24	7498.87	7499.03	7498.23
(††)	-50	-10	-50	-30	-10	+100	+180	-210	+100	-30	+10	-80
(†††)	193	166	177	178	147	169	182	222	125	164	171	61
(††††)	0	0	0	0	0	0	0	175	0	0	0	0
CAL YR 1990	MAX 3700	MIN 2260	(††) -570	(†††) 2266	(††††) 808							
WTR YR 1991	MAX 2530	MIN 2220	(††) -80	(†††) 1955	(††††) 175							

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET

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

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

e Estimated

ARKANSAS RIVER BASIN

07199550 LAKE ALICE NEAR RATON, NM

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

DRAINAGE AREA.--29.4 mi².

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

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

REMARKS.--Reservoir is formed by an earthfill dam, completed in 1892; capacity 100 acre-ft, spillway elevation, 7,078.0 ft. Reservoir rehabilitated in 1941; capacity, 71 acre-ft, spillway elevation, 7,089.6 ft. Elevation of lowest outlet, 7,064.1 ft. No dead storage. Water is for municipal use of City of Raton.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 73 acre-ft, Apr. 30, May 31, 1983, elevation, 7,090 ft; minimum observed, 0 acre-ft, Aug., Sept. 1989, lake drained.

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

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
07199550 LAKE ALICE NEAR RATON, NM			
Sept. 30, 1990.....	7,089.60	71	0
Oct. 31.....	7,089.60	71	0
Nov. 30.....	7,089.60	71	0
Dec. 31.....	7,089.60	71	0
CAL YR 1990	-	-	+71
Jan. 31, 1991.....	7,089.60	71	0
Feb. 28.....	7,089.60	71	0
Mar. 31.....	7,089.00	71	0
Apr. 30.....	7,089.00	71	0
May 31.....	7,089.60	71	0
June 30.....	7,089.60	71	0
July 31.....	7,089.60	71	0
Aug. 31.....	7,089.60	71	0
Sept. 30.....	7,089.60	71	0
WTR YR 1991	-	-	0

ARKANSAS RIVER BASIN

07202400 VERMEJO RIVER AT VERMEJO PARK, NM

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

DRAINAGE AREA.--36.7 mi².

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

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

REMARKS.--Records fair.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86 ft³/s, July 19, gage height, 3.07 ft; minimum recorded, 5.0 ft³/s, Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	---	---	---	---	---	---	---	25	14	11	10
2	7.3	---	---	---	---	---	---	---	24	14	11	9.9
3	7.0	---	---	---	---	---	---	---	22	14	19	10
4	6.4	---	---	---	---	---	---	---	22	13	38	19
5	6.1	---	---	---	---	---	---	---	21	12	21	13
6	5.9	---	---	---	---	---	---	---	25	11	20	12
7	6.1	---	---	---	---	---	---	---	22	11	19	11
8	7.1	---	---	---	---	---	---	---	21	11	15	9.6
9	6.8	---	---	---	---	---	---	---	20	12	14	9.8
10	6.4	---	---	---	---	---	---	---	25	10	14	17
11	6.0	---	---	---	---	---	---	---	28	14	14	11
12	e6.0	---	---	---	---	---	---	---	23	12	14	16
13	e5.8	---	---	---	---	---	---	---	22	10	31	14
14	e5.8	---	---	---	---	---	---	---	23	9.9	39	11
15	e5.7	---	---	---	---	---	---	---	25	11	47	10
16	e5.4	---	---	---	---	---	---	---	27	13	27	9.7
17	e5.2	---	---	---	---	---	---	---	23	11	22	9.3
18	5.0	---	---	---	---	---	---	---	20	9.2	20	9.2
19	---	---	---	---	---	---	---	---	21	14	21	9.3
20	---	---	---	---	---	---	---	---	21	10	19	9.0
21	---	---	---	---	---	---	---	---	20	12	16	8.5
22	---	---	---	---	---	---	---	---	20	22	15	8.2
23	---	---	---	---	---	---	---	---	19	23	15	7.9
24	---	---	---	---	---	---	---	---	18	23	19	7.7
25	---	---	---	---	---	---	---	---	17	22	14	7.5
26	---	---	---	---	---	---	---	---	16	17	14	7.4
27	---	---	---	---	---	---	---	---	16	15	13	7.4
28	---	---	---	---	---	---	---	---	16	13	12	7.6
29	---	---	---	---	---	---	---	---	15	12	12	7.5
30	---	---	---	---	---	---	---	---	15	12	11	7.9
31	---	---	---	---	---	---	---	25	---	12	10	---
TOTAL	---	---	---	---	---	---	---	---	632	419.1	587	307.4
MEAN	---	---	---	---	---	---	---	---	21.1	13.5	18.9	10.2
MAX	---	---	---	---	---	---	---	---	28	23	47	19
MIN	---	---	---	---	---	---	---	---	15	9.2	10	7.4
AC-FT	---	---	---	---	---	---	---	---	1250	831	1160	610

e Estimated

ARKANSAS RIVER BASIN

07202500 EAGLE TAIL DITCH NEAR MAXWELL, NM

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

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

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

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

AVERAGE DISCHARGE.--20 years (water years 1946-49, 1976-91), 6.65 ft³/s, 4,820 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 92 ft³/s, Aug. 13, gage height, 3.13 ft; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	1.0	2.5	e.44	e.70	.00	1.6	.00	.00	6.1	3.3	1.7
2	9.1	1.9	2.2	e.42	e.67	.00	1.1	.00	.00	2.1	2.6	.82
3	3.8	21	e1.9	e.42	e.66	.00	1.2	.00	.00	37	2.6	.46
4	4.3	10	e1.7	e.45	e.64	.00	1.4	.00	.00	5.9	16	.29
5	2.1	5.6	e1.6	e.58	e.64	.00	1.2	.00	.00	2.2	47	.52
6	1.2	4.8	e1.5	e.86	e.64	.00	13	.00	.00	1.1	49	1.1
7	.79	4.8	e1.4	e1.1	e.66	.19	9.7	.00	.00	.43	31	1.9
8	.41	4.0	e1.4	e1.3	e.67	.13	3.8	.00	3.5	.05	10	2.1
9	.33	3.5	e1.4	e1.4	e.70	.16	1.8	6.4	4.2	.00	8.2	1.3
10	1.2	3.4	e1.4	e1.6	e.70	.12	.83	8.6	.49	.00	6.8	33
11	1.6	3.3	e1.5	e1.9	e.74	.16	.27	2.8	6.8	.07	17	19
12	1.7	2.7	e1.6	e2.2	e.76	.14	.14	.86	16	.73	44	5.4
13	.92	2.8	e1.7	e2.5	e.76	.11	.03	.12	12	3.0	40	4.0
14	1.0	2.7	e1.8	e2.7	e.80	.04	.02	.00	4.5	.66	15	3.5
15	1.1	2.9	e1.8	2.9	e.92	.07	.01	.00	5.2	.20	9.9	3.3
16	.74	2.8	2.0	e2.8	e1.1	.46	.00	.00	10	.02	7.1	2.1
17	1.1	2.9	2.2	e2.8	e1.1	.78	.00	.00	4.5	.00	5.2	2.1
18	.90	2.9	2.1	e2.7	e1.1	.70	.00	8.0	2.3	.00	4.4	1.1
19	.92	2.8	2.1	e2.6	e1.2	.48	.00	2.2	2.8	.00	5.4	.88
20	1.4	2.9	e2.2	e2.4	1.2	.25	.00	1.2	3.8	.00	7.6	.90
21	1.1	2.8	e1.7	e2.0	1.7	.15	.00	3.2	5.3	.00	15	1.3
22	1.2	2.4	e1.4	e1.8	1.2	.27	.00	2.9	5.8	.00	13	2.7
23	1.2	1.8	e1.2	e1.7	1.1	.63	.00	1.8	5.7	7.8	8.8	1.2
24	1.3	2.2	e1.0	e1.6	.74	.70	.00	1.1	3.0	19	8.6	.51
25	1.2	2.7	e.92	e1.4	.43	.73	.00	.84	4.3	40	7.3	.53
26	1.6	2.5	e.84	e1.1	.00	.67	.00	1.9	2.8	64	6.1	.29
27	1.1	2.3	e.73	e.99	.00	.96	.00	.27	1.5	60	5.1	.59
28	.97	1.8	e.64	e.90	.00	.85	.00	.00	1.8	29	5.0	1.4
29	1.0	1.7	e.56	e.86	---	.43	.00	.00	1.2	9.7	4.8	1.6
30	.98	2.3	e.51	e.81	---	.49	.00	.00	3.7	6.0	2.9	1.7
31	1.0	---	e.47	e.74	---	1.0	---	.00	---	4.2	2.0	---
TOTAL	62.26	111.2	45.97	47.97	21.53	10.67	36.10	42.19	111.19	299.26	410.7	97.29
MEAN	2.01	3.71	1.48	1.55	.77	.34	1.20	1.36	3.71	9.65	13.2	3.24
MAX	15	21	2.5	2.9	1.7	1.0	13	8.6	16	64	49	33
MIN	.33	1.0	.47	.42	.00	.00	.00	.00	.00	.00	2.0	.29
AC-FT	123	221	91	95	43	21	72	84	221	594	815	193

CAL YR 1990 TOTAL 1431.80 MEAN 3.92 MAX 56 MIN .00 AC-FT 2840
WTR YR 1991 TOTAL 1296.33 MEAN 3.55 MAX 64 MIN .00 AC-FT 2570

e Estimated

ARKANSAS RIVER BASIN

07203000 VERMEJO RIVER NEAR DAWSON, NM

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

DRAINAGE AREA.--301 mi².

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

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

GAGE.--Water-stage recorder. Elevation of gage is 6,360 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1311 or 1731 for history of changes prior to Sept. 24, 1953.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of small acreage and mountain meadows upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--67 years (water years 1916-17, 1920, 1928-91), 18.5 ft³/s, 13,400 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 11	1600	*3,650	*9.61	Aug. 13	2015	2,450	8.04
July 24	2000	846	6.12				

Minimum discharge, 1.9 ft³/s, Mar. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	9.2	7.8	e3.9	e7.0	4.8	e7.4	14	33	17	26	e5.0
2	17	9.4	9.7	e3.7	e6.9	4.7	e8.1	13	33	15	15	e8.2
3	17	14	10	e4.0	e6.5	4.5	e9.0	14	32	41	47	e15
4	13	17	8.5	e4.5	e6.2	4.5	e10	15	31	25	100	e35
5	10	14	6.6	e4.9	e5.8	4.4	e13	16	29	17	87	e81
6	11	12	7.2	e5.5	e6.0	4.4	e10	15	33	14	81	45
7	9.8	12	9.0	e5.8	e6.3	4.1	e13	15	36	14	99	44
8	10	14	9.6	e6.6	e6.1	3.7	e19	14	31	15	52	e79
9	11	15	10	e7.1	e5.7	3.3	e21	13	29	12	42	e190
10	11	12	11	e8.0	e5.3	3.4	e18	16	29	12	60	e280
11	11	11	11	11	e5.1	4.0	e16	20	41	338	64	e120
12	10	11	8.7	e10	e5.4	3.7	e14	24	40	50	47	e110
13	9.3	11	9.7	e8.6	e5.3	3.4	e13	25	37	31	416	e97
14	8.8	11	7.9	e9.3	e5.1	3.5	e12	20	38	29	354	e88
15	8.3	11	8.2	e11	e4.6	3.5	e11	21	35	23	e235	e76
16	8.1	11	8.1	11	e4.4	3.7	e11	21	39	34	e215	e66
17	7.9	11	9.0	10	e4.2	4.2	e11	20	33	23	e195	e58
18	7.7	11	9.2	10	e3.9	4.3	e12	20	28	22	e172	e52
19	8.0	11	9.8	e9.7	e3.5	4.1	14	24	26	22	e155	e47
20	8.4	10	11	e9.4	e3.3	4.1	14	46	28	22	e140	e44
21	11	9.6	e10	e9.3	e3.8	4.1	16	86	25	24	e121	e41
22	9.4	9.4	e9.8	e8.9	e4.0	4.0	16	89	86	26	e111	e37
23	9.5	9.1	e9.1	e8.5	e4.5	3.7	17	76	32	39	e100	e34
24	9.9	9.7	e8.1	e8.1	5.2	3.8	19	66	32	184	e91	e32
25	9.5	9.9	e7.0	e8.0	4.9	4.2	17	55	24	104	e75	e29
26	9.5	9.2	e6.6	e7.8	4.8	4.4	17	48	19	47	e63	e28
27	9.5	9.2	e5.6	e7.3	4.7	4.6	17	45	18	37	e50	e27
28	9.3	8.6	e5.1	e7.2	4.7	4.7	16	41	17	28	e15	e26
29	9.4	7.3	e4.7	e7.2	---	4.9	16	40	17	20	e5.0	e27
30	9.1	7.3	e4.4	e7.1	---	4.9	14	37	19	15	e4.7	e26
31	8.8	---	e4.0	e7.1	---	7.6	---	35	---	18	e4.9	---
TOTAL	322.2	326.9	256.4	240.5	143.2	131.2	421.5	1004	950	1318	3242.6	1847.2
MEAN	10.4	10.9	8.27	7.76	5.11	4.23	14.0	32.4	31.7	42.5	105	61.6
MAX	20	17	11	11	7.0	7.6	21	89	86	338	416	280
MIN	7.7	7.3	4.0	3.7	3.3	3.3	7.4	13	17	12	4.7	5.0
AC-FT	639	648	509	477	284	260	836	1990	1880	2610	6430	3660

CAL YR 1990 TOTAL 4805.3 MEAN 13.2 MAX 87 MIN 3.0 AC-FT 9530
WTR YR 1991 TOTAL 10203.7 MEAN 28.0 MAX 416 MIN 3.3 AC-FT 20240

e Estimated

ARKANSAS RIVER BASIN

07203505 VERMEJO DITCH NEAR COLFAX, NM

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

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

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 19, 1985 at site 0.8 mi downstream at same datum.

REMARKS.--Records poor. Vermejo ditch diverts water from Vermejo River for use on the Vermejo Project. Three small diversions from Vermejo ditch upstream from gage. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 16.0 ft³/s, 11,590 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 190 ft³/s, Aug. 15; minimum daily, 0.98 ft³/s, Feb. 2-4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	7.2	4.4	e1.4	e1.0	4.9	8.3	16	22	9.7	e14	e4.8
2	16	8.8	5.0	e1.4	e.98	4.6	8.5	14	22	9.5	e10	e5.6
3	15	15	4.0	e1.5	e.98	4.4	9.1	15	21	11	30	e11
4	13	13	4.1	e1.5	e.98	4.2	11	16	20	36	e60	e44
5	11	11	4.9	e1.4	e1.0	3.9	9.1	16	19	10	e70	e70
6	10	12	5.5	e1.5	e1.1	3.6	9.1	15	21	9.5	e50	e35
7	9.5	12	4.9	e1.5	e1.1	4.1	12	15	25	9.1	e60	e38
8	10	8.8	6.3	e1.4	e1.2	3.9	18	15	21	9.4	e35	45
9	10	11	7.6	e1.5	e1.2	3.4	17	14	18	8.7	e25	e60
10	11	11	8.8	e1.5	e1.2	3.0	14	14	18	8.5	e30	e90
11	8.8	11	10	e1.5	e1.2	3.3	13	17	25	e80	e40	e80
12	7.0	10	12	e1.5	e1.3	4.3	13	21	30	e109	e43	e76
13	5.8	9.9	11	e1.5	e1.3	3.6	13	25	23	18	e100	e68
14	5.4	9.7	8.3	e1.4	e1.5	3.6	12	20	30	11	e140	e61
15	5.8	9.9	5.1	e1.4	e1.6	4.7	11	19	25	9.7	e190	e54
16	7.4	9.5	6.4	e1.4	1.8	4.7	11	20	28	9.2	e100	e50
17	6.7	9.5	9.5	e1.2	e2.1	5.7	10	20	26	26	e96	e48
18	6.8	9.7	7.3	e1.2	e2.3	6.0	11	19	19	9.7	e85	e43
19	6.6	9.6	e5.3	e1.1	e2.5	5.2	13	22	17	9.5	e77	e41
20	7.1	9.2	e4.6	e1.1	e3.0	4.7	15	44	18	9.2	e69	e39
21	9.3	7.4	e3.6	e1.1	e3.8	4.6	16	99	17	9.8	e60	32
22	10	5.7	e2.2	e1.1	e4.0	5.5	17	111	56	17	e44	28
23	9.8	5.5	e1.8	e1.1	e4.5	4.1	17	69	18	29	e31	27
24	9.8	5.3	e1.6	e1.1	9.0	4.0	18	71	14	e90	e11	27
25	9.5	6.8	e1.5	e1.1	7.5	4.1	17	50	11	e112	e7.5	25
26	9.0	7.6	e1.5	e1.1	5.6	4.3	17	42	10	32	e6.0	23
27	9.0	7.2	e1.5	e1.1	6.2	6.1	18	37	10	20	e5.0	22
28	8.7	7.6	e1.5	e1.1	5.6	4.5	16	33	12	e17	e4.3	22
29	8.5	5.0	e1.4	e1.0	---	5.3	17	31	9.9	e14	e4.0	23
30	7.7	3.7	e1.4	e1.0	---	7.2	16	28	10	e12	e4.0	22
31	7.5	---	e1.4	e1.0	---	6.6	---	25	---	e12	e4.1	---
TOTAL	290.7	269.6	154.4	39.7	75.54	142.1	407.1	973	615.9	777.5	1504.9	1214.4
MEAN	9.38	8.99	4.98	1.28	2.70	4.58	13.6	31.4	20.5	25.1	48.5	40.5
MAX	19	15	12	1.5	9.0	7.2	18	111	56	112	190	90
MIN	5.4	3.7	1.4	1.0	.98	3.0	8.3	14	9.9	8.5	4.0	4.8
AC-FT	577	535	306	79	150	282	807	1930	1220	1540	2980	2410

CAL YR 1990 TOTAL 4888.17 MEAN 13.4 MAX 95 MIN .45 AC-FT 9700
WTR YR 1991 TOTAL 6464.84 MEAN 17.7 MAX 190 MIN .98 AC-FT 12820

e Estimated

ARKANSAS RIVER BASIN

07203525 VERMEJO RIVER NEAR MAXWELL, NM

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

DRAINAGE AREA.--486 mi².

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

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

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

AVERAGE DISCHARGE.--7 years, 7.10 ft³/s, 5,140 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,380 ft³/s, Aug. 14, gage height, 7.55 ft; no flow partial days at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	.80	1.4	e1.1	1.8	1.4	.98	.74	.79	.08	1.4	2.5
2	.44	1.2	1.3	e1.1	1.9	1.3	.94	.77	.62	.07	1.2	2.2
3	.35	2.0	1.3	e1.0	1.9	1.3	.79	.77	.59	.05	2.1	2.1
4	.15	1.5	1.2	e1.0	1.9	1.3	1.0	.88	.52	.04	58	1.9
5	.15	1.3	1.3	e1.0	1.9	1.3	.90	.98	.48	.06	69	2.2
6	.17	1.2	1.3	e1.1	2.0	1.2	.92	1.1	.65	.06	10	3.6
7	.18	1.1	1.3	e1.1	1.9	1.2	.88	1.2	.70	.06	10	3.7
8	.20	1.1	1.4	e1.2	1.9	1.2	.72	1.3	.57	.04	7.3	3.1
9	.24	1.0	1.4	e1.3	1.9	1.1	.56	1.5	.56	.04	6.7	8.3
10	.29	1.4	1.4	e1.4	1.9	1.1	.55	1.5	.67	.03	6.9	126
11	.29	1.1	1.5	e1.4	1.9	1.1	.43	1.6	.83	.04	7.0	18
12	.27	.99	1.6	e1.4	1.8	1.1	.37	1.4	.49	285	4.3	8.5
13	.28	.95	1.7	e1.6	2.3	1.0	.38	1.4	.41	13	4.9	6.5
14	.28	.92	1.7	e1.9	2.2	1.1	.48	1.6	.35	5.5	579	5.4
15	.35	.95	1.7	2.1	1.8	1.4	.38	1.3	.30	3.4	34	4.5
16	.36	.88	1.8	2.0	1.8	1.6	.40	.91	.29	2.2	12	3.9
17	.36	.93	1.9	1.6	1.8	1.7	.40	.96	.28	1.5	e8.6	3.4
18	.39	1.0	1.9	1.9	1.7	1.5	.35	.96	.28	1.3	e7.2	3.3
19	.41	1.0	1.9	2.0	1.6	1.3	.31	1.1	.30	e1.1	e6.5	3.4
20	.50	1.0	2.0	e2.1	1.6	1.3	.37	2.6	.28	e1.0	e5.9	3.3
21	.75	1.2	2.0	1.9	1.6	1.2	.42	5.6	.22	e.70	e5.3	3.1
22	.83	1.1	1.9	2.0	1.5	1.1	.40	8.1	.16	.33	e4.8	3.0
23	.82	1.1	e1.7	2.0	1.4	1.1	.46	4.4	.14	e.25	e4.5	2.7
24	.80	1.2	e1.6	2.0	1.4	1.0	.53	3.1	.10	22	e4.1	2.4
25	.81	1.2	e1.5	e1.8	1.5	1.0	.51	2.6	.08	109	e3.8	2.3
26	.82	1.2	e1.5	2.0	1.5	.97	.54	2.2	.06	13	e3.5	2.1
27	.81	1.2	e1.4	2.2	1.3	.96	.55	1.8	.02	7.1	e3.3	2.0
28	.80	1.2	e1.4	2.2	1.3	.78	.65	1.4	.29	4.4	e3.1	1.9
29	.83	1.1	e1.3	2.2	---	.77	.71	1.2	.18	2.9	e3.0	1.9
30	.80	1.2	e1.2	1.9	---	1.1	.75	.98	.11	2.3	e2.9	1.8
31	.80	---	e1.2	e1.8	---	1.0	---	.89	---	1.7	2.6	---
TOTAL	14.99	34.02	47.7	51.3	49.0	36.48	17.63	56.84	11.32	478.25	882.9	239.0
MEAN	.48	1.13	1.54	1.65	1.75	1.18	.59	1.83	.38	15.4	28.5	7.97
MAX	.83	2.0	2.0	2.2	2.3	1.7	1.0	8.1	.83	285	579	126
MIN	.15	.80	1.2	1.0	1.3	.77	.31	.74	.02	.03	1.2	1.8
AC-FT	30	67	95	102	97	72	35	113	22	949	1750	474

CAL YR 1990 TOTAL 584.66 MEAN 1.60 MAX 10 MIN .00 AC-FT 1160
WTR YR 1991 TOTAL 1919.43 MEAN 5.26 MAX 579 MIN .02 AC-FT 3810

e Estimated

ARKANSAS RIVER BASIN

07204000 MORENO CREEK AT EAGLE NEST, NM

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

DRAINAGE AREA.--73.8 mi².

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

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

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

REMARKS.--Records good. Diversions for irrigation of about 1,200 acres upstream from station. Several observations of water temperature were made during the year.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	2300	*130	*3.14	No other peak greater than base discharge.			

Minimum discharge determined, 1.2 ft³/s, Oct. 14-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	---	---	---	---	---	---	13	14	4.2	4.8	6.3
2	1.7	---	---	---	---	---	---	13	14	4.2	4.6	6.8
3	1.6	---	---	---	---	---	---	13	13	4.6	9.9	7.2
4	1.5	---	---	---	---	---	---	13	12	4.7	13	8.8
5	1.4	---	---	---	---	---	---	13	11	3.9	11	7.2
6	1.3	---	---	---	---	---	---	12	12	3.5	7.7	7.7
7	1.3	---	---	---	---	---	---	13	14	3.3	9.8	7.7
8	1.4	---	---	---	---	---	---	13	10	3.5	9.8	6.5
9	1.4	---	---	---	---	---	---	13	9.6	3.4	9.8	6.9
10	1.4	---	---	---	---	---	---	14	7.9	3.4	11	19
11	1.4	---	---	---	---	---	39	16	8.2	3.2	11	14
12	1.3	---	---	---	---	---	39	18	9.6	3.5	11	12
13	1.3	---	---	---	---	---	30	18	10	3.4	10	13
14	1.3	---	---	---	---	---	29	18	14	3.2	13	10
15	1.3	---	---	---	---	---	26	16	9.9	3.1	9.7	8.8
16	---	---	---	---	---	---	26	17	12	3.1	8.7	8.0
17	---	---	---	---	---	---	27	16	8.2	3.6	9.8	7.5
18	---	---	---	---	---	---	25	14	6.4	3.3	10	7.2
19	---	---	---	---	---	---	26	14	4.7	3.6	12	7.1
20	---	---	---	---	---	---	25	37	5.9	3.6	10	6.5
21	---	---	---	---	---	---	27	95	5.0	3.7	8.6	6.5
22	---	---	---	---	---	---	27	117	6.4	4.8	7.8	6.1
23	---	---	---	---	---	---	24	91	5.2	5.1	8.2	5.9
24	---	---	---	---	---	---	21	70	4.7	6.2	8.6	5.7
25	---	---	---	---	---	---	19	54	4.2	5.9	9.1	5.5
26	---	---	---	---	---	---	21	42	3.9	6.1	7.7	5.4
27	---	---	---	---	---	---	20	32	3.7	5.2	7.1	5.3
28	---	---	---	---	---	---	20	27	3.5	4.6	7.1	5.5
29	---	---	---	---	---	---	18	21	3.6	4.5	8.0	5.6
30	---	---	---	---	---	---	17	21	4.4	4.4	7.3	5.7
31	---	---	---	---	---	---	---	17	---	4.2	6.5	---
TOTAL	---	---	---	---	---	---	---	901	251.0	127.0	282.6	235.4
MEAN	---	---	---	---	---	---	---	29.1	8.37	4.10	9.12	7.85
MAX	---	---	---	---	---	---	---	117	14	6.2	13	19
MIN	---	---	---	---	---	---	---	12	3.5	3.1	4.6	5.3
AC-FT	---	---	---	---	---	---	---	1790	498	252	561	467

ARKANSAS RIVER BASIN

07204500 CIENEGUILLA CREEK NEAR EAGLE NEST, NM

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

DRAINAGE AREA.--56 mi².

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

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

GAGE.--Water-stage recorder. Concrete control since Sept. 25, 1947. Elevation of gage is 8,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 8, 1928, nonrecording gage, and May 8, 1928 to Sept. 1, 1934, water-stage recorder at site 0.2 mi downstream at different datums.

REMARKS.--Records good. Diversions for irrigation of about 1,000 acres upstream from station. Several observations of water temperature were made during the year.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 19	0045	98	4.31	Aug. 16	1700	115	4.46
May 22	0645	*226	*5.23	Sept. 10	1545	82	4.15
Aug. 13	1730	80	4.13				

Minimum discharge determined, 2.1 ft³/s, Oct. 6, 7, 13-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	---	---	---	---	---	---	27	24	7.8	10	12
2	2.9	---	---	---	---	---	---	27	21	5.9	8.2	17
3	2.8	---	---	---	---	---	---	27	21	5.8	18	17
4	2.5	---	---	---	---	---	---	27	18	6.5	52	20
5	2.3	---	---	---	---	---	---	24	16	7.2	41	14
6	2.2	---	---	---	---	---	---	21	16	4.9	31	16
7	2.1	---	---	---	---	---	---	22	20	4.4	26	18
8	2.6	---	---	---	---	---	---	22	14	4.2	18	13
9	2.6	---	---	---	---	---	---	22	12	4.4	16	14
10	2.5	---	---	---	---	---	---	24	13	4.0	16	70
11	2.4	---	---	---	---	---	73	23	18	3.6	16	46
12	2.3	---	---	---	---	---	66	22	17	5.3	14	35
13	2.4	---	---	---	---	---	50	21	16	5.6	27	43
14	2.1	---	---	---	---	---	43	19	13	4.4	28	30
15	2.1	---	---	---	---	---	41	18	11	4.4	24	24
16	2.1	---	---	---	---	---	54	17	11	4.8	31	21
17	---	---	---	---	---	---	59	15	9.4	4.4	35	18
18	---	---	---	---	---	---	75	14	8.0	4.5	45	17
19	---	---	---	---	---	---	79	13	7.6	5.2	31	16
20	---	---	---	---	---	---	74	31	10	5.2	25	15
21	---	---	---	---	---	---	83	121	8.2	6.0	21	14
22	---	---	---	---	---	---	69	200	7.2	10	18	13
23	---	---	---	---	---	---	64	134	8.1	15	28	12
24	---	---	---	---	---	---	60	94	6.2	19	24	11
25	---	---	---	---	---	---	53	71	5.0	24	17	10
26	---	---	---	---	---	---	51	59	4.3	25	16	9.9
27	---	---	---	---	---	---	44	48	3.8	15	15	9.9
28	---	---	---	---	---	---	41	41	3.6	12	16	10
29	---	---	---	---	---	---	35	36	3.8	12	16	9.5
30	---	---	---	---	---	---	32	31	16	12	14	10
31	---	---	---	---	---	---	---	26	---	11	12	---
TOTAL	---	---	---	---	---	---	---	1297	362.2	263.5	709.2	585.3
MEAN	---	---	---	---	---	---	---	41.8	12.1	8.50	22.9	19.5
MAX	---	---	---	---	---	---	---	200	24	25	52	70
MIN	---	---	---	---	---	---	---	13	3.6	3.6	8.2	9.5
AC-FT	---	---	---	---	---	---	---	2570	718	523	1410	1160

ARKANSAS RIVER BASIN

07205000 SIXMILE CREEK NEAR EAGLE NEST, NM

LOCATION.--Lat 36°31'07", long 105°16'29", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on left upstream wingwall of concrete control, 250 ft downstream from concrete box culvert on U.S. Highway 64, and 2.6 mi southwest of Eagle Nest.

DRAINAGE AREA.--10.5 mi².

PERIOD OF RECORD.--April 1928 to September 1955 (no winter records in water years 1929-31, 1933-55), July 1958 to current year (no winter records subsequent to water year 1975). Prior to October 1930 monthly discharge only, published in WSP 1311. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

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

GAGE.--Water-stage recorder. Concrete control Sept. 11, 1931 to May 1933, and since Sept. 13, 1934. Datum of gage is 8,195.16 ft above National Geodetic Vertical Datum of 1929. Prior to May 18, 1928, nonrecording gage at site 88 ft upstream at datum 0.98 ft higher. May 18, 1928 to Sept. 11, 1938, water-stage recorder at site 88 ft upstream at datum 0.43 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	1915	*41	*1.66	Aug. 23	1615	30	1.57

Minimum discharge determined, 0.61 ft³/s, July 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	---	---	---	---	---	---	7.7	e9.2	.93	3.2	4.8
2	2.5	---	---	---	---	---	---	7.2	e8.9	.97	3.1	4.3
3	2.4	---	---	---	---	---	---	7.4	e8.3	1.1	5.2	8.8
4	2.3	---	---	---	---	---	---	8.2	e7.5	.98	6.0	12
5	2.1	---	---	---	---	---	---	8.0	e7.1	.84	5.6	10
6	2.1	---	---	---	---	---	---	7.0	6.0	.77	4.9	10
7	2.1	---	---	---	---	---	---	6.3	5.5	.77	4.5	8.2
8	2.4	---	---	---	---	---	---	6.0	4.3	.73	4.0	7.1
9	2.2	---	---	---	---	---	---	6.5	3.1	.78	4.7	6.3
10	2.2	---	---	---	---	---	---	7.2	3.3	.76	5.1	5.8
11	2.1	---	---	---	---	---	---	7.9	4.4	.75	4.8	5.9
12	2.1	---	---	---	---	---	---	7.7	4.2	.79	5.6	5.6
13	2.1	---	---	---	---	---	---	7.1	3.5	.75	7.7	5.3
14	2.0	---	---	---	---	---	---	6.9	5.2	.73	9.7	4.9
15	2.0	---	---	---	---	---	---	5.3	6.5	.76	8.7	4.7
16	---	---	---	---	---	---	---	6.1	6.3	.68	8.0	4.4
17	---	---	---	---	---	---	---	6.5	4.8	.79	7.9	4.1
18	---	---	---	---	---	---	---	7.5	4.1	1.4	7.8	4.1
19	---	---	---	---	---	---	---	7.5	4.6	1.3	8.0	3.7
20	---	---	---	---	---	---	---	7.8	13	4.3	7.3	3.4
21	---	---	---	---	---	---	9.2	29	3.9	1.5	6.5	3.1
22	---	---	---	---	---	---	9.6	e33	4.0	3.3	5.9	e3.0
23	---	---	---	---	---	---	9.3	e30	3.6	5.6	9.1	e2.8
24	---	---	---	---	---	---	9.2	e28	3.3	5.7	6.6	e2.7
25	---	---	---	---	---	---	9.6	e24	2.9	6.5	5.5	e2.6
26	---	---	---	---	---	---	11	e21	2.8	5.6	5.3	e2.6
27	---	---	---	---	---	---	9.2	e16	2.7	4.4	5.2	e2.6
28	---	---	---	---	---	---	9.6	e14	1.9	3.8	5.5	e2.5
29	---	---	---	---	---	---	9.4	e12	1.1	3.6	4.6	e2.7
30	---	---	---	---	---	---	8.2	e11	1.1	3.5	4.3	e2.8
31	---	---	---	---	---	---	---	e10	---	3.3	5.2	---
TOTAL	---	---	---	---	---	---	---	367.0	139.7	64.48	185.5	150.8
MEAN	---	---	---	---	---	---	---	11.8	4.66	2.08	5.98	5.03
MAX	---	---	---	---	---	---	---	33	9.2	6.5	9.7	12
MIN	---	---	---	---	---	---	---	4.1	1.1	.68	3.1	2.5
AC-FT	---	---	---	---	---	---	---	728	277	128	368	299

e Estimated

ARKANSAS RIVER BASIN

07205500 EAGLE NEST LAKE NEAR EAGLE NEST, NM

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

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--December 1927 to December 1944 (monthend contents only, published in WSP 1311), May 1950 to September 1965 (monthend contents only), October 1965 to June 1987 (nonrecording gage read several times a month at random intervals), July 1987 to current year. Prior to January 1972 published as "Eagle Nest Reservoir."

REVISED RECORDS.--WSP 1281: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,056.8 ft above Geodetic Vertical Datum of 1929. Prior to October 1964 gage heights were raised by addition of 8,000 ft and called elevations.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 78,800 acre-ft, May 31, 1942, gage height, 136.9 ft; minimum observed, 635 acre-ft, Dec. 14, 1954, gage height, 61.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 74,790 acre-ft, Sept. 28, gage height, 135.18 ft; minimum, 62,120 acre-ft, Oct. 30, Nov. 1, gage height, 129.50 ft.

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

(Based on data provided by New Mexico State Engineer Office in 1950)

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62540	62120	62350	e62790	63420	64470	66590	71060	73700	73050	71910	73650
2	62500	62180	62300	e62790	63440	64450	66730	71060	73680	73010	71910	73680
3	62460	62180	62310	e62790	63520	64600	66930	70910	73700	72920	72000	73700
4	62460	62180	62330	e62800	63530	64630	67170	70880	73650	72960	72140	73770
5	62480	62180	62330	e62800	63550	64660	67490	70910	73630	73010	72200	73810
6	62460	62180	62330	e62820	63600	64690	67890	70860	73540	73030	72230	73900
7	62390	62200	62350	e62840	63600	64670	68200	70820	73520	72940	72270	73970
8	62250	62250	62370	e62860	63620	64740	68310	70820	73430	72920	72250	74000
9	62310	62250	62390	e62880	63600	64920	68580	70820	73340	72850	72270	74030
10	62350	62270	62410	e62900	63640	64920	68780	70700	73280	72740	72270	74240
11	62290	62290	62450	e62940	63640	64920	69030	70610	73210	72610	72290	74350
12	62310	62290	62480	e62960	63710	64930	69030	70500	73230	72560	72360	74450
13	62270	62310	62480	e63020	63780	64960	69210	70530	73210	72490	72400	74520
14	62220	62310	62460	e63060	63800	65050	69340	70570	73190	72400	72520	74550
15	62220	62330	62540	63090	63820	65090	69480	70500	73250	72340	72650	74570
16	62220	62350	62600	63110	63900	65070	69560	70500	73250	72230	72760	74620
17	62160	62390	62620	63150	63930	65100	69720	70440	73250	72070	72830	74640
18	62140	62370	62700	63150	63960	65140	69940	70460	73230	72020	72920	74570
19	62160	62370	62700	63290	63960	65200	70170	70370	73230	71940	73030	74570
20	62180	62400	62690	e63290	64000	65250	70370	70660	73250	71820	73140	74640
21	62180	62430	62700	e63300	64040	65270	70410	71350	73250	71780	73160	74690
22	62210	62310	62690	e63350	64130	65340	70640	72160	73230	71760	73160	74670
23	62200	62350	62690	e63360	64110	65360	70770	72630	73230	71820	73320	74690
24	62220	62350	62720	63350	64110	65500	70840	72920	73190	71820	73410	74690
25	62200	62400	62720	63350	64130	65760	70850	73190	73160	71820	73450	74740
26	62160	62400	e62720	63330	64200	65900	70860	73390	73120	71870	73520	74740
27	62180	62410	e62740	63290	64270	65920	70840	73570	73050	71890	73590	74740
28	62140	62410	e62740	63300	64250	65970	70990	73650	72980	71890	73630	74790
29	62140	62390	e62740	63350	---	66190	70990	73700	72920	71910	73680	74770
30	62120	62370	e62740	63400	---	66190	70970	73740	73010	71940	73650	74770
31	62160	---	e62760	63400	---	66350	---	73720	---	71910	73680	---
MAX	62540	62430	62760	63400	64270	66350	70990	73740	73700	73050	73680	74790
MIN	62120	62120	62300	62790	63420	64450	66590	70370	72920	71760	71910	73650
(†)	129.52	129.66	---	130.09	130.48	131.42	133.49	134.72	134.40	133.91	134.70	135.17
(††)	-360	+210	+390	+640	+850	+2100	+4620	+2750	-710	-1100	+1770	+1090
CAL YR 1990	MAX 71800	MIN 62120	(††)	-350								
WTR YR 1991	MAX 74790	MIN 62120	(††)	+12250								

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

e Estimated

ARKANSAS RIVER BASIN

07206000 CIMARRON RIVER BELOW EAGLE NEST DAM, NM

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

DRAINAGE AREA.--167 mi².

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

REVISED RECORDS.--WSP 1281: Drainage area.

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

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

AVERAGE DISCHARGE.--41 years, 14.4 ft³/s, 10,430 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 78 ft³/s, June 7; minimum daily, 0.33 ft³/s, Dec. 3-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	7.8	.42	.42	.58	.76	3.1	43	35	12	16	10
2	.63	7.8	.35	.42	.64	.76	3.1	45	39	12	16	10
3	.62	7.8	.33	.42	.63	.85	3.1	49	43	12	16	10
4	.63	5.4	.33	.42	.63	.90	3.1	49	52	12	21	10
5	.63	1.7	.33	.42	.63	.95	3.1	49	63	12	24	10
6	.63	1.4	.33	.42	.63	.98	3.1	49	76	12	24	10
7	.63	1.0	.33	.42	.63	1.1	3.1	60	78	12	24	10
8	.60	.90	.33	.42	.63	7.7	2.9	67	73	12	24	10
9	.55	.90	.33	.42	.63	14	2.8	65	68	23	24	10
10	.62	.80	.33	.42	.63	14	2.6	57	64	35	24	10
11	.62	.63	.33	.42	.63	14	1.5	56	47	39	25	10
12	.57	.63	.33	.42	.63	14	.76	56	36	39	25	10
13	.56	.53	.33	.42	.64	14	.77	49	36	39	25	10
14	.54	.52	.33	e.42	.63	14	4.1	42	32	39	15	10
15	.52	.52	.33	e.42	.64	14	5.1	42	29	39	1.8	10
16	.53	.52	.33	e.42	.67	14	5.0	42	29	57	1.8	10
17	.58	.52	.37	e.50	.65	14	4.8	42	28	68	1.8	10
18	.55	.52	.48	e.50	.63	14	4.0	46	27	68	1.8	10
19	.53	.47	.47	e.50	.63	11	3.7	57	24	68	1.7	10
20	.52	.42	.50	e.55	.66	9.0	4.9	47	21	68	1.7	5.0
21	.52	.42	.45	e.55	.76	9.0	26	15	17	68	1.7	1.7
22	.52	.42	.42	e.55	.76	6.7	26	1.3	13	68	1.8	.85
23	6.8	.42	.42	e.63	.76	3.1	37	1.0	13	53	1.9	.42
24	7.8	.49	.42	.63	.76	3.1	43	1.0	13	41	1.9	.42
25	7.8	.52	.42	.63	.76	3.1	43	.76	13	32	1.9	.42
26	7.8	.42	.42	.62	.76	3.1	43	.76	13	11	1.9	.42
27	7.8	.42	.42	.56	.76	3.1	43	.76	13	8.6	4.2	.42
28	7.8	.48	.42	.52	.76	3.1	43	11	12	8.6	10	.42
29	7.8	.46	.42	.52	---	2.9	43	15	12	8.6	10	21
30	7.8	.42	.42	.52	---	2.9	43	27	12	14	10	21
31	7.8	---	.42	.52	---	2.9	---	35	---	16	10	---
TOTAL	81.93	45.25	11.86	15.02	18.75	217.00	454.63	1120.58	1031	1006.8	368.9	242.07
MEAN	2.64	1.51	.38	.48	.67	7.00	15.2	36.1	34.4	32.5	11.9	8.07
MAX	7.8	7.8	.50	.63	.76	14	43	67	78	68	25	21
MIN	.52	.42	.33	.42	.58	.76	.76	.76	12	8.6	1.7	.42
AC-FT	163	90	24	30	37	430	902	2220	2040	2000	732	480

CAL YR 1990 TOTAL 5073.32 MEAN 13.9 MAX 84 MIN .32 AC-FT 10060
WTR YR 1991 TOTAL 4613.79 MEAN 12.6 MAX 78 MIN .33 AC-FT 9150

e Estimated

ARKANSAS RIVER BASIN

07207000 CIMARRON RIVER NEAR CIMARRON, NM

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

DRAINAGE AREA.--294 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1281: Drainage area.

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

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by Eagle Nest Lake (station 07205500). Diversions upstream from station for irrigation of about 3,500 acres, part of which is downstream from station. Philmont ditch (formerly known as Cimarroncito ditch) diverts from left bank 1.5 mi upstream from station, siphons under river 0.9 mi upstream and bypasses station for off-channel storage and irrigation downstream; Raton diversion pipeline 300 ft upstream from station for City of Raton Water Supply started June, 1983. See tabulation below for monthly diversions.

AVERAGE DISCHARGE.--41 years, 21.7 ft³/s, 15,720 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 215 ft³/s, at 1845 hours Aug. 19, gage height, 2.63 ft; no flow at times, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	11	5.7	e1.6	e2.2	e4.0	8.4	47	54	9.0	26	25
2	3.5	13	6.3	e1.5	e2.8	2.1	7.2	47	54	6.9	25	26
3	2.9	15	1.4	e1.5	e2.5	1.6	6.1	50	56	8.5	29	26
4	2.5	13	2.7	e1.5	e2.7	1.6	5.9	51	55	8.0	41	31
5	2.0	12	5.6	e1.4	e2.9	2.1	5.9	51	56	7.5	49	25
6	1.6	9.9	5.0	e1.3	e3.0	2.3	7.0	51	68	6.7	46	28
7	1.5	8.8	6.9	e1.1	e3.3	.80	9.0	53	73	6.3	43	27
8	2.0	11	4.7	e1.1	e3.3	.76	11	56	71	6.2	42	24
9	2.2	8.1	8.5	e1.0	e3.1	2.1	11	56	65	8.2	47	27
10	2.2	7.8	11	e1.1	3.6	6.1	11	53	66	18	56	83
11	2.5	7.4	10	e1.3	4.5	10	10	53	64	25	52	61
12	3.0	7.2	3.6	e1.5	2.9	11	10	53	44	33	49	52
13	3.6	7.0	3.7	e1.5	2.9	11	9.5	53	39	33	72	51
14	4.5	6.8	e3.5	e1.2	.86	10	8.9	47	36	31	82	46
15	4.8	6.6	e3.6	e1.6	1.4	10	9.8	47	32	28	57	42
16	4.9	6.6	e3.7	e2.2	.41	11	11	46	28	35	47	40
17	4.8	6.5	e4.0	e3.4	.20	11	11	45	25	51	47	38
18	4.9	6.5	e4.1	e3.1	.60	11	12	44	23	54	43	36
19	4.9	6.3	e4.1	e2.8	1.5	12	13	52	25	53	82	36
20	5.8	4.0	e4.0	e3.3	2.2	9.9	13	61	29	53	66	33
21	6.5	1.6	e3.7	e2.7	3.2	9.7	22	91	25	57	50	25
22	6.0	.85	e3.4	e2.3	3.5	11	34	151	18	63	45	22
23	5.8	.49	e2.8	e2.0	3.8	11	39	116	15	64	41	21
24	8.6	.60	e2.4	e2.5	4.0	9.3	47	86	14	58	40	18
25	8.1	.58	e2.3	e3.3	e3.2	8.9	48	69	14	55	43	16
26	7.1	.70	e2.7	e1.5	e3.1	8.8	49	56	13	37	34	15
27	7.3	.99	e2.5	e2.0	e2.9	8.1	48	49	12	28	28	15
28	8.7	3.2	e2.3	e2.5	e2.6	7.9	48	45	12	23	32	14
29	9.9	1.8	e2.2	e2.0	---	7.8	48	50	13	22	31	18
30	11	1.9	e2.2	e4.0	---	8.3	47	50	14	22	29	24
31	11	---	e1.8	e2.8	---	8.3	---	56	---	25	26	---
TOTAL	158.5	187.21	130.4	62.6	73.17	229.46	620.7	1835	1113	935.3	1400	945
MEAN	5.11	6.24	4.21	2.02	2.61	7.40	20.7	59.2	37.1	30.2	45.2	31.5
MAX	11	15	11	4.0	4.5	12	49	151	73	64	82	83
MIN	1.5	.49	1.4	1.0	.20	.76	5.9	44	12	6.2	25	14
AC-FT	314	371	259	124	145	455	1230	3640	2210	1860	2780	1870
(†)	---	---	---	---	---	---	---	196	210	378	0	0
(††)	---	---	---	---	---	45	2	23	170	33	36	57

CAL YR 1990 TOTAL 6505.85 MEAN 17.8 MAX 70 MIN .08 AC-FT 12900 (†) 760 (††) 162
WTR YR 1991 TOTAL 7690.34 MEAN 21.1 MAX 151 MIN .20 AC-FT 15250 (†) 784 (††) 366

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

e Estimated

ARKANSAS RIVER BASIN

07207000 CIMARRON RIVER NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR	TEMPER- ATURE WATER	OXYGEN, DIS- SOLVED	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL)	HARD- NESS TOTAL	CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED	
		(00061)	(US/CM) (00095)	(00400)	(DEG C) (00020)	(DEG C) (00010)	(MG/L) (00300)	(MG/L) (00340)	(MG/L AS CACO3) (00900)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	
NOV 20...	0900	6.1	375	8.3	12.0	4.0	10.4	--	180	54	9.9	
DEC 06...	1200	6.6	307	--	--	15.0	--	--	--	--	--	
JAN 23...	1200	2.0	330	8.4	-3.0	0.0	11.4	<10	--	--	--	
MAR 28...	1500	7.9	--	8.5	10.0	6.0	9.8	--	160	48	9.4	
MAY 29...	1600	50	194	7.7	24.0	14.0	8.9	--	93	28	5.6	
JUL 23...	1500	65	318	7.6	18.5	16.5	8.1	19	140	42	8.5	
DATE		SODIUM, DIS- SOLVED	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED	ALKA- LINITY LAB	SULFATE DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SILICA, DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	NITRO- GEN, NITRATE TOTAL	NITRO- GEN, NITRITE TOTAL
		(MG/L AS NA) (00930)	(00931)	(MG/L AS K) (00935)	(MG/L AS CACO3) (90410)	(MG/L AS SO4) (00945)	(MG/L AS CL) (00940)	(MG/L AS F) (00950)	(MG/L AS SIO2) (00955)	(MG/L AS N) (70301)	(MG/L AS N) (00620)	(MG/L AS N) (00615)
NOV 20...	17	0.6	1.4	153	46	8.2	0.40	10	239	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	--	--	<0.010
MAR 28...	18	0.6	1.3	143	50	13	0.40	7.3	233	--	--	--
MAY 29...	8.6	0.4	1.4	87	18	5.5	0.40	9.1	129	--	--	--
JUL 23...	13	0.5	2.2	146	19	7.0	0.30	7.4	188	0.120	0.020	--
DATE		NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, NO2+NO3 TOTAL	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, AMMONIA TOTAL	NITRO- GEN, DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	NITRO- GEN, TOTAL	PHOS- PHORUS TOTAL	PHOS- PHORUS ORTHO, DIS- SOLVED	CARBON, ORGANIC TOTAL	ARSENIC TOTAL
		(MG/L AS N) (00613)	(MG/L AS N) (00630)	(MG/L AS N) (00631)	(MG/L AS N) (00610)	(MG/L AS N) (00608)	(MG/L AS N) (00605)	(MG/L AS N) (00600)	(MG/L AS P) (00665)	(MG/L AS P) (00671)	(MG/L AS C) (00680)	(UG/L AS AS) (01002)
NOV 20...	--	--	--	--	--	--	--	--	--	--	--	<1
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	<0.010	<0.100	<0.100	<0.010	0.020	--	--	<0.010	0.010	1.7	--	--
MAR 28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 29...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 23...	<0.010	0.140	0.120	0.030	0.020	0.47	0.64	0.070	0.020	7.3	--	--

ARKANSAS RIVER BASIN
07207000 CIMAARRON RIVER NEAR CIMAARRON, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
NOV 20...	2	20	<1	1.0	<1	<1	4	1	14	1
DEC 06...	--	--	--	--	--	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	20	--	--	--	--	--	--	4	--
MAY 29...	--	20	--	--	--	--	--	--	31	--
JUL 23...	--	30	--	--	--	--	--	--	13	--

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 20...	<1	<0.10	<0.1	<1	<1	<10	6	16	0.26	81
DEC 06...	--	--	--	--	--	--	--	35	0.62	72
JAN 23...	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--	0	0.0	100
MAY 29...	--	--	--	--	--	--	--	--	--	--
JUL 23...	--	--	--	--	--	--	--	32	5.6	86

ARKANSAS RIVER BASIN

07207500 PONIL CREEK NEAR CIMARRON, NM

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

DRAINAGE AREA.--171 mi².

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--52 years (water years 1916-25, 1928, 1951-91), 11.7 ft³/s, 8,480 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 06	2130	370	3.87	Aug. 13	2130	*1,280	*6.25
Aug. 12	1900	314	3.68	Aug. 15	0100	1,160	6.00

Minimum discharge, 1.4 ft³/s Dec. 3, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	6.4	4.8	e2.0	7.5	4.1	9.9	22	26	4.5	16	61
2	20	7.4	4.7	e2.2	6.8	3.9	15	20	24	4.2	14	61
3	18	11	3.7	e2.4	5.8	3.6	16	20	22	5.6	32	62
4	15	8.9	5.2	e2.5	4.7	3.6	18	21	20	5.7	110	68
5	13	10	5.7	e2.6	4.6	4.1	26	21	18	4.4	98	78
6	12	11	4.3	e2.7	4.6	4.5	38	20	20	3.4	98	63
7	11	8.7	5.2	e2.9	4.1	4.1	53	20	21	2.8	144	54
8	12	9.7	5.5	e3.0	3.9	3.9	52	20	17	2.7	90	39
9	12	9.9	4.8	e3.2	3.5	3.9	42	21	15	2.5	67	44
10	12	10	4.6	e3.5	4.0	4.2	39	23	14	2.6	83	155
11	11	9.4	4.5	e3.8	4.1	4.4	37	26	19	3.5	85	124
12	9.8	9.5	4.3	e4.0	4.5	4.0	36	28	20	11	103	98
13	9.0	9.8	3.4	e4.4	4.2	3.8	30	28	17	6.2	307	97
14	8.4	10	2.9	e4.7	4.0	4.2	27	27	16	4.2	515	82
15	8.1	9.8	3.9	e5.1	3.7	4.1	24	25	18	3.7	572	63
16	7.7	9.6	3.6	e5.3	3.6	5.4	24	25	17	3.1	450	50
17	7.3	9.5	3.4	e5.7	3.3	5.1	24	22	15	2.9	303	39
18	7.0	9.2	3.6	e5.8	3.7	5.0	26	20	12	2.9	252	31
19	6.9	8.9	e5.6	e5.8	4.1	5.1	28	21	11	3.5	245	32
20	7.9	8.7	e5.5	e5.9	4.7	5.4	30	34	12	3.5	215	30
21	9.5	7.5	e4.8	e5.6	5.1	5.4	35	94	11	4.3	162	27
22	8.7	5.2	e4.3	e5.6	4.3	5.3	37	164	9.7	14	146	25
23	8.6	5.1	e3.9	e5.6	3.6	5.5	37	146	9.7	14	125	24
24	8.5	5.9	e3.7	e5.4	4.4	5.9	36	115	8.3	33	113	22
25	8.5	4.8	e3.5	e5.1	4.5	6.4	34	91	7.1	40	107	21
26	8.4	4.7	e3.3	e5.2	4.2	7.3	33	71	6.1	50	95	21
27	8.3	4.3	e3.1	e5.2	4.4	7.2	31	57	5.2	49	91	19
28	8.0	3.5	e2.8	e5.9	3.9	7.7	30	46	4.7	30	85	21
29	7.4	3.5	e2.5	7.4	---	7.5	27	38	4.8	23	76	20
30	6.9	4.5	e2.0	9.7	---	8.0	24	33	5.8	20	74	19
31	6.6	---	e2.2	8.9	---	7.8	---	28	---	17	64	---
TOTAL	319.5	236.4	125.3	147.1	123.8	160.4	918.9	1347	426.4	377.2	4937	1550
MEAN	10.3	7.88	4.04	4.75	4.42	5.17	30.6	43.5	14.2	12.2	159	51.7
MAX	22	11	5.7	9.7	7.5	8.0	53	164	26	50	572	155
MIN	6.6	3.5	2.0	2.0	3.3	3.6	9.9	20	4.7	2.5	14	19
AC-FT	634	469	249	292	246	318	1820	2670	846	748	9790	3070

CAL YR 1990 TOTAL 5068.67 MEAN 13.9 MAX 129 MIN .82 AC-FT 10050
WTR YR 1991 TOTAL 10669.0 MEAN 29.2 MAX 572 MIN 2.0 AC-FT 21160

e Estimated

ARKANSAS RIVER BASIN

07207500 PONIL CREEK NEAR CIMARRON, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
NOV 20...	1045	8.5	248	8.4	11.0	5.0	9.6	120	33	8.9	13	0.5
JAN 23...	1515	5.5	254	8.3	2.0	0.0	12.3	--	--	--	--	--
MAR 28...	1100	7.9	300	7.8	10.0	5.0	9.6	93	26	6.7	9.5	0.4
MAY 30...	1430	34	145	8.4	19.0	13.0	9.2	71	20	5.0	5.8	0.3
JUL 23...	0840	13	--	7.6	17.0	13.0	7.9	91	25	6.9	8.1	0.4
SEP 19...	1200	30	292	7.3	7.0	9.0	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 20...	0.80	120	20	1.4	0.40	9.2	159	<10	61	3	0.07	100
JAN 23...	--	--	--	--	--	--	--	--	--	6	0.09	100
MAR 28...	0.90	85	20	3.0	0.20	8.1	125	20	84	--	--	--
MAY 30...	0.80	67	16	2.0	0.20	10	100	<10	200	63	5.8	80
JUL 23...	2.5	86	17	1.9	0.40	8.6	123	20	--	42	1.5	89
SEP 19...	--	--	--	--	--	--	--	--	--	20	1.6	87

ARKANSAS RIVER BASIN

07208500 RAYADO CREEK AT SAUBLE RANCH, NEAR CIMARRON, NM

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

DRAINAGE AREA.--65 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1976. Elevation of gage is 6,720 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1921 for history of changes prior to Oct. 1, 1954. Oct. 1, 1954 to June 16, 1965, at site 270 ft downstream at datum 2.79 ft lower.

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

AVERAGE DISCHARGE.--72 years (water years 1912, 1914, 1916-20, 1924, 1928-91), 14.0 ft³/s, 10,140 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 6	2045	334	4.18	July 26	1630	106	3.38
May 22	0100	*411	*4.37	Sept. 10	0515	110	3.35

Minimum discharge, 0.80 ft³/s, Nov. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	4.1	4.7	e2.6	3.8	4.3	11	21	33	15	33	29
2	6.3	5.8	5.3	e2.3	5.5	3.7	13	22	30	14	29	29
3	5.7	9.3	4.3	e2.6	4.0	3.8	13	22	28	16	33	31
4	5.3	6.9	4.5	e2.8	3.5	4.1	16	22	25	15	42	29
5	4.9	6.0	4.3	e2.9	4.7	5.7	29	21	23	14	47	26
6	4.5	5.9	5.0	e3.1	4.4	5.3	109	20	24	12	46	32
7	4.5	5.4	5.9	e3.2	3.9	4.2	84	20	23	11	41	29
8	4.7	5.5	4.6	e3.4	3.7	4.2	60	20	21	10	40	25
9	5.7	5.3	3.7	e3.2	3.4	5.0	46	21	20	10	37	27
10	5.1	5.6	5.2	e3.1	3.3	4.6	44	23	19	9.7	37	94
11	4.7	5.5	3.5	e2.9	3.2	5.1	45	26	26	9.1	34	66
12	4.5	5.5	3.7	e2.8	3.0	5.1	45	27	22	11	30	58
13	4.4	5.3	3.9	e2.7	3.1	5.1	38	27	18	13	43	58
14	4.1	5.4	3.9	e2.8	3.6	5.4	33	26	16	11	66	50
15	4.0	5.3	5.4	e2.8	3.8	4.9	31	24	16	10	58	43
16	4.0	5.0	4.6	e3.5	3.7	4.7	32	23	17	9.8	53	39
17	4.0	5.0	4.4	e4.6	3.5	5.3	32	22	15	11	68	34
18	3.9	4.8	e3.9	e4.2	3.3	4.5	34	19	13	9.5	86	32
19	3.9	4.7	e3.6	e3.7	4.5	5.2	36	21	13	11	88	30
20	5.0	4.7	e3.3	e3.2	5.6	4.8	35	41	21	12	82	28
21	5.2	4.6	e2.8	e3.0	4.8	4.8	39	155	15	11	72	26
22	5.0	2.4	e2.5	e3.2	4.4	4.9	37	269	14	22	70	24
23	5.7	3.4	e2.3	e3.5	4.2	5.3	37	160	13	28	65	22
24	5.1	4.6	e2.0	e3.7	4.2	5.7	35	123	12	63	60	21
25	4.8	4.3	e2.3	e4.4	4.4	6.3	33	94	11	69	52	20
26	4.7	4.7	e2.5	5.9	4.1	7.2	32	76	9.7	72	47	19
27	4.5	2.8	e2.6	5.7	4.4	6.5	29	63	8.9	73	43	18
28	4.5	2.8	e2.7	6.6	4.1	7.3	27	54	8.8	60	40	18
29	4.3	4.5	e2.8	5.5	---	6.8	25	47	13	51	38	17
30	4.2	5.3	e3.0	4.7	---	4.4	24	41	26	44	34	17
31	4.1	---	e3.0	4.8	---	10	---	36	---	37	32	---
TOTAL	148.2	150.4	116.2	113.4	112.1	164.2	1104	1586	554.4	764.1	1546	991
MEAN	4.78	5.01	3.75	3.66	4.00	5.30	36.8	51.2	18.5	24.6	49.9	33.0
MAX	6.9	9.3	5.9	6.6	5.6	10	109	269	33	73	88	94
MIN	3.9	2.4	2.0	2.3	3.0	3.7	11	19	8.8	9.1	29	17
AC-FT	294	298	230	225	222	326	2190	3150	1100	1520	3070	1970

CAL YR 1990 TOTAL 3338.2 MEAN 9.15 MAX 40 MIN 1.9 AC-FT 6620
WTR YR 1991 TOTAL 7350.0 MEAN 20.1 MAX 269 MIN 2.0 AC-FT 14580

e Estimated

ARKANSAS RIVER BASIN

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

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	
NOV 20...	1300	4.8	125	8.1	15.5	7.0	9.4	63	17	5.1	5.4	0.3	
JAN 23...	1400	3.5	120	8.4	0.0	0.0	11.6	--	--	--	--	--	
MAR 28...	1230	4.9	192	7.9	10.0	4.0	8.6	63	17	5.0	5.4	0.3	
MAY 29...	1400	47	82	6.8	26.0	11.0	8.4	39	11	2.9	3.4	0.2	
JUL 23...	1130	24	125	7.4	20.0	15.0	8.1	43	11	3.8	3.1	0.2	
SEP 19...	1600	30	123	7.2	12.0	10.0	--	--	--	--	--	--	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 20...	1.2	67	6.6	1.8	0.30	19	97	<10	37	1	0.01	100	
JAN 23...	--	--	--	--	--	--	--	--	--	3	0.03	100	
MAR 28...	1.1	67	8.6	1.7	0.20	16	95	<10	110	3	0.04	100	
MAY 29...	1.1	37	6.0	1.3	0.20	15	64	10	480	21	2.7	71	
JUL 23...	1.5	57	4.3	1.8	0.30	18	92	10	300	10	0.66	74	
SEP 19...	--	--	--	--	--	--	--	--	--	10	0.81	69	

ARKANSAS RIVER BASIN

07211000 CIMARRON RIVER AT SPRINGER, NM

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

DRAINAGE AREA.--1,032 mi².

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

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

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

REMARKS.--Records good. Flow partly regulated by Eagle Nest Lake (station 07205500). Diversions for irrigation of about 23,000 acres upstream from station and a few hundred acres between station and mouth. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--67 years (water years 1921, 1925, 1927-91), 18.6 ft³/s, 13,480 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 14	2045	*544	*5.02	No other peak greater than base discharge.			

Minimum discharge, 0.24 ft³/s, Jan. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	3.1	2.6	e6.0	e9.2	6.1	8.9	8.5	11	.93	32	76
2	6.6	5.6	2.5	e6.6	e9.4	5.6	7.7	7.2	8.0	2.0	29	75
3	4.6	12	2.3	e7.3	e9.4	5.5	6.7	5.4	5.4	4.8	33	71
4	3.3	9.0	2.6	e8.0	e9.0	5.4	7.3	3.9	3.2	3.5	46	76
5	2.8	8.9	2.7	e9.0	e8.5	5.5	7.5	6.3	2.4	1.7	49	50
6	2.4	7.6	2.7	e10	e8.2	5.1	6.7	6.8	3.0	1.2	47	37
7	2.1	6.9	2.5	e11	7.6	5.4	13	7.4	7.6	5.9	48	74
8	2.7	6.4	2.4	e10	7.3	5.4	13	5.3	7.6	2.7	39	73
9	2.8	5.5	2.4	e9.1	6.9	5.1	9.7	4.7	7.5	1.9	37	83
10	2.5	5.2	2.4	e9.0	6.9	4.9	12	5.7	8.6	2.2	37	197
11	2.3	4.9	2.5	e11	6.5	4.8	18	15	12	3.9	37	221
12	2.2	4.8	2.5	e10	6.3	4.4	14	16	12	10	42	186
13	2.4	4.2	2.7	e9.0	6.2	4.0	3.8	19	10	11	35	193
14	2.1	4.0	3.1	e11	6.4	4.7	8.0	16	8.8	13	213	171
15	2.1	4.0	3.6	e12	5.9	6.9	8.9	12	10	19	420	143
16	2.5	3.6	5.6	e11	6.0	8.3	7.9	11	7.5	15	399	129
17	2.5	3.6	8.6	e11	6.1	9.7	11	9.1	6.5	12	354	120
18	2.6	3.6	12	e10	5.9	9.9	9.9	4.9	6.5	10	314	102
19	2.8	3.4	11	e10	5.9	8.6	7.2	3.9	5.4	6.2	316	98
20	2.8	3.1	9.2	e9.5	5.4	6.8	8.6	7.1	4.4	5.6	345	94
21	2.6	2.9	8.1	e8.2	6.0	6.3	8.1	24	3.4	4.7	306	91
22	2.6	2.9	e7.8	e8.6	6.1	5.7	9.9	93	3.1	5.5	259	78
23	2.6	2.9	e6.1	e9.0	5.9	5.2	9.7	71	3.0	16	243	79
24	2.6	2.9	e6.3	e9.2	6.2	5.0	13	38	2.6	31	208	71
25	2.6	2.9	e7.0	e9.0	6.3	4.8	12	27	1.8	29	189	66
26	2.6	2.9	e7.0	e8.6	6.1	4.3	3.9	45	1.3	24	166	60
27	2.6	2.9	e6.4	e8.0	5.9	3.7	3.4	54	1.2	15	137	58
28	2.6	2.9	e6.4	e7.6	5.9	3.6	3.6	46	1.1	17	111	61
29	2.7	2.6	e6.0	e7.9	---	4.1	4.1	41	3.1	32	106	60
30	2.9	2.6	e5.9	e9.0	---	7.9	3.4	22	1.7	41	100	58
31	3.0	---	e5.5	e9.0	---	8.3	---	12	---	37	85	---
TOTAL	93.5	137.8	158.4	284.6	191.4	181.0	260.9	648.2	169.7	384.73	4782	2951
MEAN	3.02	4.59	5.11	9.18	6.84	5.84	8.70	20.9	5.66	12.4	154	98.4
MAX	10	12	12	12	9.4	9.9	18	93	12	41	420	221
MIN	2.1	2.6	2.3	6.0	5.4	3.6	3.4	3.9	1.1	.93	29	37
AC-FT	185	273	314	565	380	359	517	1290	337	763	9490	5850

CAL YR 1990 TOTAL 3642.81 MEAN 9.98 MAX 427 MIN .29 AC-FT 7230
WTR YR 1991 TOTAL 10243.23 MEAN 28.1 MAX 420 MIN .93 AC-FT 20320

e Estimated

ARKANSAS RIVER BASIN

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM

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

DRAINAGE AREA.--2,850 mi².

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

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

GAGE.--Water-stage recorder. Elevation of gage is 5,640 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 10, 1964, water-stage recorder at site 1.7 mi downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

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

AVERAGE DISCHARGE.--46 years (water years 1940-58, 1965-91), 77.9 ft³/s, 56,440 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 12	0145	*3,640	*5.66	No other peak greater than base discharge.			
Minimum discharge 1.0 ft ³ /s Dec. 20.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	6.9	13	e6.8	22	11	19	8.6	13	41	42	93
2	28	31	11	e8.0	23	9.9	17	9.9	12	23	37	88
3	21	54	9.0	e10	25	10	14	8.9	9.5	17	56	76
4	15	36	12	e11	24	9.8	15	7.3	8.4	74	200	79
5	12	28	13	e11	25	9.5	14	7.2	7.5	32	189	60
6	10	23	12	e12	22	8.7	14	9.0	6.9	12	104	46
7	9.0	21	12	e12	21	8.8	12	9.4	9.1	9.2	155	82
8	9.1	19	13	e12	20	8.6	21	9.3	12	7.9	127	85
9	12	17	14	e13	19	9.4	14	7.6	34	5.1	144	89
10	9.2	16	14	e13	18	8.9	13	6.8	30	5.6	104	920
11	7.7	16	15	e13	17	8.5	19	11	35	33	96	582
12	7.6	15	15	e14	17	7.6	20	15	47	821	135	323
13	7.3	14	15	e14	16	7.9	10	16	35	91	104	303
14	7.0	13	11	e14	17	8.1	8.3	15	28	51	694	255
15	7.0	13	10	e15	16	11	12	11	24	39	848	211
16	7.0	12	14	e15	16	14	11	8.7	19	31	731	177
17	6.8	12	19	e15	16	16	13	8.7	13	21	612	157
18	6.8	12	22	e16	16	16	13	6.5	17	19	469	134
19	6.9	12	22	e17	15	13	10	5.1	23	15	441	132
20	7.1	12	15	e18	15	11	10	13	23	15	672	274
21	7.1	11	e12	e18	13	10	12	50	12	11	544	139
22	7.6	11	e11	e20	11	9.2	12	167	13	9.6	390	115
23	7.5	12	e10	e21	10	8.3	13	139	12	43	334	113
24	7.7	12	e9.0	e20	10	7.7	15	64	8.9	295	285	102
25	8.5	13	e8.2	e20	10	7.4	16	42	7.0	900	248	93
26	7.9	13	e7.5	22	11	7.6	11	49	5.3	220	216	85
27	7.5	12	e7.0	22	10	8.5	8.0	71	3.7	116	165	74
28	7.1	11	e8.1	24	10	8.8	8.0	58	2.7	54	135	73
29	6.7	10	e10	22	---	8.8	8.5	47	115	48	122	69
30	6.9	11	e8.2	22	---	14	7.8	33	253	60	128	67
31	6.8	---	e7.3	21	---	19	---	15	---	51	108	---
TOTAL	333.8	498.9	379.3	491.8	465	317.0	390.6	929.0	839.0	3170.4	8635	5096
MEAN	10.8	16.6	12.2	15.9	16.6	10.2	13.0	30.0	28.0	102	279	170
MAX	56	54	22	24	25	19	21	167	253	900	848	920
MIN	6.7	6.9	7.0	6.8	10	7.4	7.8	5.1	2.7	5.1	37	46
AC-FT	662	990	752	975	922	629	775	1840	1660	6290	17130	10110

CAL YR 1990 TOTAL 7934.45 MEAN 21.7 MAX 636 MIN .48 AC-FT 15740
WTR YR 1991 TOTAL 21545.8 MEAN 59.0 MAX 920 MIN 2.7 AC-FT 42740

e Estimated

ARKANSAS RIVER BASIN

07215500 MORA RIVER AT LA CUEVA, NM

LOCATION.--Lat 35°56'27", long 105°14'59", Mora County, Hydrologic Unit 11080004, in Mora Grant, on left bank 45 ft upstream from bridge on State Highway 518 at La Cueva, 0.3 mi downstream from La Cueva damsite, and at mile 86.8.

DRAINAGE AREA.--173 mi².

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--64 years (water years 1907-10, 1932-91), 28.7 ft³/s, 20,790 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0715	*750	*5.40	Aug. 13	2330	486	4.33
July 23	0700	508	4.41	Aug. 18	1645	329	3.72
Aug. 4	0530	472	4.28	Sept. 10	0530	384	3.91
Aug. 11	0115	329	3.72				

Minimum discharge, 1.5 ft³/s, Apr. 10, 11, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	11	5.7	e12	17	6.1	11	5.3	77	85	117	90
2	39	12	e5.7	e12	15	6.4	11	4.1	73	80	107	87
3	34	29	e5.6	e12	14	6.0	12	6.0	67	85	212	81
4	28	16	e5.5	e12	15	4.8	12	9.9	60	84	411	86
5	27	13	e5.3	e13	17	3.7	12	9.8	53	82	335	83
6	25	12	e5.2	e13	17	4.0	9.3	9.9	52	76	265	119
7	26	14	e5.1	e13	17	3.3	3.2	9.2	63	75	243	107
8	26	20	4.9	e14	15	3.3	3.3	7.5	56	71	202	93
9	28	25	4.8	e14	15	2.9	2.9	5.3	58	70	183	112
10	29	26	4.6	e14	15	2.8	2.4	5.0	59	70	182	271
11	29	25	4.8	e14	15	2.9	1.6	4.4	84	77	196	180
12	26	25	5.1	e14	15	5.4	2.2	4.1	77	76	163	164
13	28	26	6.3	e14	15	5.9	2.4	3.8	85	63	207	184
14	28	25	9.8	e14	15	7.2	3.8	3.9	88	65	258	150
15	30	18	12	e15	15	8.4	3.8	3.9	86	64	175	137
16	17	7.5	12	e15	14	9.8	2.6	5.0	94	59	157	128
17	14	7.1	e12	e16	15	10	3.6	5.8	86	57	153	124
18	20	7.4	e11	e15	15	13	2.4	5.4	62	55	189	117
19	21	8.0	e10	e14	e15	12	3.0	6.3	60	58	180	107
20	18	8.1	e9.8	e13	e14	11	4.0	35	69	62	132	104
21	11	8.7	e9.4	e13	e16	9.1	2.2	338	67	73	126	96
22	13	11	e9.4	e13	15	7.7	1.7	667	67	130	130	91
23	12	13	e9.0	e13	14	7.4	2.4	462	59	326	133	88
24	11	15	e8.5	e13	14	7.2	8.3	298	50	237	115	83
25	11	14	e7.7	e14	11	8.3	6.8	205	43	255	112	80
26	12	13	e7.6	e16	5.5	11	7.1	165	43	245	116	78
27	11	14	e7.5	e16	5.5	10	6.7	141	45	210	104	76
28	13	11	e7.5	e15	5.5	10	6.9	120	47	187	100	78
29	13	11	e7.5	16	---	11	7.2	110	56	157	96	76
30	12	6.0	e8.0	19	---	11	6.8	97	120	134	95	71
31	11	---	e10	16	---	11	---	87	---	138	92	---
TOTAL	671	451.8	237.3	437	391.5	232.6	164.6	2839.6	2006	3506	5286	3341
MEAN	21.6	15.1	7.65	14.1	14.0	7.50	5.49	91.6	66.9	113	171	111
MAX	48	29	12	19	17	13	12	667	120	326	411	271
MIN	11	6.0	4.6	12	5.5	2.8	1.6	3.8	43	55	92	71
AC-FT	1330	896	471	867	777	461	326	5630	3980	6950	10480	6630
(†)	671	717	407	91	30	245	382	514	400	455	687	560

CAL YR 1990 TOTAL 8501.6 MEAN 23.3 MAX 110 MIN 1.0 AC-FT 16860 (†) 4474

WTR YR 1991 TOTAL 19564.4 MEAN 53.6 MAX 667 MIN 1.6 AC-FT 38810 (†) 5159

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

e Estimated

ARKANSAS RIVER BASIN

07215500 MORA RIVER AT LA CUEVA, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON- DUCT- ANCE	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR	TEMPER- ATURE WATER	OXYGEN, DIS- SOLVED	HARD- NESS TOTAL	CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED	SODIUM, DIS- SOLVED	SODIUM AD- SORP- TION RATIO	
		(00061)	(US/CM) (00095)	(00400)	(DEG C) (00020)	(DEG C) (00010)	(MG/L) (00300)	(MG/L AS CACO3)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	(MG/L AS NA) (00930)	(00931)	
OCT 24...	1200	11	500	8.1	17.0	9.5	9.6	240	75	14	11	0.3	
MAR 19...	1530	12	430	8.2	9.0	10.0	9.4	250	75	15	20	0.6	
MAY 29...	1100	110	300	7.8	20.5	10.5	8.6	180	56	9.9	6.0	0.2	
JUL 17...	0930	60	450	8.1	22.0	13.0	8.4	250	79	13	8.8	0.2	
SEP 18...	1330	123	400	7.8	15.0	11.0	9.0	--	--	--	--	--	
DATE		POTAS- SIUM, DIS- SOLVED	ALKA- LINITY LAB	SULFATE DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SILICA, DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	BORON, DIS- SOLVED	IRON, DIS- SOLVED	SEDI- MENT, SUS- PENDE	SEDI- MENT, DIS- CHARGE, SUS- PENDE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
		(MG/L AS K) (00935)	(MG/L AS CACO3) (90410)	(MG/L AS SO4) (00945)	(MG/L AS CL) (00940)	(MG/L AS F) (00950)	(MG/L AS SIO2) (00955)	(MG/L) (70301)	(UG/L AS B) (01020)	(UG/L AS FE) (01046)	(MG/L) (80154)	(T/DAY) (80155)	(70331)
OCT 24...	1.2	192	63	10	0.40	8.4	298	40	39	24	0.71	71	
MAR 19...	1.3	198	83	22	0.60	9.1	345	50	14	44	1.4	59	
MAY 29...	1.1	142	49	1.8	<0.10	7.5	216	20	32	--	--	--	
JUL 17...	0.90	197	58	6.4	0.30	8.1	293	30	9	--	--	--	
SEP 18...	--	--	--	--	--	--	--	--	--	252	84	44	

ARKANSAS RIVER BASIN

07216500 MORA RIVER NEAR GOLONDRINAS, NM

LOCATION.--Lat 35°53'27", long 105°09'47", Mora County, Hydrologic Unit 11080004, in Mora Grant, on right bank 0.7 mi upstream from bridge on State Highway 161, 1.2 mi east of Golondrin, 1.9 mi upstream from Coyote Creek, 4.7 mi downstream from Rito Cebolla, and at mile 75.8.

DRAINAGE AREA.--267 mi².

PERIOD OF RECORD.--March 1915 to May 1921, October 1921 to March 1922, May, August, September 1922, July 1923 to July 1924, December 1924 to September 1986, March 1988 to current year. Monthly discharge only 1915-30, published in WSP 1311.

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

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Off-channel lakes make it possible to divert and store water during non-irrigation season. Several observations of water temperature were made during the year. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--72 years (water years 1916-20, 1922, 1924-86, 1989-91), 34.1 ft³/s, 24,710 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0900	*1,050	*3.68	Aug. 14	0545	854	3.41
July 23	0815	662	3.24	Aug. 19	0900	565	3.01
Aug. 4	0900	878	3.47	Sept. 10	0900	860	3.45
Aug. 11	0445	510	2.91	Sept. 13	0700	535	2.96

Minimum discharge, 1.1 ft³/s, Apr. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	16	e7.2	e13	21	7.7	13	2.5	70	103	153	92
2	51	16	e7.7	e13	24	8.8	13	2.5	69	85	140	88
3	42	34	e8.0	e14	19	7.7	12	1.7	63	83	351	77
4	34	25	e8.1	e14	17	7.2	13	2.1	56	89	741	89
5	34	21	e8.2	e14	18	6.4	9.3	2.2	46	88	631	89
6	36	20	e8.2	e15	19	6.2	4.9	3.2	46	89	467	185
7	33	20	e8.2	e15	20	6.2	2.3	3.2	52	83	428	167
8	30	21	e8.2	e16	20	5.2	2.0	2.6	41	73	327	109
9	30	29	e8.3	e16	19	4.6	1.6	2.3	41	71	276	102
10	31	31	e9.0	e17	19	4.5	2.4	2.7	47	68	266	629
11	31	29	10	e17	18	4.9	2.4	2.5	73	73	298	366
12	28	28	11	18	18	5.5	2.8	2.1	68	66	239	312
13	27	28	11	20	20	5.2	3.8	2.5	80	101	264	364
14	27	27	14	19	19	6.0	4.7	3.2	90	66	563	225
15	28	25	19	e19	19	8.9	5.2	3.1	98	59	298	182
16	24	15	18	e18	18	12	4.4	2.5	104	51	239	153
17	17	10	20	e18	18	12	3.8	2.8	107	49	210	141
18	19	11	25	e18	18	17	4.0	2.4	62	45	275	125
19	21	12	19	e18	e17	17	3.6	2.8	56	52	403	113
20	22	12	e18	e18	18	16	4.0	12	67	60	225	114
21	18	10	e15	e17	19	15	5.7	222	66	62	182	104
22	18	11	e13	e15	19	12	2.5	906	63	148	187	98
23	20	13	e11	e15	18	12	1.9	782	63	505	223	93
24	18	13	e11	e16	17	10	1.4	534	56	407	155	88
25	17	14	e10	e17	17	10	1.2	358	45	433	146	82
26	16	14	e9.8	e18	9.9	13	1.3	259	38	428	155	78
27	16	13	e9.8	e17	7.7	12	1.6	195	39	362	129	79
28	16	13	e10	e17	7.7	11	1.4	157	39	296	115	79
29	17	e8.4	e11	e19	---	11	1.5	126	49	232	104	81
30	17	7.0	e12	e20	---	52	2.1	106	160	188	107	77
31	17	---	e13	23	---	12	---	90	---	187	96	---
TOTAL	814	546.4	371.7	524	494.3	339.0	132.8	3795.9	1954	4702	8393	4581
MEAN	26.3	18.2	12.0	16.9	17.7	10.9	4.43	122	65.1	152	271	153
MAX	59	34	25	23	24	52	13	906	160	505	741	629
MIN	16	7.0	7.2	13	7.7	4.5	1.2	1.7	38	45	96	77
AC-FT	1610	1080	737	1040	980	672	263	7530	3880	9330	16650	9090

CAL YR 1990 TOTAL 9803.2 MEAN 26.9 MAX 186 MIN 6.0 AC-FT 19440
WTR YR 1991 TOTAL 26648.1 MEAN 73.0 MAX 906 MIN 1.2 AC-FT 52860

e Estimated

ARKANSAS RIVER BASIN

07218000 COYOTE CREEK NEAR GOLONDRINAS, NM

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

DRAINAGE AREA.--215 mi².

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

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

GAGE.--Water-stage recorder. Elevation of gage is 6,780 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 26, 1938, at site 0.4 mi downstream at different datum (nonrecording gage prior to Apr. 20, 1929). Apr. 26, 1938 to Sept. 25, 1946, at site 139 ft downstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversions (including off-channel storage) for irrigation of about 4,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--63 years, 12.6 ft³/s, 9,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft³/s, Aug. 17, 1961, gage height, 9.60 ft, from rating curve extended above 250 ft³/s on basis of slope-area measurements at gage heights 5.54 ft, 7.74 ft, and 9.60 ft; maximum gage height, 10.1 ft, Aug. 30, 1936 (site and datum then in use); no flow Aug. 4, 1945, Apr. 10, May 9, 10, 1956, Feb. 20, 1978.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0800	615	4.97	Aug. 14	0545	805	5.19
July 24	1900	258	4.00	Aug. 19	1030	243	3.64
Aug. 1	1700	221	3.82	Sept. 9	2315	*2,340	*7.63
Aug. 3	2200	643	4.84	Sept. 13	0815	701	4.98
Aug. 10	2215	514	4.51				

Minimum discharge, 1.5 ft³/s, May 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	11	12	e7.2	11	4.5	6.8	2.6	15	11	58	36
2	11	12	11	e7.2	11	5.3	8.0	2.6	14	7.9	49	33
3	12	19	13	e7.2	9.4	5.3	9.9	2.9	13	8.1	206	28
4	12	16	18	e7.3	10	5.1	7.8	2.6	13	8.1	377	27
5	11	15	14	e7.6	10	4.9	10	3.5	11	8.0	279	29
6	10	15	11	e7.9	10	5.2	7.2	3.6	9.7	7.3	200	51
7	9.7	15	13	e8.2	10	4.4	5.8	3.9	8.8	7.0	201	69
8	9.5	16	11	e8.9	10	3.7	7.0	4.0	8.8	7.0	131	41
9	9.5	16	11	e9.6	9.5	3.6	6.1	2.9	8.1	7.0	119	256
10	9.2	15	11	e10	9.5	3.6	7.0	2.4	8.1	6.6	191	1290
11	8.6	14	12	11	7.7	3.9	7.9	2.1	9.3	8.0	141	518
12	8.4	14	12	13	3.0	4.4	8.0	1.9	4.9	13	106	399
13	8.2	14	12	11	2.5	4.6	6.1	1.9	6.3	14	127	535
14	8.0	14	12	12	2.4	4.9	6.2	1.9	9.2	13	530	271
15	7.3	13	11	12	2.9	6.1	6.3	1.7	8.6	13	497	177
16	6.7	13	13	11	2.7	7.9	6.5	1.9	8.7	12	231	129
17	6.5	13	13	e11	2.9	7.9	6.0	2.0	12	8.4	135	98
18	6.7	12	9.8	e10	3.3	6.7	6.4	1.8	11	8.1	116	76
19	7.1	11	11	11	3.7	6.5	4.7	2.5	9.0	9.5	183	64
20	7.5	12	9.7	10	4.5	6.9	4.5	5.6	11	9.5	156	55
21	8.8	12	9.5	10	4.2	5.7	4.9	36	12	9.5	99	47
22	9.1	11	e9.5	e10	3.7	5.0	5.1	430	13	12	82	40
23	8.0	11	e8.4	e9.6	3.2	5.0	4.9	243	13	58	90	36
24	7.9	9.2	e8.0	e9.3	3.2	5.5	3.2	137	13	83	59	32
25	8.5	8.8	e7.7	e9.0	3.5	4.6	2.9	90	12	75	49	30
26	12	8.7	e7.3	e8.7	3.2	3.7	2.5	51	8.3	87	46	29
27	9.2	8.7	e7.0	e9.0	3.8	4.7	2.7	44	7.9	76	36	28
28	9.2	8.4	e6.9	e9.9	4.2	4.4	4.3	39	6.9	70	34	28
29	10	9.4	e6.6	11	---	3.9	4.2	30	7.3	59	40	26
30	11	11	e6.9	12	---	6.4	4.7	21	11	51	51	25
31	10	---	e7.1	12	---	6.8	---	18	---	45	36	---
TOTAL	281.7	378.2	325.4	303.6	165.0	161.1	177.6	1193.3	303.9	812.0	4655	4503
MEAN	9.09	12.6	10.5	9.79	5.89	5.20	5.92	38.5	10.1	26.2	150	150
MAX	12	19	18	13	11	7.9	10	430	15	87	530	1290
MIN	6.5	8.4	6.6	7.2	2.4	3.6	2.5	1.7	4.9	6.6	34	25
AC-FT	559	750	645	602	327	320	352	2370	603	1610	9230	8930

CAL YR 1990 TOTAL 3784.30 MEAN 10.4 MAX 71 MIN .90 AC-FT 7510
WTR YR 1991 TOTAL 13259.8 MEAN 36.3 MAX 1290 MIN 1.7 AC-FT 26300

e Estimated

ARKANSAS RIVER BASIN

07221000 MORA RIVER NEAR SHOEMAKER, NM

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

DRAINAGE AREA.--1,104 mi², of which 71 mi² is probably noncontributing.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 6,140 above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 10, 1934, at site 2,000 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 26,000 acres upstream from station. Off-channel lakes make it possible to divert and store water during non-irrigation season. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--73 years (water years 1915-18, 1920-24, 1928-91), 58.1 ft³/s, 42,090 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	2045	1,300	4.77	Aug. 4	2100	1,040	4.40
July 23	0200	2,290	6.07	Aug. 14	1700	1,630	5.27
July 26	2400	935	4.22	Sept. 10	1715	*4,080	*7.64

Minimum discharge, 1.9 ft³/s, March 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	37	43	e39	46	15	16	7.5	77	73	184	156
2	117	40	e40	e39	42	11	15	7.4	51	51	178	173
3	118	60	e40	e40	41	8.8	8.5	7.0	58	50	242	147
4	104	82	e40	e41	47	8.9	7.8	7.1	54	68	745	131
5	93	73	e41	e43	45	8.2	6.8	7.1	45	65	840	139
6	90	67	e41	e44	45	7.9	5.8	7.1	34	56	608	239
7	87	59	e41	e45	45	7.2	6.3	7.1	33	48	529	576
8	83	56	e42	e47	45	9.2	5.7	7.1	34	41	442	320
9	82	61	e42	54	44	8.8	8.6	7.0	26	40	399	236
10	76	71	e42	56	43	5.6	6.7	6.6	28	43	388	2350
11	55	74	42	51	41	4.1	6.2	6.4	27	48	413	1550
12	55	72	46	48	40	3.7	7.4	6.1	40	62	364	895
13	45	77	47	48	34	3.8	7.4	6.2	35	70	334	898
14	44	77	46	52	32	4.1	6.9	6.3	47	66	945	681
15	47	74	43	44	31	5.0	7.0	6.0	95	76	976	472
16	49	70	51	46	30	4.6	8.1	6.2	68	66	688	330
17	43	59	54	47	27	4.2	8.4	6.0	74	50	527	298
18	35	53	47	49	27	4.2	8.7	5.8	67	42	471	282
19	36	52	51	49	23	4.6	8.2	6.0	47	42	619	262
20	40	51	47	46	19	4.3	8.3	7.8	47	59	637	247
21	48	49	e46	43	18	5.0	8.2	17	62	55	458	231
22	43	47	e45	e44	17	5.3	8.1	791	58	63	386	211
23	41	47	e45	e44	14	4.9	8.3	1050	51	689	433	194
24	38	48	e44	e44	14	4.5	8.2	692	47	421	348	181
25	38	46	e44	e45	17	4.6	7.6	498	40	437	298	170
26	33	47	e43	e46	16	4.5	7.0	365	33	511	323	157
27	37	43	e44	51	16	4.3	7.6	262	26	443	327	152
28	40	40	e42	43	16	4.4	7.3	197	21	336	254	156
29	40	39	e42	49	---	4.5	7.5	152	18	286	231	151
30	44	38	e41	e45	---	6.7	7.3	122	19	241	222	144
31	42	---	e40	e45	---	9.9	---	100	---	212	186	---
TOTAL	1852	1709	1362	1427	875	191.8	240.9	4379.8	1362	4810	13995	12129
MEAN	59.7	57.0	43.9	46.0	31.2	6.19	8.03	141	45.4	155	451	404
MAX	118	82	54	56	47	15	16	1050	95	689	976	2350
MIN	33	37	40	39	14	3.7	5.7	5.8	18	40	178	131
AC-FT	3670	3390	2700	2830	1740	380	478	8690	2700	9540	27760	24060

CAL YR 1990 TOTAL 14143.5 MEAN 38.7 MAX 237 MIN 2.9 AC-FT 28050
WTR YR 1991 TOTAL 44333.5 MEAN 121 MAX 2350 MIN 3.7 AC-FT 87940

e Estimated

ARKANSAS RIVER BASIN

07221500 CANADIAN RIVER NEAR SANCHEZ, NM
(National stream-quality accounting network, and surveillance network station)

LOCATION.--Lat 35°39'08", long 104°22'39", in SW¼ sec.34, T.17 N., R.24 E., San Miguel County, Hydrologic Unit 11080003, on right bank 1,000 ft downstream from bridge on State Highway 419, 0.9 mi upstream from Lagartija Creek, 3.2 mi northeast of Sanchez, 10 mi downstream from Mora River, 25 mi southwest of Mosquero, and at mile 777.0.

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

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1177: Drainage area. WSP 1281: 1939, 1940(P), 1942, 1946. WSP 1731: 1956-57(M). WDR NM-82-1: 1965(M), 1979(M). The revised figures of discharge for September 1942, as published in WSP 1281, supersede those published in WSP 1311.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to November 1966.

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

AVERAGE DISCHARGE.--58 years (water years 1913-14, 1936-91), 183 ft³/s, 132,600 acre-ft/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 25	0330	6,090	10.11	Sept. 10	0430	*18,900	*16.14
Aug. 20	0400	9,130	12.34				

Minimum discharge, 1.2 ft³/s, Jan. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	47	58	79	59	37	20	16	157	21	276	330
2	249	50	56	76	66	37	19	14	137	82	249	290
3	183	108	58	78	72	37	18	12	106	154	247	286
4	167	83	49	82	70	36	23	11	79	139	907	274
5	145	85	48	85	72	35	41	12	76	90	880	243
6	128	131	57	91	76	32	42	10	71	96	775	536
7	116	121	62	92	76	29	37	10	63	108	1030	639
8	109	111	63	93	77	27	32	10	51	89	587	565
9	107	103	65	97	76	26	29	9.3	43	71	510	518
10	101	103	63	88	76	26	26	9.1	40	61	601	7160
11	98	104	64	87	74	24	22	9.1	42	50	498	3120
12	90	108	65	82	72	22	22	6.9	34	51	762	1710
13	72	105	66	86	70	23	24	6.7	32	500	1070	1310
14	68	99	66	82	67	23	21	8.1	59	262	513	1310
15	58	97	70	83	61	28	20	7.3	64	186	1280	982
16	54	95	72	86	57	29	24	5.2	104	157	1440	779
17	54	91	72	76	56	29	26	5.2	130	139	1400	600
18	54	87	73	76	54	29	21	4.6	89	142	1020	544
19	52	76	77	73	55	27	18	8.3	88	96	868	490
20	44	71	73	74	52	27	16	13	142	99	2760	451
21	40	68	60	74	50	32	17	16	83	100	1170	498
22	43	66	62	68	46	32	17	25	78	199	893	430
23	51	63	61	58	42	30	18	623	89	197	736	390
24	51	62	61	63	40	28	19	833	77	594	723	357
25	46	62	47	68	40	26	17	580	64	2410	605	342
26	44	64	49	62	38	22	15	421	53	1170	538	319
27	43	62	63	71	36	20	15	329	44	767	545	299
28	40	64	69	63	36	19	15	265	40	530	486	288
29	39	61	73	62	---	19	16	230	34	446	419	277
30	43	59	70	54	---	22	17	206	27	354	374	272
31	44	---	82	66	---	22	---	182	---	299	368	---
TOTAL	2778	2506	1974	2375	1666	855	667	3897.8	2196	9659	24530	25609
MEAN	89.6	83.5	63.7	76.6	59.5	27.6	22.2	126	73.2	312	791	854
MAX	345	131	82	97	77	37	42	833	157	2410	2760	7160
MIN	39	47	47	54	36	19	15	4.6	27	21	247	243
AC-FT	5510	4970	3920	4710	3300	1700	1320	7730	4360	19160	48660	50800

CAL YR 1990 TOTAL 29487.22 MEAN 80.8 MAX 2790 MIN .17 AC-FT 58490
WTR YR 1991 TOTAL 78712.8 MEAN 216 MAX 7160 MIN 4.6 AC-FT 156100

ARKANSAS RIVER BASIN

07221500 CANADIAN RIVER NEAR SANCHEZ, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD, AS CACO3 (MG/L) (00904)
OCT 23...	1230	52	650	8.2	20.0	12.5	12	10.8	15	270	99
DEC 11...	1200	61	--	8.2	15.0	3.5	2.0	11.4	--	400	200
MAR 26...	1100	21	--	8.3	21.0	11.5	4.9	10.2	--	790	640
MAY 30...	1200	205	700	8.4	23.0	20.0	98	8.9	31	320	180
JUL 10...	1130	67	800	8.3	26.0	25.0	53	7.6	25	320	190
SEP 04...	1100	276	600	8.1	24.0	22.0	62	7.7	--	270	120

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 23...	64	26	43	1	2.4	206	0	169	170	15
DEC 11...	89	42	64	1	2.4	242	0	198	310	17
MAR 26...	150	100	180	3	3.6	176	0	144	960	40
MAY 30...	77	31	53	1	3.1	159	7	142	270	13
JUL 10...	62	39	77	2	3.6	151	0	124	340	15
SEP 04...	70	23	36	1	2.4	182	0	149	160	9.1

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 23...	0.20	10	445	434	--	<0.010	<0.010	<0.100	0.100	0.030	0.090
DEC 11...	0.30	12	692	656	--	<0.010	<0.010	<0.100	<0.100	0.010	<0.010
MAR 26...	0.40	4.6	1670	1530	--	0.010	<0.010	<0.050	<0.050	0.020	<0.010
MAY 30...	0.30	10	563	544	0.080	0.050	<0.010	0.130	0.150	0.050	0.020
JUL 10...	0.40	8.3	625	621	--	0.030	0.010	<0.050	<0.050	0.040	0.040
SEP 04...	0.30	14	438	406	--	--	--	--	--	--	--

ARKANSAS RIVER BASIN

07221500 CANADIAN RIVER NEAR SANCHEZ, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
OCT 23...	0.37	--	<0.010	0.060	2.5	30	1	86	<0.5	<1.0	<1
DEC 11...	--	--	0.020	<0.010	--	--	--	--	--	--	--
MAR 26...	0.28	--	<0.010	<0.010	--	--	--	--	--	--	--
MAY 30...	0.75	0.93	0.220	<0.010	9.4	70	1	80	<0.5	<1.0	<1
JUL 10...	1.2	--	0.020	<0.010	4.8	<10	<1	<100	<10	<1.0	<1
SEP 04...	--	--	--	--	--	140	1	85	<0.5	<1.0	<1

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT 23...	<3	7	19	1	25	5	0.6	<10	1	<1	<1.0
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 30...	<1	<1	46	<1	23	4	<0.1	<2	<1	<1	<1.0
JUL 10...	1	6	<10	1	30	<10	<0.1	3	1	<1	<1.0
SEP 04...	<3	6	230	1	19	17	<0.1	<10	1	<1	<1.0

DATE	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT. MAT (MG/KG AS N) (00633)	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)
OCT 23...	800	<6	13	<2.0	2.1	<40	5	<1	<10	<5	3
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 30...	930	<4	5	--	--	--	--	--	--	--	--
JUL 10...	1100	4	10	--	--	--	--	--	--	--	--
SEP 04...	740	<6	15	--	--	--	--	--	--	--	--

DATE	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS P) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 23...	2700	<10	230	<0.01	9	67	9.4	99	K16	K8
DEC 11...	--	--	--	--	--	15	2.5	66	K26	K71
MAR 26...	--	--	--	--	--	89	5.0	94	K16	K7
MAY 30...	--	--	--	--	--	433	240	96	K71	440
JUL 10...	--	--	--	--	--	142	26	97	K230	K68
SEP 04...	--	--	--	--	--	138	103	96	K190	2100

ARKANSAS RIVER BASIN

07222500 CONCHAS RIVER AT VARIADERO, NM

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

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

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

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

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

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

AVERAGE DISCHARGE.--55 years, 13.5 ft³/s, 9,780 acre-ft/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 10	0445	*1,920	*4.97	No other peak greater than base discharge.			
No flow many days.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e.35	.14	.20	.21	.22	.40	.03	.00	.00	1.9	1.1
2	6.6	e.37	.14	.24	.21	.15	.23	.03	.00	.00	1.4	1.2
3	4.6	e.43	.12	.27	.21	.17	.21	.03	.00	32	4.8	.90
4	2.5	e.41	.11	.27	.21	.14	.19	.03	.00	19	41	.62
5	1.7	e.43	.11	.27	.19	.17	.18	.03	.00	1.2	16	.31
6	1.4	e.46	.11	.27	.19	.12	.20	.03	.00	1.5	14	.85
7	1.1	e.48	.11	.24	.19	.07	.19	.03	.00	.43	137	76
8	.85	e.52	.11	.21	.19	.09	.17	.03	.00	.09	49	15
9	.75	e.55	.11	.20	.19	.10	.14	.04	.00	.00	20	6.4
10	.68	e.53	.09	.27	.19	.13	.12	.03	.07	.00	39	692
11	.58	e.57	.12	.27	.19	.16	.09	.03	.17	.00	8.7	113
12	.44	e.59	.14	.27	.19	.13	.06	.02	.10	.00	4.6	66
13	.36	.59	.16	.27	.19	.12	.07	.02	e.00	.11	9.2	31
14	.33	.48	.15	.28	.19	.14	.10	.00	e.00	.68	15	15
15	.26	.44	.11	.31	.18	.19	.11	.00	e.00	17	5.9	9.9
16	.22	.39	.12	.27	.19	.24	.10	.00	e.00	3.8	3.8	7.3
17	.20	.35	.18	.24	.19	.23	.10	.00	.00	1.5	27	5.1
18	.16	.29	.16	.20	.17	.21	.13	.00	.00	3.0	11	4.0
19	.14	.32	.13	.19	.19	.18	.14	.00	.01	8.9	49	3.1
20	.10	.27	.11	.19	.19	.15	.15	.00	.00	8.4	11	2.6
21	.12	.25	.13	.22	.19	.12	.15	.26	.00	18	7.4	2.2
22	.13	.18	.18	.24	.19	.10	.13	.83	.00	30	12	1.9
23	.14	.19	.20	.24	.18	.09	.14	1.0	.00	7.4	9.4	1.6
24	.14	.19	.18	.23	.16	.12	.15	.70	.00	6.4	7.2	1.4
25	.19	.19	.18	.21	.18	.15	.10	.56	.00	215	18	1.4
26	.24	.18	e.17	.21	.21	.14	.04	.44	.00	26	29	1.3
27	.25	.17	.17	.21	.21	.10	.04	.43	.00	183	9.5	2.0
28	e.27	.11	.15	.21	.23	.12	.02	.38	.00	24	5.1	2.5
29	e.28	.11	.22	.21	---	.17	.02	.25	.00	7.7	3.6	1.1
30	e.27	.12	.24	.21	---	.39	.03	.04	.00	4.1	2.6	.81
31	e.32	---	.20	.21	---	.54	---	.00	---	2.7	1.7	---
TOTAL	35.32	10.51	4.55	7.33	5.40	5.15	3.90	5.27	0.35	621.91	574.8	1067.59
MEAN	1.14	.35	.15	.24	.19	.17	.13	.17	.012	20.1	18.5	35.6
MAX	10	.59	.24	.31	.23	.54	.40	1.0	.17	215	137	692
MIN	.10	.11	.09	.19	.16	.07	.02	.00	.00	.00	1.4	.31
AC-FT	70	21	9.0	15	11	10	7.7	10	.7	1230	1140	2120

CAL YR 1990 TOTAL 2272.67 MEAN 6.23 MAX 463 MIN .00 AC-FT 4510
WTR YR 1991 TOTAL 2342.08 MEAN 6.42 MAX 692 MIN .00 AC-FT 4650

e Estimated

ARKANSAS RIVER BASIN

07223300 CONCHAS CANAL BELOW CONCHAS DAM, NM

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 751 ft³/s, Aug. 31, 1961; no flow many days each year.

MONTHLY DIVERSION, IN ACRE-FEET, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Month	Mean	Diversion in acre-feet
October.....	122	7,490
November.....	19.2	1,140
December.....	0	0
January.....	0	0
February.....	0	0
March.....	0	0
April.....	171	10,150
May.....	192	11,790
June.....	178	10,620
July.....	125	7,660
August.....	56.9	3,500
September.....	78.7	4,680
WTR YR 1991.....	78.8	57,030

ARKANSAS RIVER BASIN

07223500 CONCHAS LAKE AT CONCHAS DAM, NM

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

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

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

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

REMARKS.--Lake is formed by dam consisting of concrete main section and earthfill wings, completed Sept. 15, 1939; storage began Dec. 29, 1938. Capacity, 330,100 acre-ft between elevations 4,060.0 ft and 4,201.0 ft, crest of 300 ft ungated service spillway. Inactive storage, 70,490 acre-ft, at elevation 4,155.0 ft. Lake usually not drawn below elevation, 4,157.35 ft, sill of irrigation outlet, capacity, 77,790 acre-ft, except for minor sluicing; at times irrigation water is pumped into Conchas Canal. Capacity of 198,800 acre-ft between elevations 4,201.0 ft, crest of 300 ft ungated service spillway, and 4,218.0 ft, crest of 3,000 ft ungated emergency spillway, acts as detention storage in the control of floods. Figures given herein represent total contents. Lake is used for irrigation, flood control, and recreation. Diversions upstream from station for irrigation of about 57,000 acres. Direct diversions through Conchas Dam to Bell Ranch Canal and Conchas Canal (stations 07223000, 07223300) irrigate about 36,000 acres near Tucumcari, and on Bell Ranch. U.S. Army Corps of Engineers satellite telemeter at station.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 276,140 acre-ft, Sept. 30, elevation, 4,196.66 ft; minimum, 160,870 acre-ft, July 12, elevation, 4,180.04 ft.

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

(Based on Survey by U.S. Army Corps of Engineers in 1970)

4,180	160,600
4,190	223,400
4,200	306,200

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189440	184680	187390	188130	192000	193710	192380	177820	174280	165020	178470	227210
2	190500	184680	187450	188190	192000	193650	192260	177220	174460	164460	178350	227570
3	191310	185170	187390	188320	192130	193650	192130	176510	174520	164350	178530	228230
4	191440	185480	187390	188570	192130	193650	192070	175810	174520	164120	179780	228380
5	191500	185600	187390	188570	192260	193710	192260	175280	174520	163680	181100	228530
6	191500	185720	187450	188690	192380	193650	192130	175340	174870	163120	182610	229780
7	191380	185790	187450	189000	192380	193520	191690	174630	174750	162520	184190	231410
8	191310	186030	187450	189130	192510	193270	191250	173930	174750	162020	186280	232460
9	191500	186220	187450	189250	192630	193270	190690	173580	174220	161800	187140	233060
10	191690	186220	187450	189620	192760	193200	190190	172530	173640	161470	188070	246590
11	191190	186400	187450	189940	192760	193270	189620	171030	173230	161030	189060	253780
12	191000	186590	187450	189940	192890	193200	189130	171150	173060	160870	190560	259820
13	190870	186710	187450	190120	193010	192890	188500	171380	172480	161090	194470	262870
14	190560	186830	187450	190310	193010	192820	188010	170570	172010	162080	196000	265370
15	190250	186890	187450	190500	193140	192820	187570	170000	171670	162790	197410	267300
16	189870	187020	187450	190620	193200	192820	187080	169370	171430	163070	200200	268900
17	189370	187140	187450	190750	193270	192820	186520	168630	171090	162740	203080	269990
18	189000	187200	187450	190870	193270	192820	185970	167600	170630	162960	205990	270840
19	188570	187330	187450	191000	193330	192760	185420	167600	170630	163240	208000	271690
20	187950	187450	187450	191000	193460	192760	184930	167320	171670	163350	212540	272710
21	187570	187450	187450	191120	193520	192630	184380	167660	171430	163960	215090	273400
22	187270	187450	187640	191250	193520	192570	183580	167890	170970	164180	216690	273910
23	186960	187450	187880	191380	193520	192380	182980	168060	170920	164510	218090	274170
24	186710	187450	187880	191500	193520	192320	182370	169420	169940	165180	219220	274590
25	186520	187450	187880	191500	193520	192260	181770	170800	169140	169710	220360	274940
26	186400	187640	187880	191630	193580	192260	181160	171550	168230	172710	221780	275280
27	186090	187450	187880	191630	193650	192130	180440	172480	167430	174810	222930	275630
28	185910	187450	188010	191750	193710	192260	179720	172940	166760	176280	223790	275800
29	185600	187510	188010	191750	---	192260	179130	173350	166140	177340	224660	275800
30	185230	187540	188010	191880	---	192260	178410	173700	165690	178050	225750	276140
31	184990	---	188070	191880	---	192320	---	173990	---	178350	226330	---
MAX	191690	187640	188070	191880	193710	193710	192380	177820	174870	178350	226330	276140
MIN	184990	184680	187390	188130	192000	192130	178410	167320	165690	160870	178350	227210
(†)	4184.20	4184.60	4184.70	4185.31	4185.60	4185.38	4183.11	4182.36	4180.91	4183.10	4190.41	4196.66
(††)	-4070	2550	530	3810	1830	-1390	-13910	-4420	-8300	12660	47980	49810

CAL YR 1990 MAX 216480 MIN 165300 (††) -21280
WTR YR 1991 MAX 276140 MIN 160870 (††) 87080

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

ARKANSAS RIVER BASIN

07226500 UTE CREEK NEAR LOGAN, NM

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

DRAINAGE AREA.--2,060 mi², of which 617 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1281: 1942-48, 1950, 1951(P), WDR NM-81-1: 1965(P), 1967-68(M), 1969(P), 1971(M), 1972, 1975(M), 1977, 1979. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Elevation of gage is 3,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2121 for history of changes prior to Oct. 1, 1964.

REMARKS.--Records poor. Diversions for irrigation of a few hundred acres upstream from station. Three observations of water temperature were made during the year.

AVERAGE DISCHARGE.--49 years, 21.9 ft³/s, 15,870 acre-ft/yr.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1, 1914, reached a stage of 22.95 ft, site and datum then in use. Another major flood reached a stage of 16.0 ft, 1942 datum, sometime in 1941, from information furnished by U.S. Bureau of Reclamation; discharge, about 70,000 ft³/s.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11	0230	*1,920	*3.67				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	e.00	.00	.00	.68	.02	2.1	.00	.00	e.00	e.00	e.00
2	84	e.00	.00	.00	.38	.00	.82	.00	.00	e.00	e.00	e.00
3	e10	19	.00	.00	.96	.00	.24	.00	.00	e.00	.68	e.00
4	e1.0	e2.2	.00	.00	1.9	.00	.00	.00	.00	e.00	105	e.00
5	e.00	e.00	.00	.00	1.6	.00	.00	.00	.00	e.00	e10	e.00
6	e.00	e.00	.00	.00	1.4	.00	.00	.00	42	e.00	e1.5	e.00
7	e.00	e.00	.00	.00	1.7	.00	.00	.00	17	e.00	50	e.00
8	e.00	e.00	.00	.00	1.7	.00	.00	.00	.87	e.00	e6.0	e.00
9	e.00	e.00	.00	.00	1.3	.00	.00	.00	e.00	e.00	e1.6	e.00
10	e.00	e.00	.00	.00	1.0	.00	.00	.00	.00	e.00	145	735
11	e.00	.00	.00	.00	.79	.00	.00	.00	32	e4.4	127	896
12	e.00	.00	.00	15	.63	.00	.00	.00	10	29	e5.0	150
13	e.00	.00	.00	59	.53	.00	.00	.00	5.1	61	e.00	52
14	e.00	.00	.00	54	.31	.00	.00	.00	2.9	67	e.00	75
15	e.00	.00	.00	31	.22	.00	.00	.00	2.2	96	e.00	23
16	e.00	.00	.00	13	.25	.00	.00	.00	2.0	38	e.00	7.5
17	e.00	.00	.00	18	.11	.00	.00	.00	1.9	e2.0	e.00	2.1
18	e.00	.00	.00	7.8	.01	.00	.00	.00	1.6	e.00	e.00	.44
19	e.00	.00	.00	4.4	.00	.00	.00	.00	1.7	e.00	e.00	.10
20	e.00	.00	.00	4.2	.00	.00	.00	.00	39	e.00	e.00	.03
21	e.00	.00	.00	3.2	.00	.00	.00	4.0	13	e.00	e5.0	.00
22	e.00	.00	.00	4.4	.00	.00	.00	27	e5.0	e.00	e.00	.00
23	e.00	.00	.00	2.3	.00	.00	.00	6.2	e2.0	e.00	e.00	.00
24	e.00	.00	.00	2.0	.00	.00	.00	2.6	e.00	e.00	e.00	.00
25	e.00	.00	.00	1.5	.00	.00	.00	.06	e.00	e.00	e.00	.00
26	e.00	.00	.00	1.3	.00	.00	.00	.00	e.00	e.00	e.00	.00
27	e.00	.00	.00	.99	.00	.00	.00	.00	e.00	e.00	e.00	.00
28	e.00	.00	.00	.68	.00	.74	.00	.00	45	e.00	e.00	.00
29	e.00	.00	.00	3.1	---	1.2	.00	.00	24	e.00	e.00	.00
30	e.00	.00	.00	2.3	---	5.7	.00	.00	e1.0	e.00	e.00	.00
31	e.00	---	.00	.63	---	4.1	---	.00	---	e.00	e.00	---
TOTAL	152.00	21.20	0.00	228.80	15.47	11.76	3.16	39.86	248.27	297.40	524.10	1941.17
MEAN	4.90	.71	.000	7.38	.55	.38	.11	1.29	8.28	9.59	16.9	64.7
MAX	84	19	.00	59	1.9	5.7	2.1	27	45	96	145	896
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	301	42	.00	454	31	23	6.3	79	492	590	1040	3850

CAL YR 1990 TOTAL 2692.76 MEAN 7.38 MAX 1030 MIN .00 AC-FT 5340
WTR YR 1991 TOTAL 3483.19 MEAN 9.54 MAX 896 MIN .00 AC-FT 6910

e Estimated

ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, NM

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

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

WATER-DISCHARGE RECORDS

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

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 250,000 acre-ft, May 20, 21, 1987, elevation, 3,787.40 ft; minimum since reservoir first filled in September 1965, 31,320 acre-ft, June 6, 1984, elevation, 3,739.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 247,800 acre-ft, Sept. 11, elevation, 3,787.15 ft; minimum, 219,580 acre-ft, May 18, 20, elevation, 3,783.47 ft.

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

(Based on survey by Geological Survey and New Mexico Interstate Stream Commission, 1983)

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228970	226080	225250	223800	225550	225550	223650	221140	222170	222170	224260	238550
2	229050	226230	225170	223570	225630	225020	223800	221060	222090	223280	224100	238620
3	229270	226390	224940	223500	225630	225320	223570	e221060	222170	e223000	224490	238550
4	229430	226690	224940	223570	225630	224710	223730	e221060	221720	e222700	224640	238320
5	229430	226770	225020	223650	225550	224870	223650	e221060	221350	e222700	224870	238240
6	229270	226310	224640	223570	225630	224330	223730	221060	223060	e222300	224640	238550
7	228900	226230	224710	223650	225700	224260	223880	220830	222910	e221900	225250	239090
8	228510	226390	224790	224490	225780	223950	223800	220910	222910	220220	225250	239090
9	228590	226390	224790	224790	225700	223880	223420	221060	222910	220390	226230	239410
10	228670	226460	224790	224870	225700	224030	223730	220830	223060	220320	227600	243040
11	228590	226610	224710	224940	225700	224790	223420	220830	222910	219720	228210	247800
12	228210	226540	224710	225020	225780	223730	e223350	220760	223130	219580	229200	247480
13	228440	226540	224560	225170	225780	223350	223060	220460	222760	220460	231020	247160
14	228060	226610	224790	225250	225700	223280	222910	220460	222460	221870	233150	247080
15	227980	226460	224330	225320	225700	223420	222830	220540	222240	224030	233680	246680
16	228060	226160	224710	225470	225930	223730	222760	219800	222390	224710	233910	246200
17	227750	226230	224640	225550	225780	223650	222680	219800	222390	224710	234210	245490
18	227530	226230	224640	225400	225320	223570	222540	219580	221790	224560	234750	244230
19	227600	226230	224490	225700	225630	223950	222460	219650	221130	224560	236270	243360
20	226920	226310	223950	225400	225550	223420	222310	219580	222020	224640	237330	242800
21	226840	226230	223950	225400	225550	223500	222540	221130	221940	224330	239410	242020
22	227000	226080	223880	225470	225470	223130	222170	222390	222090	224560	239730	241150
23	226690	226160	223880	225470	225320	223130	222230	222680	221570	224490	239800	240520
24	226770	226160	223800	225400	225170	223060	222000	222760	221650	224260	239800	239650
25	226770	226160	223730	225400	225250	223350	222000	222980	221570	224490	239800	239010
26	226770	226060	223800	225400	225320	223130	221930	222760	221570	224560	239570	238240
27	226540	225470	223880	225470	225470	223100	221720	222760	221350	224710	239490	237480
28	226460	225470	224100	225550	225630	223200	221720	222540	222310	224790	239330	236870
29	226390	225320	223280	225320	---	223130	221440	222540	222170	224710	239010	235960
30	226390	225470	223570	225400	---	223420	221300	222240	222170	224640	238780	235350
31	226310	---	223730	225400	---	223570	---	222170	---	224410	238550	---
MAX	229430	226770	225250	225700	225930	225550	223880	222980	223130	224790	239800	247800
MIN	226310	225320	223280	223500	225170	223060	221300	219580	221130	219580	224100	235350
(†)	3784.37	3784.26	3784.03	3784.25	3784.28	3784.01	3783.70	3783.82	3784.12	3785.98	3785.56	
(††)	-2590	-840	-1740	1670	230	-2060	-2270	870	0	2240	14140	-3200

CAL YR 1990 MAX 229880 MIN 210910 (††) 2380

WTR YR 1991 MAX 247800 MIN 219580 (††) 6450

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET

e Estimated

ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, NM -- Continued

WATER-QUALITY RECORDS

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

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

REMARKS.--Samples for chemical analyses are collected annually at Site B which is located 0.6 mi upstream from Ute Dam. Samples are collected 5 feet from the bottom of the reservoir.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)
AUG												
07...	1010	5.00	1040	8.5	--	25.0	8.1	--	--	--	--	--
07...	1011	10.0	--	--	--	25.0	7.9	--	--	--	--	--
07...	1012	15.0	--	--	--	25.0	8.3	--	--	--	--	--
07...	1013	20.0	--	--	--	25.0	8.3	--	--	--	--	--
07...	1014	25.0	--	--	--	25.0	8.1	--	--	--	--	--
07...	1015	30.0	--	--	--	24.5	7.9	--	--	--	--	--
07...	1016	35.0	--	--	--	24.0	6.5	--	--	--	--	--
07...	1017	40.0	1040	8.5	--	23.0	5.2	--	--	--	--	--
07...	1018	45.0	--	--	--	22.0	3.5	--	--	--	--	--
07...	1019	50.0	--	--	--	20.0	1.6	--	--	--	--	--
07...	1020	55.0	--	--	--	18.0	1.1	--	--	--	--	--
07...	1021	60.0	--	--	--	17.0	1.1	--	--	--	--	--
07...	1022	65.0	--	--	--	16.5	1.1	--	--	--	--	--
07...	1023	70.0	--	--	--	16.0	1.0	--	--	--	--	--
07...	1024	75.0	1050	7.9	26.0	16.0	1.0	16	260	68	49	33

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	
AUG 07...	120	3	5.6	232	0	190	280	47	0.50	2.4	652	
DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
AUG 07...	<0.010	<0.010	0.110	0.089	<0.010	0.020	0.41	<0.010	<0.010	4.4	1	<1

DATE	BORON, DIS- SOLVED (UG/L) AS B (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L) AS CD (01027)	CADMIUM DIS- SOLVED (UG/L) AS CD (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)
AUG											
07...	170	<1	1.0	1	2	4	1	9	3	<1	<0.10
DATE	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	SELE- NIUM, TOTAL (UG/L) AS SE (01147)	SELE- NIUM, DIS- SOLVED (UG/L) AS SE (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG) AS N (00633)	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG) AS N (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG) AS P (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G) AS AS (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS CD (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)
AUG											
07...	<0.1	<1	<1	<10	3	3.0	44	540	6	1	4

ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, NM -- Continued

WATER-QUALITY RECORDS

07226560 UTE RESERVOIR NEAR LOGAN, NM -- Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
AUG 07...	<5	10	3400	10	350	0.02	20	46	78	K1	<1

ARKANSAS RIVER BASIN

07227000 CANADIAN RIVER AT LOGAN, NM

LOCATION.--Lat 35°21'25", long 103°25'03", in NE¼NE¼ sec.15, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080006, on left bank 1,110 ft upstream from bridge on U.S. Highway 54, 0.7 mi south of Logan, 1.4 mi upstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 2.0 mi downstream from Ute Dam, 4.3 mi upstream from Revuelto Creek, and at mile 672.0.

DRAINAGE AREA.--11,141 mi², of which 1,110 mi² is probably noncontributing.

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

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

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

REMARKS.--Records poor. Flow regulated by Conchas Lake, 45 mi upstream (station 07223500) and Ute Reservoir, 2 mi upstream (station 07226800). Diversions for irrigation of about 90,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years (water years 1909, 1912-13, 1927-38), 392 ft³/s, 284,000 acre-ft/yr, prior to completion of Conchas Dam. 24 years (water years 1939-62), 257 ft³/s, 186,200 acre-ft/yr, prior to completion of Ute Dam. 29 years (water years 1963-91), 36.0 ft³/s, 26,080 acre-ft/yr.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s, Sept. 12, gage height, 5.73; minimum daily, 1.4 ft³/s, May 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.2	4.9	3.8	4.0	15	2.4	2.5	4.6	3.5	3.7	4.5
2	3.9	4.3	4.8	3.8	4.1	5.2	3.4	2.9	3.1	3.5	3.7	4.5
3	2.7	5.3	3.4	3.8	4.1	5.4	3.8	2.9	3.1	3.7	3.8	4.5
4	3.7	4.4	3.7	3.9	3.9	5.9	3.6	3.1	3.3	3.7	3.8	4.6
5	4.8	4.7	3.6	3.9	3.9	30	3.6	3.2	3.5	3.4	3.4	4.6
6	4.4	4.7	3.5	3.8	3.9	6.5	3.7	3.3	3.7	3.3	3.4	4.7
7	4.3	4.7	3.7	3.9	3.9	5.3	3.8	3.2	3.9	3.3	3.5	4.5
8	4.2	4.7	3.8	3.9	3.9	4.8	3.9	3.3	3.8	3.4	3.5	4.6
9	4.0	4.4	3.8	4.0	3.9	4.2	4.0	3.5	3.7	3.3	3.8	4.7
10	4.0	4.3	3.8	4.2	3.8	4.5	4.0	3.5	3.7	3.4	3.8	103
11	3.9	4.2	3.8	4.0	3.8	5.5	3.9	3.5	3.7	3.6	3.8	489
12	3.8	4.1	3.8	4.0	3.7	8.8	4.2	3.5	3.6	3.8	4.0	866
13	3.8	4.0	3.8	4.0	3.2	4.2	4.3	3.5	3.5	4.3	4.5	421
14	3.8	4.0	4.2	4.3	3.6	4.0	4.1	3.5	3.4	5.1	4.2	327
15	3.8	3.9	3.9	4.3	3.9	3.8	4.0	3.3	3.4	6.9	4.1	101
16	3.7	3.8	3.8	4.0	4.1	3.9	4.0	3.4	3.5	4.4	4.0	217
17	3.7	3.8	3.8	4.0	4.6	4.1	4.1	3.5	3.5	3.8	3.9	401
18	3.7	3.8	3.8	4.0	4.8	4.0	4.2	3.5	3.6	3.6	4.6	351
19	3.8	3.8	3.8	4.2	4.9	4.4	4.2	3.6	3.5	3.6	5.2	348
20	3.7	3.8	4.0	4.0	5.1	5.6	4.2	3.6	3.4	3.6	4.2	347
21	3.8	3.9	4.1	4.1	5.4	5.5	4.3	7.0	3.3	3.6	4.4	364
22	3.8	4.2	4.0	4.2	5.8	7.1	4.4	5.2	3.2	3.6	4.4	350
23	3.8	4.1	4.0	4.0	6.1	5.2	4.4	1.8	3.2	3.4	4.4	346
24	3.8	4.1	4.0	4.1	6.4	5.2	4.4	1.4	3.4	3.5	4.5	348
25	3.9	4.3	4.1	4.0	6.6	5.5	4.6	1.9	3.4	3.5	4.5	346
26	4.0	4.5	4.2	4.2	6.9	18	12	2.2	3.3	3.7	4.5	345
27	3.9	6.2	4.3	4.2	7.1	16	3.8	2.3	3.4	3.8	4.5	345
28	4.0	5.0	4.1	4.1	7.6	4.1	2.3	2.9	3.6	3.6	4.5	346
29	4.3	5.0	3.9	3.9	---	2.8	2.3	3.4	4.1	3.7	4.5	346
30	4.1	4.7	3.8	4.2	---	2.8	2.2	3.1	3.4	3.8	4.6	347
31	4.2	---	3.8	4.1	---	2.2	---	3.1	---	3.8	4.8	---
TOTAL	121.1	130.9	122.0	124.9	133.0	209.5	122.1	100.6	105.8	117.2	128.5	7495.2
MEAN	3.91	4.36	3.94	4.03	4.75	6.76	4.07	3.25	3.53	3.78	4.15	250
MAX	4.8	6.2	4.9	4.3	7.6	30	12	7.0	4.6	6.9	5.2	866
MIN	2.7	3.8	3.4	3.8	3.2	2.2	2.2	1.4	3.1	3.3	3.4	4.5
AC-FT	240	260	242	248	264	416	242	200	210	232	255	14870

CAL YR 1990 TOTAL 1525.6 MEAN 4.18 MAX 7.4 MIN 2.7 AC-FT 3030
WTR YR 1991 TOTAL 8910.8 MEAN 24.4 MAX 866 MIN 1.4 AC-FT 17670

ARKANSAS RIVER BASIN

07227100 REVUELTO CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°20'29", long 103°23'37", in SW¼NW¼ sec.24, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080008, on right bank 0.3 mi upstream from bridge on State Highway 469, 1.9 mi southeast of Logan, and at mile 2.3.

DRAINAGE AREA.--786 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 16, 1981, at site 320 ft upstream at datum 0.56 ft higher.

REMARKS.--Water-discharge records poor. Low flows supplemented by surface- and ground-water return from irrigation in vicinity of Tucumcari. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 45.1 ft³/s, 32,670 acre-ft/yr.

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

EXTREMES OUTSIDE PERIOD OF RECORD (1941-47).--Maximum discharge determined, about 13,400 ft³/s, Sept. 18, 1946, gage height, 9.04 ft, at site 180 ft downstream at different datum, from unpublished records collected by U.S. Bureau of Reclamation. A peak of 26,100 ft³/s, date unknown, gage height, 12.9 ft at former site and datum, was measured by slope-area method in May 1957.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0030	*10,100	*9.60	Aug. 13	0400	5,220	7.11
July 14	2245	5,770	7.43	Aug. 19	0200	4,730	6.81

No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	4.2	1.4	e.00	2.4	.98	26	5.4	186	8.7	1.1	7.1
2	76	3.7	1.3	e.50	2.0	.81	11	9.2	32	7.1	1.1	6.7
3	37	180	1.1	e2.0	1.9	.74	6.5	8.0	3.6	138	13	5.6
4	19	86	.90	e3.0	1.9	.77	5.1	6.5	1.6	15	25	5.2
5	11	58	2.6	e4.0	2.0	.62	3.7	7.4	.90	e2.0	430	4.9
6	8.6	45	2.4	e5.0	2.4	.38	2.5	9.6	118	e.00	63	98
7	5.0	53	1.8	e6.0	2.5	.29	1.6	8.6	253	e.00	71	182
8	3.3	42	2.5	7.1	2.7	.29	1.1	7.5	57	.00	112	37
9	3.3	29	2.6	4.3	2.4	.42	.78	6.0	21	e.00	54	25
10	3.4	17	2.5	4.2	2.0	.49	.45	7.7	54	e.00	479	764
11	3.7	7.5	2.4	7.2	2.1	.41	.25	7.5	190	e.00	747	1120
12	2.8	4.1	2.2	6.5	2.0	.27	.93	5.4	66	4.2	221	265
13	2.8	2.5	2.1	6.0	1.7	.26	5.3	4.5	43	45	1260	98
14	4.8	1.6	2.3	18	1.6	.27	8.0	4.4	21	1780	1340	25
15	3.6	1.0	1.9	130	1.5	.36	4.3	4.5	10	3080	272	8.2
16	4.2	.85	2.8	37	1.4	.61	5.3	4.1	8.8	1060	96	3.4
17	2.7	.77	4.3	7.4	1.1	.73	6.2	7.4	7.6	380	49	1.7
18	5.1	1.0	2.7	4.3	1.0	.67	6.3	8.0	8.5	141	63	.93
19	8.6	1.1	2.0	2.5	.99	.56	8.4	8.5	5.1	68	843	.61
20	9.8	1.2	e1.3	1.9	1.2	.34	6.7	8.7	3.9	34	299	.55
21	6.6	1.1	e.75	1.4	1.2	.26	5.4	1030	3.1	25	566	.53
22	9.2	.82	e.00	1.8	1.1	.24	3.1	3530	2.6	18	162	e.00
23	11	.87	e.00	1.9	1.1	.24	4.2	1010	2.6	9.3	61	e.00
24	12	.92	e.00	1.5	1.0	.25	6.5	349	1.6	6.9	32	e.00
25	11	.97	e.00	1.3	.99	.25	5.4	71	2.3	10	27	e.00
26	11	.83	e.00	1.7	1.0	.24	5.4	14	1.2	7.1	21	e.00
27	11	.65	e.00	2.1	1.1	.24	4.0	5.4	1.2	59	15	e.00
28	8.0	.64	e.00	1.7	1.0	9.9	4.1	55	2.3	25	11	e.08
29	6.2	1.1	e.00	1.7	---	136	4.5	70	52	5.5	9.6	2.0
30	6.1	1.2	e.00	1.8	---	317	5.0	7.9	17	2.6	8.3	2.4
31	4.9	---	e.00	2.4	---	103	---	2.6	---	1.6	8.0	---
TOTAL	452.7	548.62	43.85	276.20	45.28	577.89	158.01	6283.8	1176.90	6933.00	7360.1	2663.90
MEAN	14.6	18.3	1.41	8.91	1.62	18.6	5.27	203	39.2	224	237	88.8
MAX	141	180	4.3	130	2.7	317	26	3530	253	3080	1340	1120
MIN	2.7	.64	.00	.00	.99	.24	.25	2.6	.90	.00	1.1	.00
AC-FT	898	1090	87	548	90	1150	313	12460	2330	13750	14600	5280

CAL YR 1990 TOTAL 10464.29 MEAN 28.7 MAX 1200 MIN .00 AC-FT 20760
WTR YR 1991 TOTAL 26520.25 MEAN 72.7 MAX 3530 MIN .00 AC-FT 52600

e Estimated

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 24...	0830	12	1010	8.2	7.0	7.5	10.4	310	64	37	140
MAR 19...	0830	0.56	2900	8.7	6.0	8.0	10.0	420	73	57	600
MAY 29...	1600	43	900	8.1	31.5	28.0	6.3	170	44	14	140
JUL 16...	0815	1160	440	8.4	24.5	20.0	6.8	140	41	9.7	82
SEP 17...	1030	2.0	1010	8.1	25.0	20.0	8.3	--	--	--	--

[illegible]

WESTERN GULF OF MEXICO BASINS

RIO GRANDE BASIN

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

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

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

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Estimated daily discharges: Nov. 1-5, 8, 9 and Nov. 28 to Feb. 28. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

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

AVERAGE DISCHARGE.--31 years (water years 1900-30), 846 ft³/s, 612,900 acre-ft/yr, includes period of extensive development for irrigation; 61 years (water years 1931-91), 449 ft³/s; 325,300 acre-ft/yr.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,130 ft³/s at 0715 May 23, gage height, 3.63 ft; minimum daily, 53 ft³/s, Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	238	220	250	280	390	463	466	812	649	224	82
2	205	264	160	260	275	410	466	427	945	567	232	68
3	182	302	150	260	275	410	546	457	1190	507	212	55
4	222	337	240	275	280	475	596	551	1200	426	249	53
5	276	368	285	285	280	455	715	575	988	297	356	65
6	214	375	270	290	280	460	832	560	786	264	435	68
7	181	345	280	295	270	450	1040	631	865	284	501	66
8	171	315	290	300	280	440	1440	668	1030	310	541	171
9	202	306	300	310	285	425	1660	661	1190	332	434	162
10	241	364	320	305	290	415	1630	962	1240	318	357	190
11	262	451	350	300	285	430	1640	1290	1330	302	279	291
12	280	506	380	290	290	440	1580	1500	1210	329	226	291
13	295	528	400	300	300	445	1470	1350	759	295	230	325
14	293	516	330	300	310	450	1190	1080	659	244	206	466
15	276	475	280	300	310	450	1020	1060	805	269	228	519
16	266	390	320	305	335	495	833	1210	785	248	245	443
17	252	368	270	295	345	483	664	1150	678	200	232	336
18	248	361	225	295	355	455	719	904	577	163	208	273
19	247	363	220	290	365	452	838	961	525	162	179	266
20	256	360	210	300	355	470	910	1360	498	189	175	266
21	267	328	195	300	365	479	879	1610	490	217	184	279
22	278	274	210	300	375	490	999	1890	451	233	148	252
23	351	249	200	290	365	466	996	2010	388	293	132	215
24	399	243	200	280	360	455	853	1630	345	392	129	209
25	292	259	210	275	310	452	731	1290	366	488	136	193
26	223	308	200	275	400	481	798	1120	437	516	124	157
27	198	328	200	270	390	537	816	1030	493	481	125	146
28	183	310	220	270	375	520	652	960	453	389	128	123
29	181	258	240	275	---	490	541	912	464	286	94	108
30	174	226	245	280	---	475	472	899	560	242	95	98
31	191	---	210	280	---	471	---	812	---	222	95	---
TOTAL	7368	10315	7830	8900	8985	14216	27989	31986	22519	10114	7139	6236
MEAN	238	344	253	287	321	459	933	1032	751	326	230	208
MAX	399	528	400	310	400	537	1660	2010	1330	649	541	519
MIN	62	226	150	250	270	390	463	427	345	162	94	53
AC-FT	14610	20460	15530	17650	17820	28200	55520	63440	44670	20060	14160	12370

CAL YR 1990 TOTAL 88514 MEAN 243 MAX 1790 MIN 28 AC-FT 175600
WTR YR 1991 TOTAL 163597 MEAN 448 MAX 2010 MIN 53 AC-FT 324500

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO -- Continued

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT									
17...	1000	254	237	8.4	10.0	7.0	9.2	22	68
DEC									
19...	1300	248	212	8.4	0.0	4.0	--	K2	53
FEB									
21...	0830	290	243	8.1	0.0	3.0	10.3	<1	55
APR									
25...	1130	768	185	8.3	10.0	22	8.8	K15	68
JUN									
21...	0900	522	490	8.4	17.0	5.2	7.7	21	K16
AUG									
20...	1300	168	238	8.8	23.0	6.5	8.8	K9	K2

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA-(A) LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	BICAR-(B) BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT									
17...	66	20	3.9	26	44	1	4.9	92	108
DEC									
19...	75	23	4.3	15	29	0.8	2.8	78	95
FEB									
21...	68	21	3.7	21	39	1	3.6	77	94
APR									
25...	52	16	3.0	11	30	0.7	2.4	48	59
JUN									
21...	150	45	9.0	36	33	1	6.1	107	131
AUG									
20...	75	23	4.3	20	35	1	3.7	84	102

DATE	CAR-(C) BONATE WATER DIS IT FIELD MG/L AS CO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT								
17...	2	20	8.9	0.3	25	162	164	111
DEC								
19...	0	24	4.4	0.2	29	147	150	98.4
FEB								
21...	0	29	6.1	0.3	25	159	156	124
APR								
25...	0	26	3.4	0.1	21	122	112	253
JUN								
21...	0	110	12	0.4	23	331	307	467
AUG								
20...	0	27	6.4	0.3	24	149	159	67.6

A Field total dissolved alkalinity, determined by incremental titration method.

B Field dissolved bicarbonate, determined by incremental titration method.

C Field dissolved carbonate, determined by incremental titration method.

K Based on non-ideal colony counts.

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 17...	<0.01	<0.10	<0.01	<0.01	0.50	0.10	0.03	0.02
DEC 19...	0.01	0.10	0.03	0.04	<0.20	0.09	0.06	0.06
FEB 21...	<0.01	<0.10	<0.01	<0.01	0.50	0.05	0.03	0.03
APR 25...	<0.01	<0.05	0.02	<0.01	0.70	0.18	0.06	0.03
JUN 21...	<0.01	<0.05	0.04	0.03	0.90	0.12	0.07	0.06
AUG 20...	<0.01	<0.05	<0.01	<0.01	0.40	0.10	0.06	0.04

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 17...	<10	3	23	<0.5	<1	<1	<3	1	38	<1
FEB 21...	<10	1	24	<0.5	<1	<1	<3	3	56	<1
JUN 21...	<10	3	50	<0.5	<1	<1	<3	2	80	<1
AUG 20...	<10	3	24	<0.5	<1	<1	<3	1	30	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 17...	5	6	<0.1	<10	1	<1	<1	170	<6	3
FEB 21...	6	22	<0.1	<10	<1	<1	<1	160	<6	6
JUN 21...	10	24	<0.1	<10	1	<1	<1	400	<6	14
AUG 20...	5	10	<0.1	<10	<1	<1	<1	180	<6	6

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
DEC 19...	1300	1.7	0.8	3.3	<0.6	4.0	<0.6	0.10	0.99
JUN 21...	0900	2.7	<0.6	42	0.8	56	0.8	0.04	1.2

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

CROSS-SECTION DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	TEMPER- ATURE WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)
APR							
25...	1131	29	10.5	129	8.1	8.8	83
25...	1132	49	10.5	126	8.0	8.8	95
25...	1133	59	10.0	127	8.0	8.8	86
25...	1134	69	10.0	128	8.0	8.8	85
25...	1135	79	10.0	127	8.0	8.8	97
25...	1136	89	10.0	126	7.9	8.8	90
25...	1137	99	10.0	127	7.9	8.8	115
25...	1138	109	10.0	128	7.9	8.8	117
25...	1139	119	10.0	128	7.9	8.8	95
25...	1140	129	10.0	130	7.8	8.8	88
25...	1141	139	10.5	133	7.8	8.8	87
25...	1142	149	10.5	138	7.7	8.8	80
JUN							
21...	0901	30	17.5	491	8.3	8.0	52
21...	0902	50	17.0	491	8.2	7.7	46
21...	0903	60	17.0	490	8.2	7.7	34
21...	0904	70	17.0	490	8.2	7.6	50
21...	0905	80	17.0	487	8.2	7.6	36
21...	0906	90	17.0	490	8.2	7.6	--
21...	0907	100	17.0	490	8.2	7.7	42
21...	0908	110	17.0	490	8.2	7.7	63
21...	0909	120	17.0	490	8.2	7.8	53
21...	0910	140	17.5	487	8.3	7.9	51
AUG							
20...	1301	31	23.5	238	8.8	9.1	23
20...	1302	41	23.0	238	8.8	8.9	11
20...	1303	51	23.0	239	8.7	8.7	13
20...	1304	61	22.5	239	8.7	8.6	12
20...	1305	71	22.5	239	8.7	8.6	17
20...	1306	81	22.5	239	8.7	8.7	18
20...	1307	91	22.5	238	8.7	8.7	15
20...	1308	101	22.5	238	8.7	8.7	16
20...	1309	111	23.0	238	8.7	8.9	19
20...	1310	121	23.5	237	8.8	9.5	15

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
17...	1000	254	29	20	--
DEC					
19...	1300	248	11	7.4	--
FEB					
21...	0830	290	7	5.5	66
APR					
25...	1130	768	85	176	85
AUG					
20...	1300	168	18	8.2	--

RIO GRANDE BASIN

08252500 COSTILLA CREEK ABOVE COSTILLA DAM, NM

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

DRAINAGE AREA.--25.1 mi².

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

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

GAGE.--Water-stage recorder. Concrete control since Sept. 17, 1965. Elevation of gage is 9,430 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1923 for history of changes prior to Sept. 17, 1965.

REMARKS.--Records good. Natural flow may be augmented by transbasin diversions or irrigation returns from about 1,300 acres irrigated from Casias Creek (station 08253000). Several observations of water temperature were made during the year.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	1730	*115	*3.23	July 24	2215	48	2.76
June 11	1645	56	2.83	Sept. 4	0500	62	2.84
July 22	1600	48	2.76				

Minimum recorded, 3.2 ft³/s, Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	---	---	---	---	---	---	12	31	11	10	7.7
2	4.9	---	---	---	---	---	---	15	30	11	17	7.1
3	5.0	---	---	---	---	---	---	13	30	11	19	11
4	4.3	---	---	---	---	---	---	11	25	10	28	35
5	4.1	---	---	---	---	---	---	11	23	8.9	16	15
6	4.1	---	---	---	---	---	---	11	29	8.1	17	13
7	4.4	---	---	---	---	---	---	12	25	7.9	18	12
8	6.7	---	---	---	---	---	---	17	22	7.8	14	8.8
9	6.5	---	---	---	---	---	---	22	22	8.5	13	11
10	5.8	---	---	---	---	---	---	28	26	7.2	13	23
11	5.2	---	---	---	---	---	---	34	34	12	15	12
12	4.7	---	---	---	---	---	---	35	26	10	13	23
13	4.5	---	---	---	---	---	---	31	23	8.1	16	18
14	4.4	---	---	---	---	---	---	35	25	7.1	13	13
15	4.3	---	---	---	---	---	---	36	26	9.7	11	12
16	4.2	---	---	---	---	---	---	31	25	12	9.4	11
17	4.1	---	---	---	---	---	---	30	22	8.9	9.3	10
18	4.3	---	---	---	---	---	---	36	20	7.0	15	9.6
19	5.1	---	---	---	---	---	---	44	21	7.8	12	9.5
20	6.4	---	---	---	---	---	---	61	21	7.8	9.5	9.1
21	5.4	---	---	---	---	---	---	89	19	12	8.1	8.5
22	7.4	---	---	---	---	---	---	65	19	30	7.9	8.0
23	7.8	---	---	---	---	---	---	57	16	20	8.1	7.6
24	7.7	---	---	---	---	---	16	51	15	21	7.7	7.2
25	7.2	---	---	---	---	---	18	45	14	21	12	7.0
26	6.5	---	---	---	---	---	16	45	13	14	10	6.8
27	5.8	---	---	---	---	---	16	44	13	13	9.2	7.0
28	5.5	---	---	---	---	---	12	42	13	11	8.6	7.3
29	5.3	---	---	---	---	---	12	40	13	12	8.9	7.1
30	5.2	---	---	---	---	---	9.2	37	13	11	7.7	7.9
31	5.3	---	---	---	---	---	---	33	---	9.7	6.7	---
TOTAL	167.5	---	---	---	---	---	---	1073	654	356.5	383.1	345.2
MEAN	5.40	---	---	---	---	---	---	34.6	21.8	11.5	12.4	11.5
MAX	7.8	---	---	---	---	---	---	89	34	30	28	35
MIN	4.1	---	---	---	---	---	---	11	13	7.0	6.7	6.8
AC-FT	332	---	---	---	---	---	---	2130	1300	707	760	685

RIO GRANDE BASIN

08253000 CASIAS CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'48", long 105°15'35", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 200 ft downstream from road crossing, 900 ft upstream from normal high-water line of Costilla Reservoir, 1.8 mi northeast of Costilla Dam, and 16 mi southeast of Costilla.

DRAINAGE AREA.--16.6 mi².

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

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 18, 1940, water-stage recorder and wooden control 100 ft downstream at datum 1.56 ft lower.

REMARKS.--Records good. Diversion 3.5 mi upstream for irrigation of about 1,300 acres, part of which is in Costilla Creek basin. Several observations of water temperature were made during the year.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	1500	*60	*1.26	Sept. 4	0515	37	1.06
June 14	2015	43	1.10				

Minimum recorded, 3.2 ft³/s, Oct. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	---	---	---	---	---	---	8.5	37	22	12	9.3
2	6.9	---	---	---	---	---	---	8.4	36	20	14	8.9
3	6.8	---	---	---	---	---	---	8.0	33	20	15	8.7
4	6.0	---	---	---	---	---	---	7.6	31	19	19	21
5	5.8	---	---	---	---	---	---	8.2	29	17	15	11
6	5.7	---	---	---	---	---	---	8.0	32	16	16	9.6
7	6.2	---	---	---	---	---	---	9.0	30	15	17	9.1
8	6.5	---	---	---	---	---	---	11	30	15	15	8.1
9	6.4	---	---	---	---	---	---	13	30	15	14	9.7
10	6.1	---	---	---	---	---	---	16	31	14	14	15
11	5.7	---	---	---	---	---	---	20	34	15	16	9.3
12	5.4	---	---	---	---	---	---	21	32	14	14	16
13	5.3	---	---	---	---	---	---	21	31	12	16	12
14	5.0	---	---	---	---	---	---	23	36	12	14	9.8
15	4.9	---	---	---	---	---	---	24	37	14	13	9.1
16	4.8	---	---	---	---	---	---	22	35	14	12	8.8
17	4.8	---	---	---	---	---	---	22	32	12	12	8.3
18	4.7	---	---	---	---	---	---	25	31	12	15	8.1
19	5.5	---	---	---	---	---	---	28	31	12	13	8.1
20	5.7	---	---	---	---	---	---	34	32	11	12	8.0
21	6.3	---	---	---	---	---	---	47	31	13	11	7.8
22	8.4	---	---	---	---	---	---	38	31	21	11	7.5
23	6.8	---	---	---	---	---	---	8.5	38	28	16	7.3
24	7.0	---	---	---	---	---	---	8.6	36	27	18	7.4
25	6.2	---	---	---	---	---	---	9.2	36	25	17	7.3
26	5.7	---	---	---	---	---	7.8	38	24	15	10	7.2
27	5.3	---	---	---	---	---	8.8	40	24	14	9.7	7.1
28	5.0	---	---	---	---	---	7.3	40	24	12	9.8	7.7
29	5.0	---	---	---	---	---	7.3	40	24	13	9.4	7.6
30	5.0	---	---	---	---	---	7.8	39	24	12	8.6	8.3
31	4.8	---	---	---	---	---	---	38	---	12	8.4	---
TOTAL	180.5	---	---	---	---	---	---	767.7	912	464	397.9	283.1
MEAN	5.82	---	---	---	---	---	---	24.8	30.4	15.0	12.8	9.44
MAX	8.4	---	---	---	---	---	---	47	37	22	19	21
MIN	4.7	---	---	---	---	---	---	7.6	24	11	8.4	7.1
AC-FT	358	---	---	---	---	---	---	1520	1810	920	789	562

RIO GRANDE BASIN

08253500 SANTISTEVAN CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'03", long 105°16'50", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 200 ft upstream from road crossing, 1,300 ft upstream from normal high-water line of Costilla Reservoir, 0.6 mi north of Costilla Dam, and 16 mi southeast of Costilla.

DRAINAGE AREA.--2.15 mi².

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

REVISED RECORDS.--WSP 1923: Drainage area.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 9,490 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 27, 1940, water-stage recorder and wooden control at datum 0.99 ft lower.

REMARKS.--Records good. No diversions upstream from station. Several observations of water temperature were made during the year.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	1400	7.5	0.92	July 21	1700	6.6	0.85
Jun. 14	1845	*9.1	*1.01				

Minimum recorded, 0.23 ft³/s, Apr. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	---	---	---	---	---	---	1.2	6.4	4.3	2.3	1.7
2	1.1	---	---	---	---	---	---	1.4	6.2	4.2	2.3	1.7
3	1.1	---	---	---	---	---	---	1.4	6.0	4.2	2.4	1.7
4	1.0	---	---	---	---	---	---	1.4	6.0	4.0	2.5	2.4
5	1.0	---	---	---	---	---	---	1.4	6.0	3.7	2.2	1.9
6	1.0	---	---	---	---	---	---	1.4	6.2	3.4	2.3	1.8
7	1.1	---	---	---	---	---	---	1.5	5.8	3.3	2.2	1.8
8	1.1	---	---	---	---	---	---	1.7	5.6	3.3	2.1	1.7
9	2.0	---	---	---	---	---	---	1.9	5.5	3.2	2.2	1.9
10	e1.8	---	---	---	---	---	---	2.2	5.5	3.0	2.1	2.1
11	e1.7	---	---	---	---	---	---	2.4	6.0	3.0	2.2	1.7
12	e1.5	---	---	---	---	---	---	2.5	5.6	3.0	2.1	2.3
13	e1.4	---	---	---	---	---	---	2.5	5.6	2.8	2.2	2.0
14	e1.3	---	---	---	---	---	---	2.7	6.4	2.7	2.1	1.9
15	e1.2	---	---	---	---	---	---	2.9	6.6	2.7	2.0	1.9
16	e1.2	---	---	---	---	---	---	2.8	6.1	2.6	2.1	1.9
17	e1.1	---	---	---	---	---	---	3.0	5.7	2.5	2.1	1.9
18	e1.1	---	---	---	---	---	---	3.3	5.6	2.4	2.7	1.9
19	e1.2	---	---	---	---	---	---	3.7	5.6	2.6	2.3	1.9
20	e1.4	---	---	---	---	---	---	4.5	5.5	2.5	2.1	1.9
21	e1.6	---	---	---	---	---	---	5.6	5.4	3.1	2.0	1.8
22	e1.5	---	---	---	---	---	---	5.1	5.3	2.9	2.0	1.8
23	e1.7	---	---	---	---	---	---	5.2	5.1	2.6	1.9	1.8
24	e2.2	---	---	---	---	---	1.4	5.5	5.0	2.8	1.9	1.7
25	e2.0	---	---	---	---	---	1.5	5.6	4.9	2.9	1.9	1.7
26	e1.7	---	---	---	---	---	1.2	6.0	4.8	2.5	1.9	1.6
27	e1.5	---	---	---	---	---	1.4	6.3	4.6	2.4	1.9	1.7
28	e1.3	---	---	---	---	---	1.1	6.4	4.6	2.3	1.9	1.7
29	e1.2	---	---	---	---	---	1.1	6.5	4.6	2.3	1.8	1.7
30	e1.1	---	---	---	---	---	1.3	6.3	4.5	2.3	1.7	1.7
31	1.1	---	---	---	---	---	---	6.3	---	2.3	1.7	---
TOTAL	42.2	---	---	---	---	---	---	110.6	166.7	91.8	65.1	55.2
MEAN	1.36	---	---	---	---	---	---	3.57	5.56	2.96	2.10	1.84
MAX	2.2	---	---	---	---	---	---	6.5	6.6	4.3	2.7	2.4
MIN	1.0	---	---	---	---	---	---	1.2	4.5	2.3	1.7	1.6
AC-FT	84	---	---	---	---	---	---	219	331	182	129	109

e Estimated

RIO GRANDE BASIN

08253900 COSTILLA RESERVOIR NEAR COSTILLA, NM

LOCATION.--Lat 36°52'36", long 105°16'45", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on face of Costilla Dam on Costilla Creek, 16 mi southeast of Costilla, and at mile 34.8.

DRAINAGE AREA.--54.6 mi².

PERIOD OF RECORD.--May 1922 to September 1965 (monthend contents only), October 1965 to September 1983, April to September 1991. Records prior to October 1960 published in WSP 1732. Prior to October 1966, published as Costilla Lake near Costilla.

REVISED RECORDS.--WSP 1923: Drainage area.

GAGE.--Water-stage recorder with satellite telemeter. Elevation of gage is 9,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Reservoir is formed by earthfill dam faced with rock. Storage began in 1920. Diversions for irrigation of about 1,300 acres above reservoir. Reservoir is used for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 15,130 acre-ft June 13, 1938, June 20-23, 1941, gage height, 9,511.5 ft; no storage October 1925 to February 1926, September 1956, Aug. 22 to Sept. 24, 1972, July 29 to Sept. 7, 1977.

EXTREMES FOR APRIL TO SEPTEMBER 1991.--Maximum contents observed 8,230 acre-ft, June 3, gage height, 84.58 ft; minimum observed, 3,400 acre-ft, Sept. 12, gage height, 63.78.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e4150	5960	8170	7370	4750	3850
2	---	---	---	---	---	---	e4250	6010	8220	7290	4750	3760
3	---	---	---	---	---	---	e4350	6050	8230	7200	4780	3690
4	---	---	---	---	---	---	4450	6090	8210	7110	4810	3690
5	---	---	---	---	---	---	4550	6130	8160	7070	4750	3630
6	---	---	---	---	---	---	4690	6170	8110	7060	4700	3620
7	---	---	---	---	---	---	4780	6220	8070	7010	4650	3640
8	---	---	---	---	---	---	4830	6280	8050	6870	4580	3630
9	---	---	---	---	---	---	4880	6350	8020	6740	4580	3560
10	---	---	---	---	---	---	4940	6440	7970	6600	4590	3520
11	---	---	---	---	---	---	4990	6540	7930	6480	4590	3440
12	---	---	---	---	---	---	5020	6630	7870	6440	4550	3400
13	---	---	---	---	---	---	5050	6690	7800	6440	4510	3410
14	---	---	---	---	---	---	5080	6770	7800	6380	4460	3430
15	---	---	---	---	---	---	5120	6870	7830	6210	4400	3450
16	---	---	---	---	---	---	5190	6930	7860	6030	4380	3470
17	---	---	---	---	---	---	5250	6990	7900	5840	4390	3480
18	---	---	---	---	---	---	5310	7070	7930	5650	4390	3500
19	---	---	---	---	---	---	5360	7170	7950	5600	4350	3510
20	---	---	---	---	---	---	5430	7300	7960	5590	4290	3520
21	---	---	---	---	---	---	5490	7480	7960	5550	4230	3530
22	---	---	---	---	---	---	5550	7540	7970	5430	4160	3540
23	---	---	---	---	---	---	5600	7510	7950	5270	4140	3550
24	---	---	---	---	---	---	5660	7530	7880	5120	4150	3560
25	---	---	---	---	---	---	5710	7600	7770	4970	4140	3560
26	---	---	---	---	---	---	5750	7670	7670	4920	4080	3560
27	---	---	---	---	---	---	5790	7740	7560	4930	4020	3570
28	---	---	---	---	---	---	5830	7810	7520	4920	3970	3580
29	---	---	---	---	---	---	5870	7900	7500	4880	3910	3580
30	---	---	---	---	---	---	5910	8000	7460	4840	3880	3600
31	---	---	---	---	---	---	---	8080	---	4790	3880	---
MAX	---	---	---	---	---	---	5910	8080	8230	7370	4810	3850
MIN	---	---	---	---	---	---	4150	5960	7460	4790	3880	3400
(†)	---	---	---	---	---	---	+1760	+2170	-620	-2670	-910	-280
(††)	---	---	---	---	---	---	75.76	84.02	81.78	70.80	66.34	64.88

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

e Estimated

RIO GRANDE BASIN

08254000 COSTILLA CREEK BELOW COSTILLA DAM, NM

LOCATION.--Lat 36°52'26", long 105°16'47", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on right bank approximately 1,000 ft downstream from Costilla Dam, 16 mi southeast of Costilla, and at mile 34.5.

DRAINAGE AREA.--54.6 mi².

PERIOD OF RECORD.--April 1937 to current year (no winter records 1937-44, 1947-49, 1988-90). Monthly discharge only for some periods, published in WSP 1312. Prior to October 1951, published as "below reservoir near Costilla."

REVISED RECORDS.--WSP 1923: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,290 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 7, 1989, at site 500 ft upstream at different datum.

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

AVERAGE DISCHARGE.--41 years (water years 1945-47, 1950-87), 18.6 ft³/s, 13,480 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 130 ft³/s, July 16-18, 23; minimum daily, 0.65 ft³/s, Oct. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	---	---	---	---	---	---	2.7	27	76	46	32
2	.71	---	---	---	---	---	---	2.7	36	76	33	59
3	.73	---	---	---	---	---	---	2.8	59	75	26	58
4	.78	---	---	---	---	---	---	2.9	68	75	37	58
5	.78	---	---	---	---	---	---	2.9	80	50	59	58
6	.80	---	---	---	---	---	---	3.0	86	36	59	28
7	.83	---	---	---	---	---	---	3.1	75	36	58	13
8	.83	---	---	---	---	---	---	3.0	60	e65	58	27
9	.83	---	---	---	---	---	---	3.1	69	e94	36	58
10	.86	---	---	---	---	---	---	3.1	84	e94	24	58
11	e.84	---	---	---	---	---	---	3.2	86	e94	32	57
12	e.82	---	---	---	---	---	---	9.1	87	e94	52	57
13	e.82	---	---	---	---	---	---	22	87	e94	52	29
14	e.82	---	---	---	---	---	---	17	62	e101	52	15
15	e.81	---	---	---	---	---	---	13	49	e119	52	15
16	e.81	---	---	---	---	---	---	25	44	e130	34	15
17	e.81	---	---	---	---	---	---	27	37	e130	25	15
18	e.80	---	---	---	---	---	---	27	37	e130	33	15
19	e.80	---	---	---	---	---	---	27	41	e76	51	15
20	e.79	---	---	---	---	---	---	27	47	e21	51	15
21	e.77	---	---	---	---	---	---	37	48	e21	50	15
22	e.76	---	---	---	---	---	---	72	48	e76	50	15
23	e.75	---	---	---	---	---	---	102	53	e130	31	15
24	e.74	---	---	---	---	---	2.2	73	76	126	20	15
25	e.73	---	---	---	---	---	2.3	45	90	123	30	15
26	e.72	---	---	---	---	---	2.4	45	91	61	47	15
27	e.71	---	---	---	---	---	2.4	45	90	29	47	15
28	e.68	---	---	---	---	---	2.5	45	60	35	47	15
29	e.66	---	---	---	---	---	2.5	33	46	46	46	15
30	e.66	---	---	---	---	---	2.6	27	57	46	29	8.2
31	.65	---	---	---	---	---	---	27	---	46	19	---
TOTAL	23.83	---	---	---	---	---	---	777.6	1880	2405	1286	840.2
MEAN	.77	---	---	---	---	---	---	25.1	62.7	77.6	41.5	28.0
MAX	.86	---	---	---	---	---	---	102	91	130	59	59
MIN	.65	---	---	---	---	---	---	2.7	27	21	19	8.2
AC-FT	47	---	---	---	---	---	---	1540	3730	4770	2550	1670

e Estimated

RIO GRANDE BASIN

08255500 COSTILLA CREEK NEAR COSTILLA, NM

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

DRAINAGE AREA.--195 mi².

PERIOD OF RECORD.--March 1936 to current year (no winter records 1936-41, 1943). Monthly discharge for March 1943 and water-year estimate for 1943, published in WSP 1312.

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

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1952. Elevation of gage is 7,900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 18, 1944, at site 200 ft downstream at different datum. June 18, 1944 to Sept. 30, 1964, at site 0.4 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Costilla Reservoir (station 08253900) 19 mi upstream. Diversions for irrigation of about 2,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years (water years 1942-91), 44.4 ft³/s, 32,170 acre-ft/yr.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 394 ft³/s, May 22, gage height, 4.00 ft; minimum daily, 3.2 ft³/s Dec. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	15	e5.3	e4.0	e5.9	12	21	55	119	98	73	44
2	21	21	e4.7	e4.0	e5.8	12	32	57	115	97	81	81
3	19	26	e4.4	e4.2	e5.7	13	28	59	136	97	60	84
4	17	21	e6.0	e4.7	e5.6	13	37	58	141	98	68	105
5	16	19	e5.2	e4.7	e5.9	16	75	57	149	84	95	103
6	16	21	e4.7	e4.1	e5.9	12	130	58	164	57	109	83
7	16	15	e4.6	e4.0	e5.9	11	128	58	167	56	130	51
8	19	e14	e4.4	e4.5	e6.2	12	76	61	127	96	104	45
9	19	e13	e4.3	e5.0	e6.9	12	56	75	122	104	89	84
10	19	e12	e4.2	e5.6	e8.1	13	60	87	142	102	64	115
11	18	e11	e4.5	e6.1	e9.6	15	48	98	149	104	65	100
12	17	e10	e4.7	e6.9	e11	12	58	103	147	91	93	108
13	16	e8.8	e5.2	e7.8	e15	14	37	116	148	50	93	98
14	15	e8.0	e7.0	e7.2	e14	13	31	117	153	47	94	60
15	14	e7.2	e8.2	e7.0	e14	14	32	115	131	108	88	55
16	14	e6.9	e10	e6.0	e13	14	57	111	124	119	82	52
17	14	e6.5	e7.7	e6.0	e12	14	70	109	102	125	57	50
18	13	e6.4	e6.2	e6.5	e11	13	75	107	92	127	63	48
19	14	e6.3	e6.0	e7.0	e10	14	73	112	91	105	93	48
20	20	e6.2	e4.9	e6.1	e13	14	70	150	104	52	85	47
21	17	e6.2	e4.3	e7.0	e16	14	84	280	97	51	80	46
22	17	6.2	e3.7	e7.0	15	12	85	349	95	139	78	44
23	19	7.5	e3.3	e7.7	15	14	88	356	90	157	70	42
24	19	9.0	e3.3	e8.1	14	15	82	304	100	158	49	40
25	18	8.8	e3.3	e7.7	14	19	85	236	115	163	49	40
26	17	11	e3.2	e7.4	13	24	86	210	112	128	80	39
27	16	e7.0	e3.4	e7.1	13	16	69	194	112	60	77	38
28	16	e6.3	e3.5	e6.8	13	18	68	179	101	54	76	40
29	15	e6.1	e3.6	e6.6	---	18	63	162	76	73	78	40
30	14	e5.6	e4.0	e6.4	---	17	60	138	77	73	69	38
31	14	---	e4.0	e6.2	---	17	---	128	---	73	47	---
TOTAL	523	328.0	151.8	189.4	297.5	447	1964	4299	3598	2946	2439	1868
MEAN	16.9	10.9	4.90	6.11	10.6	14.4	65.5	139	120	95.0	78.7	62.3
MAX	24	26	10	8.1	16	24	130	356	167	163	130	115
MIN	13	5.6	3.2	4.0	5.6	11	21	55	76	47	47	38
AC-FT	1040	651	301	376	590	887	3900	8530	7140	5840	4840	3710

CAL YR 1990 TOTAL 13620.9 MEAN 37.3 MAX 123 MIN 3.2 AC-FT 27020
WTR YR 1991 TOTAL 19050.7 MEAN 52.2 MAX 356 MIN 3.2 AC-FT 37790

e Estimated

RIO GRANDE BASIN

08261000 COSTILLA CREEK AT GARCIA, CO

LOCATION.--Lat 36°59'21", long 105°31'54", Taos County, Hydrologic Unit 13020101, in Sangre de Cristo Grant, on left bank 0.4 mi downstream from old State Highway 3, 0.5 mi upstream from New Mexico-Colorado State line, 0.9 mi south of Garcia, and at mile 13.3.

DRAINAGE AREA.--200 mi², approximately.

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

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1956. Elevation of gage is 7,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 20, 1950, at site 0.4 mi downstream at different datum.

REMARKS.--Records good. Flow partly regulated by Costilla Reservoir (station 08253900) 22 mi upstream. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 514 ft³/s, May 22, 1991, maximum gage height 4.91 ft., June 1, 1983; no flow many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 514 ft³/s, May 22, gage height, 4.69 ft; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	---	---	---	---	---	e.04	3.1	3.3	10	.00	.00
2	8.2	---	---	---	---	---	e.04	3.0	2.3	10	6.4	4.1
3	6.5	---	---	---	---	---	e.04	3.5	2.7	9.7	2.4	9.2
4	.58	---	---	---	---	---	e.04	2.7	.81	9.6	6.9	17
5	.40	---	---	---	---	---	e39	.84	1.2	6.4	6.2	15
6	.00	---	---	---	---	---	e95	5.0	6.2	2.3	4.5	7.1
7	.00	---	---	---	---	---	e100	8.1	13	.04	18	4.0
8	.00	---	---	---	---	---	e46	8.8	12	1.0	5.1	3.4
9	1.0	---	---	---	---	---	22	13	4.9	.17	6.8	7.5
10	2.5	---	---	---	---	---	19	16	5.6	1.3	3.7	17
11	5.1	---	---	---	---	---	e2.0	15	5.8	2.9	1.3	7.6
12	5.3	---	---	---	---	---	11	23	7.0	3.5	5.1	10
13	4.6	---	---	---	---	---	6.6	8.2	6.6	.15	3.7	13
14	3.8	---	---	---	---	---	e5.0	3.9	13	.00	5.0	3.0
15	4.1	---	---	---	---	---	9.3	4.4	16	2.8	.56	1.0
16	4.3	---	---	---	---	---	32	5.7	16	6.1	4.4	.60
17	4.6	---	---	---	---	---	26	3.2	11	4.1	1.3	.45
18	4.8	---	---	---	---	---	20	1.9	5.3	4.4	2.2	.39
19	5.1	---	---	---	---	---	21	20	2.6	6.9	6.5	.40
20	5.8	---	---	---	---	---	20	47	2.4	2.4	2.2	2.2
21	5.5	---	---	---	---	---	29	167	1.3	2.4	1.8	2.6
22	5.5	---	---	---	---	---	28	275	.80	11	1.6	3.8
23	5.6	---	---	---	---	---	18	286	1.1	12	1.5	2.5
24	5.2	---	---	---	---	---	15	171	3.8	12	.98	2.2
25	5.1	---	---	---	---	.04	15	86	.97	13	.54	2.0
26	5.4	---	---	---	---	e.04	18	58	.04	12	4.5	1.8
27	6.5	---	---	---	---	e.04	5.8	48	.27	1.9	.99	2.0
28	8.8	---	---	---	---	e.04	3.2	41	6.6	1.3	1.9	3.8
29	8.5	---	---	---	---	e.04	3.5	34	8.7	1.6	.70	4.8
30	6.3	---	---	---	---	e.04	4.6	20	9.5	1.1	11	2.4
31	3.3	---	---	---	---	e.04	---	3.8	---	.00	11	---
TOTAL	136.78	---	---	---	---	---	614.16	1386.14	170.79	152.06	128.77	150.84
MEAN	4.41	---	---	---	---	---	20.5	44.7	5.69	4.91	4.15	5.03
MAX	8.8	---	---	---	---	---	100	286	16	13	18	17
MIN	.00	---	---	---	---	---	.04	.84	.04	.00	.00	.00
AC-FT	271	---	---	---	---	---	1220	2750	339	302	255	299

e Estimated

RIO GRANDE BASIN

PRINCIPAL DIVERSIONS FROM COSTILLA CREEK, NEW MEXICO-COLORADO

Records of discharge are collected at 4 gaging stations on 2 diversions from Costilla Creek. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado downstream from the gaging station on Costilla Creek near Costilla, NM (station 08255500). Records collected during irrigation season only. Several observations of water temperature were made at each site during the year.

08256000 ACEQUIA MADRE AT COSTILLA, NM.--Lat 36°58'03", long 105°30'57", Taos County, Hydrologic Unit 13020101, on right bank 135 ft downstream from new diversion dam, and 1.2 mi southeast of the intersection of State Highways 522 and 196 at Costilla.

PERIOD OF RECORD.--May 1944 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Acequia diverts from right bank of Costilla Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50 ft³/s, June 25, 1944, July 31, 1945; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 27 ft³/s, Sept. 10; minimum daily, 0.24 ft³/s, many days.

08258000 CERRO CANAL AT COSTILLA, NM.--Lat 36°57'56", long 105°31'07", Taos County, Hydrologic Unit 13020101, on right bank 1,350 ft downstream from new diversion dam, and 1.2 mi southeast of the intersection of State Highways 522 and 196 at Costilla.

PERIOD OF RECORD.--April 1944 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Canal diverts from left bank of Costilla Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 164 ft³/s, June 9, 1985; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 127 ft³/s, June 6; minimum daily, 3.4 ft³/s, Oct. 2.

08258600 CERRO CANAL BELOW ASSOCIATION DITCH AT COSTILLA, NM.--Lat 36°57'41", long 105°32'05", Taos County, Hydrologic Unit 13020101, on left bank 220 ft downstream from Association ditch, and 1.2 mi south of the intersection of State Highways 522 and 196 at Costilla.

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 7,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 85 ft³/s, July 8, 1987; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 77 ft³/s, July 25; 0.77 ft³/s, Oct. 17.

08259600 CERRO CANAL AT STATE LINE NEAR JAROSO, CO.--Lat 36°59'41", long 105°34'36", Taos County, Hydrologic Unit 13020101, on right bank 780 ft downstream from head of N. Mex. branch Cerro Canal, and 2.7 mi east of Jaroso.

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 7,680 ft above National Geodetic Vertical Datum of 1929, from topographic map. Flow measured is delivered to Colorado.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 72 ft³/s, July 10, 1986; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 60 ft³/s, July 25; minimum daily, 0.07 ft³/s, Oct. 3.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

	08256000 Acequia Madre	08258000 Cerro Canal at Costilla	08258600 Cerro Canal below Association ditch	08259600 Cerro Canal at State line nr Jaroso
October	57	372	91	33
November	-	-	-	-
December	-	-	-	-
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	135	2470	1860	1620
May	1010	4450	1970	1680
June	1070	5470	2200	1900
July	974	3530	2520	2080
August	984	3300	1430	1110
September	847	2020	1420	1040

RIO GRANDE BASIN

08263500 RIO GRANDE NEAR CERRO, NM

LOCATION.--Lat 36°44'24", long 105°40'59", in NW¼NE¼ sec.20, T.29 N., R.12 E., Taos County, Hydrologic Unit 13020101, on left bank 4 mi southwest of Cerro, 5.5 mi northwest of Questa, 7.4 mi upstream from Red River, and at mile 1,693.1.

DRAINAGE AREA.--8,440 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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

REVISED RECORDS.--WDR NM-80-1: 1978(M).

GAGE.--Water-stage recorder. Elevation of gage is 7,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

AVERAGE DISCHARGE.--43 years, 458 ft³/s, 331,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s, June 22, 1949, gage height, 15.78 ft; minimum, about 40 ft³/s, Sept. 10, 11, 1977.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 9	1630	1,880	8.22	May 23	1715	*2,200	*8.79
May 12	1815	1,630	7.72				

Minimum discharge, 104 ft³/s, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	234	259	304	329	485	573	540	953	665	289	153
2	157	293	287	323	328	500	565	518	1010	727	298	153
3	247	336	212	326	323	520	616	483	1180	623	337	152
4	232	371	199	312	323	532	704	563	1360	569	332	152
5	283	404	289	325	328	596	812	664	1230	464	324	151
6	333	420	336	335	328	572	934	677	1030	334	477	150
7	197	443	322	340	331	587	1070	682	929	308	560	149
8	141	397	348	346	330	569	1410	769	1100	343	622	149
9	119	386	376	352	341	559	1730	771	1240	370	626	215
10	186	365	412	358	346	530	1770	858	1300	391	503	227
11	260	453	447	355	351	522	1780	1280	1400	367	424	260
12	299	552	486	352	356	531	1730	1510	1430	376	339	368
13	344	607	547	341	362	546	1650	1550	1120	399	292	368
14	364	618	577	349	369	547	1460	1320	834	345	296	426
15	357	605	e470	352	378	557	1250	1170	880	306	280	597
16	319	538	e425	351	393	554	1110	1210	963	325	292	619
17	305	442	e370	354	421	621	913	1380	909	307	309	512
18	294	424	e320	347	432	573	816	1130	767	252	315	401
19	293	415	e276	343	442	557	920	1030	681	221	266	337
20	300	414	e270	339	448	537	1040	1230	618	223	236	336
21	322	411	e260	348	456	564	1030	1660	588	250	232	340
22	328	368	e245	348	466	592	1060	1780	554	280	238	352
23	338	318	e260	349	475	577	1150	2100	489	306	205	309
24	453	291	e250	341	467	556	1060	1890	403	416	189	275
25	457	291	e250	332	462	546	921	1570	363	495	182	272
26	339	319	260	326	412	541	838	1330	387	613	190	253
27	270	374	248	325	498	594	942	1240	492	604	185	223
28	239	378	249	319	489	648	882	1150	538	562	201	211
29	224	341	270	321	---	618	715	1080	496	436	186	185
30	225	273	290	324	---	589	600	1070	538	346	156	169
31	214	---	296	329	---	581	---	1020	---	304	152	---
TOTAL	8558	12081	10106	10466	10984	17401	32051	35225	25782	12527	9533	8464
MEAN	276	403	326	338	392	561	1068	1136	859	404	308	282
MAX	457	618	577	358	498	648	1780	2100	1430	727	626	619
MIN	119	234	199	304	323	485	565	483	363	221	152	149
AC-FT	16970	23960	20050	20760	21790	34510	63570	69870	51140	24850	18910	16790

CAL YR 1990 TOTAL 108559 MEAN 297 MAX 1750 MIN 73 AC-FT 215300
WTR YR 1991 TOTAL 193178 MEAN 529 MAX 2100 MIN 119 AC-FT 383200

e Estimated

RIO GRANDE BASIN

08265000 RED RIVER NEAR QUESTA, NM

LOCATION.--Lat 36°42'12", long 105°34'04", in NE¼SE¼ sec.32, T.29 N., R.13 E. (projected), Taos County, Hydrologic Unit 13020101, in Carson National Forest, on left bank 1.3 mi upstream from Cabresto Creek, 1.5 mi east of Questa, and at mile 9.0.

DRAINAGE AREA.--113 mi².

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

REVISED RECORDS.--WSP 808: 1935. WSP 1392: 1913, 1932, 1941, 1947-48. WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Wood or concrete control since Mar. 20, 1936. Datum of gage is 7,451.92 ft above National Geodetic Vertical Datum of 1929. See WSP 1923 for history of changes prior to Oct. 4, 1938.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of a few hundred acres upstream from station. Figures of discharge do not include flow in South ditch which diverts from left bank 1,500 ft upstream and bypasses gage for irrigation and stock water downstream. Since January 1966 surface and ground-water diversions by Molybdenum Corp. of America (Molycorp) refinery 5.5 mi upstream bypass gage in tailings pipelines on left bank and discharge into settling pond 3 mi downstream. Effluent from this pond enters Red River as surface water and is included in discharge at Red River below Fish Hatchery, near Questa (station 08266820). Several observations of water temperature were made during year.

AVERAGE DISCHARGE.--52 years (water years 1913-25, 1927-65), 55.9 ft³/s, 40,500 acre-ft/yr, prior to extensive upstream diversions by Molycorp; 26 years (water years 1966-91), 40.4 ft³/s, 29,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1929).--Maximum discharge, 886 ft³/s, May 25, 1942, from rating curve extended above 450 ft³/s; maximum gage height, 5.80 ft, June 8, 1979; minimum discharge, 0.60 ft³/s, Jan. 21, 1981, result of freezeup. The maximum discharge of May 25, 1942, may have been equalled or exceeded by the peak of June 15, 1921.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	1200	*509	*4.80	No other peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Mar. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	18	16	15	12	13	25	67	184	101	60	56
2	28	27	18	15	14	14	27	71	172	96	56	55
3	27	29	16	15	14	13	23	79	159	93	66	58
4	24	24	19	17	15	16	27	79	148	90	72	62
5	23	22	21	19	14	20	35	75	146	83	73	56
6	21	23	23	19	13	14	66	77	155	80	76	63
7	22	22	13	20	15	12	76	80	155	78	82	62
8	24	20	11	18	15	9.5	66	82	151	75	69	58
9	23	20	10	18	13	13	61	98	152	72	72	58
10	23	21	8.5	19	12	14	65	119	152	69	77	87
11	21	22	5.4	17	12	14	64	145	157	66	72	73
12	20	23	8.3	13	14	14	58	162	155	64	76	91
13	20	21	15	21	13	15	50	159	155	62	79	87
14	21	19	14	18	14	16	49	163	165	61	75	80
15	20	19	8.6	16	13	15	49	164	162	61	69	76
16	19	18	16	16	14	18	56	159	157	63	66	73
17	15	19	18	17	15	19	58	145	151	62	65	70
18	15	19	13	17	14	19	65	152	148	61	83	67
19	16	19	10	17	13	19	85	168	146	62	74	64
20	21	19	14	19	11	14	91	243	154	58	66	62
21	17	15	7.2	17	13	15	103	387	147	61	62	58
22	16	14	6.5	14	13	14	103	469	142	85	58	56
23	19	16	5.3	11	13	15	101	391	136	84	58	54
24	19	14	4.9	12	12	15	98	304	128	76	57	52
25	19	13	6.1	15	13	17	101	249	121	74	69	50
26	19	15	7.7	15	12	20	101	231	115	72	69	49
27	20	13	9.8	15	14	16	92	221	111	64	68	48
28	21	7.8	12	15	14	17	87	216	107	62	65	48
29	21	7.5	15	14	---	15	79	208	107	62	68	47
30	19	9.4	15	11	---	19	76	200	109	59	60	47
31	16	---	14	10	---	22	---	186	---	60	57	---
TOTAL	637	548.7	381.3	495	374	486.5	2037	5549	4347	2216	2119	1867
MEAN	20.5	18.3	12.3	16.0	13.4	15.7	67.9	179	145	71.5	68.4	62.2
MAX	28	29	23	21	15	22	103	469	184	101	83	91
MIN	15	7.5	4.9	10	11	9.5	23	67	107	58	56	47
AC-FT	1260	1090	756	982	742	965	4040	11010	8620	4400	4200	3700

CAL YR 1990 TOTAL 12095.8 MEAN 33.1 MAX 153 MIN 4.9 AC-FT 23990
WTR YR 1991 TOTAL 21057.5 MEAN 57.7 MAX 469 MIN 4.9 AC-FT 41770

RIO GRANDE BASIN

08266000 CABRESTO CREEK NEAR QUESTA, NM

LOCATION.--Lat 36°43'50", long 105°33'12", in SE¼ sec.21, T.29 N., R.13 E., Taos County, Hydrologic Unit 13020101, in Carson National Forest, on right bank 900 ft downstream from Llano ditch heading, 2.6 mi downstream from Lake Fork, 3 mi northeast of Questa, and at mile 3.5.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--September 1943 to current year.

REVISED RECORDS.--WSP 1712: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,845 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Llano ditch (station 08265500), the only diversion upstream from station, diverts from right bank 900 ft upstream from gage for irrigation of about 800 acres downstream. See tabulation below for monthly diversion of Llano ditch (records of daily discharge available in District files). Flow regulated by Cabresto Reservoir (capacity, 732 acre-ft, after reconstruction in 1928) on Lake Fork 1 mi upstream from mouth. Present capacity of Cabresto Reservoir is 1,100 acre-ft after further rehabilitation between 1959 and 1961. Several observations of water temperature were made during year.

AVERAGE DISCHARGE.--48 years, 10.5 ft³/s, 7,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204 ft³/s, June 2, 1983, gage height, 4.82 ft; minimum, 0.44 ft³/s, Dec. 2, 1950, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 25, 1942, may have exceeded the maximum of record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121 ft³/s, May 21, gage height, 3.95 ft; minimum, 2.0 ft³/s, Oct. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.1	8.3	e6.0	e7.0	7.1	7.7	28	52	11	11	9.9
2	10	9.7	8.6	e7.5	e7.8	6.8	8.7	31	48	11	11	9.8
3	10	10	7.2	e7.5	7.7	6.7	8.7	34	41	11	11	9.8
4	9.8	9.4	7.8	e8.0	7.7	e7.0	9.5	33	34	11	11	11
5	9.6	9.3	8.5	e8.0	7.6	e10	12	32	30	12	11	10
6	7.8	9.6	8.6	e8.5	7.6	e7.0	16	23	31	11	14	10
7	6.3	9.2	8.2	e8.5	7.5	e6.0	21	19	31	11	15	10
8	10	8.8	8.4	e8.0	7.4	e4.5	20	20	28	11	11	9.7
9	9.8	8.9	8.4	e8.0	7.0	e6.5	18	22	26	11	11	9.7
10	9.8	9.1	8.3	e9.0	6.9	e7.0	19	26	25	11	12	12
11	9.6	9.2	8.2	e9.0	7.0	e7.0	19	31	26	11	12	11
12	9.3	9.4	8.1	e6.0	7.1	e7.0	19	32	25	11	13	13
13	9.1	9.2	8.4	e8.0	7.3	6.6	17	32	23	11	12	13
14	9.1	9.2	8.4	e9.0	7.3	6.5	16	33	28	11	12	11
15	8.9	9.3	7.5	e8.0	7.3	6.7	16	34	34	11	11	11
16	8.8	9.3	8.8	e8.0	7.2	6.5	18	33	25	11	11	11
17	8.7	9.4	8.5	e8.5	7.2	6.5	20	31	20	11	11	10
18	8.6	9.3	7.8	e9.0	7.2	6.4	23	31	20	11	12	10
19	8.6	9.3	7.6	e9.0	7.1	6.7	26	32	28	11	12	10
20	9.8	9.4	8.3	e9.0	6.8	6.7	24	41	34	11	11	10
21	8.8	9.2	6.4	e8.5	6.9	6.8	26	78	26	11	11	10
22	9.2	8.6	e5.5	e8.0	7.1	6.6	27	113	12	11	11	10
23	9.9	8.5	e4.5	7.5	7.1	7.0	32	108	9.4	11	11	10
24	9.8	8.8	e3.9	e7.5	7.1	6.9	35	100	6.5	11	11	9.9
25	9.7	9.0	e3.9	e9.0	6.8	7.2	37	86	10	11	11	9.9
26	9.9	9.5	e3.9	e9.0	6.7	7.5	36	77	13	11	11	9.8
27	9.3	8.8	e4.0	e9.0	6.9	6.8	33	73	12	10	12	9.8
28	8.4	7.9	e5.0	e9.0	7.1	7.0	32	71	12	10	11	9.9
29	8.3	7.3	e7.0	e8.0	---	6.9	30	60	11	11	11	10
30	8.1	7.8	e7.0	e7.5	---	7.2	29	52	11	11	11	10
31	8.0	---	e5.9	e6.0	---	7.2	---	52	---	11	10	---
TOTAL	283.0	270.5	220.9	251.5	201.4	212.3	655.6	1468	731.9	340	356	311.2
MEAN	9.13	9.02	7.13	8.11	7.19	6.85	21.9	47.4	24.4	11.0	11.5	10.4
MAX	10	10	8.8	9.0	7.8	10	37	113	52	12	15	13
MIN	6.3	7.3	3.9	6.0	6.7	4.5	7.7	19	6.5	10	10	9.7
AC-FT	561	537	438	499	399	421	1300	2910	1450	674	706	617
(†)	0	0	0	0	0	0	39	706	639	566	232	134

CAL YR 1990 TOTAL 3630.5 MEAN 9.95 MAX 27 MIN 3.6 AC-FT 7200 (†) 2161
WTR YR 1991 TOTAL 5302.3 MEAN 14.5 MAX 113 MIN 3.9 AC-FT 10520 (†) 2316

(†) DIVERSION, IN ACRE-FEET, BY LLANO DITCH

e Estimated

RIO GRANDE BASIN

08266820 RED RIVER BELOW FISH HATCHERY, NEAR QUESTA, NM

LOCATION.--Lat 36°40'54", long 105°39'21", in NW¼NW¼ sec.10, T.28 N., R.12 E., Taos County, Hydrologic Unit 13020101, on right bank 0.3 mi downstream from State Fish Hatchery, 3.5 mi upstream from mouth, and 3.7 mi southwest of Questa.

DRAINAGE AREA.--185 mi².

PERIOD OF RECORD.--August 1969 to July 1978 (discharge measurements only), August 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 16, 1979, at site about 250 ft upstream at datum 5.55 ft higher.

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

AVERAGE DISCHARGE.--13 years (water years 1979-91), 84.4 ft³/s, 61,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s, June 8, 1979, gage height, 5.30 ft, site and datum then in use; minimum, 21 ft³/s, Dec. 14, 1986, from construction work on hatchery ponds.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 165 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0730	*650	*4.45	June 20	0845	257	3.37

Minimum discharge, 26 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	38	31	35	e42	42	41	87	231	125	80	66
2	54	49	36	36	e44	42	43	83	231	116	78	64
3	53	55	31	e34	e44	41	41	91	209	112	81	62
4	50	49	29	e34	e46	42	41	95	192	108	96	66
5	48	46	31	e36	e46	45	46	92	180	103	100	67
6	45	47	33	e38	e44	46	66	90	174	99	94	69
7	45	45	32	e40	e44	43	95	88	177	97	101	71
8	50	44	32	e40	e46	e38	86	83	e175	92	95	71
9	48	42	32	e40	e46	e38	79	95	e180	89	90	71
10	48	43	33	e38	e44	e40	85	117	e185	87	95	81
11	44	46	33	e36	e44	e42	85	141	e190	86	91	89
12	42	46	34	e36	e44	e41	81	154	e192	85	91	94
13	42	45	38	e40	e44	41	68	154	e194	82	91	110
14	43	42	38	e44	e46	42	66	158	e210	80	97	110
15	42	41	34	e42	48	40	64	156	e215	79	89	106
16	41	41	38	e38	48	40	70	154	e200	81	84	100
17	39	41	41	e38	48	e38	78	143	e191	83	80	96
18	37	41	39	e38	47	e38	90	144	e180	83	84	91
19	38	41	35	e40	46	e36	105	159	e190	90	88	88
20	43	40	38	e42	46	37	107	254	212	85	85	85
21	41	40	38	e40	45	37	118	470	188	83	79	84
22	39	38	32	e42	45	35	120	567	167	101	73	81
23	40	39	30	e44	45	35	122	515	159	111	70	79
24	39	40	30	e46	44	35	123	470	151	107	68	77
25	40	38	30	e42	43	36	126	423	140	101	67	75
26	39	38	32	e42	43	38	129	412	133	100	76	73
27	40	38	33	e42	43	33	112	378	133	91	79	72
28	42	33	33	e44	42	34	110	339	125	85	82	72
29	42	36	33	e46	---	33	105	297	119	82	77	71
30	42	29	35	e44	---	37	100	266	139	81	77	71
31	38	---	35	e42	---	38	---	243	---	78	74	---
TOTAL	1347	1251	1049	1239	1257	1203	2602	6918	5362	2882	2612	2412
MEAN	43.5	41.7	33.8	40.0	44.9	38.8	86.7	223	179	93.0	84.3	80.4
MAX	54	55	41	46	48	46	129	567	231	125	101	110
MIN	37	29	29	34	42	33	41	83	119	78	67	62
AC-FT	2670	2480	2080	2460	2490	2390	5160	13720	10640	5720	5180	4780

CAL YR 1990 TOTAL 21661 MEAN 59.3 MAX 156 MIN 29 AC-FT 42960
WTR YR 1991 TOTAL 30134 MEAN 82.6 MAX 567 MIN 29 AC-FT 59770

e Estimated

RIO GRANDE BASIN

08267500 RIO HONDO NEAR VALDEZ, NM

LOCATION.--Lat 36°32'30", long 105°33'21", Taos County, Hydrologic Unit 13020101, in Carson National Forest, on right bank 500 ft upstream from first diversion, 1.6 mi east of Valdez, 3.8 mi downstream from South Fork, and at mile 9.2.

DRAINAGE AREA.--36.2 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1342: 1935. WSP 1712: Drainage area. WSP 1732: 1942(M).

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1938. Elevation of gage is 7,650 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 28, 1938, at datum 1.92 ft lower.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. No diversions upstream from station.

AVERAGE DISCHARGE.--57 years, 34.9 ft³/s, 25,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 541 ft³/s, May 13, 1941; maximum gage height, 4.81 ft, Jan. 5, 1970 (ice jam); minimum discharge, about 1 ft³/s, Jan. 27, 1942, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 27	1045	ice jam	*4.25	May 21	2230	*439	4.06
May 15	0100	116	2.70				

Minimum discharge, 8.0 ft³/s, Mar. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	20	15	e12	e16	15	18	39	158	79	32	27
2	29	27	15	e12	e15	15	21	40	150	76	32	27
3	27	29	e12	e12	e15	15	21	46	141	73	38	27
4	25	24	e12	e12	e16	15	24	48	129	69	42	27
5	24	22	e12	e14	e16	16	34	46	124	65	41	28
6	23	21	15	e14	e15	15	51	47	129	62	38	31
7	23	20	e20	e15	e16	14	62	48	123	63	38	28
8	24	19	14	e16	e16	18	57	52	118	58	35	27
9	23	18	13	e16	16	18	49	65	121	53	37	27
10	23	18	13	e15	16	15	48	80	118	50	36	33
11	23	19	13	e14	17	15	47	95	120	48	38	29
12	23	19	13	e14	17	15	43	106	121	46	41	39
13	22	19	13	e16	17	15	36	102	118	43	39	39
14	22	19	13	e16	17	15	31	105	123	42	38	35
15	21	19	e14	e15	17	15	30	113	120	42	37	34
16	21	18	13	e15	17	16	32	98	120	41	36	33
17	21	18	12	e15	17	15	38	90	123	39	35	32
18	20	18	13	e15	16	16	47	92	121	40	45	32
19	20	17	e12	e16	16	17	53	107	117	38	39	32
20	23	18	e14	e17	19	17	55	143	117	36	38	32
21	20	17	14	e16	15	17	63	286	118	39	37	31
22	21	16	e12	e16	15	16	66	326	116	49	36	30
23	22	15	e10	e17	15	15	63	276	113	43	35	29
24	21	16	e10	e18	16	16	59	251	111	40	34	28
25	21	16	e12	e17	16	17	58	206	106	41	33	27
26	21	16	e12	e17	15	18	56	186	100	40	32	27
27	20	15	e12	e17	15	17	52	183	95	37	32	27
28	20	18	e12	e18	15	17	47	183	89	35	31	26
29	20	34	e12	e18	---	17	43	181	87	35	30	26
30	19	23	e12	e16	---	16	40	169	84	34	29	26
31	19	---	e12	e16	---	16	---	163	---	34	28	---
TOTAL	684	588	401	477	449	494	1344	3972	3530	1490	1112	896
MEAN	22.1	19.6	12.9	15.4	16.0	15.9	44.8	128	118	48.1	35.9	29.9
MAX	29	34	20	18	19	18	66	326	158	79	45	39
MIN	19	15	10	12	15	14	18	39	84	34	28	26
AC-FT	1360	1170	795	946	891	980	2670	7880	7000	2960	2210	1780

CAL YR 1990 TOTAL 11534.3 MEAN 31.6 MAX 138 MIN 5.0 AC-FT 22880
WTR YR 1991 TOTAL 15437 MEAN 42.3 MAX 326 MIN 10 AC-FT 30620

e Estimated

RIO GRANDE BASIN

08267500 RIO HONDO NEAR VALDEZ, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 07...	0900	20	148	8.2	-1.0	1.5	12.0	<10	67	12	23
JAN 30...	1500	E16	229	8.1	2.0	0.0	11.6	<10	--	--	--
MAR 27...	0830	16	237	7.5	5.0	0.0	11.3	14	70	12	24
MAY 07...	1700	48	110	7.5	10.0	7.0	9.0	17	55	9	19
JUL 10...	1700	49	104	7.8	20.0	12.0	10.4	<10	55	10	19
SEP 10...	1500	32	122	8.2	15.0	10.0	8.4	14	--	--	--
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	
NOV 07...	2.4	3.2	0.2	0.80	68	0	56	14	3.8	0.10	
MAR 27...	2.4	5.5	0.3	1.0	71	0	58	14	9.4	0.10	
MAY 07...	1.9	2.7	0.2	0.70	56	0	46	8.7	3.3	0.10	
JUL 10...	1.8	2.2	0.1	0.70	55	0	45	10	2.1	0.20	
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	
NOV 07...	7.4	90	--	--	<0.010	<0.010	0.200	0.400	<0.010	0.060	
JAN 30...	--	--	--	0.390	<0.010	0.010	0.400	0.400	0.030	0.030	
MAR 27...	7.5	100	0.320	--	0.010	<0.010	0.330	0.350	<0.010	<0.010	
MAY 07...	7.3	72	0.120	--	0.010	<0.010	0.130	0.130	<0.010	<0.010	
JUL 10...	6.6	70	--	--	<0.010	<0.010	0.130	0.120	<0.010	<0.010	
SEP 10...	--	--	--	--	<0.010	<0.010	0.150	0.140	<0.010	<0.010	
DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
NOV 07...	--	0.60	<0.010	0.080	1.3	10	29	0	0.0	100	
JAN 30...	0.17	0.60	<0.010	0.020	0.7	--	--	--	--	--	
MAR 27...	--	--	<0.010	<0.010	1.6	<10	33	3	0.13	100	
MAY 07...	--	--	0.010	<0.010	2.2	<10	31	17	2.2	71	
JUL 10...	--	--	<0.010	0.010	1.3	<10	17	9	1.2	83	
SEP 10...	--	--	0.010	<0.010	1.5	--	--	9	0.78	85	

RIO GRANDE BASIN

08268700 RIO GRANDE NEAR ARROYO HONDO, NM

LOCATION.--Lat 36°32'04", long 105°42'34", in NW¼ sec.31, T.27 N., R.12 E., Taos County, Hydrologic Unit 13020101, on right bank 350 ft downstream from Arroyo Hondo, 400 ft downstream from bridge on county road, 2.2 mi west of Arroyo Hondo, 11.6 mi northwest of Taos, and at mile 1,677.4.

DRAINAGE AREA.--8,760 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 15,000 acres in New Mexico. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 678 ft³/s, 491,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,550 ft³/s, May 19, 1987, gage height, 8.52 ft; minimum, 136 ft³/s, Aug. 2, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 9	----	2,000	Unknown	May 23	1945	*2,940	*5.00

Minimum discharge, 234 ft³/s, Sept. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	333	348	390	432	e600	689	718	1310	857	427	268
2	304	431	385	407	433	e610	690	696	1320	929	431	265
3	400	481	302	423	431	e600	703	656	1440	846	473	251
4	386	509	250	426	436	e600	804	716	1600	784	560	256
5	448	534	306	440	437	e620	895	820	1520	683	489	243
6	476	570	387	453	432	e640	1000	840	1340	541	579	248
7	413	587	354	456	447	e640	903	833	1210	490	717	266
8	367	541	365	457	442	e620	1030	905	1340	492	747	254
9	347	521	387	464	453	e620	1690	945	1470	522	775	303
10	360	494	399	481	455	e610	e1910	992	1550	541	677	395
11	405	551	432	473	464	e610	e2000	1460	1620	524	597	387
12	431	663	457	454	467	e620	e1900	1760	1660	511	533	551
13	447	728	510	458	482	e620	e1810	1860	1450	531	471	573
14	466	747	528	469	484	e620	e1680	1660	1170	498	476	577
15	467	738	472	466	e500	e660	e1200	1480	1160	431	434	735
16	441	683	421	463	e520	e680	1120	1510	1240	453	455	779
17	422	586	388	461	e560	e700	1020	1680	1200	441	454	699
18	403	558	410	459	538	e720	964	1490	1080	400	493	584
19	400	549	392	454	550	688	1060	1400	1000	363	453	513
20	427	554	397	459	550	653	1190	1700	960	350	400	495
21	433	553	434	464	e580	684	1240	2510	910	364	369	498
22	434	521	370	461	e580	690	1240	e2900	873	437	388	504
23	461	460	371	453	e590	697	1360	e3600	806	461	352	481
24	539	428	377	442	e600	675	1300	e3100	719	547	323	429
25	607	414	364	443	e580	666	1160	e2500	646	623	310	424
26	491	437	355	440	507	656	1050	e2100	641	737	341	410
27	402	494	345	439	561	681	1120	e1720	711	739	342	378
28	364	500	350	432	567	754	1090	e1590	774	701	357	368
29	342	466	378	433	---	738	919	1540	736	611	326	346
30	341	376	388	427	---	708	799	1480	771	506	302	325
31	326	---	385	430	---	686	---	1400	---	446	275	---
TOTAL	12826	16007	12007	13877	14078	20366	35536	48561	34227	17359	14326	12805
MEAN	414	534	387	448	503	657	1185	1566	1141	560	462	427
MAX	607	747	528	481	600	754	2000	3600	1660	929	775	779
MIN	276	333	250	390	431	600	689	656	641	350	275	243
AC-FT	25440	31750	23820	27530	27920	40400	70490	96320	67890	34430	28420	25400

CAL YR 1990 TOTAL 160170 MEAN 439 MAX 1950 MIN 215 AC-FT 317700
WTR YR 1991 TOTAL 251975 MEAN 690 MAX 3600 MIN 243 AC-FT 499800

e Estimated

RIO GRANDE BASIN

08269000 RIO PUEBLO DE TAOS NEAR TAOS, NM

LOCATION.--Lat 36°26'22", long 105°30'11", in SW¼SE¼ sec.36, T.26 N., R.13 E., Taos County, Hydrologic Unit 13020101, in Taos Pueblo Grant, on right bank 2.3 mi east of Taos Pueblo, 4.5 mi northeast of Taos, 5.8 mi upstream from Rio Lucero, and at mile 15.1.

DRAINAGE AREA.--66.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1911 to December 1916, January 1940 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1911-12, 1914. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 20, 1962. Elevation of gage is 7,380 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1923 for history of changes prior to Nov. 20, 1962.

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

AVERAGE DISCHARGE.--46 years (water years 1911-16, 1941-51, 1963-91), 29.6 ft³/s, 21,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s, May 26, 1979, gage height, 3.42 ft, from rating curve extended above 370 ft³/s; maximum gage height, 3.90 ft, from floodmark, May 14, 1941, site and datum then in use; minimum discharge, about 0.69 ft³/s, Feb. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 07	0200	92	1.46	May 22	0515	*658	*2.75
Apr. 22	0030	130	1.63				

Minimum discharge, 0.69 ft³/s, Feb. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	9.5	9.1	e5.5	e6.0	2.9	18	58	103	28	16	21
2	9.8	15	8.7	e5.0	e6.5	2.7	24	61	96	27	16	21
3	9.8	16	e8.0	e5.0	e5.5	2.9	24	70	89	26	29	21
4	8.9	12	8.2	e5.5	e5.5	2.4	29	75	81	25	36	20
5	8.6	11	e9.0	e5.5	e5.5	3.3	48	75	76	23	35	20
6	8.4	11	10	e5.0	e6.0	3.3	68	73	79	22	31	24
7	8.3	9.9	e9.0	e5.0	e6.0	3.2	82	79	76	21	28	22
8	9.5	9.1	e8.0	e5.0	e6.0	3.4	75	83	70	20	24	20
9	8.9	8.4	8.2	e5.0	e5.0	4.1	66	108	67	19	26	23
10	8.4	9.0	7.7	e5.0	e5.0	4.0	66	142	71	18	30	52
11	8.2	8.8	7.5	e5.5	e4.0	4.0	70	166	74	18	31	46
12	8.0	8.8	7.6	e5.5	e4.0	3.8	68	181	69	17	48	44
13	7.9	8.8	8.0	e6.0	e4.5	3.9	57	162	66	17	46	41
14	7.8	8.9	8.0	e5.5	e4.0	4.0	49	157	67	17	50	37
15	7.6	9.0	e8.0	e6.0	e3.5	3.9	46	158	63	16	46	33
16	7.6	8.9	8.1	e5.5	e3.5	3.7	50	141	59	16	42	30
17	7.5	8.9	8.1	e5.0	3.7	3.7	59	124	56	15	38	28
18	7.5	8.9	8.0	e5.0	3.6	3.9	76	124	53	17	41	27
19	7.5	8.6	e10	e4.5	3.5	4.6	87	139	50	19	44	25
20	11	8.7	10	e5.0	e3.0	4.7	90	200	50	16	39	24
21	9.7	8.8	e10	e5.0	e3.0	9.5	109	337	47	16	35	23
22	9.1	7.8	e9.0	e4.5	3.0	11	113	572	45	24	32	22
23	11	7.2	e5.0	e4.0	3.0	12	109	375	42	22	29	21
24	9.7	8.4	e3.5	e3.5	2.8	12	106	252	39	21	27	21
25	9.4	8.3	e4.0	e4.5	2.7	15	105	203	37	23	28	21
26	9.2	9.6	e5.0	e4.5	2.8	17	108	172	35	22	28	20
27	9.1	7.7	e5.5	e4.5	3.4	17	96	158	34	19	25	20
28	9.0	7.5	e5.5	e4.5	3.4	17	81	147	32	18	26	21
29	8.7	9.1	e5.0	e4.5	---	15	69	140	31	17	26	20
30	8.5	8.1	e5.0	e6.5	---	15	62	129	32	17	24	20
31	8.3	---	e6.0	e6.5	---	14	---	113	---	17	22	---
TOTAL	272.4	281.7	232.7	157.5	118.4	226.9	2110	4974	1789	613	998	788
MEAN	8.79	9.39	7.51	5.08	4.23	7.32	70.3	160	59.6	19.8	32.2	26.3
MAX	11	16	10	6.5	6.5	17	113	572	103	28	50	52
MIN	7.5	7.2	3.5	3.5	2.7	2.4	18	58	31	15	16	20
AC-FT	540	559	462	312	235	450	4190	9870	3550	1220	1980	1560

CAL YR 1990 TOTAL 7388.6 MEAN 20.2 MAX 104 MIN 2.7 AC-FT 14660
WTR YR 1991 TOTAL 12561.6 MEAN 34.4 MAX 572 MIN 2.4 AC-FT 24920

e Estimated

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 07...	1230	11	170	7.9	-1.0	1.0	10.0	110	12	33	5.8
JAN 31...	1200	6.5	289	7.4	5.0	0.0	9.9	120	5	37	6.6
MAR 26...	1300	17	200	7.4	10.0	1.0	9.9	100	17	32	5.6
MAY 07...	1330	79	120	7.0	14.0	7.0	9.9	68	18	21	3.7
JUL 10...	1100	18	172	8.3	20.0	12.0	9.9	92	11	29	4.7
AUG 13...	1300	44	179	7.8	24.0	12.0	9.2	82	14	26	4.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 07...	3.1	0.1	0.60	115	0	94	18	1.8	<0.10
JAN 31...	3.8	0.2	0.60	140	0	115	23	0.50	<0.10
MAR 26...	4.2	0.2	0.70	105	0	86	19	1.7	<0.10
MAY 07...	2.6	0.1	0.60	61	0	50	11	1.6	<0.10
JUL 10...	3.7	0.2	1.6	98	0	80	14	2.2	0.20
AUG 13...	2.6	0.1	0.70	83	0	68	11	0.20	<0.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 07...	7.2	126	<1	<1	10	<1	<1.0	<1	<1	2
JAN 31...	7.1	147	<1	<1	<10	<1	<1.0	<1	<1	1
MAR 26...	7.3	122	<1	<1	10	<1	<1.0	<1	<1	2
MAY 07...	7.9	79	<1	<1	40	<1	<1.0	3	1	3
JUL 10...	7.3	111	<1	<1	<10	<1	<1.0	<1	<1	4
AUG 13...	7.7	93	<1	<1	20	<1	<1.0	<1	<1	2

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL SOLVED (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 07...	3	20	1	1	<0.10	0.1	<1	<1	<10	10
JAN 31...	2	6	<1	<1	<0.10	0.1	<1	<1	<10	8
MAR 26...	1	50	1	1	0.20	--	<1	<1	20	14
MAY 07...	6	92	2	<1	0.20	<0.1	<1	<1	10	12
JUL 10...	4	17	<1	1	<0.10	<0.1	<1	<1	<10	16
AUG 13...	3	33	2	<1	<0.10	<0.1	<1	<1	<10	12

RIO GRANDE BASIN

08271000 RIO LUCERO NEAR ARROYO SECO, NM

LOCATION.--Lat 36°30'30", long 105°31'49", Taos County, Hydrologic Unit 13020101, in Tract C Taos Pueblo Grant, on right bank 200 ft upstream from diversion dam for Tenorio and Indian ditches, 2.2 mi east of Arroyo Seco, 7.4 mi northeast of Taos, and at mile 8.1.

DRAINAGE AREA.--16.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to December 1910 (discharge measurements and occasional gage heights), January 1911 to September 1915, March to December 1916 (fragmentary), October 1933 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Fragmentary records for October 1915 to February 1916, published in WSP 438, are unreliable and should not be used. Published as "near Taos," 1910-16.

REVISED RECORDS.--WSP 1512: 1912, 1916, 1949. WSP 1732: Drainage area. WDR NM-75-1: 1973. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Concrete control since Nov. 21, 1962. Datum of gage is 8,051.44 ft above National Geodetic Vertical Datum of 1929. See WSP 1923 for history of changes prior to Nov. 21, 1962.

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

AVERAGE DISCHARGE.--52 years (water years 1911-15, 1934-51, 1963-91), 21.9 ft³/s, 15,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 310 ft³/s, June 8, 1979, gage height, 2.33 ft; maximum gage height, 3.12 ft, May 13, 1941, datum then in use; minimum discharge, about 1.4 ft³/s, Nov. 2, 1951, result of freezeup.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0045	*266	*2.45	No other peak greater than base discharge.			
Minimum daily, 6.0 ft ³ /s, Jan. 1-5, 23.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	19	e6.0	e7.5	10	13	23	71	42	16	20
2	17	17	17	e6.0	8.1	10	16	24	65	39	16	19
3	16	17	20	e6.0	8.2	9.8	15	27	58	37	19	19
4	15	14	24	e6.0	8.4	9.8	18	28	56	35	22	19
5	15	13	32	e6.0	8.6	11	29	27	57	33	23	19
6	14	13	47	e7.0	8.9	10	43	27	59	31	23	20
7	14	12	34	e6.5	9.6	10	49	28	58	30	22	20
8	14	12	17	e6.5	10	11	41	29	58	28	21	20
9	13	12	19	e6.5	10	10	35	36	59	26	22	20
10	13	12	20	e7.0	10	9.4	35	45	59	25	21	24
11	13	13	20	e7.0	11	9.5	36	52	61	24	23	23
12	13	14	21	e7.0	11	9.5	31	58	64	23	25	27
13	12	15	19	e7.0	12	9.6	26	56	63	22	25	28
14	12	16	10	e7.0	11	9.8	23	58	66	22	25	28
15	11	17	9.7	e7.0	11	10	22	59	67	21	24	27
16	11	16	8.9	e7.5	11	9.6	24	55	63	21	23	26
17	11	16	8.8	e7.0	11	10	28	50	61	20	22	25
18	11	16	8.4	e7.0	11	10	33	54	62	21	25	24
19	11	15	8.4	e7.0	10	11	34	67	62	21	22	23
20	12	15	8.0	e7.0	9.9	11	36	100	64	20	22	22
21	11	13	7.4	e7.0	9.7	10	40	178	63	19	21	21
22	13	12	8.7	e6.5	9.8	9.4	40	203	60	22	20	21
23	13	14	e9.0	e6.0	10	9.1	38	169	57	21	20	21
24	13	13	e8.0	e6.5	10	9.2	37	120	55	20	19	20
25	13	12	e7.0	e7.0	10	10	37	101	53	20	19	20
26	13	12	e8.0	e7.0	10	11	36	100	51	19	19	20
27	12	9.8	e8.0	e7.0	10	11	34	101	49	18	20	19
28	12	12	e8.0	e7.0	10	11	30	98	47	18	20	20
29	12	19	e8.0	e7.0	---	11	27	93	46	17	20	19
30	11	21	e7.5	e7.0	---	11	25	85	44	17	20	19
31	11	---	e7.0	e7.0	---	11	---	76	---	16	19	---
TOTAL	396	424.8	457.8	209.0	277.7	314.7	931	2227	1758	748	658	653
MEAN	12.8	14.2	14.8	6.74	9.92	10.2	31.0	71.8	58.6	24.1	21.2	21.8
MAX	17	21	47	7.5	12	11	49	203	71	42	25	28
MIN	11	9.8	7.0	6.0	7.5	9.1	13	23	44	16	16	19
AC-FT	785	843	908	415	551	624	1850	4420	3490	1480	1310	1300

CAL YR 1990 TOTAL 7624.1 MEAN 20.9 MAX 80 MIN 3.0 AC-FT 15120
WTR YR 1991 TOTAL 9055.0 MEAN 24.8 MAX 203 MIN 6.0 AC-FT 17960

e Estimated

RIO GRANDE BASIN

08271000 RIO LUCERO NEAR ARROYO SECO, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 07...	1100	12	124	8.2	0.0	1.0	11.4	54	0	19	1.6
JAN 24...	1600	6.5	122	7.3	-5.0	0.0	12.0	60	2	21	1.8
MAR 26...	1500	11	70	7.1	10.0	0.0	11.3	47	0	16	1.6
MAY 07...	1430	32	56	6.8	12.0	7.0	9.2	35	6	12	1.2
JUL 10...	1300	25	103	7.6	20.0	12.0	10.0	54	4	19	1.5
SEP 10...	1230	24	112	7.9	15.0	10.0	9.2	51	2	18	1.4

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 07...	1.6	0.1	0.50	67	0	55	7.8	0.40	<0.10
JAN 24...	2.0	0.1	0.60	71	0	58	6.4	<0.10	0.20
MAR 26...	2.2	0.1	0.70	61	0	50	6.7	0.80	0.10
MAY 07...	1.9	0.1	0.70	35	0	29	4.5	0.90	<0.10
JUL 10...	1.2	0.1	0.50	61	0	50	6.3	0.30	0.20
SEP 10...	1.5	0.1	0.60	59	0	48	6.4	0.30	<0.10

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 07...	6.7	71	<1	<1	10	<1	1.0	<1	<1	2
JAN 24...	6.7	--	<1	<1	<10	<1	<1.0	<1	<1	4
MAR 26...	8.6	67	<1	<1	<10	<1	1.0	<1	<1	2
MAY 07...	7.2	46	<1	<1	<10	<1	<1.0	3	<1	2
JUL 10...	5.6	65	<1	<1	<10	<1	<1.0	<1	<1	2
SEP 10...	5.7	63	<1	<1	<10	<1	<1.0	1	<1	2

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 07...	6	62	<1	2	<0.10	0.3	<1	<1	<10	25
JAN 24...	1	29	<1	<1	0.50	0.1	<1	<1	<10	76
MAR 26...	5	270	1	2	<0.10	--	<1	<1	<10	12
MAY 07...	4	80	2	1	<0.10	<0.1	<1	<1	<10	29
JUL 10...	<1	6	<1	<1	<0.10	<0.1	<1	<1	70	<3
SEP 10...	2	20	1	<1	<0.10	<0.1	<1	<1	<10	9

RIO GRANDE BASIN

08275500 RIO GRANDE DEL RANCHO NEAR TALPA, NM

LOCATION.--Lat 36°17'52", long 105°34'55", Taos County, Hydrologic Unit 13020101, in Carson National Forest, Rancho del Rio Grande Grant, on right bank 1.4 mi downstream from Rito de la Olla (locally known as Pot Creek), 3.2 mi south of Talpa, 4.3 mi upstream from Rio Chiquito, and at mile 6.9.

DRAINAGE AREA.--83 mi², approximately.

PERIOD OF RECORD.--October 1952 to September 1982, October 1983 to September 1985 (annual maximum only), October 1985 to current year. Prior to October 1955, published as Rio Grande del Rancho near Taos and October 1955 to September 1960 as Rio Grande de Ranchos near Talpa.

GAGE.--Water-stage recorder. Elevation of gage is 7,240 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 11, 1952, nonrecording gage at site 1,035 ft downstream at lower datum. Nov. 11, 1952 to Nov. 5, 1968, water-stage recorder at site 1,000 ft downstream at lower datum. Nov. 6, 1968 to Aug. 28, 1980, water-stage recorder at present site on left bank at same datum.

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

AVERAGE DISCHARGE.--36 years (water years 1953-1982, 1986-91) 20.2 ft³/s, 14,630 acre-feet/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft³/s May 22, 1991, gage height 4.16 ft; minimum discharge, 0.2 ft³/s Jan. 5, 1955, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0730	*644	*4.16	Aug. 4	1900	81	1.60

Minimum discharge, 3.1 ft³/s, Nov. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	13	6.2	e4.0	e4.0	8.2	25	50	93	37	22	13
2	8.3	21	5.8	e4.0	e4.0	7.3	30	52	85	34	21	13
3	8.1	23	4.8	e4.5	e4.5	8.0	30	59	77	32	32	13
4	7.5	20	5.2	e4.5	e4.5	9.1	33	64	70	31	46	13
5	6.1	17	6.3	e4.5	5.0	21	37	66	65	27	59	13
6	5.4	14	9.1	4.8	5.0	23	44	68	65	24	59	15
7	5.3	13	6.5	4.7	4.6	17	51	71	61	22	52	14
8	5.6	11	6.3	4.9	4.2	9.6	44	75	56	21	44	13
9	5.6	8.5	6.0	5.1	4.0	9.6	40	87	53	20	39	14
10	5.7	8.6	5.6	5.1	4.2	12	39	100	50	19	35	22
11	5.8	8.2	5.5	e5.0	4.6	13	39	115	51	18	32	18
12	5.7	7.3	5.1	4.5	4.9	13	37	130	50	18	29	18
13	6.0	5.9	5.6	5.4	5.0	12	33	133	49	17	32	20
14	6.3	5.9	6.0	5.0	5.2	14	29	133	48	16	33	19
15	5.0	5.9	5.6	6.2	5.5	12	28	135	48	15	28	18
16	4.8	5.8	5.9	4.9	5.3	11	28	132	45	15	25	18
17	5.1	5.8	5.7	5.0	5.8	11	29	125	40	14	23	18
18	5.5	5.8	5.4	4.9	5.5	10	33	122	37	14	23	17
19	5.7	5.8	4.3	5.1	5.2	14	36	126	36	18	22	17
20	15	5.8	e4.0	4.7	5.0	15	39	163	38	15	20	16
21	13	6.0	e4.0	4.5	6.6	16	46	349	33	15	19	15
22	11	5.8	e3.5	5.4	6.9	12	49	590	31	26	18	15
23	12	4.7	e3.5	e5.0	6.9	13	52	398	29	30	18	14
24	12	4.9	e3.5	e4.0	6.7	17	53	275	27	28	17	15
25	12	5.0	e3.5	e4.0	6.5	21	54	208	25	27	16	14
26	11	5.4	e3.5	e4.0	5.7	24	58	162	24	30	15	14
27	11	5.5	3.9	e4.5	5.8	23	54	141	23	28	15	14
28	11	4.6	3.9	e4.5	7.2	22	50	130	22	28	15	13
29	11	3.9	4.5	e4.5	---	21	46	121	22	28	17	13
30	11	5.0	5.2	e4.0	---	21	42	113	44	26	15	13
31	10	---	e4.0	e4.0	---	21	---	102	---	25	14	---
TOTAL	256.5	262.1	157.9	145.2	148.3	460.8	1208	4595	1397	718	855	462
MEAN	8.27	8.74	5.09	4.68	5.30	14.9	40.3	148	46.6	23.2	27.6	15.4
MAX	15	23	9.1	6.2	7.2	24	58	590	93	37	59	22
MIN	4.8	3.9	3.5	4.0	4.0	7.3	25	50	22	14	14	13
AC-FT	509	520	313	288	294	914	2400	9110	2770	1420	1700	916

CAL YR 1990 TOTAL 5131.0 MEAN 14.1 MAX 58 MIN 3.5 AC-FT 10180
WTR YR 1991 TOTAL 10665.8 MEAN 29.2 MAX 590 MIN 3.5 AC-FT 21160

e Estimated

RIO GRANDE BASIN

08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM

LOCATION.--Lat 36°22'39", long 105°40'05", Taos County, Hydrologic Unit 13020101, in Gijosa Grant, on left bank 1.9 mi southwest of Los Cordovas, 2.5 mi downstream from Rio Grande del Rancho, and at mile 5.1.

DRAINAGE AREA.--380 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1957 to current year.

REVISED RECORDS.--WSP 1732: 1957(M). WSP 1923: 1957(P), 1958. WDR NM-81-1: 1979(P).

GAGE.--Water-stage recorder. Elevation of gage is 6,650 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 4, 1984 at site 700 ft downstream at same datum.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station, of which about 1,700 acres are irrigated by water from Rio Hondo.

AVERAGE DISCHARGE.--34 years, 61.1 ft³/s, 44,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s, Aug. 24, 1957, gage height, 5.80 ft; maximum gage height, 8.93 ft, May 22, 1991; minimum, 1.9 ft³/s, July 31, Aug. 1, 1972.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	1445	*1,660	*8.93	Aug. 6	1530	268	6.81
July 22	2030	950	7.82	Sept. 9	1615	1,060	7.95
July 29	1530	252	6.79				

Minimum daily, 15.0 ft³/s, Dec. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	25	30	e34	e35	74	61	101	e400	59	33	37
2	25	63	28	e29	e40	73	71	91	e320	48	33	35
3	24	57	e28	e33	e34	57	70	93	e280	45	60	40
4	20	43	e28	34	e35	54	78	99	e250	41	102	45
5	18	38	e29	37	35	61	104	101	e226	37	120	38
6	18	36	31	36	35	58	152	92	e200	36	117	51
7	18	35	31	34	36	51	196	88	e206	32	106	46
8	22	35	31	36	35	44	193	90	e190	29	85	40
9	21	34	31	34	37	45	185	105	e180	26	73	107
10	22	33	31	34	37	46	186	145	e186	24	63	128
11	21	32	30	35	37	49	195	177	e196	24	e62	86
12	21	32	30	35	42	46	191	198	e180	25	e92	129
13	21	32	38	e37	46	45	168	198	e176	21	e90	103
14	20	32	38	32	51	47	147	192	e176	20	e96	73
15	19	32	31	33	53	46	133	195	e160	20	e88	62
16	19	32	36	e35	57	49	132	191	e156	19	e82	61
17	18	32	35	e32	68	47	138	174	e150	18	e76	60
18	18	32	33	e31	58	45	155	158	136	17	e80	58
19	18	32	35	e30	50	46	173	169	131	18	e86	58
20	27	32	34	e32	54	44	174	266	136	19	e78	57
21	25	32	34	e31	69	46	182	876	124	22	e68	49
22	23	31	e34	e30	66	43	186	1490	105	64	57	49
23	23	30	e15	e25	68	43	183	1300	84	61	56	48
24	23	31	e19	e22	65	44	181	1020	76	40	51	46
25	23	30	e25	e22	54	48	181	860	64	35	46	44
26	24	32	e30	e25	49	54	186	702	54	36	49	42
27	23	33	e35	e28	48	56	173	605	53	34	43	42
28	23	29	e34	e30	48	56	156	532	54	34	42	41
29	23	28	e18	e34	---	53	132	519	54	58	41	39
30	23	29	e30	e41	---	63	115	492	66	42	43	36
31	22	---	e37	e40	---	60	---	e420	---	32	40	---
TOTAL	667	1024	949	1001	1342	1593	4577	11739	4769	1036	2158	1750
MEAN	21.5	34.1	30.6	32.3	47.9	51.4	153	379	159	33.4	69.6	58.3
MAX	27	63	38	41	69	74	196	1490	400	64	120	129
MIN	18	25	15	22	34	43	61	88	53	17	33	35
AC-FT	1320	2030	1880	1990	2660	3160	9080	23280	9460	2050	4280	3470

CAL YR 1990 TOTAL 13640 MEAN 37.4 MAX 149 MIN 11 AC-FT 27050
WTR YR 1991 TOTAL 32605 MEAN 89.3 MAX 1490 MIN 15 AC-FT 64670

e Estimated

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 06...	1500	36	435	8.4	10.0	8.0	9.6	10	220	31	65
JAN 30...	1200	E30	74	8.7	1.5	0.0	10.2	14	--	--	--
MAR 26...	1130	54	410	8.4	12.0	6.0	9.6	19	190	21	57
MAY 08...	0845	94	246	7.5	10.0	5.0	10.2	19	130	31	41
JUL 11...	1100	26	466	8.2	24.0	18.0	8.0	15	230	20	69
SEP 11...	1000	69	346	8.1	16.0	13.5	8.5	20	--	--	--
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 06...	14	21	0.6	1.8	171	29	188	57	14	0.60	
MAR 26...	11	17	0.5	1.5	199	2	167	56	13	0.40	
MAY 08...	7.9	8.6	0.3	1.0	127	0	104	28	4.8	0.20	
JUL 11...	14	19	0.5	1.7	256	0	210	58	11	0.50	
DATE		SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 06...	15	304	0.490	0.490	0.010	0.010	0.500	0.500	0.020	0.030	
JAN 30...	--	--	0.580	0.580	0.020	0.020	0.600	0.600	0.080	0.080	
MAR 26...	12	269	0.068	--	0.010	<0.010	0.078	0.087	0.400	0.350	
MAY 08...	9.5	164	0.041	--	0.020	<0.010	0.061	0.130	0.070	0.100	
JUL 11...	16	317	0.180	0.190	0.020	0.010	0.200	0.200	0.110	0.110	
SEP 11...	--	--	0.065	0.083	0.010	0.010	0.075	0.093	0.050	0.060	
DATE		NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 06...	0.48	1.0	0.150	0.160	2.7	50	26	6	0.58	78	
JAN 30...	0.22	0.90	0.090	0.080	2.4	--	--	222	--	77	
MAR 26...	0.40	0.88	0.140	0.120	4.0	40	28	10	1.4	87	
MAY 08...	0.23	0.36	0.040	0.020	4.3	20	83	24	6.1	89	
JUL 11...	0.59	0.90	0.120	0.110	3.1	50	17	23	1.6	77	
SEP 11...	0.35	0.48	0.040	<0.010	4.4	--	--	50	9.3	76	

RIO GRANDE BASIN

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM
(Surveillance network station)

LOCATION.--Lat 36°19'12", long 105°45'14", in NW¼NE¼ sec.15, T.24 N., R.11 E., Taos County, Hydrologic Unit 13020101, on left bank 1.7 mi downstream from bridge on State Highway 567, 2.0 mi downstream from Rio Pueblo de Taos, 11.8 mi southwest of Taos, and at mile 1,657.7.

DRAINAGE AREA.--9,730 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1930 monthly discharge only, published in WSP 1312. Published as "at Taos Junction Bridge, near Taos" prior to 1934.

REVISED RECORDS.--WSP 788: 1934(M). WSP 828: Drainage area. WSP 1392: 1931-1932, 1935, 1937, 1945, 1950.

GAGE.--Water-stage recorder. Datum of gage is 6,050.3 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 14, 1934, at bridge 1.7 mi upstream at different datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 30,000 in New Mexico.

AVERAGE DISCHARGE.--66 years, 757 ft³/s, 548,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, June 7, 1948, gage height, 9.18 ft, and June 22, 1949, gage height, 9.23 ft; minimum, 155 ft³/s, Sept. 21, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1888, about 14,000 ft³/s June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 ft³/s occurred June 9, 1905, May 28, 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 9	2400	2,530	5.79	May 22	1230	*4,520	*6.94

Minimum discharge, 295 ft³/s, Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	388	430	458	495	703	791	869	1770	972	503	355
2	299	524	440	467	503	718	805	818	1730	1080	504	355
3	372	563	395	487	501	709	809	768	1810	1000	565	347
4	403	567	331	495	507	719	919	828	2020	900	724	371
5	411	579	361	504	506	786	1050	935	1930	800	688	368
6	475	606	440	517	503	790	1290	964	1700	655	704	370
7	446	626	426	519	519	765	1580	952	e1660	583	888	360
8	406	593	434	516	513	745	1900	1020	e1750	571	893	351
9	372	576	455	519	528	724	2300	1090	e1850	602	922	429
10	381	550	464	539	528	717	2430	1150	e1950	618	852	557
11	424	573	490	535	536	706	2430	1660	e2030	612	754	520
12	462	674	511	510	538	695	2400	2110	2100	591	679	701
13	471	734	563	518	577	716	2280	2270	1940	607	633	735
14	494	757	593	530	611	727	2080	2040	1620	595	616	681
15	499	751	554	522	618	715	1770	1770	1490	520	582	810
16	484	718	501	522	640	731	1610	1770	1590	529	573	885
17	463	638	468	516	683	772	1510	1940	1540	524	558	820
18	447	600	485	519	648	763	e1460	1750	1410	496	636	700
19	438	591	460	507	636	722	1490	1560	1280	449	600	616
20	472	592	466	524	640	695	1570	1850	1240	429	521	583
21	480	594	497	527	676	721	1630	3230	1170	447	484	581
22	471	580	447	524	678	727	1630	4390	1100	538	487	582
23	500	524	433	507	686	742	1750	4390	991	573	475	570
24	540	491	448	500	696	723	1710	3900	889	595	429	510
25	639	474	e460	507	657	717	1580	3240	772	699	403	495
26	552	484	e445	501	600	717	1510	2720	744	802	426	480
27	465	538	e420	500	658	738	1530	2470	781	838	416	452
28	424	558	416	495	684	822	1510	2270	890	794	456	434
29	402	524	439	500	---	824	1250	2130	855	742	410	415
30	397	453	458	491	---	814	997	2020	897	620	403	387
31	387	---	439	496	---	791	---	1910	---	533	371	---
TOTAL	13773	17420	14169	15772	16565	22954	47571	60784	43499	20314	18155	15820
MEAN	444	581	457	509	592	740	1586	1961	1450	655	586	527
MAX	639	757	593	539	696	824	2430	4390	2100	1080	922	885
MIN	297	388	331	458	495	695	791	768	744	429	371	347
AC-FT	27320	34550	28100	31280	32860	45530	94360	120600	86280	40290	36010	31380

CAL YR 1990 TOTAL 177287 MEAN 486 MAX 2080 MIN 233 AC-FT 351600
WTR YR 1991 TOTAL 306796 MEAN 841 MAX 4390 MIN 297 AC-FT 608500

e Estimated

RIO GRANDE BASIN

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
NOV 06...	1200	605	270	8.2	12.0	10.0	7.0	9.9	10	98	0
MAR 29...	1000	835	--	7.5	10.0	4.0	--	10.0	14	92	0
MAY 08...	1000	1040	192	7.4	19.0	12.0	14	8.6	15	73	6
SEP 11...	1300	514	263	8.6	22.0	18.0	20	7.5	15	110	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 06...	29	6.2	20	0.9	3.2	124	0	102	36	9.0
MAR 29...	28	5.4	20	0.9	3.3	115	0	94	39	7.3
MAY 08...	22	4.4	13	0.7	2.6	82	0	67	26	3.7
SEP 11...	32	6.7	18	0.8	2.7	88	31	124	40	6.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 06...	0.50	25	191	--	<0.010	<0.010	0.100	0.100	<0.010	<0.010	--
MAR 29...	0.40	25	186	0.054	0.020	<0.010	0.074	0.100	0.020	0.030	0.48
MAY 08...	0.20	21	134	0.089	0.010	<0.010	0.099	0.120	0.020	0.010	0.38
SEP 11...	0.60	21	203	0.250	0.010	<0.010	0.260	0.210	0.010	<0.010	0.39

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
NOV 06...	0.50	0.050	0.030	2.5	<0.010	1	2	40	<1	<1.0	2
MAR 29...	0.57	0.060	0.020	2.4	<0.010	--	--	40	--	--	--
MAY 08...	0.50	0.090	0.020	4.4	<0.010	--	--	30	--	--	--
SEP 11...	0.66	0.100	<0.010	2.9	<0.010	2	<1	40	<1	<1.0	2

RIO GRANDE BASIN

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
NOV 06...	<1	5	7	34	1	1	<0.10	0.1	6	<1	<1
MAR 29...	--	--	--	39	--	--	--	--	--	--	--
MAY 08...	--	--	--	84	--	--	--	--	4	--	--
SEP 11...	<1	4	6	18	5	<1	<0.10	<0.1	6	<1	<1

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT. MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT. MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOVERABLE FM BOT. MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOVERABLE FM BOT. MATERIAL (UG/G AS CR) (01029)	COBALT, RECOVERABLE FM BOT. MATERIAL (UG/G AS CO) (01038)	COPPER, RECOVERABLE FM BOT. MATERIAL (UG/G AS CU) (01043)
NOV 06...	10	9	<2.0	9.9	500	30	<1	7	<5	10
SEP 11...	20	4	--	--	--	--	--	--	--	--

DATE	IRON, RECOVERABLE FM BOT. MATERIAL (UG/G AS FE) (01170)	LEAD, RECOVERABLE FM BOT. MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOVERABLE FM BOT. MATERIAL (UG/G) (01053)	MERCURY RECOVERABLE FM BOT. MATERIAL (UG/G AS HG) (71921)	ZINC, RECOVERABLE FM BOT. MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, DISCHARGE, SUSPENDED (MG/L) (80154)	SEDIMENT, SIEVE DIAM. 0.75 % FINER (T/DAY) (80155)	SEDIMENT, SIEVE DIAM. 0.75 % FINER (T/DAY) (70331)	COLIFORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 06...	6200	20	390	0.03	40	6	9.8	100	160	K7
MAR 29...	--	--	--	--	--	10	23	95	180	K55
MAY 08...	--	--	--	--	--	47	132	91	K12	K45
SEP 11...	--	--	--	--	--	57	79	95	100	180

RIO GRANDE BASIN

08279000 EMBUDO CREEK AT DIXON, NM

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼SE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, Hydrologic Unit 13020101, on right bank 750 ft upstream from State Highway 68, 0.5 mi upstream from mouth, 0.5 mi east of Embudo Post Office, and 1.7 mi northwest of Dixon.

DRAINAGE AREA.--305 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to February 1926, October 1926 to September 1955, annual maximum, water years 1956-62, September 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 6-25, 1932, published in WSP 733, and maximum discharges for water years 1931-33, 1935, 1937-38, 1941, are unreliable and should not be used.

REVISED RECORDS.--WSP 1512: 1931-32, 1941, 1947(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 5,858.60 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1938, at site about 1 mi upstream at different datum. Nov. 30, 1938 to Aug. 1, 1941, at site about 0.9 mi upstream at datum about 59.9 ft higher. Aug. 2, 1941 to Sept. 1, 1971, at site 750 ft downstream at datum 9.10 ft lower. April 1956 to Sept. 21, 1962, crest-stage gage.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 6,600 acres, a small part of which are downstream from gage.

AVERAGE DISCHARGE.--60 years (water years 1924-25, 1927-55, 1963-91), 81.9 ft³/s, 59,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1941).--Maximum discharge, 4,200 ft³/s, Aug. 29, 1977, gage height, 7.10 ft, from rating curve extended above 1,600 ft³/s; maximum gage height, 7.6 ft, Aug. 4, 1967; minimum discharge, 0.06 ft³/s, June 26, 27, 1950.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0545	*2,650	*5.78	July 25	2245	1,830	5.07
July 23	2245	1,070	4.48				

Minimum discharge, 14 ft³/s, Dec. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	62	48	e34	e32	54	81	112	423	96	243	90
2	71	92	45	e35	e33	51	99	101	382	83	221	82
3	73	103	30	e35	e34	45	98	113	344	78	275	75
4	67	90	33	e35	e35	51	117	123	306	73	428	78
5	65	81	41	e36	e35	70	180	115	275	68	492	83
6	64	81	43	e37	e35	71	309	111	291	62	452	107
7	63	76	39	e41	e36	58	395	117	322	55	420	110
8	65	74	41	e39	e36	47	376	120	269	54	338	97
9	64	71	43	e39	e38	52	327	148	230	51	291	93
10	64	71	45	e36	e37	56	308	200	220	48	284	173
11	64	70	45	e34	e36	61	333	264	250	42	253	168
12	63	69	48	e34	e39	58	317	304	286	44	233	252
13	60	68	56	e35	e40	57	246	286	264	44	228	234
14	58	66	55	e37	e42	60	184	268	294	41	269	222
15	56	67	38	e34	46	57	143	278	289	35	217	190
16	55	66	51	e36	51	58	136	287	254	34	200	177
17	53	65	46	e37	52	53	145	264	232	33	199	151
18	54	64	39	e35	46	54	172	238	209	32	216	134
19	54	63	38	e33	43	60	208	234	188	32	198	129
20	75	62	44	e32	43	61	201	424	213	32	e170	124
21	71	62	40	e35	48	64	228	1120	179	42	e160	114
22	66	55	35	e36	50	55	243	2300	159	114	e140	104
23	66	51	42	e35	51	56	238	1440	136	423	e130	100
24	65	56	36	e32	52	62	228	984	114	371	118	93
25	64	54	e37	e34	48	68	214	763	99	443	107	89
26	62	59	e36	e35	43	77	227	640	85	414	110	85
27	58	58	e36	e36	45	75	201	596	75	286	100	82
28	58	45	e36	e37	47	76	175	590	69	256	110	80
29	58	36	e37	e37	---	71	149	567	67	263	100	73
30	56	42	e40	e37	---	72	132	514	122	225	98	71
31	56	---	e38	e35	---	69	---	463	---	245	94	---
TOTAL	1931	1979	1281	1103	1173	1879	6410	14084	6646	4119	6894	3660
MEAN	62.3	66.0	41.3	35.6	41.9	60.6	214	454	222	133	222	122
MAX	75	103	56	41	52	77	395	2300	423	443	492	252
MIN	53	36	30	32	32	45	81	101	67	32	94	71
AC-FT	3830	3930	2540	2190	2330	3730	12710	27940	13180	8170	13670	7260

CAL YR 1990 TOTAL 26367 MEAN 72.2 MAX 305 MIN 16 AC-FT 52300
WTR YR 1991 TOTAL 51159 MEAN 140 MAX 2300 MIN 30 AC-FT 101500

e Estimated

RIO GRANDE BASIN

08279000 EMBUDO CREEK AT DIXON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 06...	1000	81	291	8.4	4.0	2.0	10.6	150	51	6.0	6.1
JAN 30...	1000	E30	64	8.2	2.0	0.0	10.0	--	--	--	--
MAR 26...	1020	77	255	8.2	10.0	6.0	10.2	140	46	5.6	6.4
MAY 07...	1045	125	196	8.8	14.0	12.0	9.0	110	37	4.5	4.6
JUL 11...	1300	36	360	8.2	24.0	20.0	9.9	190	64	7.1	10
SEP 10...	1015	58	238	8.1	15.0	13.5	8.4	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 06...	0.2	1.0	139	22	5.8	0.20	12	187	20	30
MAR 26...	0.2	1.3	122	23	6.9	0.20	11	174	20	86
MAY 07...	0.2	1.0	104	13	3.5	0.10	9.1	135	10	58
JUL 11...	0.3	1.5	184	14	8.2	0.40	14	230	30	11

RIO GRANDE BASIN

08279500 RIO GRANDE AT EMBUDO, NM

LOCATION.--Lat 36°12'20", long 105°57'49", in SW¼SW¼ sec.23, T.23 N., R.9 E., Rio Arriba County, Hydrologic Unit 13020101, on right bank 0.2 mi downstream from bridge at Embudo, 2.8 mi downstream from Embudo Creek, and at mile 1.643.1.

DRAINAGE AREA.--10,400 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--January 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Oct. 4 to Nov. 30, 1896, published in WSP 358, are unreliable and should not be used.

REVISED RECORDS.--WSP 358: 1900-1902. WSP 828: Drainage area. WSP 878: 1915-16. WSP 1512: 1892-99, 1904, 1916, 1931-32, 1939, 1944-45, 1950. WSP 1712: 1903(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 5,789.14 ft above National Geodetic Vertical Datum of 1929. Jan. 1 to Feb. 28, 1889, nonrecording gage 1.2 mi upstream at different datum. March 1889 to December 1903, nonrecording gage 1,300 ft upstream at different datum. September 1912 to June 1914, water-stage recorder on downstream end of bridge pier at site 200 ft upstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 620,000 acres in Colorado and 40,000 acres in New Mexico. Several observations of water temperature were made during the year. National Weather Service gage-height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1890-1930), 1,238 ft³/s, 896,900 acre-ft/yr. 61 years (water years 1931-91), 825 ft³/s, 597,700 acre-ft/yr, subsequent to upstream development.

EXTREMES FOR PERIOD OF RECORD (1889-1903 AND SINCE 1911).--Maximum discharge, 16,200 ft³/s, June 19, 1903, gage height, about 15.9 ft; minimum daily, 130 ft³/s, June 30, 1902. A flood of about 14,000 ft³/s occurred between May 20 and June 10, 1905, from a comparison of records for Lobatos and Otowi Bridge. Another major flood occurred Sept. 29 or 30, 1904.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 10	0215	2,550	6.27	July 23	2330	2,310	5.97
May 22	1100	*5,730	*9.57	July 25	2200	3,930	7.80

Minimum discharge, 340 ft³/s, Dec. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	448	477	526	547	731	825	989	2040	962	735	437
2	382	597	476	524	551	747	863	912	1950	1040	700	423
3	414	661	440	529	553	730	865	885	1980	1000	788	404
4	483	641	370	544	559	737	967	932	2130	904	1050	428
5	461	636	367	556	560	804	1120	1020	2080	825	1170	435
6	511	662	456	563	562	829	1410	1050	1890	703	1070	486
7	518	680	470	568	570	775	1750	1050	1800	611	1200	467
8	471	658	466	559	571	755	2000	1110	1740	582	1140	443
9	440	629	486	565	581	747	2340	1210	1850	607	1120	465
10	434	611	502	584	586	747	2490	1310	1980	617	1070	728
11	474	609	525	576	591	739	2470	1770	2070	614	962	697
12	507	697	553	550	597	728	2450	2230	2210	590	887	884
13	515	763	600	561	621	743	2320	2410	2080	610	849	944
14	536	789	639	582	666	752	2150	2260	1830	608	886	873
15	541	789	595	566	669	748	1850	2020	1660	536	788	934
16	532	767	555	571	692	763	1680	2010	1720	527	750	1000
17	509	695	531	563	737	782	1530	2100	1660	533	712	948
18	495	645	522	568	712	790	1390	1980	1510	509	755	845
19	486	636	501	556	680	763	1480	1770	1340	479	804	756
20	539	633	500	575	675	750	1640	2120	1310	448	681	702
21	544	639	532	578	709	756	1770	3720	1220	452	628	686
22	529	624	489	575	722	761	1770	5500	1140	652	613	664
23	555	573	456	552	721	772	1870	5220	1050	969	616	655
24	570	546	470	548	739	765	1860	4480	949	965	572	593
25	670	525	478	559	703	765	1710	3660	837	1240	508	571
26	616	534	480	553	668	775	1580	3080	789	1210	523	553
27	532	576	463	554	676	785	1570	2760	791	1090	514	528
28	487	591	471	550	712	849	1530	2580	886	1010	556	503
29	463	559	487	546	---	855	1320	2440	868	972	503	487
30	452	513	488	540	---	833	1130	2310	935	859	498	457
31	447	---	485	540	---	818	---	2190	---	775	460	---
TOTAL	15472	18926	15330	17281	17930	23894	49700	69078	46295	23499	24108	18996
MEAN	499	631	495	557	640	771	1657	2228	1543	758	778	633
MAX	670	789	639	584	739	855	2490	5500	2210	1240	1200	1000
MIN	359	448	367	524	547	728	825	885	789	448	460	404
AC-FT	30690	37540	30410	34280	35560	47390	98580	137000	91830	46610	47820	37680

CAL YR 1990 TOTAL 204246 MEAN 560 MAX 2420 MIN 250 AC-FT 405100
WTR YR 1991 TOTAL 340509 MEAN 933 MAX 5500 MIN 359 AC-FT 675400

RIO GRANDE BASIN

08284100 RIO CHAMA NEAR LA PUENTE, NM

LOCATION.--Lat 36°39'45", long 106°37'57", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 0.7 mi downstream from Rito de Tierra Amarilla, 3.1 southwest of La Puente, 6.7 mi upstream from flow line of El Vado Reservoir, and at mile 91.4.

DRAINAGE AREA.--480 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 9, 1965. Elevation of gage is 7,083 ft above National Geodetic Vertical Datum of 1929, from river profile map.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,300 acres upstream from station (1962 determination). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 349 ft³/s, 252,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft³/s, May 28, 1979, gage height, 6.35 ft, from rating curve extended above 5,400 ft³/s; maximum gage height, 6.46 ft, May 14, 1984; minimum, 4.0 ft³/s, Sept. 19, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 9,000 ft³/s occurred Apr. 16, 1937, based on flow of Rio Chama at Los Ojos (Park View) with allowance for tributary inflow. A peak on May 21 or 22, 1926, may have exceeded 10,000 ft³/s.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 6	2245	2,330	4.65	May 11	2345	*6,000	*5.81
Apr. 21	2345	3,230	4.98				

Minimum discharge, 51 ft³/s, Sept. 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	185	e120	e76	e70	e102	429	885	1140	281	118	62
2	131	202	e110	e82	e70	90	563	1030	1080	219	169	60
3	161	207	e100	e86	e70	90	619	1320	1030	185	170	58
4	135	204	e86	e92	e70	119	823	1360	917	172	213	67
5	112	195	e86	e94	e72	147	1090	1230	854	165	252	75
6	101	195	e88	e90	e72	142	1500	1590	858	152	217	174
7	100	188	e94	e90	e74	132	1820	1830	840	136	229	229
8	206	164	e84	e90	e74	117	1630	2240	769	130	155	172
9	185	166	e84	e90	e76	118	1220	3170	759	138	131	114
10	140	173	e84	e90	e76	126	1290	3170	762	132	127	103
11	126	175	e84	e84	e80	130	1200	3890	862	114	127	104
12	113	174	e84	e84	e80	135	1030	3670	787	102	168	162
13	106	170	e84	e84	e80	147	777	3070	853	89	136	236
14	101	167	e80	e84	e80	165	666	3070	1090	70	140	162
15	96	166	e76	e80	e80	153	796	2730	1070	67	254	128
16	92	164	e76	e80	e84	149	1080	2320	868	65	206	109
17	87	161	e70	e80	e88	138	1460	2250	757	73	150	100
18	83	156	e70	e80	e84	145	1810	2440	670	73	127	94
19	84	152	e70	e76	e80	183	1950	2480	609	82	131	90
20	110	161	e70	e74	e80	199	2080	2460	612	73	111	86
21	110	147	e66	e72	e80	195	2760	3120	544	80	98	83
22	118	119	e66	e70	e80	170	2670	2670	484	97	90	80
23	133	124	e66	e66	e80	161	2430	2660	431	162	89	75
24	149	141	e66	e66	e80	180	2280	2200	399	138	88	71
25	159	139	e68	e66	e80	231	2450	1960	376	143	80	64
26	172	e130	e74	e66	e82	264	2010	1880	322	151	81	54
27	196	e120	e74	e66	e86	237	1440	1780	290	137	73	53
28	204	e110	e74	e68	e94	255	1200	1610	270	110	75	53
29	195	e115	e80	e70	---	257	1010	1480	274	95	73	60
30	190	e110	e70	e70	---	242	934	1340	338	101	66	56
31	185	---	e70	e70	---	295	---	1240	---	91	66	---
TOTAL	4209	4780	2474	2436	2202	5214	43017	68145	20915	3823	4210	3034
MEAN	136	159	79.8	78.6	78.6	168	1434	2198	697	123	136	101
MAX	206	207	120	94	94	295	2760	3890	1140	281	254	236
MIN	83	110	66	66	70	90	429	885	270	65	66	53
AC-FT	8350	9480	4910	4830	4370	10340	85320	135200	41480	7580	8350	6020
CAL YR 1990	TOTAL	74718	MEAN	205	MAX	1800	MIN	23	AC-FT	148200		
WTR YR 1991	TOTAL	164459	MEAN	451	MAX	3890	MIN	53	AC-FT	326200		

e Estimated

RIO GRANDE BASIN

08284100 RIO CHAMA NEAR LA PUENTE, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
NOV 14...	1230	167	160	8.8	16.0	5.0	--	11.6	--	--	--
NOV 30...	1045	E86	158	8.8	4.0	0.0	6	13.0	<10	75	0
JAN 28...	1245	E68	150	8.8	1.5	0.0	--	11.2	<10	--	--
MAR 29...	0945	208	280	8.7	5.0	3.0	--	10.8	110	120	40
MAY 31...	1230	1260	80	8.0	22.0	11.0	--	8.8	13	36	3
JUL 26...	1200	154	222	8.4	20.5	18.5	--	10.2	17	110	6
AUG 29...	1115	73	217	8.4	24.0	17.5	--	8.3	16	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 14...	--	--	--	--	--	77	0	63	--	--
NOV 30...	23	4.2	6.3	0.3	1.6	93	0	76	16	2.5
MAR 29...	37	7.9	11	0.4	2.3	100	2	86	65	3.4
MAY 31...	11	2.1	3.1	0.2	0.90	40	0	33	5.1	0.20
JUL 26...	32	6.1	8.6	0.4	2.0	106	7	99	21	2.4

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 30...	<0.10	21	116	120	--	--	--	--	--	--
JAN 28...	--	--	--	--	--	<0.010	<0.010	<0.100	<0.100	0.010
MAR 29...	0.10	16	--	194	--	0.020	<0.010	<0.050	<0.050	<0.010
MAY 31...	<0.10	16	--	58	0.045	0.020	0.010	<0.050	0.055	0.030
JUL 26...	0.10	19	--	151	--	0.010	<0.010	<0.050	<0.050	0.020
AUG 29...	--	--	--	--	--	<0.010	<0.010	<0.050	<0.050	0.010

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 14...	--	--	--	--	--	--	--	1	0.45	100
NOV 30...	--	--	--	--	3.1	<10	60	24	--	95
JAN 28...	0.020	--	0.030	0.030	2.1	--	--	1	--	100
MAR 29...	0.010	--	0.040	<0.010	5.0	20	180	3	1.7	100
MAY 31...	0.020	0.27	0.050	<0.010	4.3	10	87	39	133	76
JUL 26...	0.040	0.68	0.110	0.030	5.3	20	42	43	18	88
AUG 29...	0.010	0.49	0.070	0.020	3.2	--	--	31	6.1	82

RIO GRANDE BASIN

08284160 AZOTEA TUNNEL AT OUTLET, NEAR CHAMA, NM

LOCATION.--Lat 36°51'12", long 106°40'18", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on left bank at south portal, 0.2 mi upstream from Azotea Creek, and 6.2 mi southwest of Chama.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 7,519.87 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records represent regulated diversions from Rio Blanco, Little Navajo River, and Navajo River in San Juan River basin.

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

AVERAGE DISCHARGE.--21 years, 130 ft³/s, 94,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, May 17, 1978, gage height, 7.85 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,000 ft³/s, June 14; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	.23	.00	.00	.00	.00	48	166	658	247	43	.00
2	238	.26	.00	.00	.00	.00	102	210	632	247	28	.00
3	232	.30	.00	.00	.00	.00	132	250	513	201	1.0	.00
4	157	.30	.00	.00	.00	.00	160	258	442	176	1.0	.00
5	126	.30	.00	.00	.00	.00	273	230	516	157	30	4.5
6	111	.30	.00	.00	.00	.00	606	333	557	147	54	3.0
7	108	.30	.00	.00	.00	.00	782	395	561	133	1.0	.00
8	219	.24	.00	.00	.00	.00	641	558	690	139	10	.00
9	145	13	.00	.00	.00	.00	508	748	723	161	35	.00
10	133	24	.00	.00	.00	.00	553	810	665	122	32	.00
11	118	28	.00	.00	.00	.00	498	907	767	103	27	.00
12	96	29	.00	.00	.00	.00	369	847	751	88	24	.00
13	80	25	.00	.00	.00	.00	276	827	804	83	27	154
14	71	26	.00	.00	.00	.00	247	864	1000	66	32	112
15	63	23	.00	.00	.00	.00	313	803	891	56	20	76
16	56	23	.00	.00	.00	.00	433	643	791	26	8.6	52
17	42	21	.00	.00	.00	.00	584	593	765	28	9.1	36
18	17	20	.00	.00	.00	.00	668	738	735	48	4.0	29
19	20	18	.00	.00	.00	.00	646	872	688	57	53	22
20	49	18	.00	.00	.00	1.5	690	864	618	36	20	19
21	35	19	.00	.00	.00	2.5	782	961	595	42	17	15
22	38	11	.00	.00	.00	.50	716	956	537	107	6.6	12
23	54	9.6	.00	.00	.00	1.5	630	922	474	87	6.6	8.1
24	54	11	.00	.00	.00	3.0	556	795	437	84	13	.00
25	57	11	.00	.00	.00	4.0	568	776	408	65	5.5	.00
26	56	14	.00	.00	.00	9.1	514	863	360	60	5.5	.00
27	52	11	.00	.00	.00	14	413	947	308	37	1.5	.00
28	48	.31	.00	.00	.00	22	356	939	329	14	2.0	.00
29	30	.38	.00	.00	---	27	309	867	355	12	1.0	.00
30	.50	.40	.00	.00	---	22	250	825	401	15	1.5	.00
31	.50	---	.00	.00	---	19	---	734	---	29	.00	---
TOTAL	2697.00	357.92	0.00	0.00	0.00	126.10	13623	21501	17971	2873	519.90	542.60
MEAN	87.0	11.9	.000	.000	.000	4.07	454	694	599	92.7	16.8	18.1
MAX	238	29	.00	.00	.00	27	782	961	1000	247	54	154
MIN	.50	.23	.00	.00	.00	.00	48	166	308	12	.00	.00
AC-FT	5350	710	.00	.00	.00	250	27020	42650	35650	5700	1030	1080

CAL YR 1990 TOTAL 38404.32 MEAN 105 MAX 986 MIN .00 AC-FT 76170
WTR YR 1991 TOTAL 60211.52 MEAN 165 MAX 1000 MIN .00 AC-FT 119400

RIO GRANDE BASIN

08284200 WILLOW CREEK ABOVE HERON RESERVOIR, NEAR LOS OJOS, NM

LOCATION.--Lat 36°44'33", long 106°37'34", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 200 ft downstream from bridge, 0.2 mi downstream from Iron Spring Creek, 3.3 mi west of Los Ojos, and at mile 9.7.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Concrete control since June 6, 1963. Datum of gage is 7,196.29 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Apr. 1, 1971, at site 900 ft downstream at lower datum.

REMARKS.--Records represent inflow to Heron Reservoir and since Nov. 17, 1970, include San Juan River water imported through Azotea tunnel (station 08284160).

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

AVERAGE DISCHARGE.--8 years (water years 1963-70), 10.5 ft³/s, 7,610 acre-ft/yr, prior to completion of Azotea tunnel. 21 years (water years 1971-91), 143 ft³/s, 103,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s, Mar. 12, 1985, gage height, 6.65 ft; no flow at times most years prior to 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 992 ft³/s. June 14; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	1.7	.34	.50	1.0	7.6	150	199	660	251	62	2.0
2	235	1.7	.40	.50	1.0	8.1	354	242	638	263	61	1.5
3	256	1.7	.22	.50	1.0	8.6	477	281	525	219	13	1.5
4	178	1.7	.19	.50	1.0	9.6	482	298	443	191	9.6	2.0
5	136	2.0	.18	.50	1.0	28	525	254	509	167	23	8.1
6	117	2.0	.18	.50	1.0	51	784	339	547	156	83	13
7	108	2.0	.13	.50	1.0	31	926	386	538	140	10	16
8	220	2.0	.13	.50	1.0	39	782	511	672	140	3.5	8.6
9	158	23	.13	.50	1.0	28	578	735	712	178	37	22
10	141	23	.15	.50	1.0	39	616	772	645	152	38	3.5
11	124	23	.16	.50	2.5	37	573	880	769	129	30	2.5
12	100	23	.16	.50	2.5	54	434	826	741	109	27	131
13	82	22	.18	.50	3.0	84	336	794	788	103	20	324
14	72	23	.18	.50	3.0	94	295	836	992	85	45	81
15	64	22	.15	.50	3.5	75	352	794	889	71	23	35
16	57	21	.16	.50	4.0	63	446	637	784	32	15	53
17	49	20	.20	.50	4.5	44	572	561	749	31	10	36
18	17	19	.20	.50	4.0	54	693	703	728	51	6.6	24
19	16	18	.20	.50	3.5	99	671	852	681	68	46	18
20	102	18	.22	.50	4.0	126	679	805	594	41	23	13
21	60	19	.23	.50	4.0	111	797	929	594	46	18	10
22	50	13	.23	.50	4.0	66	733	931	536	98	8.1	14
23	63	7.6	.23	.50	6.1	55	644	908	455	97	6.1	10
24	59	8.6	.23	.50	7.1	88	553	789	418	101	12	5.5
25	59	9.2	.24	.50	8.1	138	573	753	414	79	7.1	1.0
26	57	11	.24	.50	7.1	73	527	830	379	70	5.5	.00
27	51	14	.25	1.0	7.6	130	434	920	326	57	3.5	.00
28	46	3.3	.25	1.0	7.6	137	378	917	330	20	2.0	.00
29	37	.73	.26	1.0	---	144	338	867	366	17	2.5	.00
30	4.0	.45	.26	1.0	---	131	298	817	400	19	3.5	.00
31	1.0	---	.26	1.0	---	138	---	745	---	21	3.0	---
TOTAL	2908.0	356.68	6.54	18.00	96.1	2190.9	16000	21111	17822	3202	657.0	836.20
MEAN	93.8	11.9	.21	.58	3.43	70.7	533	681	594	103	21.2	27.9
MAX	256	23	.40	1.0	8.1	144	926	931	992	263	83	324
MIN	1.0	.45	.13	.50	1.0	7.6	150	199	326	17	2.0	.00
AC-FT	5770	707	13	36	191	4350	31740	41870	35350	6350	1300	1660

CAL YR 1990	TOTAL 39686.53	MEAN 109	MAX 951	MIN .01	AC-FT 78720
WTR YR 1991	TOTAL 65204.42	MEAN 179	MAX 992	MIN .00	AC-FT 129300

RIO GRANDE BASIN

08284300 HORSE LAKE CREEK ABOVE HERON RESERVOIR, NEAR LOS OJOS, NM

LOCATION.--Lat 36°42'24", long 106°44'42", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on right bank 3.7 mi northwest of Heron Dam, 7.8 mi downstream from Horse Lake, and 9.9 mi west of Los Ojos.

DRAINAGE AREA.--45 mi², approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year. No winter records subsequent to 1973. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Concrete control since June 10, 1963. Datum of gage is 7,188.85 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to July 1, 1971, at site 1,100 ft upstream at higher datums.

REMARKS.--Diversions upstream from station for irrigation of meadows and for off-channel stock tanks.

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

AVERAGE DISCHARGE.--11 years (water years 1963-73), 1.10 ft³/s, 797 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s, July 30, 1968, gage height, 4.9 ft, site and datum then in use, from rating curve extended above 37 ft³/s on basis of slope-area measurements at gage heights 3.20 ft and 4.9 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 18 ft³/s, Mar. 31; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	.00	16	.57	.01	.00	.00	.00
2	.00	.00	.00	---	---	.00	15	.51	.01	.00	.00	.00
3	.00	.04	.00	---	---	.00	16	.36	.01	.00	.00	.00
4	.00	.36	.00	---	---	.00	12	.30	.01	.00	.00	.00
5	.00	.36	.00	---	---	.00	8.1	.26	.01	.00	.00	.00
6	.00	.06	.00	---	---	.00	8.7	.22	.01	.00	.00	.00
7	.00	.02	.00	---	---	.00	12	.22	.00	.00	.00	.00
8	.00	.00	.00	---	---	.00	9.6	.20	.00	.00	.00	.00
9	.00	.00	.00	---	---	.00	6.0	.18	.00	.00	.00	.00
10	.00	.01	.00	---	---	.00	5.4	.12	.00	.00	.00	.00
11	.00	.00	.00	---	---	.00	4.2	.10	.00	.00	.00	.00
12	.00	.00	.00	---	---	.00	3.4	.09	.01	.00	.00	.00
13	.00	.00	.00	---	---	.00	2.8	.08	.00	.00	.00	.00
14	.00	.00	.00	---	---	.00	2.4	.08	.02	.00	.00	.00
15	.00	.00	.00	---	---	.00	2.0	.07	1.9	.00	.00	.00
16	.00	.00	.00	---	---	.00	1.7	.09	.11	.00	.00	.00
17	.00	.00	.00	---	---	.00	1.5	.09	.02	.00	.00	.00
18	.00	.00	.00	---	---	.00	1.4	.06	.00	.00	.00	.00
19	.00	.00	.00	---	---	.00	1.2	.06	.00	.00	.00	.00
20	8.5	.00	.00	---	---	.00	1.0	.09	.00	.00	.00	.00
21	1.9	.00	.00	---	---	.00	.57	.20	.00	.00	.00	.00
22	1.0	.00	.00	---	---	.00	.28	.20	.00	.00	.00	.00
23	.05	.00	.00	---	---	.00	.57	.24	.00	.00	.00	.00
24	.00	.00	.00	---	---	.00	.47	.11	.00	.00	.00	.00
25	.00	.00	.00	---	---	.00	.76	.09	.00	.00	.00	.00
26	.00	.00	.00	---	---	.00	.84	.06	.00	.00	.00	.00
27	.00	.00	.00	---	---	.00	1.1	.04	.00	.00	.00	.00
28	.00	.00	.00	---	---	.00	.53	.03	.00	.00	.00	.00
29	.00	.00	.00	---	---	.00	.92	.02	.00	.00	.00	.00
30	.00	.00	.00	---	---	.00	.68	.01	.00	.00	.00	.00
31	.00	---	.00	---	---	18	---	.01	---	.00	.00	---
TOTAL	11.45	0.85	0.00	---	---	18.00	137.12	4.76	2.12	0.00	0.00	0.00
MEAN	.37	.028	.000	---	---	.58	4.57	.15	.071	.000	.000	.000
MAX	8.5	.36	.00	---	---	18	16	.57	1.9	.00	.00	.00
MIN	.00	.00	.00	---	---	.00	.28	.01	.00	.00	.00	.00
AC-FT	23	1.7	.00	---	---	36	272	9.4	4.2	.00	.00	.00

RIO GRANDE BASIN

08284510 HERON RESERVOIR NEAR LOS OJOS, NM

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, at Heron Dam on Willow Creek, 0.2 mi upstream from Rio Chama, 5.1 mi northeast of El Vado Dam, and 8.7 mi southwest of Los Ojos.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--October 1970 to current year. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Mar. 24, 1971, nonrecording gage.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 21, 1970. Total capacity 401,300 acre-ft at elevation 7,186.1 ft, low point on crest of uncontrolled spillway, including 1,340 acre-ft of dead storage at elevation 7,003.0 ft, invert of gate sill of outlet tunnel. Reservoir is used for storage of transmountain water from San Juan River basin and for recreation. Figures given herein represent total storage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 401,800 acre-ft, July 28, 1982, elevation, 7,186.19 ft; no storage prior to Oct. 21, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 401,570 acre-ft, Aug. 4, elevation, 7,186.14 ft; minimum, 313,840 acre-ft, Apr. 21, 2, elevation, 7,170.23 ft.

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

(Based on survey by U.S. Bureau of Reclamation in 1971)

7,170	312,600
7,180	366,200
7,190	424,700

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	377800	382000	381800	380450	375710	367970	344910	321010	363660	398030	401270	399680
2	378300	382200	381600	380390	375430	367740	344540	321370	364830	398500	401330	399560
3	378700	382300	381500	380340	375090	367460	344050	321370	365890	398800	401390	399450
4	379000	382300	381400	380680	374750	367300	343560	322260	366850	399090	401570	399450
5	379100	382300	381400	380680	374410	367240	342480	322620	367740	399450	401510	399450
6	379200	382200	381200	380620	374070	367010	341240	323240	368810	399680	401220	399740
7	379500	382400	381200	380680	373780	366680	340380	323980	369880	399860	400860	399680
8	379800	382300	381100	380510	373500	366400	339040	324970	371180	400040	400860	399620
9	379900	382200	381000	380450	373220	366170	337490	326480	372590	400330	400680	399560
10	380200	382200	381000	380450	372880	366010	335890	328010	373900	400510	400680	399560
11	380300	382300	380900	380390	372590	365730	334140	329800	376000	400620	400800	399560
12	380400	382300	380900	380340	372250	365500	332170	331330	377710	400680	400800	399800
13	380400	382300	381000	380280	371970	365390	329900	332970	379590	400740	400800	400330
14	380500	382300	380900	380220	371630	364660	327640	334670	381370	400800	401100	400450
15	380600	382300	380900	380220	371410	363270	325280	336260	383210	400860	401100	400510
16	380700	382400	381000	380110	371120	361990	323040	337550	384760	400800	401100	400510
17	380600	382400	381000	380050	370900	360650	320960	338510	386260	400740	401040	400510
18	380500	382400	380900	379940	370620	359370	319090	339900	387710	400860	400920	400510
19	380900	382300	380900	379590	370280	358100	317340	341620	388980	400800	400980	400510
20	381300	382300	381000	379310	370000	357000	315540	343560	390030	400680	400920	400450
21	381400	382300	377500	379130	369660	355840	313840	345670	391250	400510	400800	400450
22	381400	382200	377500	378790	369380	354460	313840	347680	392240	400620	400740	400450
23	381500	382200	380700	378510	369090	353140	314970	349480	393110	400800	400570	400390
24	381500	382200	380600	378160	368760	351990	315900	351060	393930	400860	400510	400270
25	381700	382200	380600	377940	368420	351120	317030	352590	394630	401040	400390	400210
26	381800	382300	380500	377590	368190	350350	318110	354300	395100	401100	400270	400210
27	381800	382200	380400	377250	367910	349210	318840	356060	395690	401100	400090	400150
28	381900	382100	380600	376970	367800	348330	319510	358040	396210	401100	399980	400040
29	381900	381900	380700	376680	---	347250	320130	359760	396980	401100	399920	399980
30	381900	381900	380600	376400	---	346210	320650	361210	397560	401040	399860	399980
31	381900	---	380400	376060	---	345350	---	362490	---	401040	399800	---
MAX	381900	382400	381800	380680	375710	367970	344910	362490	397560	401100	401570	400510
MIN	377800	381900	377500	376060	367800	345350	313840	321010	363660	398030	399800	399450
(†)	7182.76	7182.76	7182.50	7181.74	7180.28	7176.21	7171.55	7179.33	7185.46	7186.05	7184.84	7185.87
(††)	4200	----	-1500	-4340	-8260	-22450	-24700	41840	35070	3480	-1240	180
CAL YR 1990	MAX 382400	MIN 319500	(††) +13940									
WTR YR 1991	MAX 401570	MIN 313840	(††) +22280									

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET

RIO GRANDE BASIN

08284520 WILLOW CREEK BELOW HERON DAM, NM

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, in outlet conduits of Heron Dam, 0.2 mi upstream from Rio Chama, 5.1 mi northeast of El Vado Dam, and 8.7 mi southwest of Los Ojos.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--January 1971 to current year.

GAGE.--Totalizing flowmeters in each of two outlet conduits in Heron Dam.

REMARKS.--Flow regulated by Heron Reservoir (station 08284510). Outlet conduits are 14-in. and 120-in. in diameter.

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

AVERAGE DISCHARGE.--20 years, 118 ft³/s, 85,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,780 ft³/s, Dec. 18, 19, 1982; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,640 ft³/s, Apr. 16-18; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	20	20	164	162	736	.00	.00	.00	9.9	.00
2	.00	.00	20	20	163	163	739	.00	.00	.00	.00	.00
3	.00	.00	20	20	163	163	736	.00	.00	.00	.00	.00
4	.00	.00	19	20	163	162	800	.00	.00	.00	.00	.00
5	.00	.00	19	20	163	162	1190	.00	.00	9.0	155	.00
6	.00	.00	19	20	163	162	1470	.00	.00	20	244	.00
7	.00	.00	20	20	164	162	1470	.00	.00	20	93	.00
8	.00	.00	19	20	163	162	1480	.00	.00	8.3	.00	.00
9	.00	.00	19	20	163	162	1470	.00	.00	.00	.00	.00
10	.00	.00	19	20	163	162	1460	.00	.00	16	.00	.00
11	.00	.00	19	20	163	162	1450	.00	.00	30	.00	.00
12	.00	.00	19	20	163	162	1460	.00	.00	25	.00	.00
13	.00	.00	19	20	163	162	1440	.00	.00	17	.00	.00
14	.00	.00	20	20	163	489	1440	.00	.00	17	.00	.00
15	.00	.00	20	20	163	754	1550	.00	.00	17	.00	.00
16	.00	.00	20	20	163	753	1640	.00	.00	17	.00	.00
17	.00	.00	20	20	163	753	1640	.00	.00	21	.00	.00
18	.00	.00	20	75	163	751	1640	.00	.00	40	.00	.00
19	.00	.00	20	140	163	749	1630	.00	.00	53	.00	.00
20	.00	.00	20	140	163	748	1620	.00	.00	52	.00	.00
21	.00	.00	20	140	163	747	1620	.00	.00	52	.00	.00
22	.00	.00	20	141	163	745	726	.00	.00	28	24	.00
23	.00	.00	20	141	163	744	56	.00	.00	.00	40	.00
24	.00	.00	20	140	163	744	27	.00	.00	.00	40	.00
25	.00	.00	20	140	163	742	.00	.00	.00	.00	40	.00
26	.00	11	20	140	163	741	.00	.00	.00	.00	40	.00
27	.00	20	20	140	162	741	.00	.00	.00	.00	16	.00
28	.00	19	20	140	162	740	.00	26	.00	.00	.00	.00
29	.00	20	20	155	---	739	.00	52	.00	12	.00	.00
30	.00	20	20	164	---	738	.00	52	.00	22	.00	.00
31	.00	---	20	165	---	738	---	22	---	22	.00	---
TOTAL	0.00	90.00	611	2301	4564	15264	29490.00	152.00	0.00	498.30	701.90	0.00
MEAN	.000	3.00	19.7	74.2	163	492	983	4.90	.000	16.1	22.6	.000
MAX	.00	20	20	165	164	754	1640	52	.00	53	244	.00
MIN	.00	.00	19	20	162	162	.00	.00	.00	.00	.00	.00
AC-FT	.00	179	1210	4560	9050	30280	58490	301	.00	988	1390	.00

CAL YR 1990 TOTAL 30704.10 MEAN 84.1 MAX 543 MIN .00 AC-FT 60900
WTR YR 1991 TOTAL 53672.20 MEAN 147 MAX 1640 MIN .00 AC-FT 106500

RIO GRANDE BASIN

08285000 EL VADO RESERVOIR NEAR TIERRA AMARILLA, NM

LOCATION.--Lat 36°35'39", long 106°44'00", Rio Arriba County, Hydrologic Unit 13020102, Tierra Amarilla Grant, at outlet tower of dam on Rio Chama, at village of El Vado, 12.4 mi southwest of Tierra Amarilla, and at mile 77.7.

DRAINAGE AREA.--873 mi², of which about 100 mi² probably is noncontributing.

PERIOD OF RECORD.--January 1935 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1967, contents at about 0730 hours.

GAGE.--Water-stage recorder. Prior to October 1967, nonrecording gage only below gage height 6,879.3 ft. Datum of gage is 8.21 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by rockfill dam, steel faced. Storage began in January 1935. Capacity 186,250 acre-ft between gage heights 6,759.0 ft and 6,902.0 ft, top of spillway gate. Dead storage, 1,480 acre-ft below 6,775.0 ft, sill of outlet works. Figures given herein represent total contents. Reservoir is used to impound water for irrigation by Middle Rio Grande Conservancy District and, since December 1972, for storage of contract water from San Juan-Chama Project. Rehabilitation of outlet works, completed in December 1966, increased valve-controlled release from about 1,750 ft³/s to about 6,000 ft³/s.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 204,900 acre-ft, of which 7,400 acre-ft was uncontrolled storage, June 4, 5, 1948, gage height, 6,904.2 ft; no storage at times prior to December 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 174,530 acre-ft, Apr. 22, elevation, 6,898.32 ft; minimum, 100,150 acre-ft, Jan. 29, 30, Feb. 1-5, elevation, 6,870.06 ft.

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

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

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111500	111000	112000	104300	100150	101790	125960	171770	171270	162250	154730	146400
2	111400	111300	111000	104060	100150	101900	127630	171980	171060	162160	154880	146290
3	111400	111500	110900	103820	100150	101940	129400	172540	170900	162070	155020	146230
4	111300	111600	110700	103710	100150	102070	130980	172940	170560	161980	155430	146150
5	111200	111800	110600	103520	100150	102540	132540	172570	170190	161890	155780	146180
6	111100	111900	110400	103300	100170	102760	134220	173010	170130	161830	156110	145870
7	111000	112000	110300	103040	100170	102890	135650	173130	169940	161710	156050	144700
8	110900	112000	110200	102870	100220	103020	136760	173160	169330	161620	155760	144110
9	110900	112100	110100	102650	100240	103130	138510	174130	168840	161590	154790	144220
10	110800	112100	109800	102440	100260	103280	142020	173440	168720	161620	152930	144250
11	110700	112200	109500	102180	100260	103500	145700	173290	168930	161650	151690	144310
12	110600	112200	109300	101900	100300	103620	148690	172420	168960	161620	150940	144390
13	110400	112300	109100	101660	100340	103840	150740	171430	169080	161620	150320	143810
14	110300	112300	108900	101410	100380	104690	153020	171610	169330	161620	149970	142100
15	110200	112300	108600	101170	100450	106080	155700	171060	169420	161650	149970	141060
16	110000	112400	108400	100920	100530	107400	159110	171150	169020	161560	150060	140730
17	109900	112400	108200	100660	100660	108700	162790	171950	168410	161530	150090	140540
18	109800	112400	107900	100490	100720	109970	166300	172140	167640	161620	150120	140460
19	109800	112400	107600	100470	100790	111390	169180	171740	166700	160960	150140	140380
20	110000	112300	107400	100450	100850	112800	171330	171400	165810	159230	150120	140320
21	110100	112200	107100	100470	100900	114060	173630	172170	164810	158340	150090	140320
22	110100	112100	106800	100450	100980	114910	174530	171740	163660	158320	150120	140320
23	110200	112000	106500	100450	101060	115740	174500	171670	162820	158370	149230	140320
24	110200	111900	106200	100380	101150	116620	173570	171240	162670	158370	147440	140320
25	110300	111800	105900	100340	101210	117630	173470	171240	162520	158280	146540	140400
26	110400	111700	105700	100280	101300	118880	173070	171300	162430	157460	146740	140400
27	110500	111700	105400	100240	101380	119980	172730	171150	166220	155780	146710	140430
28	110600	111600	105200	100170	101510	121130	172570	171060	162160	154850	146680	140460
29	110700	111400	105000	100150	---	122270	172230	171330	162130	154820	146600	140460
30	110800	111300	104800	100150	---	123370	172010	171580	162160	154760	146540	140480
31	110900	---	104500	100170	---	124520	---	171490	---	154680	146490	---
MAX	111500	112400	112000	104300	101510	124520	174530	174130	171270	162250	156110	146400
MIN	109800	111000	104500	100150	100150	101790	125960	171060	162130	154680	146490	140320
(†)	6874.93	6875.12	6872.08	6870.07	6870.70	6880.60	6897.50	6897.33	6894.27	6891.74	6888.88	6886.71
(††)	-600	+400	-6800	-4330	+1340	+23010	+47490	-520	-9330	-7480	-8190	-6010

CAL YR 1990 MAX 179800 MIN 85680 (††) +11410
WTR YR 1991 MAX 174530 MIN 100150 (††) +28980

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

RIO GRANDE BASIN

08285500 RIO CHAMA BELOW EL VADO DAM, NM

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on left bank 1.5 mi downstream from El Vado Dam, 2.8 mi upstream from Rio Nutrias, 13 mi southwest of Tierra Amarilla, and at mile 76.2.

DRAINAGE AREA.--877 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1913 to November 1915, April to November 1916, March, April 1920, September 1920 to August 1924, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River" prior to 1935, as "near Tierra Amarilla" 1913-14, 1935-47, as "near El Vado" 1915-16, and as "at El Vado" 1920-24.

REVISED RECORDS.--WSP 1312: 1914, 1949. WSP 1392: 1949. WDR-NM-90: 1989.

GAGE.--Water-stage recorder. Datum of gage is 6,696.12 ft above National Geodetic Vertical Datum of 1929. Prior to October 1935, at site 1.5 mi upstream at different datum. October 1935 to September 1938 at site 1.1 mi upstream at datum 30.34 ft higher.

REMARKS.--Records good. Flow regulated by El Vado Reservoir (station 08285000) since 1935. Flow affected by release of transmountain water from Heron Reservoir (station 08284510) since May 1971. Diversions for irrigation of about 10,600 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years (water years 1914-15, 1921-23), 448 ft³/s, 324,600 acre-ft/yr, prior to completion of El Vado Dam. 35 years (water years 1936-70), 373 ft³/s, 270,200 acre-ft/yr, prior to release of transmountain water. 21 years (water years 1971-91), 465 ft³/s, 336,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s, May 22, 1920, gage height, 12 ft, site and datum then in use, from rating curve extended above 3,500 ft³/s; no flow Mar. 25, 26, 31, 1955. Maximum discharge since construction of El Vado Dam in 1935, 6,610 ft³/s, May 7, 1985, gage height, 7.08 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4 or 5, 1911, was greater than floods in September 1904 and May 1920, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,800 ft³/s, May 12; minimum daily, 32 ft³/s, Sept. 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	123	159	214	219	232	425	964	1180	247	94	86
2	157	121	160	211	219	234	425	888	1110	271	81	87
3	156	118	163	211	219	232	423	942	1040	247	81	77
4	153	117	163	211	220	232	747	1340	1010	218	97	60
5	154	118	164	211	231	238	1300	1330	968	217	178	48
6	157	118	166	211	232	236	1780	1420	910	213	331	373
7	159	118	166	225	232	230	2210	1780	934	211	344	760
8	159	116	166	200	232	223	2280	2010	992	204	295	412
9	161	116	170	207	232	223	1620	2710	942	149	576	70
10	161	118	204	217	232	223	783	3390	809	120	1020	85
11	159	118	248	198	232	225	585	3690	745	126	782	92
12	159	118	232	210	233	223	866	3800	792	115	522	104
13	159	117	214	211	232	223	1020	3500	788	101	448	464
14	159	116	226	211	232	221	896	3030	902	100	322	930
15	161	119	223	211	224	219	859	3070	1010	100	217	590
16	152	121	223	218	219	219	863	2270	1010	88	121	230
17	133	120	225	215	224	219	1050	1880	1010	78	91	168
18	133	119	227	215	232	219	1340	2410	1010	61	91	110
19	133	137	223	215	232	221	1780	2690	1010	438	89	110
20	135	156	223	215	223	223	2190	2670	1010	940	88	101
21	130	158	220	215	219	318	2620	2810	1010	562	87	78
22	130	159	214	219	219	462	2380	2850	1000	122	86	78
23	127	159	214	230	219	465	2150	2740	778	111	596	64
24	127	159	208	232	219	479	2340	2400	490	100	976	43
25	127	159	220	222	219	480	2090	1910	431	123	426	34
26	127	159	218	219	219	444	1890	1810	402	514	86	32
27	127	163	219	219	219	419	1460	1800	373	955	86	32
28	127	163	228	224	219	417	1230	1620	345	542	89	33
29	125	160	227	219	---	417	1150	1340	307	93	85	33
30	124	159	216	219	---	417	1020	1250	256	126	87	92
31	122	---	216	219	---	420	---	1240	---	130	86	---
TOTAL	4454	4022	6345	6674	6303	9253	41772	67554	24574	7622	8558	5476
MEAN	144	134	205	215	225	298	1392	2179	819	246	276	183
MAX	161	163	248	232	233	480	2620	3800	1180	955	1020	930
MIN	122	116	159	198	219	219	423	888	256	61	81	32
AC-FT	8830	7980	12590	13240	12500	18350	82850	134000	48740	15120	16970	10860

CAL YR 1990 TOTAL 93421 MEAN 256 MAX 1180 MIN 110 AC-FT 185300
WTR YR 1991 TOTAL 192607 MEAN 528 MAX 3800 MIN 32 AC-FT 382000

RIO GRANDE BASIN

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM

LOCATION.--Lat 36°19'06", long 106°35'50", Rio Arriba County, Hydrologic Unit 13020102, on left bank 40 ft downstream from site of former bridge, 7.7 mi downstream from Rio Gallina, 9 mi northwest of Youngsville, 15.6 mi upstream from Abiquiu Dam, 30.3 mi downstream from El Vado Dam, and at mile 47.4.

DRAINAGE AREA.--1,600 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--August 1961 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by El Vado Reservoir (08285000). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions for irrigation of about 15,000 acres upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 358 ft³/s, 259,400 acre-ft/yr, prior to release of transmountain water. 21 years (water years 1971-91), 491 ft³/s, 355,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,680 ft³/s, May 8, 1985, gage height, 7.67 ft; maximum gage height, 8.70 ft, May 20, 1973; minimum, 7.5 ft³/s, Oct. 17, 18, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred on Sept. 29, 1904, Oct. 4 or 5, 1911, and May 22, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,310 ft³/s, May 13, gage height, 6.89 ft; minimum discharge, 40 ft³/s, parts of Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	133	151	e200	e210	284	453	906	1170	194	144	94
2	151	148	150	e210	e210	321	487	791	1120	239	340	94
3	149	205	154	e240	226	333	483	799	1030	241	156	93
4	147	154	155	e220	227	372	608	1070	1010	199	398	96
5	147	141	154	e220	228	613	1200	1330	977	193	200	156
6	147	137	151	e210	228	538	1750	1150	795	193	425	116
7	148	136	153	e210	227	284	2220	1600	801	193	396	766
8	177	137	152	e210	224	250	2440	1840	969	196	350	716
9	153	140	151	e210	226	241	1980	2390	943	184	328	118
10	151	137	151	e210	226	244	1000	3440	786	174	974	91
11	149	135	244	e210	227	252	658	3930	664	119	932	93
12	148	135	245	e200	229	278	740	4160	698	120	560	144
13	148	135	230	e200	234	256	1050	4060	871	111	530	205
14	147	135	236	e200	252	249	940	3140	923	100	368	943
15	148	135	231	e200	269	241	835	3280	1090	99	292	872
16	148	135	242	e200	297	234	845	2590	1010	117	194	262
17	134	135	234	e200	449	230	921	1690	996	101	143	252
18	129	135	227	e200	398	231	1240	2160	992	92	132	133
19	131	133	222	e200	317	240	1610	2730	985	e150	131	121
20	237	153	226	e200	273	264	2100	2760	981	e980	115	118
21	155	160	223	e190	298	257	2510	3000	971	e700	109	100
22	137	156	229	e190	361	458	2730	3220	966	e360	113	83
23	133	156	e192	e190	360	458	2000	2940	898	e155	141	82
24	133	158	e194	e190	398	469	2440	2680	499	160	934	67
25	133	155	e197	e190	360	504	2150	1970	391	196	865	51
26	133	158	e200	e190	291	515	1920	1800	392	264	139	43
27	132	159	e200	e200	277	463	1630	1790	348	971	107	42
28	131	153	e200	e200	276	444	1200	1680	325	889	102	41
29	131	151	e200	e200	---	436	1160	1390	277	160	106	41
30	131	151	e200	e210	---	432	959	1210	273	145	97	40
31	132	---	e200	e210	---	431	---	1240	---	182	95	---
TOTAL	4519	4391	6094	6310	7798	10822	42259	68736	24151	8177	9916	6073
MEAN	146	146	197	204	278	349	1409	2217	805	264	320	202
MAX	237	205	245	240	449	613	2730	4160	1170	980	974	943
MIN	129	133	150	190	210	230	453	791	273	92	95	40
AC-FT	8960	8710	12090	12520	15470	21470	83820	136300	47900	16220	19670	12050

CAL YR 1990 TOTAL 92284 MEAN 253 MAX 1110 MIN 85 AC-FT 183000
WTR YR 1991 TOTAL 199246 MEAN 546 MAX 4160 MIN 40 AC-FT 395200

e Estimated

RIO GRANDE BASIN

08286900 ABIQUIU RESERVOIR NEAR ABIQUIU, NM

LOCATION.--Lat 36°14'24", long 106°25'44", Rio Arriba County, Hydrologic Unit 13020102, in Piedra Lumbre Grant, in operations building at Abiquiu Dam on Rio Chama, 6.6 mi northwest of Abiquiu, and at mile 32.1.

DRAINAGE AREA.--2,146 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--February 1963 to September 1965 (monthend contents only), October 1965 to current year. October 1969 to December 1975, contents at 0800 hours.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam, completed Feb. 5, 1963. Capacity, 1,198,500 acre-ft between elevations 6,060 ft, invert of outlet tunnel, and 6,350 ft, crest of spillway, based on capacity table from survey 1990. No dead storage. Capacity by original survey 1,223,100 acre-ft. Reservoir is used for flood control and, since March 1976, for recreation. A desilting pool of about 2,000 acre-ft was maintained from May 1968 to 1974, when it was increased to 4,000 acre-ft and continued until December 1975. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 382,720 acre-ft, June 11, 1985, elevation, 6,256.22 ft; no storage at times prior to May 1968 and Jan. 11 to Mar. 25, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 256,860 acre-ft, May 28, elevation, 6,235.26 ft; minimum, 154,030 acre-ft, Nov. 26, elevation, 6,210.52 ft.

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

Oct. 1 to Dec. 31 (Based on survey by COE in 1984)		Jan. 1 to Sept. 30 (Based on survey by COE in 1990)			
6,200	116,840	6,200	115,360	6,240	280,470
6,220	191,310	6,220	189,310	6,250	333,840
		6,230	232,160	6,260	392,280

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156700	155190	154480	156650	163880	169910	170720	214240	254040	208430	195130	194460
2	156780	155420	154740	157030	163770	169910	170690	213510	253270	205290	195210	193180
3	156820	155870	154850	157260	163880	170060	170690	212560	252210	202270	195380	191900
4	156700	156060	154930	157560	164190	170300	170920	212010	251060	199080	195540	190580
5	156630	156060	155010	157860	164460	170610	172410	212180	249920	198660	195420	189390
6	156480	155270	155080	158170	164730	171550	175330	211880	248440	198370	195710	189060
7	156360	154780	155160	158550	165030	172170	178380	212260	247030	197910	195250	190050
8	156320	154740	155230	159000	165110	175410	183400	212950	245750	197500	194460	190950
9	156140	154700	155230	159150	165340	175880	186280	214630	244490	197160	194790	191200
10	156020	154670	155270	159230	165650	176280	187140	218140	242900	196540	195710	191160
11	155910	154630	155310	159310	165920	176750	187100	222340	241130	195790	196620	191160
12	155720	154630	155080	159380	166260	177230	187100	226760	239690	194880	197120	191400
13	155640	154590	154890	159650	166650	177590	187750	230940	238530	193920	197500	192190
14	155530	154550	154930	159920	166920	177790	188000	233800	237700	192930	197830	193180
15	155460	154550	154970	160220	167270	177390	188080	236500	237190	191940	197910	194170
16	155380	154590	155040	160370	167500	176750	188280	238300	236230	191110	197870	194550
17	155380	154590	155190	160600	168230	176160	188730	238120	235130	190580	197700	194380
18	155310	154670	155160	160830	168820	176120	189960	238950	233940	190250	197500	193880
19	155310	154740	154850	161060	169280	175680	191940	240890	233020	189760	197330	193470
20	155490	154820	154890	161210	169670	175050	194880	243320	231800	189470	197250	193060
21	155640	154820	155230	161670	169980	174420	198580	246700	230620	190250	197160	192520
22	155680	154700	155570	161900	170300	173910	202640	250350	229270	190660	197330	192020
23	155680	154550	155910	162090	170610	173470	205290	253030	227700	190830	197250	191690
24	155530	154290	156210	162430	170840	173080	208550	255010	225830	190990	198710	191030
25	155380	154140	156550	162660	171000	172760	211320	255880	223350	191240	200550	189960
26	155270	154030	156850	162970	171000	172640	213380	256270	220930	191450	200130	188980
27	155270	154070	157160	163190	170530	172100	214760	256660	218270	193010	199330	188080
28	155230	154070	157460	163460	170300	171630	215100	256860	216010	194500	198500	187180
29	155230	154140	157840	163730	---	171310	215280	256370	213640	195000	197540	186280
30	155190	154220	158140	163960	---	171120	214840	255500	211490	195080	196620	185300
31	155190	---	158290	164000	---	170800	---	254910	---	195170	195670	---
MAX	156820	156060	158290	164000	171000	177790	215280	256860	254040	208430	200550	194550
MIN	155190	154030	154480	156650	163770	169910	170690	211880	211490	189470	194460	185300
(†)	6210.83	6210.57	6211.65	6213.62	6215.25	6215.38	6226.08	6234.86	6225.30	6221.42	6221.54	6219.02
(††)	-1470	-970	+4070	+7500	+6300	+500	+44040	+40070	-43420	-16320	+500	-10370

CAL YR 1990 MAX 176090 MIN 154030 (††) -4740
WTR YR 1991 MAX 256860 MIN 154030 (††) +30420

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

* COMPUTED ON BASIS OF REVISED CAPACITY TABLE PUT INTO USE JAN. 1, 1991.

RIO GRANDE BASIN

08287000 RIO CHAMA BELOW ABIQUIU DAM, NM

LOCATION.--Lat 36°14'12", long 106°24'59", in SE¼SE¼ sec.8, T.23 N., R.5 E., Rio Arriba County, Hydrologic Unit 13020102, on right bank 0.8 mi downstream from Abiquiu Dam, 5.9 mi northwest of Abiquiu, and at mile 31.3.

DRAINAGE AREA.--2,147 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1961 to current year (monthly discharge only, October 1961).

REVISED RECORDS.--WDR-NM-90: 1989.

GAGE.--Water-stage recorder. Concrete control since Jan. 25, 1966. Elevation of gage is 6,040 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 25, 1966, at datum 1.60 ft lower.

REMARKS.--Records good. Flow controlled by El Vado Reservoir (station 08285000) 46.4 mi upstream and Abiquiu Reservoir (station 08286900) 0.8 mi upstream since February 1963. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 54.5 mi upstream. Diversions for irrigation of about 17,600 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station. Several observations of water temperature taken during year.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 384 ft³/s, 278,200 acre-ft/yr, prior to release of transmountain water. 21 years (water years 1971-91), 514 ft³/s, 372,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft³/s, July 1, 1965, gage height, 6.69 ft, datum then in use; maximum gage height, 7.29 ft, Jan. 14, 1967 (backwater from ice); minimum discharge, about 0.5 ft³/s, Mar. 17, 1966, Jan. 28, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,970 ft³/s, May 16, 17; minimum daily, 55 ft³/s, Nov. 20, Mar. 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	116	132	79	279	425	576	1430	1680	1700	206	619
2	127	127	130	76	278	283	536	1490	1670	1720	292	682
3	158	136	125	78	94	285	533	1560	1660	1710	357	704
4	181	135	121	82	84	186	532	1540	1670	1740	361	723
5	186	296	120	82	84	196	532	1530	1670	319	346	689
6	211	590	120	80	84	210	526	1540	1660	296	419	396
7	234	302	120	78	77	114	556	1650	1650	374	706	196
8	234	138	121	88	70	59	835	1770	1650	352	703	250
9	204	138	113	135	71	55	962	1760	1650	345	416	225
10	182	131	143	187	73	55	960	1800	1630	389	345	123
11	201	133	202	189	73	60	953	1880	1630	473	345	102
12	200	132	287	145	73	61	951	1860	1610	556	341	101
13	184	127	305	103	73	65	953	1890	1600	543	282	134
14	186	103	277	104	103	162	944	1900	1560	550	242	165
15	186	93	257	104	83	433	946	1920	1480	544	242	172
16	151	82	253	104	82	542	952	1970	1600	480	222	172
17	102	72	268	104	82	539	960	1970	1650	336	193	278
18	107	72	286	104	82	407	955	1940	1650	182	194	394
19	116	56	286	104	82	517	953	1960	1650	264	173	322
20	106	55	171	104	86	546	953	1950	1630	562	130	281
21	104	133	72	104	161	647	956	1690	1630	549	130	355
22	104	196	72	104	237	695	964	1550	1540	310	113	286
23	165	221	76	103	271	695	979	1760	1460	116	126	189
24	208	246	74	102	277	699	986	1890	1610	118	149	368
25	207	250	72	101	300	706	1050	1840	1630	143	159	590
26	159	178	72	99	478	714	1130	1850	1680	164	306	531
27	118	121	72	99	595	718	1210	1830	1660	141	485	482
28	118	122	72	99	584	713	1210	1820	1670	136	509	477
29	115	101	73	84	---	661	1310	1810	1560	136	509	477
30	114	94	76	141	---	613	1410	1740	1480	121	534	496
31	116	---	78	277	---	613	---	1680	---	130	584	---
TOTAL	4911	4696	4646	3443	4916	12674	27273	54770	48570	15499	10119	10979
MEAN	158	157	150	111	176	409	909	1767	1619	500	326	366
MAX	234	590	305	277	595	718	1410	1970	1680	1740	706	723
MIN	102	55	72	76	70	55	526	1430	1460	116	113	101
AC-FT	9740	9310	9220	6830	9750	25140	54100	108600	96340	30740	20070	21780

CAL YR 1990 TOTAL 103475 MEAN 283 MAX 1170 MIN 50 AC-FT 205200
WTR YR 1991 TOTAL 202496 MEAN 555 MAX 1970 MIN 55 AC-FT 401700

RIO GRANDE BASIN

08289000 RIO OJO CALIENTE AT LA MADERA, NM

LOCATION.--Lat 36°20'59", long 106°02'37", in NW¼NE¼ sec.1, T.24 N., R.8 E., Rio Arriba County, Hydrologic Unit 13020102, on left bank 400 ft upstream from bridge on State Highway 554, 2.4 mi south of La Madera, 2.6 mi downstream from confluence of Rio Vallecitos and Rio Tusas, 3.1 mi north of Ojo Caliente, and at mile 19.9.

DRAINAGE AREA.--419 mi².

PERIOD OF RECORD.--April 1932 to current year.

REVISED RECORDS.--WSP 1712: 1959.

GAGE.--Water-stage recorder. Datum of gage is 6,358.84 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 23, 1934, at site about 2.6 mi upstream at different datum. Apr. 23, 1934 to Apr. 21, 1936, at datum 12.58 ft lower and Apr. 22, 1936 to Oct. 26, 1956, at datum 13.84 ft lower, both at site 1,400 ft downstream.

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

AVERAGE DISCHARGE.--59 years, 69.1 ft³/s, 50,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,140 ft³/s, Apr. 21, 1958, gage height, 6.42 ft, from rating curve extended above 1,300 ft³/s; maximum gage height, 7.25 ft, from floodmarks, June 19, 1966; minimum discharge, 0.2 ft³/s, Aug. 17, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Apr. 21, 1958, may have been exceeded by a flood in May 1920, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 8	0245	804	5.36	May 11	0030	1,060	5.71
Apr. 21	0245	804	5.36	May 21	0830	*1,170	*5.84

Minimum discharge, 7.6 ft³/s, July 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	16	21	24	43	126	161	83	17	15	15
2	15	41	16	22	23	40	151	232	75	14	14	15
3	14	63	15	22	24	38	150	344	73	14	15	55
4	15	41	14	22	23	42	194	348	65	13	49	27
5	14	26	17	24	25	87	288	260	60	13	69	25
6	14	24	17	26	27	118	413	346	64	13	39	38
7	14	24	16	26	24	58	560	364	70	12	63	56
8	19	22	17	25	22	41	504	432	58	12	42	39
9	25	18	18	25	22	41	349	656	52	11	29	32
10	17	19	18	24	27	41	365	596	51	10	27	32
11	15	22	18	26	28	38	377	583	50	10	58	31
12	15	21	19	26	28	33	333	474	54	10	43	30
13	14	18	29	25	27	33	246	335	123	9.8	31	44
14	14	20	25	23	29	43	218	307	136	9.6	28	37
15	14	18	15	25	29	40	215	279	105	9.1	38	30
16	14	16	21	24	32	47	273	232	83	8.7	41	27
17	14	16	28	26	39	42	359	212	61	8.2	35	26
18	13	18	21	24	29	59	440	217	50	8.8	28	25
19	14	19	22	25	27	74	510	211	43	8.4	31	24
20	15	20	23	23	26	77	524	274	39	8.3	30	24
21	24	20	20	24	31	69	630	808	34	8.9	23	24
22	22	17	19	27	32	57	595	481	32	13	22	24
23	18	17	17	26	33	48	580	343	28	9.6	22	18
24	18	19	18	25	38	54	566	250	23	13	24	15
25	17	21	17	25	32	85	588	211	20	26	23	17
26	17	26	17	25	30	127	464	178	18	22	19	16
27	17	32	17	25	29	120	292	151	17	24	18	15
28	17	16	17	25	30	115	242	132	16	18	22	16
29	17	14	19	23	---	113	191	122	17	16	18	17
30	17	16	20	24	---	108	181	103	21	15	16	17
31	17	---	21	23	---	103	---	92	---	14	15	---
TOTAL	503	681	587	756	790	2034	10924	9734	1621	399.4	947	811
MEAN	16.2	22.7	18.9	24.4	28.2	65.6	364	314	54.0	12.9	30.5	27.0
MAX	25	63	29	27	39	127	630	808	136	26	69	56
MIN	13	14	14	21	22	33	126	92	16	8.2	14	15
AC-FT	998	1350	1160	1500	1570	4030	21670	19310	3220	792	1880	1610

CAL YR 1990 TOTAL 11325.1 MEAN 31.0 MAX 328 MIN 5.4 AC-FT 22460
WTR YR 1991 TOTAL 29787.4 MEAN 81.6 MAX 808 MIN 8.2 AC-FT 59080

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, NM

LOCATION.--Lat 36°04'26", long 106°06'40", in NE¼NE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, Hydrologic Unit 13020102, in San Juan Pueblo Grant, near left downstream corner of bridge on U.S. Highway 285, 0.5 mi west of Chamita, 2.5 mi northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 mi², of which about 100 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Chama River near Chamita prior to 1928, and Chama River at Chamita 1929-30.

REVISED RECORDS.--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Jan. 1, 1964. Datum of gage is 5,653.61 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1933, at railroad bridge 2.3 mi downstream at different datums. Oct. 4, 1933 to Mar. 1, 1942, at site 50 ft downstream at datum 0.22 ft higher. Mar. 2, 1942 to Dec. 31, 1963, at site 200 ft downstream, present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 27,600 acres. Chamita ditch (station 08289500), on left bank, and Hernandez ditch (station 08289800), on right bank, bypass gage for irrigation of several hundred acres downstream from station. Flow regulated by El Vado Reservoir (station 08285000) 74.9 mi upstream since January 1935 and Abiquiu Reservoir (station 08286900), 29.3 mi upstream since February 1963. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 83.0 mi upstream. National Weather Service gage-height telemeter and U.S. Army Corps of Engineers telemeter at station.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 541 ft³/s, 392,000 acre-ft/yr, prior to release of transmountain water. 21 years (water years 1971-91), 569 ft³/s, 412,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, May 22, 1920, from rating curve extended above 2,300 ft³/s; maximum gage height, 10.45 ft, Aug. 22, 1961; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 ft³/s. Another major flood occurred in 1884, from newspaper accounts.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,820 ft³/s, June 13, gage height, 6.89 ft; minimum discharge, 51 ft³/s, Jan. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	135	144	156	435	464	698	1300	1760	1530	105	577
2	193	329	151	175	439	339	783	1440	1750	1520	270	652
3	151	254	166	161	353	362	841	1710	1680	1530	498	670
4	191	197	171	168	177	277	827	1750	1630	1500	580	750
5	196	172	167	171	160	225	830	1670	1590	699	652	693
6	198	504	160	153	152	200	812	1760	1640	185	588	734
7	244	492	163	140	121	208	947	1860	1680	190	755	320
8	251	190	167	134	113	122	1120	2180	1650	197	801	251
9	246	177	162	188	117	121	1150	2440	1640	185	548	405
10	195	166	161	264	88	122	1170	2430	1640	180	395	278
11	191	167	220	316	93	122	1230	2560	1620	244	411	137
12	222	162	318	308	96	130	1300	2500	1750	345	426	134
13	183	154	393	228	96	137	1200	2420	2000	375	432	139
14	182	151	390	e210	99	153	1070	2390	1990	370	323	198
15	191	120	333	e160	113	333	1050	2380	1660	374	334	187
16	194	117	355	e140	101	513	1120	2350	1710	368	286	185
17	137	100	349	e140	122	599	1110	2360	1710	246	221	173
18	119	91	377	e140	158	487	1170	2290	1680	190	270	405
19	121	88	375	e140	123	592	1230	2120	1630	172	260	418
20	143	72	364	e160	113	544	1240	2200	1610	538	155	271
21	131	78	155	e150	140	577	1410	2480	1570	709	116	351
22	123	186	e110	e140	261	725	1410	2120	1560	1040	109	355
23	124	218	e110	e130	229	980	1380	2000	1550	243	115	200
24	210	258	e110	e120	342	1040	1380	2100	1560	286	132	197
25	219	253	e120	e130	304	1030	1460	2100	1550	354	147	530
26	211	250	e120	e140	388	932	1420	2000	1560	484	171	491
27	143	159	e130	168	470	865	1310	1960	1530	248	438	449
28	139	154	e140	146	380	857	1260	1960	1530	167	508	414
29	146	156	e140	234	---	873	1240	1930	1560	146	509	444
30	128	124	140	175	---	827	1340	1900	1290	179	512	438
31	141	---	126	398	---	731	---	1740	---	110	571	---
TOTAL	5417	5674	6487	5583	5783	15487	34508	64400	49280	14904	11638	11446
MEAN	175	189	209	180	207	500	1150	2077	1643	481	375	382
MAX	251	504	393	398	470	1040	1460	2560	2000	1530	801	750
MIN	119	72	110	120	88	121	698	1300	1290	110	105	134
AC-FT	10740	11250	12870	11070	11470	30720	68450	127700	97750	29560	23080	22700

CAL YR 1990 TOTAL 107684 MEAN 295 MAX 1050 MIN 72 AC-FT 213600
WTR YR 1991 TOTAL 230607 MEAN 632 MAX 2560 MIN 72 AC-FT 457400

e Estimated

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
NOV 27...	1400	158	--	343	8.8	5.5	8.0	10.7	130	0	39	7.3	
MAR 21...	1315	320	405	--	8.4	10.0	8.0	10.8	160	60	48	9.5	
MAY 21...	1245	3240	276	--	8.2	13.0	11.0	9.1	110	33	32	6.5	
AUG 27...	1330	457	325	--	8.1	28.0	22.0	7.3	120	34	39	6.6	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 27...	22		0.8	2.7	149	5	130	46	8.2	0.40	21	225	2
MAR 21...	21		0.7	2.5	121	0	99	110	5.6	0.20	15	271	--
MAY 21...	16		0.7	2.4	90	0	74	60	50	0.20	13	224	--
AUG 27...	16		0.6	2.0	111	0	91	73	<0.10	0.20	13	--	--
DATE		ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	
NOV 27...	2		40	<1	<1.0	1	<1	6	3	42	4	1	
MAR 21...	--		30	--	--	--	--	--	--	70	--	--	
MAY 21...	--		20	--	--	--	--	--	--	61	--	--	
AUG 27...	--		30	--	--	--	--	--	--	5	--	--	
DATE		MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCOCI, KF AGAR (COLS. PER 100 ML) (31673)	
NOV 27...	<0.10		<0.1	<1	<1	30	5	651	278	12	K10	K72	
MAR 21...	--		--	--	--	--	--	1090	942	9	K3	K46	
MAY 21...	--		--	--	--	--	--	1590	13900	44	>600	>2500	
AUG 27...	--		--	--	--	--	--	1590	1960	40	480	800	

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

RIO GRANDE BASIN

08291Q00 SANTA CRUZ RIVER AT CUNDIYO, NM

LOCATION.--Lat 35°57'53", long 105°54'14", in SE¼NW¼ sec.17, T.20 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, on left bank 135 ft downstream from bridge on State Highway 503, 200 ft downstream from confluence of Rio Medio and Rio Frijoles, 0.6 mi northwest of Cundiyo, 1.8 mi upstream from Santa Cruz Dam, and at mile 11.9.

DRAINAGE AREA.--86 mi², approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only from some periods, published in WSP 1312. Prior to October 1953, published as Rio Santa Cruz at Cundiyo.

REVISED RECORDS.--WSP 1392: 1931(M), 1932-33, 1934-39(M), 1942, 1943(M).

GAGE.--Water-stage recorder. Concrete control since Jan. 3, 1954. Elevation of gage is 6,460 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 1, 1930 to Aug. 12, 1932, water-stage recorder at site about 1 mi downstream at different datum. Aug. 13, 1932 to Oct. 29, 1934, water-stage recorder at site 35 ft upstream at datum 0.42 ft higher. Oct. 30, 1934 to Jan. 2, 1954, water-stage recorder at present site at datum 0.64 ft lower.

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

AVERAGE DISCHARGE.--61 years, 31.3 ft³/s, 22,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s, Sept. 24, 1931, gage height, 7.80 ft, site and datum then in use, from rating curve extended above 170 ft³/s; minimum, 0.19 ft³/s, Mar. 13, 1954, result of freezeup.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 02	1615	416	3.44	Aug. 13	1800	765	4.15
May 11	2045	176	2.69	Aug. 26	2315	103	2.48
May 22	0130	*775	*4.23	Sept. 06	1515	126	2.59
July 21	2215	110	2.51	Sept. 12	0800	170	2.77
July 25	0330	140	2.66				

Minimum discharge, 8.5 ft³/s, Feb. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	16	e14	e13	e11	14	27	48	183	48	69	49
2	48	22	e15	e13	e11	14	34	50	163	43	63	48
3	33	30	e16	e13	11	14	32	55	137	42	118	50
4	30	24	e17	e13	10	15	36	54	112	40	204	59
5	26	21	e18	12	11	24	44	51	106	37	140	51
6	22	22	19	12	11	25	60	52	107	35	163	76
7	22	21	e18	12	11	22	71	54	103	34	188	67
8	22	19	e17	12	11	21	63	56	100	33	118	57
9	25	19	e16	12	10	21	59	82	97	32	110	55
10	24	18	e16	12	11	19	58	118	94	31	128	83
11	22	18	16	12	11	19	68	112	101	30	114	73
12	20	18	14	e11	11	19	69	101	99	31	119	93
13	18	18	14	12	11	19	55	95	93	30	151	78
14	18	17	13	11	11	20	48	96	93	29	162	69
15	17	17	e13	11	12	19	43	99	90	28	182	64
16	17	17	12	11	12	19	43	94	85	27	155	61
17	17	17	12	11	13	18	44	86	81	27	130	57
18	16	16	e12	10	13	18	52	84	77	27	127	55
19	16	16	e12	e10	12	19	58	95	75	25	112	54
20	22	16	e12	10	12	20	62	140	75	25	90	52
21	18	16	11	10	14	22	82	359	69	42	82	49
22	18	e12	12	9.6	13	19	88	606	65	68	75	47
23	18	e13	e11	e10	13	20	89	417	59	76	73	44
24	18	17	e11	e10	13	21	89	313	56	86	73	43
25	18	17	e11	e10	13	23	88	288	52	107	67	42
26	18	17	e12	e11	14	26	89	261	50	98	66	40
27	17	14	e12	e11	14	25	72	252	45	80	67	39
28	17	13	e12	e11	14	24	60	244	44	73	62	38
29	17	e15	e13	10	---	22	54	229	47	70	56	37
30	16	e16	e13	e11	---	21	50	216	59	64	55	33
31	16	---	e13	e11	---	22	---	201	---	72	52	---
TOTAL	651	532	427	347.6	334	624	1787	5008	2617	1490	3371	1663
MEAN	21.0	17.7	13.8	11.2	11.9	20.1	59.6	162	87.2	48.1	109	55.4
MAX	48	30	19	13	14	26	89	606	183	107	204	93
MIN	16	12	11	9.6	10	14	27	48	44	25	52	33
AC-FT	1290	1060	847	689	662	1240	3540	9930	5190	2960	6690	3300

CAL YR 1990 TOTAL 11355.8 MEAN 31.1 MAX 179 MIN 7.8 AC-FT 22520
WTR YR 1991 TOTAL 18851.6 MEAN 51.6 MAX 606 MIN 9.6 AC-FT 37390

e Estimated

RIO GRANDE BASIN
08291600 RIO GRANDE AT SANTA CLARA, NM

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 27...	1045	E936	--	483	8.7	6.0	6.0	12.2	180	92	54	11
MAR 29...	1245	E1900	332	--	8.8	10.0	7.0	10.4	130	32	39	7.4
MAY 29...	1345	E3560	230	--	8.2	23.0	15.0	8.5	98	24	30	5.5
AUG 28...	1100	1020	312	--	8.1	29.0	19.0	7.9	120	15	38	6.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 27...	32	1	2.8	107	0	88	100	9.7	0.40	16	279	3
MAR 29...	20	0.8	2.7	109	4	95	75	5.4	0.30	18	225	--
MAY 29...	11	0.5	2.3	90	0	74	45	2.6	0.20	14	155	--
AUG 28...	15	0.6	2.1	127	0	104	54	4.7	0.40	16	199	--

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 27...	3	50	<1	<1.0	2	<1	4	2	63	4	1
MAR 29...	--	30	--	--	--	--	--	--	29	--	--
MAY 29...	--	10	--	--	--	--	--	--	54	--	--
AUG 28...	--	30	--	--	--	--	--	--	13	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	STREP-TOCOCOCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 27...	<0.10	<0.1	<1	<2	20	9	21300	--	88	K37	K80
MAR 29...	--	--	--	--	--	--	96	--	61	27	28
MAY 29...	--	--	--	--	--	--	227	--	56	K22	160
AUG 28...	--	--	--	--	--	--	471	1300	53	230	500

[illegible]

RIO GRANDE BASIN

08292000 SANTA CLARA CREEK NEAR ESPANOLA, NM

LOCATION.--Lat 35°58'40", long 106°10'20", in SW¼SW¼ sec.11, T.20 N., R.7 E., Rio Arriba County, Hydrologic Unit 13020101, in Santa Clara Indian Reservation, on right bank 5.5 mi upstream from mouth, and 5.5 mi southwest of Espanola.

DRAINAGE AREA.--34.5 mi².

PERIOD OF RECORD.--February 1936 to September 1941, August 1949 to October 1950, October 1950 to September 1961 (annual maximum only), April 1984 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Several observations of water temperature were made during year. Two small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--13 years (1937-41, 1950, 1985-91) 4.43 ft³/s, 3,210 ac-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 970 ft³/s, Sept. 22, 1941, from rating curve extended above 35 ft³/s on basis of slope-area measurement, gage height, 5.65 ft; no flow Aug. 8-13, 1984, and Mar. 9, 1990, both times from extreme diversion.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 16	2245	31	2.34	July 25	2100	106	3.09
July 18	2015	*387	*4.30	Aug. 4	1330	71	2.78
July 21	2345	69	2.80				

Minimum discharge, 0.58 ft³/s, Oct. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.4	e2.2	e1.6	2.8	3.0	1.8	4.8	4.2	4.0	9.5	3.9
2	3.1	5.0	e2.1	e1.6	2.7	2.8	1.8	4.7	4.1	3.8	9.7	4.0
3	3.0	4.2	e2.1	e1.6	2.6	3.0	1.7	4.5	4.0	4.0	9.8	3.9
4	2.8	3.3	e2.1	e1.5	2.4	3.0	1.8	4.6	4.1	4.0	15	4.2
5	2.5	3.1	e2.0	1.3	2.4	3.0	2.0	4.6	4.2	3.8	15	5.9
6	2.4	3.2	e2.1	1.2	2.4	3.3	2.4	4.4	4.2	4.0	11	9.6
7	2.3	3.3	e2.1	1.2	2.4	2.9	2.3	4.4	3.6	3.7	6.2	5.2
8	2.5	3.2	1.8	1.3	2.8	3.1	3.5	4.5	4.4	3.8	7.0	6.1
9	2.3	3.1	2.4	1.3	3.1	3.1	3.8	4.6	4.5	3.6	7.0	6.2
10	2.6	3.1	2.7	1.3	3.1	2.9	2.9	4.5	4.1	3.6	6.5	8.3
11	1.7	3.1	2.7	1.4	3.0	2.6	3.1	4.6	4.3	3.2	5.4	6.4
12	.87	3.1	2.7	1.7	3.0	2.1	3.2	4.6	3.6	3.6	6.7	11
13	.87	3.0	2.3	1.9	2.9	2.3	3.2	4.6	2.7	3.8	6.0	15
14	.87	3.1	1.7	1.4	2.9	2.0	3.3	4.5	4.1	3.7	5.8	13
15	.87	3.0	1.9	1.7	2.9	2.0	3.2	4.6	4.1	3.7	5.7	e11
16	.87	3.0	1.7	1.5	3.0	2.1	3.2	4.6	4.4	4.7	5.7	e9.0
17	.87	3.0	1.6	1.8	3.0	2.1	3.1	4.1	4.3	4.0	5.4	e8.2
18	.87	3.1	1.8	1.7	3.1	2.1	3.1	3.9	4.0	17	5.7	e8.0
19	.87	3.0	e1.8	2.5	3.0	2.0	3.5	4.5	4.2	7.0	6.0	e7.8
20	.87	3.1	e1.8	1.7	2.9	2.0	3.9	4.7	4.2	e5.4	5.2	e7.6
21	.87	e3.1	e1.7	e1.8	3.1	1.9	4.1	6.9	4.1	e5.8	4.3	e7.4
22	.84	e3.1	e1.5	e1.8	3.1	1.9	4.1	4.9	4.0	7.0	4.3	e7.2
23	1.4	e3.1	e1.4	e1.6	3.1	1.9	4.5	4.3	4.0	5.1	4.9	7.0
24	1.8	e3.1	e1.4	e1.6	3.1	1.9	4.4	4.5	4.0	3.7	4.6	6.7
25	1.8	e3.1	e1.4	e1.8	3.1	2.0	4.3	4.3	3.9	7.0	4.6	6.3
26	1.7	e2.9	e1.4	e2.0	3.0	2.0	4.4	4.1	3.8	9.0	4.4	5.9
27	1.5	e2.8	e1.4	e2.2	3.0	1.9	4.9	4.2	3.7	9.8	4.3	6.1
28	1.5	e2.6	e1.4	e2.4	3.0	1.9	4.8	4.1	3.8	9.6	4.5	5.7
29	1.5	e2.5	e1.5	2.7	---	1.8	4.9	4.1	3.9	9.5	4.4	5.4
30	1.5	e2.3	e1.6	2.9	---	1.9	4.9	4.0	4.3	9.7	4.0	5.5
31	1.5	---	e1.6	2.8	---	1.8	---	4.1	---	9.5	3.9	---
TOTAL	51.94	93.0	57.9	54.8	80.9	72.3	102.1	139.8	120.8	180.1	202.5	217.5
MEAN	1.68	3.10	1.87	1.77	2.89	2.33	3.40	4.51	4.03	5.81	6.53	7.25
MAX	3.1	5.0	2.7	2.9	3.1	3.3	4.9	6.9	4.5	17	15	15
MIN	.84	2.3	1.4	1.2	2.4	1.8	1.7	3.9	2.7	3.2	3.9	3.9
AC-FT	103	184	115	109	160	143	203	277	240	357	402	431

CAL YR 1990 TOTAL 1052.78 MEAN 2.88 MAX 9.0 MIN .10 AC-FT 2090
WTR YR 1991 TOTAL 1373.64 MEAN 3.76 MAX 17 MIN .84 AC-FT 2720

e Estimated

RIO GRANDE BASIN

08294200 NAMBE FALLS RESERVOIR NEAR NAMBE, NM

LOCATION.--Lat 35°50'46", long 105°54'17", in NE¼SW¼, sec.29, T.19 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, on Nambe Indian Reservation, 300 ft upstream from Nambe Falls, 2.6 mi upstream from Rio En Medio, 4.4 mi southeast of Nambe Pueblo, and 5.4 mi southeast of Nambe.

DRAINAGE AREA.--34.1 mi².

PERIOD OF RECORD.--February 1976 to current year.

REVISED RECORDS.--WDR NM-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to July 22, 1976, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by a concrete arch and earthfill dam, storage began Feb. 23, 1976. Total capacity, 2,020 acre-ft at elevation 6,826.6 ft, crest of ogee weir spillway, including 237 acre-ft of storage in a permanent pool between elevation 6,760.9 ft, invert of outlet conduits, and 6,780.0 ft. Dead storage 121 acre-ft below elevation 6,760.9 ft. Outlet conduits are one 6-in. and two 12-in. diameter pipes. Reservoir is used for storage of irrigation water and for recreation. Figures given herein represent total storage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,060 acre-ft June 9, 1979, elevation, 6,827.24 ft; no storage prior to Feb. 23, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,050 acre-ft, May 21, elevation, 6,827.01 ft; minimum, 1,280 acre-ft, Oct. 1, elevation 6,826.66 ft.

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

(Based on survey by Bureau of Reclamation in 1976)

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	1710	1730	1860	1900	1940	1990	1950	2030	2020	2020	2030
2	1310	1720	1720	1860	1900	1950	1990	1920	2030	2020	2030	2030
3	1340	1730	1720	1870	1900	1960	1980	1910	2030	2020	2030	2030
4	1360	1730	1720	1890	1900	1970	1970	1900	2030	2020	2030	2030
5	1390	1740	1720	1900	1900	1960	1960	1890	2030	2020	2030	2030
6	1420	1740	1710	1910	1900	1930	1960	1870	2030	2020	2030	2030
7	1440	1740	1710	1910	1900	1910	1960	1860	2030	2020	2030	2030
8	1470	1750	1700	1910	1900	1910	1970	1860	2030	2010	2030	2030
9	1490	1750	1700	1920	1900	1910	1970	1850	2030	1990	2030	2030
10	1510	1750	1690	1930	1900	1910	1980	1850	2030	1970	2030	2030
11	1530	1750	1690	1930	1900	1920	1980	1860	2030	1930	2030	2030
12	1550	1750	1700	1940	1900	1920	1990	1880	2030	1890	2030	2030
13	1560	1750	1710	1940	1900	1920	1990	1890	2030	1850	2040	2030
14	1580	1750	1720	1950	1900	1920	1990	1910	2030	1810	2030	2030
15	1600	1750	1730	1960	1900	1920	1980	1920	2030	1770	2030	2030
16	1600	1750	1740	1960	1900	1930	1980	1940	2030	1740	2030	2030
17	1610	1750	1750	1960	1900	1930	1980	1940	2030	1710	2030	2030
18	1610	1750	1760	1960	1900	1930	1970	1940	2030	1680	2030	2030
19	1620	1750	1760	1950	1900	1940	1980	1950	2030	1650	2030	2030
20	1630	1750	1770	1940	1910	1940	1980	1990	2030	1630	2030	2030
21	1640	1750	1780	1920	1910	1940	1990	2050	2030	1620	2030	2030
22	1650	1750	1790	1910	1910	1940	2000	2040	2030	1660	2030	2030
23	1660	1750	1790	1900	1910	1950	2010	2040	2030	1710	2030	2030
24	1670	1750	1800	1890	1910	1950	2000	2040	2030	1760	2030	2030
25	1680	1750	1810	1890	1910	1960	2000	2040	2030	1810	2030	2030
26	1680	1750	1810	1890	1920	1960	2000	2040	2020	1860	2030	2030
27	1690	1740	1820	1890	1920	1960	2000	2040	2020	1900	2030	2030
28	1700	1730	1830	1900	1930	1970	1990	2040	2020	1930	2030	2030
29	1700	1730	1830	1900	---	1980	1980	2030	2020	2000	2030	2030
30	1710	1730	1840	1900	---	1980	1960	2030	2030	2020	2030	2030
31	1710	---	1850	1900	---	1980	---	2030	---	2020	2030	---
MAX	1710	1750	1850	1960	1930	1980	2010	2050	2030	2020	2040	2030
MIN	1280	1710	1690	1860	1900	1910	1960	1850	2020	1620	2020	2030
(†)	6820.92	6821.28	6823.58	6824.40	6825.00	6825.93	6825.56	6826.76	6826.65	6826.63	6826.68	6826.66
(††)	+450	+20	+120	+50	+30	+50	-20	+70	0	-10	+10	0

CAL YR 1990 MAX 2030 MIN 961 (††) +760
WTR YR 1991 MAX 2050 MIN 1280 (††) +770

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

LOCATION.--Lat 35°50'46", long 105°54'17", in NE¼SW¼ sec.29, T.19 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, on Nambe Indian Reservation, in outlet conduits of Nambe Falls Dam, 300 ft upstream from Nambe Falls, 2.6 mi upstream from Rio En Medio, 4.4 mi southeast of Nambe Pueblo and 5.4 mi southeast of Nambe.

PERIOD OF RECORD.--January 1979 to current year.

REMARKS.--Flow regulated by Nambé Falls Reservoir (station 08294200). Outlet conduits are one 6-in. and two 12-in. diameter pipes. During periods of spill at Nambé Falls Dam, record computed at site 1,100 ft downstream, site of discontinued station 08294300. Rio Nambé at Nambé Falls.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 312 ft³/s June 9, 1979, gage height, 1.96 ft at site 1,100 ft downstream (maximum release and spill computed at Nambé Falls Dam, 250 ft³/s, June 9, 1979); minimum daily discharge, 0.13 ft³/s May 3, 1981.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

CAL YR 1990	TOTAL	3262.99	MEAN	8.94	MAX	40	MIN	.47	AC-FT	6470
WTR YR 1991	TOTAL	5915.12	MEAN	16.2	MAX	72	MIN	.58	AC-FT	11730

RIO GRANDE BASIN

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

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

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, Hydrologic Unit 13020101, on San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft downstream from bridge on State Highway 502, 1.8 mi southwest of San Ildefonso Pueblo, 2.5 mi downstream from Pojoaque River, 6.8 mi west of Pojoaque, and at mile 1,614.2.

DRAINAGE AREA.--14,300 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1895 to December 1905, June 1909 to current year. Monthly discharge only for some periods, published in WSP 1312. In early reports this record was published as "at Water Tank," as "at Rio Grande," and as "near Buckman."

REVISED RECORDS.--WSP 828: Drainage area. WSP 1512: 1895-99, 1904-6, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M). WDR-NM-90: 1989.

GAGE.--Water-stage recorder. Datum of gage is 5,488.48 ft above National Geodetic Vertical Datum of 1929. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

REMARKS.--Water-discharge records good. Considerable regulation by Heron Reservoir (station 08284510), El Vado Reservoir (station 08285000) and Abiquiu Reservoir (station 08286900) on Rio Chama, which can contribute a major portion of the total flow. Flow affected by release of transmountain water from Heron Reservoir since May 1971. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico. Gage height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--92 yrs, 1,530 ft³/2, 1,108,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s, May 23, 1920; maximum gage height, 14.5 ft, Sept. 29, 1904, present site and datum; minimum daily discharge, 60 ft³/s, July 4, 5, 1902.

EXTREMES OUTSIDE PERIOD OF RECORD.--The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeo's file on floods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	1300	*8,560	*8.26	Aug. 4	1045	5,460	6.75
June 14	0230	5,780	6.79	Aug. 11	2330	6,990	7.58
July 22	2200	6,360	7.25				

Minimum discharge, 555 ft³/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	644	778	669	1110	1760	1620	2590	4370	2500	970	990
2	719	1050	800	718	1110	1430	1620	2550	4180	2620	1030	1050
3	636	1560	788	747	1070	1310	1660	2830	4160	2730	1610	1080
4	750	1150	667	789	804	1310	1760	2820	4210	2600	3430	1250
5	730	1090	623	820	799	1210	1980	2820	4200	1970	2660	1210
6	748	1590	711	842	801	1400	2340	2900	4010	927	2510	1740
7	877	1860	772	831	808	1320	2840	2970	3990	860	3420	910
8	832	1220	724	824	822	1150	3270	3230	3750	862	3340	762
9	767	1060	744	827	808	1080	3700	3530	3860	833	2530	807
10	693	1000	786	983	826	1060	4170	3590	3970	873	2120	1060
11	707	976	867	1060	832	1060	4360	4070	4040	951	2150	1010
12	783	1060	1000	1010	843	1020	4290	4620	4290	1010	1880	1380
13	787	1180	1280	892	871	1000	4170	4760	4490	1060	1730	1410
14	773	1270	1330	872	950	1020	3660	4630	4480	1060	1660	1250
15	822	1270	1200	870	1030	1160	3160	4290	3710	1020	1280	1220
16	817	1250	1210	858	1050	1670	2960	4180	3650	973	1240	1340
17	721	1150	1170	858	1120	1720	2960	4220	3590	952	1080	1270
18	675	1000	1100	878	1130	1770	2970	4150	3330	783	1010	1330
19	638	957	1070	857	1020	1540	3050	3910	3170	724	1180	1290
20	768	930	1090	869	1010	1700	3180	4240	3130	828	964	1050
21	817	928	894	889	1050	1780	3390	6730	2990	966	835	1050
22	774	1060	762	880	1250	1970	3410	8400	2840	2030	757	1070
23	762	1080	634	823	1340	1930	3430	8070	2700	1490	788	939
24	884	1050	657	826	1390	1950	3460	7490	2540	1320	781	817
25	1070	1040	649	816	1340	1920	3370	6630	2370	2090	713	1090
26	1130	1000	630	817	1330	1900	3210	5940	2320	2480	704	1150
27	881	950	656	821	1550	1890	3070	5530	2280	1740	865	1050
28	715	952	650	810	1710	1900	3000	5270	2370	1380	995	982
29	676	916	750	807	---	1900	2830	5080	2480	1250	1000	953
30	653	850	725	769	---	1740	2750	4790	2340	1230	975	936
31	655	---	659	947	---	1660	---	4580	---	978	999	---
TOTAL	23840	33093	26376	26279	29774	47230	91640	141410	103810	43090	47206	33446
MEAN	769	1103	851	848	1063	1524	3055	4562	3460	1390	1523	1115
MAX	1130	1860	1330	1060	1710	1970	4360	8400	4490	2730	3430	1740
MIN	580	644	623	669	799	1000	1620	2550	2280	724	704	762
AC-FT	47290	65640	52320	52120	59060	93680	181800	280500	205900	85470	93630	66340
CAL YR 1990	TOTAL 355272	MEAN 973	MAX 2980	MIN 501	AC-FT 704700							
WTR YR 1991	TOTAL 647194	MEAN 1773	MAX 8400	MIN 580	AC-FT 1284000							

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1946 to current year.

WATER TEMPERATURE: October 1948 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1947 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

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

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 396 microsiemens, Oct. 1, Nov. 4; minimum daily, 212 microsiemens, May 25.

WATER TEMPERATURE: Maximum daily, 26.0°C, July 9; minimum daily, 0.0°C, on several days during December and January.

SEDIMENT CONCENTRATION: Maximum daily mean, 12,600 mg/L, July 26; minimum daily mean, 190 mg/L, July 18.

SEDIMENT LOAD: Maximum daily, 90,300 tons, July 26; minimum daily, 350 tons, Dec. 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV											
29...	1330	916	318	8.6	7.0	4.5	22	12.2	120	38	7.1
JAN											
30...	1145	793	268	8.1	4.0	0.0	10	12.4	120	37	6.7
MAR											
21...	1000	1780	323	8.3	6.0	7.0	3.0	10.8	130	40	7.9
MAY											
29...	1030	5110	230	8.1	23.0	13.0	48	8.4	97	30	5.3
JUL											
25...	1230	1620	270	7.9	24.0	20.0	950	7.3	94	31	4.0
AUG											
27...	1000	910	325	8.2	25.0	21.0	38	7.1	130	42	7.1

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
NOV										
29...	22	0.9	2.6	122	0	100	49	6.9	0.50	22
JAN										
30...	22	0.9	2.8	134	0	110	43	6.1	0.40	25
MAR										
21...	21	0.8	2.5	126	0	103	73	6.3	0.30	19
MAY										
29...	11	0.5	2.0	90	0	74	39	4.1	0.20	15
JUL										
25...	22	1	2.5	113	0	93	23	5.7	<0.10	17
AUG										
27...	18	0.7	2.4	137	0	112	51	5.7	0.40	18

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L) AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N) (00605)
NOV 29...	213	209	--	0.020	<0.010	<0.100	<0.100	0.040	0.020	0.16
JAN 30...	206	210	--	<0.010	<0.010	0.200	0.200	0.020	<0.010	0.28
MAR 21...	234	232	--	0.020	<0.010	<0.050	<0.050	0.020	<0.010	0.58
MAY 29...	150	152	0.030	0.040	<0.010	0.070	0.080	0.060	<0.010	0.64
JUL 25...	180	162	0.140	0.020	<0.010	0.160	0.180	0.020	0.040	1.1
AUG 27...	192	213	--	<0.010	<0.010	<0.050	0.061	<0.010	0.010	--
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L) AS N) (00607)	NITRO- GEN, TOTAL (MG/L) AS N) (00600)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)	CYANIDE TOTAL (MG/L) AS CN) (00720)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS- SOLVED (UG/L) AS B) (01020)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)
NOV 29...	--	--	0.140	0.010	<0.010	K2	K16	40	19	4
JAN 30...	--	0.50	0.010	0.020	--	--	--	40	<10	--
MAR 21...	--	--	0.170	0.030	--	21	71	30	75	--
MAY 29...	--	0.77	0.250	0.010	<0.010	270	220	20	30	8
JUL 25...	0.36	1.3	2.80	0.040	<0.010	2800	6100	40	39	3
AUG 27...	0.29	--	0.090	<0.010	<0.010	K670	1700	30	4	<1
DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L) AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L) AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L) AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L) AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L) AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COBALT, DIS- SOLVED (UG/L) AS CO) (01035)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)
NOV 29...	1330	20	1	60	<0.5	<1.0	<1	<3	4	1
MAY 29...	1030	40	1	43	<0.5	<1.0	<1	<3	11	1
JUL 25...	1230	50	2	78	<0.5	<1.0	<1	<3	3	<1
AUG 27...	1000	<10	2	76	<0.5	<1.0	<1	<3	3	<1

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)
NOV 29...	17	0.1	<10	1	<1	<1.0	300	<6	7	5.0
MAY 29...	9	<0.1	2	<1	<1	<1.0	210	<6	9	--
JUL 25...	10	<0.1	<10	<1	<1	<1.0	270	8	9	--
AUG 27...	16	<0.1	4	<1	<1	<1.0	330	<6	<3	--
DATE	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)
NOV 29...	32	240	3	<10	4	<10	4	4500	<10	170
DATE	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
NOV 29...	<0.01	170	5.2	<0.6	4.6	<0.6	3.4	<0.6	0.16	3.5
JUL 25...	--	--	3.6	160	3.8	200	2.9	190	0.10	2.4
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)			
NOV 29...	1330	916	318	4.5	627	1550	8			
JAN 30...	1145	793	268	0.0	408	874	9			
MAR 21...	1000	1780	323	7.0	725	3480	13			
MAY 29...	1030	5110	230	13.0	836	11500	20			
JUL 25...	1230	1620	270	20.0	6250	27300	37			
AUG 27...	1000	910	325	21.0	3760	9240	17			

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	345	314	363	342	329	338	315	252	287	277	333
2	387	351	325	341	352	320	330	316	259	288	284	336
3	361	334	338	327	350	324	323	309	258	286	295	334
4	358	393	338	320	341	325	320	314	259	285	269	340
5	358	370	352	322	341	318	312	313	259	286	---	332
6	369	347	355	322	341	308	296	316	257	297	262	331
7	341	346	346	320	339	314	277	307	261	312	271	335
8	341	334	354	328	333	303	---	309	269	308	291	345
9	342	334	352	320	336	298	261	303	271	322	260	347
10	339	317	354	332	331	304	239	286	266	326	264	326
11	336	320	364	---	331	305	232	281	265	324	261	335
12	335	328	352	---	335	310	227	266	259	312	270	332
13	337	332	348	---	328	307	234	250	266	309	281	288
14	321	307	341	331	316	315	241	250	294	305	271	301
15	320	300	332	331	321	316	256	256	270	309	285	292
16	330	297	325	328	319	338	262	261	266	311	290	268
17	315	299	340	327	320	331	270	265	276	320	298	258
18	320	311	354	327	310	337	269	263	272	327	299	273
19	327	312	361	325	330	301	269	265	278	334	296	282
20	339	317	363	329	328	319	260	265	285	335	298	287
21	324	317	340	331	320	332	257	271	296	317	300	289
22	336	339	333	329	362	334	240	236	304	322	307	286
23	338	333	363	335	337	339	245	---	313	---	314	291
24	339	339	355	330	330	335	243	213	315	---	323	299
25	334	344	358	330	325	335	248	212	312	---	322	311
26	329	351	359	334	334	339	256	219	312	---	331	314
27	317	348	358	334	346	341	277	228	316	---	340	317
28	319	341	359	331	340	339	---	235	322	---	329	321
29	327	328	349	331	---	336	280	240	324	256	329	324
30	339	327	338	333	---	328	301	246	321	256	330	329
31	347	---	347	354	---	329	---	248	---	276	328	---
MEAN	339	332	347	---	333	323	---	---	283	---	---	312
MAX	396	393	364	---	362	341	---	---	324	---	---	347
MIN	315	297	314	---	310	298	---	---	252	---	---	258

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	9.0	4.5	.5	4.5	6.0	13.0	14.0	16.0	17.0	19.0	18.5
2	17.0	12.0	3.0	2.0	3.0	4.5	8.5	15.0	12.5	18.0	19.0	17.5
3	19.0	9.0	3.0	2.0	3.5	5.0	7.0	14.0	12.0	16.5	20.0	18.0
4	19.0	7.5	3.5	2.0	7.0	10.0	9.0	9.5	15.0	22.0	19.0	18.0
5	19.0	5.0	3.0	3.0	7.0	9.0	10.0	9.0	14.0	23.0	18.0	18.0
6	13.0	6.0	3.5	3.0	7.0	10.0	10.0	10.0	13.5	21.0	18.0	20.0
7	13.0	6.0	4.0	5.0	7.0	6.0	10.0	10.0	12.0	25.0	16.5	17.0
8	14.0	8.0	2.5	4.5	3.0	8.5	9.0	9.5	15.0	24.5	17.5	17.0
9	15.0	8.5	2.5	3.0	5.0	4.0	7.0	12.0	14.5	26.0	19.0	16.5
10	15.0	5.0	5.0	4.0	4.0	5.0	12.0	11.5	14.5	17.5	18.0	20.0
11	15.0	5.5	2.0	---	8.5	5.5	8.5	11.5	15.0	23.5	23.5	16.0
12	16.0	10.0	5.0	---	9.0	5.0	7.0	11.0	14.0	20.0	19.0	18.0
13	11.0	9.0	7.0	---	9.0	4.0	6.0	10.5	14.0	17.0	20.0	16.0
14	9.5	10.0	7.0	5.0	9.5	6.0	8.0	10.5	15.0	21.0	19.0	15.0
15	16.0	10.0	3.5	4.0	9.5	5.0	6.0	11.0	14.0	23.5	20.0	15.0
16	15.0	6.0	3.5	4.5	7.0	6.0	13.0	10.0	15.0	23.5	19.0	19.0
17	16.0	9.0	4.0	4.0	6.0	5.0	13.5	11.0	15.5	24.0	19.0	19.5
18	14.0	10.0	4.0	4.0	4.0	11.0	10.0	11.5	14.5	24.5	19.0	17.0
19	14.5	10.0	3.0	3.0	7.0	6.0	8.5	12.5	15.5	24.0	20.0	16.0
20	11.0	6.0	4.0	2.0	9.0	6.0	14.5	25.0	15.0	24.0	19.5	18.0
21	8.5	9.5	2.0	.5	9.5	8.0	14.5	12.0	15.5	20.0	20.0	13.5
22	13.0	7.5	5.0	3.0	9.0	5.0	14.0	10.5	15.0	18.5	20.0	14.5
23	8.0	4.0	.0	3.0	5.5	5.5	9.5	11.0	14.5	---	18.0	19.0
24	14.0	5.5	.0	2.5	5.0	7.0	12.0	12.0	15.0	---	18.0	19.0
25	8.5	7.5	.0	3.0	9.5	7.0	9.5	12.0	15.0	---	19.0	19.5
26	12.0	5.0	.0	.5	8.0	8.0	9.0	13.0	16.0	---	20.0	18.5
27	17.0	6.5	.5	1.0	8.0	10.0	10.0	13.0	15.5	---	20.0	19.0
28	14.5	5.0	.0	4.0	5.0	6.5	---	13.0	17.0	---	20.0	15.0
29	8.5	4.5	1.5	3.0	---	8.0	10.0	12.0	18.0	19.0	19.0	14.0
30	14.5	5.0	.0	4.0	---	6.0	13.0	12.0	16.5	19.0	18.5	14.0
31	12.0	---	.0	4.5	---	20.0	---	13.0	---	19.5	18.0	---
MEAN	13.9	7.4	2.8	---	6.7	7.0	---	12.0	14.8	---	19.1	17.2
MAX	19.0	12.0	7.0	---	9.5	20.0	---	25.0	18.0	---	23.5	20.0
MIN	8.0	4.0	.0	---	3.0	4.0	---	9.0	12.0	---	16.5	13.5

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1750	2770	650	1130	521	1090	416	752	736	2200	956	4560
2	1600	3230	1760	7690	555	1200	583	1130	959	2870	469	1790
3	1520	2620	5020	23000	615	1310	601	1210	974	2850	1560	5520
4	1520	3100	1730	5370	452	817	509	1080	628	1360	1360	4820
5	1270	2500	1320	3890	454	764	508	1120	471	1020	1200	3930
6	1680	3400	2520	11500	523	1000	484	1100	423	915	1230	4640
7	1840	4350	2720	13700	614	1270	522	1170	496	1080	1470	5240
8	2740	6160	1710	5700	1780	3480	493	1100	692	1540	918	2860
9	1270	2630	1620	4640	709	1410	528	1180	430	938	965	2810
10	902	1690	1650	4470	708	1500	681	1820	522	1160	905	2580
11	890	1700	1580	4170	1000	2360	688	1980	1200	2710	886	2520
12	1000	2120	1370	3910	2330	6440	585	1600	514	1170	783	2160
13	1240	2630	1560	4960	1460	4970	501	1210	531	1250	897	2430
14	1070	2240	1670	5740	1340	4810	515	1210	585	1500	972	2680
15	812	1800	1730	5940	1170	3790	653	1530	697	1950	1530	4810
16	962	2120	1820	6110	649	2120	622	1440	812	2300	1700	7680
17	707	1390	1620	5040	764	2410	658	1520	883	2680	1230	5690
18	678	1230	1290	3480	561	1660	661	1570	1020	3120	1350	6430
19	620	1070	1420	3660	670	1920	775	1790	799	2210	2030	8620
20	1630	3420	1230	3090	791	2340	680	1600	643	1750	2430	11100
21	967	2140	1130	2830	239	592	609	1460	734	2090	1770	8470
22	725	1520	1350	3880	450	918	503	1200	1100	3730	1210	6420
23	892	1840	1370	3990	331	565	543	1200	1340	4850	1340	6980
24	957	2280	1330	3770	197	350	655	1460	1400	5280	1270	6670
25	2030	5910	1200	3380	241	427	725	1600	1510	5450	1390	7200
26	1130	3460	1020	2770	519	885	591	1310	1890	6830	1300	6670
27	1070	2530	923	2370	543	959	417	925	1710	7110	1290	6600
28	1110	2150	741	1900	379	664	414	905	628	2890	1370	7050
29	1030	1880	516	1280	399	811	467	1020	---	---	1510	7770
30	1390	2450	635	1450	573	1120	425	882	---	---	1380	6450
31	716	1270	---	---	597	1060	523	1430	---	---	1320	5920
TOTAL	---	79600	---	154810	---	55012	---	40504	---	74803	---	169070
DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1530	6690	2020	14200	1320	15500	1010	6850	1350	3520	1140	3040
2	2040	8890	1780	12300	1390	15700	1460	10300	1700	4760	1160	3280
3	1820	8140	1410	10800	1510	16900	690	5100	2900	14800	1280	3720
4	2950	14100	1800	13800	1610	18400	217	1520	9160	89900	3020	10200
5	4090	21900	2080	15800	1910	21600	736	3300	4650	33700	1910	6230
6	2410	15000	2190	17100	1430	15400	816	2050	4860	35900	4530	24100
7	1610	12400	2010	16100	1100	11800	1730	4050	9200	86000	2260	5630
8	3570	31900	2030	17700	950	9620	852	1980	4710	42600	1180	2430
9	4010	40100	1960	18700	1010	10600	624	1400	3590	25100	1040	2270
10	3220	36200	2100	20400	1230	13200	423	995	4380	25500	2130	6090
11	3320	39100	2160	23800	1410	15400	325	836	2780	25300	1450	3990
12	3330	38600	2500	31300	1840	21400	557	1520	7390	41700	1610	6560
13	2810	31600	2340	30100	4740	57700	1580	4540	5270	33400	4720	18000
14	2450	24100	2130	26600	5690	69900	791	2250	7800	36200	3060	10300
15	2710	23100	2110	24400	2790	28200	540	1500	4160	14600	2170	7150
16	2210	17600	2060	23300	1760	17300	322	844	6410	21800	1840	6630
17	1900	15200	2140	24400	1500	14500	264	678	3210	9380	1490	5110
18	2260	18200	2070	23200	1760	15800	190	410	2070	5610	1780	6420
19	3410	28100	1670	17600	1550	13300	2370	4700	2420	7730	1490	5190
20	2550	21800	2400	27800	1550	13100	1540	4780	1760	4620	1200	3410
21	2700	24800	4410	81800	1490	12000	3200	8840	1350	3030	1150	3270
22	1710	15700	3470	78700	1390	10700	9440	66500	1230	2510	1200	3460
23	1650	15300	2190	47800	1450	10500	11700	48700	1380	2940	843	2160
24	2730	25500	1820	36800	1800	12300	7140	26200	1370	2900	744	1640
25	3420	31200	2170	38700	1550	9930	8840	55500	1030	2000	1280	3850
26	4390	38100	2270	36500	1090	6800	12600	90300	1400	2660	1300	4050
27	4120	34100	1910	28500	1310	8060	8610	41400	4810	11800	1130	3230
28	2960	24000	2050	29100	1170	7490	4700	17500	3370	9010	952	2520
29	1630	12500	2280	31300	862	5800	2900	9810	1990	5410	878	2260
30	3830	28400	1950	25200	1030	6530	2380	7910	1560	4110	804	2040
31	---	---	1700	21000	---	---	1790	4720	1320	3560	---	---
TOTAL	---	702320	---	864800	---	505430	---	436983	---	612050	---	168230
TOTAL LOAD FOR YEAR: 3863612 TONS												

RIO GRANDE BASIN

08315500 MCCLURE RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'18", long 105°50'06", in NE¼SW¼, sec.24, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, at McClure Dam on Santa Fe River, 2.1 mi upstream from Nichols Reservoir, 5.8 mi east of Santa Fe, and at mile 37.1.

DRAINAGE AREA.--17.4 mi².

PERIOD OF RECORD.--September 1929, July to October 1930, April 1931 to June 1946, September 1947 to current year. Prior to October 1947, published in WSP 1312. Prior to October 1965, monthend contents only. Prior to January 1980 at site on outlet tower.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1947, nonrecording gages at same site and various datums all referred to the Public Service Co. of New Mexico assumed datum, 165.9 ft lower.

REMARKS.--Reservoir is formed by earthfill dam, completed in 1926, capacity, 561 acre-ft, raised 3 ft in 1935, capacity, 650 acre-ft, and raised 36.5 ft more in 1947, capacity, 2,615 acre-ft at gage height 96.6 ft, crest of concrete spillway. Between October 1947 and May 1953 varying amounts of sandbag bulkheads were placed on crest of spillway to increase capacity. Between May 1953 and December 1971 spillway was equipped with radial gates that opened automatically thereby increasing capacity to over 3,000 acre-ft. Radial gates were removed during 1972, capacity, 2,615 acre-ft. In 1989, modifications to the dam and spillway increased capacity to 2,813 acre-ft. No dead storage. Water is for municipal use of City of Santa Fe.

COOPERATION.--Capacity table and supplementary gage readings, provided by Public Service Co. of New Mexico.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,140 acre-ft, June 25, 1960, gage height, 103.7 ft; no contents Jan. 25 to May 8, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 2,860 acre-ft; July 26, Aug. 3, 6, 7, 10 gage height, 99.94 ft; minimum, 1,200 acre-ft, Apr. 2, gage height, 73.08.

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

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

60	668	90	2,160
70	1,050	100	2,860
80	1,550		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1450	e1810	e1780	1610	1390	1230	1230	e1770	e2850	2840	2840	2830
2	e1450	e1800	e1770	1600	1380	1230	1200	e1780	e2840	2830	2850	2830
3	e1470	e1800	1770	1590	1370	1220	1250	1800	e2840	2830	2860	2840
4	e1490	e1800	e1770	1590	1370	1220	1270	1810	e2840	2830	2850	2840
5	e1500	1780	e1760	1580	1360	1220	1290	1820	e2840	2830	2850	2830
6	e1520	e1780	e1760	1580	1350	1220	1310	1830	e2840	2830	2860	2840
7	e1530	e1780	1760	1570	1350	1220	1350	1840	2840	2830	2860	2840
8	1550	e1790	1750	1570	1340	1220	1380	1850	2830	2830	2850	2840
9	e1600	e1790	1750	1560	1330	1220	1400	1870	2830	2830	2850	2840
10	e1640	e1790	1740	1550	1330	1220	1400	1890	2830	2820	2860	2850
11	e1650	e1800	1740	1540	1320	1220	e1420	1920	2840	2820	2850	2850
12	e1670	e1800	1730	1530	1320	1210	e1440	1960	2850	2820	2850	2850
13	e1680	1800	1730	1530	1310	1210	e1460	1990	2850	2820	2850	2850
14	e1690	e1800	1720	1520	1300	1210	e1480	2020	2840	2820	2850	2840
15	e1700	e1810	1720	1510	1300	1210	e1500	2050	2840	2820	2840	2840
16	e1700	e1810	1710	1500	1290	1210	e1510	2070	2840	2820	2840	2840
17	e1710	e1810	1710	1500	1290	1210	e1520	2040	2840	2820	2840	2840
18	e1720	e1820	1700	1490	1280	1210	e1540	2110	2840	2830	2840	2840
19	e1730	1820	1700	1480	1280	1210	e1550	2140	2840	2830	2840	2840
20	e1740	e1820	1690	1480	1270	1210	e1570	2190	2830	2830	2840	2840
21	e1750	e1810	1680	1470	1260	1210	e1590	e2340	2830	2830	2840	2840
22	1760	e1810	1680	1460	1260	1210	1600	2420	2830	2840	2840	2840
23	e1760	e1810	1670	1450	1250	1210	e1620	e2500	2830	2840	2840	2830
24	e1770	e1800	1670	1440	1250	1210	e1640	e2620	2830	2850	2840	2840
25	1780	e1800	1650	1440	1250	1220	e1660	e2740	2830	2850	2840	2830
26	e1780	1800	1650	1430	1240	1220	e1680	e2800	2820	2860	2830	2830
27	e1790	e1800	1640	1420	1230	1220	e1700	e2850	2820	2850	2830	2830
28	e1790	e1790	1630	1420	1230	1230	e1720	e2850	2830	2850	2830	2830
29	1800	e1790	1630	1410	---	1230	1740	e2850	2850	2840	2830	2830
30	e1800	e1780	1620	1400	---	1230	e1760	e2850	2840	2840	2830	2830
31	1810	---	1610	1390	---	1230	---	e2850	---	2840	2830	---
MAX	1810	1820	1780	1610	1390	1230	1760	2850	2850	2860	2860	2850
MIN	1450	1780	1610	1390	1230	1210	1200	1770	2820	2820	2830	2830
(†)	---	---	80.95	77.03	73.28	73.65	---	---	99.67	99.71	99.52	99.58
(††)	+360	-30	-170	-220	-160	0	+530	+1090	-10	0	-10	0
CAL YR 1990	MAX 2100	MIN 547	(††)	+1065								
WTR YR 1991	MAX 2860	MIN 1200	(††)	+1380								

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

e Estimated

RIO GRANDE BASIN

08316000 SANTA FE RIVER NEAR SANTA FE, NM

LOCATION.--Lat 35°41'12", long 105°50'35", in NE¼SE¼ sec.23, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, on left bank 0.4 mi downstream from McClure Dam, 5.3 mi east of Santa Fe, and at mile 36.6.

DRAINAGE AREA.--18.2 mi².

PERIOD OF RECORD.--June 1910, January 1913 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Santa Fe Creek near Santa Fe.

REVISED RECORDS.--WSP 1512: 1933, 1936-37(M), 1942, drainage area. WSP 1732: 1923, 1925. WDR NM-75-1: 1927.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,720 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1312 for history of changes prior to Oct. 1, 1947.

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

AVERAGE DISCHARGE.--78 years, 8.08 ft³/s, 5,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,500 ft³/s, Aug. 14, 1921, gage height, 5.17 ft, site and datum then in use, from rating curve extended above 150 ft³/s; minimum, 0.05 ft³/s, Apr. 7, 8, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks which probably exceeded 1,000 ft³/s occurred Aug. 19, 1872, and Sept. 29 or 30, 1904. Without regulation the flood of Sept. 23, 1929, might have exceeded 1,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 84 ft³/s, July 26, gage height, 2.84 ft, but may have been greater during period of no gage height record; minimum daily, 0.91 ft³/s Oct. 17-19, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	.99	4.6	5.2	5.2	4.9	4.9	6.2	e15	23	25	e7.8
2	2.7	1.0	4.6	5.2	5.2	4.9	5.0	6.2	e14	17	22	e9.0
3	.99	.99	4.6	5.2	5.2	4.9	5.2	6.2	e13	13	60	e11
4	.99	.99	4.6	5.2	5.0	4.8	5.2	6.2	e13	11	60	e15
5	.99	.99	4.6	5.2	4.9	5.0	5.2	6.2	e14	9.8	58	e20
6	.99	2.6	4.6	5.2	4.9	5.2	5.4	6.2	e15	8.9	55	e26
7	.99	4.2	4.6	5.2	4.9	5.1	5.4	6.2	e16	8.2	74	e33
8	.99	4.2	4.6	5.2	4.9	5.0	5.4	6.2	17	7.2	69	e25
9	.99	4.2	4.6	5.2	4.9	5.1	5.4	6.2	16	6.7	59	e18
10	.99	4.2	4.6	5.2	4.9	5.2	5.6	6.2	15	6.4	62	e26
11	.99	4.2	4.6	5.2	4.9	5.2	5.8	6.3	15	6.0	75	e62
12	.99	4.1	4.6	5.2	4.9	5.2	5.8	6.3	22	5.9	50	e44
13	.99	4.0	4.9	5.1	4.9	5.2	5.9	10	45	5.7	e56	e35
14	.99	4.0	4.9	4.9	4.9	5.2	5.9	13	36	4.7	e52	e43
15	.99	4.0	4.9	4.9	4.9	5.2	5.9	13	28	4.6	e45	e31
16	.93	4.0	5.1	4.9	4.9	5.2	5.9	13	23	4.7	e47	e27
17	.91	4.0	5.2	4.9	4.9	5.2	5.9	13	19	4.9	e31	e23
18	.91	4.0	5.2	4.9	4.9	5.2	6.0	13	16	5.0	e23	e20
19	.91	4.0	5.2	4.9	4.9	5.2	6.0	13	15	6.8	e17	e15
20	.94	4.0	5.2	4.9	4.9	5.2	6.0	13	14	5.7	e13	e12
21	.91	4.0	5.2	5.2	4.9	5.2	6.0	14	13	8.0	e10	e10
22	.91	4.0	5.2	5.2	4.9	5.2	6.0	14	11	16	e9.0	e8.8
23	.92	4.0	4.9	5.2	4.9	5.2	6.0	15	9.8	18	e8.0	e8.2
24	.94	3.8	4.9	5.2	4.9	5.2	6.0	15	8.8	22	e7.0	e7.4
25	.96	3.7	4.9	5.2	4.9	5.2	6.0	56	8.0	52	e6.6	e7.2
26	.99	3.7	4.9	5.2	4.9	5.2	6.1	e40	7.3	70	e6.4	e7.0
27	.99	3.7	5.0	5.2	4.9	5.2	6.1	e31	7.5	58	e6.2	e6.8
28	.99	3.7	5.1	5.2	4.9	5.2	6.1	e25	5.8	48	e6.2	e6.6
29	.99	4.2	5.2	5.2	---	5.2	6.2	e21	13	36	e6.2	e6.4
30	.99	4.6	5.2	5.2	---	4.9	6.2	e18	34	29	e8.6	e6.2
31	.99	---	5.2	5.2	---	4.9	---	e16	---	25	e7.0	---
TOTAL	35.55	104.06	151.5	159.0	138.2	158.7	172.5	440.6	499.2	547.2	1034.2	577.4
MEAN	1.15	3.47	4.89	5.13	4.94	5.12	5.75	14.2	16.6	17.7	33.4	19.2
MAX	4.8	4.6	5.2	5.2	5.2	5.2	6.2	56	45	70	75	62
MIN	.91	.99	4.6	4.9	4.9	4.8	4.9	6.2	5.8	4.6	6.2	6.2
AC-FT	71	206	301	315	274	315	342	874	990	1090	2050	1150

CAL YR 1990 TOTAL 1853.24 MEAN 5.08 MAX 23 MIN .39 AC-FT 3680
WTR YR 1991 TOTAL 4018.11 MEAN 11.0 MAX 75 MIN .91 AC-FT 7970

e Estimated

RIO GRANDE BASIN

08316500 NICHOLS RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'24", long 105°52'46", in SE¼NE¼ sec.21, T.17 N., R.10 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, at Nichols Dam on Santa Fe River, 0.6 mi east of Twomile Reservoir, 3.3 mi east of Santa Fe, and at mile 34.4.

DRAINAGE AREA.--22.8 mi².

PERIOD OF RECORD.--March 1943 to September 1965 (monthend contents only), October 1965 to current year. Prior to January 1980 at site on outlet tower.

GAGE.--Water-stage recorder. Datum of gage is 7,313.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam. No contents prior to Mar. 16, 1943. Capacity, 685 acre-ft between gage heights 121.2 ft, bottom of lower operational gate and 167.0 ft, crest of spillway. Dead storage, 14 acre-ft. Water is for municipal use of City of Santa Fe.

COOPERATION.--Survey to compute capacity table and supplementary gage readings, provided by Public Service Co. of New Mexico.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 836 acre-ft, June 8, 1952, gage height, 171.8 ft; minimum, 16 acre-ft, Feb. 11 to Mar. 10, 1944, Feb. 1-19, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 698 acre-ft, July 26, Aug. 10, gage height, 167.41 ft; minimum, 172 acre-ft, Mar. 2, gage height, 142.64 ft.

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

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

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	586	338	218	329	312	173	353	338	692	689	690	683
2	583	331	216	328	310	172	357	329	691	688	692	681
3	576	322	215	326	299	177	362	316	690	686	695	680
4	567	314	215	325	292	186	367	303	689	685	696	688
5	558	308	221	325	284	199	370	296	689	683	696	687
6	555	300	227	324	277	212	370	293	689	679	697	690
7	557	296	233	323	271	218	376	280	689	674	697	689
8	551	292	238	322	264	224	381	268	689	667	696	688
9	540	288	244	320	262	230	381	256	689	658	695	691
10	530	284	250	319	254	236	380	251	688	648	698	695
11	519	280	256	318	246	243	382	247	688	638	696	694
12	508	276	263	317	243	248	381	245	695	628	694	694
13	505	273	270	316	242	253	379	247	694	618	694	693
14	507	270	276	315	238	258	377	250	692	607	693	692
15	500	266	283	313	230	263	374	259	691	595	692	692
16	488	263	292	312	221	268	372	273	690	581	692	691
17	478	260	299	311	217	273	370	283	688	566	691	691
18	468	257	306	310	215	277	367	293	687	554	691	691
19	457	254	314	308	206	283	365	302	687	543	690	690
20	448	250	320	310	198	290	362	314	688	534	690	690
21	437	247	327	314	191	297	359	330	686	540	689	690
22	428	244	334	312	184	304	356	344	683	564	689	689
23	423	240	333	311	178	311	354	356	681	588	688	689
24	413	237	333	310	177	317	351	368	675	616	688	688
25	403	234	343	309	176	324	338	439	671	695	688	688
26	393	231	343	309	175	331	345	524	666	698	688	688
27	383	228	339	314	174	335	343	601	662	695	687	687
28	373	224	338	319	173	339	344	668	656	694	687	687
29	364	221	337	324	---	342	345	693	666	692	686	688
30	356	220	336	321	---	346	342	693	662	690	685	688
31	347	---	330	314	---	350	---	692	---	691	685	---
MAX	586	338	343	329	312	350	382	693	695	698	698	695
MIN	347	220	215	308	173	172	338	245	656	534	685	680
(†)	153.53	146.17	152.66	151.80	142.72	153.68	153.31	167.22	167.20	167.18	166.98	167.10
(††)	-244	-127	+110	-16	-141	+177	-8	+350	0	-1	-6	+3

CAL YR 1990 MAX 591 MIN 155 (††) 25
WTR YR 1991 MAX 698 MIN 172 (††) 97

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

RIO GRANDE BASIN

08317200 SANTA FE RIVER ABOVE COCHITI LAKE, NM

LOCATION.--Lat 35°32'49", long 106°13'41", in NW¼ sec.8, T.15 N., R.7 E., Santa Fe County, Hydrologic Unit 13020201 in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 mi upstream from Cochiti Dam, 6.3 mi east of Pena Blanca, and at mile 7.9.

DRAINAGE AREA.--231 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1970 to current year.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Surface- and ground-water diversions and returns for municipal supply of City of Santa Fe in upper part of basin. Diversions for irrigation of about 400 acres upstream from station. See tabulation below for the results of discharge measurements made during year at point adjacent to gage of an unnamed ditch on right bank which diverts water 0.4 mi upstream and bypasses gage; ditch flow not included in record.

AVERAGE DISCHARGE.--21 years, 9.79 ft³/s, 7,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, July 26, 1971, gage height, 9.58 ft, from rating curve extended above 160 ft³/s on basis of slope-area measurements at gage heights 5.69 ft and 9.58 ft; no flow July 16-18, 1971.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 29	2145	804	3.69	Aug. 4	2300	*1,700	*4.77
July 22	2045	615	3.37				

Minimum daily, 3.3 ft³/s, July 16,17.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 4	0	Feb. 26	0	July 2	.51
Nov. 2	0	Mar. 30	1.4	Aug. 6	.42
Dec. 6	0	June 4	.78	Sept. 5	1.2

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	8.3	e8.8	e8.1	11	8.8	5.8	11	11	24	5.5
2	27	14	8.1	e9.0	e8.2	11	9.4	4.9	9.5	7.9	16	5.5
3	e12	14	8.0	e8.9	e8.3	10	9.5	5.8	11	17	40	5.5
4	e10	11	8.0	e8.9	e8.4	10	9.5	5.5	10	10	156	5.7
5	8.4	11	7.8	e9.0	e8.5	10	9.3	5.2	10	5.4	114	7.2
6	8.0	11	9.3	e9.0	e8.5	9.8	8.8	5.6	9.0	4.7	55	14
7	8.5	10	13	e8.8	e8.6	11	8.4	5.0	10	4.2	80	10
8	9.6	11	15	e8.9	e8.6	8.1	8.3	5.4	8.3	4.2	50	12
9	9.4	11	e17	e8.8	e8.7	9.3	8.4	5.1	7.9	4.3	41	10
10	9.6	10	e16	e9.1	e8.4	9.5	7.3	5.2	8.4	4.3	41	43
11	10	9.9	e12	e9.4	e8.6	9.1	7.9	5.0	20	4.0	46	41
12	10	9.8	e11	e9.6	e8.5	8.8	7.7	4.4	18	3.8	44	44
13	10	10	e9.8	e9.6	e8.3	9.4	7.0	4.5	34	4.1	45	44
14	11	10	e9.7	e9.5	e8.2	9.4	6.7	5.0	34	3.4	51	32
15	11	10	e9.4	e9.6	e8.0	9.7	6.4	4.8	27	3.9	34	28
16	12	9.9	e9.0	e9.7	e8.0	10	5.5	4.5	18	3.3	28	26
17	14	9.9	e8.9	e9.8	e7.9	10	6.1	4.9	13	3.3	24	23
18	13	9.6	e8.7	e9.8	e7.8	10	5.8	4.7	8.9	4.2	20	20
19	15	9.5	e8.6	e9.6	e7.8	9.3	5.8	6.7	16	18	19	18
20	17	9.5	e8.4	e9.6	e7.7	9.3	5.6	7.3	29	7.7	12	17
21	17	9.2	e8.4	e9.4	e7.8	9.4	4.7	41	17	18	9.7	17
22	17	9.2	e8.0	e8.7	e7.7	9.1	5.0	20	14	58	8.9	14
23	16	9.2	e7.2	e8.1	e8.0	9.4	5.3	11	10	15	9.5	12
24	13	8.9	e6.3	e8.2	8.0	9.3	5.2	9.6	8.9	17	7.5	11
25	13	8.9	e5.7	e8.3	8.0	9.2	4.9	10	8.5	77	6.3	9.8
26	12	8.8	e6.8	e8.5	8.3	9.8	4.7	11	7.3	68	6.2	8.3
27	10	8.6	e7.5	e8.6	8.9	9.5	4.6	11	7.0	45	6.0	7.8
28	10	8.6	e7.8	e8.6	9.7	9.6	4.7	16	7.4	39	5.6	6.3
29	9.8	8.5	e8.2	e8.1	---	9.5	5.1	19	83	32	5.6	6.5
30	11	8.3	e8.5	e8.0	---	9.4	5.5	17	66	23	5.6	7.6
31	11	---	e8.6	e8.1	---	9.4	---	14	---	18	5.6	---
TOTAL	381.3	300.3	289.0	278.0	231.5	298.3	201.9	284.9	542.1	538.7	1016.5	511.7
MEAN	12.3	10.0	9.32	8.97	8.27	9.62	6.73	9.19	18.1	17.4	32.8	17.1
MAX	27	14	17	9.8	9.7	11	9.5	41	83	77	156	44
MIN	8.0	8.3	5.7	8.0	7.7	8.1	4.6	4.4	7.0	3.3	5.6	5.5
AC-FT	756	596	573	551	459	592	400	565	1080	1070	2020	1010
CAL YR 1990	TOTAL 3282.6	MEAN 8.99	MAX 225	MIN 2.0	AC-FT 6510							
WTR YR 1991	TOTAL 4874.2	MEAN 13.4	MAX 156	MIN 3.3	AC-FT 9670							

e Estimated

RIO GRANDE BASIN

08317200 SANTA FE RIVER ABOVE COCHITI LAKE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-75, 1979, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
JAN 11...	1430	8.6	590	8.9	7.0	7.0	10.1	17	160	49	
JUN 05...	1102	9.7	575	8.7	28.5	22.5	7.5	--	140	47	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
JAN 11...		8.4	63	2	7.3	195	51	45	0.80	20	375
JUN 05...		6.5	63	2	6.1	192	49	40	0.80	24	352
DATE		NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	
JAN 11...		1.64	1.65	0.060	0.050	1.70	1.70	0.450	0.520	1.0	
DATE		NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
JAN 11...		3.2	2.10	1.80	5.4	140	17	37	0.86	67	
JUN 05...		--	--	--	--	150	8	100	2.6	87	

RIO GRANDE BASIN

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM

LOCATION.--Lat 35°37'01", long 106°18'58", in NW¼SW¼ sec.16, T.16 N., R.6 E., Sandoval County, Hydrologic Unit 13020201, in Pueblo de Cochiti Grant, in control tower at Cochiti Dam, 1.7 mi northeast of Cochiti Pueblo, and at mile 1,588.1.

DRAINAGE AREA.--14,900 mi² approximately, including 2,940 mi², in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 15, 1975, at site 1.3 mi upstream at same datum.

REMARKS.--Lake is formed by an earthfill dam on Rio Grande and Santa Fe River. Storage began on Nov. 12, 1973. Capacity, based on capacity table effective Jan. 1, 1988, 502,330 acre-ft between elevations 5,247.0 ft and 5,450.0 ft, crest of service spillway. Dead storage 560 acre-ft below elevation 5,255.0 ft, invert of outlet structure. Lake was created primarily for flood and sediment control. A 50,000-acre-ft permanent pool is authorized for recreational purposes. U.S. Army Corps of Engineers satellite telemeter at station.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 111,470 acre-ft, May 30, elevation, 5,366.10 ft; minimum, 47,060 acre-ft, Nov. 16, elevation, 5,329.57 ft.

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

(Based on survey by Corps of Engineers in 1988)

5,325	42,250	5,375	135,480
5,335	53,620	5,385	166,390
5,345	68,010	5,395	201,410
5,355	86,140	5,405	241,230
5,365	108,740	5,415	286,210

RESERVOIR STORAGE (ACRE-FEET), WATER OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49790	49360	49210	50140	50360	51020	50610	59910	110540	49590	49180	49080
2	49600	49460	49220	50180	50460	50830	50670	57910	109680	49870	49140	49070
3	49780	50100	49180	50230	50560	50830	50840	56480	108740	49830	49730	49150
4	49760	49720	49230	50290	50320	50980	50790	55490	107400	49570	52780	49380
5	49770	49070	49390	50060	50170	51000	51070	54710	105920	49210	53000	49520
6	49760	48740	49400	49900	50180	51100	51360	54030	104520	49030	51040	50170
7	49910	49210	49390	49950	50180	51050	53790	53450	104020	49560	50070	49310
8	49950	49060	49250	49970	50210	50720	56070	53320	101910	49890	49120	48860
9	49770	48650	49330	49940	50210	50660	58900	53860	100540	49730	49530	49100
10	49700	48200	49380	50000	50240	50900	61970	54530	100430	49500	50420	49510
11	49710	47870	49420	50020	50290	50880	65090	55880	100430	49360	50000	49630
12	49820	47910	49500	49980	50310	50780	67860	58280	100120	49290	49530	49940
13	49960	48010	49480	50690	50290	50780	69880	60720	100190	49290	49280	50300
14	49900	48060	49360	51830	50350	50780	71410	62670	99960	49320	50380	50010
15	49870	47730	49360	52850	50460	50800	72120	64060	98270	49290	49790	49520
16	49760	47060	49490	53690	50410	51100	72170	65260	96510	49320	49480	49510
17	49530	47830	49490	54700	50260	51330	71920	66210	94100	49570	49200	49440
18	49430	49200	49360	54620	50260	51490	71410	66730	90990	49530	48920	49310
19	49460	50180	49350	54450	50090	51310	70920	66800	87230	49240	49140	49410
20	49580	51120	49310	54760	50070	51210	70720	67480	84770	48740	49170	49480
21	49770	51230	49130	55130	50210	50870	70890	72720	81370	48990	49200	49640
22	49770	51040	48710	54730	50290	50830	70760	82440	77750	49980	49240	49640
23	49620	50700	48290	53910	50210	50830	70030	91200	73890	50670	49290	49450
24	49570	50060	48690	53090	50240	50820	69370	96900	69980	49770	49290	49200
25	49520	49630	48980	52220	50260	50880	68550	100920	66370	51210	49210	49270
26	49450	49440	49280	51490	50240	50870	67610	106380	63800	51510	49060	49440
27	49160	49320	49500	50690	50370	50980	66370	108740	61270	49500	49150	49410
28	49000	49380	49920	50170	50990	51020	65090	110590	58930	49360	49360	49340
29	49180	49350	50680	50250	---	51020	63570	111390	55760	49700	49380	49170
30	49350	49300	50660	50320	---	51100	61860	111470	51560	49360	49280	49340
31	49390	---	50210	50290	---	50770	---	111140	---	49150	49160	---
MAX	49960	51230	50680	55130	50990	51490	72170	111470	110540	51510	53000	50300
MIN	49000	47060	48290	49900	50070	50660	50610	53320	51560	48740	48920	48860
(†)	5331.64	5331.56	5332.33	5332.39	5332.96	5332.78	5341.03	5365.97	5333.41	5331.43	5331.44	5331.60
(††)	-1820	-90	+910	+80	+700	-220	+11090	+49280	-59580	-2410	+10	+180
CAL YR 1990	MAX	52000	MIN	47060	(††)	-730						
WTR YR 1991	MAX	111470	MIN	47060	(††)	-1870						

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET.

RIO GRANDE BASIN

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected in Cochiti Lake impounded by Cochiti Dam on the Rio Grande.

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

REMARKS.--Samples for chemical analyses are collected annually at Site A which is located 500 ft upstream from the Outlet Tower (Riser). Samples are collected 5 feet from the bottom of the lake.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
JUN													
20...	1146	1.00	101	--	--	--	19.0	7.7	--	--	--	--	
20...	1147	5.00	101	270	8.0	--	19.0	7.6	--	--	--	--	
20...	1148	10.0	101	--	--	--	18.5	7.5	--	--	--	--	
20...	1149	15.0	101	--	--	--	18.0	7.2	--	--	--	--	
20...	1150	20.0	101	--	--	--	18.0	7.1	--	--	--	--	
20...	1151	25.0	101	--	--	--	18.0	6.9	--	--	--	--	
20...	1152	30.0	101	--	--	--	17.5	6.7	--	--	--	--	
20...	1153	35.0	101	--	--	--	17.0	6.9	--	--	--	--	
20...	1154	40.0	101	--	--	--	16.5	6.9	--	--	--	--	
20...	1155	45.0	101	--	--	--	16.0	6.8	--	--	--	--	
20...	1156	50.0	101	270	8.0	--	16.0	6.8	--	--	--	--	
20...	1157	55.0	101	--	--	--	16.0	6.8	--	--	--	--	
20...	1158	60.0	101	--	--	--	15.5	6.7	--	--	--	--	
20...	1159	65.0	101	--	--	--	15.0	6.6	--	--	--	--	
20...	1200	70.0	101	--	--	--	15.0	6.5	--	--	--	--	
20...	1201	75.0	101	--	--	--	15.0	6.5	--	--	--	--	
20...	1202	80.0	101	--	--	--	15.0	6.4	--	--	--	--	
20...	1203	85.0	101	--	--	--	14.0	5.7	--	--	--	--	
20...	1204	90.0	101	--	--	--	13.0	5.2	--	--	--	--	
20...	1205	95.0	101	261	8.1	26.0	10.5	2.7	19	100	26	32	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	
JUN													
20...	5.8	13	0.6	2.3	95	0	78	43	3.9	0.20	16		
DATE		SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
JUN													
20...	166	0.047	0.069	0.040	0.020	0.087	0.089	0.030	0.020	0.57	0.69	0.070	
DATE		PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
JUN													
20...	0.030	4.2	<1	1	2300	<1	<1.0	3	<1	5	2	14	

RIO GRANDE BASIN

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)
JUN 20...	3	1	<0.1	<1	<1	<10	<3	<2.0	55	560	23	1
DATE	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
JUN 20...	5	<5	20	6700	20	680	0.05	40	45	91	K9	77

RIO GRANDE BASIN

08317400 RIO GRANDE BELOW COCHITI DAM, NM

LOCATION.--Lat 35°37'05", long 106°19'24", in SW¼NE¼ sec.17, T.16 N., R.6 E., Sandoval County, Hydrologic Unit 13020201, in Pueblo de Cochiti Grant, on right bank 320 ft upstream from bridge on State Highway 22,700 ft downstream from Cochiti Dam, 1.4 mi northeast of Cochiti Pueblo, and at mile 1,587.6.

DRAINAGE AREA.--14,900 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,226.08 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 14, 1973, at site 2.4 mi downstream at elevation 5,210 ft, from topographic map. Nov. 14, 1973, to Jan. 8, 1976, at site 320 ft downstream at datum 1.79 ft lower.

REMARKS.--Records good. Discharges include flow of Santa Fe River, which is intercepted by Cochiti Dam and released through the combined outlet works. Flow regulated by Cochiti Dam since Nov. 12, 1973. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and about 81,000 acres in New Mexico. Cochiti Eastside Main Canal, on left bank, and Sili Main Canal, on right bank, head at Cochiti Dam and bypass gage for irrigation of about 6,000 acres downstream from station; see tabulation below for monthly and yearly diversion. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--21 years, 1,387 ft³/s, 1,005,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,300 ft³/s, July 26, 1971, gage height, 7.90 ft, site and datum then in use, from rating curve extended above 2,600 ft³/s; minimum, 0.51 ft³/s, Aug. 3-5, 1977, Aug. 27, 28, 1978, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 15, 1941, reached a discharge of 23,400 ft³/s at a nearby site upstream from mouth of Santa Fe River. The flood of May 23, 1920, probably exceeded 23,400 ft³/s, and is likely the highest since 1905.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,120 ft³/s, June 18; minimum daily, 286 ft³/s, Dec. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	454	751	583	937	1390	1510	3300	4070	3320	836	865
2	591	630	741	583	937	1330	1420	3290	4060	2470	883	863
3	495	861	749	607	937	1120	1420	3150	4110	2510	889	860
4	552	1070	664	666	937	1050	1560	2930	4400	2470	1180	893
5	583	1150	583	783	856	989	1610	2920	4550	2110	2160	948
6	583	1150	656	785	788	1030	1630	2910	4320	964	2790	1140
7	576	1050	731	750	788	1080	1640	2920	3890	519	2960	1290
8	623	1090	754	753	788	1090	1830	2920	4520	537	2840	862
9	668	1040	730	759	788	852	2010	2930	4220	684	1830	599
10	596	1030	694	773	788	722	2090	2940	3620	759	1510	823
11	510	967	723	890	783	838	2130	2960	3790	759	1710	968
12	483	815	808	854	800	859	2250	2990	4050	793	2110	992
13	498	884	926	492	826	817	2430	3140	4400	841	1470	1230
14	546	948	1020	287	826	817	2440	3280	4540	840	1310	1370
15	575	1120	1040	309	849	932	2540	3300	4550	828	1460	1290
16	597	1230	941	313	935	1100	2630	3330	4560	725	1270	1140
17	608	526	936	317	1030	1220	2780	3480	4950	651	1180	1170
18	494	316	938	763	1010	1280	2950	3680	5120	649	1160	1180
19	436	313	905	825	1020	1280	2930	3680	5110	657	1020	1100
20	436	365	896	569	917	1340	2920	3710	4920	713	986	945
21	460	692	896	638	876	1450	2910	3480	5000	826	747	836
22	530	856	892	971	998	1450	3200	3240	4950	876	633	959
23	569	978	534	1150	1140	1440	3480	3700	4910	1410	633	924
24	578	1100	286	1150	1140	1450	2460	3780	4940	1430	633	817
25	645	1030	331	1150	1160	1440	3450	3610	4470	1380	633	817
26	741	925	389	1160	1160	1450	3440	3650	3680	2100	616	928
27	725	856	450	1160	1180	1440	3400	3660	3610	2400	600	928
28	553	776	390	1030	1130	1450	3370	3670	3600	1300	695	863
29	394	812	347	772	---	1500	3360	3950	4080	1010	807	856
30	394	787	642	759	---	1540	3330	4080	4500	1260	826	706
31	435	---	750	842	---	1540	---	4070	---	991	872	---
TOTAL	17594	25821	22093	23443	26324	37286	75120	104650	131490	38782	39249	29162
MEAN	568	861	713	756	940	1203	2504	3376	4383	1251	1266	972
MAX	1120	1230	1040	1160	1180	1540	3480	4080	5120	3320	2960	1370
MIN	394	313	286	287	783	722	1420	2910	3600	519	600	599
AC-FT	34900	51220	43820	46500	52210	73960	149000	207600	260800	76920	77850	57840
(†)	6980	0	0	0	0	5850	7850	7900	8080	7170	6110	6500
(††)	4010	0	0	0	0	3940	4320	4570	4310	4160	3960	3810

CAL YR 1990 TOTAL 283899 MEAN 778 MAX 2610 MIN 286 AC-FT 563100
WTR YR 1991 TOTAL 571014 MEAN 1564 MAX 5120 MIN 286 AC-FT 1133000

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

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

RIO GRANDE BASIN

08317900 GALISTEO RESERVOIR NEAR CERRILLOS, NM

LOCATION.--Lat 35°27'44", long 106°12'30", in NW¼ sec.9 T.14 N., R.7 E., Santa Fe County, Hydrologic Unit 13020201, in Mesita de Juana Lopez Grant, at Galisteo Dam on Galisteo Creek, 5.0 mi northwest of Cerrillos, and at mile 11.8.

DRAINAGE AREA.--596 mi².

PERIOD OF RECORDS.--October 1970 to current year.

GAGE.--Water-stage recorder above elevation 5,500.3 ft, nonrecording below. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by an earthfill dam, completed Oct. 11, 1970. Capacity, based on capacity table effective January 1972, 88,990 acre-ft between elevations 5,496.0 ft, sill of ungated outlet conduit, and 5,608.0 ft, crest of uncontrolled spillway. No dead storage. Reservoir is used for flood control. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,510 acre-ft, July 26, 1971, elevation, 5,517.00; no storage most of time.

EXTREMES FOR CURRENT YEAR.--No storage all year.

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

(Based on survey by U.S. Army Corps of Engineers in 1972)

5,500	0	5,504	41
5,501	2	5,505	69
5,502	9	5,506	109
5,503	21	5,508	244

RIO GRANDE BASIN

08317950 GALISTEO CREEK BELOW GALISTEO DAM, NM

LOCATION.--Lat 35°27'53", long 106°12'49", in NE¼NE¼ sec.8, T.14 N., R.7 E., Santa Fe County, Hydrologic Unit 13020201, in Mesita de Juana Lopez Grant, on right bank 0.4 mi downstream from Galisteo Dam, 5.3 mi northwest of Cerrillos, and at mile 11.4.

DRAINAGE AREA.--597 mi².

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,450 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 21, 1981, at site 1,200 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Galisteo Reservoir 0.4 mi upstream. Diversions for irrigation of about 50 acres upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--21 years, 6.25 ft³/s, 4,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s, July 27, 1971, gage height, 7.00 ft, from rating curve extended above 1,400 ft³/s; maximum gage height, 7.33 ft, July 20, 1971; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft³/s, Aug. 7, gage height, 5.47 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	.19	.48	e.00	e.80	1.2	.63	.00	.00	7.8	15	.20
2	5.5	.60	.73	e.00	e.80	1.9	.41	.00	.00	1.2	21	.21
3	1.8	1.4	.50	e.00	e.80	.95	.15	.00	.00	16	74	.19
4	.91	.82	.55	e.00	e.80	.74	.08	.00	.00	.75	64	.18
5	.66	.48	.59	e.40	e.80	.70	.03	.00	.00	.01	28	1.8
6	.52	.39	.79	e1.2	e.80	.80	.00	.00	.00	.00	75	7.0
7	.36	.28	.76	e1.5	e.80	.71	.00	.00	.00	.01	513	7.4
8	.32	.71	.94	e1.5	e.80	.60	.00	.00	.00	.01	50	1.3
9	.21	.74	e.90	e1.5	e.80	.61	.00	.00	.00	.01	22	40
10	.17	.57	e.88	e1.5	e.80	.63	.00	.00	.00	.01	159	226
11	.19	.52	e.85	e1.5	e.80	.69	.00	.00	.00	.01	32	61
12	.17	.47	e.80	e1.0	e.80	.53	.00	.00	.00	.01	8.1	21
13	.17	.46	.92	e1.0	e.70	.41	.00	.00	.04	.01	44	14
14	.17	.46	.95	e1.1	e.70	.50	.00	.00	.33	.01	314	5.8
15	.16	.44	e.55	e1.0	e.70	.64	.00	.00	.51	.01	20	2.7
16	.15	.43	e.60	e1.1	e.70	.88	.00	.00	3.5	.02	15	1.5
17	.16	.38	e.70	e1.0	e.70	1.0	.00	.00	.81	1.8	39	1.0
18	.17	.41	.49	e1.0	e.60	.75	.00	.00	.12	.34	82	.70
19	.17	.49	.72	e1.0	e.60	.66	.00	.00	.00	16	8.3	.53
20	.24	.53	.65	e1.0	e.60	.58	.00	.00	.00	11	3.9	.63
21	.20	.63	.49	e1.0	e.50	.59	.00	.04	.00	7.6	1.9	.68
22	.15	.49	.55	e1.0	e.50	.62	.00	8.7	.00	115	7.0	.54
23	.15	.42	e.45	e1.0	e.50	.50	.00	2.3	.00	35	40	.35
24	.16	.46	.25	e.90	e.50	.52	.00	.33	.00	93	8.4	.32
25	.15	.46	.20	e.90	.54	.57	.00	.08	.00	330	68	.33
26	.15	.60	.20	e.80	.51	.66	.00	.00	.00	253	10	.28
27	.14	.78	.20	e.60	.54	.96	.00	.00	.00	59	2.9	.29
28	.14	.58	.20	e.90	.64	.77	.00	.00	.00	26	1.0	.26
29	.14	.49	.20	e.90	---	.70	.00	.00	.00	94	.51	.27
30	.14	.40	.18	e.90	---	.83	.00	.00	.00	49	21	.68
31	.15	---	.18	e.80	---	.70	---	.00	---	13	.23	---
TOTAL	22.97	16.08	17.45	28.00	19.13	22.90	1.30	11.45	148.31	1029.61	1727.66	397.14
MEAN	.74	.54	.56	.90	.68	.74	.043	.37	4.94	33.2	55.7	13.2
MAX	9.1	1.4	.95	1.5	.80	1.9	.63	8.7	94	330	513	226
MIN	.14	.19	.18	.00	.50	.41	.00	.00	.00	.00	.23	.18
AC-FT	46	32	35	56	38	45	2.6	23	294	2040	3430	788

CAL YR 1990 TOTAL 1821.38 MEAN 4.99 MAX 368 MIN .00 AC-FT 3610
WTR YR 1991 TOTAL 3442.00 MEAN 9.43 MAX 513 MIN .00 AC-FT 6830

e Estimated

RIO GRANDE BASIN

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

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼NW¼ sec.17, T.14 N., R.5 E., Sandoval County, Hydrologic Unit 13020201, in San Felipe Grant, on right bank 200 ft downstream from Tonque Arroyo, 1,700 ft upstream from steel highway bridge, 0.8 mi upstream from San Felipe Pueblo, 11 mi northeast of Bernalillo, and at mile 1,572.7.

DRAINAGE AREA.--16,100 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1926-30, WSP 1392: 1937(M), WSP 1512: 1931-32, 1933(M), 1934-36, 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 5,115.73 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1957, at site 1,800 ft downstream at datum 5.35 ft lower, except period May 16, 1945, to Sept. 30, 1946, when it was 5.94 ft lower than present datum.

REMARKS.--Records good. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300) 17 mi upstream. Prior to November 1973 some regulation of flow by El Vado Reservoir (station 08285000) and Abiquiu Reservoir (station 08286900). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions for irrigation of about 705,000 acres upstream from station, some of which is irrigated downstream by Cochiti Eastside Main Canal and San Felipe eastside acequia, which bypass station.

AVERAGE DISCHARGE.--48 years (water years 1926-73), 1,374 ft³/s, 995,500 acre-ft/yr, prior to closure of Cochiti Dam. 18 years (water years 1974-91), 1,542 ft³/s, 1,117,000 acre-ft/yr, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,300 ft³/s, June 26, 1937, gage height, 11.13 ft, site and datum then in use, from rating curve extended above 15,000 ft³/s; minimum, 32 ft³/s, July 7, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in 1874, 1884, and 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,440 ft³/s, at 0130 hours July 26, gage height, 7.00 ft; minimum daily, 331 ft³/s, Dec. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	634	894	720	984	1510	1570	3420	3080	3620	1060	979
2	916	716	852	721	990	1560	1450	3400	3970	2520	1060	972
3	724	973	848	724	995	1330	1380	3340	3980	2640	1030	921
4	751	1200	802	819	994	1220	1510	3110	4150	2630	1520	882
5	799	1310	649	944	954	1180	1610	3110	4320	2500	1940	942
6	727	1380	718	1020	850	1220	1620	3100	4210	1980	2930	1010
7	724	1240	811	959	848	1270	1640	3090	3720	671	3970	1200
8	745	1290	874	958	843	1250	1770	3080	4220	686	3220	1060
9	833	1250	829	953	843	1100	1940	3080	4100	785	2380	878
10	796	1250	797	959	846	860	2050	3080	3640	920	1790	1260
11	659	1210	828	1050	846	926	2100	3090	3580	907	2010	1250
12	633	1020	926	1060	851	975	2170	3140	3870	924	2210	1190
13	650	1030	1050	789	898	922	2380	3210	3990	1000	2190	1260
14	733	1150	1170	353	896	904	2420	3370	4180	1010	1960	1410
15	804	1230	1220	376	908	948	2500	3380	4190	1020	1810	1450
16	754	1550	1120	376	964	1190	2600	3390	4180	947	1720	1350
17	789	927	1080	374	1130	1270	2700	3460	4350	753	1600	1310
18	722	417	1120	637	1070	1390	2880	3670	4530	754	1560	1310
19	604	400	1050	1090	1110	1380	2890	3690	4480	798	1320	1250
20	596	387	1050	663	1050	1400	2890	3700	4440	827	1290	1220
21	611	751	1050	685	964	1540	2930	3700	4470	978	1120	1070
22	673	1030	1040	972	1030	1560	3070	3270	4470	1020	942	1030
23	786	1120	845	1250	1260	1540	3430	3630	4420	1140	945	1130
24	736	1300	331	1270	1270	1540	3440	3820	4400	1790	887	1030
25	830	1270	414	1270	1270	1580	3430	3630	4240	1390	883	983
26	946	1080	440	1260	1280	1520	3420	3670	3500	3500	864	967
27	974	1080	550	1250	1250	1520	3430	3690	3450	3010	798	1050
28	845	922	513	1200	1260	1520	3430	3710	3440	2050	823	1020
29	571	969	416	837	---	1560	3430	3840	3820	1170	966	985
30	562	968	592	790	---	1600	3430	3980	4300	1530	970	970
31	570	---	978	830	---	1610	---	3980	---	1300	985	---
TOTAL	23583	31054	25857	27159	28454	40895	75510	106830	121690	46770	48753	33339
MEAN	761	1035	834	876	1016	1319	2517	3446	4056	1509	1573	1111
MAX	1520	1550	1220	1270	1280	1610	3440	3980	4530	3620	3970	1450
MIN	562	387	331	353	843	860	1380	3080	3080	671	798	878
AC-FT	46780	61600	51290	53870	56440	81120	149800	211900	241400	92770	96700	66130
(†)	1520	0	0	0	0	2710	3660	3830	3300	2870	2990	3540

CAL YR 1990 TOTAL 320671 MEAN 879 MAX 3000 MIN 331 AC-FT 636100
WTR YR 1991 TOTAL 609894 MEAN 1671 MAX 4530 MIN 331 AC-FT 1210000

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

RIO GRANDE BASIN
08319000 RIO GRANDE AT SAN FELIPE, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE-CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARE DISSOLV FLD. AS CACO3 (MG/L) (00904)
DEC 20...	1215	1050	--	362	8.5	10.0	5.0	11.8	<10	140	13
FEB 27...	1115	1240	280	--	8.2	12.0	5.0	12.7	<10	120	--
JUN 04...	1131	4260	248	--	8.2	27.5	16.0	9.2	16	99	20
SEP 04...	1315	888	320	--	8.2	25.5	23.0	8.4	17	120	8

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
DEC 20...	42	7.7	23	0.9	2.8	140	5	123	52	8.3	0.60
FEB 27...	37	6.8	22	0.9	3.1	--	--	--	47	7.9	0.40
JUN 04...	31	5.3	12	0.5	2.0	96	0	79	45	1.8	0.30
SEP 04...	39	6.1	18	0.7	2.8	139	0	114	45	6.0	0.40

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N) (70301)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
DEC 20...	21	231	--	--	<0.010	<0.010	<0.100	<0.100	0.060	0.050	0.24
FEB 27...	22	217	0.053	0.078	0.020	0.010	0.073	0.088	0.010	0.030	0.19
JUN 04...	15	160	0.014	--	0.040	<0.010	0.054	0.084	0.030	<0.010	0.37
SEP 04...	17	203	0.049	0.054	0.010	0.010	0.059	0.064	0.010	0.020	0.29

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTH- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
DEC 20...	--	0.040	0.010	2.4	1	2	40	<1	1.0	<1
FEB 27...	0.27	0.040	0.030	2.2	--	--	40	--	--	--
JUN 04...	0.45	0.100	<0.010	5.1	--	--	20	--	--	--
SEP 04...	0.36	0.090	0.020	3.7	2	2	30	<1	1.0	3

RIO GRANDE BASIN
08319000 RIO GRANDE AT SAN FELIPE, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
DEC 20...	<1	3	1	5	1	1	<0.10	<0.1	<1	<1
FEB 27...	--	--	--	10	--	--	--	--	--	--
JUN 04...	--	--	--	40	--	--	--	--	--	--
SEP 04...	<1	9	3	4	8	<1	<0.10	<0.1	<1	<1
DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT. MAT. (UG/G AS AS) (01003)	CADMIUM RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS CO) (01029)	COBALT, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS CU) (01043)
DEC 20...	<10	8	<2.0	9.9	250	3	<1	3	<10	3
SEP 04...	10	<3	--	--	--	--	--	--	--	--
DATE	IRON, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOVERABLE FM BOT-TOM MATERIAL (UG/G) (01053)	MERCURY RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS HG) (71921)	ZINC, RECOVERABLE FM BOT-TOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, DISCHARGE, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SEDIMENT, SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 20...	3900	<10	130	<0.01	10	32	91	51	K1	K3
FEB 27...	--	--	--	--	--	11	37	73	K2	26
JUN 04...	--	--	--	--	--	162	1860	46	K12	45
SEP 04...	--	--	--	--	--	133	319	32	30	57

RIO GRANDE BASIN

08323000 RIO GUADALUPE AT BOX CANYON, NEAR JEMEZ, NM

LOCATION.--Lat 35°43'52", long 106°45'44", Sandoval County, Hydrologic Unit 13020202, in Canon de San Diego Grant, on left bank at downstream end of Guadalupe Box Canyon, 4.8 mi upstream from mouth, 5 mi southwest of Jemez Springs, and 7 mi north of Jemez.

DRAINAGE AREA.--235 mi².

PERIOD OF RECORD.--November 1938 to September 1942, August 1949 to September 1950 (monthly discharge only for November, December 1938 and August 1949 published in WSP 1312), May 1951 to September 1957 (irrigation seasons only), May 1958 to September 1976, July 1981 to current year. Prior to 1951 published as 08323500 Rio Guadalupe near Jemez Springs.

REVISED RECORDS.--WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,015 ft above National Geodetic Vertical Datum of 1929 (plane-table survey by Topographic Division, U.S. Geological Survey, 1952). Prior to 1951, at site 2.4 mi downstream at lower datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated to some extent since October 1958 by San Gregorio Reservoir on Clear Creek, 24 mi upstream (capacity, 345 acre-ft), and by transmountain diversion into Rio Puerco basin for irrigation of about 300 acres in vicinity of Cuba. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--33 years (water years 1939-42, 1950, 1959-76, 1982-91), 46.5 ft³/s, 33,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,190 ft³/s, May 13 or 14, 1941, gage height, 8.4 ft, from floodmarks, site and datum in use June 1941 to September 1942, from rating curve extended above 1,000 ft³/s; minimum, 2.8 ft³/s, Dec. 9, 1967.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	0800	*758	*6.34	July 26	0800	149	4.69
June 12	2245	482	5.59	Sept. 6	1530	154	4.65

Minimum daily, 8.0 ft³/s, Dec. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	21	e16	15	19	51	107	77	19	21	15
2	15	20	12	e16	16	18	72	126	71	16	21	15
3	15	27	15	e15	15	18	77	154	63	15	25	14
4	14	22	23	e16	12	19	100	156	59	16	64	17
5	13	18	34	e15	13	27	137	133	59	15	40	31
6	12	20	35	e17	12	34	197	144	59	14	35	97
7	12	20	40	e17	12	27	260	153	47	13	35	86
8	12	17	46	e16	12	24	256	174	43	13	30	52
9	12	17	18	e17	12	25	237	235	47	12	25	39
10	13	18	11	e17	12	26	231	244	61	12	25	67
11	12	18	10	e16	12	26	238	269	75	11	29	106
12	12	17	15	e15	13	26	197	248	127	11	46	76
13	11	17	17	e18	13	27	157	198	238	11	36	62
14	11	17	15	e17	13	28	131	191	134	11	27	51
15	11	17	11	e16	14	27	122	182	e120	12	24	43
16	11	16	13	e17	15	27	142	143	e96	14	25	38
17	11	16	12	e17	17	26	171	118	e72	18	24	34
18	11	15	9.8	e16	15	27	207	117	e60	14	23	32
19	11	15	12	e17	16	31	234	130	49	16	21	31
20	13	15	19	e19	16	31	224	203	50	17	21	29
21	15	16	9.0	e18	15	33	250	514	40	17	19	28
22	14	14	11	e17	16	30	241	302	34	24	21	27
23	13	12	e8.0	e13	17	29	235	202	30	22	20	25
24	13	14	e10	e15	17	32	220	163	27	38	31	24
25	13	14	e11	e17	16	38	218	138	24	60	26	23
26	14	16	e12	e14	16	42	214	129	22	76	22	22
27	14	14	e15	e15	17	41	178	124	20	52	19	21
28	13	12	e16	15	18	45	146	115	19	32	17	21
29	13	14	e17	14	---	41	121	108	18	25	16	20
30	13	31	e17	14	---	37	109	97	20	23	16	20
31	12	---	e14	16	---	38	---	85	---	20	16	---
TOTAL	394	512	528.8	498	407	919	5373	5402	1861	669	820	1166
MEAN	12.7	17.1	17.1	16.1	14.5	29.6	179	174	62.0	21.6	26.5	38.9
MAX	15	31	46	19	18	45	260	514	238	76	64	106
MIN	11	12	8.0	13	12	18	51	85	18	11	16	14
AC-FT	781	1020	1050	988	807	1820	10660	10710	3690	1330	1630	2310

CAL YR 1990 TOTAL 9203.0 MEAN 25.2 MAX 143 MIN 4.8 AC-FT 18250
WTR YR 1991 TOTAL 18549.8 MEAN 50.8 MAX 514 MIN 8.0 AC-FT 36790

e Estimated

RIO GRANDE BASIN

08324000 JEMEZ RIVER NEAR JEMEZ, NM

LOCATION.--Lat 35°39'42", long 106°44'34", Sandoval County, Hydrologic Unit 13020202, in Canon de San Diego Grant, on left bank 0.7 mi downstream from Rio Guadalupe, 3.5 mi north of Jemez, and at mile 29.5.

DRAINAGE AREA.--470 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1936 to May 1941, August 1949 to October 1950, May 1951 to September 1952 (irrigation seasons only), March 1953 to current year. Monthly discharge only for some periods, published in WSP 1732. Published as Jemez Creek near Jemez, 1936-41.

REVISED RECORDS.--WSP 1712: Drainage area. WSP 1923, 1957-58.

GAGE.--Water-stage recorder. Concrete control since Dec. 6, 1965. Datum of gage is 5,622 ft above National Geodetic Vertical Datum of 1929 (plane-table survey by Topographic Division, U.S. Geological Survey, 1952). June 22, 1936, to Mar. 11, 1937, at site 60 ft upstream at datum 0.50 ft higher. Mar. 12, 1937, to July 8, 1938, at present site at datum 0.7 ft higher. July 9, 1938, to May 6, 1941, at site 60 ft upstream at datum 0.70 ft higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversion for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--43 years (water years 1937-40, 1950, 1954-91), 76.5 ft³/s, 55,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s, Apr. 21, 1958, from rating curve extended above 2,200 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 10.10 ft, July 15, 1985, present datum; minimum, 1.2 ft³/s, July 25, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1890 occurred between May 6 and 15, 1941, after gage was destroyed (discharge probably exceeded 6,000 ft³/s), from information by local residents.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 7	0245	*1,070	*6.64	No other peak greater than base discharge.			
Minimum daily, 14 ft ³ /s, Dec. 23.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	31	39	e26	29	48	139	179	93	31	70	40
2	54	71	34	e27	27	43	209	191	88	28	72	40
3	57	93	29	e27	31	42	277	207	93	36	87	38
4	52	65	24	e26	31	45	340	208	86	33	155	37
5	46	50	30	e27	30	58	489	195	79	32	153	75
6	41	50	30	e28	31	72	611	194	84	31	167	248
7	40	48	26	e28	34	64	743	195	85	28	202	249
8	39	40	26	e27	33	63	650	204	71	28	151	129
9	39	42	28	e26	33	67	487	257	66	27	99	94
10	37	44	27	e30	e30	71	449	258	67	32	97	172
11	37	45	28	e24	e31	68	453	283	76	32	113	245
12	35	47	32	e24	e33	65	376	270	105	29	136	157
13	34	46	39	e28	e34	67	296	231	104	30	106	139
14	33	44	37	e28	e35	71	259	222	245	28	99	118
15	32	45	27	e27	35	68	259	208	198	28	79	101
16	31	43	e34	e27	40	69	292	182	136	32	94	88
17	31	44	e31	e31	44	64	303	163	100	43	82	82
18	30	43	e27	e28	38	70	314	158	78	38	99	86
19	30	45	e25	e27	e34	79	332	162	64	41	92	87
20	33	47	e30	e29	e30	75	317	206	65	43	75	73
21	37	49	e31	e32	e33	79	334	466	55	56	66	69
22	35	43	e21	e30	e32	69	321	374	49	80	64	67
23	34	37	e14	e27	e35	60	316	258	45	82	61	64
24	33	38	e19	e24	e36	74	302	193	41	129	69	61
25	33	37	e18	e28	e34	84	291	169	35	172	65	53
26	33	41	e24	29	e34	89	285	157	31	201	69	51
27	33	40	e26	31	e35	85	261	151	30	173	56	49
28	32	29	e27	30	e40	96	231	142	27	125	54	55
29	31	26	e29	31	---	107	205	128	28	90	50	56
30	31	31	e26	29	---	100	189	116	32	78	43	52
31	23	---	e25	31	---	111	---	103	---	67	43	---
TOTAL	1143	1354	863	867	942	2223	10330	6430	2356	1903	2868	2875
MEAN	36.9	45.1	27.8	28.0	33.6	71.7	344	207	78.5	61.4	92.5	95.8
MAX	57	93	39	32	44	111	743	466	245	201	202	249
MIN	23	26	14	24	27	42	139	103	27	27	43	37
AC-FT	2270	2690	1710	1720	1870	4410	20490	12750	4670	3770	5690	5700

CAL YR 1990 TOTAL 20299 MEAN 55.6 MAX 517 MIN 14 AC-FT 40260
WTR YR 1991 TOTAL 34154 MEAN 93.6 MAX 743 MIN 14 AC-FT 67740

e Estimated

RIO GRANDE BASIN

08324000 JEMEZ RIVER NEAR JEMEZ, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (UE/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
DEC 12...	1200	30	505	8.1	17.0	5.0	14.6	48	--	--	--	--
FEB 20...	1430	29	487	7.9	10.0	12.5	9.4	--	140	48	5.2	47
APR 16...	1100	314	180	8.4	20.5	6.5	9.8	--	83	28	3.1	13
DATE		SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
DEC 12...	--	--	--	--	--	--	--	--	--	0.010	<0.010	<0.100
FEB 20...	2	7.9	162	25	46	0.70	36	313	--	--	--	--
APR 16...	0.6	2.7	86	9.0	13	0.30	23	144	--	--	--	--
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)
DEC 12...	<0.100	0.020	0.030	0.38	0.020	0.010	2.1	53	51	--	--	<1
FEB 20...	--	--	--	--	--	--	--	--	--	--	460	--
APR 16...	--	--	--	--	--	--	--	--	--	--	90	--
DATE		CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)
DEC 12...	2.0	<1	<1	1	4	--	2	2	<0.10	<0.1	<1	
FEB 20...	--	--	--	--	--	54	--	--	--	--	--	--
APR 16...	--	--	--	--	--	190	--	--	--	--	--	--
DATE		SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
DEC 12...	<1	<10	<10	8.6	0.8	14	0.9	10	0.9	2.0	1.5	

RIO GRANDE BASIN

08328500 JEMEZ CANYON RESERVOIR NEAR BERNALILLO, NM

LOCATION.--Lat 35°23'40", long 106°32'50", in SW¼SW¼ sec.32, T.14 N., R.4 E., Sandoval County, Hydrologic Unit 13020202, at corner of outlet works control tower of Jemez Canyon Dam on Jemez River, 2.8 mi upstream from mouth, and 6 mi north of Bernalillo.

DRAINAGE AREA.--1,034 mi².

PERIOD OF RECORD.--October 1953 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam, completed October 19, 1953. Capacity, 172,800 acre-ft, from capacity table adapted January 1, 1985, between elevations 5,125.0 ft, sill of outlet gates, and 5,252.3 ft, operating deck of spillway. Maximum controlled capacity, 102,700 acre-ft at elevation 5,232.0 ft (floor of spillway, which is located about 0.8 mi south of dam). Capacity by original survey was 189,100 acre-ft. Original plan for reservoir operation was to desilt all flow above 30 ft³/s by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande. U.S. Army Corps of Engineers satellite telemeter at station.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,530 acre-ft, Aug. 15, elevation, 5,203.56 ft; minimum contents, 16,220 acre-ft, Mar. 24, 25, elevation, 5,185.80 ft.

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

(Based on survey by U.S. Army Corps of Engineers in 1985).

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

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18570	17060	16870	16850	16800	16730	16390	24310	34440	35060	34290	26830
2	17990	17350	16890	16900	16820	16770	16420	24570	34510	33750	34470	26860
3	17670	17810	16890	16960	16820	16750	16450	24820	34620	32490	34620	26830
4	17590	17940	16890	17010	16820	16730	16460	25130	34680	31350	34950	26810
5	17560	17840	16890	17090	16830	16740	16800	25380	34740	30720	35120	27390
6	17550	17530	16920	17190	16820	16700	17440	25690	34750	30660	35330	28820
7	17540	17300	16920	17280	16810	16640	18090	25940	34830	30560	36590	29400
8	17500	17140	16920	17220	16820	16520	18680	26230	34840	30510	36970	29530
9	17450	17200	16920	17150	16820	16490	19130	26610	34830	30440	37320	29100
10	17390	17220	16950	16970	16820	16490	19470	27020	34860	30380	38450	28270
11	17340	17250	16960	16780	16820	16450	19690	27490	34900	30280	38670	27140
12	17350	17280	16970	16650	16800	16400	19750	27920	34960	30200	38860	26790
13	17360	17300	16940	16600	16750	16350	19680	28300	35030	30160	39000	26950
14	17360	17130	16860	16630	16710	16330	19610	28610	35300	30090	39110	26910
15	17350	16990	16780	16670	16700	16350	19560	28930	35650	30140	39530	26830
16	17300	16960	16720	16710	16650	16380	19650	29210	35840	30100	38870	26810
17	17190	16980	16670	16750	16640	16390	19790	29420	35980	30090	36800	26780
18	17180	17010	16660	16760	16600	16400	19910	29580	36020	30320	34750	26740
19	17220	17040	16710	16790	16570	16370	20090	29760	36020	30350	32700	26700
20	17250	17050	16700	16790	16570	16370	20250	30100	36060	30340	30510	26700
21	17280	16980	16700	16760	16570	16310	20440	31750	36060	30310	28100	26700
22	17220	16900	16700	16810	16580	16280	20770	32380	36040	31000	27020	26620
23	17150	16900	16700	16810	16610	16240	21290	32800	36020	32060	27030	26580
24	17140	16920	16700	16820	16640	16220	21760	33230	35980	32260	27180	26530
25	17130	16950	16700	16820	16650	16220	22280	33530	35930	33060	27190	26450
26	17130	16960	16700	16890	16650	16240	22690	33700	35890	33480	27170	26380
27	17100	16950	16700	16920	16700	16270	23090	33910	35840	33940	26990	26380
28	17090	16820	16700	16950	16700	16270	23480	34030	35750	34100	26910	26420
29	17080	16790	16700	16900	---	16330	23830	34160	35740	34170	26860	26460
30	17070	16800	16750	16800	---	16390	24070	34290	35750	34190	26820	26490
31	17060	---	16810	16790	---	16420	---	34350	---	34190	26830	---
MAX	18570	17940	16970	17280	16830	16770	24070	34350	36060	35060	39530	29530
MIN	17060	16790	16660	16600	16570	16220	16390	24310	34440	30090	26820	26380
(†)	5186.60	5186.36	5186.37	5186.35	5186.26	5185.99	5192.68	5200.17	5201.11	5200.86	5194.83	5194.57
(††)	-1620	-260	+10	-20	-90	-280	+7650	+10280	+1400	-1560	-7360	-340

CAL YR 1990 MAX 22410 MIN 16660 (†) -5540
WTR YR 1991 MAX 39530 MIN 16220 (†) +7810

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

RIO GRANDE BASIN

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec.5, T.13 N., R.4 E., Sandoval County, Hydrologic Unit 13020202, on right bank 0.8 mi downstream from Jemez Canyon Dam, 2.0 mi upstream from mouth, and 6 mi north of Bernalillo.

DRAINAGE AREA.--1,038 mi².

PERIOD OF RECORD.--March 1936 to January 1938, March 1943 to current year. Published as "Jemez Creek" prior to 1948, and as "near Bernalillo" prior to 1954.

REVISED RECORDS.--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,095.60 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 24, 1951, at site 0.8 mi upstream at datum 24.51 ft higher. Apr. 24, 1951, to June 25, 1958, at site 37 ft upstream at datum 4.40 ft above present datum. Supplementary water-stage recorder at gages on Jemez Canyon Dam at datum 5,125.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark) used at times since January 1953.

REMARKS.--Records good. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (station 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years (water years 1937, 1944-91), 61.4 ft³/s, 44,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,300 ft³/s, Aug. 29, 1943, gage height, 5.62 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; no flow for many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1900 was probably less than 16,000 ft³/s, but highest observed outside period of record.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,320 ft³/s, Aug. 21; no flow Oct. 19-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	9.2	2.0	2.3	21	49	119	2.5	.28	624	.50	.78
2	282	10	1.8	2.4	21	48	157	2.6	.28	620	.50	.87
3	186	9.7	7.9	2.4	20	48	229	3.0	.28	611	.61	.90
4	60	9.8	12	2.3	21	48	304	3.5	.38	604	8.6	.90
5	30	80	13	2.1	20	48	304	3.5	.38	289	.56	.90
6	11	145	14	2.1	22	68	305	3.5	.38	16	.50	94
7	10	145	15	26	22	88	306	3.5	.38	15	.41	145
8	10	92	12	82	22	77	304	3.4	.38	13	.35	141
9	19	6.7	12	102	22	68	304	3.3	.38	8.0	6.3	326
10	27	16	13	135	22	68	302	3.4	.38	2.9	1.3	736
11	13	16	21	131	28	67	299	3.5	.38	2.8	.28	870
12	1.0	16	26	71	37	74	290	3.5	.38	2.8	.38	424
13	.67	16	56	70	43	71	288	3.7	.38	3.1	.38	150
14	.30	105	73	30	43	63	288	4.0	.38	3.2	.38	147
15	12	100	75	4.8	43	62	243	3.9	.38	2.2	.41	145
16	21	33	75	3.4	42	61	164	3.9	.38	.42	602	110
17	21	18	75	10	42	60	165	4.2	.33	.38	1210	69
18	8.2	18	38	15	42	60	168	4.2	.28	5.9	1190	59
19	.00	17	11	14	42	60	167	3.9	.28	.54	1180	58
20	.00	33	23	14	33	59	170	3.8	.28	.28	1220	56
21	.00	63	16	14	23	59	171	2.9	.28	.22	1320	56
22	41	63	3.2	12	23	59	115	1.1	.28	.24	567	55
23	39	36	3.3	11	23	59	6.8	.80	.28	14	34	54
24	11	15	5.9	11	24	58	5.2	.60	.28	2.4	19	52
25	11	16	3.1	11	23	58	4.5	.38	.28	.40	19	52
26	11	27	2.2	10	24	54	4.0	.29	.28	28	58	36
27	10	36	2.2	10	24	59	2.5	.28	.28	4.9	113	16
28	10	64	2.4	16	36	58	2.1	.28	.28	.48	60	.96
29	9.9	55	2.4	34	---	66	2.1	.28	.28	.38	21	.96
30	9.7	11	2.2	43	---	74	2.6	.28	.28	.38	14	24
31	9.3	---	2.1	29	---	74	---	.28	---	.40	.70	---
TOTAL	1023.07	1281.4	620.7	922.8	808	1925	5191.8	78.27	9.75	2876.32	7649.16	3881.27
MEAN	33.0	42.7	20.0	29.8	28.9	62.1	173	2.52	.32	92.8	247	129
MAX	282	145	75	135	43	88	306	4.2	.38	624	1320	870
MIN	.00	6.7	1.8	2.1	20	48	2.1	.28	.28	.22	.28	.78
AC-FT	2030	2540	1230	1830	1600	3820	10300	155	19	5710	15170	7700

CAL YR 1990 TOTAL 17214.59 MEAN 47.2 MAX 422 MIN .00 AC-FT 34150
WTR YR 1991 TOTAL 26267.54 MEAN 72.0 MAX 1320 MIN .00 AC-FT 52100

RIO GRANDE BASIN

08329700 CAMPUS WASH AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'40", long 106°37'22", in SE¼ sec.16, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 100 ft west of southwest corner of University of New Mexico North Golf Course, 200 ft downstream from Barelbas Stormwater Pumping Station outfall, 600 ft downstream from Tucker Road bridge, and 1,500 ft northeast of intersection of Lomas and University Blvds. in Albuquerque.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1982 to current year (no winter records).

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

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Recording rain gage at station.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 863 ft³/s, at 2000 hours July 24, gage height, 4.50 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.03
2	.72	10	---	---	---	---	.00	.02	.00	.00	4.1	.04
3	.00	.00	---	---	---	---	.00	.03	.00	.68	17	.03
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.89	.02
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.11
6	.00	.00	---	---	---	---	.00	.00	.00	2.3	7.4	18
7	.00	.11	---	---	---	---	.00	.00	.00	4.2	.42	.00
8	.00	.03	---	---	---	---	.00	.02	.00	3.4	.85	.00
9	.00	.00	---	---	---	---	.11	.00	.12	.00	3.6	18
10	.00	.00	---	---	---	---	.00	.00	.00	.00	5.1	19
11	.00	.00	---	---	---	---	.00	.00	29	.09	.31	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.05	3.7	.99
13	.00	.00	---	---	---	---	.00	.06	.12	.00	3.6	.00
14	.00	.00	---	---	---	---	.00	.04	.00	2.0	.00	.00
15	.00	.00	---	---	---	.00	.00	.02	.00	e.00	1.7	.00
16	.00	.00	---	---	---	.00	.00	.03	.00	e10	.92	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	e.00	22	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	2.0	.19	.00
19	.00	.04	---	---	---	.00	.00	.00	.00	.54	.00	.00
20	.36	.00	---	---	---	.00	.00	1.1	.00	.07	.06	.00
21	.00	.00	---	---	---	.00	.00	22	.00	9.2	.03	.00
22	.00	.00	---	---	---	.00	.00	.21	.00	9.7	.06	.00
23	.00	.00	---	---	---	.00	.06	.00	.00	11	1.1	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	49	.42	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	3.1	.00	.00
26	.00	---	---	---	---	.07	.00	.00	.00	1.5	.01	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.01	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.79	.39	.01	.00
29	.00	---	---	---	---	.00	.00	.00	36	.00	2.9	.00
30	.00	---	---	---	---	.00	.00	.00	.00	.00	.58	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	1.08	---	---	---	---	---	0.17	23.53	66.03	109.23	76.95	56.22
MEAN	.035	---	---	---	---	---	.006	.76	2.20	3.52	2.48	1.87
MAX	.72	---	---	---	---	---	.11	.22	.36	.49	.22	.19
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	2.1	---	---	---	---	---	.3	.47	131	217	153	112
(†)	.13	.72	---	---	---	.07	.01	.81	.87	2.77	2.32	1.63

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329700 CAMPUS WASH AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1990 to June 1991.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 19...	1030	0.03	749	--	9.9	12.0	13.5	--	29	--	
FEB 20...	1015	0.04	512	--	10	10.0	12.0	11.8	16	<3.0	
APR 11...	1130	0.24	771	--	10.0	15.5	18.5	12.7	19	3.0	
MAY 15...	1045	0.07	697	--	10.4	17.0	24.0	14.0	37	2.5	
JUN 19...	0945	0.20	--	560	9.3	25.0	26.0	11.6	30	26	
DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RINE, TOTAL RESI-DUAL (MG/L) (50060)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 19...	270	87	14	58	2	7.3	148	170	--	62	0.80
FEB 20...	130	43	6.4	48	2	6.1	109	73	0.0	50	0.70
APR 11...	280	93	12	56	1	8.3	150	140	0.0	55	0.70
MAY 15...	230	78	7.8	52	2	8.5	90	170	0.0	72	0.80
JUN 19...	210	66	10	47	1	7.5	132	100	0.83	49	1.0
DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 19...	73	551	561	0.380	--	0.020	--	0.400	--	0.040	--
FEB 20...	60	350	353	--	--	<0.010	<0.010	<0.100	<0.100	<0.010	<0.010
APR 11...	72	570	528	0.110	0.110	0.020	0.010	0.130	0.120	0.030	0.020
MAY 15...	53	497	496	--	--	0.010	<0.010	<0.050	<0.050	<0.010	0.010
JUN 19...	58	426	418	--	--	<0.010	<0.010	<0.050	<0.050	<0.010	0.020
DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)
NOV 19...	0.56	1.0	0.940	--	4.6	<0.010	9	<1	K15	K120	<1
FEB 20...	--	--	0.160	0.030	2.9	<0.010	--	<1	<1	K15	1
APR 11...	0.57	0.73	0.340	0.070	3.0	<0.010	2	<1	K7	1600	<1
MAY 15...	--	--	0.600	0.020	10	<0.010	2	<1	--	450	<1
JUN 19...	--	--	0.060	<0.010	8.9	<0.010	2	<1	K1600	540	<1

RIO GRANDE BASIN
08329700 CAMPUS WASH AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 19...	6	<10	<1	3	22	1	<0.20	<1	1	<1	30
FEB 20...	6	<10	<1	2	11	1	<0.10	<1	<1	<1	<10
APR 11...	9	<10	<1	2	4	3	<0.10	5	3	<1	<10
MAY 15...	5	<10	<1	2	9	2	<0.10	4	3	<1	<10
JUN 19...	4	<10	<1	<1	17	75	<0.10	17	3	<1	330

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)
NOV 19...	1030	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
FEB 20...	1015	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
APR 11...	1130	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MAY 15...	1045	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
JUN 19...	0945	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

DATE	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	PER- THANE TOTAL (UG/L) (39034)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)
NOV 19...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
FEB 20...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
APR 11...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY 15...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN 19...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ANTHRA- CENE TOTAL (UG/L) (34220)	BENZO B FLUOR- AN- THENE TOTAL (UG/L) (34230)	BENZO K FLUOR- AN- THENE TOTAL (UG/L) (34242)	BENZO- A- PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L) (34259)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (UG/L) (34278)
NOV 19...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
FEB 20...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
APR 11...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
MAY 15...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUN 19...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0

RIO GRANDE BASIN

08329700 CAMPUS WASH AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L) (34292)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHRY- SENE TOTAL (UG/L) (34320)	DIETHYL PHTHAL- ATE TOTAL (UG/L) (34336)	DI- METHYL PHTHAL- ATE TOTAL (UG/L) (34341)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L) (34386)	HEXA- CHLORO- ETHANE TOTAL (UG/L) (34396)
NOV 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
FEB 20...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
APR 11...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
MAY 15...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUN 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
DATE	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L) (34403)	ISO- PHORONE TOTAL (UG/L) (34408)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	N- NITRO- SODI-N- PROPYL- AMINE TOTAL (UG/L) (34428)	N-NITRO -SODI- PHENY- LAMINE TOTAL (UG/L) (34433)	N-NITRO -METHY- LAMINE TOTAL (UG/L) (34438)	NITRO- BENZENE TOTAL (UG/L) (34447)	PARA- CHLORO- META CRESOL TOTAL (UG/L) (34452)	PHENAN- THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)
NOV 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
FEB 20...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
APR 11...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
MAY 15...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUN 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
DATE	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2- TRANSDI CHLORO- ETHENE TOTAL (UG/L) (34546)
NOV 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
FEB 20...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
APR 11...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
MAY 15...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUN 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
DATE	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L) (34551)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L) (34556)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL ETHER TOTAL (UG/L) (34576)	2- CHLORO- NAPH- THALENE TOTAL (UG/L) (34581)	2- CHLORO- PHENOL TOTAL (UG/L) (34586)	2- NITRO- PHENOL TOTAL (UG/L) (34591)	DI-N- OCTYL PHTHAL- ATE TOTAL (UG/L) (34596)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L) (34601)	2,4-DI- METHYL- PHENOL TOTAL (UG/L) (34606)
NOV 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
FEB 20...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
APR 11...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
MAY 15...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUN 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0

RIO GRANDE BASIN
08329700 CAMPUS WASH AT ALBUQUERQUE, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	2,4-DI-NITRO-TOLUENE TOTAL (UG/L) (34611)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L) (34626)	3,3'-DI-CHLORO-BENZI-DINE TOTAL (UG/L) (34631)	4-BROMO-PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLORO-PHENYL ETHER TOTAL (UG/L) (34641)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)
NOV 19...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
FEB 20...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
APR 11...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
MAY 15...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUN 19...	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0

DATE	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	BIS(2-ETHYL PHTHAL-ATE) TOTAL (UG/L) (39100)	DI-N-BUTYL-ATE TOTAL (UG/L) (39110)	BENZI-DINE TOTAL (UG/L) (39120)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)
NOV 19...	<5.0	<0.20	<0.20	<30.0	--	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
FEB 20...	<5.0	<0.20	<0.20	<30.0	0.04	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
APR 11...	<5.0	<0.20	<0.20	<30.0	0.06	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
MAY 15...	<5.0	<0.20	<0.20	<30.0	0.17	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
JUN 19...	<5.0	<0.20	<0.20	<30.0	0.10	<5.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01

DATE	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	HEXA-CHLORO-BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)	1,2-DIBROMO-ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
NOV 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
FEB 20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
APR 11...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
MAY 15...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUN 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2

LOCATION.--Lat 35°08'40", long 106°32'50", Bernalillo County, Hydrologic Unit 132020203, in Elena Gallegos Grant, on the grounds of the Tanoan Country Club, on right bank, and 30 ft upstream from Ventura Blvd in Albuquerque.

GAGE.--Water-stage recorder. Elevation of gage is 5,490 ft above National Geodetic Vertical Datum of 1929, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 99 ft³/s, July 21, 1991, gage height, 1.83 ft, from rating curve extended above 12 ft³/s on basis of slope-area measurement of peak flow; no flow part of many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 99 ft³/s, at 2110 hours July 21, gage height, 1.83 ft, from rating curve extended above 12 ft³/s on basis of slope-area measurement of peak flow; no flow part of many days.

[illegible]

RIO GRANDE BASIN

08329831 PINO ARROYO AT VENTURA AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

[illegible]

LOCATION.--Lat 35°08'50", long 106°33'00", Bernalillo County, Hydrologic Unit 132020203, in Elena Gallegos Grant, at drainage outlet of east parking lot of Hoffmantown Baptist Church, at northern boundary of Albuquerque Academy and 0.1 mi downstream from Ventura Blvd. in Albuquerque.

GAGE.--Water-stage recorder and Palmer-Bowls flume. Elevation of gage is 5,490 ft above National Geodetic Vertical Datum of 1929, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9.4 ft³/s, Aug. 15, 1991, gage height, 1.31 ft; no flow most of time.

EXTREMES FOR AUGUST TO SEPTEMBER 1990.--Maximum discharge, 1.9 ft³/s, at 1940 hours Sept. 28, gage height 0.54 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.4 ft³/s, at 1820 hours Aug. 15, gage height, 1.31 ft; no flow most of time.

[illegible]

RIO GRANDE BASIN

083298314 HOFFMANTOWN CHURCH OUTLET NO. 1 AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	---	---	---	---	.00	.01	.01	---	.01	.00
2	.00	.15	---	---	---	---	.00	.00	.02	---	.12	.02
3	.00	.01	---	---	---	---	.00	.00	---	---	.08	.12
4	.00	.00	---	---	---	---	.00	.00	---	---	.02	.04
5	.00	.00	---	---	---	---	.01	.00	---	---	.02	.04
6	.00	.00	---	---	---	---	.00	.01	---	---	.19	.52
7	.00	.02	---	---	---	---	.00	.01	---	---	.07	.04
8	.00	.02	---	---	---	---	.00	.01	---	---	.04	.00
9	.00	.00	---	---	---	---	.00	.02	---	---	.03	.06
10	.00	.00	---	---	---	---	.02	.02	.03	---	.02	.17
11	.00	.00	---	---	---	---	.01	---	.11	---	.01	.04
12	.01	.00	---	---	---	---	.00	---	.04	---	.02	.06
13	.01	.00	---	---	---	---	.01	---	.01	---	.04	.03
14	.00	.00	---	---	---	---	.00	---	---	---	.03	.03
15	.00	.00	---	---	---	---	.00	---	---	---	.27	.00
16	.01	.00	---	---	---	---	.00	---	---	---	.07	.03
17	.00	.00	---	---	---	---	.00	.02	---	---	.05	.03
18	.00	.00	---	---	---	---	.00	.05	---	---	.01	.03
19	.02	.00	---	---	---	.00	.00	.09	---	---	.03	.03
20	.06	.00	---	---	---	.00	.00	.12	---	---	.02	.03
21	.00	.00	---	---	---	.00	.00	.34	---	---	.03	.04
22	.00	.00	---	---	---	.00	.00	.11	---	---	.03	.00
23	.00	.00	---	---	---	.00	.00	.08	---	.10	.04	.03
24	.00	.00	---	---	---	.00	.00	.04	---	.14	.04	.03
25	.00	.00	---	---	---	.00	.00	.02	---	.01	.00	.03
26	.00	.02	---	---	---	.01	.00	.01	---	.04	.02	.04
27	.00	---	---	---	---	.00	.01	.03	---	.00	.02	.04
28	.00	---	---	---	---	.00	.00	.03	---	.01	.04	.03
29	.00	---	---	---	---	.00	.00	.03	---	.01	.03	.00
30	.01	---	---	---	---	.02	.00	.04	---	.01	.03	.02
31	.00	---	---	---	---	.00	---	.03	---	.01	.03	---
TOTAL	0.12	---	---	---	---	---	0.06	---	---	---	1.46	1.58
MEAN	.004	---	---	---	---	---	.002	---	---	---	.047	.053
MAX	.06	---	---	---	---	---	.02	---	---	---	.27	.52
MIN	.00	---	---	---	---	---	.00	---	---	---	.00	.00
AC-FT	.2	---	---	---	---	---	.1	---	---	---	2.9	3.1

LOCATION.--Lat 35°08'50", long 106°33'10", Bernalillo County, Hydrologic Unit 132020203, in Elena Gallegos Grant, at drainage outlet of west parking lot of Hoffmantown Baptist Church, at northern boundary of Albuquerque Academy and 0.3 mi south of Harper Blvd. in Albuquerque.

GAGE.--Water-stage recorder and concrete-lined channel. Elevation of gage is 5,485 ft above National Geodetic Vertical Datum of 1929, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18 ft³/s, July 21, 1991, gage height, 0.58 ft, from rating curve extended above 7.0 ft/s on basis of theoretical rating for open box culvert; no flow most of time.

EXTREMES FOR AUGUST TO SEPTEMBER 1990.--Maximum discharge, 17 ft³/s, at 1935 hours Sept. 28, gage height, 0.55 ft, from rating curve extended above 7.0 ft³/s on basis of theoretical rating for open box culvert; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s, at 2025 hours July 21, gage height, 0.58 ft, from rating curve extended above 7.0 ft³/s on basis of theoretical rating for open box culvert; no flow most of time.

[illegible]

RIO GRANDE BASIN

083298315 HOFFMANTOWN CHURCH OUTLET NO. 2 AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	e.01	.00	.00	.00	.00	.00
2	.03	.23	---	---	---	---	e.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.07
4	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	e.01	.00	.00	.00	.05	.16
7	.00	.11	---	---	---	---	e.00	.00	.00	.00	.00	.00
8	.00	.02	---	---	---	---	e.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	e.00	.00	.06	.00	.00	.00
12	.00	.00	---	---	---	---	e.00	.00	.00	.02	.00	.00
13	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.12	.00
16	.00	.00	---	---	---	.03	e.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	e.00	.12	.00	.00	.00	.00
20	.05	.00	---	---	---	.00	e.00	.08	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	e.00	.39	.00	.17	.00	.00
22	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	e.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	e.00	.00	.00	.00	.02	.00	.00
25	.00	.00	---	---	---	e.00	.00	.00	.00	.00	.00	.00
26	.00	.04	---	---	---	e.00	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	e.01	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	e.00	.00	.00	.07	.00	.00	.00
31	.00	---	---	---	---	e.00	---	.00	---	.00	.00	---
TOTAL	0.08	---	---	---	---	---	0.02	0.59	0.13	0.21	0.17	0.23
MEAN	.003	---	---	---	---	---	.001	.019	.004	.007	.005	.008
MAX	.05	---	---	---	---	---	.01	.39	.07	.17	.12	.16
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.2	---	---	---	---	---	.04	1.2	.3	.4	.3	.5

e Estimated

LOCATION.--Lat 35°08'50", long 106°33'10", Bernalillo County, Hydrologic Unit 132020203, in Elena Gallegos Grant, on left bank, on grounds of the Albuquerque Academy, and 300 ft downstream from Harper Blvd. in Albuquerque.

PERIOD OF RECORD.--August 1990 to current year (no winter records).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s, July 21, 1991, gage height, 1.44 ft; no flow most of time.

EXTREMES FOR AUGUST TO SEPTEMBER 1990.--Maximum discharge, 4.9 ft³/s, at 1825 hours Sept. 29, gage height, 0.88 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft³/s, at 2040 hours July 21, gage height, 1.44 ft; no flow most of the time.

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

[illegible]

RIO GRANDE BASIN

08329832 CHERRY HILLS ARROYO NO. 1 AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00
2	.00	.07	.00	---	---	---	---	.00	.00	.00	.03	e.00
3	.00	.00	.00	---	---	---	---	.00	.00	.00	.04	e.00
4	.00	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00
5	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
6	.00	.00	---	---	---	---	---	.00	.00	.00	.11	e.00
7	.00	.00	---	---	---	---	---	.00	.00	.00	.04	e.00
8	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
9	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
10	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
11	.00	.00	---	---	---	---	---	.00	.05	.00	.00	e.00
12	.00	.00	---	---	---	---	---	.00	.00	.01	.00	e.00
13	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
14	.00	.00	---	---	---	---	---	.00	.00	.00	.00	e.00
15	.00	.00	---	---	---	---	---	.00	.00	.00	e.00	e.00
16	.00	.00	---	---	---	---	---	.00	.00	.00	e.00	e.00
17	.00	.00	---	---	---	---	---	.00	.00	.00	e.00	e.00
18	.00	.00	---	---	---	---	---	.00	.00	.00	e.00	.00
19	.00	.00	---	---	---	---	---	.05	.00	.02	e.00	.00
20	.02	.00	---	---	---	---	.00	.02	.00	.00	e.00	.00
21	.00	.00	---	---	---	---	.00	.21	.00	.26	e.00	.00
22	.00	.00	---	---	---	---	.00	.07	.00	.04	e.00	.00
23	.00	.00	---	---	---	---	.00	.00	.00	.03	e.00	.00
24	.00	.00	---	---	---	---	.00	.00	.00	.08	e.00	.00
25	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00
26	.00	.00	---	---	---	---	.00	.00	.00	.01	e.00	.00
27	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00
28	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00
29	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00
30	.00	.00	---	---	---	---	.00	.00	.03	.00	e.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	e.00	---
TOTAL	0.02	0.07	---	---	---	---	---	0.35	0.08	0.45	0.22	0.00
MEAN	.001	.002	---	---	---	---	---	.011	.003	.015	.007	.000
MAX	.02	.07	---	---	---	---	---	.21	.05	.26	.11	.00
MIN	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	.04	.1	---	---	---	---	---	.7	.2	.9	.4	.00

e Estimated

RIO GRANDE BASIN

08329833 CHERRY HILLS ARROYO NO. 2 AT ALBUQUERQUE, NM

LOCATION.--Lat 35°08'50", long 106°33'20", Bernalillo County, Hydrologic Unit 132020203, in Elena Gallegos Grant, on right bank, on grounds of the Albuquerque Academy, and 390 ft downstream from Harper Blvd. in Albuquerque.

PERIOD OF RECORD.--August 1990 to current year (no winter records).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,445 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21 ft³/s, Sept. 22, 1990, gage height, 1.85 ft; no flow most of time.

EXTREMES FOR AUGUST TO SEPTEMBER 1990.--Maximum discharge, 21 ft³/s, at 1440 hours Sept. 22, gage height 1.85 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20 ft³/s, at 0045 hours July 22, gage height, 1.44 ft; no flow most of time.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	.00
2	---	---	---	---	---	---	---	---	---	---	---	.00
3	---	---	---	---	---	---	---	---	---	---	---	.00
4	---	---	---	---	---	---	---	---	---	---	---	.00
5	---	---	---	---	---	---	---	---	---	---	---	.00
6	---	---	---	---	---	---	---	---	---	---	---	.00
7	---	---	---	---	---	---	---	---	---	---	---	.04
8	---	---	---	---	---	---	---	---	---	---	---	.01
9	---	---	---	---	---	---	---	---	---	---	---	.00
10	---	---	---	---	---	---	---	---	---	---	---	.00
11	---	---	---	---	---	---	---	---	---	---	---	.00
12	---	---	---	---	---	---	---	---	---	---	---	.00
13	---	---	---	---	---	---	---	---	---	---	---	.00
14	---	---	---	---	---	---	---	---	---	---	---	.00
15	---	---	---	---	---	---	---	---	---	---	---	.00
16	---	---	---	---	---	---	---	---	---	---	---	.00
17	---	---	---	---	---	---	---	---	---	---	---	.00
18	---	---	---	---	---	---	---	---	---	---	---	.00
19	---	---	---	---	---	---	---	---	---	---	---	.00
20	---	---	---	---	---	---	---	---	---	---	---	.00
21	---	---	---	---	---	---	---	---	---	---	---	.00
22	---	---	---	---	---	---	---	---	---	---	---	.28
23	---	---	---	---	---	---	---	---	---	---	---	.00
24	---	---	---	---	---	---	---	---	---	---	---	e.00
25	---	---	---	---	---	---	---	---	---	---	---	e.00
26	---	---	---	---	---	---	---	---	---	---	---	e.00
27	---	---	---	---	---	---	---	---	---	---	---	e.00
28	---	---	---	---	---	---	---	---	---	---	---	e.00
29	---	---	---	---	---	---	---	---	---	---	---	e.00
30	---	---	---	---	---	---	---	---	---	---	.00	e.00
31	---	---	---	---	---	---	---	---	---	---	.00	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	0.33
MEAN	---	---	---	---	---	---	---	---	---	---	---	.011
MAX	---	---	---	---	---	---	---	---	---	---	---	.28
MIN	---	---	---	---	---	---	---	---	---	---	---	.00
AC-FT	---	---	---	---	---	---	---	---	---	---	---	.7

e Estimated

RIO GRANDE BASIN

08329833 CHERRY HILLS ARROYO NO. 2 AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	e.00	.10	.00	---	---	---	.00	.00	.00	.00	.08	.00
3	e.00	.00	.00	---	---	---	.00	.00	.00	.00	.02	.34
4	e.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.65
6	.00	.00	.00	---	---	---	.00	.00	.00	.00	.17	.02
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.02	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.01	.00	.19
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.05	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.01	.00	.04
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.45	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.08	.00	.03	.00	.00
20	.03	.00	---	---	---	.00	.00	.09	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.41	.00	.03	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.44	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.09	.01	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.12	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.04	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.07	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.03	0.10	---	---	---	---	0.00	0.58	0.12	0.77	0.75	1.24
MEAN	.001	.003	---	---	---	---	.000	.019	.004	.025	.024	.041
MAX	.03	.10	---	---	---	---	.00	.41	.07	.44	.45	.65
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.06	.2	---	---	---	---	.00	1.2	.2	1.5	1.5	2.5

RIO GRANDE BASIN

08329835 NORTH FLOODWAY CHANNEL AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'03", long 106°36'42", in SE¼ sec.3, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank of concrete-lined drainage channel, 300 ft downstream (north) of bridge on Candelaria Blvd. NE, and 3,000 ft downstream from confluence of Campus Wash and Embudo Arroyo in Albuquerque.

PERIOD OF RECORD.--May 1982 to current year (no winter records).

GAGE.--Water-stage recorder and concrete-lined channel. Elevation of gage is 5,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,000 ft³/s, at 2115 hours July 21, gage height, 8.90 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
2	11	83	---	---	---	---	.00	.00	.00	34	30	.00
3	.00	.25	---	---	---	---	.00	.00	.97	.00	131	2.3
4	.00	.00	---	---	---	---	.00	.00	.00	2.4	13	.00
5	.00	2.0	---	---	---	---	.00	.00	.00	.00	2.7	.00
6	6.5	.00	---	---	---	---	.00	.00	.00	.00	89	238
7	.00	4.1	---	---	---	---	.00	.00	1.3	.00	21	1.5
8	.00	4.2	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.84	.00	.89	49
10	.00	.00	---	---	---	---	.00	1.2	1.5	.00	35	184
11	.00	.00	---	---	---	---	.00	2.9	81	2.3	13	.51
12	.00	.00	---	---	---	---	.00	3.7	.59	22	11	5.9
13	.00	.00	---	---	---	---	.00	6.6	13	3.8	5.9	4.6
14	.00	.00	---	---	---	---	.00	8.0	.00	.00	4.1	.00
15	.00	.00	---	---	---	---	.00	6.7	.00	1.2	24	.00
16	.00	.00	---	---	---	---	.00	1.9	.00	47	5.9	.00
17	.24	.00	---	---	---	---	.00	.00	.00	1.4	65	.00
18	.00	.00	---	---	---	---	.00	.00	3.9	20	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	2.1	68	.00	.00
20	17	.00	---	---	---	.00	.00	13	.00	7.8	.00	.00
21	.00	.00	---	---	---	.00	.00	191	.00	172	.41	.00
22	2.2	.00	---	---	---	.00	1.7	1.8	1.3	113	.33	.00
23	3.7	.00	---	---	---	.00	2.0	.00	.00	85	8.2	.00
24	.06	.00	---	---	---	.00	.43	.00	.00	184	4.0	.00
25	1.7	.00	---	---	---	.36	.00	.00	.00	18	.00	4.5
26	.00	---	---	---	---	1.1	.65	.00	.00	19	.00	.00
27	.00	---	---	---	---	.00	.69	.00	.00	5.7	.00	.00
28	.00	---	---	---	---	.00	.00	.00	1.3	12	.00	.00
29	.00	---	---	---	---	.00	.00	.00	46	.00	3.8	.00
30	.00	---	---	---	---	4.9	.00	.00	6.3	.04	.59	.00
31	.00	---	---	---	---	.00	---	.00	---	5.3	.00	---
TOTAL	42.40	---	---	---	---	---	5.47	236.80	160.10	823.94	468.82	490.31
MEAN	1.37	---	---	---	---	---	.18	7.64	5.34	26.6	15.1	16.3
MAX	17	---	---	---	---	---	2.0	191	81	184	131	238
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	84	---	---	---	---	---	11	470	318	1630	930	973

RIO GRANDE BASIN

08329840 HAHN ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'31", long 106°35'10", in SE¼NE¼ sec.2, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on downstream side of San Mateo Boulevard Bridge, 750 ft north of Comanche Road, and 2,050 ft south of Montgomery Boulevard in Albuquerque.

DRAINAGE AREA.--4.23 mi².

PERIOD OF RECORD.--June 1978 to current year (no winter records).

GAGE.--Water-stage recorder concrete-lined channel. Elevation of gage is 5,190 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Recording rain gage at station. Development within basin is predominantly residential, but there are some commercial areas. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s, Aug. 14, 1980, gage height, 2.54 ft, from rating curve extended above 10 ft³/s on basis of step-forward analysis of channel; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 492 ft³/s, at 2110 hours July 30, gage height, 1.95 ft, from rating curve extended above 10 ft³/s on basis of step-forward analysis of channel; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 597 ft³/s, at 2000 hours Aug. 27, gage height, 2.07 ft, from rating curve extended above 10 ft³/s on basis of step-forward analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 543 ft³/s, at 1955 hours July 24, gage height, 2.01 ft, from rating curve extended above 10 ft³/s on basis of step-forward analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	e.00	.00	.00	3.0	.00
2	.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	e.00	e.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
6	2.0	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
7	1.3	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
16	.00	.00	---	---	---	---	e.00	e.00	.00	1.3	.00	.00
17	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
19	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	4.0
20	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
21	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
22	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
23	.00	.00	---	---	---	---	e.00	e.00	.00	1.4	.00	.00
24	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
25	.00	.00	---	---	---	---	e.00	e.00	.00	7.1	.00	.00
26	.00	.00	---	---	---	---	e.00	e.00	.00	.71	.00	.00
27	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
28	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
29	.00	.00	---	---	---	---	e.00	e.00	.00	.00	.00	.00
30	.00	.00	---	---	---	---	e.00	e.00	.00	10	.00	.00
31	.00	---	---	---	---	---	---	e.00	---	.05	.00	---
TOTAL	3.30	0.00	---	---	---	---	0.00	0.00	0.00	20.56	3.00	4.00
MEAN	.11	.000	---	---	---	---	.000	.000	.000	.66	.097	.13
MAX	2.0	.00	---	---	---	---	.00	.00	.00	10	3.0	4.0
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	6.5	.00	---	---	---	---	.00	.00	.00	41	6.0	7.9
(†)	0.20	0.05					0.00	0.00	0.00	0.52	0.27	0.00

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329840 HAHN ARROYO AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	6.1	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	2.4	.00	.00	.00	.00
4	8.4	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	3.6	.00	---	---	---	---	.00	.00	.00	.71	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	1.0
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	2.7
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	5.2	.00
13	.00	.00	---	---	---	---	.00	.00	.00	25	.11	.00
14	.00	.00	---	---	---	---	.00	.00	.00	14	12	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.05	.00
18	.00	.00	---	---	---	.00	e10	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	e.00	.00	.00	.00	4.8	.17
21	.00	.00	---	---	---	.00	e12	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.39	13
23	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	e8.0	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	e10	.00	.00	2.7	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	23	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	1.3	5.5
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	12.00	0.00	---	---	---	---	40.00	8.50	0.00	42.41	46.85	22.37
MEAN	.39	.000	---	---	---	---	1.33	.27	.000	1.37	1.51	.75
MAX	8.4	.00	---	---	---	---	12	6.1	.00	25	23	13
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.24	.00	---	---	---	---	.79	.17	.00	.84	.93	.44
(†)	0.61				0.60	0.13	0.06	0.13	0.06	2.48	1.14	0.58

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329840 HAHN ARROYO AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
2	.98	6.5	---	---	---	---	.00	.21	.00	.63	3.2	.00
3	.00	.00	---	---	---	---	.00	.00	.00	---	1.2	1.4
4	.00	.00	---	---	---	---	.00	.00	.00	---	.00	.00
5	.00	.00	---	---	---	---	.00	---	.00	---	.00	.00
6	.00	.00	---	---	---	---	.00	---	.00	---	16	25
7	.00	.00	---	---	---	---	.00	---	.00	---	.00	.00
8	.00	.00	---	---	---	---	.00	---	.00	---	.00	.00
9	.00	.00	---	---	---	---	.00	---	.00	---	.00	3.1
10	.00	.00	---	---	---	---	.00	---	.00	---	.00	6.0
11	.00	.00	---	---	---	---	.00	---	2.0	---	.00	.00
12	.00	.00	---	---	---	---	.00	---	.00	---	.00	.00
13	.00	.00	---	---	---	.00	.00	---	.00	---	.00	.00
14	.00	.00	---	---	---	.00	.00	---	.00	---	.00	.00
15	.00	.00	---	---	---	.00	.00	---	.00	---	2.5	.00
16	.00	.00	---	---	---	.11	.00	---	.00	---	.00	.00
17	.00	.00	---	---	---	.00	.00	---	.00	---	.41	.00
18	.00	.00	---	---	---	.00	.00	---	.00	---	.00	.00
19	.00	.00	---	---	---	.00	.00	---	.00	---	.00	.00
20	2.0	.00	---	---	---	.00	.00	---	.00	---	.00	.00
21	.00	.00	---	---	---	.00	.00	---	.00	---	.00	.00
22	1.1	.00	---	---	---	.00	.00	.00	.00	---	.05	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	---	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	10	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	13	.00	.00
26	.00	---	---	---	---	.00	.00	.00	.00	2.7	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.33	.00	.00	.00
29	.00	---	---	---	---	.00	.00	.00	.10	.00	.00	.00
30	.00	---	---	---	---	.00	.00	.00	.42	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	4.08	---	---	---	---	---	0.00	---	2.85	---	23.36	35.50
MEAN	.13	---	---	---	---	---	.000	---	.095	---	.75	1.18
MAX	2.0	---	---	---	---	---	.00	---	2.0	---	16	25
MIN	.00	---	---	---	---	---	.00	---	.00	---	.00	.00
AC-FT	8.1	---	---	---	---	---	.00	---	5.7	---	46	70
(†)	0.71	---	---	---	---	---	0.00	1.38	0.41	2.07	1.74	1.2

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329860 GRANT LINE ARROYO AT VILLA DEL OSO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°08'04", long 106°34'16", in SE¼SE¼ sec.36, T.11 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank of rock-lined channel, and 60 ft west of northwest corner of apartment parking lot at 4215 Louisiana Boulevard NE in Albuquerque.

DRAINAGE AREA.--0.052 mi².

PERIOD OF RECORD.--June 1976 to current year (no winter records).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Recording rain gage at station. Development within basin is predominantly residential. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34 ft³/s, Aug. 1, 1982, gage height, 2.14 ft, from rating curve extended above 5.0 ft³/s on basis of slope-area measurement at gage height 2.08; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 7.2 ft³/s, at 1435 hours July 25, gage height, 1.59 ft, from rating curve extended above 5.0 ft³/s on basis of slope-area measurement at gage height 2.08; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 13 ft³/s, at 1410 hours Aug. 14, gage height, 1.75 ft, from rating curve extended above 5.0 ft³/s on basis of slope-area measurement at gage height 2.08; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.7 ft³/s, at 2330 hours Aug. 6, gage height, 1.67 ft, from rating curve extended above 5.0 ft³/s on basis of slope-area measurement at gage height 2.08; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.02	e.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	e.00
6	.01	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.01	.00	---	---	---	---	.00	.00	.00	.00	.00	.01
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.03	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.08
20	.00	.00	---	---	---	.07	.00	.00	.00	.00	e.00	.00
21	.00	.00	---	---	---	.01	.00	.00	.00	.00	e.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.20	e.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.03	e.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.02	e.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.01	e.00	---
TOTAL	0.02	0.00	---	---	---	---	0.00	0.00	0.00	0.29	0.02	0.09
MEAN	.001	.000	---	---	---	---	.000	.000	.000	.009	.001	.003
MAX	.01	.00	---	---	---	---	.00	.00	.00	.20	.02	.08
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.04	.00	---	---	---	---	.00	.00	.00	.6	.04	.2
(†)	0.49	0.22							0.00	1.13	0.61	0.95

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329860 GRANT LINE ARROYO AT VILLA DEL OSO AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.03	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.01	.00	.00	.00	.00
4	.05	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.04	.00	---	---	---	---	.00	.00	.00	.03	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.01
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.20	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.10	.15	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.03	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.01	.00
21	.00	.00	---	---	---	.00	.01	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.05
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.02	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.03	.00	.00	.01	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.06	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.06
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.09	0.00	---	---	---	---	0.09	0.04	0.00	0.34	0.22	0.12
MEAN	.003	.000	---	---	---	---	.003	.001	.000	.011	.007	.004
MAX	.05	.00	---	---	---	---	.03	.03	.00	.20	.15	.06
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.2	.00	---	---	---	---	.2	.08	.00	.7	.4	.2
(†)	0.34	0.19					0.94	0.25	0.18	2.80	1.81	0.39

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329860 GRANT LINE ARROYO AT VILLA DEL OSO AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
2	.00	---	---	---	---	---	.00	.00	.00	.00	.03	---
3	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
4	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
5	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
6	.00	---	---	---	---	---	.00	.00	.00	.00	.13	---
7	.00	---	---	---	---	---	.00	.00	.00	.00	.02	---
8	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
9	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
10	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
11	.00	---	---	---	---	---	.00	.00	.01	.00	.00	---
12	.00	---	---	---	---	---	.00	.00	.00	.02	.00	---
13	.00	---	---	---	---	---	.00	.00	.00	.00	.00	---
14	.00	---	---	---	---	---	.00	.00	.00	.00	---	---
15	.00	---	---	---	---	---	.00	.00	.00	.00	---	---
16	.00	---	---	---	---	---	.00	.00	.00	.01	---	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	---	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	---	.00
19	.00	---	---	---	---	.00	.00	.00	.00	.01	---	.00
20	.17	---	---	---	---	.00	.00	.02	.00	.00	---	.00
21	.00	---	---	---	---	.00	.00	.18	.00	.10	---	.00
22	.00	---	---	---	---	.00	.00	.00	.00	.02	---	.00
23	.00	---	---	---	---	.00	.00	.00	.00	.16	---	.00
24	.00	---	---	---	---	.00	.00	.00	.00	.07	---	.00
25	.00	---	---	---	---	.00	.00	.00	.00	.00	---	.00
26	.00	---	---	---	---	.00	.00	.00	.00	.04	---	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.00	---	.00
28	.00	---	---	---	---	.00	.00	.00	.00	.00	---	.00
29	.00	---	---	---	---	.00	.00	.00	.00	.00	---	.00
30	.00	---	---	---	---	.00	.00	.00	.01	.00	---	.00
31	---	---	---	---	---	.00	---	.00	---	.00	---	---
TOTAL	---	---	---	---	---	---	0.00	0.20	0.02	0.43	---	---
MEAN	---	---	---	---	---	---	.000	.006	.001	.014	---	---
MAX	---	---	---	---	---	---	.00	.18	.01	.16	---	---
MIN	---	---	---	---	---	---	.00	.00	.00	.00	---	---
AC-FT	---	---	---	---	---	---	.00	.4	.04	.9	---	---
(†)	0.28						0.14	1.39	0.56	3.05	2.01	1.80

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329865 GRANT LINE ARROYO ABOVE SAN PEDRO BOULEVARD AT ALBUQUERQUE, NM

LOCATION.--Lat 35°08'04", long 106°34'43", in SE¼SE¼ sec.36, T.11 N., R. 3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 50 ft east of San Pedro Blvd. and 1,500 ft north of Montgomery Blvd. in Albuquerque.

DRAINAGE AREA.--0.052 mi².

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

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Development within basin is predominately residential.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15 ft³/s, July 9, 1988, gage height, 2.48 ft; no flow most of time.

EXTREMES FOR 1988 WATER YEAR.--Maximum discharge, 15 ft³/s, at 1945 hours July 9, gage height, 2.48 ft; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 12 ft³/s, at 1500 hours July 25, gage height, 2.29 ft; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 9.9 ft³/s, at 1825 hours July 13, gage height, 2.15 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12 ft³/s, at 0200 hours July 23, gage height, 2.32 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	1.2	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.13	.02	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.34	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.03	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.01
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.15
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.01	.00
25	.00	.00	---	---	---	.00	.00	.00	.01	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.02	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.03	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.01	.00	.00	.00
31	.00	---	---	---	---	.38	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	1.20	0.00	0.05	0.47	0.08	0.16
MEAN	.000	.000	---	---	---	---	.040	.000	.002	.015	.003	.005
MAX	.00	.00	---	---	---	---	1.2	.00	.03	.34	.03	.15
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	2.4	.00	.1	.9	.2	.3

RIO GRANDE BASIN

08329865 GRANT LINE ARROYO ABOVE SAN PEDRO BOULEVARD AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.38	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.38	0.00	0.00
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.012	.000	.000
MAX	.00	.00	---	---	---	---	.00	.00	.00	.38	.00	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	.8	.00	.00

RIO GRANDE BASIN

08329865 GRANT LINE ARROYO ABOVE SAN PEDRO BOULEVARD AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.05	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.02	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.02	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.37	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.23	.08	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.03	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.12
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.02	0.00	---	---	---	---	0.00	0.05	0.00	0.62	0.11	0.12
MEAN	.001	.000	---	---	---	---	.000	.002	.000	.020	.004	.004
MAX	.02	.00	---	---	---	---	.00	.05	.00	.37	.08	.12
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.04	.00	---	---	---	---	.00	.1	.00	1.2	.2	.2

RIO GRANDE BASIN

08329865 GRANT LINE ARROYO ABOVE SAN PEDRO BOULEVARD AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00
2	e.00	.00	.00	.00	.00	---	---	.00	.00	.00	.02	.00
3	e.00	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00
4	e.00	.00	.00	.02	.00	---	---	.00	.00	.00	.00	.00
5	e.00	.00	.00	.04	.00	---	---	.00	.00	.00	.00	.00
6	e.00	.00	.00	.00	.00	---	---	.00	.00	.00	.28	.12
7	e.00	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00
8	e.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
9	e.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
10	e.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.09
11	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
16	.00	.00	.01	.00	.00	---	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	---	---	.00	.24	.00	.08	.00	.00
22	.00	.00	.00	.00	---	---	.00	.00	.00	.05	.00	.00
23	.00	.00	.00	.00	---	---	.00	.00	.00	.38	.00	.00
24	.00	.00	.00	.00	---	---	.00	.00	.00	.29	.00	.00
25	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	---	---	.00	.00	.00	.03	.00	.00
27	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
29	.00	.00	.02	.00	---	---	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.03	0.06	---	---	---	0.24	0.00	0.83	0.30	0.21
MEAN	.000	.000	.001	.002	---	---	---	.008	.000	.027	.010	.007
MAX	.00	.00	.02	.04	---	---	---	.24	.00	.38	.28	.12
MIN	.00	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00
AC-FT	.00	.00	.06	.1	---	---	---	.5	.00	1.6	.6	.4

e Estimated

RIO GRANDE BASIN

08329880 ACADEMY ACRES DRAIN AT ALBUQUERQUE, NM

LOCATION.--Lat 35°09'02", long 106°34'18", in NE¼SE¼ sec.25, T.11 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank of concrete-lined channel, at intersection of Burlison Drive and Leander Avenue, 250 ft north of intersection of Esther Avenue and Burlison Drive, and 0.4 mi north of Academy Road in Albuquerque.

DRAINAGE AREA.--0.124 mi².

PERIOD OF RECORD.--June 1976 to current year (no winter records).

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 5,306 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Recording rain gage at station. The basin is primarily urban residential. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103 ft³/s, Aug. 3, 1978, gage height, 4.09 ft, from rating curve extended above 10 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 46 ft³/s, at 1110 hours Sept. 19, gage height 3.44 ft, from rating curve extended above 10 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 76 ft³/s, at 1420 hours Aug. 14, gage height, 3.81 ft, from rating curve extended above 10 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s, at 1010 hours May 21, gage height, 2.68 ft, from rating curve extended above 10 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.17	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.01	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.09	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.05	.00	---	---	---	---	.00	.00	.00	.00	.00	.01
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	.01	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.16	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.70
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.02	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.45	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.12	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.15	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.01	.00	---
TOTAL	0.14	0.00	---	---	---	---	0.00	0.00	0.00	0.91	0.19	0.71
MEAN	.005	.000	---	---	---	---	.000	.000	.000	.029	.006	.024
MAX	.09	.00	---	---	---	---	.00	.00	.00	.45	.17	.70
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.3	.00	---	---	---	---	.00	.00	.00	1.8	.4	1.4
(†)	0.17	0.05	---	---	---	---	0.00	0.00	0.00	0.87	0.29	0.50

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329880 ACADEMY ACRES DRAIN AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	e.05	.00
2	.00	.00	.00	---	---	---	.00	.19	.00	.00	e.00	.00
3	.00	.00	.00	---	---	---	.00	.06	.00	.00	e.00	.00
4	.53	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00
5	.14	.00	---	---	---	---	.06	.00	.00	.09	e.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	e.01	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	.06
8	.00	.00	---	---	---	---	.01	.00	.00	.00	e.00	.04
9	.00	.00	---	---	---	---	.00	.00	.00	.06	e.00	.00
10	.00	.00	---	---	---	---	.00	.00	.04	.00	e.00	.00
11	.00	.00	---	---	---	---	.00	.00	.01	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.01	.01	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	1.0	.01	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.36	1.1	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.06	.00
18	.00	.00	---	---	---	.00	.15	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.29	.00
21	.00	.00	---	---	---	.00	.05	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.03	.57
23	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.00	.00
24	.00	.00	---	---	---	.00	.16	.00	.00	e.00	.00	.00
25	.00	.00	---	---	---	.00	.22	.00	.00	e.05	.00	.00
26	.00	.00	---	---	---	.00	.02	.08	.00	e.00	.00	.00
27	.00	.00	---	---	---	.02	.00	.00	.00	e.00	.31	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.01	.24
29	.00	.00	---	---	---	.02	.00	.00	.00	e.00	.00	.00
30	.00	.00	---	---	---	.03	.00	.00	.00	e.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	e.00	.00	---
TOTAL	0.67	0.00	---	---	---	---	0.67	0.33	0.05	1.57	1.88	0.91
MEAN	.022	.000	---	---	---	---	.022	.011	.002	.051	.061	.030
MAX	.53	.00	---	---	---	---	.22	.19	.04	1.0	1.1	.57
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	1.3	.00	---	---	---	---	1.3	.7	.1	3.1	3.7	1.8
(†)	0.77	0.00					0.66	0.23	0.12	2.45	1.55	1.24

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329880 ACADEMY ACRES DRAIN AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
2	.03	.35	---	---	---	---	e.00	.00	.01	.00	.17	.00
3	.00	.00	---	---	---	---	e.00	.00	.00	.00	.06	.01
4	.00	.00	---	---	---	---	e.00	.00	.00	.07	.01	.00
5	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	e.00	.00	.00	.00	.22	.04
7	.00	.02	---	---	---	---	e.00	.00	.00	.00	.03	.00
8	.00	.00	---	---	---	---	e.00	.00	.00	.01	.00	.00
9	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.03
11	.00	.00	---	---	---	---	e.00	.00	.08	.00	.00	.00
12	.00	.00	---	---	---	---	e.00	.00	.00	.07	.00	.00
13	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	e.00	.00	.00	.00	.06	.00
16	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	e.00	.00	.00	.03	.00	.00
19	.00	.00	---	---	---	e.00	e.00	.02	.00	.01	.00	.00
20	.04	.00	---	---	---	e.00	e.00	.15	.00	.00	.00	.00
21	.00	.00	---	---	---	e.00	e.00	.79	.00	.38	.00	.00
22	.00	.00	---	---	---	e.00	e.00	.00	.00	.12	.00	.00
23	.00	.00	---	---	---	e.00	.00	.00	.00	.20	.00	.00
24	.00	.00	---	---	---	e.00	.00	.00	.00	.32	.00	.00
25	.00	.00	---	---	---	e.00	.00	.00	.00	.01	.00	.00
26	.00	---	---	---	---	e.00	.00	.00	.00	.05	.00	.00
27	.00	---	---	---	---	e.00	.00	.00	.00	.01	.00	.00
28	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	e.00	.00	.00	.01	.00	.00	.00
30	.00	---	---	---	---	e.00	.00	.00	.16	.00	.00	.00
31	.00	---	---	---	---	e.00	---	.00	---	.00	.00	---
TOTAL	0.07	---	---	---	---	---	0.00	0.96	0.26	1.28	0.55	0.08
MEAN	.002	---	---	---	---	---	.000	.031	.009	.041	.018	.003
MAX	.04	---	---	---	---	---	.00	.79	.16	.38	.22	.04
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.1	---	---	---	---	---	.00	1.9	.5	2.5	1.1	.2
(†)	0.21						0.10	1.18	0.61	2.28	1.70	1.83

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM

LOCATION.--Lat 35°11'58", long 106°35'53", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on left bank 0.5 mi upstream from Edith Blvd., 1.1 mi upstream from mouth, and 1.2 mi northeast of Alameda.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1968 to current year (no winter records in water years 1969-89).

GAGE.--Water-stage recorder and concrete-lined channel. Elevation of gage is 5,015 ft above National Geodetic Vertical Datum of 1929, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--Water-discharge records good. Floodway channel intercepts flow of numerous arroyos in northeast Albuquerque and discharges into the Rio Grande at a point 1.6 mi north of Alameda.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Aug. 14, 1980, gage height, 10.4 ft, from rating curve extended above 2,900 ft³/s; no flow most of time.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	1600	2,310	3.80	Aug. 3	1615	3,000	4.50
July 19	1945	2,040	3.50	Aug. 6	2245	1,610	3.00
July 21	2200	*8,150	*8.50	Sept. 6	0630	4,810	6.14
July 24	2300	4,640	6.00	Sept. 10	0115	2,760	4.26

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.00	e.00	.00	---	.00	.00	.00	.00	.00	.00
2	36	129	e.00	e.00	.00	---	.00	.00	.00	61	106	.00
3	.00	56	e.00	e.00	.00	---	.00	.00	.00	2.8	424	38
4	.00	.00	e.00	e.00	.00	---	.00	.00	.00	3.3	7.6	.00
5	.00	.00	e.00	e.00	.00	---	.00	.00	.00	.00	.00	.00
6	14	.00	e.00	e.00	.00	---	.00	.00	.00	.00	126	570
7	.00	7.5	e.00	e.00	.00	---	.00	.00	.00	.00	82	144
8	.00	40	e.00	e.00	.00	---	.00	.00	.00	.00	.00	.00
9	.00	.00	e.00	.00	.00	---	.00	.00	3.8	.00	.00	122
10	.00	.00	e.00	.00	.00	---	.00	.00	.00	.00	70	329
11	.00	.00	e.00	.00	.00	---	.00	.00	190	.00	.00	e.00
12	.00	.00	e.00	.00	.00	---	.00	.00	5.2	59	.00	e.00
13	.00	.00	e.00	.00	.00	---	.00	.00	20	47	.00	e.00
14	.00	.00	e.00	.00	.00	---	.00	.00	6.7	.00	88	e.00
15	.00	.00	e.00	.00	.00	---	.00	.00	.00	.00	135	e.00
16	.00	.00	e.00	.00	.00	---	.00	.00	.00	98	97	e.00
17	.00	.00	e.00	.00	.00	---	.00	.00	.00	20	79	e.00
18	.00	.00	e.00	.00	.00	---	.00	.00	.00	56	.00	e.00
19	.00	.00	e.00	.00	.00	---	.00	5.1	.00	164	.00	e.00
20	37	.00	e.00	.00	.00	---	.00	49	.00	30	.00	e.00
21	.00	.00	e.00	.00	---	---	.00	461	.00	478	.00	e.00
22	.00	.00	e.00	.00	---	---	.00	12	.00	328	30	e.00
23	7.9	.00	e.00	.00	---	---	.00	.00	.00	323	96	e.00
24	.00	e.00	e.00	.00	---	---	.00	.00	.00	406	184	e.00
25	.00	e.00	e.00	.00	---	---	.00	.00	.00	96	.00	e.00
26	.00	e.00	e.00	.00	---	---	.00	.00	.00	52	.00	e.00
27	.00	e.00	e.00	.00	---	.00	.00	.00	.00	32	.00	e.00
28	.00	e.00	e.00	.00	---	.00	.00	.00	.00	40	.00	e.00
29	.00	e.00	e.00	.00	---	.00	.00	.00	123	9.0	.00	e.00
30	.00	e.00	e.00	.00	---	31	.00	.00	43	.00	39	e.00
31	.00	---	e.00	.00	---	9.2	---	.00	---	20	.00	---
TOTAL	94.90	232.50	0.00	0.00	---	---	0.00	527.10	391.70	2325.10	1608.60	1203.00
MEAN	3.06	7.75	.000	.000	---	---	.000	17.0	13.1	75.0	51.9	40.1
MAX	37	129	.00	.00	---	---	.00	461	190	478	424	570
MIN	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
AC-FT	188	461	.00	.00	---	---	.00	1050	777	4610	3190	2390

CAL YR 1990 TOTAL 4477.29 MEAN 12.3 MAX 961 MIN .00 AC-FT 8880

e Estimated

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982-83, 1991.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)
OCT												
31...	1130	--	2.1	390	--	9.3	--	20.0	15.5	11.5	23	22
NOV												
19...	1533	--	1.2	369	--	9.8	--	19.5	16.0	--	11	--
FEB												
20...	1500	--	0.77	453	--	9.0	--	15.0	14.0	8.7	18	<3.0
APR												
11...	1650	--	1.4	617	--	9.3	--	22.0	16.5	8.8	64	10
MAY												
15...	1530	--	2.8	406	--	9.1	--	19.0	24.0	8.4	10	2.3
21...	1100	--	972	138	--	7.9	--	--	--	--	320	14
21...	1115	--	1200	--	--	--	--	--	--	--	--	--
MAY												
21-21	1120-1305	644	--	137	--	7.8	--	--	--	--	260	15
JUN												
11...	1445	--	1070	114	--	8.1	--	23.0	20.5	--	150	24
JUN												
11-11	1500-1800	596	--	98	--	8.3	--	--	--	--	140	17
19...	1443	--	1.1	707	--	9.3	--	33.5	31.5	10.0	48	<3.0
29...	0040	--	538	531	--	8.9	--	--	--	--	280	--
29...	1840	--	590	122	--	8.0	--	--	--	--	240	--
JUL												
12...	1608	--	375	149	--	8.2	--	30.5	26.5	4.9	460	--
16...	1926	--	1390	115	--	8.6	--	30.0	28.0	--	360	25
JUL												
16-16	1950-2233	518	--	134	--	8.2	--	--	--	--	150	19
JUL												
18-18	2200-2246	485	--	139	--	8.1	--	--	--	--	160	--
JUL												
19-19	1927-2045	1220	--	105	--	9.2	--	--	--	--	--	--
20...	2027	--	188	458	--	10.6	--	28.0	25.5	--	--	--
21...	2130	--	7260	100	--	8.8	--	--	24.5	--	370	13
JUL												
21-22	2150-0050	2230	--	80	--	8.8	--	--	--	--	180	8.7
JUL												
23-23	0247-0308	1180	--	--	102	--	7.8	--	--	--	--	--
24...	2032	--	2800	--	136	--	8.2	--	--	--	--	--
JUL												
24-24	2046-2244	2220	--	--	103	--	8.0	--	--	--	--	--
26...	2230	--	746	181	--	8.7	--	--	22.0	--	--	--
AUG												
02-02	2335-2350	1220	--	125	--	8.4	--	--	--	--	--	--
AUG												
03-03	0005-0227	986	--	96	--	8.2	--	--	--	--	--	--
AUG												
03-03	1539-1624	1530	--	87	--	8.6	--	--	--	--	--	--
AUG												
06-06	2040-2055	584	--	114	--	--	8.3	--	--	--	--	--
AUG												
10-10	1534-1549	874	--	169	--	8.8	--	--	--	--	--	--
AUG												
15-15	1929-1939	680	--	114	--	8.7	--	--	--	--	--	--
AUG												
17-17	1758-1813	1230	--	274	--	8.2	--	--	--	--	--	--
AUG												
17-17	1828-1846	1040	--	886	--	8.4	--	--	--	--	--	--
SEP												
03...	1700-1846	--	196	115	--	8.5	--	32.0	27.5	--	--	--
SEP												
06-06	0337-0352	1000	--	--	208	--	7.8	--	--	--	110	--
SEP												
06-06	0407-0425	2040	--	--	134	--	7.9	--	--	--	140	--

RIO GRANDE BASIN
08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)
OCT 31...	100	34	4.0	44	2	4.1	101	72	--	24	0.70	30
NOV 19...	95	31	4.2	40	2	3.4	96	68	--	19	0.80	32
FEB 20...	160	53	5.9	32	1	5.2	115	71	0.0	32	0.50	32
APR 11...	150	48	7.1	66	2	9.8	120	91	0.07	57	1.0	45
MAY 15...	110	34	6.3	37	2	4.2	124	66	0.0	14	<0.10	30
21...	54	19	1.6	6.5	0.4	2.9	82	11	--	5.9	0.20	6.9
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 21-21	56	20	1.5	6.7	0.4	3.8	86	11	--	4.7	0.20	5.6
JUN 11...	42	15	1.1	4.7	0.3	2.6	37	7.8	--	3.1	0.20	4.4
JUN 11-11	34	12	0.91	3.8	0.3	2.7	31	5.6	0.07	2.7	<0.10	3.6
19...	190	72	1.3	49	2	7.3	126	88	--	63	1.0	33
29...	150	55	3.5	52	2	7.8	199	73	--	41	0.80	36
29...	43	15	1.3	5.6	0.4	3.4	63	9.1	--	4.8	0.30	4.7
JUL 12...	52	18	1.6	7.8	0.5	3.3	99	11	0.40	5.8	0.10	9.1
16...	37	13	1.1	6.2	0.4	2.8	75	7.7	--	5.4	0.20	6.4
JUL 16-16	44	16	1.1	5.2	0.3	3.0	81	5.6	--	3.9	0.20	4.7
JUL 18-18	43	15	1.4	6.8	0.5	2.9	37	12	--	5.1	0.20	7.2
JUL 19-19	36	13	0.81	5.1	0.4	2.5	89	7.6	--	4.3	0.20	6.3
20...	140	54	1.4	30	1	5.4	98	72	--	25	0.60	25
21...	35	12	1.1	4.9	0.4	4.2	86	8.0	--	4.0	0.20	6.8
JUL 21-22	32	11	1.1	6.2	0.5	2.5	106	5.0	--	3.2	0.20	4.5
JUL 23-23	36	13	0.90	2.3	0.2	1.3	50	3.2	--	1.1	<0.10	3.7
24...	35	12	1.1	5.2	0.4	1.9	31	7.8	--	5.0	0.20	6.7
JUL 24-24	25	8.8	0.63	2.2	0.2	1.6	22	3.7	--	2.0	<0.10	2.8
26...	57	20	1.7	14	0.8	2.5	90	17	--	9.3	0.30	11
AUG 02-02	45	16	1.3	7.5	0.5	2.3	99	9.6	--	5.0	0.20	7.2
AUG 03-03	37	13	1.0	4.5	0.3	2.0	52	4.5	--	3.0	0.10	4.5
AUG 03-03	34	12	0.93	4.1	0.3	1.8	91	5.1	--	3.6	<0.10	6.0
AUG 06-06	38	13	1.4	8.4	0.6	2.4	93	16	--	6.6	0.30	8.3
AUG 10-10	50	17	1.9	13	0.8	2.5	117	16	--	13	0.30	15
AUG 15-15	37	13	1.2	7.3	0.5	2.3	32	8.9	--	4.4	0.20	8.5
AUG 17-17	74	25	2.7	23	1	3.2	123	22	--	30	0.30	16
AUG 17-17	33	12	0.82	3.1	0.2	1.8	102	4.9	--	1.9	0.10	3.9
SEP 03...	39	14	1.1	5.6	0.4	2.7	129	9.5	--	4.0	0.20	7.2
SEP 06-06	43	15	1.3	7.7	0.5	2.4	121	11	--	5.5	0.20	7.6
SEP 06-06	24	8.7	0.64	2.5	0.2	1.7	90	3.5	--	2.1	<0.10	3.2

RIO GRANDE BASIN
08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
OCT 31...	277	273	--	--	<0.010	--	<0.100	--	0.010	--	0.49	--
NOV 19...	236	256	--	--	<0.010	--	<0.100	--	0.060	--	0.34	--
FEB 20...	296	301	--	--	<0.010	<0.010	<0.100	<0.100	<0.010	0.020	--	--
APR 11...	414	397	--	--	0.020	<0.010	<0.050	<0.050	0.040	0.040	1.5	--
MAY 15...	246	266	--	--	0.020	<0.010	<0.050	<0.050	<0.010	<0.010	--	--
MAY 21...	104	106	0.00	0.340	0.550	0.050	0.420	0.390	0.540	0.250	2.9	3.8
MAY 21...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 21-21	110	108	0.260	0.360	0.170	0.060	0.430	0.420	0.310	0.220	3.3	4.0
JUN 11...	92	64	0.520	0.480	0.130	0.040	0.650	0.520	0.460	0.280	2.7	3.9
JUN 11-11	72	53	0.420	0.480	0.120	0.040	0.540	0.520	0.430	0.390	1.9	2.8
JUN 19...	393	393	0.340	0.560	0.110	0.050	0.450	0.610	0.050	0.010	1.2	1.7
JUN 29...	441	388	--	--	--	--	--	--	--	--	--	--
JUN 29...	140	82	--	--	--	--	--	--	--	--	--	--
JUL 12...	116	119	0.620	0.610	0.050	0.050	0.670	0.660	0.200	0.130	4.1	5.0
JUL 16...	100	91	0.320	0.410	0.100	0.030	0.420	0.440	0.370	0.340	3.2	4.0
JUL 16-16	95	91	0.420	0.420	0.030	0.030	0.450	0.450	0.220	0.220	2.8	3.5
JUL 18-18	89	77	0.690	0.720	0.050	0.050	0.740	0.770	0.520	0.550	1.3	2.5
JUL 19-19	93	93	0.400	--	0.090	--	0.490	--	0.340	--	0.46	1.3
JUL 20...	298	272	--	--	0.010	--	<0.050	--	0.020	--	0.68	--
JUL 21...	79	97	0.900	0.820	0.030	0.030	0.930	0.850	0.100	0.210	0.70	1.7
JUL 21-22	64	100	0.440	0.470	0.030	0.020	0.470	0.490	0.170	0.160	1.0	1.7
JUL 23-23	46	55	0.230	--	0.060	--	0.290	--	<0.010	--	--	1.3
JUL 24...	74	58	0.450	--	0.040	--	0.490	--	0.080	--	1.0	1.6
JUL 24-24	34	35	0.260	--	0.070	--	0.330	--	0.160	--	1.3	1.8
JUL 26...	141	130	0.610	--	0.060	--	0.670	--	0.240	--	1.7	2.6
AUG 02-02	103	108	0.790	--	0.050	--	0.840	--	0.290	--	1.0	2.1
AUG 03-03	70	64	0.470	--	0.050	--	0.520	--	0.270	--	0.73	1.5
AUG 03-03	54	88	0.380	--	0.030	--	0.410	--	0.070	--	1.4	1.9
AUG 06-06	88	112	0.620	--	0.020	--	0.640	--	0.030	--	6.1	6.7
AUG 10-10	104	149	0.490	--	0.060	--	0.550	--	0.100	--	1.7	2.4
AUG 15-15	96	65	0.690	--	0.060	--	0.750	--	0.090	--	3.2	4.1
AUG 17-17	179	196	0.240	--	0.070	--	0.310	--	0.060	--	1.5	1.9
AUG 17-17	46	90	0.500	--	0.030	--	0.530	--	0.090	--	3.1	3.7
SEP 03...	98	122	0.690	--	0.020	--	0.710	--	0.140	--	1.3	2.1
SEP 06-06	114	126	0.380	0.380	0.030	0.030	0.410	0.410	0.260	0.240	2.2	2.9
SEP 06-06	72	78	0.290	0.280	0.020	0.020	0.310	0.300	0.240	0.280	1.7	2.2

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANTI- MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)
OCT 31...	0.060	--	6.1	<0.010	<1	--	58	200	1	4	--	<10
NOV 19...	0.070	--	2.5	<0.010	6	<1	K5	86	<1	3	--	<10
FEB 20...	0.070	0.010	3.4	<0.010	7	<1	29	1300	<1	5	--	<10
APR 11...	0.160	<0.010	11	<0.010	<1	<1	K86	7900	1	7	--	<10
MAY 15...	0.030	<0.010	3.5	<0.010	2	<1	--	260	<1	2	--	<10
MAY 21...	0.730	0.130	60	<0.010	7	2	K64000	210000	2	5	--	<10
MAY 21...	--	--	18	--	--	--	--	--	--	--	--	--
MAY 21-21	0.690	0.240	36	<0.010	4	1	--	--	2	5	--	<10
JUN 11...	0.710	0.090	42	<0.010	2	3	K9100	200000	2	2	--	<10
JUN 11-11	0.440	0.130	32	<0.010	6	3	--	--	2	2	--	<10
JUN 19...	0.360	0.050	69	<0.010	9	170	--	430	<1	2	--	<10
JUN 29...	--	--	72	--	130	--	--	--	--	--	--	--
JUN 29...	--	--	48	--	6	1	--	--	--	--	--	--
JUL 12...	1.00	0.020	58	--	7	1	--	--	--	--	--	--
JUL 16...	1.60	0.120	63	<0.010	5	<1	--	--	3	3	--	<10
JUL 16-16	0.840	0.150	33	<0.010	3	<1	--	--	3	3	--	<10
JUL 18-18	0.760	0.180	45	--	1	<1	--	--	--	--	--	--
JUL 19-19	0.410	--	29	--	--	--	--	--	--	2	200	--
JUL 20...	0.080	--	15	--	--	--	--	--	--	2	<100	--
JUL 21...	1.30	0.130	46	<0.010	5	<1	--	--	3	6	--	<10
JUL 21-22	0.610	0.100	47	<0.010	19	<1	--	--	2	2	--	<10
JUL 23-23	0.360	--	11	--	--	--	--	--	--	1	<100	--
JUL 24...	0.440	--	21	--	--	--	--	--	--	4	600	--
JUL 24-24	0.590	--	22	--	--	--	--	--	--	2	<100	--
JUL 26...	0.720	--	27	--	--	--	--	--	--	2	200	--
AUG 02-02	0.330	--	46	--	--	--	--	--	--	3	500	--
AUG 03-03	0.280	--	26	--	--	--	--	--	--	2	100	--
AUG 03-03	0.550	--	21	--	--	--	--	--	--	2	100	--
AUG 06-06	5.30	--	50	--	--	--	--	--	--	3	2400	--
AUG 10-10	2.20	--	30	--	--	--	--	--	--	5	1400	--
AUG 15-15	0.720	--	24	--	1	--	--	--	--	3	2900	--
AUG 17-17	0.780	--	19	--	6	--	--	--	--	2	500	--
AUG 17-17	2.30	--	31	--	--	--	--	--	--	2	500	--
SEP 03...	0.150	--	37	--	--	--	--	--	--	2	1200	--
SEP 06-06	0.850	0.110	27	--	18	2	--	--	1	2	--	<10
SEP 06-06	0.420	0.130	25	0.040	11	2	--	--	1	2	--	<10

RIO GRANDE BASIN
08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 31...	<1	2	7	--	1	--	<0.10	1	<1	<1	10
NOV 19...	<1	<1	6	--	<1	--	<0.20	2	<1	<1	10
FEB 20...	<1	2	20	--	4	--	<0.10	2	<1	<1	<10
APR 11...	<1	3	12	--	6	--	0.10	2	1	<1	20
MAY 15...	<1	<1	8	--	3	--	<0.10	7	<1	<1	<10
MAY 21...	3	64	4	--	3	--	0.30	80	<2	11	710
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
MAY 21-21	1	9	15	--	90	--	0.10	12	<2	<1	10
JUN 11...	2	13	19	--	72	--	<0.10	9	<1	<1	210
JUN 11-11	2	13	17	--	88	--	<0.10	19	<1	<1	200
JUN 19...	<1	3	14	--	3	--	<0.10	2	2	1	<10
JUN 29...	--	--	--	--	--	--	--	--	--	--	--
JUN 29...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	2	240	37	--	160	--	0.20	150	<1	2	360
JUL 16-16	2	45	43	--	150	--	0.10	34	<1	1	310
JUL 18-18	--	--	--	--	--	--	--	--	--	--	--
JUL 19-19	2	--	21	14000	120	460	<0.10	--	--	--	270
JUL 20...	<1	--	7	1100	13	50	<0.10	--	--	--	10
JUL 21...	3	--	140	--	190	--	0.30	130	<4	<1	580
JUL 21-22	2	--	100	--	140	--	0.10	340	<4	<1	530
JUL 23-23	<1	8	15	--	40	230	0.10	--	--	--	270
JUL 24...	2	31	44	--	92	1600	0.10	--	--	--	580
JUL 24-24	1	14	25	--	76	440	<0.10	--	--	--	350
JUL 26...	1	12	18	7200	78	260	<0.10	--	--	--	180
AUG 02-02	2	9	19	20000	77	950	<0.10	--	--	--	<10
AUG 03-03	<1	4	10	4100	27	160	<0.10	--	--	--	80
AUG 03-03	1	2	8	6600	68	210	<0.10	--	--	--	110
AUG 06-06	4	88	140	110000	240	5400	0.30	--	--	--	710
AUG 10-10	3	88	88	--	200	2600	0.20	--	--	--	420
AUG 15-15	6	130	22	180000	360	7900	0.30	--	--	--	1100
AUG 17-17	2	21	30	19000	120	690	0.20	--	--	--	270
AUG 17-17	2	21	22	24000	140	1100	0.20	--	--	--	320
SEP 03...	2	43	17	59000	140	3100	0.10	--	--	--	490
SEP 06-06	4	42	29	--	140	--	0.20	53	<1	4	480
SEP 06-06	2	24	25	--	110	--	<0.10	30	<1	<1	300

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)
OCT												
31...	1130	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
NOV												
19...	1533	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
FEB												
20...	1500	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
APR												
11...	1650	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MAY												
15...	1530	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
21...	1100	<0.1	<0.010	0.1	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010
MAY												
21-21	1120-1305	<0.1	<0.010	0.2	<0.010	<0.010	<0.010	0.020	<0.010	<0.010	<0.010	<0.010
JUN												
11...	1445	<0.1	<0.010	<0.1	0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.20
JUN												
11-11	1500-1800	<0.1	<0.010	0.2	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
19...	1443	<1.0	<0.10	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
JUL												
16...	1926	0.1	<0.010	0.2	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010
JUL												
16-16	1950-2233	<0.1	<0.010	0.2	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010
21...	2130	<0.1	<0.010	1.4	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
JUL												
21-22	2150-0050	<0.1	<0.010	1.9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
AUG												
17-17	1758-1813	<0.1	<0.010	0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
DATE	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	PER- THANE TOTAL (UG/L) (39034)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)
OCT												
31...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NOV												
19...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
FEB												
20...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	0.40	0.80
APR												
11...	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY												
15...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
21...	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY												
21-21	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN												
11...	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN												
11-11	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
19...	<0.10	<0.10	<10	<1.0	<1.0	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL												
16...	0.010	0.02	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL												
16-16	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
21...	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUL												
21-22	0.010	0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG												
17-17	<0.010	<0.01	<1	<0.1	<0.10	<0.01	--	--	--	--	--	--

RIO GRANDE BASIN
08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	PHENOLS TOTAL (UG/L) (32730)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ANTHRA- CENE TOTAL (UG/L) (34220)	BENZO B FLUOR- AN- THENE TOTAL (UG/L) (34230)	BENZO K FLUOR- AN- THENE TOTAL (UG/L) (34242)	BENZO- A- PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L) (34259)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (UG/L) (34278)
OCT 31...	<1	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
NOV 19...	6	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
FEB 20...	7	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
APR 11...	<1	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
MAY 15...	2	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
MAY 21...	7	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
MAY 21-21	4	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUN 11...	2	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUN 11-11	6	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUN 19...	9	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.10	<5.0	<5.0
JUL 16...	5	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUL 16-16	3	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUL 21...	5	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
JUL 21-22	19	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
AUG 17-17	6	--	--	--	--	--	--	--	--	--	--	--
DATE	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL- PHTHAL- ATE TOTAL (UG/L) (34292)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHRY- SENE TOTAL (UG/L) (34320)	DIETHYL PHTHAL- ATE TOTAL (UG/L) (34336)	DI- METHYL PHTHAL- ATE TOTAL (UG/L) (34341)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L) (34386)	HEXA- CHLORO- ETHANE TOTAL (UG/L) (34396)
OCT 31...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
NOV 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
FEB 20...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
APR 11...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
MAY 15...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
MAY 21...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
MAY 21-21	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUN 11...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUN 11-11	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUN 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUL 16...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	9.0	<5.0	<5.0	<5.0
JUL 16-16	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUL 21...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
JUL 21-22	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L) (34403)	ISO- PHORONE TOTAL (UG/L) (34408)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	N- NITRO- SODI-N- PROPYL- AMINE TOTAL (UG/L) (34428)	N-NITRO -SODI- PHENY- LAMINE TOTAL (UG/L) (34433)	N-NITRO -SODI- METHY- LAMINE TOTAL (UG/L) (34438)	NITRO- BENZENE TOTAL (UG/L) (34447)	PARA- CHLORO- META CRESOL TOTAL (UG/L) (34452)	PHENAN- THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)
OCT 31...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
NOV 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
FEB 20...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
APR 11...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
MAY 15...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
MAY 21...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
MAY 21-21	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUN 11...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUN 11-11	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUN 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	45.0	<5.0
JUL 16...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	7.0
JUL 16-16	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUL 21...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
JUL 21-22	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
DATE	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2- TRANSDI CHLORO- ETHENE TOTAL (UG/L) (34546)
OCT 31...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
NOV 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
FEB 20...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
APR 11...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
MAY 15...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
MAY 21...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
MAY 21-21	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUN 11...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUN 11-11	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUN 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUL 16...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUL 16-16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUL 21...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
JUL 21-22	<0.20	<0.20	<0.20	<0.20	2.3	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20

RIO GRANDE BASIN
08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L) (34551)	1,2,5,6 -DIBENZ- -ANTHRA- -CENE TOTAL (UG/L) (34556)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	2- CHLORO- NAPH- THALENE TOTAL (UG/L) (34581)	2- CHLORO- PHENOL TOTAL (UG/L) (34586)	2- NITRO- PHENOL TOTAL (UG/L) (34591)	DI-N- OCTYL- PHTHAL- ATE TOTAL (UG/L) (34596)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L) (34601)	2,4-DI- METHYL- PHENOL TOTAL (UG/L) (34606)
OCT 31...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
NOV 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
FEB 20...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
APR 11...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
MAY 15...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
MAY 21...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
MAY 21-21	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUN 11...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUN 11-11	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUN 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUL 16...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUL 16-16	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUL 21...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
JUL 21-22	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0

DATE	2,4-DI- NITRO- TOLUENE TOTAL (UG/L) (34611)	2,4,- DI- NITRO- PHENOL TOTAL (UG/L) (34616)	2,4,6- TRI- CHLORO- PHENOL TOTAL (UG/L) (34621)	2,6-DI- NITRO- TOLUENE TOTAL (UG/L) (34626)	3,3'- DI- CHLORO- BENZI- DINE TOTAL (UG/L) (34631)	4- BROMO- PHENYL ETHER TOTAL (UG/L) (34636)	4- CHLORO- PHENYL ETHER TOTAL (UG/L) (34641)	4- NITRO- PHENOL TOTAL (UG/L) (34646)	4,6- DINITRO- -ORTHO- CRESOL TOTAL (UG/L) (34657)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H- 5OH) TOTAL (UG/L) (34694)
OCT 31...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
NOV 19...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
FEB 20...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
APR 11...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
MAY 15...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
MAY 21...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
MAY 21-21	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUN 11...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUN 11-11	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUN 19...	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUL 16...	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUL 16-16	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUL 21...	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
JUL 21-22	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0

RIO GRANDE BASIN

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	PENTA- CHLORO- PHENOL TOTAL (UG/L) (39032)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L) (39100)	DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L) (39110)	BENZI- DINE TOTAL (UG/L) (39120)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L) (39338)
OCT 31...	<5.0	<0.20	<0.20	<30.0	--	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
NOV 19...	<5.0	<0.20	<0.20	<30.0	--	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
FEB 20...	<5.0	<0.20	<0.20	<30.0	0.03	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
APR 11...	<5.0	<0.20	<0.20	<30.0	0.09	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
MAY 15...	<5.0	<0.20	<0.20	<30.0	0.04	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
MAY 21...	<5.0	<0.20	<0.20	<30.0	0.22	22.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
MAY 21-21	<5.0	<0.20	<0.20	<30.0	0.32	24.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
JUN 11...	<5.0	<0.20	<0.20	<30.0	0.22	10.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
JUN 11-11	<5.0	<0.20	<0.20	<30.0	0.16	9.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
JUN 19...	<5.0	<0.20	<0.20	<30.0	<0.01	<5.0	<5.0	<40.0	<0.20	<0.2	<0.10	<0.10
JUL 16...	<5.0	<0.20	<0.20	<30.0	0.05	16.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01
JUL 16-16	<5.0	<0.20	<0.20	<30.0	0.01	8.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01
JUL 21...	<5.0	<0.20	<0.20	<30.0	<0.01	<5.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01
JUL 21-22	<5.0	<0.20	<0.20	<30.0	<0.01	6.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01
AUG 17-17	--	--	--	--	0.06	--	--	--	--	--	--	--

DATE	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39700)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
OCT 31...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
NOV 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
FEB 20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
APR 11...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
MAY 15...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
MAY 21...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
MAY 21-21	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUN 11...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUN 11-11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUN 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUL 16...	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUL 16-16	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUL 21...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
JUL 21-22	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2

RIO GRANDE BASIN

08329914 NORTH CAMINO ARROYO TRIBUTARY AT ALBUQUERQUE, NM

LOCATION.--Lat 35°11'47", long 106°33'57", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on left bank in right-of-way for extension of Wyoming Boulevard, 150 ft south of Venice Avenue, 15 ft north of Beverly Hills Avenue, and 1.5 mi north of intersection of Paseo del Norte and Wyoming Boulevard in Albuquerque.

DRAINAGE AREA.--0.06 mi².

PERIOD OF RECORD.--June 1979 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,364 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Recording rain gage at station. The basin is totally undeveloped. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 134 ft³/s, July 7, 1981, gage height, 2.10 ft, from slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 42 ft³/s, at 1215 hours Sept. 19, 1989, gage height, 1.35 ft, from slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--No flow recorded during water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40 ft³/s, at 1900 hours Aug. 15, gage height, 1.33 ft, from slope-area measurement of peak flow; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.93
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.93
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.000	.000	.031
MAX	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.93
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	1.8
(†)	0.05	0.22					0.00	0.00	0.00	0.78	0.42	0.13

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329914 NORTH CAMINO ARROYO TRIBUTARY AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	(*)	---
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	---	---
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	---	---
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	---	---
5	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
6	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
7	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
8	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
9	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
10	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
11	.00	.00	---	---	---	---	.00	.00	.00	.00	---	---
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	---
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	---	(*)
31	.00	---	---	---	---	.00	---	.00	---	---	---	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	---	---	---
MEAN	.000	.000	---	---	---	---	.000	.000	.000	---	---	---
MAX	.00	.00	---	---	---	---	.00	.00	.00	---	---	---
MIN	.00	.00	---	---	---	---	.00	.00	.00	---	---	---
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	---	---	---

(†)

0.61 0.40 0.39 0.57

(*) Gage destroyed by vandalism; no record August 1 to September 30.

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329914 NORTH CAMINO ARROYO TRIBUTARY AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	---	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	---	.00	.00
3	---	---	---	---	---	---	.00	.00	.00	---	.00	.00
4	---	---	---	---	---	---	.00	.00	.00	---	.00	.00
5	---	---	---	---	---	---	.00	.00	.00	---	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	---	2.3	.94
7	---	---	---	---	---	---	.00	.00	.00	---	1.6	---
8	---	---	---	---	---	---	.00	.00	.00	---	.00	---
9	---	---	---	---	---	---	.00	.00	.00	---	.00	---
10	---	---	---	---	---	---	.00	.00	.00	---	.00	---
11	---	---	---	---	---	---	.00	.00	.00	---	.00	---
12	---	---	---	---	---	---	.00	.00	.00	---	.00	---
13	---	---	---	---	---	---	.00	.00	.00	---	.00	---
14	---	---	---	---	---	---	.00	.00	.00	---	.00	---
15	---	---	---	---	---	---	.00	.00	.00	---	1.7	---
16	---	---	---	---	---	---	.00	.00	.00	.00	.00	---
17	---	---	---	---	---	---	.00	.00	.00	.00	.00	---
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	2.5	.00	1.1	.00	.00
22	---	---	---	---	---	.00	.00	.00	.00	.11	.00	.00
23	---	---	---	---	---	.00	.00	.00	.00	.00	.16	.00
24	---	---	---	---	---	.00	.00	.00	.00	1.7	.00	.00
25	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	.00	.00	.00	---	.00	.00	.00
30	---	---	---	---	---	.00	.00	.00	---	.00	.00	.00
31	---	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.00	2.50	---	---	5.76	---
MEAN	---	---	---	---	---	---	.000	.081	---	---	.19	---
MAX	---	---	---	---	---	---	.00	2.5	---	---	2.3	---
MIN	---	---	---	---	---	---	.00	.00	---	---	.00	---
AC-FT	---	---	---	---	---	---	.00	5.0	---	---	11	---
(†)							0.02	1.41	1.10	2.14	2.29	0.61

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329928 RIO GRANDE NEAR ALAMEDA, NM

LOCATION.--Lat 35°10'54", long 106°39'20", Bernalillo County, Hydrologic Unit 13020203, on downstream side of Paseo del Norte Bridge in Albuquerque, and at mile 1,532.0.

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

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

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

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300), 48 mi upstream. Possible regulation by operation of reservoirs on Rio Chama and by flood and silt-detention reservoirs on Galisteo Creek and Jemez River (stations 08285000, 08286900, 08317900, 08328500). Diversions upstream form station for irrigation of about 714,000 acres, several hundred of which are downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,670 ft³/s, Aug. 7, 1991, gage height, 6.31 ft; minimum, 14 ft³/s, Sept. 28, 29, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,670 ft³/s, at 1850 hours Aug. 7, gage height, 6.31 ft; minimum daily, 97 ft³/s, July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	494	e780	793	627	1190	1300	3560	3540	5190	728	549
2	1370	707	e740	625	746	1410	1310	3530	3580	3160	774	563
3	915	842	e720	643	807	1320	1200	3440	3760	3080	1180	536
4	551	909	e740	725	887	1080	1400	3070	4260	3050	1710	543
5	544	1120	e640	820	863	937	1610	3170	4730	2840	1810	598
6	508	1360	e620	1010	769	806	1680	3270	4760	1510	3450	1490
7	456	1370	e630	875	797	902	1680	3280	4020	593	6520	1770
8	434	1340	e680	897	801	820	1720	3310	4840	194	5230	1720
9	449	1190	e720	994	736	940	2040	3320	4730	97	4440	986
10	481	1140	e730	1100	722	687	2200	3480	3930	205	2380	3290
11	399	1120	720	1170	712	598	2170	3460	3800	165	2660	2570
12	324	962	745	1120	726	700	2140	3480	4500	170	2640	2090
13	298	813	847	1160	764	704	2460	3610	4360	235	3510	1510
14	303	960	1040	649	791	681	2620	3910	4810	245	3080	1620
15	363	1080	1160	418	776	676	2710	3890	4880	258	2730	1730
16	362	1340	1260	389	770	830	2800	3730	4700	270	2460	1440
17	376	1220	1140	331	892	892	2870	3610	5600	218	3610	1210
18	375	585	1130	396	927	1020	3240	4110	6340	129	4130	1230
19	280	410	1030	937	953	1060	3250	4900	6620	258	3200	1230
20	260	365	1000	765	989	1100	3220	5330	6090	275	3090	1140
21	242	470	1020	584	878	1290	3150	6230	6040	436	3100	886
22	256	851	964	620	875	1350	3100	4440	5200	1070	2420	800
23	374	e940	929	802	1060	1350	3490	4990	4890	969	808	e940
24	358	e960	568	899	1170	1320	3580	5390	4010	2020	806	e910
25	366	e1000	408	900	1140	1280	3680	e4500	3290	1800	740	e860
26	430	e990	348	e1100	1270	1240	3610	e3900	3270	3250	e580	710
27	499	e900	420	e1110	1120	1310	3650	e3910	3380	3480	e570	841
28	552	e830	456	e1140	1170	1290	3650	e3950	3590	2820	e560	753
29	382	e860	515	e900	---	1270	3630	e3800	3600	826	430	777
30	298	e800	389	e780	---	1340	3570	3680	5150	1130	536	768
31	258	---	826	750	---	1290	---	3570	---	994	544	---
TOTAL	14493	27928	23915	25402	24738	32683	78730	121820	136270	40937	70426	36060
MEAN	468	931	771	819	883	1054	2624	3930	4542	1321	2272	1202
MAX	1430	1370	1260	1170	1270	1410	3680	6230	6620	5190	6520	3290
MIN	242	365	348	331	627	598	1200	3070	3270	97	430	536
AC-FT	28750	55400	47440	50380	49070	64830	156200	241600	270300	81200	139700	71520

CAL YR 1990 TOTAL 254398 MEAN 697 MAX 2950 MIN 226 AC-FT 504600
WTR YR 1991 TOTAL 633402 MEAN 1735 MAX 6620 MIN 97 AC-FT 1256000

e Estimated

RIO GRANDE BASIN

08329935 ARROYO 19A AT ALBUQUERQUE, NM

LOCATION.--Lat 35°09'24", long 106°43'37", in NE¼NE¼ sec.28, T.11 N., R.2 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 900 ft upstream from culvert under 81st Street, 1,200 ft south of city water tank, and 0.6 mi south of intersection of 81st Street and Atrisco Drive in Albuquerque.

DRAINAGE AREA.--1.50 mi².

PERIOD OF RECORD.--June 1977 to current year (no winter records).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,328 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 19, 1986 at site 450 ft downstream at different datum.

REMARKS.--Records poor. Recording rain gage at station. The basin drains undeveloped semidesert terrain above the escarpment west of Albuquerque. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100 ft³/s, Oct. 2, 1981, gage height, 4.03 ft, site and datum then in use, from slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--No flow recorded during the water year.

EXTREMES FOR 1990 WATER YEAR.--No flow recorded during the water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.2 ft³/s, at 2330 hours July 21, gage height, 1.87 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
2	e.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
3	e.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
4	e.00	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00
5	e.00	.00	---	---	---	---	.00	e.00	.00	.00	.00	.00
6	e.00	.00	---	---	---	---	.00	e.00	.00	.00	.00	.00
7	e.00	.00	---	---	---	---	.00	e.00	.00	.00	.00	.00
8	e.00	.00	---	---	---	---	.00	e.00	.00	.00	.00	.00
9	e.00	.00	---	---	---	---	.00	e.00	.00	.00	.00	.00
10	e.00	.00	---	---	---	.00	.00	e.00	.00	.00	.00	.00
11	e.00	.00	---	---	---	.00	.00	e.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	e.00	e.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.000	.000	.000
MAX	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
(†)	0.00	0.00					0.00	0.00	0.00	1.06	0.75	0.25

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329935 ARROYO 19A AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.000	.000	.000
MAX	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
(†)	1.19	0.26					0.59	0.20	0.29	2.00	1.34	1.02

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329935 ARROYO 19A AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
17	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
22	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00
MEAN	---	---	---	---	---	---	---	.000	.000	.001	.000	.000
MAX	---	---	---	---	---	---	---	.00	.00	.02	.00	.00
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	.00	.00	.04	.00	.00
(†)								0.48	0.89	0.00	0.76	1.65

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329936 TAYLOR RANCH DRAIN AT ALBUQUERQUE, NM

LOCATION.--Lat 35°08'56", long 106°42'03", in SE¼SW¼ sec.26, T.11 N., R.2 E., Bernalillo County, Hydrologic Unit 13020203, on left bank of drainage outlet for Taylor Ranch subdivision, 120 ft west of intersection of Calle Nuestra and Cabrillo Circle, and 1,850 ft southwest of intersection of Montano Road and Valle Vista Drive in Albuquerque.

DRAINAGE AREA.--0.132 mi².

PERIOD OF RECORD.--August 1978 to current year (no winter records).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,115 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Recording rain gage at station. The basin is primarily urban residential. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43 ft³/s, Sept. 8, 1980, gage height, 3.26 ft; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 12 ft³/s, at 1350 hours Aug. 1, gage height, 1.99 ft; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 24 ft³/s, at 1830 hours July 14, gage height, 2.54 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29 ft³/s, July 19, at 1810 hours gage height, 2.77 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.32	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.09	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.01	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.02	.00	---	---	---	.00	.00	.00	.00	.00	.00	.01
20	.00	.00	---	---	---	.25	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.18	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.02	.01	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.09	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.39	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.02	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.06	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.10	.00	---
TOTAL	0.11	0.06	---	---	---	---	0.00	0.00	0.00	0.62	0.34	0.01
MEAN	.004	.002	---	---	---	---	.000	.000	.000	.020	.011	.000
MAX	.09	.06	---	---	---	---	.00	.00	.00	.39	.32	.01
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.2	.1	---	---	---	---	.00	.00	.00	1.2	.7	.02
(†)	0.22	0.11					0.04	0.00	0.00	0.79	0.29	0.01

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329936 TAYLOR RANCH DRAIN AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	e.00	.00	.00	.00	.11	.00
2	.00	.00	.00	---	---	---	e.00	.10	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	e.00	.01	.00	.00	.00	.00
4	.08	.00	.00	---	---	---	e.00	.00	.00	.01	.00	.10
5	.04	.00	.00	---	---	---	e.00	.00	.00	.01	.08	.00
6	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.03
7	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.15
8	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.03
9	.01	.00	---	---	---	---	e.00	.00	.00	.29	.00	.00
10	.00	.00	---	---	---	---	e.00	.00	.01	.01	.00	.00
11	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	e.00	.00	.00	.00	.02	.00
13	.00	.00	---	---	---	---	e.00	.00	.00	.17	.19	.00
14	.00	.00	---	---	---	---	e.00	.00	.00	.51	.00	.00
15	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	---	e.00	.00	.00	.09	.00	.00
21	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.03	.00
23	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	e.00	.00	.00	.04	.00	.00
25	.00	.00	---	---	---	.00	e.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.08	.00	.00	.00	.00	.01	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.15
29	.00	.00	---	---	---	.02	.00	.00	.00	.00	.00	.03
30	.00	.00	---	---	---	e.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	e.00	---	.00	---	.25	.00	---
TOTAL	0.13	0.00	---	---	---	---	0.00	0.11	0.01	1.38	0.44	0.49
MEAN	.004	.000	---	---	---	---	.000	.004	.000	.045	.014	.016
MAX	.08	.00	---	---	---	---	.00	.10	.01	.51	.19	.15
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.3	.00	---	---	---	---	.00	.2	.02	2.7	.9	1.0
(†)	0.07	0.17					0.07	0.00	0.24	0.27	1.53	0.20

(†) Total rainfall accumulation in inches.

e Estimated

RIO GRANDE BASIN

08329936 TAYLOR RANCH DRAIN AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.00	.01	.00
2	.00	.23	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	---	.00	.00	.00	.03	.00
4	.00	.00	---	---	---	---	---	.00	.00	.00	.01	.17
5	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	---	.00	.00	.00	.18	.52
7	.00	.04	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	---	.00	.01	.00	.00	.01
10	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.12
11	.00	.00	---	---	---	---	---	.00	.04	.00	.00	.00
12	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.01	.00	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	---	.07	.00	.00	.14	.00	.00
19	.00	.00	---	---	---	---	.00	.00	.00	.67	.00	.00
20	.00	.00	---	---	---	---	.00	.04	.00	.00	.00	.00
21	.00	.00	---	---	---	---	.00	.06	.00	.25	.00	.00
22	.00	.00	---	---	---	---	.00	.00	.00	.04	.20	.00
23	.00	.00	---	---	---	---	.00	.00	.00	.06	.00	.00
24	.00	.00	---	---	---	---	.00	.00	.00	.10	.00	.00
25	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	---	.00	.00	.08	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.05	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	---	0.10	0.18	1.27	0.43	0.82
MEAN	.000	---	---	---	---	---	---	.003	.006	.041	.014	.027
MAX	.00	---	---	---	---	---	---	.06	.08	.67	.20	.52
MIN	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	---	.2	.4	2.5	.9	1.6
(†)	0.08							0.35	0.59	2.33	1.02	1.45

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329938 LADERA ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°06'59", long 106°43'59", in Town of Atrisco Land Grant, Bernalillo County, Hydrologic Unit 13020203, on left bank, 0.25 mi northwest of City of Albuquerque water storage tank, on dirt road extension of Ouray Road, and 2.3 mi west of North Coors Road in Albuquerque.

DRAINAGE AREA.--0.34 mi².

PERIOD OF RECORD.--May 1981 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,220 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 5, 1986 at site 0.2 mi downstream at different datum.

REMARKS.--Records fair. Recording rain gage at station. The basin is undeveloped semidesert terrain, part of which is above the escarpment west of Albuquerque. See tabulation below for monthly precipitation in inches.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 161 ft³/s, Aug. 1, 1989, gage height, 3.77 ft, from step-backwater analysis of channel; maximum gage height, 3.82 ft, July 21, 1991; no flow most of time.

EXTREMES FOR 1989 WATER YEAR.--Maximum discharge, 161 ft³/s, at 1400 hours Aug. 1, gage height, 3.77 ft, from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 33 ft³/s, at 2040 hours Sept. 28, gage height, 2.54 ft, from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 126 ft³/s, at 2210 hours July 21, gage height, 3.82 ft, from step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	5.6	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	1.9	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.11	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	2.01	5.60	0.00
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.065	.18	.000
MAX	.00	.00	---	---	---	---	.00	.00	.00	1.9	5.6	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	4.0	11	.00
(†)	0.05	0.13						0.04	0.00	1.08	0.76	1.14

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329938 LADERA ARROYO AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	2.6
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.75
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	3.35
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.000	.000	.11
MAX	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	2.6
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	6.6
(†)	0.77	0.27					1.37	0.32	0.34	2.78	1.79	0.69

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08329938 LADERA ARROYO AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	1.0	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	---	---	---	---	---	---	---	.00	.00	.00	.06	.00
7	---	---	---	---	---	---	---	.00	.00	.00	.01	.00
8	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
17	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.00	3.7	.00	.00
22	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
23	---	---	---	---	---	---	.00	.00	.00	.59	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.00	0.00	4.31	1.07	0.00
MEAN	---	---	---	---	---	---	---	.000	.000	.14	.035	.000
MAX	---	---	---	---	---	---	---	.00	.00	3.7	1.0	.00
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	.00	.00	8.5	2.1	.00
(†)								0.81	1.02	2.18	0.36	0.92

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, Hydrologic Unit 13020203, in Atrisco Grant, on downstream side of Central Ave. Bridge in Albuquerque, and at mile 1,540.0.

DRAINAGE AREA.--17,440 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1946(M).

GAGE.--Water-stage recorder. Datum of gage is 4,946.16 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1947, at various sites at datum about 2.00 ft higher; Sept. 15, 1982, to Sept. 20, 1983, at site 1.0 mi upstream at different datum.

REMARKS.--Water-discharge records good. Flow completely regulated since November 1973 by Cochiti Dam (station 08317300) 50 mi upstream. Possible regulation by operation of reservoirs on Rio Chama and by flood and silt-detention reservoirs on Galisteo Creek and Jemez River (stations 08285000, 08286900, 08317900, 08328500). Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510). Diversions upstream from station for irrigation of about 718,000 acres, several hundred of which are downstream from station. National Weather Service gage-height telemeter, and U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Records for Albuquerque Riverside Drain and Arenal, Armijo, and Atrisco Canals provided by Middle Rio Grande Conservancy District.

AVERAGE DISCHARGE.--32 years (water years 1942-73), 1,068 ft³/s, 773,800 acre-ft/yr, prior to closure of Cochiti Dam. 18 years (water years 1974-91), 1,408 ft³/s, 1,020,000 acre-ft/yr, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Apr. 24, 1942, from rating curve extended above 13,900 ft³/s; maximum gage height, 7.82 ft, Aug. 10, 1967; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,440 ft³/s, at 0915 hours Aug. 7, gage height, 6.12 ft; minimum daily, 303 ft³/s, July 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	507	841	845	859	1210	1730	3380	3550	3730	754	485
2	1520	633	803	709	938	1490	1610	3390	3530	2600	686	476
3	991	843	787	696	943	1390	1370	3320	3600	2830	793	468
4	677	845	823	719	939	1140	1460	3040	3690	3000	1140	459
5	603	1050	744	813	923	1040	1640	2830	4040	2950	1270	474
6	551	1270	670	953	841	963	1650	2860	4020	1840	2440	890
7	500	1290	721	915	765	1030	1600	2780	3680	864	4800	1030
8	482	1230	797	866	767	1050	1650	2700	3490	490	3630	1080
9	478	1150	815	910	759	1010	1920	2690	3920	303	3080	793
10	525	1080	774	947	761	830	2110	2660	3410	372	1840	2280
11	519	1110	756	998	765	734	2280	2700	2970	383	1840	2290
12	449	1020	804	1030	782	827	2290	2710	3360	379	1810	2120
13	410	889	916	957	822	841	2490	2800	3390	449	2340	1640
14	408	974	1110	680	862	766	2610	2990	3870	496	2010	1810
15	447	1120	1230	463	867	747	2660	3030	3830	545	1770	2060
16	476	1350	1260	436	878	867	2670	3040	3790	518	1540	1920
17	475	1270	1220	416	957	1030	2720	3010	3730	473	2290	1580
18	486	699	1120	425	1040	1100	2940	3220	4140	415	2700	1670
19	438	482	1060	776	1020	1190	2970	3370	4160	458	2170	1640
20	389	454	997	867	1030	1250	2930	3390	4290	509	1920	1460
21	365	499	1050	667	920	1360	2980	3970	3880	494	1940	1210
22	367	819	996	699	872	1360	3010	3020	3950	1360	1720	866
23	427	987	928	1020	1000	1300	3310	3130	3870	1070	659	958
24	459	1100	633	1150	1130	1300	3420	3620	3800	1690	582	865
25	437	1180	404	1150	1120	1240	3390	3410	3830	2000	463	662
26	480	1080	448	1180	1110	1260	3330	3250	2960	2810	461	640
27	537	1030	466	1200	1120	1450	3270	3280	2670	2800	456	662
28	537	933	566	1200	1190	1460	3260	3270	2620	2480	403	765
29	460	905	601	1070	---	1490	3320	3280	2700	1070	345	706
30	358	885	515	847	---	1690	3380	3590	3750	920	420	691
31	442	---	711	815	---	1730	---	3570	---	1060	440	---
TOTAL	17123	28684	25566	26419	25980	36145	75970	97300	108490	41358	48712	34650
MEAN	552	956	825	852	928	1166	2532	3139	3616	1334	1571	1155
MAX	1520	1350	1260	1200	1190	1730	3420	3970	4290	3730	4800	2290
MIN	358	454	404	416	759	734	1370	2660	2620	303	345	459
AC-FT	33960	56890	50710	52400	51530	71690	150700	193000	215200	82030	96620	68730
(†)	14330	0	0	1090	964	9730	15860	17390	17980	15930	15450	14790

CAL YR 1990 TOTAL 253735 MEAN 695 MAX 2420 MIN 200 AC-FT 503300 (†) 118800
WTR YR 1991 TOTAL 566397 MEAN 1552 MAX 4800 MIN 303 AC-FT 1123000 (†) 123500

(†) COMBINED FLOW, IN ACRE-FEET, OF ALBUQUERQUE RIVERSIDE DRAIN, AND ARENAL, ARMIJO AND ATRISCO CANALS. THIS FLOW, WHICH BYPASSES RIVER GAGE, CAN BE ADDED TO RIVER RECORDS TO GET THE ENTIRE FLOW IN VALLEY CROSS SECTION.

RIO GRANDE BASIN
08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued
WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1969 to current year.

WATER TEMPERATURE: October 1969 to current year.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,840 microsiemens, Oct. 12, 1974; minimum daily, 115 microsiemens, Aug. 14, 1980.

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

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

SEDIMENT LOAD: Maximum daily, 275,000 tons, July 27, 1971; minimum daily, 0 ton on many days in 1971, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 759 microsiemens, Aug. 21; minimum daily, 251 microsiemens, May 31.

WATER TEMPERATURE: Maximum daily, 24.0°C, Aug. 24, Sept. 4, 13; minimum daily, 3.0°C, Dec. 31.

SEDIMENT CONCENTRATION: Maximum daily mean, 11,400 mg/L, July 26-27; minimum daily mean, 38 mg/L, Jan. 2, 18.

SEDIMENT LOAD: Maximum daily, 105,000 tons, Aug. 7; minimum daily, 44 tons, Jan. 18.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SEDI- MENT, DISCH, SUSP. + BED MA- TERIAL (T/DAY) (80156)
OCT										
01...	1130	1580	249	2.1	3.03	444	17.5	3630	15500	21300
31...	1430	331	181	1.1	1.62	455	16.5	61	55	92
NOV										
30...	1330	880	266	1.5	2.22	424	10.0	121	287	454
JAN										
04...	1500	712	246	1.5	1.95	384	4.5	122	235	375
APR										
04...	1315	1490	220	2.3	2.89	548	10.0	262	1050	1590
10...	1115	2130	271	2.4	3.33	473	12.0	2160	12400	17200
22...	1300	3060	338	2.6	3.44	311	13.5	174	1440	2150
MAY										
01...	1100	3390	296	2.9	3.96	--	13.0	703	6430	9130
JUN										
03...	1800	3590	309	3.1	3.79	262	--	669	6480	9200
JUL										
02...	1130	2470	360	2.1	3.32	--	15.0	300	2000	2960
10...	1420	401	283	0.99	1.44	373	--	218	236	376
31...	1020	1040	292	1.6	2.26	340	22.0	358	1010	1530
SEP										
26...	1130	634	270	1.2	1.92	383	18.5	1690	2890	4220

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571	454	393	421	410	386	398	289	260	314	348	361
2	582	457	406	402	413	379	396	290	259	315	346	358
3	588	423	---	403	393	384	452	287	256	379	335	356
4	659	418	397	404	394	385	458	291	259	381	362	354
5	666	412	405	405	396	406	522	297	264	393	423	364
6	493	417	406	387	395	402	523	295	263	401	419	396
7	482	495	413	383	401	421	506	302	268	358	357	397
8	439	493	416	405	402	422	504	317	267	359	358	465
9	446	403	423	405	405	407	500	320	269	363	315	488
10	437	397	413	451	405	407	499	320	270	366	314	755
11	433	414	410	442	406	429	454	328	269	351	326	738
12	463	432	419	432	406	431	448	321	271	353	331	494
13	465	433	408	427	420	424	410	314	275	351	315	489
14	433	436	405	428	423	426	410	314	276	---	325	430
15	431	489	425	424	416	422	375	307	289	---	384	428
16	406	490	425	415	418	423	378	308	288	---	409	421
17	411	405	430	430	398	403	328	300	283	---	640	424
18	443	426	416	428	398	401	328	299	283	---	647	374
19	443	412	404	431	386	392	331	288	278	372	741	375
20	444	415	403	445	388	393	339	286	276	372	739	374
21	446	467	387	442	386	394	327	289	289	---	759	371
22	427	472	383	401	387	394	325	287	289	---	733	380
23	427	---	453	404	371	389	306	288	289	---	414	378
24	469	472	458	372	370	420	303	289	283	---	411	368
25	473	432	430	375	377	390	288	301	303	---	396	371
26	448	442	427	375	374	385	297	296	302	---	392	330
27	429	407	410	384	377	386	292	282	303	---	407	384
28	425	402	409	376	377	387	291	258	302	---	409	367
29	440	443	397	376	---	388	279	254	302	---	468	368
30	429	454	406	421	---	400	278	252	303	---	459	345
31	431	---	385	420	---	401	---	251	---	---	362	---
MEAN	470	---	---	410	396	402	385	294	280	---	440	417
MAX	666	---	---	451	423	431	523	328	303	---	759	755
MIN	406	---	---	372	370	379	278	251	256	---	314	330

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	14.0	13.0	4.0	8.0	10.0	10.0	13.0	14.0	16.0	18.0	19.0
2	16.0	15.0	12.0	6.0	8.0	9.0	12.0	12.0	13.0	17.0	19.0	20.0
3	14.0	15.0	---	6.0	9.0	10.0	11.0	12.0	15.0	16.0	18.0	21.0
4	17.0	16.0	11.0	7.0	8.0	9.0	12.0	13.0	14.0	17.0	20.0	24.0
5	15.0	13.0	12.0	7.0	9.0	10.0	11.0	12.0	13.0	19.0	20.0	22.0
6	15.0	14.0	11.0	6.0	9.0	11.0	13.0	13.0	15.0	18.0	21.0	21.0
7	14.0	14.0	12.0	7.0	8.0	9.0	12.0	14.0	14.0	16.0	19.0	22.0
8	16.0	13.0	11.0	8.0	9.0	10.0	13.0	13.0	14.0	18.0	18.0	21.0
9	16.0	15.0	12.0	6.0	9.0	9.0	11.0	14.0	13.0	18.0	20.0	20.0
10	14.0	13.0	11.0	7.0	8.0	11.0	13.0	13.0	14.0	18.0	21.0	22.0
11	15.0	12.0	12.0	8.0	10.0	11.0	12.0	15.0	14.0	19.0	21.0	21.0
12	15.0	13.0	13.0	8.0	8.0	10.0	13.0	12.0	13.0	20.0	22.0	20.0
13	17.0	14.0	11.0	7.0	9.0	10.0	12.0	13.0	14.0	17.0	20.0	24.0
14	16.0	13.0	13.0	7.0	8.0	11.0	12.0	15.0	13.0	---	21.0	21.0
15	17.0	12.0	14.0	8.0	10.0	10.0	13.0	14.0	14.0	---	20.0	22.0
16	14.0	15.0	13.0	7.0	11.0	12.0	14.0	13.0	15.0	---	22.0	20.0
17	15.0	14.0	12.0	8.0	9.0	10.0	13.0	14.0	16.0	---	20.0	21.0
18	16.0	13.0	14.0	9.0	9.0	11.0	12.0	13.0	14.0	---	21.0	19.0
19	17.0	12.0	13.0	7.0	9.0	11.0	13.0	13.0	16.0	20.0	20.0	23.0
20	16.0	14.0	14.0	6.0	10.0	10.0	12.0	12.0	17.0	17.0	22.0	19.0
21	14.0	14.0	12.0	8.0	9.0	11.0	13.0	13.0	14.0	---	24.0	18.0
22	15.0	11.0	10.0	9.0	10.0	12.0	14.0	14.0	15.0	---	19.0	21.0
23	13.0	12.0	6.0	9.0	8.0	12.0	14.0	13.0	16.0	---	20.0	22.0
24	16.0	13.0	4.0	9.0	9.0	10.0	13.0	15.0	14.0	---	21.0	19.0
25	14.0	12.0	5.0	8.0	10.0	16.0	12.0	14.0	15.0	---	21.0	20.0
26	15.0	14.0	6.0	9.0	9.0	12.0	14.0	15.0	16.0	---	23.0	18.0
27	13.0	13.0	4.0	7.0	9.0	11.0	13.0	12.0	16.0	---	22.0	20.0
28	14.0	12.0	5.0	9.0	10.0	11.0	14.0	14.0	15.0	---	19.0	19.0
29	15.0	13.0	5.0	8.0	---	12.0	15.0	15.0	16.0	---	20.0	23.0
30	15.0	12.0	4.0	9.0	---	11.0	14.0	13.0	17.0	---	21.0	18.0
31	14.0	---	3.0	7.0	---	12.0	---	14.0	---	---	22.0	---
MEAN	15.1	13.3	---	7.5	9.0	10.8	12.7	13.4	14.6	---	20.5	20.7
MAX	17.0	16.0	---	9.0	11.0	16.0	15.0	15.0	17.0	---	24.0	24.0
MIN	13.0	11.0	---	4.0	8.0	9.0	10.0	12.0	13.0	---	18.0	18.0

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9250	35500	83	112	85	193	101	237	90	208	220	773
2	7240	30600	79	135	93	200	38	72	90	229	225	901
3	1790	4990	366	841	99	211	49	92	77	196	117	441
4	459	837	362	830	83	185	56	108	98	250	118	361
5	433	705	509	1450	80	160	48	106	114	284	97	271
6	233	348	539	1840	82	148	65	175	78	177	97	251
7	221	298	501	1750	75	146	100	251	75	154	118	330
8	178	232	471	1560	75	161	82	192	68	141	102	290
9	185	239	197	614	79	174	87	215	59	121	80	219
10	179	253	207	602	95	198	89	227	56	115	75	169
11	155	217	140	418	92	188	127	344	66	136	57	113
12	135	163	142	387	70	151	126	352	64	136	59	132
13	128	142	190	456	71	178	98	254	76	168	70	159
14	125	138	183	481	111	333	90	165	66	155	74	154
15	119	144	174	528	136	450	72	90	72	170	67	134
16	182	234	229	862	178	602	73	86	81	193	88	212
17	184	236	383	1320	210	696	42	47	118	308	152	423
18	141	185	309	594	178	540	38	44	115	324	124	369
19	140	166	230	300	181	516	58	131	67	186	134	432
20	109	115	137	168	142	383	58	132	68	190	146	491
21	96	94	61	81	138	390	249	447	65	162	133	488
22	63	62	58	131	91	244	279	524	68	160	136	498
23	84	99	67	179	94	236	65	168	141	387	146	511
24	156	193	126	385	55	97	81	251	133	405	130	456
25	138	163	138	439	60	66	139	430	105	319	140	470
26	132	171	127	369	98	120	138	437	103	310	127	435
27	149	218	166	465	96	119	147	477	105	320	129	503
28	206	299	162	411	78	119	167	544	105	337	99	392
29	176	220	112	274	89	145	157	452	---	---	131	529
30	122	118	107	255	69	97	140	320	---	---	187	851
31	117	111	---	---	85	190	112	247	---	---	159	742
TOTAL	---	77490	---	18237	---	7636	---	7617	---	6241	---	12500

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	126	586	222	2030	214	2050	434	4380	222	464	174	228
2	117	509	212	1940	197	1880	385	2720	237	439	171	220
3	108	403	216	1940	196	1900	204	1550	2070	4610	161	204
4	129	515	240	1970	254	2540	201	1620	5540	21100	166	205
5	184	815	206	1580	362	3960	185	1470	11000	38100	177	226
6	156	694	209	1610	298	3230	218	1090	10300	68500	1160	3250
7	133	573	212	1590	265	2630	102	256	8200	105000	1670	4710
8	147	655	222	1620	217	2000	85	110	6720	67400	897	2630
9	207	1090	272	1970	156	1650	222	181	1380	11600	868	1840
10	226	1290	260	1870	160	1470	109	108	888	4430	5410	36200
11	268	1650	228	1660	132	1060	69	71	530	2650	5720	35300
12	263	1630	188	1380	108	974	66	68	567	2770	607	3470
13	279	1880	243	1840	124	1130	48	58	676	4290	608	2710
14	258	1820	245	1980	107	1120	70	94	523	2880	675	3300
15	261	1880	230	1890	172	1770	95	140	4970	23600	638	3550
16	272	1960	257	2110	187	1910	129	182	6260	26400	557	2890
17	286	2100	242	1970	135	1360	1020	1320	2700	16700	512	2180
18	294	2340	291	2550	137	1540	2770	3160	2000	14800	378	1700
19	370	2970	333	3040	218	2450	2770	3480	570	3360	362	1610
20	363	2870	318	2910	218	2520	3080	4290	518	2680	250	984
21	324	2600	370	3990	236	2480	2710	3620	424	2230	249	813
22	306	2490	359	2930	227	2420	7620	29300	369	1730	187	438
23	341	3060	313	2640	346	3620	6970	20300	278	496	193	506
24	339	3120	320	3130	243	2500	8080	40700	285	443	254	596
25	277	2540	356	3280	223	2300	11100	61600	457	570	234	419
26	237	2130	398	3490	206	1650	11400	97600	457	568	155	265
27	176	1550	338	2990	199	1430	11400	87500	1220	1490	139	258
28	179	1580	247	2180	245	1740	7730	51900	1020	1140	185	344
29	263	2350	201	1780	280	2040	3050	10100	137	135	125	212
30	206	1880	294	2850	344	3490	1380	3630	147	171	164	271
31	---	---	324	3120	---	---	1120	2980	178	218	---	---
TOTAL	---	51530	---	71830	---	62814	---	435578	---	430964	---	111529
TOTAL LOAD FOR YEAR:		1293966	TONS.									

RIO GRANDE BASIN

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM

LOCATION.--Lat 35°03'39", long 106°29'40", in SW¼SW¼, sec.26, T. 10 N. R. 4 E., Bernalillo County, Hydrologic Unit 13020203, on left bank, 1,000 ft upstream from Four Hills Bridge, 0.5 mi south of old U.S. Highway 66 and 1.0 mi below the streamflow gaging station (08330500), Tijeras Arroyo at Albuquerque.

DRAINAGE AREA.--77.0 mi².

PERIOD OF RECORD.--May 1989 to September 1991 (discontinued).

GAGE.--Water-stage recorder. Parshall flume since November 15, 1989. Elevation of gage is 5,520 ft above National Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft³/s, Aug. 1, 1989, gage height, 2.35 ft from rating curve extended above 1.0 ft³/s; no flow most of time.

EXTREMES FOR MAY TO SEPTEMBER 1989.--Maximum discharge, 78 ft³/s, at 1915 hours Aug. 1, gage height, 2.35 ft, from rating curve extended above 1.0 ft³/s; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum daily discharge recorded, 1.3 ft³/s, Mar. 20; no flow most of time.EXTREMES FOR CURRENT YEAR.--Maximum daily discharge recorded, 1.3 ft³/s, July 13, Aug. 7; no flow most of time.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.00	.00	11	e.00
2	---	---	---	---	---	---	---	---	.00	.00	6.8	e.00
3	---	---	---	---	---	---	---	---	.00	.00	4.4	e.00
4	---	---	---	---	---	---	---	---	.00	.00	2.0	e.00
5	---	---	---	---	---	---	---	---	.00	.00	e1.0	e.00
6	---	---	---	---	---	---	---	---	.00	.00	e.50	e.00
7	---	---	---	---	---	---	---	---	.00	.00	e.40	e.00
8	---	---	---	---	---	---	---	---	.00	.00	e.10	e.00
9	---	---	---	---	---	---	---	---	.00	.00	e.00	e.00
10	---	---	---	---	---	---	---	---	.00	.00	e.00	e.00
11	---	---	---	---	---	---	---	.01	.00	.00	e.00	e.00
12	---	---	---	---	---	---	---	.05	.00	.00	e.00	e.00
13	---	---	---	---	---	---	---	.07	.00	.00	e.00	e.00
14	---	---	---	---	---	---	---	.04	.00	.00	e.00	e.00
15	---	---	---	---	---	---	---	.04	.00	.00	e.00	e.00
16	---	---	---	---	---	---	---	.07	.00	.00	e.00	e.00
17	---	---	---	---	---	---	---	.17	.00	.00	e.00	e.00
18	---	---	---	---	---	---	---	.09	.00	.00	e.00	e.00
19	---	---	---	---	---	---	---	.00	.00	.00	e.00	e.00
20	---	---	---	---	---	---	---	.00	.00	.00	e.00	e.00
21	---	---	---	---	---	---	---	.00	.00	.00	e.00	e.00
22	---	---	---	---	---	---	---	.00	.00	1.5	e.00	e.00
23	---	---	---	---	---	---	---	.00	.00	14	e.00	e.00
24	---	---	---	---	---	---	---	.00	.00	4.6	e.00	e.00
25	---	---	---	---	---	---	---	.00	.00	5.1	e.00	e.00
26	---	---	---	---	---	---	---	.00	.00	14	e.00	e.00
27	---	---	---	---	---	---	---	.00	.00	5.0	e.00	e.00
28	---	---	---	---	---	---	---	.00	.00	2.1	e.00	e.00
29	---	---	---	---	---	---	---	.00	.00	.83	e.00	e.00
30	---	---	---	---	---	---	---	.00	.00	.37	e.00	e.00
31	---	---	---	---	---	---	---	.00	---	14	e.00	---
TOTAL	---	---	---	---	---	---	---	---	0.00	61.50	26.20	0.00
MEAN	---	---	---	---	---	---	---	---	.000	1.98	.85	.000
MAX	---	---	---	---	---	---	---	---	.00	14	11	.00
MIN	---	---	---	---	---	---	---	---	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	---	.00	122	52	.00

e Estimated

RIO GRANDE BASIN

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.16	.21	.21	.13	.20	.37	.23	.00	.00	.00	.00
2	.20	.20	.20	.11	.20	.14	.42	.63	.00	.00	.00	.00
3	.20	.21	.19	.15	.17	.17	.41	.37	.00	.00	.00	.00
4	.30	.20	.20	.21	.13	.16	.37	.32	.00	.00	.39	.00
5	.35	.20	.19	.21	.19	.19	.37	.21	.00	.00	.00	.00
6	.37	.13	.18	.18	.26	.39	.42	.11	.00	.00	.34	.00
7	.01	.08	.19	.17	.19	.34	.40	.08	.00	.00	.14	.00
8	.01	.29	.19	.16	.16	.27	.43	.06	.00	.00	.00	.00
9	.00	.58	.20	e.15	.15	.21	.41	.05	.00	.00	.00	.00
10	.00	.38	.20	e.17	.13	.33	.28	.09	.00	.00	.00	.00
11	.00	.39	.17	e.18	.13	.46	.23	.07	.00	.00	.00	.00
12	.00	.43	.43	e.16	.12	.36	.17	.03	.00	.00	---	.00
13	.00	.19	.15	e.17	.10	.38	.08	.02	.00	.21	.18	.00
14	.00	.00	.19	e.17	.12	.41	.05	.02	.00	.13	.64	.00
15	.00	.00	.19	e.18	.20	.36	.07	.05	.00	.00	.00	.00
16	.00	.25	.16	e.20	.11	.32	.08	.04	.00	.00	.00	.00
17	.00	.26	.17	e.18	.25	.62	.17	.03	.00	.00	.00	.00
18	.00	.25	.15	e.20	.14	1.1	.57	.03	.00	.02	.00	.00
19	.06	.24	.13	.21	.13	1.3	.59	.03	.00	.00	.00	.00
20	.13	.12	.15	.40	.29	1.0	.30	.02	.00	.00	.00	---
21	.11	e.13	.13	.28	.27	.23	.23	.02	.00	.00	.00	---
22	.05	.10	.14	.46	.20	.21	.19	.01	.00	.00	---	e.10
23	.03	.22	.14	.12	.18	.20	.16	.01	.00	.00	.81	e.00
24	.06	.21	.11	.12	.19	.25	.21	.00	.00	.00	.00	e.00
25	.06	.17	.09	.11	.17	.27	.79	.00	.00	.00	.00	e.00
26	e.05	.16	.08	.15	.15	.27	.44	.00	.00	.00	.00	e.00
27	.05	.16	.09	.12	.31	.32	.24	.00	.00	.00	.53	e.00
28	.08	.18	.11	.13	.25	.37	.19	.00	.00	.00	.48	e.00
29	.08	.18	.09	.25	---	.50	.13	.00	.00	.00	.00	e.00
30	.14	.16	.07	.16	---	.48	.19	.00	.00	.00	.00	e.00
31	.14	---	.06	.14	---	.38	---	.00	---	.00	.00	---
TOTAL	2.58	6.23	4.95	5.81	5.02	12.19	8.96	2.53	0.00	0.36	---	---
MEAN	.083	.21	.16	.19	.18	.39	.30	.082	.000	.012	---	---
MAX	.37	.58	.43	.46	.31	1.3	.79	.63	.00	.21	---	---
MIN	.00	.00	.06	.11	.10	.14	.05	.00	.00	.00	---	---
AC-FT	5.1	12	9.8	12	10	24	18	5.0	.00	.7	---	---

e Estimated

RIO GRANDE BASIN

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.03	e.00	.21	.07	.06	.01	.00	.00	e.00	.00
2	e.02	.12	.03	e.00	.11	.07	.06	.00	.00	.04	e.00	.00
3	e.04	.30	.03	e.00	.13	.06	.05	.00	.00	.00	.49	.00
4	.00	e.00	.05	e.00	.10	.04	.04	.00	.00	.00	.03	.00
5	.00	e.00	.05	e.00	.08	.02	.04	.00	.00	.00	.00	.00
6	.00	e.00	.02	e.00	.07	.03	.04	.00	.00	.00	---	.49
7	.00	.05	.02	e.00	.02	.06	.05	.00	.00	.00	1.3	.02
8	.00	.10	.04	e.00	.04	.05	.05	.00	.00	.00	.00	.00
9	.00	.08	.00	e.00	.02	.02	.06	.00	.00	.00	.00	.28
10	.01	.03	.01	e.00	.01	.01	.08	.00	.00	.00	.00	1.2
11	.01	.01	.00	.00	.03	.00	.13	.00	.00	.00	.00	.01
12	.00	.00	.00	.00	.01	.01	.10	.00	.00	.00	.00	.00
13	.00	.00	.00	.04	.01	.02	.16	.00	.00	.00	.03	1.1
14	.00	.00	.00	.08	.00	.03	.13	.07	.00	.00	.67	---
15	.00	.00	.00	.10	.00	.04	.08	.00	.00	.00	.01	---
16	.00	.00	.02	.12	.00	.12	.06	.00	.00	1.3	.04	---
17	.00	.00	.02	.14	.00	.08	.03	.00	.00	.01	.62	---
18	.00	.00	.00	.13	.01	.05	.03	.00	.00	.00	.58	---
19	.00	.00	.01	.15	.02	.06	.03	.00	.00	.11	.00	---
20	.00	.00	.01	.14	.02	.05	.03	.00	.00	.00	.00	---
21	.02	.00	.05	.32	.01	.07	.03	.26	.00	.07	.00	---
22	.04	.00	e.05	.16	.00	.05	.03	.11	.00	---	.17	---
23	.03	.00	e.04	.17	.00	.04	.03	.00	.00	e.00	.16	---
24	.01	.00	e.02	.15	.01	.03	.02	.00	.00	.00	.00	---
25	.01	.00	e.00	.18	.00	.02	.00	.00	.00	.00	.00	---
26	.00	.06	e.00	.20	.02	.05	.00	.00	.00	e.00	.00	---
27	.00	.07	e.00	.22	.02	.04	.03	.00	.00	e.00	.00	---
28	.00	.02	e.00	.21	.06	.07	.03	.00	.00	e.00	.00	---
29	.00	.03	e.00	.22	---	.06	.03	.00	.01	e.00	.00	---
30	.00	.04	e.00	.20	---	.07	.01	.00	.00	e.00	.00	---
31	.00	---	e.00	.16	---	.05	---	.00	---	e.00	.00	---
TOTAL	0.19	0.91	0.50	3.09	1.01	1.44	1.52	0.45	0.01	---	---	---
MEAN	.006	.030	.016	.10	.036	.046	.051	.015	.000	---	---	---
MAX	.04	.30	.05	.32	.21	.12	.16	.26	.01	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---
AC-FT	.4	1.8	1.0	6.1	2.0	2.9	3.0	.9	.02	---	---	---

e Estimated

RIO GRANDE BASIN

08330540 TRAMWAY FLOODWAY CHANNEL AT ALBUQUERQUE, NM

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

DRAINAGE AREA.--1.60 mi².

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 144 ft³/s, at 1500 hours Aug. 17, gage height 1.18 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.26	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	e.00	.00	1.8	.00
4	.00	.00	---	---	---	---	.00	.00	e.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	e.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	e.00	.00	1.8	13
7	.00	.00	---	---	---	---	.00	.00	e.00	.00	1.3	.00
8	.00	.00	---	---	---	---	.00	.00	e.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	e.00	.00	.00	3.2
10	.00	.00	---	---	---	---	.00	.00	e.00	.00	2.7	5.8
11	.00	.00	---	---	---	---	.00	.00	e1.0	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	e.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	5.8
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	2.3	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	11	.00
18	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	---	.00	.04	.00	.00	.00	.00
21	.00	.00	---	---	---	---	.00	.84	.00	e1.7	.00	.00
22	.00	.00	---	---	---	---	.00	.00	.00	e1.4	.00	.00
23	.00	.00	---	---	---	---	.00	.00	.00	e.13	.15	.00
24	.00	.00	---	---	---	---	.00	.00	.00	.92	.00	.00
25	.00	.00	---	---	---	---	.00	.00	.00	.02	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.30	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.51	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.88	1.00	4.98	21.31	27.80
MEAN	.000	.000	---	---	---	---	.000	.028	.033	.16	.69	.93
MAX	.00	.00	---	---	---	---	.00	.84	1.0	1.7	11	13
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	1.7	2.0	9.9	42	55

e Estimated

RIO GRANDE BASIN

08330565 ARROYO DEL COYOTE NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'55", long 106°32'18", IN NE¼NE¼ sec.17, T. 9 N., R. 4 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 0.6 mi downstream from Pennsylvania Ave., 2.0 mi upstream from confluence with Tijeras Arroyo, and 2.5 southeast of Kirtland Air Force Base.

DRAINAGE AREA.--35.0 mi².

PERIOD OF RECORD.--September 1989 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,370 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 666 ft³/s, Sept. 6, 1991, gage height, 3.95 ft, from floodmarks, from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR SEPTEMBER 1989.--No flow recorded during the month.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 38 ft³/s, July 29, gage height, 1.44 ft, from floodmarks from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 666 ft³/s, Sept. 6, gage height, 3.95 ft, from floodmarks, from step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

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

e Estimated

RIO GRANDE BASIN

08330565 ARROYO DEL COYOTE NEAR ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.00	1.3	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	1.30	0.00	0.00
MEAN	.000	.000	---	---	---	---	.000	.000	.000	.042	.000	.000
MAX	.00	.00	---	---	---	---	.00	.00	.00	1.3	.00	.00
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	---	---	---	---	.00	.00	.00	2.6	.00	.00

RIO GRANDE BASIN

08330565 ARROYO DEL COYOTE NEAR ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	15
7	.00	.00	---	---	---	---	.00	.00	.00	.00	14	e.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	e.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	7.8	e.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e2.0
11	.00	.00	---	---	---	---	.00	.00	6.0	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	5.1	.00	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	3.3	.00
18	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	---	.00	.00	.00	4.2	.00	.00
20	.00	.00	---	---	---	---	.00	.00	.00	e.00	.00	.00
21	.00	.00	---	---	---	---	.00	.00	.00	2.0	.00	.00
22	.00	.00	---	---	---	---	.00	.00	.00	5.2	.00	.00
23	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	---	.00	.00	.00	4.6	.00	.00
25	.00	.00	---	---	---	---	.00	.00	.00	e1.0	.00	.00
26	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
29	.00	---	---	---	---	.00	.00	.00	4.9	e.00	.00	.00
30	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	0.00	0.00	10.90	22.10	25.10	17.00
MEAN	.000	---	---	---	---	---	.000	.000	.36	.71	.81	.57
MAX	.00	---	---	---	---	---	.00	.00	6.0	5.2	14	15
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	.00	22	44	50	34

e Estimated

RIO GRANDE BASIN

08330567 ARROYO DEL COYOTE AT MOUTH NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°01'20", long 106°33'00", in NW¼SW¼, sec.8, T. 9 N., R. 4 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 1.5 mi. downstream from Pennsylvania Ave., 2,000 ft upstream from confluence with Tijeras Arroyo, and 1.5 mi south of Kirtland Air Force Base.

DRAINAGE AREA.--39.0 mi².

PERIOD OF RECORD.--September 1989 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,290 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 262 ft³/s, Sept. 6, 1991, gage height, 5.21 ft, from floodmarks, from step-backwater analysis of channel; no flow most of time.

EXTREMES FOR SEPTEMBER 1989.--No flow recorded during the month.

EXTREMES FOR 1990 WATER YEAR.--No flow recorded during the water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 262 ft³/s, at 0410 hours Sept. 6, 1991, gage height, 5.21 ft, from floodmarks, from step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

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

e Estimated

RIO GRANDE BASIN

08330567 ARROYO DEL COYOTE AT MOUTH NEAR ALBUQUERQUE, NM -- Continued

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

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

RIO GRANDE BASIN

08330567 ARROYO DEL COYOTE AT MOUTH NEAR ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	.00	.00	.00	.00	.00	2.3	17
7	.00	.00	---	---	---	.00	.00	.00	.00	.00	2.6	e.00
8	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	e.00
9	.00	.00	---	---	---	.00	.00	.00	.00	.00	2.2	e.00
10	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	16
11	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
12	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
13	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
14	.00	.00	---	---	---	.00	.00	.00	.00	.00	e.00	.00
15	.00	.00	---	---	---	.00	.00	.00	.00	2.4	.00	.00
16	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	.00	.00	.00	.00	.00	1.9	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	1.3	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	e2.5	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.00	.00
23	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.00	.00
24	.00	.00	---	---	---	.00	.00	.00	.00	4.0	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	e.00	.00	.00
26	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
29	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
30	.00	---	---	---	---	.00	.00	.00	.00	e.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	e.00	.00	---
TOTAL	0.00	---	---	---	---	0.00	0.00	0.00	0.00	10.20	9.00	33.00
MEAN	.000	---	---	---	---	.000	.000	.000	.000	.33	.29	1.10
MAX	.00	---	---	---	---	.00	.00	.00	.00	4.0	2.6	17
MIN	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	.00	.00	.00	.00	20	18	65

e Estimated

RIO GRANDE BASIN

08330569 TIJERAS ARROYO BELOW ARROYO DEL COYOTE NEAR ALBUQUERQUE. NM

LOCATION.--Lat 35°01'37", long 106°33'48", in NW¼NE¼, sec.7, T.9N., R.4 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 1.6 mi south of Kirtland Air Force Base and 2.3 mi southeast of intersection of Gibson Blvd. and Louisiana Blvd.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--July 1989 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 787 ft³/s, July 21, 1991, Sept. 6, 1991, gage height, 6.60 ft, from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurements at gage heights 4.18 ft and 6.60 ft; no flow most of time.

EXTREMES FOR JULY TO SEPTEMBER 1989.--Maximum discharge, 123 ft³/s, at 2000 hours July 26, gage height, 3.56 ft, from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurements at gage heights 4.18 ft and 6.60 ft; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 234 ft³/s, at 2100 hours Aug. 27, gage height, 5.08 ft, from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurements at gage heights 4.18 ft and 6.60 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 787 ft³/s, at 2200 hours July 21, Sept. 6, gage height, 6.60 ft, from floodmarks, from rating curve extended on basis of slope-area measurements at gage heights 4.18 ft and 6.60 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

[illegible]

RIO GRANDE BASIN

08330569 TIJERAS ARROYO BELOW ARROYO DEL COYOTE NEAR ALBUQUERQUE, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.28	.00
2	.00	.00	.00	.00	---	---	.00	.44	.00	.00	.00	.00
3	.00	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
4	.94	.00	.00	.00	---	---	.00	.01	.00	.00	.00	.03
5	.41	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.03
9	.00	.00	.00	---	---	---	.00	.00	.00	2.4	.00	.00
10	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	---	---	---	.00	.00	.00	.00	.23	.00
13	.00	.00	.00	---	---	---	.00	.00	.00	6.6	.00	.00
14	.00	.00	.00	---	---	---	.00	.00	.00	2.2	.00	.00
15	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	---	---	.00	.49	.00	.00	.00	.00	.00
19	.00	.00	.00	---	---	.00	.00	.00	.03	.00	.00	.00
20	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.02
22	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.14	10
23	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	---	---	.00	.88	.00	.00	.00	.00	.00
27	.00	.00	.00	---	---	.00	.00	.00	.00	.00	8.5	.00
28	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.18	.00
29	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.61
30	.00	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	---	---	.00	---	.00	---	.00	.00	---
TOTAL	1.35	0.00	0.00	---	---	---	1.37	0.45	0.03	11.20	9.33	10.69
MEAN	.044	.000	.000	---	---	---	.046	.015	.001	.36	.30	.36
MAX	.94	.00	.00	---	---	---	.88	.44	.03	6.6	8.5	10
MIN	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	2.7	.00	.00	---	---	---	2.7	.9	.06	22	19	21

RIO GRANDE BASIN

08330569 TIJERAS ARROYO BELOW ARROYO DEL COYOTE NEAR ALBUQUERQUE, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.14	.00	---	---	---	.00	.00	.00	2.3	.00	.00
3	.00	.00	.00	---	---	---	.00	.00	.00	.00	.02	.00
4	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	82
7	.00	.00	.00	---	---	---	.00	.00	.00	.00	24	.00
8	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	---	---	---	.00	.00	.00	.00	2.1	.00
10	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	8.8
11	.00	.00	.00	---	---	---	.00	.00	.18	.00	.00	.00
12	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	---	---	---	.00	.00	.28	.00	.00	.68
14	.00	.00	.00	---	---	---	.00	.00	.00	.00	1.3	.00
15	.00	.00	.00	---	---	---	.00	.00	.00	15	.14	.00
16	.00	.00	.00	---	---	---	.00	.00	.00	5.0	.00	.00
17	.00	.00	.00	---	---	---	.00	.00	.00	.00	26	.00
18	.00	.00	.00	---	---	---	.00	.00	.00	.00	.10	.00
19	.00	.00	.00	---	---	---	.00	.00	.00	9.3	.00	.00
20	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	---	---	---	.00	.31	.00	42	.00	.00
22	.00	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	.00	---	---	---	---	.00	.00	.00	22	.00	.00
25	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	---	---	---	.00	.00	.00	.79	.00	.00	.00
30	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.14	---	---	---	---	0.00	0.31	1.25	95.60	53.66	91.48
MEAN	.000	.005	---	---	---	---	.000	.010	.042	3.08	1.73	3.05
MAX	.00	.14	---	---	---	---	.00	.31	.79	42	26	82
MIN	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	.3	---	---	---	---	.00	.6	2.5	190	106	181

RIO GRANDE BASIN

08330580 TIJERAS ARROYO AT MONTESSA PARK NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°01'19", long 106°35'40", Bernalillo County, Hydrologic Unit 13020203, on left bank 3.1 mi upstream from bridge on Interstate Highway 25, and 3.5 mi south of Albuquerque.

DRAINAGE AREA.--122 mi².

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

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

REMARKS.--Records poor. Recording rain gage at station. See tabulation below for monthly precipitation in inches.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s, at 0500 hours Sept. 6, gage height, 3.90 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.06	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	40	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	25
11	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	.00	---	---	---	---	.00	.00	.00	.02	.00	1.3
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.00	.00	30	.00	.00
16	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	47	.00
18	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	---	---	---	.00	.00	.00	.00	10	.00	.00
20	.00	.00	---	---	---	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	---	---	---	.00	.00	.00	.00	12	.00	.00
22	.00	.00	---	---	---	.00	.00	.00	.00	22	.00	.00
23	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	.00	.00	.00	.00	65	.00	.00
25	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	0.00	0.00	0.02	139.06	87.00	111.30
MEAN	.000	---	---	---	---	---	.000	.000	.001	4.49	2.81	3.71
MAX	.00	---	---	---	---	---	.00	.00	.02	65	47	85
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	.00	.04	276	173	221
(†)	0.13						0.01	0.99	0.76	1.30	2.37	1.78

(†) Total rainfall accumulation in inches.

RIO GRANDE BASIN

08330600 TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'09", long 106°38'57", in SW¼SW¼ sec.17, T.9 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 800 ft upstream from bridge on Broadway Boulevard SE, 0.2 mi downstream from bridge on Interstate Highway 25, and 3.0 mi south of Albuquerque.

DRAINAGE AREA.--128 mi².

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 687 ft³/s, at 2200 hours July 24, gage height, 5.77 ft, from rating curve extended above 10 ft³/s on basis of step-backwater analysis of channel; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e1.0
7	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	e.00	e.00
9	.00	.00	---	---	---	---	e.00	.00	.00	.00	6.5	1.6
10	.00	.00	---	---	---	---	e.00	.00	.00	.00	2.6	36
11	.00	e.00	---	---	---	---	e.00	.00	.00	.00	.00	e.10
12	.00	e.00	---	---	---	---	e.00	.00	.00	.00	.00	.00
13	.00	e.00	---	---	---	---	e.00	.00	.00	.00	.00	9.4
14	.00	e.00	---	---	---	---	e.00	.00	.00	.00	e.20	e.00
15	.00	e.00	---	---	---	---	e.00	.00	.00	8.8	.00	e.00
16	.00	e.00	---	---	---	---	.00	.00	.00	e1.2	.00	e.00
17	.00	e.00	---	---	---	---	.00	.00	.00	e.00	11	e.00
18	.00	e.00	---	---	---	---	.00	.00	.00	e.00	e.02	e.00
19	e.00	e.00	---	---	---	---	.00	.00	.00	2.2	e.00	e.00
20	e.00	e.00	---	---	---	---	.00	.00	.00	e1.1	e.00	e.00
21	e.00	e.00	---	---	---	---	.00	1.3	.00	22	e.00	e.00
22	e.00	e.00	---	---	---	---	.00	.00	.00	36	e.00	e.00
23	e.00	e.00	---	---	---	---	.00	.00	.00	1.4	e.00	e.00
24	e.00	e.00	---	---	---	---	.00	.00	.00	39	e.00	e.00
25	e.00	e.00	---	---	---	---	.00	.00	.00	e1.7	e.00	e.00
26	e.00	e.00	---	---	---	---	.00	.00	.00	e.00	e.00	e.00
27	e.00	e.00	---	---	---	---	.00	.00	.00	e.00	e.00	e.00
28	e.00	---	---	---	---	---	.00	.00	.00	e.00	e.00	e.00
29	e.00	---	---	---	---	---	.00	.00	.00	e.00	e.00	e.00
30	e.00	---	---	---	---	---	.00	.00	.00	e.00	e.00	e.00
31	e.00	---	---	---	---	---	---	.00	---	e.00	e.00	---
TOTAL	0.00	---	---	---	---	---	0.00	1.30	0.00	113.40	20.32	48.10
MEAN	.000	---	---	---	---	---	.000	.042	.000	3.66	.66	1.60
MAX	.00	---	---	---	---	---	.00	1.3	.00	39	11	36
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	2.6	.00	225	40	95

e Estimated

RIO GRANDE BASIN

08330775 SOUTH DIVERSION CHANNEL ABOVE TIJERAS ARROYO NEAR ALBUQUERQUE, NM

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

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 621 ft³/s, at 2130 hours July 24, gage height, 3.87 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.13	.00	.00	.00
2	.14	4.1	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	3.2	---	---	---	---	.00	.00	.00	.00	15	.00
4	.00	.15	---	---	---	---	.00	.00	.00	.00	4.4	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.40	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.15	12
7	.00	e.00	---	---	---	---	.00	.00	.00	.00	6.9	6.3
8	.00	e.00	---	---	---	---	.00	.00	.00	.00	.40	.70
9	.00	e.00	---	---	---	---	.00	e.10	.18	.00	.00	4.6
10	.00	e.00	---	---	---	---	.00	e.25	4.0	.00	.00	22
11	.00	e.00	---	---	---	---	.00	e.20	14	.00	.00	2.0
12	.00	e.00	---	---	---	---	.00	e.25	e.02	.00	.00	.80
13	.00	e.00	---	---	---	---	.00	e.20	.27	.48	.00	.70
14	.00	e.00	---	---	---	---	.00	e.20	.70	.00	.00	.00
15	.00	e.00	---	---	---	---	.00	e.00	.07	.00	.00	.00
16	.00	e.00	---	---	---	---	.00	e.00	.00	.00	1.3	.00
17	.00	e.00	---	---	---	---	.00	e.00	.00	.00	5.5	.00
18	.00	e.00	---	---	---	---	.00	e.00	.00	.00	2.9	.00
19	.00	e.00	---	---	---	---	.00	e.00	.00	1.3	.50	.00
20	.00	e.00	---	---	---	---	.00	e.00	.00	3.5	.00	.00
21	.00	e.00	---	---	---	---	.00	16	.00	.00	.00	.00
22	.00	e.00	---	---	---	---	.00	.40	.00	12	.00	.00
23	.00	e.00	---	---	---	---	.00	.82	.00	9.6	.00	.00
24	.00	e.00	---	---	---	---	.00	.92	.00	44	1.7	.00
25	.00	e.00	---	---	---	---	.00	.20	.00	8.5	.13	.00
26	.00	e.00	---	---	---	---	.00	.00	.00	.07	.00	.00
27	.00	e.00	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	1.3	.00	.00	.00	.00
29	.00	---	---	---	---	---	.00	4.3	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	2.7	.00	.00	4.8	.00
31	.00	---	---	---	---	---	---	2.9	---	.00	.50	---
TOTAL	0.14	---	---	---	---	---	0.00	30.74	19.37	79.45	44.58	49.10
MEAN	.005	---	---	---	---	---	.000	.99	.65	2.56	1.44	1.64
MAX	.14	---	---	---	---	---	.00	16	14	44	15	22
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.3	---	---	---	---	---	.00	61	38	158	88	97

e Estimated

RIO GRANDE BASIN

08331000 RIO GRANDE AT ISLETA, NM
(Surveillance network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 34°54'21", long 106°41'04", in NE¼NE¼SW¼ sec.24, T.08 N., R.02 E., Valencia County, Hydrologic Unit 13020203, 50 feet upstream from diversion dam, 50 feet downstream from bridge on State Highway 147, at Isleta.

DRAINAGE AREA.--18,100 mi² (estimated).

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--Samples are collected on the Peralta Main Canal or the Belen Highline Canal when the river is completely diverted. Water-discharge measurements were made at the time water-quality samples were collected.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 20...	0900	459	520	8.1	15.5	10.0	8.4	16	160	9	51
MAR 06...	1330	961	365	8.0	19.5	12.5	8.7	12	140	28	44
MAY 08...	1430	2740	288	7.8	29.5	19.5	7.4	33	120	34	36
SEP 24...	1030	1040	390	7.6	23.0	18.0	6.4	25	140	25	44

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 20...	8.5	47	2	5.1	187	0	153	79	27	0.50
MAR 06...	7.3	33	1	3.5	137	0	112	62	14	0.50
MAY 08...	6.3	19	0.8	2.7	100	0	82	55	7.0	0.30
SEP 24...	6.6	29	1	3.2	137	0	112	67	17	0.50

DATE	SILICA, DIS- SOLVED (MG/L SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 20...	26	343	0.560	0.480	0.140	0.120	0.700	0.600	1.10	1.20	0.40
MAR 06...	23	258	0.360	0.410	0.050	0.030	0.410	0.440	0.310	0.300	0.39
MAY 08...	18	195	0.160	0.210	0.050	0.020	0.210	0.230	0.140	0.080	0.86
SEP 24...	22	261	0.360	0.370	0.100	0.080	0.460	0.450	0.590	0.560	0.51

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV 20...	2.2	0.860	0.800	4.2	5	5	120	<1	<1.0	<1	<1
MAR 06...	1.1	0.260	0.160	2.8	--	--	80	--	--	--	--
MAY 08...	1.2	0.130	0.090	4.7	--	--	30	--	--	--	--
SEP 24...	1.6	0.530	0.460	5.1	3	3	80	<1	<1.0	3	<1

RIO GRANDE BASIN

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, NM

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, Hydrologic Unit 13020203, in Sevilleta or Belen Grant, 0.2 mi south of U.S. Highway 60, 1.8 mi east of Bernardo, about 3 mi upstream from floodway, and 4 mi upstream from Rio Puerco.

PERIOD OF RECORD.--June 1936 to September 1937, October 1964 to current year. July 1943 to September 1964, included in composite flow of Rio Grande near Bernardo. October 1960 to September 1964, monthly acre-feet published in WSP 1923 (daily records available in district files). Beginning October 1952, flow in conveyance channel represents controlled diversion from Rio Grande. Prior to October 1952, records called San Francisco Riverside drain near Bernardo are not equivalent.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,720.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1964, 0.2 mi upstream at various datums.

REMARKS.--Records good, except for estimated daily discharge, which are fair. Conveyance channel is 1 of 4 channels (stations 08332010, 08332030, and 08332050) carrying flow in valley cross section. Original design and plan were for conveyance channel to carry flows up to about 2,000 ft³/s. For combined monthly flow in acre-ft of this channel, floodway, Bernardo interior drain, and Lower San Juan Riverside drain, see tabulation below daily table for station 08332010. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,220 ft³/s, Apr. 22, 1958; no flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	e3.9	e4.0	3.8	e4.3	3.7	5.0	8.3	11	7.7	2.4	2.3
2	3.1	e3.9	e4.0	3.7	e4.3	3.7	5.0	8.2	10	5.8	2.4	2.6
3	3.2	e3.9	e4.0	3.5	e4.2	3.5	4.9	10	10	4.5	2.4	2.3
4	2.9	e3.9	e4.0	3.5	e4.2	3.4	4.6	9.3	7.2	5.0	2.4	3.0
5	3.1	e3.9	e4.0	3.6	e4.1	3.4	7.4	8.9	6.2	5.2	2.5	4.0
6	e3.8	e3.9	e4.0	3.6	e4.1	3.3	7.6	9.1	5.7	4.3	6.3	4.3
7	e3.8	e3.9	e4.0	3.7	e4.0	11	7.1	8.1	7.0	3.8	22	2.9
8	e3.8	e3.9	e4.0	3.8	e4.0	19	7.9	6.3	7.0	4.0	25	2.6
9	e3.8	e3.9	e4.0	3.8	e3.9	3.7	12	5.9	8.0	4.3	16	5.3
10	e3.8	e3.9	e4.0	3.9	e3.9	3.5	11	6.3	8.8	4.7	5.1	5.0
11	e3.8	e3.9	e4.0	3.8	e3.8	5.7	10	6.7	8.4	4.3	5.3	3.3
12	e3.8	e3.9	e4.0	3.8	e3.8	8.7	9.8	6.4	7.7	3.8	5.3	3.4
13	e3.8	e3.9	4.1	4.1	e3.7	4.2	9.8	6.0	6.7	3.4	4.6	3.5
14	e3.8	e3.9	4.0	4.2	e3.7	7.6	9.6	6.0	6.5	3.3	7.9	4.1
15	e3.8	e3.9	4.2	3.9	e3.6	35	9.6	6.2	7.7	3.7	6.6	3.4
16	e3.8	e3.9	4.3	3.9	e3.6	33	9.8	6.2	10	3.6	6.6	3.3
17	e3.8	e3.9	4.4	3.5	e3.5	36	9.3	11	9.5	1.9	5.0	4.3
18	e3.8	e3.9	4.3	3.1	e3.5	25	9.0	13	8.2	1.7	4.8	4.5
19	e3.8	e3.9	4.2	3.3	3.4	5.1	8.6	12	7.5	2.3	5.5	4.0
20	e3.8	e4.0	4.3	3.4	3.7	5.5	8.2	15	8.0	1.6	4.7	5.5
21	e3.8	e4.0	4.4	3.5	3.7	5.6	9.2	13	7.2	2.9	4.5	7.0
22	e3.8	e4.0	4.1	3.8	3.5	5.0	8.6	8.6	6.2	4.6	5.8	6.6
23	e3.8	e4.0	3.9	3.7	3.7	4.8	9.4	7.5	8.0	4.6	6.4	6.6
24	e3.8	e4.0	3.8	3.6	3.5	4.9	9.5	7.0	7.3	2.6	4.5	5.8
25	e3.8	e4.0	4.0	3.9	3.4	4.9	9.5	7.1	7.1	6.4	4.7	3.5
26	e3.8	e4.0	4.1	4.1	3.4	4.8	8.9	7.9	8.0	3.7	4.2	2.7
27	e3.8	e4.0	4.1	4.1	3.5	4.9	8.7	8.1	8.7	3.1	2.8	3.9
28	e3.8	e4.0	4.1	4.2	3.6	4.8	8.7	6.4	7.6	3.3	2.4	4.7
29	e3.9	e4.0	4.4	4.4	---	4.8	8.9	7.1	8.1	3.3	2.3	3.7
30	e3.9	e4.0	4.4	e4.4	---	5.0	8.5	8.3	7.9	3.0	2.0	3.8
31	e3.9	---	4.0	e4.4	---	4.9	---	8.3	---	2.6	2.7	---
TOTAL	114.5	118.1	127.1	118.0	105.6	278.4	256.1	258.2	237.2	119.0	185.1	121.9
MEAN	3.69	3.94	4.10	3.81	3.77	8.98	8.54	8.33	7.91	3.84	5.97	4.06
MAX	3.9	4.0	4.4	4.4	4.3	36	12	15	11	7.7	25	7.0
MIN	2.9	3.9	3.8	3.1	3.4	3.3	4.6	5.9	5.7	1.6	2.0	2.3
AC-FT	227	234	252	234	209	552	508	512	470	236	367	242

CAL YR 1990 TOTAL 1408.47 MEAN 3.86 MAX 30 MIN .00 AC-FT 2790
WTR YR 1991 TOTAL 2039.2 MEAN 5.59 MAX 36 MIN 1.6 AC-FT 4040

e Estimated

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, Hydrologic Unit 13020203, in Belen or Sevilleta Grant, on downstream side of bridge on U.S. Highway 60, 5 mi downstream from heading of conveyance channel, 2 mi east of Bernardo, and at mile 1,487.2.

DRAINAGE AREA.--19,230 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1936 to January 1939, October 1941 to current year. Monthly discharge only October 1942 to June 1943, published in WSP 1312, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Published as Rio Grande near Bernardo prior to October 1964. Prior to October 1952, flow of Bernardo interior drain was included only when it carried river overflow; the entire flow has been included from October 1952 to September 1964. Flow in the conveyance channel, formerly "San Francisco Riverside drain," has been included in records prior to October 1964.

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

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Since November 1973 flow completely regulated by Cochiti Dam (station 08317300) 100 mi upstream. Floodway is 1 of 4 channels (stations 08331990, 08332030, and 08332050) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below. Diversions for irrigation of about 740,000 acres upstream from station.

AVERAGE DISCHARGE.--19 years (water years 1937-38, 1942-58), 1,125 ft³/s, 815,100 acre-ft/yr. Includes flow of floodway, conveyance channel, and Bernardo interior drain. 15 years (water years 1959-73), 898 ft³/s, 605,600 acre-ft/yr, includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain, prior to closure of Cochiti Dam. 18 years (water years 1974-91), 1,386 ft³/s, 1,004,000 acre-ft/yr, includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD (1936-39 AND SINCE 1941).--Maximum discharge, 21,000 ft³/s, Apr. 25, 1942, gage height, 6.90 ft; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,450 ft³/s, Aug. 8; minimum daily, 66 ft³/s Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	417	1040	495	907	1200	1370	2590	3190	4030	807	e130
2	1210	701	969	917	914	1190	1280	2740	3150	3810	612	e120
3	1360	992	891	740	1070	1380	1270	2680	3190	2610	633	e100
4	885	1130	866	740	1080	1360	1150	2610	3280	2360	773	66
5	618	1100	894	783	1080	1170	1130	2460	3330	2380	873	121
6	446	1250	858	910	1070	972	1210	2350	3660	2290	1340	239
7	401	1380	711	998	1040	942	1150	2370	3560	1530	1850	483
8	343	1470	746	1110	919	941	1150	2430	3260	794	4450	983
9	256	1410	834	1030	899	996	1190	2370	3180	418	3180	1100
10	239	1370	916	1080	880	994	1380	2350	3790	214	2510	1080
11	256	1300	881	1120	866	977	1660	2350	3630	137	1540	2090
12	299	1300	829	1100	862	832	1770	2410	3420	120	1260	1980
13	238	1270	841	1130	849	781	1860	2410	3790	103	1220	1790
14	174	1130	961	1110	836	812	1960	2490	3830	84	1630	1230
15	149	1150	1140	949	854	720	2060	2610	4270	107	1570	1170
16	134	1320	1300	558	848	674	2130	2660	4220	197	1240	1130
17	148	1430	1350	451	841	692	2260	2830	4190	307	1070	1140
18	200	1550	1300	454	857	873	2370	2830	4170	203	1890	843
19	277	1060	1160	458	985	910	2540	2990	4120	120	2430	880
20	257	682	1120	578	931	1110	2370	3230	4050	101	1860	868
21	173	594	1030	1120	954	1180	2190	3460	4050	151	1520	716
22	142	570	980	798	904	1160	2330	4290	3730	262	1520	681
23	134	782	e1030	770	841	1190	2350	3420	3780	1260	1430	468
24	134	1080	935	1030	889	1110	2570	3370	3840	1340	769	364
25	135	1120	735	1240	1110	1140	2750	3670	3730	2320	414	469
26	169	1290	535	1250	1110	1120	2640	3480	3780	2370	e250	334
27	152	1270	475	1260	1130	1210	2580	3240	2980	2930	e200	310
28	196	1130	e540	1280	1170	1310	2580	3180	2480	2920	e180	273
29	336	1100	640	1260	---	1340	2620	3060	2480	2510	e160	367
30	382	1010	596	1200	---	1290	2640	2940	2760	1240	e150	340
31	274	---	519	950	---	1310	---	3220	---	838	e140	---
TOTAL	11537	33358	27622	28869	26696	32886	58510	89090	106890	40056	39471	21865
MEAN	372	1112	891	931	953	1061	1950	2874	3563	1292	1273	729
MAX	1420	1550	1350	1280	1170	1380	2750	4290	4270	4030	4450	2090
MIN	134	417	475	451	836	674	1130	2350	2480	84	140	66
AC-FT	22880	66170	54790	57260	52950	65230	116100	176700	212000	79450	78290	43370
(†)	32040	71310	64010	63900	59120	77130	130000	190400	224800	91020	92780	58230

CAL YR 1990 TOTAL 196339.80 MEAN 538 MAX 1780 MIN .00 AC-FT 389400 (†) MEAN 710 AC-FT 514100
WTR YR 1991 TOTAL 516850 MEAN 1416 MAX 4450 MIN 66 AC-FT 1025000 (†) MEAN 1598 AC-FT 1157000

(†) COMBINED FLOW, IN ACRE-FT, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL, BERNARDO INTERIOR DRAIN AND LOWER SAN JUAN RIVERSIDE DRAIN.

e Estimated

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to current year.

WATER TEMPERATURE: October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1964 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1964-91): Maximum daily, 1,410 microsiemens, July 23, 1976; minimum daily, 224 microsiemens, June 5, 1980.

WATER TEMPERATURE: Maximum daily, 34.5°C, Aug. 9, 1975; minimum daily, 0.0°C on several days during 1971-72, 1976-77, 1979, and 1983-87.

SEDIMENT CONCENTRATION (water years 1975-91): Maximum daily mean, 21,400 mg/L, Aug. 11, 1979; minimum daily mean, no flow on many days of most years.

SEDIMENT LOAD: Maximum daily, 356,000 tons, Aug. 11, 1967; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 686 microsiemens, July 25; minimum daily, 295 microsiemens, June 3.

WATER TEMPERATURE: Maximum daily, 33.0°C, Sept. 3; minimum daily, 2.0°C, Dec. 25-26.

SEDIMENT CONCENTRATION: Maximum daily mean, 17,300 mg/L, July 25; minimum daily mean, 50 mg/L, Oct. 23.

SEDIMENT LOAD: Maximum daily, 110,000 tons, July 25; minimum daily, 12 tons, Sept. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
NOV 19...	1230	1090	482	7.9	19.0	11.5	9.5	<10	160	51	8.5	43	
MAR 06...	1030	972	405	8.3	14.5	11.5	9.0	--	140	44	7.6	39	
MAY 10...	1200	2310	340	7.8	26.5	16.0	8.2	--	140	42	7.5	27	
JUL 24...	1115	1390	410	8.5	27.5	24.0	6.3	76	150	49	7.8	34	
DATE		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV 19...	1		4.1	147	79	19	0.50	23	321	0.760	0.780	0.040	0.020
MAR 06...	1		4.6	132	66	22	0.50	24	287	--	--	--	--
MAY 10...	1		3.4	109	66	12	0.30	19	243	--	--	--	--
JUL 24...	1		4.8	132	85	15	0.40	21	302	1.03	1.02	0.070	0.080
DATE		NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
NOV 19...		0.800	0.800	0.030	0.020	0.67	1.5	0.370	0.330	5.9	90	6	
MAR 06...		--	--	--	--	--	--	--	--	--	90	15	
MAY 10...		--	--	--	--	--	--	--	--	--	50	27	
JUL 24...		1.10	1.10	0.010	0.020	0.69	1.8	0.550	0.260	34	110	29	

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

		ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)		
NOV 19...	1230	4	5	<1	<1.0	4	<1	8	1		
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)		
NOV 19...		8	<1	<0.10	<0.1	<1	<1	20	7		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DISCH, SUSP. + BED MA- TERIAL (T/DAY) (80155)	SEDI- MENT, DISCH, SUSP. + BED MA- TERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 19...	1230	1090	335	1.6	2.09	482	11.5	749	2200	3260	84
DEC 20...	1130	1080	305	1.8	1.99	--	6.5	361	1050	1590	--
MAR 06...	1030	972	295	1.6	2.09	405	11.5	417	1090	1650	--
MAR 21...	1130	1180	345	1.7	2.06	--	10.0	197	628	964	--
APR 09...	1130	1140	330	1.5	2.29	--	13.0	172	529	816	83
MAY 10...	1200	2310	353	2.7	2.45	340	16.0	354	2210	3270	--
JUN 19...	1130	4120	390	3.4	3.16	335	22.5	229	2550	3760	93
JUL 11...	1100	258	152	2.5	0.69	561	24.0	72	50	83	97
JUL 24...	1115	1390	265	2.2	2.38	410	24.0	2490	9340	13300	--
SEP 03...	1045	88	132	0.82	0.82	521	24.5	192	46	76	--

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)
NOV 19...	--	--	--	--	--	--	64	86	99	100	--
DEC 20...	--	--	--	--	--	--	98	99	100	--	--
MAR 06...	--	--	--	--	--	--	87	94	100	--	--
MAR 21...	--	--	--	--	--	--	87	92	98	100	--
APR 09...	92	98	100	--	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	70	85	100	--	--
JUN 19...	--	--	--	--	--	--	--	--	--	--	63
JUL 24...	--	--	--	72	85	92	99	100	--	--	--
SEP 03...	--	--	--	--	--	--	79	93	100	--	--

DATE	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL 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)
NOV 19...	--	--	--	2	7	43	96	100	--	--
DEC 20...	--	--	100	--	--	--	--	--	--	--
MAR 06...	--	--	--	0	1	16	79	97	99	100
MAR 21...	--	--	--	3	8	40	84	98	100	--
APR 09...	--	--	--	7	27	71	94	100	--	--
MAY 10...	--	--	--	24	47	90	100	--	--	--
JUN 19...	90	100	--	--	--	--	--	--	--	--
JUL 11...	--	--	--	3	11	32	87	99	100	--
JUL 24...	--	--	--	9	35	86	100	--	--	--
SEP 03...	--	--	--	4	9	17	77	99	100	--

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	634	594	467	475	426	450	458	351	302	355	443	545
2	---	576	452	412	433	457	452	352	296	350	455	519
3	478	549	451	431	410	440	461	359	295	379	480	524
4	626	508	444	442	404	441	---	363	299	411	449	514
5	622	514	445	446	408	446	---	355	309	402	437	508
6	649	506	456	433	404	462	---	360	302	404	503	491
7	601	495	459	418	406	470	---	365	300	410	400	505
8	593	522	453	415	485	469	---	336	300	430	410	390
9	600	538	452	414	493	473	541	367	302	461	447	486
10	582	535	453	433	487	478	537	384	303	494	357	474
11	586	482	442	448	488	480	515	385	302	592	375	592
12	577	465	446	450	490	494	482	390	326	590	376	607
13	581	452	458	467	508	517	484	381	313	585	378	665
14	600	473	443	430	493	494	464	376	314	591	376	643
15	598	474	434	431	490	507	448	380	324	565	374	496
16	624	453	440	487	494	508	445	376	324	538	456	476
17	611	485	430	489	491	503	429	370	304	494	406	469
18	572	---	428	477	486	488	404	365	314	510	485	485
19	566	450	441	476	471	457	395	360	313	528	618	513
20	554	490	441	398	473	461	385	351	310	536	655	449
21	572	521	423	396	467	459	390	341	336	515	658	461
22	582	525	421	421	471	458	387	349	314	503	657	462
23	591	515	423	436	473	450	386	352	332	465	656	494
24	586	468	434	389	487	446	379	351	318	488	664	496
25	586	467	432	388	456	448	364	315	315	686	598	471
26	585	433	466	392	452	452	358	329	328	408	535	504
27	590	426	424	388	457	451	367	316	333	473	529	521
28	566	441	---	385	452	451	353	310	333	455	539	528
29	548	448	---	---	---	446	360	312	336	395	557	507
30	535	462	---	383	---	451	353	306	340	413	582	480
31	582	---	470	413	---	446	---	300	---	454	591	---
MEAN	---	---	---	---	463	466	---	352	315	480	498	509
MAX	---	---	---	---	508	517	---	390	340	686	664	665
MIN	---	---	---	---	404	440	---	300	295	350	357	390

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	18.0	12.0	7.0	9.0	13.0	17.0	18.0	20.0	30.0	26.0	29.0
2	22.0	15.0	11.0	8.0	10.0	14.0	17.0	19.0	27.0	29.0	31.0	31.0
3	23.0	13.0	9.0	8.0	11.0	15.0	18.0	19.0	20.0	29.0	27.0	33.0
4	24.0	16.0	8.0	9.0	12.0	17.0	---	18.0	25.0	24.0	23.0	27.0
5	24.0	15.0	9.0	10.0	13.0	18.0	---	18.0	25.0	30.0	29.0	26.0
6	25.0	17.0	9.0	12.0	15.0	17.0	---	18.0	25.0	30.0	28.0	28.0
7	23.0	8.0	9.0	12.0	12.0	12.0	---	20.0	25.0	31.0	27.0	31.0
8	22.0	14.0	10.0	11.0	13.0	14.0	---	21.0	23.0	30.0	29.0	30.0
9	19.0	15.0	11.0	10.0	12.0	15.0	18.0	21.0	25.0	30.0	29.0	24.0
10	20.0	13.0	11.0	11.0	11.0	15.0	18.0	21.0	27.0	30.0	26.0	27.0
11	21.0	16.0	12.0	10.0	13.0	15.0	17.0	20.0	26.0	30.0	28.0	26.0
12	21.0	16.0	12.0	11.0	14.0	16.0	17.0	21.0	26.0	29.0	29.0	27.0
13	20.0	15.0	14.0	11.0	15.0	15.0	18.0	23.0	23.0	27.0	29.0	22.0
14	21.0	16.0	16.0	10.0	16.0	13.0	17.0	18.0	27.0	28.0	28.0	27.0
15	22.0	17.0	11.0	12.0	15.0	14.0	18.0	20.0	27.0	28.0	29.0	29.0
16	21.0	15.0	12.0	9.0	13.0	13.0	18.0	21.0	27.0	24.0	30.0	26.0
17	22.0	13.0	11.0	10.0	13.0	16.0	18.0	24.0	29.0	29.0	30.0	26.0
18	20.0	15.0	13.0	10.0	12.0	17.0	18.0	23.0	30.0	28.0	27.0	20.0
19	20.0	17.0	11.0	10.0	13.0	15.0	17.0	24.0	30.0	31.0	28.0	20.0
20	19.0	14.0	10.0	9.0	14.0	16.0	17.0	23.0	29.0	18.0	29.0	21.0
21	17.0	16.0	9.0	5.0	15.0	12.0	16.0	18.0	25.0	30.0	30.0	24.0
22	17.0	13.0	8.0	9.0	16.0	15.0	16.0	25.0	28.0	23.0	30.0	27.0
23	18.0	13.0	5.0	9.0	15.0	15.0	16.0	24.0	26.0	23.0	29.0	25.0
24	19.0	13.0	4.0	10.0	16.0	17.0	17.0	25.0	27.0	29.0	30.0	26.0
25	19.5	11.0	2.0	11.0	15.0	17.0	17.0	26.0	27.0	20.0	30.0	25.0
26	19.5	13.0	2.0	9.0	15.0	13.0	19.0	26.0	28.0	23.0	29.0	26.0
27	19.0	11.0	9.0	9.0	16.0	13.0	19.0	23.0	29.0	22.0	30.0	25.0
28	18.0	9.0	---	10.0	12.0	12.0	18.0	26.0	29.0	25.0	29.0	25.0
29	19.0	9.0	---	8.0	---	13.0	19.0	26.0	26.0	29.0	32.0	25.0
30	19.0	9.0	---	8.0	---	15.0	18.0	27.0	28.0	31.0	32.0	25.0
31	22.0	---	7.0	8.5	---	14.0	---	22.0	---	31.0	30.0	---
MEAN	20.5	13.8	---	9.6	13.4	14.7	---	21.9	26.3	27.5	28.8	26.1
MAX	25.0	18.0	---	12.0	16.0	18.0	---	27.0	30.0	31.0	32.0	33.0
MIN	17.0	8.0	---	5.0	9.0	12.0	---	18.0	20.0	18.0	23.0	20.0

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS	MEAN	LOADS
	CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)		CONCEN- TRATION (MG/L)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5050	19100	175	207	250	698	195	265	152	372	258	840
2	3920	12600	308	589	245	642	186	465	160	395	353	1130
3	2400	8840	494	1330	213	513	159	317	162	466	348	1300
4	1300	3200	570	1740	186	435	163	325	157	456	312	1190
5	666	1120	601	1780	180	436	198	420	162	472	362	1140
6	486	588	723	2460	180	417	211	519	159	461	264	721
7	403	436	903	3370	174	334	192	518	166	467	269	682
8	344	320	683	2720	174	350	197	591	155	384	256	651
9	277	192	526	2000	175	395	202	560	136	331	327	877
10	232	150	512	1900	205	507	229	667	130	309	313	840
11	292	206	428	1500	191	454	247	748	131	306	233	617
12	287	231	410	1430	180	402	239	709	134	312	221	496
13	208	135	369	1270	181	412	245	745	170	390	211	444
14	139	66	330	1000	212	552	205	613	210	475	235	515
15	116	47	344	1080	260	803	129	338	403	929	183	357
16	106	39	392	1400	278	976	123	182	350	801	162	295
17	91	37	417	1620	258	938	125	153	177	404	205	385
18	98	53	380	1610	253	888	107	132	243	564	234	551
19	119	89	267	766	229	718	112	139	400	1060	246	605
20	94	66	245	451	229	690	119	188	554	1390	253	755
21	82	38	211	339	349	973	132	402	401	1030	242	769
22	68	26	180	277	362	1050	126	271	217	533	228	714
23	50	18	222	480	223	674	217	453	240	546	210	674
24	57	20	274	800	147	437	251	693	220	529	209	629
25	57	21	293	887	158	471	240	805	267	798	220	679
26	70	32	310	1080	178	529	251	848	232	694	260	788
27	60	25	292	1000	153	452	253	863	307	942	238	776
28	70	38	266	813	143	422	251	866	257	813	202	714
29	114	104	253	750	132	287	230	784	---	---	196	707
30	124	128	253	692	137	221	183	597	---	---	206	717
31	116	88	---	---	128	180	149	382	---	---	215	760
TOTAL	---	48053	---	37341	---	17256	---	15558	---	16629	---	22318

DAY	MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION	
	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	196	726	357	2490	329	2840	457	5040	491	1070	72	54
2	184	638	348	2580	308	2620	459	4720	654	1070	73	57
3	189	649	305	2200	309	2660	338	2400	2370	4470	70	29
4	185	573	234	1660	304	2700	229	1460	1160	2430	64	12
5	201	616	200	1330	301	2720	237	1520	1350	3190	91	30
6	236	771	213	1350	374	3700	274	1700	4860	17700	175	142
7	224	698	214	1370	324	3110	213	898	2800	13200	706	1370
8	210	652	186	1220	244	2150	166	358	2860	34600	1720	4670
9	282	911	180	1160	228	1960	142	163	1570	13800	2590	7670
10	438	1650	195	1240	244	2500	110	64	3570	24300	2730	7930
11	418	1860	215	1370	233	2280	96	36	1860	8170	3720	22200
12	335	1610	186	1210	199	1830	92	30	1150	3920	5060	27100
13	366	1840	222	1450	215	2210	83	23	2100	6920	3770	18400
14	385	2040	253	1700	259	2680	82	19	1080	4680	1790	6000
15	371	2070	368	2610	543	6280	90	26	729	3080	2190	6910
16	369	2120	343	2450	768	8760	279	176	4110	13400	1160	3540
17	422	2590	320	2440	555	6280	390	324	3800	11000	720	2220
18	488	3120	293	2240	646	7280	154	90	3180	16400	470	1070
19	425	2910	291	2360	496	5520	89	29	2510	16400	653	1550
20	358	2290	252	2190	336	3670	484	128	1020	5180	384	904
21	312	1850	427	4030	850	9370	630	258	756	3110	305	590
22	320	2020	652	7610	367	3670	907	653	593	2440	293	540
23	383	2440	1010	9220	276	2820	2000	7340	466	1810	239	303
24	445	3080	755	6850	243	2520	3280	12100	334	720	209	205
25	383	2840	601	5960	218	2190	17300	110000	279	311	278	355
26	373	2650	506	4770	209	2130	4060	29300	227	191	197	179
27	316	2200	433	3790	187	1510	6530	57700	253	159	180	151
28	325	2270	354	3040	158	1060	7220	57600	202	124	159	118
29	312	2210	305	2520	183	1230	2200	15100	184	118	195	195
30	307	2190	292	2310	188	1400	759	2630	168	113	145	133
31	---	---	313	2730	---	---	574	1300	92	65	---	---
TOTAL	---	54084	---	89450	---	101650	---	313185	---	214141	---	114627
TOTAL LOAD FOR YEAR:												
			1044292	TONS.								

RIO GRANDE BASIN

08332050 BERNARDO INTERIOR DRAIN NEAR BERNARDO, NM

LOCATION.--Lat 34°24'56", long 106°49'15", Socorro County, Hydrologic Unit 13020203, on right bank 110 ft upstream from culvert on U.S. Highway 60, and 1.0 mi east of Bernardo.

PERIOD OF RECORD.--June 1936 to May 1937, October 1943 to current year. Monthly discharge only June 1936 to May 1937, published in WSP 828. October 1943 to September 1960 included in composite records for station 08332000 Rio Grande near Bernardo. October 1960 to September 1964, monthly acre-ft published in WSP 1923. Daily records available in district files beginning October 1943.

GAGE.--Water-stage recorder. Elevation of gage is 4,710 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 4, 1936, to May 17, 1937, nonrecording gage 300 ft downstream, and Oct. 1, 1943 to Jan. 12, 1978, water-stage recorder at site 150 ft downstream at different datum.

REMARKS.--Records good. This drain is 1 of 4 channels (stations 08331990, 08332010, and 08332030) carrying flow in valley cross section. For combined monthly flow in acre-ft of this drain, conveyance channel, floodway, and lower San Juan Riverside drain, see tabulation below daily table for station 08332010. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 208 ft³/s, May 5, 1983; no flow at times. Prior to 1952, drain was subject to overflow from floodway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	100	67	55	63	59	91	81	84	65	38	116
2	147	96	67	56	63	58	92	78	75	65	52	112
3	145	92	67	56	63	59	89	60	68	54	43	102
4	146	90	65	56	63	50	86	82	71	40	36	104
5	154	89	64	56	63	43	94	76	70	68	44	105
6	152	88	64	56	63	49	98	72	53	66	47	123
7	138	86	63	57	63	53	94	74	51	57	45	117
8	141	89	62	58	62	69	95	75	53	49	48	117
9	142	92	60	58	62	91	94	70	79	53	67	128
10	154	91	59	59	62	90	95	60	70	48	116	130
11	165	90	59	58	62	92	105	64	55	49	121	127
12	166	88	59	58	62	65	112	67	47	57	125	130
13	156	87	60	59	61	70	126	59	47	55	120	125
14	153	86	61	59	60	69	126	66	49	59	120	123
15	158	86	62	58	60	69	120	70	61	45	128	124
16	144	85	63	57	60	72	95	66	66	44	125	131
17	154	83	62	56	60	73	83	73	58	40	124	135
18	125	83	62	55	60	81	59	61	47	50	122	144
19	107	83	64	55	60	95	52	56	54	57	115	157
20	116	80	63	55	60	89	57	64	48	59	112	150
21	128	77	63	58	60	89	70	82	51	63	113	125
22	158	73	63	59	59	98	73	69	53	70	123	138
23	156	71	62	59	58	96	73	46	56	58	126	142
24	158	70	61	60	58	97	70	55	52	52	115	143
25	147	71	61	62	58	93	66	71	47	45	110	133
26	149	71	59	63	58	92	65	68	52	41	106	141
27	137	71	58	64	58	83	68	55	62	39	112	143
28	142	70	58	64	59	107	75	58	55	44	110	139
29	149	69	58	64	---	108	85	60	61	42	110	128
30	141	68	57	64	---	106	77	67	63	42	107	127
31	118	---	56	64	---	99	---	65	---	32	120	---
TOTAL	4500	2475	1909	1818	1700	2464	2585	2070	1758	1608	3000	3859
MEAN	145	82.5	61.6	58.6	60.7	79.5	86.2	66.8	58.6	51.9	96.8	129
MAX	166	100	67	64	63	108	126	82	84	70	128	157
MIN	107	68	56	55	58	43	52	46	47	32	36	102
AC-FT	8930	4910	3790	3610	3370	4890	5130	4110	3490	3190	5950	7650

CAL YR 1990 TOTAL 30643 MEAN 84.0 MAX 166 MIN 21 AC-FT 60780
WTR YR 1991 TOTAL 29746 MEAN 81.5 MAX 166 MIN 32 AC-FT 59000

RIO GRANDE BASIN

08334000 RIO PUERCO ABOVE ARROYO CHICO, NEAR GUADALUPE, NM

LOCATION.--Lat 35°38'08", long 107°09'56", in SW¼ sec.21, T.16 N., R.3 W., Sandoval County, Hydrologic Unit 13020204, on right bank 1.6 mi upstream from Arroyo Chico, 5.5 mi northeast of village of Guadalupe, and at mile 106.8.

DRAINAGE AREA.--420 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,950 ft above National Geodetic Vertical Datum of 1929. Prior to July 14, 1966, at datum 1.01 ft higher.

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

AVERAGE DISCHARGE.--40 years, 13.6 ft³/s, 9,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,940 ft³/s, July 29, 1967, gage height, 13.53 ft, from rating curve extended above 1,300 ft³/s on basis of slope-area measurements at gage heights 7.75 ft and 10.60 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1943, probably exceeded 5,000 ft³/s based on records for stations upstream and downstream.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 13	0230	*2,230	*7.85	No other peak greater than base discharge			
No flow at times.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.00	e.01	e.01	e.01	13	4.9	9.9	40	1.3	5.6	.93
2	.00	94	e.01	e.01	e.01	22	4.2	9.9	39	.56	21	.15
3	.00	43	e.01	e.01	e.01	27	5.2	7.2	36	.43	14	.09
4	.00	15	e.01	e.01	e.01	21	6.8	14	39	.00	7.1	4.2
5	.00	8.4	e.01	e.01	e.01	32	7.9	18	35	.00	14	49
6	.00	3.2	e.01	e.01	e.01	39	11	15	39	.00	32	54
7	.00	e2.4	e.01	e.01	e.01	17	13	19	37	.00	19	.80
8	.00	e2.2	e.01	e.03	4.6	5.6	15	21	35	.00	7.1	.00
9	.00	e1.2	e.01	e.02	e20	6.6	14	29	52	.00	4.3	.00
10	.00	e.78	e.01	e.02	e17	6.3	11	55	85	.00	213	.20
11	.00	e.78	e.01	e.02	e37	4.5	7.6	77	95	.00	41	526
12	.00	e1.6	e.01	e.02	e54	4.5	8.9	80	242	.00	21	140
13	.00	e1.1	e.01	e.02	e149	3.2	9.2	66	779	.00	18	71
14	.00	e.85	e.01	e.01	e137	3.2	9.3	47	195	.00	6.9	43
15	.00	e.56	e.01	e.01	e78	4.0	7.2	39	198	18	3.6	6.9
16	.00	e.40	e.01	e.01	e91	4.0	8.2	30	67	8.7	2.8	5.0
17	.00	e.35	e.05	e.00	e103	4.3	7.5	22	29	4.4	2.4	4.5
18	.00	e.30	e.10	e.00	e97	3.6	8.8	17	20	17	9.2	4.3
19	.00	e.25	e.10	e.00	e39	5.6	13	13	12	54	3.0	3.0
20	2.2	e.20	e.10	e.00	33	4.3	17	51	8.4	9.7	1.6	2.2
21	17	e.15	e.05	e.00	e20	4.3	14	111	6.5	2.6	.93	2.3
22	9.2	e.10	e.05	e.00	e36	4.0	20	204	4.6	24	.36	2.2
23	3.8	e.07	e.05	e.00	e50	3.2	25	121	3.2	212	3.1	2.1
24	1.3	e.05	e.04	e.00	e40	3.2	26	93	2.2	121	.38	1.8
25	.78	e.03	e.04	e.00	e22	3.4	19	88	1.7	687	12	1.3
26	.66	e.02	e.03	e.00	e17	3.4	20	86	1.2	246	9.7	.86
27	.00	e.01	e.03	e.00	10	3.6	22	84	.58	35	2.3	.59
28	.00	e.01	e.03	e.00	10	5.3	17	76	.34	19	1.5	.45
29	.00	e.01	e.02	e.00	---	5.6	15	52	2.6	10	.24	.43
30	.00	e.01	e.02	e.00	---	5.3	10	36	1.4	6.3	e.05	.39
31	.00	---	e.01	e.00	---	5.1	---	37	---	5.0	2.9	---
TOTAL	36.14	177.03	0.88	0.23	1064.67	277.1	377.7	1628.0	2106.72	1481.99	480.06	927.69
MEAN	1.17	5.90	.028	.007	38.0	8.94	12.6	52.5	70.2	47.8	15.5	30.9
MAX	17	94	.10	.03	149	39	26	204	779	687	213	526
MIN	.00	.00	.01	.00	.01	3.2	4.2	7.2	.34	.00	.05	.00
AC-FT	72	351	1.7	.5	2110	550	749	3230	4180	2940	952	1840

CAL YR 1990 TOTAL 1918.09 MEAN 5.26 MAX 181 MIN .00 AC-FT 3800
WTR YR 1991 TOTAL 8558.21 MEAN 23.4 MAX 779 MIN .00 AC-FT 16980

e Estimated

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-56 (published as "below Cabezon"), 1981 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: July 1948 to June 1956, October 1981 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since August 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 214,000 mg/L, Aug. 28, 1988; minimum daily mean, no flow on many days each year.

SEDIMENT LOAD: Maximum daily, 730,000 tons, July 27, 1955; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 107,000 mg/L, Aug. 10; minimum daily mean, no flow on many days.

SEDIMENT LOAD: Maximum daily, 177,000 tons, June 13; minimum daily, 0 ton on many days.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)
NOV										
06...	1030	3.3	1130	5.5	26300	234	96	--	--	--
DEC										
12...	1200	3.2	505	--	136	1.2	41	--	--	--
FEB										
20...	1515	28	1010	3.5	10700	809	82	--	--	--
MAR										
21...	1130	5.2	1900	8.0	16900	237	97	--	--	--
APR										
11...	1035	17	1480	6.5	20500	941	78	--	--	--
20...	1030	26	1040	--	12000	842	86	--	--	--
MAY										
07...	1035	19	1150	13.0	19600	1010	79	--	--	--
29...	1140	38	860	--	28500	2920	61	--	--	--
JUN										
19...	1015	12	--	--	11600	376	--	92	97	100
JUL										
15...	2230	391	2760	--	83500	88200	92	--	--	--
30...	1145	4.9	1520	--	7350	97	94	--	--	--
AUG										
10...	1420	485	622	--	116000	152000	74	--	--	--
23...	0920	4.3	1630	--	35500	408	97	--	--	--
SEP										
06...	0850	9.6	1580	--	99600	2580	60	--	--	--
10...	0745	1.5	1400	--	96200	390	77	--	--	--
11...	1100	209	1280	--	69000	38900	88	--	--	--

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION	
	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17700	57	0	.00	310	.01	200	.01	300	.01	8000	281
2	0	.00	26100	6620	300	.01	220	.01	400	.01	8500	505
3	0	.00	47800	5550	320	.01	260	.01	450	.01	8800	642
4	0	.00	35000	1420	340	.01	240	.01	360	.01	9000	510
5	0	.00	33200	753	360	.01	230	.01	360	.01	9500	821
6	0	.00	25600	221	380	.01	220	.01	310	.01	9800	1030
7	0	.00	21800	141	400	.01	210	.01	280	.01	10000	459
8	0	.00	14400	86	380	.01	340	.03	4120	51	10200	154
9	0	.00	6850	22	460	.01	680	.04	14400	776	11700	208
10	0	.00	4390	9.3	410	.01	590	.03	15400	709	10900	186
11	0	.00	3080	6.5	400	.01	580	.03	16300	1630	10300	125
12	0	.00	7620	33	490	.01	450	.02	16700	2430	11500	140
13	0	.00	4290	13	420	.01	740	.04	21600	8670	10000	86
14	0	.00	4560	10	290	.01	510	.01	22000	8150	9270	80
15	0	.00	3380	5.1	240	.01	460	.01	17600	3700	11700	126
16	0	.00	2900	3.1	160	.00	260	.01	15400	3790	13200	143
17	0	.00	2400	2.3	399	.05	0	.00	13600	3790	14900	173
18	0	.00	2300	1.9	316	.09	0	.00	14300	3730	13900	135
19	0	.00	2200	1.5	299	.08	0	.00	11700	1230	15200	231
20	19100	113	2200	1.2	259	.07	0	.00	11200	998	15100	176
21	34300	1580	2400	.97	320	.04	0	.00	11000	597	15700	182
22	25000	620	2600	.70	280	.04	0	.00	10600	1030	15000	162
23	20300	208	2300	.43	310	.04	0	.00	11200	1510	14500	125
24	14100	50	700	.09	270	.03	0	.00	9820	1060	13800	119
25	9270	20	260	.02	270	.03	0	.00	9440	561	12100	111
26	7950	14	280	.02	230	.02	0	.00	9010	414	11800	108
27	0	.00	360	.01	260	.02	0	.00	8430	228	12500	122
28	0	.00	370	.01	260	.02	0	.00	8060	218	14700	211
29	0	.00	330	.01	240	.01	0	.00	---	---	15600	235
30	0	.00	410	.01	230	.01	0	.00	---	---	13900	198
31	0	.00	---	---	210	.01	0	.00	---	---	14300	197
TOTAL	---	2662.00	---	14902.17	---	0.71	---	0.29	---	45272.07	---	7981

DAY	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)
	(MG/L)		(MG/L)		(MG/L)		(MG/L)		(MG/L)		(MG/L)	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14400	190	15300	409	19300	2080	16600	58	6600	100	33600	84
2	14100	160	15100	403	18900	1990	12200	18	16300	925	20300	8.2
3	16500	232	10900	212	19300	1870	10300	12	46400	1750	17100	4.2
4	20400	375	25100	949	18600	1960	0	.0	37000	710	29200	331
5	18100	386	25400	1230	17800	1680	0	.0	52400	1980	49000	6480
6	18100	538	21800	882	18200	1920	0	.0	58000	5010	74300	10800
7	19500	683	19800	1020	17300	1730	0	.0	48400	2480	62400	135
8	20700	837	20800	1180	17100	1610	0	.0	39400	754	0	.0
9	21600	818	19600	1540	16200	2280	0	.0	39300	457	0	.0
10	21300	634	34400	5120	16000	3680	0	.0	107000	61500	61500	33
11	20600	424	40200	8370	15700	4020	0	.0	71900	7960	77500	110000
12	19800	477	36200	7810	41400	27000	0	.0	48700	2760	66100	25000
13	21000	520	37700	6720	84300	177000	0	.0	55900	2720	57700	11100
14	19500	490	32500	4120	59100	31100	0	.0	40700	758	49600	5760
15	16000	311	31900	3360	61100	32700	8210	399	38900	378	40700	759
16	14600	324	30700	2480	44200	7990	43300	1020	43400	328	38800	523
17	14200	288	27500	1630	37100	2900	32300	384	36000	233	37200	453
18	14000	333	23800	1090	31600	1710	31400	1440	57600	1430	35000	407
19	13000	455	21700	760	29400	954	54100	7880	44600	361	24700	200
20	12000	552	32500	4470	27300	619	40000	1050	35900	155	15400	91
21	12200	461	36700	11000	25700	452	34300	241	33600	84	13600	84
22	27800	1500	39600	21800	26400	328	27200	1760	27800	27	11800	70
23	29400	1980	34600	11300	26300	227	69900	40000	32100	269	11400	65
24	24000	1680	31700	7960	22700	135	60200	19700	21300	22	11200	55
25	17200	881	32100	7620	17600	81	87400	162000	49900	1620	10600	37
26	21800	1180	29100	6750	14800	48	71100	47200	47600	1250	8140	19
27	23000	1370	26700	6050	13100	21	54300	5130	36000	224	6400	10
28	16900	774	24500	5030	11900	11	40200	2060	32900	133	5610	6.8
29	17200	698	24700	3470	21000	148	21600	584	26300	17	5450	6.3
30	15400	415	21900	2120	25200	95	7640	130	17600	2.4	5170	5.4
31	---	---	20800	2080	---	---	7050	95	34200	268	---	---
TOTAL	---	19966	---	138935	---	308339	---	291161.0	---	96665.4	---	172526.9
TOTAL LOAD FOR YEAR: 1098411.54 TONS.												

RIO GRANDE BASIN

08341300 BLUEWATER CREEK ABOVE BLUEWATER DAM, NEAR BLUEWATER, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.20	.23	e.25	e.34	.66	.63	.35	.13	.00	.00	.00
2	.06	.22	.22	e.24	e.35	.62	.62	.51	.13	.00	.01	.01
3	.08	.22	.23	e.25	e.33	.57	.56	.70	.15	.05	.00	.00
4	.11	.20	.24	e.23	e.34	.62	.51	.97	.14	.14	.00	.00
5	.18	.20	.24	e.21	e.35	.71	.51	.86	.13	.10	.00	.01
6	.22	.19	.23	e.22	e.35	.71	.48	.72	.12	.24	.00	.03
7	.23	.21	.22	e.21	e.36	.69	.53	.62	.10	.13	.00	.10
8	.19	.20	.22	e.22	e.36	.65	.50	.55	.11	.10	.00	.07
9	.18	.20	.24	e.21	e.32	.62	.45	.46	.13	.09	.00	.03
10	.16	.19	.23	e.23	e.33	.56	.42	.42	.16	.16	.00	.01
11	.16	.21	.18	e.24	e.34	.63	.51	.38	.16	.19	.00	.00
12	.17	.21	.21	e.25	e.34	.66	.29	.39	.13	.10	.00	.00
13	.15	.23	.23	e.23	.39	.68	.27	.37	.11	.13	.05	.00
14	.16	.21	.24	e.24	.44	.67	.25	.37	.09	.14	.04	.00
15	.21	.20	.26	e.25	.55	.63	.24	.35	.08	.09	.12	.00
16	.14	.21	.23	e.24	e.56	.57	.27	.46	.08	.13	.06	.01
17	.12	.20	.24	e.25	e.55	.53	.33	.32	.05	.10	.02	.01
18	.15	.20	.23	e.27	e.55	.54	.41	.25	.04	.09	.01	.01
19	.14	.20	.23	e.26	e.55	.64	.51	.26	.03	.07	.00	.10
20	.16	.20	.24	e.27	e.52	.55	.54	.28	.02	.05	.10	.12
21	.21	.22	e.24	e.29	e.54	.44	.49	.25	.02	.06	.10	.08
22	.19	.22	e.24	e.28	e.57	.41	.44	.21	.01	.04	.06	.13
23	.18	.20	e.23	e.29	e.58	.40	.37	.19	.01	.06	.04	.24
24	.19	.19	e.25	e.30	e.62	.39	.40	.18	.00	.06	.02	.14
25	.19	.19	e.24	e.30	.71	.36	.47	.15	.01	.03	.01	.11
26	.22	.19	e.24	e.31	.79	.33	.49	.16	.01	.01	.01	.10
27	.22	.19	e.25	e.31	.76	.34	.45	.18	.02	.00	.02	.10
28	.23	.19	e.24	e.32	.66	.37	.36	.17	.10	.00	.04	.11
29	.23	.20	e.25	e.32	---	.43	.30	.19	.03	.00	.01	.12
30	.22	.22	e.25	e.33	---	.53	.30	.17	.00	.00	.00	.12
31	.22	---	e.25	e.33	---	.64	---	.15	---	.01	.00	---
TOTAL	5.34	6.11	7.27	8.15	13.45	17.15	12.90	11.59	2.30	2.37	0.72	1.76
MEAN	.17	.20	.23	.26	.48	.55	.43	.37	.077	.076	.023	.059
MAX	.23	.23	.26	.33	.79	.71	.63	.97	.16	.24	.12	.24
MIN	.06	.19	.18	.21	.32	.33	.24	.15	.00	.00	.00	.00
AC-FT	11	12	14	16	27	34	26	23	4.6	4.7	1.4	3.5

e Estimated

RIO GRANDE BASIN

08341300 BLUEWATER CREEK ABOVE BLUEWATER DAM, NEAR BLUEWATER, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.10	e.03	e.07	e.11	13	108	6.1	1.3	.54	.46	.16
2	.11	.16	e.03	e.07	e.11	10	166	5.5	1.8	.57	.68	.17
3	.09	.13	e.03	e.07	e.11	14	166	4.9	2.0	.91	.86	.19
4	.08	.10	e.03	e.08	e.12	23	155	4.6	1.6	.63	1.5	.21
5	.08	.09	e.04	e.08	e.12	77	162	4.1	1.3	.62	4.3	.50
6	.08	.10	e.04	e.08	e.12	331	162	4.0	1.4	.60	1.6	.72
7	.09	e.09	e.04	e.08	e.12	134	145	3.8	1.2	.63	1.1	.59
8	.10	e.09	e.04	e.08	e.12	69	107	3.3	1.1	.65	3.6	.46
9	.11	e.06	e.04	e.08	e.12	52	74	3.2	1.0	.84	1.4	.37
10	.12	e.06	e.04	e.08	e.12	48	59	2.9	1.0	.72	1.4	.36
11	.08	e.03	e.04	e.08	e.24	66	50	2.6	1.2	.62	1.0	.36
12	.09	e.03	e.04	e.09	.66	59	39	2.4	1.9	.57	.91	.37
13	.10	e.03	e.05	e.09	1.7	48	30	2.4	1.9	.62	.68	.30
14	.10	e.03	e.05	e.09	3.3	42	25	2.3	1.7	.67	.56	.26
15	.10	e.03	e.05	e.09	4.0	32	22	2.0	1.5	.58	.50	.21
16	.10	e.03	e.05	e.09	6.3	28	22	2.1	1.3	.63	.49	.18
17	.10	e.03	e.05	e.09	10	25	21	1.9	1.0	.69	.48	.17
18	.10	e.03	e.05	e.09	8.4	29	20	1.7	.89	.89	.68	.17
19	.10	e.03	e.05	e.10	6.7	37	19	1.6	.85	1.0	.72	.18
20	.20	e.04	e.06	e.10	5.9	36	17	1.6	.92	1.1	.54	.19
21	.15	e.04	e.06	e.10	6.3	42	16	1.7	.81	1.9	.44	.19
22	.12	e.04	e.06	e.10	6.5	33	14	2.0	.75	1.3	.41	.17
23	.05	e.04	e.06	e.10	6.7	36	13	1.8	.68	.89	.41	.17
24	.05	e.04	e.06	e.10	8.7	51	12	1.6	.63	1.2	.33	.18
25	.06	e.04	e.06	e.10	11	64	11	1.4	.58	1.1	.33	.16
26	.07	e.04	e.06	e.10	10	67	11	1.3	.54	2.1	.29	.17
27	.06	e.04	e.06	e.10	9.1	61	10	1.2	.51	1.2	.27	.23
28	.06	e.03	e.07	e.11	11	67	8.9	1.2	.56	.79	.23	.25
29	.07	e.03	e.07	e.11	---	58	8.0	1.1	.55	.67	.20	.24
30	.07	e.03	e.07	e.11	---	50	6.8	1.1	.57	.53	.19	.27
31	.09	---	e.07	e.11	---	64	---	1.0	---	.46	.17	---
TOTAL	2.89	1.66	1.55	2.82	117.67	1766	1679.7	78.4	33.04	26.22	26.73	8.15
MEAN	.093	.055	.050	.091	4.20	57.0	56.0	2.53	1.10	.85	.86	.27
MAX	.20	.16	.07	.11	.11	331	166	6.1	2.0	2.1	4.3	.72
MIN	.05	.03	.03	.07	.11	10	6.8	1.0	.51	.46	.17	.16
AC-FT	5.7	3.3	3.1	5.6	233	3500	3330	156	66	52	53	16

CAL YR 1990 TOTAL 76.49 MEAN .21 MAX .97 MIN .00 AC-FT 152
WTR YR 1991 TOTAL 3744.83 MEAN 10.3 MAX 331 MIN .03 AC-FT 7430

e Estimated

RIO GRANDE BASIN

08341365 COTTONWOOD CREEK NEAR THOREAU, NM

LOCATION.--Lat 35°20'32", long 106°12'42", in NE¼SE¼ sec.21, T.13 N., R. 13 W., McKinley County, Hydrologic Unit 13020207, on left bank 4.0 mi southeast of Thoreau, and 4.0 mi southwest of north end of Bluewater Lake.

DRAINAGE AREA.--77.0 mi.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,415 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft³/s, March 5, 1991, gage height 4.85 ft from rating curve extended above 1.00 ft³/s; no flow most of time.

EXTREMES FOR JULY TO SEPTEMBER 1989.--Maximum daily discharge 60 ft³/s, August 1; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum daily 0.40 ft³/s July 11, September 23; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 475 ft³/s, March 5, 1991, gage height 4.85 ft from rating curve extended above 1.00 ft³/s; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	e6.0	e.00
2	---	---	---	---	---	---	---	---	---	---	e2.5	e.00
3	---	---	---	---	---	---	---	---	---	---	e1.0	e.00
4	---	---	---	---	---	---	---	---	---	---	e.50	e.00
5	---	---	---	---	---	---	---	---	---	---	e.20	e.05
6	---	---	---	---	---	---	---	---	---	---	e.05	e.08
7	---	---	---	---	---	---	---	---	---	---	e.00	e.00
8	---	---	---	---	---	---	---	---	---	---	e.00	e.00
9	---	---	---	---	---	---	---	---	---	---	e.00	e.00
10	---	---	---	---	---	---	---	---	---	---	e.00	e.00
11	---	---	---	---	---	---	---	---	---	---	e.00	e.00
12	---	---	---	---	---	---	---	---	---	---	e.00	e.00
13	---	---	---	---	---	---	---	---	---	---	e.00	e.00
14	---	---	---	---	---	---	---	---	---	---	e.00	e.00
15	---	---	---	---	---	---	---	---	---	---	e.00	e.00
16	---	---	---	---	---	---	---	---	---	---	e.00	e.00
17	---	---	---	---	---	---	---	---	---	---	e.00	e.00
18	---	---	---	---	---	---	---	---	---	---	e.00	e.00
19	---	---	---	---	---	---	---	---	---	---	e.00	e.00
20	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
21	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
22	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
23	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
24	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
25	---	---	---	---	---	---	---	---	---	e.00	e.00	e.00
26	---	---	---	---	---	---	---	---	---	e4.0	e.00	e.00
27	---	---	---	---	---	---	---	---	---	e.05	e.00	e.00
28	---	---	---	---	---	---	---	---	---	e1.0	e.00	e.00
29	---	---	---	---	---	---	---	---	---	e.08	e.00	e.00
30	---	---	---	---	---	---	---	---	---	e1.5	e.00	e.00
31	---	---	---	---	---	---	---	---	---	e3.0	e.00	---
TOTAL	---	---	---	---	---	---	---	---	---	---	10.25	0.13
MEAN	---	---	---	---	---	---	---	---	---	---	.33	.004
MAX	---	---	---	---	---	---	---	---	---	---	6.0	.08
MIN	---	---	---	---	---	---	---	---	---	---	.00	.00
AC-FT	---	---	---	---	---	---	---	---	---	---	20	.3

e Estimated

RIO GRANDE BASIN

08341365 COTTONWOOD CREEK NEAR THOREAU, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.08	e.00	e.00	e.00
2	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.06	e.00	e.00	e.00
3	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.06	e.00	e.00	e.00
4	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.04	e.00	e.00	e.00
5	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.02	e.00	e.00	e.00
6	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.03	e.40	e.00	e.00
7	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.20
8	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
9	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
10	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
11	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.10	e.10	e.00	e.00
12	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
13	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
14	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
15	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.20	e.00
16	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
17	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
18	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
19	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
20	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.20
21	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
22	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.20
23	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.40
24	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
25	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
26	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
27	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
28	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00	e.00
29	e.00	e.00	e.00	e.00	---	e.00	e.00	e.00	e.00	e.00	e.00	e.00
30	e.00	e.00	e.00	e.00	---	e.00	e.00	e.00	e.00	e.00	e.00	e.00
31	e.00	---	e.00	e.00	---	e.00	---	e.00	---	e.00	e.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.50	0.20	1.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.013	.016	.006	.033
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.10	.40	.20	.40
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.8	1.0	.4	2.0

WTR YR 1990 TOTAL 2.09 MEAN .006 MAX .40 MIN .00 AC-FT 4.1

e Estimated

RIO GRANDE BASIN

08341365 COTTONWOOD CREEK NEAR THOREAU, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.00	e.00	e.10	e5.0	123	2.5	.04	.00	.00	.00
2	e.00	e.00	e.00	e.00	e.10	e8.0	177	2.2	.26	.00	.00	.00
3	e.00	e.00	e.00	e.00	e.10	e10	196	1.9	.24	.00	.00	.00
4	e.00	e.00	e.00	e.00	e.12	e15	197	1.7	.20	.00	.00	.00
5	e.00	e.00	e.00	e.00	e.12	e65	231	1.5	.23	.00	1.4	.00
6	e.00	e.00	e.00	e.00	e.12	e85	244	1.3	.27	.00	6.2	.00
7	e.00	e.00	e.00	e.00	e.14	75	204	1.2	.22	.00	.45	.00
8	e.00	e.00	e.00	e.00	e.14	33	135	1.1	.14	.00	.25	.00
9	e.00	e.00	e.00	e.00	e.20	21	80	1.0	.06	.00	.12	.00
10	e.00	e.00	e.00	e.00	e.20	20	61	.88	.04	.00	.01	.00
11	e.00	e.00	e.00	e.00	e.50	31	50	.80	.02	.00	.00	.00
12	e.00	e.00	e.00	e.00	e.50	28	32	.70	.25	.00	.00	.00
13	e.00	e.00	e.00	e.00	e1.0	27	21	.63	.21	.00	.00	.00
14	e.00	e.00	e.00	e.00	e1.0	22	16	.57	.17	.00	.00	.00
15	e.00	e.00	e.00	e.00	e2.0	15	15	.52	.18	.00	.00	.00
16	e.00	e.00	e.00	e.00	e2.0	11	14	.48	.12	.00	.00	.00
17	e.00	e.00	e.00	e.00	e4.0	9.5	12	.48	.00	.00	.00	.00
18	e.00	e.00	e.00	e.00	e2.0	16	11	.43	.00	.00	.00	.00
19	e.00	e.00	e.00	e.00	e1.0	22	9.5	.38	.00	.00	.00	.00
20	e.00	e.00	e.00	e.00	e1.0	28	8.4	.34	.00	.04	.00	.00
21	e.00	e.00	e.00	e.00	e2.0	29	7.3	.35	.00	1.1	.00	.00
22	e.00	e.00	e.00	e.00	e1.0	23	6.5	.40	.00	.10	.00	.00
23	e.00	e.00	e.00	e.00	e1.0	25	5.5	.39	.00	.00	.00	.00
24	e.00	e.00	e.00	e.00	e2.0	39	4.8	.34	.00	.00	.00	.00
25	e.00	e.00	e.00	e.05	e5.0	54	4.1	.27	.00	.00	.00	.00
26	e.00	e.00	e.00	e.05	e3.5	52	3.8	.23	.00	.20	.00	.00
27	e.00	e.00	e.00	e.08	e2.0	51	4.6	.17	.00	.07	.00	.00
28	e.00	e.00	e.00	e.08	e4.0	72	3.5	.13	.00	.00	.00	.00
29	e.00	e.00	e.00	e.08	---	56	3.1	.07	.00	.00	.00	.00
30	e.00	e.00	e.00	e.10	---	46	2.8	.05	.00	.00	.00	.00
31	e.00	---	e.00	e.10	---	63	---	.04	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.54	36.84	1056.5	1882.9	23.05	2.65	1.51	8.43	0.00
MEAN	.0000	.0000	.0000	.017	1.32	34.1	62.8	.74	.088	.049	.27	.0000
MAX	.00	.00	.00	.10	5.0	85	244	2.5	.27	1.1	6.2	.00
MIN	.00	.00	.00	.00	.10	5.0	2.8	.04	.00	.00	.00	.00
AC-FT	.00	.00	.00	1.1	73	2100	3730	46	5.3	3.0	17	.00

CAL YR 1990 TOTAL 14.93 MEAN .041 MAX .15 MIN .00 AC-FT 30
WTR YR 1991 TOTAL 3012.42 MEAN 8.25 MAX 244 MIN .00 AC-FT 5980

e Estimated

RIO GRANDE BASIN

08341400 BLUEWATER LAKE NEAR BLUEWATER, NM

LOCATION.--Lat 35°17'31", long 108°06'40", in SE¼ sec.9, T.12 N., R.12 W., Cibola County, Hydrologic Unit 13020207, at left end of Bluewater Dam on Bluewater Creek, and 9.5 mi west of Bluewater.

DRAINAGE AREA.--201 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 7,345.57 ft above National Geodetic Vertical Datum of 1929. July 1958 to January 1961, nonrecording gage at nearby site, same datum. Gage heights have been converted to sea level elevations.

REMARKS.--Lake is formed by concrete arch dam. Storage began in 1927. Capacity, 38,500 acre-ft, survey of 1945 at elevation 7,402.6 ft, crest of uncontrolled siphon spillway, which is vented to avoid drawdown below crest, and 44,200 acre-ft, at elevation 7,405.6 ft, crest of ungated spillway over dam. Capacity table used through 1944 showed a capacity of 50,300 acre-ft at crest of ungated spillway over dam, and that used from 1945-50, 43,500 acre-ft. Tables used prior to 1958 are not available and no adjustments are made for changes in tables. Dead storage, 3.4 acre-ft at elevation 7,345.4 ft, sill of lower outlet tube. Lake not usually drawn below conservation-pool-level elevation, 7,365.36 ft, below which ownership is by State Game and Fish Department. Above this level, water is owned and used by Bluewater-Toltec Irrigation Co. Figures given herein represent total contents at 2400 hours.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents determined, 47,100 acre-ft, Apr. 30, 1941. Contents may have been greater on Apr. 28, 1941, when peak discharge of 800 ft³/s occurred at station 8 mi downstream; no storage at times prior to 1947.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,030 acre-ft, April 27, elevation, 7,385.0 ft; minimum, 2,210 acre-ft, Dec.17, elevation, 7,361.1 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,362.2	2,470	-----
Oct. 31	7,361.6	2,320	- 150
Nov. 30	7,361.3	2,250	- 70
Dec. 31	7,361.2	2,230	- 20
CAL YR 1990			- 240
Jan. 31	7,361.7	2,350	+ 120
Feb. 28	7,364.6	3,120	+ 770
Mar. 31	7,378.2	9,600	+6,480
Apr. 30	7,384.9	15,000	+5,400
May 31	7,381.8	12,340	-2,660
June 30	7,379.4	10,480	-1,860
July 31	7,376.0	8,120	-2,360
Aug. 31	7,372.6	6,180	-1,940
Sept. 30	7,369.4	4,760	-1,420
WTR YR 1991			-2,290

RIO GRANDE BASIN

08341400 BLUEWATER LAKE NEAR BLUEWATER, NM -- Continued

WATER-QUALITY RECORDS

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

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)
DEC 07...	0930	910	8.8	-0.5	1.0	11.2	530	400	150	37
FEB 27...	1230	340	9.4	6.5	3.5	17.9	160	86	45	11
MAY 10...	1030	--	8.3	19.5	10.5	8.4	--	--	--	--
JUN 17...	1130	381	8.4	28.0	19.5	--	180	84	54	12

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
DEC 07...	20	0.4	3.2	138	10	129	430	10	0.30
FEB 27...	7.2	0.2	2.8	37	25	72	100	3.3	0.20
MAY 10...	--	--	--	103	0	84	--	--	--
JUN 17...	8.3	0.3	2.1	122	0	100	91	5.6	0.20

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
DEC 07...	13	741	1	1	80	<1	<1.0	<1	<1	2
FEB 27...	5.9	219	--	--	30	--	--	--	--	--
JUN 17...	12	245	--	--	50	--	--	--	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC 07...	1	<3	1	<1	0.70	0.2	<1	<1	<10	7
FEB 27...	--	17	--	--	--	--	--	--	--	--
JUN 17...	--	20	--	--	--	--	--	--	--	--

LOCATION.--Lat 35°18'13", long 108°05'56", in NW¼NW¼ sec.3, T.12 N., R. 12 W., Cibola County, Hydrologic Unit 13020207, on left bank 0.5 mi downstream from Bluewater Dam and 11 mi west of Bluewater.

PERIOD OF RECORD.--March 1951 to September 1960, July 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,290 ft above National Geodetic Vertical Datum of 1929, from topographic map. March 14, 1951 to September 30, 1960 at site 0.5 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Bluewater Lake (station 08341400) 0.5 mi upstream, since 1927.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63 ft³/s May 26, 1991, gage height, 3.18 ft from rating curve extended above 50 ft³/s; no flow at times in 1955, 1957. Maximum flood known occurred Sept. 6, 1909, where Bluewater Dam washed out; stage and discharge not determined. Another major flood probably occurred July 12-19, 1919 when a stage of 13.5 was reached at station 08342000 8.0 mi downstream.

EXTREMES FOR JULY TO SEPTEMBER 1989.--Maximum discharge, 43 ft³/s, at 1415 hours July 27, gage height, 2.90 ft; minimum daily, 0.33 ft³/s, Sept. 16, 17, 21.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 41 ft³/s, at 1745 hours August 27, gage height, 2.86 ft; minimum daily, 0.31 ft³/s July 29.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft³/s at 1515 hours, May 26, gage height, 3.18 ft, from rating curve extended above 50 ft³/s; minimum daily, 0.14 ft³/s Dec. 9.

[illegible]

RIO GRANDE BASIN

08341500 BLUEWATER CREEK BELOW BLUEWATER DAM, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.57	.75	.80	.50	.87	.61	.58	.43	.42	e.40	.54
2	.41	.57	.75	.84	.54	.80	.55	.86	.44	.46	e.42	.56
3	.42	.57	.74	.91	.53	.74	.57	1.1	.44	.56	e.42	.55
4	.50	.57	.75	.89	.48	.73	.61	.86	.45	.59	e.42	.53
5	.69	.57	.77	.82	.48	.79	.64	.68	.46	.75	e.43	.54
6	.51	.57	.78	.77	.49	.79	.61	.62	.43	.74	e.40	.52
7	.48	.58	.73	.75	.56	.75	.59	.63	.44	.61	e.40	.58
8	.46	.58	.74	.77	.56	.75	.58	.58	.44	.57	e.37	.57
9	.44	.58	.76	.79	.55	.73	.57	.55	.46	.67	e.42	.55
10	.47	.62	.74	.80	.62	.68	.55	.61	.50	.67	e.43	.52
11	.47	.62	.68	.81	.71	.70	.54	.62	.51	.69	e.40	.52
12	.47	.62	.67	.80	.81	.67	.54	.63	.45	.59	e.42	.52
13	.46	.62	.71	.84	.87	.72	.55	.65	.42	.53	e.43	.52
14	.47	.62	.72	.80	.87	.71	.54	.70	.42	.57	e.40	.49
15	.45	.62	.76	.78	.78	.72	.54	.67	.43	.54	e.35	.48
16	.45	.62	.80	.75	.74	.73	.56	.68	.43	.50	e.34	.52
17	.45	.62	.81	.69	.77	.73	.65	.68	.46	.55	e.34	.54
18	.46	.62	.83	.66	.78	.68	.82	.72	.46	e.40	e.35	.52
19	.48	.62	.83	.72	.75	.67	.76	.67	.50	e.33	e.36	1.1
20	.57	.64	.85	.72	.73	.65	.70	.69	.50	e.33	e.37	.82
21	.61	.67	.84	.69	.76	.62	.66	.74	.43	e.34	e.36	.60
22	.55	.67	.84	.70	.91	.57	.65	.76	.44	e.40	e.37	.84
23	.52	.67	.86	.72	.94	.57	.64	.72	.46	e.34	e.39	1.1
24	.53	.67	.88	.73	.93	.63	.76	.73	.47	e.33	.38	.59
25	.53	.67	.87	.66	.92	.63	.84	.75	.48	e.33	.35	.54
26	.52	.67	.83	.69	.90	.57	.74	.65	.51	e.32	.38	.52
27	.53	.66	.81	.70	.89	.52	.66	.40	.50	e.34	2.4	.51
28	.49	.67	.85	.60	.87	.51	.58	.40	.49	e.32	.78	.54
29	.49	.68	.84	.62	---	.59	.44	.43	.46	e.31	.54	.80
30	.50	.69	.84	.59	---	.65	.50	.44	.42	e.33	.51	.60
31	.55	---	.82	.54	---	.60	---	.43	---	e.33	.52	---
TOTAL	15.33	18.72	24.45	22.95	20.24	21.07	18.55	20.23	13.73	14.76	14.85	18.13
MEAN	.49	.62	.79	.74	.72	.68	.62	.65	.46	.48	.48	.60
MAX	.69	.69	.88	.91	.94	.87	.84	1.1	.51	.75	2.4	1.1
MIN	.40	.57	.67	.54	.48	.51	.44	.40	.42	.31	.34	.48
AC-FT	30	37	48	46	40	42	37	40	27	29	29	36

WTR YR 1990 TOTAL 223.01 MEAN .61 MAX 2.4 MIN .31 AC-FT 442

e Estimated

RIO GRANDE BASIN

08341500 BLUEWATER CREEK BELOW BLUEWATER DAM, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.49	.48	.36	e.40	.65	2.4	14	27	26	45	37
2	.59	.58	.48	.36	e.42	.70	2.4	15	26	26	45	37
3	.57	.56	.45	.36	e.42	.58	2.5	20	16	26	46	37
4	.55	.52	.39	.45	.41	.57	2.7	29	22	27	46	37
5	.54	.52	.17	.50	.43	.70	2.9	34	26	30	46	37
6	.52	.52	.16	.44	.38	.76	3.1	35	30	33	35	33
7	.48	.57	.15	.40	.43	.72	3.2	36	30	33	35	27
8	.48	.58	.15	.38	.44	.77	3.3	37	32	37	34	26
9	.48	.56	.14	.39	.45	.84	3.5	38	33	39	30	28
10	.48	.52	.18	.40	.50	.93	3.5	37	31	39	30	28
11	.49	.52	.21	.37	.50	.97	3.7	38	30	42	30	28
12	.51	.52	.21	.35	.55	1.0	3.8	38	30	43	30	26
13	.48	.52	.26	.38	.65	1.1	3.9	38	29	43	36	25
14	.48	.50	.24	.37	.53	1.2	3.9	37	27	44	37	22
15	.48	.48	.21	.35	.45	1.2	3.9	38	21	49	44	17
16	.49	.48	.28	.36	.48	1.3	3.9	39	16	51	50	17
17	.49	.48	.25	.35	.48	1.3	4.1	42	18	49	50	17
18	.48	.48	.22	.36	.41	1.3	4.0	46	19	47	50	17
19	.49	.48	.22	.40	.41	1.4	4.0	50	24	45	51	16
20	.75	.48	.26	.41	.41	1.5	4.0	55	25	39	47	15
21	.52	.48	.28	.40	.42	1.6	4.1	58	29	39	43	17
22	.52	.48	.29	.40	.42	1.6	4.1	58	29	39	43	21
23	.52	.48	.30	.38	.41	1.7	4.2	58	30	35	42	21
24	.51	.48	.33	.37	.41	1.7	4.2	58	32	31	42	24
25	.50	.48	.33	.38	.44	1.8	4.2	59	35	31	40	23
26	.48	.52	.33	.37	.44	2.0	4.4	58	33	32	39	23
27	.48	.50	.33	.41	.43	2.0	4.2	56	28	38	38	20
28	.48	.47	.33	.41	.49	2.1	4.2	56	28	38	38	20
29	.50	.47	.33	.38	---	2.2	4.2	54	26	38	38	20
30	.48	.47	.36	.38	---	2.3	5.8	50	26	38	38	19
31	.48	---	.36	e.40	---	2.3	---	36	---	45	38	---
TOTAL	15.89	15.19	8.68	12.02	12.61	40.79	112.3	1317	808	1172	1256	735
MEAN	.51	.51	.28	.39	.45	1.32	3.74	42.5	26.9	37.8	40.5	24.5
MAX	.75	.58	.48	.50	.65	2.3	5.8	59	35	51	51	37
MIN	.48	.47	.14	.35	.38	.57	2.4	14	16	26	30	15
AC-FT	32	30	17	24	25	81	223	2610	1600	2320	2490	1460

CAL YR 1990 TOTAL 204.27 MEAN .56 MAX 2.4 MIN .14 AC-FT 405
WTR YR 1991 TOTAL 5505.48 MEAN 15.1 MAX 59 MIN .14 AC-FT 10920

e Estimated

RIO GRANDE BASIN

08343000 RIO SAN JOSE AT GRANTS, NM

LOCATION.--Lat 35°09'16", long 107°52'11", in SW¼NW¼ sec.26, T.11 N., R.10 W., Cibola County, Hydrologic Unit 13020207, on right bank at bridge on El Morro St., 0.2 mi south of Santa Fe Ave. in Grants, and at mile 67.8.

DRAINAGE AREA.--1,020 mi², approximately.

PERIOD OF RECORD.--October 1912 to February 1914, June 1914, October 1914 to February 1915, May 1915 to June 1921, September 1921 to June 1923, October 1923 to May 1926, September to December 1926, May 1949 to September 1966, June 1968 to current year. Monthly discharge only for some periods published in WSP 1312. Prior to October 1967, published as Bluewater Creek at Grants.

REVISED RECORDS.--WSP 1512: 1913-14. WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,468.34 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). See WSP 1732 or 1923 for history of changes prior to Jan. 1, 1926.

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

AVERAGE DISCHARGE.--50 years (water years 1913, 1915-20, 1922, 1924, 1925, 1950-66, 1968-91), 2.80 ft³/s, 2,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1950-66 AND SINCE 1968).--Maximum discharge recorded, 1,760 ft³/s, Aug. 28, 1952, gage height, 5.35 ft, from rating curve extended above 300 ft³/s on basis of velocity-area studies; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Sept. 6 or 7, 1909, when Bluewater Dam washed out. A flood in July 1919 probably exceeded the one in 1952.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 4	1930	*12.0	*1.86				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.67	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47	0.00
MEAN	.20	.000	.000	.000	.000	.000	.000	.000	.000	.000	.11	.000
MAX	3.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.9	.00

CAL YR 1990 TOTAL 30.72 MEAN .084 MAX 6.8 MIN .00 AC-FT 61
WTR YR 1991 TOTAL 9.77 MEAN .027 MAX 3.6 MIN .00 AC-FT 19

RIO GRANDE BASIN

08343100 GRANTS CANYON AT GRANTS, NM

LOCATION.--Lat 35°09'39", long 107°50'15", in NE¼NE¼ sec.25, T.11 N., R.10 W., Cibola County, Hydrologic Unit 13020207, on upstream side of culvert under Roosevelt Avenue, in Grants, 0.2 mi east of intersection of Roosevelt and First Avenues, and 1.1 mi upstream from confluence with Rio San Jose (formerly Bluewater Creek).

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder and culvert control. Elevation of gage is 6,450 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

AVERAGE DISCHARGE.--30 years, 0.112 ft³/s, 81 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s, Aug. 26, 1963, gage height, 5.10 ft, from rating curve extended above 240 ft³/s on basis of slope-area measurements at gage heights 3.17 ft, 5.10 ft, and 5.38 ft; maximum gage height, 5.38 ft, Sept. 8, 1967; no flow most of time.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 4	0130	*64	*1.03				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.1	.00
5	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.10	0.00
MEAN	.048	.000	.000	.000	.000	.000	.000	.000	.000	.000	.13	.000
MAX	1.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.1	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.1	.00

CAL YR 1990 TOTAL 25.60 MEAN .070 MAX 14 MIN .00 AC-FT 51
WTR YR 1991 TOTAL 5.60 MEAN .015 MAX 4.1 MIN .00 AC-FT 11

e Estimated

RIO GRANDE BASIN

08343500 RIO SAN JOSE NEAR GRANTS, NM

LOCATION.--Lat 35°04'27", long 107°45'01", in SE¼ sec.23, T.10 N., R.9 W., Cibola County, Hydrologic Unit 13020207, on right bank at west boundary of Acoma Pueblo Grant, 8.5 mi southeast of Grants, and at mile 57.4.

DRAINAGE AREA.--2,300 mi², approximately, of which 1,130 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as San Jose River near Grants.

REVISED RECORDS.--WSP 898: 1936-39(M). WSP 1512: 1943. WSP 1712: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,269.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Flow slightly regulated by Bluewater Lake (station 08341400), 34 mi upstream. Diversions and ground-water withdrawal for irrigation of about 5,100 acres upstream from station.

AVERAGE DISCHARGE.--55 years, 6.65 ft³/s, 4,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft³/s, Sept. 20, 1963, gage height, 4.87 ft, from rating curve extended above 450 ft³/s on basis of slope-area measurements at gage heights 3.19 ft and 4.87 ft; minimum, 1.9 ft³/s, Feb. 21, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood probably occurred Sept. 6 or 7, 1909, following destruction of Bluewater Dam. The peak of Sept. 20, 1963, may have been exceeded by those of July 1919, August and September 1929, and August 1935.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 12	1730	*251	*2.98	Aug. 5	2330	180	2.70
Aug. 4	0230	161	2.62				

Minimum daily discharge, 2.6 ft³/s, Oct. 6-8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.6	3.9	e5.1	5.5	5.4	4.7	3.8	7.1	7.9	9.5	4.5
2	4.3	3.8	3.9	e5.3	5.7	5.4	4.4	3.9	7.6	8.0	18	4.3
3	7.1	3.8	3.8	e5.4	6.2	5.5	4.6	3.8	7.8	7.9	11	4.3
4	3.8	5.4	3.6	e5.6	6.2	5.5	4.5	3.8	7.9	7.8	23	4.4
5	2.8	5.2	3.8	e6.0	6.0	5.5	4.4	4.0	8.2	7.5	32	4.9
6	2.6	4.9	4.1	e6.8	5.8	5.5	4.1	4.2	8.6	7.1	45	12
7	2.6	4.2	4.1	e6.2	5.7	5.4	3.9	4.5	8.8	7.0	10	5.9
8	2.6	4.5	4.2	e5.3	5.7	4.8	3.8	4.6	8.8	6.7	8.8	5.4
9	2.7	6.1	4.4	e5.2	5.6	4.7	3.7	4.8	8.7	6.5	7.6	5.3
10	2.8	4.9	4.7	e5.4	5.6	4.7	3.7	4.6	8.9	6.3	6.7	5.4
11	2.9	4.4	4.8	e5.7	5.7	4.6	3.7	4.7	8.9	5.9	6.3	5.4
12	3.1	4.1	5.2	e5.5	5.9	4.5	3.5	4.6	28	5.5	6.2	11
13	3.1	4.1	6.3	e5.4	5.9	4.6	3.3	3.8	9.4	5.0	6.0	7.8
14	3.2	4.1	6.6	e5.4	5.9	4.7	3.3	2.9	8.4	4.7	6.0	6.9
15	3.4	3.8	6.0	e5.3	5.9	4.6	3.4	2.8	5.2	4.3	5.7	7.0
16	3.4	4.0	6.1	e5.3	6.0	4.5	3.6	2.9	3.7	4.3	5.8	6.7
17	3.4	3.8	6.4	e5.4	6.1	4.7	3.6	3.2	3.2	4.1	5.9	6.6
18	3.4	3.8	e5.6	e5.6	6.1	4.7	3.4	3.4	3.2	3.7	6.0	6.6
19	3.4	3.8	e5.7	e5.6	5.9	4.7	3.2	3.5	3.5	4.4	6.6	6.6
20	3.6	3.9	e5.6	e5.5	5.6	4.7	3.1	3.7	3.7	4.8	6.8	6.6
21	3.7	3.8	e5.6	e5.3	5.3	4.7	3.1	4.1	4.0	4.8	6.9	6.5
22	4.1	3.8	e5.4	e5.4	5.3	4.5	3.1	5.8	4.4	5.5	6.2	6.3
23	3.7	3.8	e5.3	5.6	5.3	4.1	3.1	5.6	5.0	7.1	6.0	6.3
24	3.5	3.7	e5.2	5.6	5.3	4.4	3.3	4.9	5.3	6.4	5.7	6.3
25	3.4	3.7	e5.3	5.6	5.3	4.4	3.3	4.8	5.7	6.2	5.9	6.3
26	3.3	3.9	e5.3	5.9	5.3	4.4	3.2	5.3	6.1	7.4	5.4	6.3
27	3.2	3.9	e4.9	5.9	5.3	4.5	3.1	5.5	6.5	8.9	5.1	6.3
28	3.1	3.9	e4.7	5.9	5.5	4.8	3.1	5.9	6.8	9.1	4.9	6.3
29	3.3	3.8	e4.8	5.7	---	4.8	3.4	6.2	7.3	8.8	4.8	6.3
30	3.4	3.6	e4.9	5.5	---	4.6	3.6	6.5	7.7	8.6	4.6	6.3
31	3.5	---	e5.0	5.2	---	5.3	---	6.8	---	9.1	4.6	---
TOTAL	106.3	124.1	155.2	172.6	159.6	149.2	108.2	138.9	218.4	201.3	293.0	190.8
MEAN	3.43	4.14	5.01	5.57	5.70	4.81	3.61	4.48	7.28	6.49	9.45	6.36
MAX	7.1	6.1	6.6	6.8	6.2	5.5	4.7	6.8	28	9.1	45	12
MIN	2.6	3.6	3.6	5.1	5.3	4.1	3.1	2.8	3.2	3.7	4.6	4.3
AC-FT	211	246	308	342	317	296	215	276	433	399	581	378

CAL YR 1990 TOTAL 1678.3 MEAN 4.60 MAX 11 MIN 2.3 AC-FT 3330
WTR YR 1991 TOTAL 2017.6 MEAN 5.53 MAX 45 MIN 2.6 AC-FT 4000

e Estimated

RIO GRANDE BASIN

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
DEC 06...	1130	4.1	1680	8.1	1.0	10.5	9.2	15	460	200	100
FEB 25...	1230	5.4	1750	8.1	10.0	12.0	10.1	16	--	--	--
MAY 13...	1400	4.6	1410	8.4	26.5	18.0	7.8	14	420	150	89
JUL 18...	1115	3.6	1210	8.2	29.0	18.0	9.3	17	390	160	93

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
DEC 06...	51	190	4	8.5	315	2	262	410	150	0.30
FEB 25...	--	--	--	--	309	0	253	--	--	--
MAY 13...	47	180	4	7.9	250	34	261	380	150	0.70
JUL 18...	39	150	3	6.8	288	0	236	280	110	0.70

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS N) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
DEC 06...	30	1110	1.87	--	0.030	<0.010	1.90	1.70	0.260	0.260	0.74
FEB 25...	--	--	1.27	1.26	0.030	0.040	1.30	1.30	1.30	1.40	0.60
MAY 13...	26	1040	0.740	0.750	0.020	0.020	0.760	0.770	0.030	0.030	1.3
JUL 18...	28	855	0.610	--	0.020	<0.010	0.630	0.660	0.050	0.040	--

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
DEC 06...	2.9	1.00	0.910	3.6	5	5	440	<1	<1.0	1	<1
FEB 25...	3.2	0.980	1.10	3.7	--	--	710	--	--	--	--
MAY 13...	2.1	1.20	1.10	3.4	--	--	390	--	--	--	--
JUL 18...	--	0.930	0.730	3.5	5	7	320	<1	<1.0	--	<1

RIO GRANDE BASIN

08343500 RIO SAN JOSE NEAR GRANTS, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
DEC 06...	5	3	13	3	3	0.10	0.2	<1	2	<10	7
MAY 13...	--	--	12	--	--	--	--	--	--	--	--
JUL 18...	5	<1	47	4	<1	<0.10	<0.1	4	4	<10	--
DATE	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	
DEC 06...	3.0	9.4	410	5	<10	7	<10	7	6100	10	
DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	
DEC 06...	97	0.02	20	14	0.9	14	2.5	10	2.4	0.13	
DATE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	2, 4-DP TOTAL (UG/L) (82183)	
DEC 06...	5.1	35	0.39	93	<5	K41	--	--	--	--	
FEB 25...	--	14	0.20	100	<1	62	0.01	<0.01	<0.01	<0.01	
MAY 13...	--	164	2.0	52	K5	<2	--	--	--	--	
JUL 18...	3.2	191	1.8	86	K30	78	--	--	--	--	

RIO GRANDE BASIN

08349800 RIO PAGUATE BELOW JACKPILE MINE NEAR LAGUNA, NM

LOCATION.--Lat 35°07'09", long 107°19'58", in SW¼SE¼ sec.2, T.10 N., R.5 W., Cibola County, Hydrologic Unit 13020207, in Paguate Purchase Grant, near right bank on downstream end of bridge abutment of former Atchison, Topeka and Santa Fe Railway Co. bridge, 1.4 mi downstream from Rio Moquino, 4.2 mi upstream from Paguate Reservoir, 5.0 mi southeast of Paguate, and 26 mi east of Grants.

DRAINAGE AREA.--107 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--15 years, 2.74 ft³/s, 1,980 acre-ft/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 20	2215	291	4.21	Sept. 5	2330	238	3.99
Aug. 7	1615	*507	*4.99	Sept. 10	0800	426	4.71

Minimum daily discharge, 0.14 ft³/s, July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	.84	1.1	e2.1	1.2	1.4	1.5	.91	6.6	.45	.62	.62
2	1.9	1.5	1.0	e2.1	1.4	1.3	1.1	.91	6.7	.43	6.8	.70
3	1.7	1.1	.97	e2.1	1.4	1.4	1.2	.90	6.3	.37	5.2	.62
4	1.6	1.2	1.4	e2.2	1.4	1.5	1.1	.88	6.0	.33	12	1.3
5	1.5	.81	1.1	e2.2	1.4	1.5	1.0	.89	5.8	.29	6.5	18
6	1.4	.75	1.8	e2.3	1.4	1.6	.99	.96	6.2	.27	6.2	23
7	1.3	1.1	e1.7	e2.3	1.6	1.6	1.1	.76	5.7	.25	29	5.2
8	1.3	1.0	2.6	e2.4	1.6	1.7	1.3	.80	5.2	.22	3.7	1.8
9	1.2	.93	2.3	e2.5	1.5	1.6	1.3	.80	5.5	.22	1.9	2.3
10	1.3	.82	1.4	e2.6	1.4	1.5	1.2	.80	5.6	.18	1.2	56
11	1.3	.76	e1.7	e2.6	1.4	1.4	1.1	.65	5.3	.19	.89	9.5
12	1.2	.73	e1.5	e2.7	1.2	1.7	1.2	.63	5.3	.21	.76	6.5
13	1.2	.72	e1.6	e2.7	1.1	1.4	1.3	.64	7.4	.23	.57	5.4
14	1.1	.73	e1.6	e2.8	.99	1.4	1.3	.62	7.4	.19	.48	3.9
15	1.1	.72	e1.6	e2.8	1.1	1.3	1.2	.63	3.6	.17	.58	3.0
16	1.0	.73	e1.6	e2.9	1.1	1.8	1.2	.70	2.6	.17	1.7	2.3
17	.93	.75	e1.5	e2.9	1.2	1.8	1.2	.65	1.7	.14	.67	1.9
18	.96	.73	e1.5	e3.0	1.2	1.7	1.1	.67	1.2	.55	.49	1.6
19	.99	.73	e1.7	e3.0	1.4	1.4	1.1	.69	.96	.77	1.4	1.4
20	1.3	.74	e1.7	e3.1	1.5	1.4	.94	21	.90	3.1	.45	1.2
21	1.0	.75	e1.7	e3.1	1.5	1.4	1.1	16	.66	2.1	.31	1.2
22	.99	.73	e1.8	e3.1	1.4	1.3	1.1	6.5	.63	1.5	.28	.93
23	.99	.74	e1.8	e3.0	1.4	1.4	1.0	6.0	.61	.93	.30	2.7
24	1.0	.76	e1.8	e2.8	1.4	1.5	.99	6.2	.53	1.2	.32	1.5
25	.95	.78	e1.9	e2.5	1.5	1.5	.96	6.3	.41	.92	.38	.96
26	.92	.73	e1.9	e2.2	1.6	1.5	.76	6.1	.39	.83	.37	.89
27	.85	.80	e1.9	e2.0	1.6	1.8	.94	5.9	.40	.81	.32	1.1
28	.85	.85	e2.0	e2.0	1.6	1.6	.90	5.9	.51	.77	.41	.84
29	.87	.75	e2.0	1.3	---	1.5	.89	5.9	.99	.75	.50	.80
30	.85	1.1	e2.0	1.6	---	1.6	.73	6.1	.67	.68	.83	.63
31	.83	---	e2.0	1.6	---	1.5	---	6.6	---	.60	.70	---
TOTAL	36.78	25.38	52.17	76.5	38.49	47.0	32.80	112.99	101.76	19.82	85.83	157.79
MEAN	1.19	.85	1.68	2.47	1.37	1.52	1.09	3.64	3.39	.64	2.77	5.26
MAX	2.4	1.5	2.6	3.1	1.6	1.8	1.5	21	7.4	3.1	29	56
MIN	.83	.72	.97	1.3	.99	1.3	.73	.62	.39	.14	.28	.62
AC-FT	73	50	103	152	76	93	65	224	202	39	170	313

CAL YR 1990 TOTAL 858.96 MEAN 2.35 MAX 350 MIN .33 AC-FT 1700
WTR YR 1991 TOTAL 787.31 MEAN 2.16 MAX 56 MIN .14 AC-FT 1560

e Estimated

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
DEC 07...	1230	1.9	1900	8.2	4.0	0.5	11.4	830	560	150
FEB 25...	1100	2.0	1550	8.3	3.5	2.5	11.2	680	400	130
MAY 13...	1045	0.64	2300	8.2	24.0	18.0	7.8	1000	720	170
JUL 18...	1345	0.16	3000	8.2	33.0	27.0	6.8	1400	1200	210

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)
DEC 07...	110	160	2	7.0	272	24	263	950	17
FEB 25...	86	120	2	6.0	308	17	280	700	16
MAY 13...	140	200	3	9.7	342	0	280	1200	22
JUL 18...	210	300	4	12	273	0	222	1800	30

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)
DEC 07...	0.10	20	1570	1	1	100	<1	<1.0	2	<1
FEB 25...	0.40	--	1230	<1	<1	80	<1	2.0	2	<1
MAY 13...	0.40	21	1930	<1	<1	140	<1	<1.0	<1	<1
JUL 18...	0.80	18	2720	<1	1	220	<1	<1.0	--	<1

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
DEC 07...	3	1	9	3	<1	<0.10	0.2	<1	4	10
FEB 25...	3	2	8	3	1	<0.10	0.1	2	2	10
MAY 13...	4	<1	<10	1	<1	<0.10	0.2	5	5	<10
JUL 18...	3	<1	<10	2	<1	<0.10	<0.1	5	7	<10

RIO GRANDE BASIN

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
DEC 07...	7	130	27	89	42	67	39	1.2	130
FEB 25...	12	130	17	46	26	34	24	0.98	95
MAY 13...	<10	160	2.6	66	21	49	20	1.2	82
JUL 18...	<10	300	1.0	120	27	89	21	2.7	320

RIO GRANDE BASIN

08351500 RIO SAN JOSE AT CORREO, NM

LOCATION.--Lat 34°58'03", long 107°10'10", in NE¼ sec.32, T.9 N., R.3 W., Cibola County, Hydrologic Unit 13020207, on left bank 0.3 mi downstream from State Highway 6, 1.2 mi northeast of Correo, and 13 mi upstream from mouth.

DRAINAGE AREA.--3,660 mi², approximately, of which about 1,130 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as San Jose River at Correo.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,474.88 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1958 to Sept. 30, 1975, water-stage recorder at site 1 mi upstream at datum 17.55 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated to some extent since 1927 by Bluewater Lake (station 08341400) 79 mi upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 11.7 ft³/s, 8,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,150 ft³/s, Aug. 11, 1955; maximum gage height, 20.7 ft, Aug. 22, 1958, backwater from dam (present datum); no flow for many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood that probably occurred Aug. 21, 1935, reached a stage of 15.4 ft, from floodmarks, (discharge, about 11,000 ft³/s), but was probably exceeded by the flood of Sept. 23, 1929 (discharge not determined), based on study of records for Rio Puerco at Rio Puerco.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11	1845	*809	*4.71	No other peak greater than base discharge			

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	6.0	8.0	28	7.6	8.0	6.9	.94	e.00	.45	.00	.00
2	29	7.3	12	13	9.9	8.2	7.0	.36	e.00	.00	.00	.00
3	15	9.3	11	6.9	13	7.5	6.5	.08	e.00	.00	13	.00
4	6.3	9.4	5.4	12	11	7.2	6.1	.00	e.00	.00	42	.27
5	6.0	8.4	7.1	15	10	7.2	6.1	.00	e.00	.00	95	4.2
6	7.4	8.1	8.6	19	9.2	7.7	5.8	.00	e.00	.00	14	224
7	6.2	8.6	9.4	22	9.5	7.1	5.8	.00	e.00	.00	29	178
8	5.5	9.2	10	18	9.4	6.6	5.5	.00	e.00	.00	20	118
9	4.8	9.7	9.4	22	8.7	5.9	4.9	.00	e.00	.00	6.7	29
10	8.7	9.7	10	22	8.9	5.3	5.2	.00	e.00	.00	120	244
11	8.3	9.6	11	14	8.7	6.3	4.8	.00	e.00	.00	55	447
12	5.4	9.1	16	12	8.5	6.5	4.9	.00	e.30	.00	36	568
13	5.0	8.7	16	12	8.6	5.9	5.3	.00	e.00	.00	9.7	149
14	4.7	8.8	15	16	8.3	6.2	5.4	.00	16	.00	3.3	34
15	4.5	9.0	12	12	7.8	6.4	5.6	.00	8.8	.00	1.4	20
16	4.6	9.0	13	14	7.8	7.0	5.6	.00	2.8	.00	.93	9.4
17	4.4	8.9	13	8.0	8.1	8.3	5.1	.00	e.30	.00	7.4	6.9
18	4.4	9.2	9.1	10	8.0	7.8	5.0	.00	e.00	.00	2.2	5.4
19	4.7	9.6	10	11	7.6	7.2	5.0	.00	e.00	.00	95	3.0
20	5.3	9.4	12	14	7.4	7.5	3.7	.00	e.00	.00	53	5.0
21	5.9	9.9	14	11	6.8	6.4	4.8	81	.00	.00	10	5.6
22	5.9	9.6	8.7	7.4	6.8	6.6	4.5	138	.00	1.8	13	4.7
23	5.8	9.4	6.3	12	6.8	6.4	4.6	42	.00	20	.72	3.0
24	6.3	9.6	5.8	7.4	6.9	6.5	5.7	4.8	.00	43	e.00	4.3
25	5.9	9.6	5.9	10	7.0	6.6	3.1	3.0	.00	78	e.00	3.9
26	5.7	10	5.8	11	6.7	6.6	1.8	2.6	.00	171	e.00	.89
27	5.6	11	5.6	12	6.6	6.9	.67	.63	.00	35	e.00	2.3
28	5.4	8.8	5.3	16	7.0	7.5	.17	e.00	.00	16	.00	.53
29	5.7	6.5	6.9	13	---	8.0	.79	e.00	e.00	1.9	.00	e.00
30	5.9	5.5	14	10	---	7.2	1.1	e.00	2.7	.22	.00	.51
31	5.8	---	33	6.8	---	7.2	---	e.00	---	e.00	.00	---
TOTAL	278.1	266.9	329.3	417.5	232.6	215.7	137.43	273.41	30.90	367.37	627.35	2070.90
MEAN	8.97	8.90	10.6	13.5	8.31	6.96	4.58	8.82	1.03	11.9	20.2	69.0
MAX	74	11	33	28	13	8.3	7.0	138	16	171	120	568
MIN	4.4	5.5	5.3	6.8	6.6	5.3	.17	.00	.00	.00	.00	.00
AC-FT	552	529	653	828	461	428	273	542	61	729	1240	4110

CAL YR 1990 TOTAL 5125.94 MEAN 14.0 MAX 513 MIN .00 AC-FT 10170
WTR YR 1991 TOTAL 5247.46 MEAN 14.4 MAX 568 MIN .00 AC-FT 10410

e Estimated

RIO GRANDE BASIN

08353000 RIO PUERCO NEAR BERNARDO, NM

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, Hydrologic Unit 13020204, on bridge on former U.S. Highway 85, 0.2 mi upstream from Interstate Highway 25, 1.2 mi southwest of Bernardo, 3 mi upstream from mouth, and 18 mi south of Belen.

DRAINAGE AREA.--7,350 mi², approximately, of which at least 1,130 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1939 to current year. Fragmentary gage-height record and footnotes concerning no flow for the period September 1910 to August 1914, published in WSP 358 and 388, are in error and should not be used.

REVISED RECORDS.--WSP 1512: 1941-42, 1944-45, 1946(P), 1947-49. WSP 1632: 1957. WSP 1732: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 4,722.34 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 24, 1969, at datum 3.10 ft higher.

REMARKS.--Water-discharge records poor. Diversions for irrigation of about 11,500 acres upstream from station (includes 3,700 acres irrigated wholly or partly from wells).

AVERAGE DISCHARGE.--51 years (water years 1941-91), 44.5 ft³/s, 32,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft³/s, Sept. 23, 1941, from rating curve extended above 7,800 ft³/s; maximum gage height, 16.9 ft, present datum, Aug. 12, 1955; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 ft³/s, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge, 30,600 ft³/s, by slope-area measurement, from reports of New Mexico State Engineer).

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 15	2145	573	7.60	July 21	1300	844	8.43
May 23	1700	400	6.60	July 26	1200	*3,030	*13.00
June 15	1500	839	8.40				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e400	e2.1	e.00	.00	e1.3	e10	e.00	14	e.00	.00	e460	.00
2	e30	e2.2	e.00	.00	e1.0	e9.0	e.00	17	e.00	.00	e760	.00
3	e40	e1.9	e.00	.00	e1.9	e9.0	e.00	e40	e.00	1.0	e650	.00
4	e200	e140	e.00	.00	e3.4	e9.0	e.00	e.00	e.00	.00	e650	.00
5	9.6	e60	e.00	.00	e4.3	6.7	e.00	e.00	e.00	.00	e500	1.7
6	6.3	e30	e.00	e1.9	e3.8	20	e.00	e.00	e.00	.00	e400	45
7	3.7	e20	e.00	e5.3	e3.2	e29	e.00	e.00	e.00	.00	264	228
8	2.2	e10	e.00	e5.4	e2.6	e7.0	.00	e.00	e.00	.00	320	466
9	1.8	e5.0	e.00	e7.7	e1.6	e10	.00	e.00	e.00	.00	195	275
10	1.5	e.00	e.00	e9.2	e1.6	e10	.00	e.00	e.00	.00	128	79
11	1.1	e.00	e.00	e6.5	6.5	e7.0	.00	e.00	e.00	.00	80	223
12	1.0	e.00	e.00	e5.4	40	e7.0	.00	e.00	e.00	.00	106	270
13	1.2	e.00	e.00	e4.9	116	4.5	.00	e.00	e.00	.00	84	462
14	1.7	e.00	5.3	e4.0	208	3.3	.00	e.00	201	.00	42	303
15	1.0	e.00	6.3	e3.3	334	2.4	.00	e.00	673	33	29	243
16	.00	e.00	4.8	e5.1	306	1.8	.00	e30	371	3.3	21	e20
17	.00	e.00	4.9	e3.1	197	1.7	.00	e20	e220	e.10	19	e1.0
18	.00	e.00	e3.4	e4.6	152	1.7	.00	e20	e160	168	287	e.00
19	.00	e.00	e2.1	e2.5	96	1.8	.00	e15	e95	86	63	e.00
20	.00	e.00	e2.4	e3.1	88	2.5	.00	e15	e10	102	32	e.00
21	.00	e.00	e1.9	e3.3	e35	2.2	.00	e20	e2.5	115	59	e.00
22	.00	e.00	e2.6	e3.8	e80	1.7	.00	e520	e2.3	215	22	e.00
23	6.9	e.00	e3.2	e2.4	e10	1.8	.00	e340	e2.0	e500	37	e.00
24	12	e.00	e3.8	e2.3	e15	1.3	.00	e290	1.2	e400	144	e.00
25	7.2	e.00	e2.6	e1.7	e10	1.1	.00	e140	.00	e900	39	e.00
26	5.1	e.00	e2.2	e.00	e10	1.1	7.8	e90	.00	e1600	15	e.00
27	3.7	e.00	e1.9	e.00	e10	.00	38	e70	.00	e1300	10	e.00
28	3.0	e.00	e1.9	e.00	e10	.00	24	e50	.00	e830	7.0	e.00
29	2.6	e.00	e.50	e.00	---	.00	30	e30	.00	e675	.00	e.00
30	2.3	e.00	.00	e.00	---	1.2	26	e.50	.00	e580	.00	e.00
31	2.1	---	.00	e1.5	---	.00	---	e.10	---	e420	.00	---
TOTAL	746.00	271.20	49.80	87.00	1748.2	163.80	125.80	1721.60	1738.00	7928.40	5423.00	2616.70
MEAN	24.1	9.04	1.61	2.81	62.4	5.28	4.19	55.5	57.9	256	175	87.2
MAX	400	140	6.3	9.2	334	29	38	520	673	1600	760	466
MIN	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
AC-FT	1480	538	99	173	3470	325	250	3410	3450	15730	10760	5190
CAL YR 1990	TOTAL 11109.15	MEAN 30.4	MAX 670	MIN .00	AC-FT 22030							
WTR YR 1991	TOTAL 22619.50	MEAN 62.0	MAX 1600	MIN .00	AC-FT 44870							

e Estimated

RIO GRANDE BASIN

08353000 RIO PUERCO NEAR BERNARDO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1956 to current year.

WATER TEMPERATURE: October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1947 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

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

SEDIMENT LOAD: Maximum daily, 2,240,000 tons, Aug. 7, 1957; minimum daily, 0 ton on many days of each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, undetermined; minimum daily, undetermined.

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

SEDIMENT CONCENTRATION: Maximum daily mean, 120,000 mg/L, May 16; minimum daily mean, no flow on many days.

SEDIMENT LOAD: Maximum daily, 158,000 tons, July 27; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
MAR											
05...	1400	7.6	2250	8.7	23.5	13.0	8.6	560	140	50	340
JUL											
23...	0930	694	1000	7.8	23.5	20.5	5.8	310	100	15	120

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR										
05...	6	7.6	189	1100	200	0.40	7.3	1960	390	10
JUL										
23...	3	7.6	139	430	20	0.70	13	790	130	12

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
MAY										
16...	1100	30	--	15.0	110000	8910	100	87	97	99

RIO GRANDE BASIN

08354500 SOCORRO MAIN CANAL NORTH AT SAN ACACIA, NM

LOCATION.--Lat 34°15'17", long 106°53'43", in SE¼NW¼ sec.1, T.1 S., R.1 W., Socorro County, Hydrologic Unit 13020203, on right bank at San Acacia, and 0.5 mi downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to current year.

REVISED RECORDS.--WSP 1242: 1951.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to Mar. 8, 1958, at site 300 ft upstream (in old channel) at datum 0.42 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. This canal is 1 of 3 channels (stations 08354800, 08354900) carrying flow in valley cross section. For combined monthly flow in acre-ft of this canal, conveyance channel, and floodway, see tabulation below daily table for 08354900. Canal diverts water from right bank of Rio Grande for irrigation of about 8,000 acres. Alamillo acequia and 3 other smaller ditches divert water from canal upstream from station for irrigation of about 400 acres. Discharge records collected at the canal heading from October 1964 to September 1965 indicate that 7,770 acre-ft or 9 percent reached the regular gaging station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 306 ft³/s, June 10, 1991; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	73	.00	.00	.00	57	209	232	291	281	191	244
2	e129	6.7	.00	.00	.00	64	210	247	274	260	170	258
3	e120	3.0	.00	.00	.00	65	214	242	278	244	167	226
4	e121	.00	.00	.00	.00	75	213	264	287	263	56	225
5	96	.00	.00	.00	.00	112	210	239	274	249	48	254
6	103	.00	.00	.00	.00	134	215	255	288	268	98	166
7	94	.00	.00	.00	.00	153	205	281	274	236	82	e140
8	93	.00	.00	.00	.00	143	207	286	268	238	174	e130
9	117	.00	.00	.00	.00	160	219	268	277	247	147	e100
10	160	.00	.00	.00	.00	177	227	278	306	245	177	e100
11	147	.00	.00	.00	.00	180	239	271	300	251	170	e95
12	149	.00	.00	.00	.00	183	232	279	249	285	196	e95
13	112	.00	.00	.00	.00	186	216	272	264	300	181	e90
14	121	.00	.00	.00	.00	191	236	289	284	291	181	e90
15	145	.00	.00	.00	.00	195	232	291	244	288	204	e85
16	161	.00	.00	.00	.00	199	234	297	244	274	177	e85
17	146	.00	.00	.00	.00	199	234	296	178	279	219	141
18	146	.00	.00	.00	.00	202	240	298	218	278	149	140
19	142	.00	.00	.00	.00	197	245	305	239	267	117	154
20	151	.00	.00	.00	.00	196	242	304	250	262	149	148
21	145	.00	.00	.00	.00	189	245	e182	258	263	189	140
22	149	.00	.00	.00	.00	201	246	e206	262	209	204	156
23	149	.00	.00	.00	.00	188	252	220	276	e139	201	172
24	146	.00	.00	.00	.00	190	248	239	277	e72	186	166
25	148	.00	.00	.00	.00	205	245	244	254	e67	212	205
26	155	.00	.00	.00	.00	204	234	223	277	e65	197	211
27	157	.00	.00	.00	19	213	240	237	246	e63	205	203
28	170	.00	.00	.00	47	204	247	248	255	64	216	214
29	172	.00	.00	.00	---	209	227	255	268	66	241	227
30	162	.00	.00	.00	---	199	230	276	270	122	243	220
31	143	---	.00	.00	---	191	---	291	---	174	232	---
TOTAL	4269	82.70	0.00	0.00	66.00	5261	6893	8115	7930	6610	5379	4880
MEAN	138	2.76	.000	.000	2.36	170	230	262	264	213	174	163
MAX	172	73	.00	.00	47	213	252	305	306	300	243	258
MIN	93	.00	.00	.00	.00	57	205	182	178	63	48	85
AC-FT	8470	164	.00	.00	131	10440	13670	16100	15730	13110	10670	9680

CAL YR 1990 TOTAL 44669.70 MEAN 122 MAX 277 MIN .00 AC-FT 88600
WTR YR 1991 TOTAL 49485.70 MEAN 136 MAX 306 MIN .00 AC-FT 98150

e Estimated

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM
(Surveillance network station)

LOCATION.--Lat 34°14'54", long 106°54'04", in SW¼ sec.1, T.1 S., R.1 W., Socorro County, Hydrologic Unit 13020203, on right bank 75 ft upstream from railway crossing, 0.5 mi south of San Acacia, and 1.2 mi downstream from San Acacia diversion dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to September 1964 included in composite flow of station 08355000, Rio Grande at San Acacia, October 1960 to September 1964 (monthly discharge published in WSP 1923 with records for station 08355000), October 1964 to current year. Daily records 1958-64 are available in files at district office.

GAGE.--Water-stage recorder. Datum of gage is 4,652.50 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Conveyance channel, constructed in 1958, is 1 of 3 channels (stations 08354500, 08354900) carrying flow in valley cross section. Original design and plan were for conveyance channel to carry all flows up to about 2,000 ft³/s. For combined monthly flow in acre-ft of this channel, floodway, and Socorro Main Canal North, see tabulation below daily table for station 08354900.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,950 ft³/s, May 12, 13, 1966; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.09	.00	.00	.00	.00	.00	.00	1.4	e.00	.00	.00
2	.19	.06	.00	.00	.00	.00	.00	.00	1.7	.00	.00	.00
3	.22	.05	.00	.00	.00	.00	.00	.00	1.8	.00	.00	.00
4	.27	.03	.00	.00	.00	.00	.00	.00	.82	.00	.00	.00
5	.31	.00	.00	.00	.00	.00	.00	31	.40	.00	.00	.00
6	.35	.00	.00	.00	.00	.00	.00	121	e.13	.00	.00	.00
7	.40	.00	.00	.00	.00	.00	.00	177	e.02	.00	.00	.00
8	.45	.00	.00	.00	.00	.00	.00	240	e.00	.00	.00	.00
9	.53	.00	.00	.00	.00	.00	.00	138	e.00	.00	.00	.00
10	.70	.00	.00	.00	.00	.00	.00	.03	e.00	.00	.00	.00
11	.75	.00	.00	.00	.00	.00	.00	.02	e.00	.00	.00	.00
12	.78	.00	.00	.00	.00	.00	.00	.04	e.00	.00	.00	.00
13	.81	.00	.00	.00	.00	.00	.00	.06	e.00	.00	.00	.00
14	.86	.00	.00	.00	.00	.00	.00	.08	e.00	.00	.00	.00
15	.94	.00	.00	.00	.00	.00	.00	.09	e.00	.00	.00	.00
16	.98	.00	.00	.00	.00	.00	.00	.12	e.00	.00	.00	.00
17	.94	.00	.00	.00	.00	.00	.00	.15	e.00	.00	.20	.00
18	.87	.00	.00	.00	.00	.00	.00	.16	e.00	.00	.06	.00
19	.81	.00	.00	.00	.00	.00	.00	.19	e.00	.00	.00	.00
20	.72	.00	.00	.00	.00	.00	.00	.26	e.00	.00	.00	.00
21	.63	.00	.00	.00	.00	.00	.00	.51	e.00	.00	.00	.00
22	.56	.00	.00	.00	.00	.00	.00	22	e.00	.00	.00	.00
23	.50	.00	.00	.00	.00	.00	.00	30	e.00	.00	.00	.00
24	.45	.00	.00	.00	.00	.00	.00	9.2	e.00	.00	.00	.00
25	.38	.00	.00	.00	.00	.00	.00	4.8	e.00	.00	.00	.00
26	.34	.00	.00	.00	.00	.00	.00	.79	e.00	.00	.00	.00
27	.29	.00	.00	.00	.00	.00	.00	.75	e.00	.00	.00	.00
28	.26	.00	.00	.00	.00	.00	.00	.81	e.00	.00	.00	.00
29	.23	.00	.00	.00	.00	.00	.00	.87	e.00	.00	.00	.00
30	.18	.00	.00	.00	.00	.00	.00	.95	e.00	.00	.00	.00
31	.14	---	.00	.00	---	.00	---	1.1	---	.00	.00	---
TOTAL	16.00	0.23	0.00	0.00	0.00	0.00	0.00	779.98	6.27	0.00	0.26	0.00
MEAN	.52	.008	.000	.000	.000	.000	.000	25.2	.21	.000	.008	.000
MAX	.98	.09	.00	.00	.00	.00	.00	240	1.8	.00	.20	.00
MIN	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	32	.5	.00	.00	.00	.00	.00	1550	12	.00	.5	.00

CAL YR 1990 TOTAL 4181.98 MEAN 11.5 MAX 261 MIN .00 AC-FT 8290
WTR YR 1991 TOTAL 802.74 MEAN 2.20 MAX 240 MIN .00 AC-FT 1590

e Estimated

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 100 ft downstream from discharge station.

PERIOD OF RECORD.--Water years 1959 to 1985, 1989 to current year.

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 06...	1143	128	475	8.4	15.5	23.5	9.2	37	140	43	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	
MAY 06...		8.3	53	2	4.1	129	2	110	96	37	
DATE		FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED TOTAL (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
MAY 06...	0.40	20	330	0.360	0.480	0.120	0.020	0.480	0.500	0.120	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
MAY 06...	0.030	0.58	1.2	0.420	0.130	6.1	54	2000	90	18	
DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)				
MAY 06...	1143	128	475	23.5	656	227	94				

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM
(Surveillance network station)

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, Hydrologic Unit 13020203, in Sevilleta Grant, on right bank 0.2 mi downstream from San Acacia diversion dam, 0.3 mi east of San Acacia, 2 mi downstream from Rio Salado, and at mile 1,472.6.

DRAINAGE AREA.--26,770 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, Co.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1936 to September 1958 (prior to construction of conveyance channel), October 1958 to September 1964 (flow in conveyance channel included), October 1964 to current year. Prior to October 1964 published as 08355000 Rio Grande at San Acacia and records are not equivalent.

REVISED RECORDS.--WSP 1242: 1951. WSP 1732: 1958(M). WRD 1969: 1967.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 19, 1953, at several sites 0.1 mi upstream at different datums. Mar. 19, 1953, to Aug. 19, 1965, at site 0.4 mi downstream at datum 3.60 ft higher. Aug. 19, 1965, to Aug. 15, 1967, at same site at datum 1.89 ft higher. Datum on Aug. 21, 1987, was lowered 2.00 ft. Floodway is bypassed by Socorro Main Canal North and since Oct. 1958 by conveyance channel.

REMARKS.--Water-discharge records fair. Floodway is 1 of 3 channels (stations 08354500, 08354800) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, and Socorro Main Canal North, see tabulation below. Normal plan is for floodway to carry flow when combined capacities of conveyance channel (about 2,000 ft³/s) and Socorro Main Canal North (about 200 ft³/s) are exceeded, during periods of silt sluicing, and when river silt load is excessive. Diversions upstream from station for irrigation of about 760,000 acres; this includes Socorro Main Canal North, which bypasses station and irrigates about 8,000 acres. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--22 years (water years 1937-58), 1,192 ft³/s, 863,000 acre-ft/yr, prior to construction of conveyance channel; does not include Socorro Main Canal North. 15 years (water years 1959-73), 911 ft³/s, 660,000 acre-ft/yr, combined flow of floodway, conveyance channel and Socorro Main Canal North, prior to closure of Cochiti Dam. 18 years (water years 1974-91), 1,430 ft³/s, 1,036,000 acre-ft/yr, combined flow of floodway, conveyance channel, and Socorro Main Canal North, since closure of Cochiti Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s, Aug. 5, 1936, gage height, 10.75 ft, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,820 ft³/s, June 15; minimum daily, 20 ft³/s, Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1990	616	1420	608	968	1330	1470	2530	3210	3680	1240	43
2	1270	866	1360	1010	991	1290	1260	2620	3220	3930	1360	53
3	1440	1110	1180	920	1100	1370	1270	2530	3260	3100	1270	40
4	1250	1290	1100	836	1130	1460	1090	2420	3460	2570	1520	e20
5	906	1430	1020	861	1110	1390	904	2240	3470	2530	1610	e26
6	648	1570	1070	978	1120	1160	1140	1940	3760	2430	1730	e852
7	603	1590	915	1130	1190	1150	1140	1930	3660	2030	2020	1530
8	547	1710	863	1410	1070	1040	1100	1980	3440	1200	4080	1770
9	376	1580	933	1220	990	1160	1050	1910	3050	634	3600	1900
10	376	1520	1040	1300	943	1000	1180	2070	3720	327	2620	1450
11	388	1420	1030	1360	1000	1010	1520	1990	3560	192	2040	1840
12	449	1410	993	1360	1120	786	1840	2090	3280	116	1410	2350
13	403	1390	982	1440	1160	539	1930	2180	3460	97	1480	2720
14	317	1330	1110	1480	1160	593	1900	2160	3650	78	1570	2020
15	227	1240	1200	1320	1170	601	2110	2290	4820	107	1700	1350
16	231	1420	1420	833	1280	529	2090	2390	4250	214	1920	1110
17	231	1360	1530	645	1250	506	2130	2550	4070	370	1500	1210
18	234	1510	1420	595	1240	759	2260	2600	3650	392	2940	1020
19	213	1320	1260	573	1320	719	2380	2650	3810	351	2790	920
20	237	1180	1330	561	1270	1080	2430	3000	3880	288	2340	938
21	244	1010	1390	1140	1270	1140	2150	3290	4070	384	1910	838
22	263	929	1310	975	1250	1080	2340	4530	3560	488	1750	785
23	270	1010	1320	845	1100	1260	2300	3730	3720	1660	1620	627
24	321	1290	1220	933	1080	1090	2430	3060	3780	1820	1340	554
25	318	1320	1010	1470	1330	1090	2760	3180	3730	3330	573	504
26	409	1420	626	1500	1400	1020	2740	3450	3640	4070	428	435
27	378	1410	559	1510	1360	1060	2630	3100	3230	3800	278	394
28	366	1340	666	1520	1320	1380	2660	3010	2600	3550	215	363
29	585	1350	731	1420	---	1360	2770	2910	2570	2560	120	367
30	640	1310	788	1380	---	1350	2680	2810	2780	1830	78	413
31	604	---	753	1060	---	1310	---	3010	---	1240	69	---
TOTAL	16734	39251	33549	34193	32692	32612	57654	82150	106360	49368	49121	28442
MEAN	540	1308	1082	1103	1168	1052	1922	2650	3545	1593	1585	948
MAX	1990	1710	1530	1520	1400	1460	2770	4530	4820	4070	4080	2720
MIN	213	616	559	561	943	506	904	1910	2570	78	69	20
AC-FT	33190	77850	66540	67820	64840	64690	114400	162900	211000	97920	97430	56410
(†)	44690	78010	66540	67820	64970	75130	128100	180600	226700	111000	108100	66090

CAL YR 1990 TOTAL 228280.20 MEAN 625 MAX 2490 MIN .00 AC-FT 452800 (†) MEAN 759 AC-FT 549700
WTR YR 1991 TOTAL 562126 MEAN 1540 MAX 4820 MIN 20 AC-FT 1115000 (†) MEAN 1678 AC-FT 1215000

(†) COMBINED FLOW, IN ACRE-FEET, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL, AND SOCORRO MAIN CANAL NORTH.

e Estimated

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-56, 1959 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to December 1937, March 1939 to September 1956, October 1964 to current year.

WATER TEMPERATURE: October 1947 to August 1956, January 1959 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1946 to June 1956, January 1959 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,700 microsiemens, July 14, 1940; minimum daily, 236 microsiemens, May 17, 1942.

WATER TEMPERATURE: (1947-56, 1959-62, 1964-91): Maximum daily, 34.5°C, July 13, 1971; minimum daily, 0.0°C on many days during winter months of most years.

SEDIMENT CONCENTRATION: Maximum daily mean, 223,000 mg/L, Aug. 11, 1946; minimum daily mean, no flow on many days of most years.

SEDIMENT LOAD: Maximum daily, 1,760,000 tons, Aug. 12, 1955; minimum daily, 0 ton on many days of most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 898 microsiemens, Aug. 3; minimum daily, 321 microsiemens, June 10.

WATER TEMPERATURE: Maximum daily, 29.0°C, Sept. 3; minimum daily, 0.0°C, Dec. 24-26.

SEDIMENT CONCENTRATION: Maximum daily mean, 78,500 mg/L, Aug. 17; minimum daily mean, 48 mg/L, July 13.

SEDIMENT LOAD: Maximum daily, 351,000 tons, July 25; minimum daily, 8.0 tons on Sept. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 19...	1020	1320	530	8.1	16.5	10.0	10.1	<10	170	52
MAR 05...	1000	1260	435	8.2	19.0	11.0	9.1	29	150	45
SEP 04...	1130	16	650	8.0	23.5	21.5	6.4	22	180	57

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD CO3 (00452)	ALKA-LINITY WAT DIS TOT IT' FIELD (MG/L AS CAC03) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 19...	9.1	50	2	4.1	176	0	144	92	28
MAR 05...	8.3	42	2	4.2	141	0	116	81	23
SEP 04...	10	59	2	5.4	186	0	152	120	37

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 19...	0.50	23	349	0.560	0.580	0.040	0.020	0.600	0.600	0.060
MAR 05...	0.50	24	302	0.740	0.780	0.030	0.010	0.770	0.790	0.020
SEP 04...	0.70	24	406	0.160	--	0.030	<0.010	0.190	0.190	0.030

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 19...	0.040	0.34	1.0	0.240	0.220	7.3	290	730	110	19
MAR 05...	0.030	0.28	1.1	0.270	0.290	8.2	140	840	100	16
SEP 04...	0.010	0.27	0.49	0.270	0.170	3.5	110	79	130	16

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
NOV 19...	1020	4	4	<1	<1.0	11	<1	17	4	12
SEP 04...	1130	7	6	<1	<1.0	1	<1	7	4	5

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)
NOV 19...	<1	<0.10	<0.1	<1	<1	50	4	6.0	4.8	170
SEP 04...	<1	<0.10	<0.1	<1	<1	<10	7	--	--	--

DATE	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
NOV 19...	8	<10	4	<10	3	4200	<10	130	0.01	10
SEP 04...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)
SEP 04...	1130	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01	<0.010

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

		ENDO-SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL PARA- THION, TOTAL (UG/L) (39600)	
SEP 04...		<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	
DATE		PARA- THION, TOTAL (UG/L) (39540)	TOX- APHENE, TOTAL (UG/L) (39400)	TOTAL TRI- THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PER- THANE TOTAL (UG/L) (39034)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	
MAR 05...		--	--	--	<0.01	<0.01	<0.01	--	--	--	
SEP 04...		<0.01	<1	<0.01	--	--	--	<0.1	<0.10	<0.01	
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SEDI- MENT, DISCH, SUSP. + BED MA- TERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 16...	1040	196	74.0	1.5	1.72	--	15.5	180	95	155	--
NOV 05...	1200	1360	132	2.6	3.99	--	12.0	8800	32300	41100	99
NOV 19...	1020	1320	--	--	--	530	10.0	2110	7520	10200	32
DEC 20...	1015	1340	129	2.8	3.70	--	5.5	393	1420	2060	--
JAN 31...	1500	990	112	2.4	3.69	--	5.0	1930	5160	7100	--
MAR 05...	1000	1260	--	--	--	435	11.0	732	2490	3530	92
MAR 05...	1100	1260	104	3.2	4.73	--	11.0	633	2150	3070	--
MAR 20...	1100	1090	113	3.8	2.53	--	9.5	237	697	1040	98
APR 04...	1130	1110	110	3.6	2.76	--	14.0	391	1170	1710	94
MAY 22...	1130	4260	160	5.4	4.97	416	17.0	2110	24300	31300	--
JUN 17...	1130	4150	160	5.1	5.10	422	23.0	3710	41600	52400	--
JUL 01...	1130	3730	150	5.2	4.79	422	25.0	1680	16900	22100	--
AUG 05...	0950	1620	115	4.3	3.27	740	24.0	26600	116000	140000	--
SEP 04...	1130	16	18.0	0.52	1.71	650	21.5	102	4.4	8.1	96

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)
OCT 16...	--	--	--	--	--	60	94	100	--	--	--
NOV 05...	100	60	72	83	--	--	--	--	--	52	90
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	22	78	94	100	--	--	--
JAN 31...	--	--	--	--	--	41	69	97	100	--	--
MAR 05...	--	--	--	--	--	--	--	--	--	--	--
MAR 05...	--	54	63	74	33	96	99	100	--	--	--
MAR 20...	--	--	--	--	13	--	--	--	--	--	--
APR 04...	--	--	--	--	29	--	--	--	--	--	--
MAY 22...	--	27	29	34	--	59	88	100	--	--	--
JUN 17...	--	76	81	88	--	99	100	--	--	--	--
JUL 01...	--	65	67	75	--	95	99	100	--	--	--
AUG 05...	--	75	81	89	--	99	100	--	--	--	--
SEP 04...	--	--	--	--	--	--	--	--	--	--	--
DATE	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	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)
OCT 16...	--	--	8	58	98	100	--	--	--	--	--
NOV 05...	98	100	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	22	61	87	100	--	--	--	--	--
JAN 31...	--	--	1	9	80	100	--	--	--	--	--
MAR 05...	--	--	--	--	--	--	--	--	--	--	--
MAR 05...	--	--	33	66	98	100	--	--	--	--	--
MAR 20...	--	--	13	53	95	100	--	--	--	--	--
APR 04...	--	--	29	70	95	97	98	98	98	98	100
MAY 22...	--	--	29	42	74	97	99	100	--	--	--
JUN 17...	--	--	21	53	88	98	100	--	--	--	--
JUL 01...	--	--	2	8	39	97	99	100	--	--	--
AUG 05...	--	--	6	9	68	99	100	--	--	--	--
SEP 04...	--	--	16	72	95	99	100	--	--	--	--

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	633	578	628	551	454	483	371	339	363	486	623
2	661	651	590	623	550	449	486	369	336	436	472	609
3	525	663	589	584	539	447	487	366	322	438	898	580
4	607	626	574	600	543	500	521	367	324	444	836	661
5	635	660	583	596	528	486	534	384	324	438	475	620
6	633	644	591	593	534	558	563	384	326	442	483	622
7	638	588	587	589	541	561	566	385	339	443	507	655
8	618	580	609	573	539	557	562	386	327	443	433	703
9	668	575	596	570	540	547	560	399	322	479	492	698
10	641	566	588	596	560	537	550	402	321	557	442	591
11	620	568	580	618	558	530	543	403	327	572	427	595
12	619	557	---	620	679	548	530	403	338	626	454	853
13	646	562	549	624	692	563	487	405	342	653	480	834
14	638	574	595	632	698	552	483	401	381	652	389	557
15	672	588	591	602	616	561	460	397	375	645	402	580
16	670	601	591	704	606	556	460	412	374	642	462	576
17	666	590	594	586	603	534	450	396	370	518	459	493
18	639	547	605	584	612	532	424	375	369	565	580	502
19	639	546	601	583	547	513	417	373	347	581	679	495
20	647	673	602	516	538	505	414	372	331	724	697	510
21	645	700	609	509	525	496	408	360	335	729	698	482
22	658	708	596	508	542	493	407	441	338	736	664	484
23	671	711	602	551	541	489	400	461	332	755	653	492
24	705	604	635	521	541	483	386	513	333	634	622	524
25	687	620	631	513	539	489	381	368	338	722	615	549
26	668	599	534	495	526	488	377	353	336	572	608	544
27	674	573	658	492	454	491	411	350	362	525	591	580
28	637	584	652	492	453	490	422	350	366	521	593	584
29	625	542	613	487	---	479	425	336	368	521	618	582
30	608	585	609	487	---	473	373	336	365	473	563	540
31	607	---	611	494	---	451	---	337	---	512	618	---
MEAN	642	607	---	567	561	510	466	386	344	560	561	591
MAX	705	711	---	704	698	563	566	513	381	755	898	853
MIN	525	542	---	487	453	447	373	336	321	363	389	482

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.0	4.0	8.0	5.0	10.0	10.0	16.0	15.5	23.0	24.0	28.0
2	15.0	12.0	6.0	2.0	9.0	13.0	13.0	15.0	21.0	25.0	23.0	27.0
3	13.0	11.0	7.0	4.0	10.0	15.0	14.0	15.0	20.0	27.0	23.0	29.0
4	13.0	18.0	4.0	5.0	11.0	16.0	15.0	14.0	22.0	26.0	24.0	24.0
5	13.0	10.5	5.0	14.0	7.0	12.5	15.0	14.0	21.0	27.0	25.0	25.0
6	15.0	9.5	4.0	12.0	6.0	11.0	15.0	16.0	21.0	28.0	25.0	22.0
7	14.0	10.0	4.0	10.0	5.0	10.0	16.0	15.0	19.0	26.0	20.0	20.0
8	16.0	10.0	4.5	9.0	6.0	10.5	14.5	22.0	21.0	25.0	24.0	24.0
9	14.0	11.0	6.0	6.0	7.0	7.0	18.0	18.0	19.0	25.0	23.0	24.0
10	13.0	9.0	4.0	7.0	7.0	8.0	17.0	20.0	20.0	28.0	26.0	24.0
11	15.0	11.0	4.0	5.0	8.0	11.0	15.0	19.0	21.0	25.0	26.0	25.0
12	17.0	10.0	4.0	9.0	7.0	10.0	11.0	21.0	22.0	27.0	24.0	26.0
13	14.0	8.0	4.0	11.0	11.0	12.0	14.0	18.0	19.0	25.0	25.0	24.0
14	18.0	9.0	5.5	5.0	12.0	10.0	14.0	19.0	19.5	23.0	27.0	25.0
15	17.0	10.0	5.0	5.0	9.0	11.0	15.0	16.5	20.0	21.0	22.0	25.0
16	14.0	10.0	4.0	5.0	7.0	8.0	18.0	17.0	22.0	22.0	28.0	24.0
17	15.0	10.0	3.0	6.0	9.0	9.0	15.0	21.0	20.0	23.0	25.0	25.0
18	15.0	12.0	3.5	8.0	8.0	10.0	18.0	20.0	22.0	25.0	23.0	19.0
19	13.0	10.0	5.5	5.0	8.0	13.0	17.5	19.0	23.0	23.0	21.0	19.0
20	13.0	11.0	5.0	8.0	6.0	12.0	20.0	17.0	22.5	24.0	27.0	21.0
21	14.0	10.5	4.5	7.0	7.0	10.0	19.5	17.5	26.0	25.0	28.0	25.0
22	12.0	11.0	3.0	6.0	6.0	8.5	19.0	14.0	21.0	23.0	27.0	24.0
23	13.0	9.0	4.0	5.0	7.0	6.0	15.0	19.0	23.0	21.0	27.0	20.0
24	13.0	12.0	.0	7.0	8.0	7.0	15.0	23.0	21.0	23.0	28.0	23.0
25	12.0	10.0	.0	5.0	9.0	7.0	14.0	22.0	26.0	19.0	27.5	24.5
26	13.0	9.0	.0	7.0	8.0	7.5	14.0	24.0	21.0	22.0	26.0	20.0
27	14.0	9.0	1.0	12.0	8.0	13.0	14.0	21.0	26.0	23.0	26.0	25.0
28	13.0	7.0	3.0	3.5	7.0	11.0	15.0	20.0	25.0	24.0	26.0	26.0
29	15.0	5.0	4.0	5.5	---	12.0	12.0	22.0	25.0	25.0	27.0	20.0
30	15.0	5.0	5.0	2.0	---	9.0	12.5	18.5	20.0	24.0	25.0	23.0
31	14.0	---	6.5	3.0	---	11.0	---	20.0	---	26.0	24.0	---
MEAN	14.3	10.0	4.0	6.7	7.8	10.4	15.2	18.5	21.5	24.3	25.0	23.7
MAX	18.0	18.0	7.0	14.0	12.0	16.0	20.0	24.0	26.0	28.0	28.0	29.0
MIN	12.0	5.0	.0	2.0	5.0	6.0	10.0	14.0	15.5	19.0	20.0	19.0
WTR YR 1991	MEAN	15.1	MAX	29.0	MIN	.0						

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM

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

LOCATION.--Lat 33°41'15", long 106°59'40", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 34, on right bank 0.4 mi northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mi southwest of former site of San Marcial, 3.5 mi downstream from railroad bridge near Tiffany siding, and 51 mi downstream from heading at San Acacia.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to September 1959, October 1969 to current year. Prior to October 1964 monthly discharge only published with record for Rio Grande at San Marcial (station 08358500).

GAGE.--Water-stage recorder. Datum of gage is 4,454.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft higher.

REMARKS.--Water-discharge records good. Original design and plan were for conveyance channel to carry all flows up to about 2,000 ft³/s. Conveyance channel is 1 of 2 channels (station 08358400) carrying flow in valley cross section. For combined monthly flow in acre-ft of this channel and floodway, see tabulation below daily table for station 08358400. U.S. Bureau of Reclamation satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD (SINCE 1954).--Maximum daily discharge, 2,200 ft³/s, May 14, 1966; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	293	270	241	263	327	402	491	561	547	462	373
2	365	328	268	239	259	320	366	473	577	518	501	391
3	348	270	251	231	258	317	380	521	559	470	484	350
4	266	225	236	264	256	320	379	522	537	481	481	337
5	248	212	230	289	251	283	377	515	499	502	436	294
6	258	227	224	293	250	286	380	570	521	480	382	477
7	256	235	228	239	248	291	358	574	511	499	417	502
8	262	266	233	234	247	315	382	613	525	520	436	484
9	245	272	226	244	246	314	341	663	506	555	467	505
10	226	255	228	254	241	304	348	610	562	492	519	489
11	272	254	254	256	241	348	358	513	611	518	576	471
12	280	253	263	252	244	333	362	515	574	512	579	460
13	263	258	267	252	251	306	354	570	510	433	553	454
14	247	259	283	259	251	299	400	511	560	457	606	460
15	237	259	288	262	248	317	452	514	572	538	540	451
16	163	261	257	268	241	327	456	510	611	476	523	453
17	202	268	261	261	246	349	432	558	617	397	523	418
18	191	268	255	258	238	342	456	559	517	414	554	418
19	193	270	253	253	227	352	450	558	453	429	511	417
20	194	261	240	253	215	347	454	576	477	447	448	451
21	185	257	238	252	215	341	508	609	476	503	447	434
22	254	251	235	260	223	313	508	684	447	517	456	404
23	247	247	232	264	225	341	489	639	441	537	468	402
24	247	247	252	263	227	361	451	555	488	484	458	431
25	211	253	258	263	227	365	436	555	465	516	453	379
26	174	261	255	271	234	365	455	618	462	538	442	378
27	201	261	252	276	245	386	456	599	487	526	399	384
28	221	265	249	277	257	376	466	503	474	494	369	404
29	228	270	240	282	---	399	538	496	435	484	320	422
30	215	272	249	280	---	386	519	505	491	446	325	407
31	288	---	243	271	---	369	---	483	---	414	356	---
TOTAL	7527	7778	7718	8061	6774	10399	12713	17182	15526	15144	14491	12700
MEAN	243	259	249	260	242	335	424	554	518	489	467	423
MAX	365	328	288	293	263	399	538	684	617	555	606	505
MIN	163	212	224	231	215	283	341	473	435	397	320	294
AC-FT	14930	15430	15310	15990	13440	20630	25220	34080	30800	30040	28740	25190

CAL YR 1990 TOTAL 94317.8 MEAN 258 MAX 538 MIN 4.8 AC-FT 187100
WTR YR 1991 TOTAL 136013 MEAN 373 MAX 684 MIN 163 AC-FT 269800

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1954 to current year.

WATER TEMPERATURE: March 1954 to current year.

SUSPENDED-SEDIMENT DISCHARGE: March 1954 to current year.

REMARKS.--Water samples for chemical and biological analyses collected at this station when all flow is diverted from the station 08358400 Rio Grande Floodway at San Marcial, NM. Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total-load data were not available at time of publication and will be available at Albuquerque District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,860 microsiemens, Oct. 25, 1956; minimum daily, 298 microsiemens, May 25, 1984.

WATER TEMPERATURE: Maximum daily, 38.0°C, June 26, 1989; minimum daily, 0.0°C on many days during December and January of most years.

SEDIMENT CONCENTRATION: Maximum daily mean, 144,000 mg/L, Sept. 19, 1971; minimum daily mean, no flow on many days during most years.

SEDIMENT LOAD: Maximum daily, 638,000 tons, Aug. 28, 1972; minimum daily, 0 ton on many days during most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, undetermined, minimum daily, undetermined.

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

SEDIMENT CONCENTRATION: Maximum daily mean, 6,850 mg/L, Sept. 9; minimum daily mean, 91 mg/L, Jan. 19.

SEDIMENT LOAD: Maximum daily, 9,360 tons, Sept. 9; minimum daily, 62 tons, Jan. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 01...	1200	360	1050	8.3	21.0	13.0	75	8.4	260	79	14
MAR 04...	1100	323	900	8.2	23.0	13.0	81	8.4	240	73	14
MAR 07...	1200	583	700	7.8	26.5	16.0	94	7.6	200	60	11
SEP 05...	1200	271	910	8.0	27.0	21.5	49	7.0	230	72	13

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 01...	120	3	6.1	255	5	217	190	85	0.30
MAR 04...	130	4	6.5	221	0	181	220	100	0.40
MAY 07...	86	3	5.0	163	0	133	150	65	0.50
SEP 05...	110	3	6.6	220	0	180	190	83	0.60

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 01...	25	654	652	0.170	--	0.030	<0.010	0.200	0.200	0.040
MAR 04...	23	868	678	0.200	0.190	0.020	0.020	0.220	0.210	0.040
MAY 07...	22	484	482	0.190	0.240	0.060	0.020	0.250	0.260	0.030
SEP 05...	23	576	608	0.130	--	0.030	<0.010	0.160	0.160	0.030

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 01...	0.020	0.26	0.50	0.220	0.070	<0.010	K200	220	4	3
MAR 04...	0.050	0.56	0.82	0.140	0.080	--	40	550	14	9
MAY 07...	0.020	0.47	0.75	0.110	0.090	--	110	680	10	56
SEP 05...	<0.010	0.27	0.46	0.250	0.110	--	80	190	8	6

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 01...	1200	<10	5	83	<0.5	2.0	<1	<3	1	<1
MAR 04...	1100	<10	5	75	<0.5	1.0	<1	<3	7	3
MAY 07...	1200	20	5	66	<0.5	<1.0	<1	<3	<1	1
SEP 05...	1200	<10	6	77	<0.5	<1.0	<1	<3	1	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)
NOV 01...	110	0.1	<6	<1	<1	<1.0	840	<6	5	<2.0
MAR 04...	110	<0.1	<10	1	<1	<1.0	850	<6	5	--
MAY 07...	74	<0.1	10	<1	<1	<1.0	650	<6	<3	--
SEP 05...	100	<0.1	<10	<1	<1	<1.0	770	<6	<3	--

DATE	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)
NOV 01...	1.0	110	2	<1	1	<5	4	1400	<10	550

DATE	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
NOV 01...	<0.01	6	4.4	12	11	5.7	8.0	5.2	0.18	2.6
MAY 07...	--	--	1.9	1.9	7.6	7.5	5.7	6.8	<0.02	1.1

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SEDI- MENT, DISCH, BED MA- TERIAL (T/DAY) (80156)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV											
01...	1200	360	53.0	2.9	2.35	1050	13.0	324	315	579	--
DEC											
17...	1230	257	53.0	2.4	2.04	--	10.0	87	60	129	--
FEB											
01...	1400	262	53.0	2.4	2.03	--	--	340	241	454	93
MAR											
04...	1100	323	53.0	2.6	2.32	900	13.0	199	174	338	93
19...	1100	379	54.0	2.9	2.40	--	13.5	317	324	594	94
APR											
03...	1130	391	54.0	3.2	2.30	--	15.0	190	201	385	92
MAY											
07...	1200	583	58.0	4.0	2.52	700	16.0	161	253	475	93
JUN											
18...	1615	521	57.0	3.8	2.41	814	23.0	655	921	1530	99
JUL											
02...	1300	532	54.0	4.1	2.41	--	18.0	184	264	494	94
AUG											
21...	1330	462	54.0	3.7	2.32	813	24.5	410	511	898	96
SEP											
05...	1200	271	52.0	2.6	2.01	910	21.5	194	142	281	91
13...	1200	472	56.0	3.5	2.40	859	21.5	473	603	1040	98

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	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)
NOV										
01...	70	79	98	100	0	2	29	95	100	--
DEC										
17...	85	95	98	100	0	2	21	94	100	--
FEB										
01...	--	--	--	--	6	24	89	100	--	--
MAR										
04...	--	--	--	--	0	4	21	91	100	--
19...	--	--	--	--	0	2	15	94	100	--
APR										
03...	--	--	--	--	0	4	22	93	99	100
MAY										
07...	--	--	--	--	44	85	99	100	--	--
JUN										
18...	--	--	--	--	16	55	95	100	--	--
JUL										
02...	--	--	--	--	42	83	99	100	--	--
AUG										
21...	--	--	--	--	32	85	100	--	--	--
SEP										
05...	--	--	--	--	0	2	25	91	99	100
13...	--	--	--	--	39	86	99	100	--	--

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV								
01...	1201	2	1.40	3.5	1000	8.3	13.0	8.2
01...	1202	4	1.96	7.2	1000	8.3	13.5	8.4
01...	1203	6	3.00	12	1000	8.3	13.0	8.5
01...	1204	8	3.04	14	1000	8.3	13.0	8.5
01...	1205	10	3.20	15	1000	8.3	13.0	8.4
01...	1206	12	3.20	14	1000	8.3	13.0	8.4
01...	1207	14	2.90	13	1000	8.3	13.0	8.5
01...	1208	16	2.80	12	1000	8.3	13.0	8.4
01...	1209	18	2.78	12	1000	8.3	13.0	8.4
01...	1210	20	2.78	12	1000	8.3	13.0	8.5
01...	1211	22	2.80	13	1000	8.3	13.0	8.5
01...	1212	24	2.74	14	1000	8.3	13.0	8.4
01...	1213	26	2.60	13	1000	8.3	13.0	8.4
01...	1214	28	2.50	11	1000	8.3	13.0	8.5
01...	1215	30	2.60	11	1000	8.3	13.5	8.4
01...	1216	32	2.60	11	1000	8.3	13.0	8.5
01...	1217	34	2.60	12	1000	8.3	13.5	8.5
01...	1218	36	2.70	12	1000	8.3	13.0	8.4
01...	1219	38	2.50	11	1000	8.3	13.5	8.5
01...	1220	40	2.40	12	1000	8.3	13.0	8.5
01...	1222	42	2.42	11	1000	8.3	13.0	8.4
01...	1223	44	2.50	11	1000	8.3	13.0	8.5
01...	1224	46	2.60	11	1000	8.3	13.0	8.4
01...	1225	48	2.72	9.0	1000	8.3	13.0	8.4
01...	1226	50	2.08	5.0	1000	8.3	13.0	8.4

RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM

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

LOCATION.--Lat 33°40'50", Long 106°59'30", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 33, on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 mi downstream from former site of San Marcial, 18.5 mi southwest of San Antonio, and at mile 1,425.2.

DRAINAGE AREA.--27,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Records collected at this site January 1895 to September 1964 represented total flow of the river and were published as Rio Grande at San Marcial (station 08358500). Records of daily discharge for floodway only, April 1950 to September 1964, are available in files of district office.

GAGE.--Water-stage recorder. Datum of gage is 4,455.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Floodway is 1 of 2 channels (station 08358300) carrying flow in valley cross section. Prior to 1950 all flow was in floodway channel. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 ft³/s) is exceeded. Combined monthly discharge in acre-ft is given at end of each year table. Diversion for irrigation of about 775,000 acres upstream from station (includes about 13,800 acre-ft diverted from conveyance channel, as based on weekly measurements, data provided by U.S. Bureau of Reclamation). U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--27 years (water years 1965-91), 735 ft³/s, 532,500 acre-ft/yr. Total flow of river, 96 years (water years 1895-1991), 1,259 ft³/s, 912,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, since January 1895, about 50,000 ft³/s, Oct. 11, 1904; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,750 ft³/s, July 27; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	87	863	e309	655	926	870	2290	2630	1170	513	.00
2	1690	122	818	e461	632	955	888	2310	2840	2170	219	.00
3	1090	379	755	e559	574	848	873	2320	2750	2220	153	.00
4	1030	776	696	e506	743	1080	812	2110	3030	1680	70	.00
5	587	1110	677	e541	792	1020	593	2180	3130	1150	263	.00
6	323	1100	626	e567	752	791	512	1850	3150	1050	368	.00
7	205	1260	641	631	728	681	769	1830	3410	1000	246	1.1
8	164	1370	578	641	717	712	681	1690	3270	658	620	24
9	135	1380	536	744	608	635	642	1620	3080	176	2670	474
10	69	1240	600	734	585	764	645	1590	2820	59	2880	579
11	25	1150	614	737	589	640	740	1580	3100	19	2050	238
12	31	1020	609	801	586	650	1070	1650	2920	4.2	1040	1180
13	44	1050	602	831	692	395	1300	1640	2560	.01	435	1840
14	66	995	591	854	742	291	1290	1820	2620	.00	478	2390
15	35	863	700	841	908	294	1370	1840	2770	.00	459	1250
16	20	874	931	690	1080	295	1310	1990	3130	.00	754	634
17	2.8	1020	987	403	1110	298	1280	2080	3300	.00	672	306
18	.00	1090	1090	291	951	277	1320	2260	3180	.00	629	293
19	.00	1270	975	261	859	467	1490	2510	3030	.00	2230	205
20	.00	808	907	245	948	572	1550	2730	3220	.00	2500	142
21	.00	500	945	275	939	871	1620	3080	3190	e.02	1670	153
22	14	404	919	638	906	886	1640	3370	3030	.16	856	148
23	16	350	e748	510	831	787	1660	4030	2450	8.5	580	109
24	7.3	523	e503	500	713	876	1820	4210	2380	410	476	105
25	.18	921	e372	605	728	751	1880	3660	2330	1350	360	77
26	.00	840	e295	878	944	711	2020	3420	2170	4470	86	56
27	.00	945	e318	957	947	674	2230	3420	2110	6750	18	62
28	24	1060	e351	879	889	725	2270	2990	1740	6410	2.7	51
29	23	957	e420	867	---	911	2310	2690	1090	5780	.00	40
30	38	897	e461	916	---	900	2490	2580	951	3530	.00	42
31	102	---	e367	889	---	871	---	2430	---	1710	.00	---
TOTAL	7321.28	26361	20495	19561	22148	21554	39945	75770	81381	41774.89	23297.70	10399.10
MEAN	236	879	661	631	791	695	1331	2444	2713	1348	752	347
MAX	1690	1380	1090	957	1110	1080	2490	4210	3410	6750	2880	2390
MIN	.00	87	295	245	574	277	512	1580	951	.00	.00	.00
AC-FT	14520	52290	40650	38800	43930	42750	79230	150300	161400	82860	46210	20630
(†)	29450	67720	55960	54790	57370	63380	104400	184400	192200	112900	74950	45820

CAL YR 1990 TOTAL 128845.91 MEAN 353 MAX 2360 MIN .00 AC-FT 255600 (†) MEAN 611 AC-FT 442600
WTR YR 1991 TOTAL 390007.97 MEAN 1069 MAX 6750 MIN .00 AC-FT 773600 (†) MEAN 1441 AC-FT 1043000

(†) COMBINED FLOW, IN ACRE-FEET, AND MEAN, IN CUBIC FEET PER SECOND, OF FLOODWAY, CONVEYANCE CHANNEL.

e Estimated

RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1905-07, 1946 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1905 to April 1907, July 1946 to current year.

WATER TEMPERATURE: January 1949 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1946 to current year.

REMARKS.--Records of chemical analyses and sediment discharge for years prior to 1946 have been published in Water Bulletins of International Boundary and Water Commission. Sediment total-load measurements were made monthly and total-load values were determined using equation from double-mass relationship plot for period of record. Some total-load data were not available at time of publication and will be available at Albuquerque District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,730 microsiemens, Apr. 8, 1953; minimum daily, 277 microsiemens, June 12, 1983.

WATER TEMPERATURE: Maximum daily, 37.0°C, July 22, 27, Aug. 7; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 135,000 mg/L, July 23, 1977; minimum daily mean, no flow on many days each year.

SEDIMENT LOAD: Maximum daily, 1,200,000 tons, Sept. 21, 1982; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, undetermined, minimum daily, undetermined.

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

SEDIMENT CONCENTRATION: Maximum daily mean, 21,100 mg/L, Sept. 10; minimum daily mean, no flow on many days.

SEDIMENT LOAD: Maximum daily, 96,600 tons, July 27; minimum daily, 0 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	STREAM DEPTH, MEAN (FT) (00064)	STREAM VELOC- ITY, MEAN (F/S) (00055)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SEDI- MENT, DISCH, SUSP. + BED MA- TERIAL (T/DAY) (80156)
OCT										
03...	1200	1050	210	1.4	3.58	721	17.0	19400	55000	58900
NOV										
01...	1120	66	55.0	0.83	1.45	622	14.0	1590	283	469
DEC										
17...	1130	945	138	1.8	3.80	558	5.5	2160	5510	7140
MAR										
04...	1500	1100	159	1.9	3.58	509	20.0	3700	11000	13500
19...	1230	541	142	1.5	2.53	562	14.5	1150	1680	2400
APR										
03...	1345	868	140	1.9	3.28	498	15.5	3220	7550	9540
MAY										
15...	1130	1810	353	1.7	2.96	419	14.0	218	1070	1590
JUN										
18...	1445	3220	218	3.6	4.16	455	25.5	361	3140	4270
JUL										
02...	1145	2540	200	4.4	2.88	385	18.0	212	1450	2100
25...	1045	1200	145	3.2	2.61	696	20.0	777	2520	3490
AUG										
21...	1000	1660	147	4.8	2.38	589	25.5	160	717	1100
SEP										
13...	1045	1650	145	4.0	2.85	687	21.0	8020	35700	39600

RIO GRANDE BASIN
08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM -- Continued
WATER-QUALITY RECORDS
WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)
OCT 03...	--	73	84	90	98	99	100	--	--	--
NOV 01...	--	86	94	97	99	99	100	--	--	--
DEC 17...	--	41	49	65	98	--	--	--	--	--
MAR 04...	--	43	51	67	95	100	--	--	87	100
19...	100	63	78	90	--	--	--	--	60	87
APR 03...	--	20	21	29	90	99	100	--	--	--
MAY 15...	97	--	--	--	--	--	--	--	97	99
JUN 18...	100	--	--	--	--	--	--	--	96	99
JUL 02...	97	--	--	--	--	--	--	--	--	--
25...	--	75	82	90	94	96	97	100	--	--
AUG 21...	97	--	--	--	--	--	--	--	--	--
SEP 13...	--	86	96	99	99	100	--	--	--	--

DATE	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	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)
OCT 03...	--	1	8	89	100	--	--	--	--	--
NOV 01...	--	1	11	82	100	--	--	--	--	--
DEC 17...	--	9	27	87	100	--	--	--	--	--
MAR 04...	--	--	--	--	--	--	--	--	--	--
19...	100	--	--	--	--	--	--	--	--	--
APR 03...	--	6	17	90	100	--	--	--	--	--
MAY 15...	100	--	--	--	--	--	--	--	--	--
JUN 18...	100	--	--	--	--	--	--	--	--	--
JUL 02...	--	11	32	74	94	95	95	97	99	100
25...	--	15	55	87	100	--	--	--	--	--
AUG 21...	--	10	32	85	100	--	--	--	--	--
SEP 13...	--	9	46	95	100	--	--	--	--	--

RIO GRANDE BASIN

08360500 ELEPHANT BUTTE RESERVOIR AT ELEPHANT BUTTE, NM

LOCATION.--Lat 33°09'15", long 107°11'28", in NW¼ sec.30, T.13 S., R.3 W., Sierra County, Hydrologic Unit 13020211, at dam on Rio Grande, 1 mi west of Elephant Butte, 4 mi northeast of Truth or Consequences (Hot Springs), and at mile 1,383.2.

DRAINAGE AREA.--29,445 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--March 1915 to December 1939 (monthend contents only published in WSP 1312), January 1940 to September 1965 (monthend contents only), October 1965 to current year.

REVISED RECORDS.--WSP 1442: 1954(m). WSP 1632: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above National Geodetic Vertical Datum of 1929. Oct. 16, 1939, to May 2, 1940, and prior to September 1930, nonrecording gages.

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,065,000 acre-ft, survey of 1988 at gage height 4,407.0 ft crest of spillway. Capacity by original survey was 2,638,900 acre-ft. No adjustment made for decrease in capacity due to sedimentation between effective dates of capacity tables. No dead storage. No storage allocated to flood control. Water is used for power development and irrigation on Rio Grande Project of U.S. Bureau of Reclamation. A 50,000-acre-ft permanent pool is authorized for recreational purposes.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 2,303,000 acre-ft, June 16-18, 1942, gage height, 4,409.19 ft; minimum daily contents after initial filling, 9,900 acre-ft, Aug. 6, 1954, gage height, 4,258.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,579,900 acre-ft, Aug. 27, gage height, 4,392.42 ft; minimum contents, 1,254,900 acre-ft, Oct. 1, gage height, 4,380.55 ft.

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

4,380	1,241.2	4,400	1,819.7
4,390	1,509.1	4,410	2,177.0

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1254900	1275400	1329000	1370400	1418400	1443000	1413700	1419200	1464800	1525000	1525200	1571000
2	1255700	1275400	1330900	1370900	1420000	1444100	1412900	1421400	1467000	1525500	1525500	1568000
3	1257700	1276600	1332700	1371400	1422000	1444900	1412400	1424400	1469300	1527800	1525800	1565400
4	1260900	1277900	1333200	1372800	1423900	1445800	1413200	1426100	1471300	1528700	1526400	1563000
5	1263500	1279200	1334800	1374100	1425500	1444900	1411300	1428000	1473000	1529600	1526700	1559200
6	1264700	1280500	1336900	1375700	1426900	1445200	1410400	1430000	1474100	1529900	1527800	1561500
7	1266000	1284000	1337700	1377400	1428900	1444900	1409600	1431300	1476100	1529900	1529900	1559200
8	1267000	1285000	1339000	1379000	1430500	1443500	1408500	1434100	1477800	1529900	1531000	1556800
9	1268300	1286600	1340300	1381400	1431600	1441900	1407700	1435800	1479500	1528100	1533400	1554400
10	1267500	1289700	1341700	1382700	1433000	1440500	1406300	1437200	1481400	1527300	1537700	1554100
11	1269500	1292200	1343200	1384900	1435500	1439100	1403900	1438000	1483700	1526400	1542100	1553900
12	1271100	1294800	1344800	1386800	1436900	1439100	1404200	1439100	1486500	1525000	1546800	1553000
13	1271100	1297400	1346700	1388700	1438500	1438800	1403900	1440200	1490200	1522900	1550600	1553900
14	1271300	1299400	1348500	1390300	1440800	1437200	1403600	1441000	1492200	1520900	1551800	1556500
15	1271600	1302000	1350100	1391900	1442200	1434900	1403300	1442200	1494800	1518900	1551800	1559700
16	1271800	1304100	1352000	1394600	1444400	1433300	1403600	1442700	1497400	1516900	1553900	1561500
17	1272300	1305600	1353800	1396300	1446600	1431600	1405000	1443500	1499600	1515100	1555900	1563000
18	1272800	1307200	1355700	1398200	1448800	1430000	1406900	1444100	1503400	1513400	1558000	1564200
19	1272800	1309800	1357300	1399000	1450800	1428600	1407700	1444400	1507400	1511100	1560300	1565100
20	1272600	1310500	1358900	1399800	1449100	1427200	1408500	1444700	1509100	1509100	1563900	1565700
21	1272300	1314400	1361000	1400600	1448800	1423900	1409300	1445500	1510000	1507100	1568600	1566500
22	1271800	1315700	1362100	1401200	1448300	1423600	1410200	1445500	1512000	1504800	1570400	1567700
23	1272100	1316200	1363400	1402300	1447700	1422800	1410700	1446300	1514000	1504500	1572500	1570100
24	1272800	1317500	1364500	1403600	1447400	1421700	1411800	1447700	1516000	1502200	1574600	1570400
25	1273100	1318300	1365600	1405000	1447200	1420900	1412400	1458000	1518300	1501400	1576600	1571300
26	1273600	1319400	1366600	1406900	1445500	1419800	1413500	1453600	1520600	1500800	1579000	1572500
27	1273800	1320700	1367400	1408800	1443800	1418100	1414000	1456700	1522300	1505900	1579900	1572500
28	1274100	1323500	1367700	1410400	1443000	1417000	1414600	1459700	1523500	1511100	1579300	1572800
29	1274300	1325100	1368200	1412400	---	1415400	1415100	1461100	1523800	1516300	1516400	1573100
30	1274600	1327200	1369000	1414800	---	1414800	1416700	1461700	1524400	1520300	1576900	1573400
31	1274900	---	1369600	1416200	---	1414300	---	1462500	---	1522600	1574000	---
MAX	1274900	1327200	1369600	1416200	1450800	1445800	1416700	1462500	1524400	1529900	1579900	1573400
MIN	1254900	1275400	1329000	1370400	1418400	1414300	1403300	1419200	1464800	1500800	1516400	1553000
(†)	4381.34	4383.37	4384.97	4386.69	4387.66	4386.62	4386.71	4388.36	4390.53	4390.47	4392.22	4392.20
(††)	+20500	+52300	+42400	+46600	+26800	-28700	+2400	+45800	+61900	-1800	+51400	-600
CAL YR 1990	MAX 1738600	MIN 1249100	(††)	-305700								
WTR YR 1991	MAX 1579900	MIN 1254900	(††)	+319000								

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET.

RIO GRANDE BASIN

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, Hydrologic Unit 13030101, in Pedro Armendaris Grant, on left bank 1.0 mi downstream from dam, 1.5 mi upstream from Cuchillo Negro River, and at mile 1,382.2.

DRAINAGE AREA.--29,450 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--January 1915 to current year. Monthly or annual discharge only for some periods, published in WSP 1732. Figures of daily discharge, published in WSP 458 for October to December 1916, are unreliable.

REVISED RECORDS.--WSP 1562: 1920. WSP 1632: Drainage area. WSP 1732: 1917, 1920. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 4,241.09 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 24, 1980, at datum 1.0 ft higher. See WSP 1732 for history of changes prior to Apr. 24, 1942.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Elephant Butte Reservoir (station 08360500). Diversion for irrigation of about 800,000 acres upstream from station. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--76 years, 991 ft³/s, 718,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,220 ft³/s, May 22, 1942; no flow at times prior to 1929, Mar. 2-4, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,130 ft³/s, June 14; minimum daily, 6.8 ft³/s, Nov. 10, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	9.5	10	12	8.8	1080	1520	1150	1400	2000	680	1560
2	16	9.7	9.5	12	8.6	666	1530	919	1420	2000	686	1550
3	11	8.0	11	12	8.6	665	1530	1160	1860	1990	692	e1550
4	11	7.5	13	12	8.6	1070	1550	1400	2040	1990	695	e1560
5	11	8.1	13	12	8.6	1300	1560	1390	2030	1990	695	e1550
6	10	7.9	13	12	8.6	1280	1540	1390	2040	2000	690	e1560
7	9.7	7.6	13	12	10	1310	1540	1380	2030	2000	697	1550
8	9.3	7.2	12	12	12	1310	1410	1160	2040	2000	685	1550
9	8.5	7.5	12	12	12	1310	1430	921	2050	1570	689	1560
10	8.9	6.8	12	12	12	1310	1390	1170	1710	1330	694	1560
11	9.1	6.9	13	12	12	1320	1400	1400	1490	1330	699	1570
12	9.1	6.9	13	13	12	1320	1400	1390	1510	1340	705	1450
13	8.6	7.1	13	13	12	1330	1400	1390	1730	1340	1160	954
14	8.5	7.0	12	13	11	1330	1400	1390	2130	1350	1390	727
15	8.5	6.8	12	14	11	1320	1410	1390	2120	1340	997	734
16	8.0	6.9	12	13	11	1330	1170	1390	2050	1300	696	741
17	7.7	7.2	12	13	11	1330	948	1720	2050	1350	703	301
18	8.2	7.3	12	13	11	1340	1200	2040	2010	1350	705	23
19	8.7	8.1	12	13	699	1430	1430	2020	2000	1350	280	19
20	8.9	8.4	12	12	1290	1490	1420	2010	2010	1360	27	19
21	9.0	8.8	12	12	1290	1490	1420	2000	2000	1360	26	18
22	9.0	9.0	12	12	1290	1490	1410	2000	2000	1350	23	17
23	9.3	9.5	12	12	1300	1500	1170	2000	2000	1360	23	21
24	9.1	8.6	12	11	1300	1500	1180	1770	2000	1370	23	17
25	9.4	8.6	12	11	1300	1500	1410	1350	2000	1370	24	15
26	9.3	8.9	12	10	1290	1490	1410	1360	2000	1120	24	15
27	8.8	9.0	12	10	1290	1500	1400	1380	1990	683	473	14
28	9.0	9.6	12	10	1300	1500	1400	1790	2000	685	718	13
29	9.5	10	12	9.6	---	1510	1400	2010	2000	1130	1140	13
30	9.4	10	12	9.5	---	1500	1390	1800	2000	1360	1360	460
31	9.3	---	12	9.2	---	1510	---	1380	---	920	1490	---
TOTAL	298.8	244.4	373.5	365.3	12537.8	41331	41768	47020	57710	44988	19589	22691
MEAN	9.64	8.15	12.0	11.8	448	1333	1392	1517	1924	1451	632	756
MAX	17	10	13	14	1300	1510	1560	2040	2130	2000	1490	1570
MIN	7.7	6.8	9.5	9.2	8.6	665	948	919	1400	683	23	13
AC-FT	593	485	741	725	24870	81980	82850	93260	114500	89230	38850	45010

CAL YR 1990 TOTAL 335540.7 MEAN 919 MAX 2370 MIN 6.8 AC-FT 665500
WTR YR 1991 TOTAL 288916.8 MEAN 792 MAX 2130 MIN 6.8 AC-FT 573100

e Estimated

RIO GRANDE BASIN

08362000 CABALLO RESERVOIR NEAR ARREY, NM

LOCATION.--Lat 32°53'47", Long 107°17'30", in SE¼SW¼ sec.19, T.16 S., R.4 W., Sierra County, Hydrologic Unit 13030101, in control tower of Caballo Dam on Rio Grande, 0.5 mi downstream from mouth of Apache Canyon, 0.9 mi upstream from Bojarquez Bridge, 2 mi upstream from Percha diversion dam, 3.5 mi northeast of Arrey, 5.2 mi south of Caballo, and at mile 1,356.6.

DRAINAGE AREA.--30,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--February 1938 to September 1965 (monthend contents only), October 1965 to current year.

REVISED RECORDS.--WSP 978: 1942. WSP 1632: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam, completed Sept. 19, 1938. Storage began Feb. 8, 1938. Capacity by 1983 survey, 331,500 acre-ft between gage heights 4,104 ft, bottom of tunnel entrance of gates and 4,182 ft, gage height above which spillway gates operate automatically. Capacity by original survey was 345,900 acre-ft. No dead storage. Storage held for flood control, 100,000 acre-ft. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande Project of U.S. Bureau of Reclamation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 347,000 acre-ft, Mar. 4, 1942, gage height, 4,182.06 ft; minimum contents, 118 acre-ft, Oct. 14, 1938, gage height, 4,108.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 68,540 acre-ft, Mar. 2, gage height, 4,149.31 ft; minimum contents, 15,720 acre-ft, Sept. 4, gage height, 4,132.33 ft.

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

4,125	4,810	4,160	131,200
4,130	11,680	4,170	209,400
4,140	33,770	4,180	308,900
4,150	71,800		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41900	44600	48400	51680	55690	68210	45780	53720	54480	49450	43190	18030
2	41800	44600	48500	51920	55930	68540	46640	53920	53840	49900	41680	16990
3	42300	45000	48600	52070	56180	67920	46850	53440	53160	50920	40760	15980
4	42400	45400	48400	52110	56380	68210	47180	53680	53160	51680	39860	15720
5	42600	45900	48500	52300	56380	66900	47320	53920	53640	52460	38940	17340
6	42700	46000	48600	52500	56260	67220	48410	54120	54800	53280	38170	19060
7	42900	46000	48600	52730	56260	67550	48780	54680	54800	54080	36880	20380
8	43000	46400	48600	52850	56300	67460	49450	54760	55320	54880	35610	21760
9	43200	46500	48700	53090	56510	66200	50350	54160	55850	55810	34250	23200
10	43100	46500	48900	53240	56760	64960	50610	52970	56430	55000	33440	24190
11	43100	46600	48900	53400	56760	63700	50690	52690	56380	53960	32630	25640
12	43500	46700	49000	53640	56800	62320	50990	52420	55570	52890	31840	27830
13	43400	46900	49100	53720	56920	60910	51530	52110	54760	52460	31620	29380
14	43400	46900	49200	53840	57050	59320	51880	51950	54360	52030	32360	30520
15	43400	47000	49300	54040	57130	58050	52810	50990	54600	51610	35000	30970
16	43500	47200	49500	54120	57380	56590	52890	49970	54800	51490	37160	31350
17	43600	47200	49700	54360	57630	55120	52890	48890	55000	51110	38200	31920
18	43700	47200	49800	54520	57880	53720	52540	49300	55200	50880	39260	31140
19	43700	47300	49900	54560	58090	52260	51840	49710	55080	50800	40340	31270
20	43800	47300	49800	54600	58430	55190	51840	50120	54800	50010	40470	31270
21	43800	47500	49900	54640	60130	49940	51880	50920	54520	49190	39670	31000
22	43900	47500	49900	54680	61660	49040	51880	51450	54120	48380	38350	30870
23	44000	47500	50000	54920	62540	48050	51880	51650	53680	48050	36490	30120
24	44100	47600	50100	55120	63470	46780	52150	53680	53280	47720	34370	29650
25	44100	47600	50200	55120	64460	45540	51650	53880	52890	48010	32330	28890
26	44200	47600	50400	55280	65280	44490	51450	54080	52420	48050	30360	28010
27	44200	48000	50500	55440	66200	44010	51760	54240	51840	47100	28240	26850
28	44300	48100	50500	55570	66660	43460	52070	54400	51340	46170	35000	28090
29	44400	48200	50800	55570	---	43360	52380	54580	50690	45220	22600	24360
30	44500	48300	51100	55610	---	44140	52770	55120	50050	44700	20210	23130
31	44500	---	51500	55690	---	44940	---	55120	---	44380	19100	---
MAX	44500	48300	51500	55690	66660	68540	52890	55120	56430	55810	43190	31920
MIN	41800	44600	48400	51680	55690	43360	45780	48890	50050	44380	19100	15720
(†)	4143.42	4144.49	4145.34	4146.40	4148.92	4143.55	4145.67	4146.26	4144.96	4143.39	4134.03	4135.85
(††)	+1800	+3800	+3200	+4190	+10970	-21720	+7830	+2350	-5070	-5670	-25280	+4030
CAL YR 1990	MAX 73000	MIN 21300	(††)	+20800								
WTR YR 1991	MAX 68540	MIN 15720	(††)	-19570								

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

(††) CHANGE IN CONTENTS, IN ACRE-FEET.

RIO GRANDE BASIN

08362500 RIO GRANDE BELOW CABALLO DAM, NM

LOCATION.--Lat 32°53'05", long 107°17'31", in NE¼SW¼ sec.30, T.16 S., R.4 W., Sierra County, Hydrologic Unit 13030102, on left bank 2,000 ft upstream from Interstate Highway 25, 4,200 ft downstream from Caballo Dam, 1.2 mi downstream from Apache Canyon, 1.3 mi upstream from Percha diversion dam, 3 mi northeast of Arrey, 5 mi south of Caballo, and at mile 1,355.6.

DRAINAGE AREA.--30,700 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--January 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,140.9 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1938, at datum 7.0 ft higher, Oct. 7-12, 1938, at datum 6.0 ft higher, and Oct. 13, 1938, to Dec. 31, 1945, at datum 5.0 ft higher than present datum.

REMARKS.--Flow regulated by Caballo Reservoir (station 08362000), capacity, 331,500 acre-ft, 1981 survey and Elephant Butte Reservoir (station 08360500), capacity, 2,065,000 acre-ft, 1988 survey. Diversions for irrigation of about 800,000 acres upstream from station. Figures of daily discharge do not include Bonita ditch, which diverts from Caballo Dam and bypasses station for irrigation downstream. See monthly table below for record of ditch. U.S. Bureau of Reclamation satellite telemeter at station.

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

AVERAGE DISCHARGE.--53 years, 902 ft³/s, 653,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft³/s, May 20, 1942; minimum daily, 0.1 ft³/s, Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955, Feb. 15-29, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,250 ft³/s, June 27, 28; minimum daily, 1.0 ft³/s, Jan. 1-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	2.0	2.0	1.0	2.0	777	1140	1010	1690	2140	1500	1900
2	2.0	5.0	2.0	1.0	2.0	1100	1310	1070	1690	1560	1430	1890
3	2.0	3.0	2.0	1.0	2.0	1100	1440	1120	1700	1550	1250	1740
4	2.0	3.0	2.0	1.0	2.0	1100	1360	1120	1700	1540	1210	1500
5	2.0	3.0	2.0	1.0	2.0	1130	1050	1120	1690	1510	1170	1420
6	2.0	3.0	2.0	1.0	2.0	1180	1000	1070	1630	1490	1290	1240
7	2.0	3.0	2.0	1.0	2.0	1260	1000	1190	1620	1490	1410	1200
8	2.0	3.0	2.0	1.0	2.0	1640	929	1390	1670	1430	1410	1230
9	2.0	3.0	2.0	1.0	2.0	2050	1190	1400	1660	1710	1440	1150
10	2.0	3.0	2.0	1.0	2.0	2180	1260	1370	1650	1920	1360	943
11	2.0	3.0	2.0	1.0	2.0	2190	1280	1350	1690	1790	907	830
12	2.0	3.0	2.0	1.0	2.0	2090	1210	1330	1740	1680	895	761
13	2.0	2.0	2.0	1.0	2.0	2020	1100	1330	1760	1600	846	731
14	2.0	2.0	2.0	1.0	2.0	2020	1020	1530	1840	1610	333	683
15	2.0	2.0	2.0	1.0	2.0	2060	1000	1890	1900	1560	100	683
16	2.0	2.0	2.0	1.0	2.0	2120	1190	1880	1900	1460	100	655
17	2.0	2.0	2.0	1.0	2.0	2100	1370	1730	1900	1440	100	798
18	2.0	2.0	2.0	1.0	2.0	2090	1370	1620	1970	1380	500	481
19	2.0	2.0	2.0	1.0	117	2030	1300	1620	2120	1540	700	25
20	2.0	2.0	2.0	1.0	328	1980	1260	1630	2140	1700	736	89
21	2.0	2.0	2.0	1.0	422	1980	1260	1560	2170	1680	777	254
22	2.0	2.0	2.0	1.0	718	1980	1260	1530	2180	1540	908	399
23	2.0	2.0	2.0	1.0	848	2060	1290	1520	2180	1420	1020	399
24	2.0	2.0	2.0	1.0	848	2140	1360	1440	2180	1360	1040	447
25	2.0	2.0	2.0	1.0	848	2090	1360	1370	2190	1350	1010	482
26	2.0	2.0	2.0	1.0	848	1850	1240	1380	2210	1320	1100	577
27	2.0	2.0	2.0	1.0	848	1720	1150	1380	2250	1310	1470	633
28	2.0	2.0	2.0	2.0	755	1640	1140	1530	2250	1310	1810	637
29	2.0	2.0	2.0	2.0	---	1320	1150	1650	2240	1300	1950	637
30	2.0	2.0	2.0	2.0	---	1120	1070	1640	2230	1380	2000	629
31	2.0	---	2.0	2.0	---	1120	---	1630	---	1460	1920	---
TOTAL	228.0	73.0	62.0	35.0	6616.0	53237	36059	44400	57740	47530	33692	25043
MEAN	7.35	2.43	2.00	1.13	236	1717	1202	1432	1925	1533	1087	835
MAX	168	5.0	2.0	2.0	848	2190	1440	1890	2250	2140	2000	1900
MIN	2.0	2.0	2.0	1.0	2.0	777	929	1010	1620	1300	100	25
AC-FT	452	145	123	69	13120	105600	71520	88070	114500	94280	66830	49670
(†)	0	0	0	0	0	1	1	84	54	70	82	22

CAL YR 1990 TOTAL 342831.00 MEAN 939 MAX 2530 MIN 2.0 AC-FT 680000
WTR YR 1991 TOTAL 304715.0 MEAN 835 MAX 2250 MIN 1.0 AC-FT 604400

(†) DIVERSION, IN ACRE-FEET, BY BONITA DITCH; DIVERTS DIRECTLY FROM CABALLO DAM AND THIS DIVERSION IS NOT INCLUDED IN THE RIVER RECORDS.

RIO GRANDE BASIN

08364000 RIO GRANDE AT EL PASO, TX
(National stream-quality accounting network)

WATER-QUALITY RECORDS

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, Hydrologic Unit 13030102, on downstream side of first pier from left abutment of Courchesne Bridge at El Paso, 1.7 mi upstream from American Dam, 5.6 mi upstream from Santa Fe Street-Juarez Avenue Bridge between El Paso and Cd. Juarez, Chihuahua, and at mile 1,249.

DRAINAGE AREA.--32,207 mi², approximately, including 2,940 mi² in closed basin in San Luis Valley, CO.

PERIOD OF RECORD.--Water years 1930 to current year.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 14...	0905	185	1950	8.2	12.0	11.5	27	8.9	420	140	120
JAN 09...	1510	88	2010	8.7	13.5	13.0	13	10.4	--	--	--
MAR 26...	0850	910	1020	8.8	17.5	13.5	80	7.7	230	51	66
MAY 15...	1100	580	1050	8.7	16.0	16.0	53	6.0	240	50	70
JUL 16...	1045	1100	1020	8.4	27.0	22.5	190	5.4	240	61	69
SEP 10...	0955	250	1220	8.3	20.5	21.0	73	7.0	280	77	80

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 14...	28	280	6	10	286	24	274	470	230	0.50
JAN 09...	27	300	--	11	288	17	264	440	250	0.30
MAR 26...	15	110	3	7.2	214	0	175	190	96	0.70
MAY 15...	16	120	3	7.7	195	19	192	220	99	0.80
JUL 16...	16	130	4	8.7	193	12	178	210	91	0.60
SEP 10...	19	160	4	8.3	234	6	202	290	130	0.70

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 14...	26	1320	1340	2.61	0.930	0.090	0.070	2.70	1.00	0.180
JAN 09...	21	1360	--	0.750	0.760	0.050	0.040	0.800	0.800	0.060
MAR 26...	12	587	604	0.330	0.340	0.040	0.040	0.370	0.380	0.040
MAY 15...	9.5	676	659	--	--	0.030	0.010	<0.050	<0.050	0.020
JUL 16...	13	650	648	0.270	0.280	0.010	0.010	0.280	0.290	<0.010
SEP 10...	17	766	830	0.550	0.580	0.020	0.010	0.570	0.590	0.020

RIO GRANDE BASIN
08364000 RIO GRANDE AT EL PASO, TX -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
NOV 14...	0.140	0.62	3.5	0.310	0.260	20	4	93	<0.5	<1.0
JAN 09...	0.050	0.24	1.1	0.550	0.420	20	4	<100	<10	<1.0
MAR 26...	0.030	0.96	1.4	0.250	0.070	--	--	--	--	--
MAY 15...	0.020	1.4	--	0.270	0.080	10	3	65	<0.5	<1.0
JUL 16...	<0.010	--	1.1	0.410	0.070	<10	5	80	<0.5	<1.0
SEP 10...	0.020	0.48	1.1	0.270	0.070	<10	3	85	<0.5	<1.0
DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
NOV 14...	2	<3	2	7	<1	200	29	<0.1	<10	1
JAN 09...	2	<1	2	<10	<1	190	60	<0.1	8	<1
MAY 15...	2	<3	2	5	1	89	4	<0.1	<10	1
JUL 16...	1	4	3	8	<1	100	5	<0.1	<10	2
SEP 10...	<1	<3	2	9	<1	110	3	<0.1	<10	1
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 14...	<1	<1.0	1600	<6	5	132	66	64	250	360
JAN 09...	<1	<1.0	1700	7	<10	50	12	79	130	240
MAR 26...	--	--	--	--	--	586	1440	53	97	920
MAY 15...	<1	<1.0	870	<6	4	306	479	66	560	570
JUL 16...	<1	<1.0	880	6	4	666	1980	67	K180	2500
SEP 10...	<1	<1.0	1100	7	5	543	367	79	630	1700

RIO GRANDE BASIN

08370500 RIO GRANDE BELOW OLD FORT QUITMAN, TX
(National stream-quality accounting network)

WATER-QUALITY RECORDS

LOCATION.--Lat 31°05'05", long 105°36'25", Hudspeth County, Hydrologic Unit 13040201, at gaging station on the rectified channel of the Rio Grande, 1.5 mi downstream from Old Fort Quitman, and 81.7 mi downstream from the American Dam at El Paso.

DRAINAGE AREA.--31,990 mi², approximately, United States and Mexico; from International Boundary and Water Commission Bulletin No. 46 (excluding 2,940 mi² in closed basin in San Luis Valley, CO).

PERIOD OF RECORD.--Water years 1930 to current year.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV											
15...	1100	318	3400	7.7	21.5	14.0	27	6.2	570	290	160
JAN											
10...	1110	188	3500	8.1	10.0	10.5	10	8.2	610	340	170
MAR											
27...	1010	54	7200	8.1	17.0	13.0	10	6.8	1100	820	300
MAY											
14...	1005	75	5200	8.3	25.5	21.0	33	5.1	920	650	250
JUL											
17...	1115	273	2350	8.0	24.5	25.0	950	4.1	450	240	130
SEP											
11...	1120	513	2200	8.0	26.5	21.0	800	6.8	420	250	120

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV										
15...	41	450	8	35	342	0	280	500	570	0.50
JAN										
10...	44	520	9	13	329	0	270	570	680	0.20
MAR										
27...	87	1000	13	13	354	0	290	1300	1600	0.90
MAY										
14...	71	770	11	12	334	0	274	990	1100	0.90
JUL										
17...	29	340	7	10	251	0	206	380	400	1.0
SEP										
11...	29	310	7	10	214	0	175	410	400	0.80

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
NOV											
15...	29	2020	1970	1.53	1.44	0.170	0.160	1.70	1.60	3.80	3.70
JAN											
10...	27	2260	2200	0.930	0.940	0.270	0.260	1.20	1.20	4.90	4.90
MAR											
27...	22	4140	4500	0.190	--	0.070	<0.010	0.260	0.270	0.060	0.020
MAY											
14...	20	3290	3390	0.240	0.240	0.060	0.060	0.300	0.300	0.080	0.080
JUL											
17...	18	1440	1440	1.04	1.04	0.160	0.160	1.20	1.20	0.270	0.290
SEP											
11...	17	1400	1410	1.05	1.05	0.050	0.050	1.10	1.10	0.060	0.070

RIO GRANDE BASIN

08370500 RIO GRANDE BELOW OLD FORT QUITMAN, TX -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
NOV 15...	1.2	--	6.7	1.80	1.30	<10	7	100	<10	<1.0
JAN 10...	2.0	--	8.1	1.50	1.30	--	--	--	--	--
MAR 27...	0.64	--	0.96	0.270	0.050	--	--	--	--	--
MAY 14...	3.0	--	3.4	0.330	0.220	20	7	<100	<10	<1.0
JUL 17...	4.4	1.0	5.9	2.60	0.210	20	6	100	<10	<1.0
SEP 11...	2.4	--	3.6	1.60	0.220	30	5	100	<10	<1.0
DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
NOV 15...	1	1	2	<10	<1	200	100	<0.1	4	3
MAY 14...	2	1	3	<10	<1	270	150	<0.1	13	4
JUL 17...	1	<1	2	40	<1	150	10	<0.1	11	2
SEP 11...	<1	<1	3	30	<1	140	10	<0.1	7	3
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 15...	<1	<1.0	3000	16	10	316	271	45	2300	8300
JAN 10...	--	--	--	--	--	90	46	33	49	66
MAR 27...	--	--	--	--	--	106	15	76	46	180
MAY 14...	<1	<1.0	4500	30	<10	266	54	73	K47	730
JUL 17...	<1	<1.0	2400	15	<10	1310	966	98	5400	8600
SEP 11...	<1	<1.0	1900	15	<10	1540	2130	93	K910	17000

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, NM
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in SW¼ sec.22, T.18 N., R.12 E., San Miguel County, Hydrologic Unit 13060001, in Santa Fe National Forest, on left bank 450 ft upstream from bridge on State Highway 63, 600 ft upstream from mouth, and 2.6 mi north of Terrero.

DRAINAGE AREA.--53.2 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. About 90 percent of the drainage is in the Pecos Wilderness Area and not subject to development, watershed management, or the building of highways; there is limited cattle grazing by permit.

AVERAGE DISCHARGE.--28 years, 32.4 ft³/s, 23,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 937 ft³/s, May 22, 1991, gage height, 4.08 ft; maximum gage height 4.15 ft, June 8, 1979; minimum determined, 0.90 ft³/s, Jan. 12-14, 1964, but may have been less during periods of ice effect.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since 1886 probably occurred Sept. 29, 1904 (based on statement for Pecos River near Pecos and history of that flood period).

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0030	*937	*4.08	Aug. 13	2300	359	3.11
July 25	0430	367	3.14	Sept. 10	0330	218	2.69

Minimum daily, 6.6 ft³/s, Dec. 24.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	14	e7.8	e9.0	e6.8	e8.4	16	40	105	35	75	54
2	45	17	e7.8	e8.6	e6.8	e8.6	20	48	94	33	70	51
3	43	19	e7.8	e8.0	e6.8	e8.8	19	57	83	34	115	48
4	39	15	e7.4	e8.0	e6.8	e8.8	20	55	77	34	181	48
5	36	14	e7.2	e8.0	e6.8	14	28	51	71	32	213	47
6	34	15	e7.2	e8.6	e7.0	11	44	54	68	30	210	76
7	33	14	e7.2	e9.0	e7.2	9.1	57	58	62	29	227	74
8	33	16	e7.2	e9.0	e7.4	e8.6	58	70	56	28	182	67
9	31	15	e7.2	e9.0	e7.4	e8.2	53	93	53	28	166	69
10	29	14	e7.2	e9.0	e7.4	e8.2	53	117	51	28	183	188
11	28	14	e8.0	e9.0	e7.8	e8.2	54	139	65	27	193	151
12	26	13	e8.0	e9.0	e7.8	e8.6	47	146	56	27	230	142
13	24	13	e8.0	e9.0	e7.8	e8.8	39	141	53	25	233	133
14	23	13	e8.4	e9.0	e7.8	e8.8	33	146	49	25	283	119
15	22	13	e8.8	e9.0	e8.0	9.3	31	146	47	25	236	105
16	21	12	e9.0	e9.0	e8.2	8.9	38	132	45	25	218	93
17	20	12	e9.4	e9.0	e8.2	9.9	45	119	42	25	221	85
18	19	12	e9.6	e9.0	e8.2	12	54	121	39	24	245	80
19	19	11	e9.6	e9.0	e8.4	13	58	131	38	27	233	76
20	22	11	e9.6	e9.0	e8.8	13	61	178	38	27	181	71
21	19	10	e8.4	e8.4	e8.8	11	74	400	35	30	146	66
22	19	8.4	e7.8	e8.0	e8.8	11	73	726	34	50	128	60
23	19	14	e7.0	e7.6	e8.8	9.7	73	524	31	99	116	56
24	18	14	e6.6	e7.6	e9.0	11	70	476	29	103	108	52
25	18	11	e6.8	e7.6	e9.0	12	69	340	27	267	94	47
26	17	12	e7.4	e7.4	e8.6	13	67	286	25	245	87	45
27	17	8.2	e7.6	e7.4	e8.2	13	57	230	23	172	81	43
28	16	e8.0	e7.8	e7.0	e8.0	12	50	203	23	155	75	41
29	15	e7.2	e8.0	e6.8	---	12	43	158	36	125	71	40
30	15	e7.2	e8.6	e6.8	---	11	40	135	54	93	64	40
31	14	---	e9.0	e6.8	---	14	---	120	---	83	57	---
TOTAL	775	377.0	247.4	257.6	220.6	323.9	1444	5640	1509	1990	4922	2267
MEAN	25.0	12.6	7.98	8.31	7.88	10.4	48.1	182	50.3	64.2	159	75.6
MAX	45	19	9.6	9.0	9.0	14	74	726	105	267	283	188
MIN	14	7.2	6.6	6.8	6.8	8.2	16	40	23	24	57	40
AC-FT	1540	748	491	511	438	642	2860	11190	2990	3950	9760	4500

CAL YR 1990 TOTAL 10815.6 MEAN 29.6 MAX 163 MIN 3.0 AC-FT 21450
WTR YR 1991 TOTAL 19973.5 MEAN 54.7 MAX 726 MIN 6.6 AC-FT 39620

e Estimated

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 28...	1230	7.0	100	8.0	0.0	0.0	0.50	11.8	53	12	18	2.0
MAR 22...	1330	11	108	8.7	3.0	1.5	4.2	10.9	56	10	19	2.0
MAY 30...	1300	135	58	8.0	18.5	9.0	2.7	8.6	32	8	11	1.0
AUG 26...	1245	88	74	7.4	22.0	10.5	2.0	--	43	6	15	1.4
DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	
NOV 28...	1.5	0.1	0.50	50	0	41	7.2	0.40	<0.10	6.7	67	
MAR 22...	1.6	0.1	0.50	56	0	46	9.0	1.1	0.20	7.0	81	
MAY 30...	0.90	0.1	0.50	29	0	24	4.5	0.20	<0.10	5.7	49	
AUG 26...	1.2	0.1	0.50	46	0	38	6.1	<0.10	0.10	6.5	51	
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 28...	61	--	<0.010	<0.010	<0.100	<0.100	0.020	0.020	--	--	0.020	<0.010
MAR 22...	69	0.045	0.020	<0.010	0.065	0.074	0.020	<0.010	0.18	0.27	0.030	<0.010
MAY 30...	38	--	0.010	<0.010	<0.050	<0.050	0.020	0.020	0.58	--	0.020	<0.010
AUG 26...	--	--	<0.010	<0.010	<0.050	<0.050	<0.010	<0.010	--	--	0.010	0.010
DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	
NOV 28...	20	<1	27	<0.5	<1.0	<1	<3	<1	15	<1	<4	
MAR 22...	120	<1	26	<0.5	1.0	<1	<3	2	79	<1	<4	
MAY 30...	130	<1	15	<0.5	<1.0	<1	<3	2	44	<1	<4	
AUG 26...	60	<1	23	<0.5	<1.0	<1	<3	1	42	<1	<4	

RIO GRANDE BASIN
08377900 RIO MORA NEAR TERRERO, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
NOV 28...	<1	<0.1	<10	<1	<1	<1.0	40	<6	<3	1.3	<0.6
MAR 22...	2	<0.1	<10	1	<1	<1.0	43	<6	6	--	--
MAY 30...	2	<0.1	<10	<1	<1	<1.0	23	<6	8	<0.6	<0.6
AUG 26...	2	<0.1	<10	<1	<1	<1.0	34	<6	7	--	--
DATE	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 28...	0.8	<0.6	0.7	<0.6	0.09	0.37	0	0.0	100	<3	K12
MAR 22...	--	--	--	--	--	--	2	0.06	100	<1	K7
MAY 30...	0.6	<0.6	<0.6	<0.6	0.07	0.09	14	5.1	65	K1	27
AUG 26...	--	--	--	--	--	--	17	4.1	67	K2	150

RIO GRANDE BASIN

08378500 PECOS RIVER NEAR PECOS, NM

LOCATION.--Lat 35°42'30", long 105°40'55", in NE¼NE¼ sec.17, T.17 N., R.12 E., San Miguel County, Hydrologic Unit 13060001, in Santa Fe National Forest, on left bank 30 ft downstream from bridge on private road, 270 ft upstream from Indian Creek, 2.4 mi downstream from Holy Ghost Creek, 9.0 mi north of Pecos, and at mile 896.6.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--August 1919 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Cowles" 1919-25, "at Irvins Ranch" 1926-29, and as "at Irvins Ranch near Pecos" 1930-39.

REVISED RECORDS.--WSP 898: Drainage area. WSP 1312: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 7,502.94 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 27, 1977, at site 30 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 75 acres, 1959 determinations, upstream from station. Several observations of water temperature were made during the year. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--72 years, 100 ft³/s, 72,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,500 ft³/s, Sept. 21 or 22, 1929, gage height, 6.2 ft, from floodmark, from rating curve extended above 1,600 ft³/s; minimum, 2.0 ft³/s, Mar. 19, 1971, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 310 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	2115	*2,980	*5.12	Aug. 7	0330	859	3.66
June 29	2400	411	2.97	Sept. 6	1430	464	3.08
July 25	0230	957	3.77	Sept. 10	0430	604	3.32

Minimum daily, 20 ft³/s, Nov. 28, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	50	e24	e31	e28	32	62	143	397	161	251	176
2	120	60	e24	e32	e27	35	76	165	360	149	231	173
3	114	74	e25	e32	e26	39	76	186	323	147	340	170
4	101	58	e24	e34	e25	37	84	183	296	144	464	167
5	95	54	e22	e34	e24	46	104	170	277	132	543	162
6	91	56	e23	e32	e27	46	146	176	276	123	553	297
7	88	55	e23	e32	e27	39	182	184	265	122	710	278
8	87	57	e24	e32	e28	44	184	212	245	118	569	236
9	85	51	e25	e30	e29	46	171	273	237	113	501	232
10	82	48	e25	e30	e29	39	169	333	225	112	517	513
11	78	47	e26	e30	e30	38	175	377	290	108	474	423
12	73	48	e28	e32	e30	42	160	380	286	109	494	392
13	70	47	e28	e32	e31	44	139	365	272	102	458	368
14	67	46	e27	e30	e31	43	122	383	262	100	542	324
15	65	47	e25	e32	e31	43	115	381	253	99	452	290
16	63	45	e31	e32	e28	42	130	352	238	102	426	262
17	61	44	e35	e30	e27	50	149	321	220	107	419	241
18	58	44	e37	e30	e26	48	177	326	205	99	438	225
19	59	44	e36	e30	e28	50	191	360	198	100	417	212
20	69	44	e36	e30	e30	49	203	507	204	101	359	200
21	62	e30	e35	e26	e31	46	249	1660	183	118	315	185
22	60	e25	e34	e24	e31	44	245	1980	170	204	286	174
23	65	e30	e31	e22	e30	47	246	1290	158	368	266	164
24	61	e33	e30	e22	e30	48	237	968	149	442	266	154
25	60	e24	e30	e24	e31	52	235	803	141	753	253	147
26	59	e26	e29	e24	e31	57	229	702	133	608	244	139
27	56	e25	e29	e26	e31	56	195	629	127	454	237	135
28	54	e20	e29	e28	e30	52	174	581	123	375	217	131
29	53	e20	e30	e26	---	50	156	550	172	322	205	126
30	51	e24	e30	e26	---	52	146	492	259	287	203	124
31	50	---	e31	e28	---	51	---	435	---	277	186	---
TOTAL	2257	1276	886	903	807	1407	4927	15867	6944	6556	11836	6820
MEAN	72.8	42.5	28.6	29.1	28.8	45.4	164	512	231	211	382	227
MAX	120	74	37	34	31	57	249	1980	397	753	710	513
MIN	50	20	22	22	24	32	62	143	123	99	186	124
AC-FT	4480	2530	1760	1790	1600	2790	9770	31470	13770	13000	23480	13530

CAL YR 1990 TOTAL 29403 MEAN 80.6 MAX 358 MIN 15 AC-FT 58320
WTR YR 1991 TOTAL 60486 MEAN 166 MAX 1980 MIN 20 AC-FT 120000

e Estimated

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM

LOCATION.--Lat 35°40'20", long 105°27'58", in NW¼SE¼ sec.28, T.17 N., R.14 E., San Miguel County, Hydrologic Unit 13060001, in Santa Fe National Forest, on right bank 2.3 mi upstream from Blue Canyon, and 5.1 mi southwest of El Porvenir.

DRAINAGE AREA.--5.42 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,060 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft³/s Aug. 13, 1991, gage height, 3.05 ft, from rating curve extended above 30 ft³/s; minimum discharge recorded, 0.06 ft³/s, July 8, 9, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 142 ft³/s, Aug. 13, gage height, 3.05 ft; minimum discharge recorded, 0.76 ft³/s, Oct. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	---	---	---	---	---	---	3.5	2.1	1.3	5.9	e5.1
2	4.8	---	---	---	---	---	---	3.5	2.1	1.4	5.6	e4.7
3	4.1	---	---	---	---	---	---	3.5	1.9	1.6	12	e4.6
4	3.7	---	---	---	---	---	---	3.1	1.8	e1.4	18	e4.1
5	3.4	---	---	---	---	---	---	3.2	1.7	e1.2	20	e3.7
6	3.1	---	---	---	---	---	---	3.2	1.7	e1.2	17	e5.6
7	2.7	---	---	---	---	---	---	3.2	1.6	e1.2	17	e4.7
8	2.5	---	---	---	---	---	---	3.3	1.5	e1.0	14	e4.1
9	2.4	---	---	---	---	---	---	3.5	1.4	e1.0	14	e8.2
10	2.2	---	---	---	---	---	---	3.8	1.4	e1.0	14	e55
11	2.1	---	---	---	---	---	---	4.0	2.4	e1.0	14	e40
12	1.8	---	---	---	---	---	---	3.9	2.6	e1.2	13	e27
13	1.7	---	---	---	---	---	---	3.7	2.0	e1.2	31	e21
14	1.6	---	---	---	---	---	---	3.6	1.5	e1.2	67	e16
15	1.5	---	---	---	---	---	---	3.4	1.5	e1.2	40	e12
16	1.5	---	---	---	---	---	---	3.3	1.4	e1.3	32	e10
17	1.4	---	---	---	---	---	---	3.1	1.3	1.3	27	e8.2
18	1.3	---	---	---	---	---	---	4.4	2.9	1.2	22	e7.0
19	1.3	---	---	---	---	---	---	4.5	2.7	1.2	22	e6.1
20	1.4	---	---	---	---	---	---	4.7	2.7	1.2	22	e5.6
21	1.3	---	---	---	---	---	---	5.1	4.8	1.2	16	e4.9
22	1.2	---	---	---	---	---	---	5.0	5.5	1.1	19	e4.4
23	1.1	---	---	---	---	---	---	4.9	4.8	1.0	14	e4.1
24	1.1	---	---	---	---	---	---	4.8	4.4	1.0	11	e3.6
25	1.0	---	---	---	---	---	---	4.8	4.0	.97	19	e16
26	.98	---	---	---	---	---	---	4.7	3.7	.93	20	e13
27	.91	---	---	---	---	---	---	4.4	3.4	.89	16	e9.8
28	.87	---	---	---	---	---	---	4.0	3.2	.91	12	e9.2
29	.85	---	---	---	---	---	---	3.8	3.0	1.6	9.7	e7.4
30	.79	---	---	---	---	---	---	3.6	2.8	1.9	8.0	e6.5
31	.76	---	---	---	---	---	---	2.4	---	7.2	e5.6	---
TOTAL	60.96	---	---	---	---	---	---	109.1	45.00	150.8	573.0	290.2
MEAN	1.97	---	---	---	---	---	---	3.52	1.50	4.86	18.5	9.67
MAX	5.6	---	---	---	---	---	---	5.5	2.6	20	67	55
MIN	.76	---	---	---	---	---	---	2.4	.89	1.0	5.6	3.2
AC-FT	121	---	---	---	---	---	---	216	89	299	1140	576

e Estimated

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
05...	1700	1028	1028	3.0	190	--	--	--	--	0	--	--
05...	1730	1028	1028	3.4	190	--	--	--	--	1	--	--
05...	1800	1028	1028	3.7	188	--	--	--	--	0	--	--
05...	1830	1028	1028	4.0	190	--	--	--	--	0	--	--
05...	1900	1028	1028	4.4	189	--	--	--	--	0	--	--
05...	1930	1028	1028	4.8	192	--	--	--	--	0	--	--
05...	2000	1028	1028	5.3	190	--	--	--	--	0	--	--
05...	2030	1028	1028	5.6	190	--	--	--	--	0	--	--
05...	2100	1028	1028	5.7	192	--	--	--	--	0	--	--
05...	2130	1028	1028	5.7	190	--	--	--	--	0	--	--
05...	2230	1028	1028	6.2	190	--	--	--	--	0	--	--
05...	2330	1028	1028	6.0	190	--	--	--	--	0	--	--
06...	0030	1028	1028	5.9	190	--	--	--	--	0	--	--
06...	0130	1028	1028	5.9	192	--	--	--	--	0	--	--
06...	0230	1028	1028	5.6	190	--	--	--	--	0	--	--
06...	0330	1028	1028	5.2	190	--	--	--	--	0	--	--
13...	0945	1028	B9735	1.1	175	8.0	11.5	4.5	--	0	9.6	130
NOV												
08...	1200	1028	B9735	0.96	165	7.8	8.5	1.0	--	1	--	100
APR												
05...	1730	1028	B9735	2.6	165	7.5	1.0	4.0	25	--	--	90
MAY												
01...	1515	1028	B9735	2.8	140	8.4	0.0	3.5	5	--	--	77
02...	1000	1028	B9735	3.0	145	8.3	0.5	1.0	5	--	--	82
24...	1010	1028	1028	1.6	150	8.2	9.5	7.0	5	3	--	87
24...	1430	1028	1028	1.6	158	8.2	--	--	--	18	--	--
24...	1500	1028	1028	1.6	156	8.2	--	--	--	18	--	--
MAY												
24-24	1530	1028	B9735	1.6	156	8.2	--	--	--	--	--	--
24...	1600	1028	1028	1.6	156	8.2	--	--	--	18	--	--
24...	1700	1028	1028	1.6	155	8.2	--	--	--	18	--	--
24...	1730	1028	1028	1.6	155	8.2	--	--	--	18	--	--
24...	1800	1028	1028	1.6	155	8.2	--	--	--	18	--	--
24...	1830	1028	1028	1.6	156	8.1	--	--	--	18	--	--
24...	1900	1028	1028	1.6	156	8.1	--	--	--	18	--	--
24...	1930	1028	1028	1.6	156	8.2	--	--	--	18	--	--
24...	2000	1028	1028	1.6	156	8.2	--	--	--	18	--	--
24...	2030	1028	1028	1.6	156	8.2	--	--	--	23	--	--
24...	2130	1028	1028	1.6	158	8.2	--	--	--	23	--	--
24...	2230	1028	1028	1.6	156	8.2	--	--	--	18	--	--
24...	2330	1028	1028	1.6	158	8.2	--	--	--	18	--	--
JUN												
22...	1030	1028	B9735	E0.77	152	8.2	18.0	12.0	5	2	--	90
JUL												
04...	2015	1028	1028	1.8	145	7.7	--	--	--	55	--	--
04...	2045	1028	1028	1.8	140	7.5	--	--	--	85	--	--
04...	2115	1028	1028	1.7	155	7.8	--	--	--	61	--	--
04...	2245	1028	1028	1.8	150	7.9	--	--	--	50	--	--
04...	2315	1028	1028	1.9	151	7.9	--	--	--	50	--	--
04...	2345	1028	1028	1.8	155	7.8	--	--	--	50	--	--
14...	1615	1028	1028	1.8	162	7.9	--	--	--	70	--	--
14...	1645	1028	1028	1.9	162	7.9	--	--	--	70	--	--
14...	1715	1028	1028	2.1	171	8.0	--	--	--	50	--	--
14...	1745	1028	1028	2.2	172	7.9	--	--	--	40	--	--
14...	1815	1028	1028	2.4	170	7.9	--	--	--	40	--	--
14...	1845	1028	1028	2.3	170	8.0	--	--	--	40	--	--
14...	1915	1028	1028	2.2	170	7.9	--	--	--	25	--	--
14...	1945	1028	1028	2.3	170	8.0	--	--	--	25	--	--
14...	2015	1028	1028	2.4	172	7.9	--	--	--	25	--	--
14...	2045	1028	1028	2.3	171	8.0	--	--	--	25	--	--
14...	2145	1028	1028	2.1	170	7.9	--	--	--	25	--	--
14...	2245	1028	1028	2.0	181	8.1	--	--	--	25	--	--
14...	2345	1028	1028	1.8	182	8.1	--	--	--	25	--	--
15...	0045	1028	1028	1.7	190	8.1	--	--	--	20	--	--
19...	1135	1028	B9735	1.2	200	8.1	15.5	12.5	--	--	--	--
20...	0600	1028	1028	2.1	175	7.7	--	--	--	40	--	--
20...	0630	1028	1028	2.1	164	7.9	--	--	--	45	--	--
20...	0700	1028	1028	2.1	162	7.8	--	--	--	40	--	--
20...	0730	1028	1028	2.1	156	7.8	--	--	--	35	--	--

B Chemical analyses performed by New Mexico State Health Laboratory

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR- BONATE WATER WH FET FIELD (MG/L AS CO3) (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 13...	46	2.5	<5.0	2.0	85	100	0	7.6	<5.0	0.23	110
NOV 08...	36	3.6	<5.0	<1.0	91	110	0	12	<5.0	0.25	156
APR 05...	32	<3.0	<10	11	79	96	--	12	<5.0	0.21	118
MAY 01...	29	<3.0	<10	3.0	71	87	--	16	<5.0	0.18	114
02...	30	<3.0	<10	2.0	70	86	--	15	<5.0	0.17	108
24...	31	2.4	<10	<1.0	76	92	0	9.9	6.6	0.24	128
JUN 22...	34	1.2	<10	3.0	83	100	0	12	6.3	0.25	124
DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
OCT 13...	<3	<0.040	<0.100	--	<0.14	0.040	--	--	--	--	--
NOV 08...	1	<0.040	<0.100	--	<0.14	0.020	--	--	--	--	--
APR 05...	14	<0.040	<0.100	--	0.68	0.150	--	--	--	--	--
MAY 01...	<3	<0.040	0.100	0.0	<0.14	<0.010	--	--	--	--	--
02...	<3	<0.040	0.160	0.0	<0.20	<0.010	--	--	--	--	--
24...	<5	<0.040	<0.100	--	<0.14	0.010	--	--	--	--	--
MAY 24-24	--	<0.040	0.120	0.05	<0.21	0.030	--	--	--	--	--
JUN 22...	<3	<0.040	<0.100	--	<0.18	0.030	<50	<5	<100	<1	<5
JUL 19...	--	0.050	<0.100	--	0.75	0.030	--	--	--	--	--

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued
WATER-QUALITY RECORDSWATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE (00027)	AGENCY ANA- LYZING SAMPLE (CODE (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)
JUL										
20-20	0800	1028	B9735	2.1	156	8.0	--	--	--	--
20...	0830	1028	1028	2.2	167	7.9	--	--	--	30
20...	0930	1028	1028	2.1	178	8.0	--	--	--	30
20...	1000	1028	1028	2.2	180	8.0	--	--	--	25
20...	1030	1028	1028	2.2	185	8.0	--	--	--	30
20...	1130	1028	1028	2.3	192	8.0	--	--	--	30
20...	1230	1028	1028	2.2	200	8.1	--	--	--	30
20...	1330	1028	1028	2.2	202	8.2	--	--	--	20
20...	1430	1028	1028	2.1	200	8.1	--	--	--	20
20...	1530	1028	1028	2.1	200	8.1	--	--	--	20
20...	1630	1028	1028	2.1	199	8.1	--	--	--	20
20...	1730	1028	1028	2.0	200	8.1	--	--	--	20
25...	1015	1028	B9735	1.1	190	8.2	17.0	11.5	15	5
31...	1745	1028	1028	2.0	190	7.6	--	--	--	20
31...	1815	1028	1028	2.3	190	7.8	--	--	--	19
31...	1845	1028	1028	3.2	182	7.8	--	--	--	25
31...	1915	1028	1028	3.4	162	7.8	--	--	--	25
31...	1945	1028	1028	3.2	172	7.7	--	--	--	30
31...	2015	1028	1028	3.5	216	7.8	--	--	--	30
AUG										
20...	2300	1028	1028	1.9	247	7.9	--	--	--	10
20...	2400	1028	1028	2.0	250	7.8	--	--	--	5
21...	0100	1028	1028	2.0	242	8.2	--	--	--	5
21...	0200	1028	1028	2.0	235	8.2	--	--	--	5
21...	0300	1028	1028	2.0	232	8.1	--	--	--	5
21...	0400	1028	1028	2.0	232	7.7	--	--	--	5
21...	0500	1028	1028	2.0	231	8.3	--	--	--	4
21...	0600	1028	1028	2.0	235	8.2	--	--	--	4
21...	0700	1028	1028	2.0	238	8.0	--	--	--	4
21...	0800	1028	1028	2.0	238	8.1	--	--	--	5
AUG										
21-21	0830	1028	1028	2.1	200	8.1	--	--	--	--
21...	0900	1028	1028	2.0	238	8.1	--	--	--	5
21...	1730	1028	1028	2.3	230	7.7	--	--	--	10
29...	1030	1028	B9735	1.6	172	8.0	21.0	10.0	5	3
SEP										
16...	1230	1028	1028	3.5	130	7.9	--	--	--	--
16...	1300	1028	1028	4.9	120	7.9	--	--	--	--
16...	1330	1028	1028	5.9	126	7.9	--	--	--	--
16...	1400	1028	1028	6.7	125	7.9	--	--	--	--
SEP										
16-16	1430	1028	B9735	6.8	128	8.0	--	--	--	--
16...	1500	1028	1028	7.0	125	8.0	--	--	--	--
16...	1600	1028	1028	6.8	147	8.0	--	--	--	--
16...	1630	1028	1028	7.0	152	8.0	--	--	--	--
16...	1700	1028	1028	6.8	152	8.0	--	--	--	--
16...	1730	1028	1028	6.7	151	8.0	--	--	--	--
16...	1800	1028	1028	6.3	152	8.0	--	--	--	--
16...	1830	1028	1028	6.2	154	8.0	--	--	--	--
16...	1900	1028	1028	6.0	159	8.0	--	--	--	--
16...	2000	1028	1028	5.7	162	8.0	--	--	--	--
16...	2100	1028	1028	6.0	165	8.1	--	--	--	--
16...	2200	1028	1028	5.9	167	8.2	--	--	--	--
16...	2300	1028	1028	5.7	170	8.2	--	--	--	--
16...	2400	1028	1028	5.7	141	8.0	--	--	--	--
26...	1500	1028	B9735	3.2	188	8.3	16.5	11.5	25	6
28...	2230	1028	1028	4.2	208	7.6	--	--	--	--
28...	2330	1028	1028	5.6	200	8.0	--	--	--	--
29...	0030	1028	1028	9.0	175	8.0	--	--	--	--
29...	0130	1028	1028	11	172	7.9	--	--	--	--
29...	0230	1028	1028	11	173	7.9	--	--	--	--
29...	0330	1028	1028	10	196	8.0	--	--	--	--
29...	0430	1028	1028	9.6	197	8.2	--	--	--	--
29...	0530	1028	1028	9.4	203	8.1	--	--	--	--
29...	0630	1028	1028	9.2	210	8.2	--	--	--	--
29...	0730	1028	1028	9.0	212	8.3	--	--	--	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET (MG/L AS CACO3) (00410)	BICAR- BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR- BONATE WATER WH FET FIELD (MG/L AS CO3) (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL										
25...	100	36	3.6	<10	3.0	98	120	0	16	<5.0
AUG										
29...	92	35	1.2	<10	2.0	86	100	0	8.1	<5.0
SEP										
26...	110	41	2.4	<10	2.0	96	120	0	9.4	<5.0

B Chemical analyses performed by New Mexico State Health Laboratory

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (JCU) (00070)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR												
17...	1145	1028	1028	4.0	220	7.5	14.5	5.0	--	31	0.33	48
20...	2100	1028	1028	4.8	180	8.2	--	--	6	25	0.32	--
APR												
20-20	2130	1028	1028	4.8	175	8.2	--	--	--	--	--	--
20...	2200	1028	1028	4.8	182	8.2	--	--	6	12	0.16	--
20...	2300	1028	1028	4.8	180	8.3	--	--	5	15	0.19	--
20...	2400	1028	1028	4.8	182	8.3	--	--	5	17	0.22	--
21...	0100	1028	1028	4.8	181	8.3	--	--	7	9	0.12	--
21...	0200	1028	1028	4.8	180	8.3	--	--	5	10	0.13	--
21...	0300	1028	1028	4.8	182	8.3	--	--	3	13	0.17	--
21...	0400	1028	1028	4.8	182	8.3	--	--	2	11	0.14	--
21...	0500	1028	1028	4.8	182	8.2	--	--	4	13	0.17	--
21...	0600	1028	1028	4.8	180	8.3	--	--	4	7	0.09	--
21...	0700	1028	1028	4.8	185	8.2	--	--	4	19	0.25	--
21...	0800	1028	1028	4.8	187	8.3	--	--	4	7	0.09	--
MAY												
15...	1215	1028	1028	3.4	125	8.0	13.5	8.0	--	21	0.19	69
21...	1615	1028	1028	4.8	133	7.3	--	--	20	32	0.41	--
21...	1645	1028	1028	5.0	130	7.6	--	--	20	40	0.54	--
21...	1715	1028	1028	5.5	130	7.8	--	--	25	55	0.82	--
21...	1745	1028	1028	5.9	126	7.6	--	--	25	114	1.8	--
21...	1815	1028	1028	6.0	125	7.6	--	--	25	51	0.83	--
21...	1845	1028	1028	6.5	122	7.5	--	--	25	80	1.4	--
21...	1915	1028	1028	6.8	122	7.5	--	--	25	92	1.7	--
21...	1945	1028	1028	7.3	121	7.6	--	--	30	161	3.2	--
21...	2015	1028	1028	7.7	121	7.4	--	--	30	167	3.5	--
21...	2045	1028	1028	8.2	120	7.5	--	--	35	168	3.7	--
21...	2115	1028	1028	8.2	119	7.5	--	--	35	204	4.5	--
21...	2145	1028	1028	8.6	115	7.5	--	--	40	249	5.8	--
21...	2215	1028	1028	8.6	112	7.6	--	--	40	231	5.4	--
21...	2245	1028	1028	8.2	110	7.6	--	--	30	192	4.3	--
21...	2315	1028	1028	8.0	111	7.3	--	--	25	146	3.2	--
21...	2345	1028	1028	7.7	110	7.6	--	--	25	119	2.5	--
MAY												
22-22	0015	1028	1028	7.4	110	7.5	--	--	--	--	--	--
22...	0045	1028	1028	7.3	112	7.5	--	--	15	74	1.5	--
22...	0145	1028	1028	7.0	115	7.6	--	--	10	66	1.2	--
22...	0245	1028	1028	6.7	117	7.8	--	--	15	61	1.1	--
22...	0445	1028	1028	6.3	120	7.6	--	--	9	34	0.58	--
31...	1215	1028	1028	2.4	137	7.9	21.0	10.5	--	18	0.12	74
JUN												
11...	1945	1028	1028	5.3	110	7.8	--	--	20	132	1.9	--
11...	2015	1028	1028	6.3	115	7.6	--	--	25	234	4.0	--
11...	2045	1028	1028	5.9	115	7.7	--	--	20	213	3.4	--
11...	2115	1028	1028	5.9	120	7.7	--	--	45	360	5.7	--
11...	2145	1028	1028	5.7	112	7.6	--	--	75	680	10	--
11...	2215	1028	1028	4.9	121	7.7	--	--	60	476	6.3	--
11...	2245	1028	1028	4.8	141	7.8	--	--	35	244	3.2	--
11...	2315	1028	1028	4.5	152	7.8	--	--	25	118	1.4	--
11...	2345	1028	1028	4.3	150	7.9	--	--	20	125	1.5	--
12...	0015	1028	1028	4.0	150	7.9	--	--	15	94	1.0	--
12...	0045	1028	1028	3.8	150	7.9	--	--	15	28	0.29	--
12...	0115	1028	1028	3.6	147	7.9	--	--	15	78	0.76	--
12...	0145	1028	1028	3.5	150	7.9	--	--	10	63	0.60	--
12...	0215	1028	1028	3.2	155	7.9	--	--	30	57	0.49	--
12...	0245	1028	1028	3.2	155	7.9	--	--	25	51	0.44	--
14...	1035	1028	1028	1.5	180	8.1	16.5	9.5	6	20	0.08	81
29...	2230	1028	1028	3.4	168	8.1	--	--	9	16	0.15	--

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (JCU) (00070)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL												
03...	1215	1028	1028	1.4	175	8.1	--	--	--	24	0.09	76
21...	1845	1028	1028	6.1	130	7.7	--	--	20	56	0.92	--
21...	1915	1028	1028	9.2	119	7.4	--	--	30	399	9.9	--
21...	1945	1028	1028	10	110	7.3	--	--	55	359	9.8	--
21...	2015	1028	1028	10	110	7.1	--	--	120	1260	35	--
21...	2045	1028	1028	9.8	102	7.2	--	--	120	604	16	--
21...	2115	1028	1028	9.5	104	7.2	--	--	75	318	8.2	--
21...	2145	1028	1028	8.7	105	7.4	--	--	45	225	5.3	--
21...	2215	1028	1028	8.4	107	7.4	--	--	35	154	3.5	--
21...	2245	1028	1028	8.4	110	7.4	--	--	35	124	2.8	--
21...	2315	1028	1028	8.4	112	7.5	--	--	25	95	2.2	--
21...	2345	1028	1028	7.9	113	7.5	--	--	30	97	2.1	--
22...	0015	1028	1028	7.2	114	7.6	--	--	8	80	1.6	--
22...	0045	1028	1028	6.6	115	7.6	--	--	25	94	1.7	--
JUL												
22-22	0115	1028	1028	6.5	119	7.6	--	--	--	--	--	--
22...	0145	1028	1028	6.5	119	7.7	--	--	30	46	0.81	--
22...	0245	1028	1028	6.3	121	7.7	--	--	25	65	1.1	--
JUL												
22-22	0315	1028	1028	6.1	122	7.7	--	--	--	--	--	--
22...	0345	1028	1028	6.1	123	7.7	--	--	20	43	0.71	--
22...	0445	1028	1028	5.9	125	7.8	--	--	20	39	0.62	--
22...	0545	1028	1028	5.8	125	7.8	--	--	20	44	0.69	--
30...	1140	1028	1028	8.1	133	7.6	18.0	9.0	--	19	0.42	60

RIO GRANDE BASIN

08379187 TECOLOTE CREEK BELOW WRIGHT CANYON NEAR EL PORVENIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (JCU) (00070)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG												
01...	1130	1028	1028	5.8	152	7.9	22.5	11.0	--	29	0.45	80
01...	1135	1028	1028	5.8	161	--	22.5	11.0	6	15	0.23	--
02...	1300	1028	1028	6.6	150	7.8	--	--	10	61	1.1	--
02...	1330	1028	1028	7.9	141	7.8	--	--	10	89	1.9	--
02...	1400	1028	1028	7.0	141	7.8	--	--	10	51	0.97	--
02...	1430	1028	1028	6.6	150	7.9	--	--	10	40	0.72	--
02...	1500	1028	1028	6.6	157	7.9	--	--	10	50	0.90	--
02...	1530	1028	1028	6.5	162	7.8	--	--	15	57	0.99	--
02...	1600	1028	1028	6.5	160	7.9	--	--	10	54	0.94	--
02...	2330	1028	1028	6.5	157	7.8	--	--	20	131	2.3	--
02...	2400	1028	1028	8.2	156	7.8	--	--	25	141	3.1	--
03...	0030	1028	1028	9.5	149	7.7	--	--	100	515	13	--
03...	0100	1028	1028	10	157	7.8	--	--	85	200	5.6	--
03...	0130	1028	1028	12	160	7.8	--	--	35	106	3.4	--
03...	0200	1028	1028	12	159	7.8	--	--	35	78	2.6	--
03...	0230	1028	1028	12	159	7.9	--	--	35	66	2.1	--
03...	0300	1028	1028	12	165	7.9	--	--	30	61	1.9	--
03...	0330	1028	1028	12	167	7.9	--	--	25	51	1.6	--
03...	0400	1028	1028	11	170	7.9	--	--	25	48	1.5	--
03...	0430	1028	1028	11	170	7.9	--	--	25	48	1.5	--
03...	0500	1028	1028	11	170	8.0	--	--	25	50	1.5	--
03...	0530	1028	1028	11	174	7.9	--	--	25	47	1.4	--
03...	0600	1028	1028	11	177	8.0	--	--	25	42	1.2	--
03...	0630	1028	1028	11	178	8.0	--	--	25	39	1.2	--
03...	0700	1028	1028	11	179	8.0	--	--	35	58	1.7	--
03...	0730	1028	1028	11	181	8.0	--	--	30	54	1.6	--
15...	1120	1028	1028	>23	--	--	23.0	11.0	10	70	--	--
15...	1125	1028	1028	>23	180	8.1	23.0	11.0	--	47	--	51
15...	1730	1028	1028	42	178	7.9	--	--	15	91	10	--
15...	1800	1028	1028	45	174	7.8	--	--	25	1130	136	--
15...	1830	1028	1028	41	170	7.7	--	--	60	1810	199	--
15...	1900	1028	1028	40	180	7.7	--	--	40	662	71	--
15...	1930	1028	1028	39	182	8.0	--	--	25	246	26	--
15...	2000	1028	1028	39	185	7.8	--	--	40	103	11	--
15...	2030	1028	1028	38	187	8.0	--	--	20	310	32	--
15...	2100	1028	1028	39	185	8.0	--	--	20	175	18	--
15...	2200	1028	1028	38	186	7.9	--	--	20	272	28	--
16...	0245	1028	1028	38	189	8.0	--	--	15	116	12	--
22...	1630	1028	1028	29	183	7.9	--	--	10	90	7.1	--
22...	1730	1028	1028	30	189	7.9	--	--	15	118	9.6	--
22...	1830	1028	1028	31	190	7.9	--	--	10	80	6.7	--
22...	1930	1028	1028	29	189	7.9	--	--	20	140	11	--
22...	2030	1028	1028	28	188	8.1	--	--	10	101	7.6	--
22...	2145	1028	1028	28	188	7.9	--	--	15	139	11	--
23...	1330	1028	1028	23	175	8.0	20.5	10.5	--	28	1.7	86
SEP												
11...	1100	1028	1028	36	175	7.7	13.0	9.0	--	44	4.3	62
11...	1105	1028	1028	36	171	7.3	13.0	9.0	20	112	11	--

RIO GRANDE BASIN

08380500 GALLINAS CREEK NEAR MONTEZUMA, NM

LOCATION.--Lat 35°39'07", long 105°19'06", San Miguel County, Hydrologic Unit 13060001, in Las Vegas Grant, on left bank 2.4 mi west of Montezuma, 6.9 mi northwest of Las Vegas, and at mile 74.4.

DRAINAGE AREA.--84 mi², approximately.

PERIOD OF RECORD.--March to September 1915, June 1916 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1964, published as Gallinas River near Montezuma.

REVISED RECORDS.--WSP 898: Drainage area. WSP 1562: 1951(P), 1952(M), 1955(P), 1957. WSP 1632: 1931-32, 1933(M), 1934, 1935(M), 1938, 1939-40(M), 1941-42, 1945, 1949-50(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 21, 1934, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 80 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--75 years, 20.0 ft³/s, 14,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,120 ft³/s, Aug. 2, 1966, gage height, 9.7 ft, from floodmarks, from rating curve extended above 500 ft³/s on basis of slope-area measurements at gage heights 5.25 ft, 8.25 ft, and 9.7 ft; minimum, 0.20 ft³/s, Oct. 6-9, 1922, Sept. 21, Oct. 9-14, 1956, Dec. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since about 1900 occurred the night of Sept. 29, 1904 (discharge not determined), from information by local residents and G. B. Monk's report on floods.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 15	2115	212	2.69	Aug. 14	0245	1,990	5.29
July 26	0300	1,210	4.56	Sept. 6	0945	1,300	4.58
Aug. 4	0430	528	3.55	Sept. 10	0245	*2,900	*6.08
Aug. 6	1530	2,040	5.37				

Minimum discharge, 4.5 ft³/s, July 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	10	35	e15	e6.8	9.2	17	25	24	e80	61	30
2	e50	11	11	e13	e7.6	8.6	21	23	23	e200	61	28
3	42	22	e11	e12	e7.6	7.9	23	22	20	15	132	25
4	37	15	e12	e12	e7.6	9.0	24	23	18	18	365	31
5	31	13	e12	e11	e7.5	14	28	26	18	15	285	39
6	27	12	e12	e10	e7.2	21	36	31	15	15	348	284
7	25	e12	e12	e10	e7.2	16	47	39	16	13	264	117
8	23	e12	e12	e10	e7.1	e16	55	44	17	e7.5	171	75
9	22	e12	e12	e9.5	e7.2	e13	54	43	15	e6.3	135	302
10	20	12	e12	e10	e7.3	S13	46	41	19	e5.3	145	1580
11	19	12	e12	e9.7	e7.4	11	38	40	16	e4.5	158	655
12	17	12	e12	e9.2	e7.3	11	e35	36	14	e7.0	153	435
13	16	12	e12	e9.0	7.2	11	30	31	15	e14	463	300
14	15	11	e12	e8.8	7.1	11	27	36	19	e20	1160	227
15	14	11	e12	e8.7	7.0	e15	27	81	14	e18	582	180
16	14	11	e13	e8.8	e7.4	S11	27	e85	13	e15	387	153
17	13	10	e13	e8.7	7.8	e11	31	e85	e12	e17	290	129
18	13	10	e13	e8.0	7.8	11	32	e85	e12	23	301	109
19	12	10	e13	e7.8	9.7	13	35	e120	e13	40	260	100
20	13	9.9	9.9	e7.8	e11	13	40	e170	e12	47	214	94
21	14	10	e8.6	e8.8	e12	13	40	e250	e12	56	147	87
22	13	9.3	e7.0	e7.5	e9.8	12	e40	e160	e11	126	129	83
23	12	8.5	e6.7	e6.6	8.7	12	e38	122	e9.8	209	118	74
24	12	9.9	e6.6	e6.4	8.5	13	37	90	e9.0	225	111	69
25	11	9.6	e6.5	e7.6	e8.6	13	37	68	e8.2	623	116	63
26	11	9.8	e6.6	e7.2	7.8	14	32	55	e7.3	625	121	57
27	12	9.2	e6.6	e6.6	e7.3	14	28	48	e6.5	304	84	56
28	11	e9.0	e7.0	e7.0	8.0	15	24	42	e6.2	191	72	56
29	11	e9.0	e7.7	e7.5	---	e15	22	37	e60	135	57	54
30	11	e10	e9.0	e8.4	---	e16	23	33	e25	101	43	49
31	11	---	e12	e6.3	---	e18	---	29	---	81	35	---
TOTAL	612	334.2	347.2	278.9	223.5	400.7	994	2020	480.0	3256.6	6968	5541
MEAN	19.7	11.1	11.2	9.00	7.98	12.9	33.1	65.2	16.0	105	225	185
MAX	60	22	35	15	12	21	55	250	60	625	1160	1580
MIN	11	8.5	6.5	6.3	6.8	7.9	17	22	6.2	4.5	35	25
AC-FT	1210	663	689	553	443	795	1970	4010	952	6460	13820	10990

CAL YR 1990 TOTAL 7791.3 MEAN 21.3 MAX 167 MIN 2.2 AC-FT 15450
WTR YR 1991 TOTAL 21456.1 MEAN 58.8 MAX 1580 MIN 4.5 AC-FT 42560

e Estimated

RIO GRANDE BASIN

08380500 GALLINAS CREEK NEAR MONTEZUMA NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

WATER QUALITY DATA

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
JUL 1990 27...A	1630	1028	B9735	24	178	8.8	18.0	20.5	20	7.4	96
AUG 30...A	1400	1028	B9735	24	200	8.7	26.0	19.5	5	7.4	100
OCT 02...	1615	1028	B9735	50	157	8.4	16.0	14.0	25	--	90

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE WATER WH FET FIELD (MG/L AS HCO3 CO3) (00440)	CAR- BONATE WATER WH FET FIELD (MG/L AS CO3) (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
JUL 1990 27...	33	3.2	<10	2.0	87	110	0	7.4	<5.0	0.30
AUG 30...	34	3.6	<10	2.0	93	110	0	7.4	<5.0	0.21
OCT 02...	33	1.8	<10	2.0	79	97	0	8.0	<5.0	0.25

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 1990 27...	124	5	<0.040	0.100	0.40	0.50	<0.010	5	0.32	--
AUG 30...	130	<3	--	--	--	--	--	9	0.58	--
OCT 02...	112	5	<0.040	<0.100	--	<0.14	0.020	0	0.0	100

A Data not previously published

B Chemical analyses performed by New Mexico State Health Laboratory

RIO GRANDE BASIN

08382500 GALLINAS RIVER NEAR COLONIAS, NM

LOCATION.--Lat 35°10'55", long 104°53'59", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 2.1 mi upstream from Canon Blanco, 2.3 mi southeast of Anton Chico, and Preston Beck Grants, on right bank 2.3 mi south of San Miguel-Guadalupe County line, 2.4 mi upstream from mouth, 5.8 mi northwest of Colonias, and 9.0 mi east of Dilia. Mouth at Pecos River mile 789.2.

DRAINAGE AREA.--610 mi², approximately.

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 7,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years, 18.0 ft³/s, 13,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft³/s, July 11, 1982, gage height, 19.67 ft, from rating curve extended above 1,900 ft³/s on basis of slope-area measurements at gage heights 8.64 ft, 12.74 ft, 16.65 ft, and 27.2 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about June 1, 1937, reached a stage of about 27.2 ft; discharge determined as 26,700 ft³/s by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29-30, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 26	2245	*7,030	*14.33	Aug. 12	2200	1,910	8.13
Aug. 6	0530	2,670	9.34				

Minimum daily, 0.57 ft³/s, June 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	6.0	6.4	e4.5	e4.1	5.2	14	13	24	16	59	43
2	23	8.0	5.9	e4.2	e4.8	5.2	17	10	19	150	41	35
3	19	48	5.6	e4.0	e4.6	4.9	16	7.3	13	173	228	33
4	17	30	5.3	e3.9	e4.6	5.3	17	6.6	11	25	415	66
5	16	25	e4.0	e3.9	e4.5	4.9	17	6.1	9.5	14	371	43
6	15	15	e4.0	e3.9	e4.5	4.7	14	5.8	8.8	6.4	308	416
7	14	12	e4.0	e3.6	e4.5	4.2	15	5.8	9.0	4.4	895	e220
8	13	12	e4.0	e3.9	e4.5	3.9	22	6.0	6.9	2.7	475	e130
9	13	12	e4.0	e4.4	4.7	4.1	28	6.3	10	1.6	315	e75
10	14	12	e4.0	e4.6	4.7	4.3	35	4.9	6.0	1.4	145	e50
11	12	12	e4.0	e4.8	4.8	4.1	32	5.0	5.0	1.1	122	e800
12	11	11	e4.0	e4.8	5.1	4.1	28	4.0	6.0	1.1	502	e560
13	9.8	10	e4.0	e4.8	5.0	4.4	28	4.0	6.5	2.2	298	e400
14	8.8	10	e4.0	e4.9	4.9	4.2	26	2.0	5.5	11	465	e230
15	8.0	9.5	e4.0	e4.9	4.2	5.2	23	5.5	6.2	22	658	e155
16	8.2	8.8	e4.0	e4.9	4.6	5.6	21	9.2	21	9.8	450	e101
17	7.9	8.3	e3.5	e4.8	4.5	8.6	17	9.4	16	9.0	357	e92
18	7.3	7.9	e4.5	e4.8	4.3	10	14	9.4	12	4.9	260	e86
19	7.1	7.7	e3.0	e4.8	4.1	14	14	11	14	75	264	e81
20	6.8	7.5	e3.0	e4.6	4.1	11	11	12	8.1	7.0	231	e76
21	6.7	7.1	e3.0	e4.1	4.0	9.8	9.6	21	8.0	32	202	e73
22	7.0	6.8	e3.0	e3.0	5.2	7.3	8.7	122	7.5	10	164	e70
23	7.5	6.6	2.9	e3.7	5.9	6.6	8.7	194	6.2	5.0	159	e66
24	7.8	6.5	2.4	e3.5	5.9	6.2	12	134	4.4	22	144	e65
25	7.4	4.9	e3.0	e3.3	6.1	5.4	13	98	3.9	171	155	58
26	7.3	4.9	e3.5	e3.2	5.7	4.7	13	79	2.2	718	137	52
27	6.7	5.3	e3.5	e3.2	5.3	4.4	13	63	1.0	614	134	47
28	6.3	5.7	e4.0	e3.7	5.0	5.0	12	50	.57	230	113	35
29	6.1	6.5	e4.5	e3.7	---	5.5	15	41	3.7	152	93	22
30	5.1	6.6	e4.5	e3.5	---	7.1	14	34	75	108	94	18
31	5.1	---	e4.5	e3.4	---	11	---	29	---	79	68	---
TOTAL	336.9	333.6	124.0	127.3	134.2	190.9	528.0	1008.3	329.97	2678.6	8322	4198
MEAN	10.9	11.1	4.00	4.11	4.79	6.16	17.6	32.5	11.0	86.4	268	140
MAX	33	48	6.4	4.9	6.1	14	35	194	75	718	895	800
MIN	5.1	4.9	2.4	3.0	4.0	3.9	8.7	2.0	.57	1.1	41	18
AC-FT	668	662	246	252	266	379	1050	2000	654	5310	16510	8330

CAL YR 1990 TOTAL 8467.28 MEAN 23.2 MAX 1560 MIN .00 AC-FT 16790
WTR YR 1991 TOTAL 18311.77 MEAN 50.2 MAX 895 MIN .57 AC-FT 36320

e Estimated

RIO GRANDE BASIN

08382600 PECOS RIVER ABOVE CANON DEL UTA NEAR COLONIAS, NM

LOCATION.--Lat 35°05'29", long 104°48'00", in T.10 N., R.20 E., Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 0.4 mi upstream from Canon del Uta, 2.9 mi southeast of Colonias, and at mile 775.8.

DRAINAGE AREA.--2,330 mi², approximately.

PERIOD OF RECORD.--January 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above National Geodetic Vertical Datum of 1929, from U.S. Army Corps of Engineers plan and profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation for about 11,800 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--15 years, 93.8 ft³/s, 67,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s, June 20, 1982, gage height, 10.36 ft, from rating curve extended above 1,200 ft³/s on basis of discharges transferred from station 5 mi downstream using the relation between peak gage heights at the two stations; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 27	0200	*6,800	*10.08	Aug. 7	0715	4,200	9.04

Minimum daily, 0.04 ft³/s Dec. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	e2.4	e2.0	e2.0	e.40	.47	.75	134	493	e70	482	205
2	95	e3.0	e2.0	e2.0	e.40	.48	.64	129	418	e300	488	135
3	69	48	e2.0	e2.2	e.40	.50	.63	100	338	e250	741	91
4	69	50	e2.0	e2.2	e.40	.50	.72	115	276	e100	1560	93
5	55	43	e2.0	e2.4	e.40	.47	.72	130	222	e65	1860	622
6	38	20	e2.1	e3.0	e.40	.50	.93	116	169	e50	1940	703
7	36	11	e2.1	5.2	e.40	.53	7.5	97	161	e30	2580	1450
8	25	18	e2.1	6.7	e.40	.43	71	90	158	e15	1970	895
9	29	9.6	e2.2	4.4	e.40	.50	128	76	166	e10	1660	655
10	22	7.6	e2.2	2.6	e.30	.22	162	128	172	e8	1310	1850
11	22	6.9	e1.6	e1.0	e.30	.37	154	208	170	e10	1130	2260
12	9.3	6.2	e.90	e.80	e.30	.52	150	241	e160	e15	1230	1630
13	4.2	e5.5	e.90	e.70	e.30	.58	162	336	e190	e25	1080	1550
14	3.6	e4.0	e1.0	e.60	e.30	.63	122	302	e180	e50	1300	1300
15	3.2	e3.3	e1.0	e.60	e.30	.49	81	320	e170	e70	1400	1090
16	3.1	e3.0	e1.2	e.50	e.30	.37	43	352	e180	e90	1290	893
17	2.7	e2.5	e1.2	e.50	e.30	.62	18	382	e260	e100	1190	736
18	2.7	e2.0	e1.6	e.50	e.30	.68	15	343	e150	e80	1200	596
19	2.5	e2.0	e2.0	e.50	e.30	.70	34	325	e110	e140	1160	488
20	2.3	e2.0	e2.0	e.50	e.30	.64	61	336	e100	e130	988	453
21	2.4	e2.0	e1.8	e.50	e.30	.56	90	528	e115	e240	846	425
22	2.3	e2.0	e1.0	e.50	e.30	.54	115	1490	e110	e200	689	363
23	2.4	e2.0	e.04	e.50	e.40	.71	162	1640	e80	e390	837	275
24	e2.4	e2.0	e.08	e.50	e.40	.82	188	1400	e60	950	641	225
25	e2.4	e2.0	e1.4	e.50	e.40	.80	181	1260	e30	1580	656	194
26	e2.4	e2.1	e2.1	e.50	e.40	.71	162	1130	e30	1660	630	165
27	e2.4	e2.1	e2.0	e.50	e.40	.69	169	870	e30	2650	521	139
28	e2.4	e2.1	e2.0	e.50	e.40	.82	171	758	e30	1430	484	125
29	e2.4	e2.1	e2.0	e.40	---	.75	156	660	e25	992	408	96
30	e2.4	e2.0	e2.0	e.40	---	.86	149	559	e15	699	361	84
31	e2.4	---	e2.0	e.40	---	.70	---	511	---	559	280	---
TOTAL	744.9	270.4	50.52	44.10	9.90	18.16	2755.89	15066	4768	12958	32912	19786
MEAN	24.0	9.01	1.63	1.42	.35	.59	91.9	486	159	418	1062	660
MAX	225	50	2.2	6.7	.40	.86	188	1640	493	2650	2580	2260
MIN	2.3	2.0	.04	.40	.30	.22	.63	76	15	8.0	280	84
AC-FT	1480	536	100	87	20	36	5470	29880	9460	25700	65280	39250

CAL YR 1990 TOTAL 23697.47 MEAN 64.9 MAX 1970 MIN .00 AC-FT 47000
WTR YR 1991 TOTAL 89383.87 MEAN 245 MAX 2650 MIN .04 AC-FT 177300

e Estimated

RIO GRANDE BASIN

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM
(National stream-quality accounting network station)

LOCATION.--Lat 35°03'35", long 104°45'41", in NE¼SE¼SE¼ sec.25, T.10 N., R.20 E., Guadalupe County, Hydrologic Unit 13060001, at south boundary Preston Beck Grant, on left bank, 1.6 mi upstream from River Ranch, 5.8 mi southeast of Colonias, 9.1 mi northwest of Santa Rosa, and at mile 770.8.

DRAINAGE AREA.--2,340 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder. Elevation of gage is 4,760 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation of about 11,800 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 116 ft³/s, 84,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s, July 24, 1990, gage height, 17.70 ft, from floodmarks, from rating curve extended above 1,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 2.9 ft³/s, Aug. 21, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 27	0300	*9,210	*15.38	Sept. 6	2115	3,460	10.59
Aug. 4	2015	3,390	10.53	Sept. 10	1130	4,210	11.41
Aug. 8	0845	6,020	12.98				

Minimum daily 14 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	18	16	18	18	19	20	105	525	109	641	559
2	135	19	16	18	18	19	20	113	471	245	653	494
3	105	40	16	18	18	18	20	91	424	346	783	457
4	99	61	16	18	19	18	20	104	366	131	1450	451
5	86	53	16	18	19	18	19	116	304	94	1550	797
6	69	44	16	18	18	19	23	118	255	81	1760	1070
7	57	32	16	27	19	19	42	110	242	57	3210	1380
8	47	32	16	30	18	19	104	110	234	44	1550	884
9	41	30	16	27	18	19	167	117	221	29	1200	777
10	40	29	16	23	19	19	175	141	226	24	1040	2450
11	38	26	16	22	18	18	158	214	193	24	959	2480
12	32	24	15	20	18	18	162	353	164	29	1110	1430
13	26	22	15	19	18	18	172	397	200	38	1110	1120
14	24	22	14	19	19	19	158	370	196	83	1360	870
15	22	22	15	19	20	19	131	389	185	103	1240	726
16	21	20	15	19	20	18	106	444	194	117	1010	642
17	21	17	15	19	19	18	83	467	272	129	1110	553
18	19	17	16	18	20	18	75	445	161	112	1060	500
19	20	17	17	18	19	18	86	438	127	168	1040	409
20	19	17	17	19	19	18	105	462	115	162	914	375
21	19	17	e17	21	19	18	134	640	131	254	896	357
22	19	16	e17	20	18	18	148	1500	120	225	825	319
23	23	16	e16	20	18	18	172	1780	90	462	926	275
24	20	16	e17	18	18	18	179	1350	48	928	826	238
25	19	16	18	18	19	17	171	1110	24	1710	820	205
26	18	17	19	18	18	18	163	986	21	1610	835	174
27	17	17	18	19	19	18	176	818	21	2750	789	150
28	17	16	18	19	19	20	180	752	47	1120	751	138
29	17	16	18	19	---	19	148	691	34	970	687	112
30	17	16	18	18	---	21	130	635	29	802	673	99
31	17	---	18	18	---	19	---	579	---	689	623	---
TOTAL	1319	725	509	615	522	573	3447	15945	5640	13645	33401	20491
MEAN	42.5	24.2	16.4	19.8	18.6	18.5	115	514	188	440	1077	683
MAX	195	61	19	30	20	21	180	1780	525	2750	3210	2480
MIN	17	16	14	18	18	17	19	91	21	24	623	99
AC-FT	2620	1440	1010	1220	1040	1140	6840	31630	11190	27060	66250	40640

CAL YR 1990 TOTAL 28947 MEAN 79.3 MAX 2100 MIN 11 AC-FT 57420
WTR YR 1991 TOTAL 96832 MEAN 265 MAX 3210 MIN 14 AC-FT 192100

e Estimated

RIO GRANDE BASIN

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 15...	1200	21	885	--	8.3	20.0	15.0	2.5	9.8	<10	450
FEB 19...	1500	20	--	929	8.0	8.0	15.0	1.2	8.0	--	480
MAR 26...	0945	18	950	--	8.2	20.0	12.0	0.40	9.4	--	570
MAY 22...	1245	1290	192	--	7.8	22.0	15.5	1500	7.9	--	100
JUL 11...	1215	24	690	--	7.9	24.0	20.0	5.4	7.8	--	450
SEP 18...	1330	535	300	--	8.1	15.0	13.0	55	8.6	14	150

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (MG/L AS CO3) (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (MG/L AS CO3) (00452)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV 15...	320	150	18	12	0.2	1.4	144	7	130	340	7.0
FEB 19...	350	160	20	10	0.2	1.3	166	0	136	460	7.0
MAR 26...	420	190	22	11	0.2	1.3	182	0	149	430	11
MAY 22...	18	34	3.8	5.3	0.2	1.1	101	0	82	31	4.4
JUL 11...	310	150	18	10	0.2	1.4	166	0	136	310	6.3
SEP 18...	45	50	5.6	7.0	0.3	1.2	126	0	103	42	4.6

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 15...	0.30	10	602	619	--	--	<0.010	<0.010	0.100	0.100	<0.010
FEB 19...	0.30	11	708	752	--	--	<0.010	<0.010	0.100	0.100	0.020
MAR 26...	0.20	10	741	765	--	0.070	<0.010	0.010	0.068	0.080	0.010
MAY 22...	0.20	6.8	149	138	0.100	--	0.030	<0.030	0.130	0.160	0.190
JUL 11...	0.40	12	600	592	0.170	--	0.010	<0.010	0.180	0.170	0.010
SEP 18...	0.20	11	193	184	--	--	<0.010	<0.010	0.093	0.090	<0.010

RIO GRANDE BASIN

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
NOV 15...	<0.010	--	--	0.020	0.020	1.0	20	<1	110	<0.5	<1.0
FEB 19...	0.020	0.18	0.30	0.020	0.020	--	--	--	--	--	--
MAR 26...	0.030	--	--	<0.010	<0.010	--	--	--	--	--	--
MAY 22...	0.190	0.41	0.73	0.100	<0.010	--	350	1	68	<0.5	<1.0
JUL 11...	<0.010	--	--	0.020	<0.010	--	<10	<1	130	<0.5	<1.0
SEP 18...	0.010	--	0.49	0.110	0.020	6.4	20	<1	72	<0.5	<1.0

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
NOV 15...	<1	<3	1	<3	1	22	22	<0.1	<10	1
FEB 19...	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--
MAY 22...	<1	<3	2	150	1	4	5	<0.1	<10	1
JUL 11...	<1	<3	<1	4	<1	17	16	<0.1	<10	<1
SEP 18...	<1	<3	2	20	<1	7	4	<0.1	<10	<1

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 15...	1	<1.0	1400	<6	4	14	0.79	29	K13	K1
FEB 19...	--	--	--	--	--	49	2.7	91	0	K1
MAR 26...	--	--	--	--	--	84	4.1	73	26	K18
MAY 22...	<1	<1.0	180	<6	6	5750	20000	52	4400	9400
JUL 11...	<1	<1.0	1400	<6	4	92	5.9	57	40	K9
SEP 18...	<1	<1.0	260	<6	3	267	386	79	110	270

RIO GRANDE BASIN

08382730 LOS ESTEROS CREEK ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°05'42", long 104°39'49", Guadalupe County, Hydrologic Unit 13060001, in Preston Beck Grant, on left bank, 3.7 mi upstream from mouth, 4.9 mi northeast of Santa Rosa Dam, and 10.4 mi northeast of Santa Rosa. Mouth at Pecos River mile 763.0.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--July 1973 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No known diversions or ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 1.45 ft³/s, 1,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft³/s, July 24, 1976, gage height, 9.3 ft, from rating curve extended above 70 ft³/s on basis of velocity-area studies and slope-area measurements at gage heights 6.5 ft and 9.3 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood of unknown date reached a discharge of about 6,800 ft³/s, gage height, 11.6 ft, from floodmarks, from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 21	1630	353	4.64	Aug. 19	0500	286	4.40
Aug. 9	0530	260	4.30	Sept. 12	2230	185	3.98
Aug. 13	0515	*414	*4.84				

No flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00
2	.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07
3	.50	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26
4	.14	.74	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
5	.03	.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
6	.00	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.77
7	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.9
8	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	8.2	1.7
9	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	38	.47
10	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	40	6.1
11	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	1.5	7.0
12	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.49	17
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	70	24
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	2.1	1.6
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.30	.27
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.07	.07
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.01	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	72	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.3	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	.19	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.70	.08	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	.05	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6	.15	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.0	.21	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.09	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	.08	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.08	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.68	.19	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.50	.06	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.01	.00	---
TOTAL	1.29	16.68	0.00	0.00	0.00	0.00	0.00	0.00	1.18	67.11	235.91	63.45
MEAN	.042	.56	.000	.000	.000	.000	.000	.000	.039	2.16	7.61	2.11
MAX	.62	15	.00	.00	.00	.00	.00	.00	.68	36	72	24
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	2.6	33	.00	.00	.00	.00	.00	.00	2.3	133	468	126

CAL YR 1990 TOTAL 326.51 MEAN .89 MAX 63 MIN .00 AC-FT 648
WTR YR 1991 TOTAL 385.62 MEAN 1.06 MAX 72 MIN .00 AC-FT 765

RIO GRANDE BASIN

08382760 LOS ESTEROS CREEK TRIBUTARY ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°05'35", long 104°40'20", Guadalupe County, Hydrologic Unit 13060001, in Preston Beck Grant, 0.5 mi southwest of Los Esteros Creek gage, 0.8 mi upstream from confluence with Los Esteros Creek, 4.6 mi northeast of Santa Rosa Dam, and 10.2 mi northeast of Santa Rosa.

DRAINAGE AREA.--13.7 mi².

PERIOD OF RECORD.--July 1973 to January 1991 (discontinued). Prior to October 1979, published as "above Los Esteros Reservoir."

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. No known diversions or ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years (1974-90), 0.25 ft³/s, 181 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,400 ft³/s, Aug. 29, 1977, gage height, 7.80 ft, from rating curve extended above 0.5 ft³/s on basis of velocity-area studies and slope-area measurement at gage height 7.80 ft; no flow most of the time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	---	---	---	---	---	---	---	---
2	.00	.00	.00	.00	---	---	---	---	---	---	---	---
3	.00	.12	.00	.00	---	---	---	---	---	---	---	---
4	.00	.01	.00	.00	---	---	---	---	---	---	---	---
5	.00	.00	.00	.00	---	---	---	---	---	---	---	---
6	.00	.00	.00	.00	---	---	---	---	---	---	---	---
7	.00	.00	.00	.00	---	---	---	---	---	---	---	---
8	.00	.00	.00	.00	---	---	---	---	---	---	---	---
9	.00	.00	.00	.00	---	---	---	---	---	---	---	---
10	.00	.00	.00	.00	---	---	---	---	---	---	---	---
11	.00	.00	.00	.00	---	---	---	---	---	---	---	---
12	.00	.00	.00	.00	---	---	---	---	---	---	---	---
13	.00	.00	.00	.00	---	---	---	---	---	---	---	---
14	.00	.00	.00	.00	---	---	---	---	---	---	---	---
15	.00	.00	.00	.00	---	---	---	---	---	---	---	---
16	.00	.00	.00	.00	---	---	---	---	---	---	---	---
17	.00	.00	.00	.00	---	---	---	---	---	---	---	---
18	.00	.00	.00	.00	---	---	---	---	---	---	---	---
19	.00	.00	.00	.00	---	---	---	---	---	---	---	---
20	.00	.00	.00	.00	---	---	---	---	---	---	---	---
21	.00	.00	.00	.00	---	---	---	---	---	---	---	---
22	.00	.00	.00	.00	---	---	---	---	---	---	---	---
23	.00	.00	.00	.00	---	---	---	---	---	---	---	---
24	.00	.00	.00	.00	---	---	---	---	---	---	---	---
25	.00	.00	.00	.00	---	---	---	---	---	---	---	---
26	.00	.00	.00	.00	---	---	---	---	---	---	---	---
27	.00	.00	.00	.00	---	---	---	---	---	---	---	---
28	.00	.00	.00	.00	---	---	---	---	---	---	---	---
29	.00	.00	.00	.00	---	---	---	---	---	---	---	---
30	.00	.00	.00	e.00	---	---	---	---	---	---	---	---
31	.00	---	.00	e.00	---	---	---	---	---	---	---	---
TOTAL	0.00	0.13	0.00	0.00	---	---	---	---	---	---	---	---
MEAN	.000	.004	.000	.000	---	---	---	---	---	---	---	---
MAX	.00	.12	.00	.00	---	---	---	---	---	---	---	---
MIN	.00	.00	.00	.00	---	---	---	---	---	---	---	---
AC-FT	.00	.3	.00	.00	---	---	---	---	---	---	---	---

CAL YR 1990 TOTAL 69.74 MEAN .19 MAX 26 MIN .00 AC-FT 138

e Estimated

RIO GRANDE BASIN

08382810 SANTA ROSA LAKE NEAR SANTA ROSA, NM

LOCATION.--Lat 35°01'47", long 104°41'30", Guadalupe County, Hydrologic Unit 13060001, in Jose Perea Grant, near outlet gates of Santa Rosa Dam on Pecos River, approximately 7.0 mi north of Santa Rosa, and at mile 757.2.

DRAINAGE AREA.--2,430 mi², approximately.

PERIOD OF RECORDS.--April 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by earth and rockfill dam on Pecos River. Storage began on Apr. 22, 1980. Capacity, 447,100 acre-ft, from capacity table effective August 1980, between elevations 4,630.0 ft, invert of outlet structure, and 4,797.0 ft, crest of spillway. No dead storage. Lake was created primarily for flood, irrigation, and sediment control. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 120,481 acre-ft, May 8, 1987, elevation, 4,749.71 ft; no storage for many days, July-Sept., 1980 and June-Aug., 1981.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 98,630 acre-ft, Sept. 13, elevation, 4,745.43 ft; minimum, 2,080 acre-ft, May 16, elevation, 4,677.67 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20500	22460	23840	24800	26250	26970	27280	27200	23140	30580	52510	81480
2	20810	22600	23850	24800	26280	27000	27320	25220	23680	31030	53270	80350
3	21010	22600	23880	24800	26320	27010	27370	22940	24200	31800	54230	80000
4	21180	22720	23890	24800	26360	27070	27380	20680	24620	32070	56810	80160
5	21360	22870	23890	24870	26390	27090	27410	18390	24970	32230	60160	81190
6	21440	22940	23950	24900	26410	27090	27440	16060	25270	32330	63690	82920
7	21510	22940	24000	24980	26470	27070	27440	13730	25570	32440	70410	85900
8	21610	23020	24000	25230	26480	27100	27610	11380	25890	32450	74240	87210
9	21620	23120	24000	25370	26510	27100	27900	9110	26230	32450	77070	88120
10	21710	23210	24090	25370	26540	27160	28230	7240	26570	32490	79160	92900
11	21810	23280	24150	25490	26580	27120	28540	5850	26880	32450	80930	97060
12	21830	23340	24200	25490	26600	27120	28740	4680	27150	32500	83110	98590
13	21870	23460	24210	25490	26630	27160	28990	3850	27460	32520	85600	98630
14	21900	23470	24210	25490	26660	27130	29280	2960	27740	32780	88360	97090
15	21940	23530	24210	25710	26640	27180	29490	2410	28060	32990	91540	95210
16	21970	23540	24270	25740	26670	27180	29680	2080	28380	33130	92970	93570
17	21970	23550	24270	25770	26700	27220	29870	2180	28940	33220	93330	92940
18	22100	23600	24490	25810	26700	27070	29930	2520	29190	33270	93500	93040
19	22100	23630	24500	25860	26720	27090	30030	2870	29380	33360	93640	93040
20	22110	23660	24340	25830	26780	27100	30180	3270	29500	33430	93190	93220
21	22100	23670	24320	25870	26800	27120	30400	3940	29730	33530	92200	93430
22	22190	23680	24350	25870	26640	27120	30600	6440	29920	33640	91290	93470
23	22210	23720	24360	25900	26670	27130	30910	10380	30050	34060	90800	93500
24	22260	23700	24430	25990	26690	27130	31230	13450	30130	35360	89970	93400
25	22300	23700	24650	26020	26880	27130	31510	15640	30130	38570	89010	93400
26	22340	23720	24460	26050	26910	27150	31720	17330	30110	41390	88060	93220
27	22350	23760	24540	26060	26940	27150	31960	18810	30110	46700	87010	93040
28	22380	23790	24570	26100	26940	27160	32210	19910	30390	48700	85870	93010
29	22400	23780	24610	26120	---	27190	31410	20870	30400	49880	84530	92870
30	22440	23810	24610	26160	---	27220	29440	21720	30440	50240	83540	92870
31	22450	---	24610	26220	---	27250	---	22480	---	51380	82520	---
MAX	22450	23810	24650	26220	26940	27250	32210	27200	30440	51380	93640	98630
MIN	20500	22460	23840	24800	26250	26970	27280	2080	23140	30580	52510	80000
(†)	+200	+1360	+800	+1610	+720	+310	+2190	+6960	+7960	+20940	+31140	+10350

CAL YR 1990 MAX 35150 MIN 6250 (†) -1350
WTR YR 1991 MAX 98630 MIN 2080 (†) +70620

(†) CHANGE IN CONTENTS, IN ACRE-FEET

RIO GRANDE BASIN

08382810 SANTA ROSA LAKE NEAR SANTA ROSA, NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4711.79	4713.41	4714.48	4715.19	4716.21	4716.70	4716.91	4716.86	4713.94	4719.03	4730.14	4740.46
2	4712.05	4713.52	4714.49	4715.19	4716.23	4716.72	4716.94	4715.49	4714.36	4719.30	4730.46	4740.11
3	4712.22	4713.52	4714.51	4715.19	4716.26	4716.73	4716.97	4713.79	4714.75	4719.76	4730.86	4740.00
4	4712.36	4713.61	4714.52	4715.19	4716.29	4716.77	4716.98	4711.94	4715.06	4719.92	4731.91	4740.05
5	4712.51	4713.73	4714.52	4715.24	4716.31	4716.78	4717.00	4709.92	4715.31	4720.01	4733.22	4740.37
6	4712.58	4713.79	4714.56	4715.26	4716.32	4716.78	4717.02	4707.68	4715.53	4720.07	4734.54	4740.90
7	4712.64	4713.79	4714.60	4715.32	4716.36	4716.77	4717.02	4705.18	4715.74	4720.13	4736.90	4741.80
8	4712.72	4713.85	4714.60	4715.50	4716.37	4716.79	4717.13	4702.36	4715.96	4720.14	4738.17	4742.19
9	4712.73	4713.93	4714.60	4715.60	4716.39	4716.79	4717.32	4699.09	4716.20	4720.14	4739.08	4742.46
10	4712.80	4714.00	4714.67	4715.60	4716.41	4716.83	4717.54	4695.75	4716.43	4720.16	4739.74	4743.84
11	4712.88	4714.05	4714.71	4715.68	4716.44	4716.80	4717.74	4692.74	4716.64	4720.14	4740.29	4745.00
12	4712.90	4714.10	4714.75	4715.68	4716.45	4716.80	4717.87	4689.60	4716.82	4720.17	4740.96	4745.42
13	4712.93	4714.19	4714.76	4715.68	4716.47	4716.83	4718.03	4686.81	4717.03	4720.18	4741.71	4745.43
14	4712.96	4714.20	4714.76	4715.68	4716.49	4716.81	4718.22	4683.17	4717.22	4720.33	4742.53	4745.01
15	4712.99	4714.24	4714.76	4715.84	4716.48	4716.84	4718.35	4680.04	4717.43	4720.45	4743.45	4744.49
16	4713.01	4714.25	4714.80	4715.86	4716.50	4716.84	4718.47	4677.67	4717.64	4720.53	4743.86	4744.03
17	4713.01	4714.26	4714.80	4715.88	4716.52	4716.87	4718.59	4678.38	4718.00	4720.58	4743.96	4743.85
18	4713.12	4714.30	4714.96	4715.91	4716.52	4716.77	4718.63	4680.75	4718.16	4720.61	4744.01	4743.88
19	4713.12	4714.32	4714.97	4715.94	4716.53	4716.78	4718.69	4682.70	4718.28	4720.66	4744.05	4743.88
20	4713.13	4714.34	4714.85	4715.92	4716.57	4716.79	4718.78	4684.54	4718.36	4720.70	4743.92	4743.93
21	4713.12	4714.35	4714.84	4715.95	4716.59	4716.80	4718.92	4687.11	4718.50	4720.76	4743.64	4743.99
22	4713.19	4714.36	4714.86	4715.95	4716.48	4716.80	4719.04	4694.10	4718.62	4720.82	4743.38	4744.00
23	4713.21	4714.39	4714.87	4715.97	4716.50	4716.81	4719.23	4701.01	4718.70	4721.06	4743.24	4744.01
24	4713.25	4714.37	4714.92	4716.03	4716.51	4716.81	4719.42	4704.86	4718.75	4721.79	4743.00	4743.98
25	4713.28	4714.37	4715.08	4716.05	4716.64	4716.81	4719.59	4707.25	4718.75	4723.54	4742.72	4743.98
26	4713.31	4714.39	4714.94	4716.07	4716.66	4716.82	4719.71	4708.94	4718.74	4725.00	4742.44	4

RIO GRANDE BASIN

08382830 PECOS RIVER BELOW SANTA ROSA DAM, NM

LOCATION.--Lat 35°01'27", long 104°41'20", Guadalupe County, Hydrologic Unit 13060001, in Jose Perea Grant, on right bank, 0.2 mi downstream from Santa Rosa Dam, 5.7 mi north of Santa Rosa, and at mile 757.0.

DRAINAGE AREA.--2,430 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 4,640 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 31, 1980, at datum about 1.2 ft higher. Prior to Mar. 26, 1982, at site 195 ft upstream at datum 2.36 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow completely regulated by Santa Rosa Lake (08382810) 0.2 mi upstream since April 1980. Diversions and ground-water withdrawals for irrigation of about 12,000 acres, 1959 determination, upstream from station. Several observations of water temperatures were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--11 years, 102 ft³/s, 73,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s, June 14, 1980, gage height, about 5.77 ft, present datum; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,910 ft³/s, Sept 14; no flow May 24-28;

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.21	.19	e.06	.10	.06	.33	1180	3.9	2.4	3.4	737
2	.57	.34	.04	e.06	.12	.10	.22	1190	2.8	2.4	3.3	745
3	.60	.26	.01	e.06	.08	.13	.17	1250	2.8	2.1	2.9	340
4	.68	.17	e.01	e.06	.10	.11	.11	1290	2.9	2.3	3.1	1.1
5	.72	.17	.03	e.06	.08	.10	.15	1260	3.2	2.2	3.1	.92
6	.78	.17	.04	e.06	.08	.13	.33	1250	2.9	2.2	3.1	1.3
7	.78	.17	.04	e.06	.10	.13	.41	1230	2.8	2.2	3.2	1.0
8	.88	.17	.04	e.06	.11	.13	.35	1210	2.8	2.1	3.2	1.0
9	.89	.17	.05	e.06	.13	.10	.32	1180	2.7	2.2	3.4	.72
10	.98	.17	.10	e.06	.10	.08	.26	978	1.8	2.3	3.1	.91
11	1.5	.18	.13	e.06	.08	.08	.28	776	1.6	2.3	2.9	899
12	1.6	.21	.13	e.06	.08	.07	.33	757	1.6	2.2	3.3	1230
13	1.5	.21	.13	e.06	.08	.11	.32	736	1.7	2.2	3.4	1510
14	1.5	.21	.29	e.06	.08	.10	.28	742	1.7	3.1	3.0	1910
15	2.4	.21	.13	e.07	.05	.13	.34	591	1.8	2.9	2.6	1890
16	2.5	.21	.13	e.07	.06	.13	.35	494	1.7	3.1	554	1650
17	1.2	.21	.13	e.07	.07	.12	.34	225	1.6	3.1	1060	788
18	1.1	.23	.10	e.07	.08	.12	.81	11	1.6	3.0	1060	387
19	2.1	.23	.08	e.07	.08	.33	.86	11	1.9	2.7	1190	386
20	.80	.08	.08	e.07	.06	.29	.81	11	1.9	2.9	1240	344
21	.78	.08	e.07	e.07	.08	.10	1.3	11	1.8	3.4	1120	280
22	.78	.05	e.07	e.07	.08	.08	.58	5.2	2.5	3.1	1040	284
23	.86	.01	e.07	e.08	.08	.08	.08	.13	2.6	3.2	1030	287
24	.69	.02	e.06	e.08	.08	.11	.51	.00	2.2	3.4	1040	246
25	.59	.04	e.06	e.08	.08	.08	1.0	.00	2.0	4.7	1060	210
26	.59	1.9	e.06	e.08	.08	.15	1.0	.00	2.0	3.9	1030	267
27	.51	.94	e.06	e.08	.08	.21	.92	.00	1.9	4.0	1040	234
28	.31	.56	e.06	e.08	.04	.24	.89	.00	2.2	3.7	1010	177
29	.27	.44	e.06	.08	---	.17	577	7.5	2.7	3.6	1010	180
30	.23	.35	e.06	.08	---	.20	1160	8.5	2.6	3.4	833	109
31	.21	---	e.06	.08	---	.19	---	7.7	---	3.4	738	---
TOTAL	29.23	8.37	2.57	2.12	2.32	4.16	1750.65	16412.03	68.2	89.7	16102.0	15096.95
MEAN	.94	.28	.083	.068	.083	.13	58.4	529	2.27	2.89	519	503
MAX	2.5	1.9	.29	.08	.13	.33	1160	1290	3.9	4.7	1240	1910
MIN	.21	.01	.01	.06	.04	.06	.08	.00	1.6	2.1	2.6	.72
AC-FT	58	17	5.1	4.2	4.6	8.3	3470	32550	135	178	31940	29940

CAL YR 1990 TOTAL 24935.06 MEAN 68.3 MAX 1170 MIN .01 AC-FT 49460
WTR YR 1991 TOTAL 49568.30 MEAN 136 MAX 1910 MIN .00 AC-FT 98320

e Estimated

RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, NM

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, Hydrologic Unit 13060001, on left bank, 0.4 mi downstream from bridge on Interstate Highway 40, 0.6 mi upstream from bridge on Parker Street in Santa Rosa, 1.9 mi upstream from El Rito Creek, and at mile 748.4.

DRAINAGE AREA.--2,650 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1903 to December 1905 (gage heights only), January to December 1906, February 1910 to July 1911, September 1912 to December 1924, March to May 1927, July 1927, January 1928 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Apr. 5-20, May 4-7, 11, Aug. 13, 16-18, 24, Sept. 7-9, 11, 13, 19, 21, 23, 25, 27, Oct. 1-31, Nov. 3, 4, 9, 11, 20, 22, 1910, and Feb. 1 to Mar. 31, June 1 to July 31, 1911, published in WSP 358, are unreliable and should not be used.

REVISED RECORDS.--WSP 1512: 1913-15. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and partial concrete control. Elevation of gage is 4,537.56 ft above National Geodetic Vertical Datum of 1929. For history of changes prior to Sept. 13, 1967, see WSP 2123.

REMARKS.--Water-discharge records good. Flow regulated by Santa Rosa Lake (station 08382810) 8.8 mi upstream since April 1980. Diversions for irrigation of about 12,000 acres, 1959 determination, upstream from station. National Weather Service telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1906, 1913, 1914, 1928-79), 135 ft³/s, 97,810 acre-ft/yr, prior to completion of Santa Rosa Dam. 12 years (water years 1980-91), 102 ft³/s, 73,900 acre-ft/yr, since completion of Santa Rosa Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s, June 2, 1937, gage height, 25.7 ft, site and datum then in use, from rating curve extended above 32,000 ft³/s; minimum, 0.28 ft³/s, Jan. 7, 1971. The flood of June 2, 1937, is the greatest since about 1886. Flood of Sept. 30, 1904, reached a stage of 24.7 ft, site and datum then in use, discharge, 45,000 ft³/s, by Kutter's formula. Flood of June 9, 1903, reached a stage of 21.1 ft, same site and datum as in 1904, discharge, 34,000 ft³/s, by comparison with 1904 flood. Since completion of Santa Rosa Dam in 1980, maximum discharge, 7,050 ft³/s, Aug. 11, 1981, gage height, 6.56 ft; minimum daily, 2.0 ft³/s, July 23-25, 31, and Aug. 1, 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily 1,900 ft³/s, Sept. 14; minimum, 2.9 ft³/s, Apr. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.3	5.1	5.1	5.8	4.3	5.8	1160	6.5	5.8	11	748
2	5.7	5.9	5.1	5.1	5.8	4.1	5.3	1180	6.1	8.2	9.2	748
3	4.9	7.6	5.1	5.1	5.5	4.3	5.8	1210	4.9	7.0	10	462
4	4.5	5.8	5.1	5.1	5.1	4.5	5.2	1270	4.5	6.5	13	25
5	4.3	5.4	4.9	5.1	5.1	4.2	5.1	1260	4.4	6.5	13	16
6	3.8	5.1	4.5	5.1	5.1	4.2	5.8	1240	5.1	6.5	11	13
7	3.4	5.1	4.5	5.1	5.1	4.1	4.5	1220	6.5	5.3	15	12
8	3.5	5.1	4.5	5.1	5.1	3.9	5.1	1200	6.5	4.9	12	8.8
9	3.9	5.1	4.5	5.6	5.1	4.2	5.1	1180	6.5	5.1	12	7.5
10	3.9	5.1	4.5	6.6	5.1	4.9	5.0	1020	6.8	5.9	13	9.0
11	3.9	5.1	4.5	6.5	5.1	4.9	4.9	785	7.1	6.5	12	e500
12	3.9	5.1	4.5	6.5	5.1	4.4	5.1	767	7.2	6.6	33	e1350
13	3.8	5.1	4.5	5.9	5.1	4.5	5.8	750	6.2	9.7	35	e1500
14	3.6	5.1	4.5	5.8	5.1	4.5	5.5	751	5.8	21	9.8	e1900
15	3.9	5.4	4.5	5.8	5.1	4.5	5.5	646	7.8	13	8.2	e1850
16	3.9	5.9	5.2	5.8	5.1	4.3	5.8	535	6.5	9.0	286	e1620
17	3.9	5.8	6.2	5.8	5.1	4.4	5.6	345	6.5	8.9	1010	881
18	3.9	5.8	5.3	5.8	5.1	4.5	5.1	28	6.5	8.9	1010	392
19	3.9	5.8	5.1	5.5	5.1	4.5	5.1	14	5.8	9.8	1020	390
20	4.1	5.8	5.2	6.4	4.7	4.5	5.1	11	5.8	9.8	1140	363
21	4.5	5.8	6.4	7.3	4.5	4.5	4.8	12	6.1	10	1100	288
22	4.5	5.2	6.5	7.3	4.5	4.2	4.5	13	6.5	11	995	287
23	4.5	5.1	6.5	7.3	4.5	4.8	4.8	8.1	6.5	13	995	287
24	4.5	5.1	6.1	6.8	4.5	5.1	4.5	5.6	6.5	12	995	266
25	4.5	5.1	5.8	5.8	4.5	4.9	3.9	4.7	6.5	22	995	199
26	4.5	5.1	5.8	5.8	4.5	4.7	3.7	4.3	6.5	15	997	252
27	4.5	5.1	5.4	5.8	4.5	4.8	3.8	3.5	6.5	30	1000	237
28	4.5	5.1	5.1	5.8	4.5	7.0	3.8	3.8	10	16	1000	167
29	4.4	5.1	5.1	5.8	---	6.2	323	3.9	34	16	1010	168
30	3.9	5.1	5.1	5.8	---	6.5	1140	3.9	7.6	17	872	124
31	3.9	---	5.1	5.7	---	5.9	---	4.5	---	18	749	---
TOTAL	128.6	161.2	160.2	182.0	139.4	146.3	1603.0	16639.3	219.7	344.9	15391.2	15070.3
MEAN	4.15	5.37	5.17	5.87	4.98	4.72	53.4	537	7.32	11.1	496	502
MAX	5.7	7.6	6.5	7.3	5.8	7.0	1140	1270	34	30	1140	1900
MIN	3.4	4.3	4.5	5.1	4.5	3.9	3.7	3.5	4.4	4.9	8.2	7.5
AC-FT	255	320	318	361	276	290	3180	33000	436	684	30530	29890

CAL YR 1990 TOTAL 26894.7 MEAN 73.7 MAX 1180 MIN 3.1 AC-FT 53350
WTR YR 1991 TOTAL 50186.1 MEAN 137 MAX 1900 MIN 3.4 AC-FT 99540

e Estimated

RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 0.6 mi downstream from discharge station.

PERIOD OF RECORD.--Water years 1905-07, 1959 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 15...	0915	5.1	2070	--	7.7	19.5	10.0	9.5	1600
JAN 10...	1615	6.3	--	7.0	--	2.0	7.0	9.8	--
MAR 28...	0920	4.9	2650	7.5	--	7.5	9.5	12.0	1700
MAY 23...	0850	8.7	1640	7.8	--	16.0	18.0	6.8	970
JUL 10...	2025	5.9	2090	7.8	--	26.5	25.0	8.8	1300
SEP 09...	1800	7.4	1810	8.0	--	22.0	21.0	8.5	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV 15...	530	65	54	0.6	2.0	130	1300	53
MAR 28...	550	69	54	0.6	2.2	--	1800	56
MAY 23...	320	42	35	0.5	2.4	116	1000	31
JUL 10...	440	53	45	0.5	2.5	121	1200	52

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 15...	0.60	13	2100	110	20	14	0.19	93
MAR 28...	0.70	12	2550	110	<10	--	--	--
MAY 23...	0.40	7.7	1510	80	140	--	--	--
JUL 10...	0.60	11	1880	100	<10	--	--	--

RIO GRANDE BASIN

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM
(Surveillance network station)

LOCATION.--Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, Hydrologic Unit 13060001, on left bank 9.0 mi southeast of Puerto de Luna, 17.5 mi upstream from Summer Dam, and at mile 719.5.

DRAINAGE AREA.--3,970 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to current year.

REVISED RECORDS.--WSP 1512: 1939.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,311.34 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 15, 1954, at datum 1.0 ft higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by Santa Rosa Lake (station 08382810) 37.7 mi upstream since April 1980. Diversions for irrigation of about 12,500 acres, 1959 determination, upstream from station. Discharge represents inflow to Lake Summer. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1939-79), 209 ft³/s, 151,400 acre-ft/yr, prior to completion of Santa Rosa Dam. 12 years (water years 1980-91), 188 ft³/s, 136,200 acre-ft/yr, since completion of Santa Rosa Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,600 ft³/s, Sept. 1, 1942, gage height, 17.00 ft, from rating curve extended above 7,400 ft³/s on basis of flow "at Santa Rosa"; minimum, 11 ft³/s, Jan. 31, 1951. Since completion of Santa Rosa Dam in 1980, maximum discharge, 27,100 ft³/s, Sept. 2, 1986, gage height, 11.23 ft; minimum, 37 ft³/s, Aug. 3, 4, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 ft³/s, and peak inflow to Lake Summer was about 75,000 ft³/s. Flood of July 24, 1895, was reported as "highest in 10 years." Other major floods occurred on June 9, 1903, Sept. 30, 1904, and May 1, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,680 ft³/s, at 0030 hours Aug. 10, gage height, 4.69 ft; minimum, 44 ft³/s, Jun. 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	83	78	81	80	75	92	1210	69	58	79	786
2	569	87	75	81	81	82	90	1260	68	60	77	805
3	146	106	78	80	82	76	87	1210	66	77	72	796
4	97	93	85	81	82	73	86	1260	65	63	119	209
5	91	89	76	87	82	72	71	1250	58	63	120	106
6	87	86	75	89	82	79	66	1250	61	53	80	e90
7	80	85	75	87	82	79	64	1260	65	53	139	e80
8	79	87	73	83	81	81	64	1250	61	52	119	e70
9	80	86	73	83	81	81	68	1260	64	50	182	e60
10	81	86	73	90	80	82	67	1270	68	55	722	e60
11	82	84	73	86	80	82	67	865	68	55	107	e700
12	83	82	69	83	80	80	65	825	67	72	90	e1400
13	83	79	70	83	77	77	68	802	59	78	117	e1900
14	83	80	73	83	78	79	73	771	59	232	106	2220
15	86	79	71	84	79	76	77	776	73	145	85	2090
16	87	79	73	82	81	75	70	504	145	87	81	1910
17	85	79	77	82	81	68	81	482	71	71	993	1370
18	88	78	73	82	81	66	75	154	72	70	1190	399
19	88	78	72	82	83	69	77	66	73	73	1170	405
20	86	78	73	81	81	69	69	72	64	73	1320	438
21	84	77	65	87	82	68	72	180	65	71	1270	394
22	85	75	e65	88	79	66	75	161	61	120	1040	367
23	84	76	e65	85	77	64	79	107	62	80	1050	349
24	82	77	e65	82	70	75	80	96	55	83	1080	349
25	80	76	e65	81	73	62	71	91	50	152	1070	258
26	77	77	e68	81	72	63	63	82	49	136	1060	265
27	78	76	e72	81	75	74	63	75	49	211	1050	317
28	79	75	e75	79	74	92	60	78	48	110	1050	240
29	81	76	e80	79	---	108	69	77	70	89	1070	211
30	82	78	e85	85	---	92	1060	69	77	86	1040	227
31	84	---	89	80	---	94	---	68	---	83	769	---
TOTAL	3147	2447	2279	2578	2216	2379	3169	18881	1982	2761	18517	18871
MEAN	102	81.6	73.5	83.2	79.1	76.7	106	609	66.1	89.1	597	629
MAX	569	106	89	90	83	108	1060	1270	145	232	1320	2220
MIN	77	75	65	79	70	62	60	66	48	50	72	60
AC-FT	6240	4850	4520	5110	4400	4720	6290	37450	3930	5480	36730	37430

CAL YR 1990 TOTAL 55602 MEAN 152 MAX 1200 MIN 52 AC-FT 110300
WTR YR 1991 TOTAL 79227 MEAN 217 MAX 2220 MIN 48 AC-FT 157100

e Estimated

RIO GRANDE BASIN

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-66, 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
NOV 14...	1300	79	2880	8.0	21.5	11.0	10.5	13	1600	--	550	64	
MAR 27...	1420	82	2940	8.3	16.5	16.0	9.3	10	1800	1700	610	73	
MAY 21...	1330	97	2310	8.1	19.0	18.5	12.2	16	1300	1200	430	56	
SEP 16...	1600	1930	420	8.0	25.0	18.0	7.9	30	200	100	69	7.9	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	
NOV 14...	100	1	2.3	--	--	--	1600	140	0.70	13	2510		
MAR 27...	110	1	2.3	133	17	137	1800	180	0.40	13	2870		
MAY 21...	81	1	2.5	154	0	126	1300	110	0.40	12	2070		
SEP 16...	11	0.3	2.0	122	0	100	110	11	0.20	11	283		
DATE		NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 14...	--	--	<0.010	<0.010	<0.100	<0.100	0.060	0.070	--	--	<0.010	<0.010	
MAR 27...	--	--	<0.010	<0.010	<0.050	<0.050	0.100	0.080	0.20	--	0.020	<0.010	
MAY 21...	0.150	--	0.040	<0.010	0.190	0.170	0.060	0.050	0.34	0.59	0.140	<0.010	
SEP 16...	0.079	0.150	0.010	0.010	0.089	0.160	0.040	0.070	0.56	0.69	0.240	0.020	
DATE		CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
NOV 14...	0.8	<1	<1	120	<1	2.0	2	2	2	3	<10	<1	
MAR 27...	1.0	--	--	120	--	--	--	--	--	--	<10	--	
MAY 21...	1.6	--	--	100	--	--	--	--	--	--	<10	--	
SEP 16...	8.3	2	<1	30	<1	<1.0	3	<1	11	3	11	15	

RIO GRANDE BASIN
08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 14...	<1	<0.10	<0.1	<1	<2	10	20	21	4.5	89	--	--
MAR 27...	--	--	--	--	--	--	--	347	77	74	K2	K81
MAY 21...	--	--	--	--	--	--	--	253	66	91	590	100
SEP 16...	<1	<0.10	--	<1	<1	30	24	401	2090	66	250	700

RIO GRANDE BASIN

08384000 LAKE SUMNER NEAR FORT SUMNER, NM

LOCATION.--Lat 34°36'30", long 104°23'04", in SE¼SW¼ sec.34, T.5 N., R.24 E., DeBaca County, Hydrologic Unit 13060001, near center of dam on Pecos River, 5.0 mi northeast of Guadalupe, 12.2 mi northwest of Fort Sumner, and at mile 702.0.

DRAINAGE AREA.--4,390 mi², approximately (contributing area).

PERIOD OF RECORD.--December 1938 to September 1965 (monthend elevations and contents), October 1965 to current year. Monthend elevations September 1937 to November 1938 published in reports of Pecos River Commission. Elevations and contents May 27 1937, to June 10, 1937, in WSP 842. Prior to October 1974, published as "Alamogordo Reservoir."

REVISED RECORDS.--WSP 1732: 1939-54 (contents). WSP 1923: 1939-53(M).

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). April 1, 1946, to Sept. 30, 1957, water-stage recorder above elevation 4,234.25 ft, nonrecording gage below. Oct. 1, 1988 to current year, water-stage recorder above elevation 4,238.00 ft, nonrecording gage below.

REMARKS.--Lake is formed by earthfill dam; completed and storage began in August 1937. Capacity, 94,700 acre-ft, from capacity table dated January 1989, between elevation 4,200.0 ft, sill of outlet gate, and elevation 4,275.0 ft, normal operating level. Capacity by original survey was 132,200 acre-feet. No dead storage. Reservoir is used to store water for irrigation. U.S. Bureau of Reclamation satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 138,300 acre-ft, May 23-30, June 1-10, July 21, Sept. 22, 23, 30, Oct. 12, Nov. 4, 5, 30, Dec. 23, 24, 1941, elevation, 4,275.00 ft; maximum elevation, 4,276.10 ft June 3, Sept. 8, 1958; no storage, July 28 to Aug. 2, 1951, elevation, 4,200.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 45,630 acre-ft, Sept. 17, elevation, 4,261.65 ft; minimum, 2,600 acre-ft, July 12, 13, elevation, 4,230.40 ft.

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7630	7630	12110	16240	19280	21670	20160	11360	5290	3050	6080	38800
2	7620	7790	12240	16370	19280	21900	20210	11930	5240	3010	6020	39980
3	8460	7980	12360	16560	19120	21990	20110	12590	5130	3130	5950	41330
4	8800	8130	12360	16650	19120	21940	20120	13230	5020	3130	5970	42480
5	8800	8300	12600	16790	19040	21950	20090	14040	4960	3090	6100	42650
6	8800	8450	12810	17040	19120	21810	20060	14880	4910	3050	6170	42650
7	8770	8590	12970	17190	19120	21730	20010	15650	4810	2970	6180	43820
8	8740	8740	13090	17310	19280	21730	19920	16070	4810	2890	6200	44080
9	8680	8900	13220	17460	19440	21670	19790	16230	4700	2820	6250	44110
10	8630	9050	13340	17540	19440	21550	19690	16360	4650	2750	6820	44450
11	8600	9210	13190	17820	19610	21410	19630	16740	4600	2670	7990	44280
12	8560	9360	13380	17930	19770	21350	19510	16520	4500	2600	8280	43650
13	8520	9520	13510	18160	19940	21280	19400	16260	4450	2600	8900	44480
14	8480	9670	13660	18330	20110	21330	19360	15940	4360	2860	11060	44390
15	8430	9810	13790	18400	20270	21290	19200	15540	4260	3490	11310	44540
16	8410	9970	13960	18560	20270	21100	19150	15130	4160	3930	11500	45200
17	8380	10100	14100	18640	20440	21070	19100	14360	4210	4090	11630	45630
18	8320	10300	14280	18830	20610	21040	19040	13520	4170	4210	12980	45170
19	8270	10390	14380	19020	20780	20900	18970	12170	4100	4340	14860	43010
20	8250	10560	14530	19120	20780	20970	18860	10540	4020	4470	16940	42590
21	8180	10680	14650	19360	20950	20930	18840	8950	3970	4590	19220	42650
22	8130	10830	14930	19440	21120	20920	18750	7880	3890	4630	21360	42650
23	8070	10940	14930	19610	21290	20780	18670	6580	3810	4830	23250	42400
24	8020	11100	15060	19770	21290	20700	18600	5690	3710	4970	25220	42540
25	7970	11290	15340	19770	21470	20480	18540	5580	3620	5140	27320	42540
26	7920	11430	15340	19770	21470	20410	17250	5580	3490	5360	28890	42510
27	7860	11540	15340	19610	21640	20310	15690	5580	3410	5700	30650	42510
28	7790	11670	15540	19610	21640	20240	14140	5520	3250	6100	32350	42840
29	7740	11840	15750	19440	---	20190	12680	5460	3200	6160	34040	43010
30	7670	11960	15940	19440	---	20210	11250	5400	3090	6150	35890	43230
31	7620	---	16130	19440	---	20140	---	5350	---	6110	37580	---
MAX	8800	11960	16130	19770	21640	21990	20210	16740	5290	6160	37580	45630
MIN	7620	7630	12110	16240	19040	20140	11250	5350	3090	2600	5950	38800
(†)	+90	+4340	+4170	+3310	+2200	-1500	-8890	-5900	-2260	+3020	+31470	+5650

CAL YR 1990 MAX 32200 MIN 5350 (†) -1110
WTR YR 1991 MAX 45630 MIN 2600 (†) +35700

(†) CHANGE IN CONTENTS, IN ACRE-Feet

RIO GRANDE BASIN

08384000 LAKE SUMNER NEAR FORT SUMNER. NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1990
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4240.07	4240.07	4244.79	4247.93	4249.90	4251.32	4250.43	4244.14	4236.40	4231.60	4237.74	4259.17
2	4240.05	4240.28	4244.90	4248.02	4249.90	4251.45	4250.46	4244.64	4236.30	4231.50	4237.65	4259.62
3	4241.14	4240.54	4245.00	4248.15	4249.80	4251.50	4250.40	4245.19	4236.10	4231.80	4237.54	4260.12
4	4241.55	4240.73	4245.00	4248.21	4249.80	4251.47	4250.41	4245.71	4235.90	4231.80	4237.57	4260.54
5	4241.55	4240.94	4245.20	4248.30	4249.75	4251.48	4250.39	4246.34	4235.80	4231.70	4237.78	4260.60
6	4241.54	4241.13	4245.37	4248.47	4249.80	4251.40	4250.37	4246.97	4235.70	4231.60	4237.89	4260.60
7	4241.51	4241.30	4245.50	4248.57	4249.80	4251.35	4250.34	4247.52	4235.50	4231.40	4237.91	4261.02
8	4241.47	4241.47	4245.60	4248.65	4249.90	4251.35	4250.29	4247.81	4235.50	4231.20	4237.94	4261.11
9	4241.40	4241.66	4245.70	4248.75	4250.00	4251.32	4250.21	4247.92	4235.30	4231.00	4238.02	4261.12
10	4241.35	4241.83	4245.80	4248.80	4250.00	4251.25	4250.15	4248.01	4235.20	4230.80	4238.90	4261.24
11	4241.31	4242.01	4245.68	4248.98	4250.10	4251.17	4250.11	4248.27	4235.10	4230.60	4240.55	4261.18
12	4241.26	4242.17	4245.83	4249.05	4250.20	4251.13	4250.04	4248.12	4234.90	4230.40	4240.92	4260.96
13	4241.22	4242.34	4245.93	4249.20	4250.30	4251.09	4249.97	4247.94	4234.80	4230.40	4241.66	4261.25
14	4241.17	4242.50	4246.05	4249.31	4250.40	4251.12	4249.95	4247.72	4234.60	4231.10	4243.86	4261.22
15	4241.12	4242.65	4246.15	4249.35	4250.50	4251.10	4249.85	4247.44	4234.40	4232.70	4244.09	4261.27
16	4241.08	4242.81	4246.28	4249.45	4250.50	4250.99	4249.82	4247.15	4234.20	4233.70	4244.26	4261.50
17	4241.05	4242.94	4246.39	4249.50	4250.60	4250.97	4249.79	4246.58	4234.30	4234.05	4244.38	4261.65
18	4240.97	4243.14	4246.52	4249.62	4250.70	4250.95	4249.75	4245.94	4234.22	4234.30	4245.51	4261.49
19	4240.91	4243.23	4246.60	4249.74	4250.80	4250.87	4249.71	4244.84	4234.07	4234.57	4246.95	4260.73
20	4240.88	4243.39	4246.71	4249.80	4250.80	4250.91	4249.64	4243.37	4233.90	4234.84	4248.40	4260.58
21	4240.79	4243.51	4246.80	4249.95	4250.90	4250.89	4249.63	4241.72	4233.77	4235.07	4249.86	4260.60
22	4240.73	4243.65	4247.00	4250.00	4251.00	4250.88	4249.57	4240.41	4233.60	4235.16	4251.14	4260.60
23	4240.66	4243.75	4247.00	4250.10	4251.10	4250.80	4249.52	4238.54	4233.42	4235.54	4252.21	4260.51
24	4240.59	4243.90	4247.10	4250.20	4251.10	4250.75	4249.48	4237.10	4233.20	4235.82	4253.26	4260.56
25	4240.52	4244.07	4247.30	4250.20	4251.20	4250.62	4249.44	4236.90	4233.00	4236.12	4254.30	4260.56
26	4240.46	4244.20	4247.30	4250.20	4251.20	4250.58	4248.61	4236.90	4232.70	4236.52	4255.04	4

RIO GRANDE BASIN

08384500 PECOS RIVER BELOW SUMNER DAM, NM

LOCATION.--Lat 34°36'15", long 104°23'14", sec.2, T.4 N., R.24 E., DeBaca County, Hydrologic Unit 13060003, on left bank 1,200 ft downstream from Sumner Dam, 2.9 mi upstream from Salado Creek, 4.6 mi northeast of Guadalupe, 12.2 mi northwest of Fort Sumner, and at mile 701.7.

DRAINAGE AREA.--4,390 mi², approximately (contributing area).

PERIOD OF RECORD.--October 1912 to April 1926, August 1926 to current year. Monthly discharge only for some periods, published in WSP 1312. October 1944 to September 1974, published as "below Alamogordo Dam." Prior to October 1944, published as "near Guadalupe."

REVISED RECORDS.--WSP 1512: 1932. WSP 1632: 1942. WSP 1712: 1944.

GAGE.--Water-stage recorder and Parshall flume, with concrete control above top of flume. Elevation of gage is 4,142.99 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to Sept. 10, 1936 at site 1.5 mi upstream at different datum. Sept. 14, 1936, to Mar. 8, 1941, and June 11 to Sept. 21, 1941, at site 0.2 mi downstream at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Lake Sumner (station 08384000) 0.3 mi upstream, since August 1937 and Santa Rosa Lake (station 08382810) 55.5 mi upstream, since April 1980. Diversions for irrigation of about 12,500 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--23 years (water years 1913-25, 1927-36), 236 ft³/s, 171,000 acre-ft/yr, prior to completion of Sumner Dam. 55 years (water years 1937-91), 199 ft³/s, 144,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,800 ft³/s, Sept. 1, 1942, by computation of flow over spillway and through outlet gates of Sumner Dam by U.S. Bureau of Reclamation; maximum gage height, 13.58 ft, Sept. 22, 1941; no flow at times. Flood of June 2, 1937, about 75,000 ft³/s, at site 1.5 mi upstream, from peak inflow to Lake Sumner.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,650 ft³/s, Sept. 14; minimum daily, 0.01 ft³/s, Nov. 4, 7, 8, 11, and July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	5.6	.28	.11	98	.19	83	829	95	91	92	101
2	87	.13	.32	.11	98	.18	83	844	95	89	97	101
3	87	.16	.24	.13	98	62	83	841	95	88	97	101
4	88	.01	.28	.17	98	95	83	843	95	88	97	101
5	88	.02	.29	.12	98	95	83	856	95	88	97	101
6	88	.02	.26	.15	98	95	83	883	97	88	97	101
7	88	.01	.29	.19	35	95	83	1020	97	88	97	100
8	88	.01	.22	.15	.13	95	88	1290	97	88	97	101
9	89	.03	.11	.15	.11	95	89	1300	97	88	97	107
10	89	.03	.11	.17	.11	95	84	1130	98	88	33	365
11	89	.01	.11	.12	.12	90	89	1010	98	88	.40	913
12	89	.02	.11	.11	.11	88	89	1020	98	87	.67	1480
13	90	.03	.11	.11	.11	89	89	1060	98	62	1.4	1480
14	90	.03	.11	.12	.12	89	89	1070	98	1.3	.31	1650
15	90	.07	.11	.12	.15	89	89	1030	98	.50	.29	1640
16	90	.12	.14	.11	.12	89	89	1050	97	.16	.22	1640
17	90	.19	.13	.11	.16	89	89	1060	97	.01	.21	1640
18	90	.28	.11	.11	.15	89	89	1060	97	.11	.19	1640
19	90	.34	.12	.12	.13	89	89	1040	98	.10	.19	1050
20	95	.40	.13	60	.19	89	89	1030	97	.10	.14	446
21	100	.28	.07	38	.18	89	90	998	97	34	.11	443
22	100	.04	e.07	.11	.19	89	95	1000	98	.31	.12	439
23	100	.06	e.07	.11	.20	89	96	735	98	.09	.07	349
24	100	.07	e.08	58	.18	89	96	266	98	.10	.07	286
25	100	e.10	e.08	98	.18	85	540	95	98	.10	66	287
26	100	e.12	e.09	98	.19	83	842	95	98	.11	100	287
27	100	.14	.10	98	.19	83	834	95	98	.33	101	172
28	100	e.20	.17	98	.20	83	826	96	98	43	101	97
29	100	.25	.18	98	---	83	820	95	97	89	101	96
30	100	.28	.11	98	---	83	814	95	97	89	101	97
31	101	---	.11	98	---	83	---	96	---	89	101	---
TOTAL	2883	9.05	4.71	844.70	626.22	2556.37	6785	23932	2914	1468.32	1576.39	17411
MEAN	93.0	.30	.15	27.2	22.4	82.5	226	772	97.1	47.4	50.9	580
MAX	101	5.6	.32	98	98	95	842	1300	98	91	101	1650
MIN	87	.01	.07	.11	.11	.18	83	95	95	.01	.07	96
AC-FT	5720	18	9.3	1680	1240	5070	13460	47470	5780	2910	3130	34530

CAL YR 1990 TOTAL 51842.77 MEAN 142 MAX 1170 MIN .01 AC-FT 102800
WTR YR 1991 TOTAL 61010.76 MEAN 167 MAX 1650 MIN .01 AC-FT 121000

e Estimated

RIO GRANDE BASIN

08385000 FORT SUMNER MAIN CANAL NEAR FORT SUMNER, NM

LOCATION.--Lat 34°30'30", long 104°16'40", in SE¼SW¼SW¼ sec.1, T.3 N., R.25 E., DeBaca County, Hydrologic Unit 13060003, on right bank of concrete canal, 200 ft downstream from diversion dam on Pecos River, 3.0 mi northwest of Fort Sumner, and at Pecos River mile 684.8.

PERIOD OF RECORD.--March 1939 to February 1943 (published in WSP 1732), April 1954 to current year (monthly discharge only prior to October 1965).

GAGE.--Water-stage recorder. Elevation of gage is 4,034.7 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to March 1954, at site 2.4 mi downstream at different datum. April 1954 to March 1965, at site 1.1 mi downstream at datum 1.7 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Canal diverts water from Pecos River for irrigation of about 6,600 acres, 1961 determination, by the Fort Sumner Irrigation District. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years (water years 1940-42, 1955-91), 50.4 ft³/s, 36,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 174 ft³/s, July 22, 1941; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	40	.00	.00	e91	.00	85	108	95	91	e90	99
2	94	.00	.00	.00	e91	.24	84	105	94	87	e92	98
3	96	.00	.00	.00	e91	.87	84	102	94	96	e92	98
4	93	.00	.00	.00	e91	57	84	99	93	87	e92	98
5	90	.00	.00	.00	e91	84	83	96	89	92	e92	97
6	91	.00	.00	.00	91	90	83	94	95	90	e93	104
7	91	.00	.00	.00	e50	91	82	107	96	88	e93	101
8	91	.00	.00	.00	e5.0	88	81	120	96	86	e93	99
9	92	.00	.00	.00	e.00	91	87	102	98	84	e93	69
10	91	.00	.00	.00	e.00	92	80	85	99	84	e50	.00
11	91	.00	.00	.00	e.00	91	86	83	98	85	e.00	.00
12	90	.00	.00	.00	e.00	86	90	93	97	87	5.7	.00
13	89	.00	.00	.00	.00	85	90	93	97	92	16	.00
14	89	.00	.00	.00	.00	86	91	91	98	37	.00	.00
15	90	.00	.00	.00	.00	86	91	92	98	.00	.00	.00
16	89	.00	.00	e.00	.00	86	90	95	98	.00	.00	.00
17	89	.00	.00	e.00	.00	87	91	100	97	.00	.00	.00
18	89	.00	.00	e.00	.00	86	94	100	97	.00	.00	e60
19	90	.00	.00	e.00	.00	87	91	100	97	.00	.00	e88
20	89	.00	.00	e.00	.00	90	89	99	96	.00	.00	e90
21	90	.00	.00	e25	.00	85	89	101	96	.00	.00	e93
22	90	.00	.00	e5.0	.00	85	89	104	96	.00	.00	e93
23	89	.00	.00	e.00	.00	84	94	101	96	.00	.00	e93
24	89	.00	.00	e.00	.00	83	93	95	96	.00	.00	e93
25	88	.00	.00	e50	.00	80	88	93	96	.00	.00	e93
26	87	.00	.00	e80	.00	77	100	92	96	.00	63	e94
27	86	.00	.00	e90	.00	81	105	92	96	.00	95	e94
28	84	.00	.00	e91	.00	81	116	91	96	.00	98	e94
29	82	.00	.00	e91	---	83	114	92	96	e30	100	e94
30	81	.00	.00	e91	---	83	111	92	96	e83	100	e94
31	91	---	.00	e91	---	84	---	93	---	e86	99	---
TOTAL	2761	40.00	0.00	614.00	601.00	2370.11	2735	3010	2882	1385.00	1456.70	2036.00
MEAN	89.1	1.33	.000	19.8	21.5	76.5	91.2	97.1	96.1	44.7	47.0	67.9
MAX	96	40	.00	91	91	92	116	120	99	96	100	104
MIN	80	.00	.00	.00	.00	.00	80	83	89	.00	.00	.00
AC-FT	5480	79	.00	1220	1190	4700	5420	5970	5720	2750	2890	4040

CAL YR 1990 TOTAL 19598.79 MEAN 53.7 MAX 114 MIN .00 AC-FT 38870
WTR YR 1991 TOTAL 19890.81 MEAN 54.5 MAX 120 MIN .00 AC-FT 39450

e Estimated

RIO GRANDE BASIN

08386000 PECOS RIVER NEAR ACME, NM
(Surveillance network station)

LOCATION.--Lat 33°32'10", long 104°22'34", in SW¼NW¼ sec.14, T.9 S., R.25 E., Chaves County, Hydrologic Unit 13060007, on right bank 3.0 mi downstream from U.S. Highway 70, 3.7 mi downstream from Salt Creek, 4.7 mi southwest of Acme, 14 mi northeast of Roswell, and at mile 585.3.

DRAINAGE AREA.--11,380 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1921 to June 1923, July 1937 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Elevation of gage is 3,510 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1938, at site on highway bridge 3 mi upstream at various datums. Since Oct. 25, 1963, supplemental water-stage recorder at site opposite base gage at same datum.

REMARKS.--Water-discharge records good. Flow regulated by Lake Summer (station 08384000) 117 mi upstream since August 1937 and Santa Rosa Lake (station 08382810) 172 mi upstream since April 1980. Diversions for irrigation of about 20,000 acres, 1959 determination, upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--54 years (water years 1938-91), 178 ft³/s, 129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s, Sept. 23, 1941, gage height, 13.71 ft, from rating curve extended above 27,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 28, 1937, reached a discharge of 53,000 ft³/s, gage height, 14.82 ft, from floodmarks, site and datum then in use, from slope-area measurement, but may have been exceeded by the flood of Oct. 1, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 15	1130	*8,140	*9.68	Aug. 14	0800	5,180	7.83
July 25	1800	2,510	6.21	Sept. 10	1645	3,140	6.74

No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	33	11	15	14	10	20	483	52	.00	56	36
2	78	35	11	16	19	8.2	16	543	166	.00	54	32
3	76	44	10	14	27	6.6	13	579	109	.05	54	29
4	61	120	9.6	13	25	6.1	13	514	64	4.2	56	29
5	64	103	9.5	12	26	4.5	12	535	50	.03	109	29
6	58	64	10	12	24	3.4	13	541	57	.00	118	54
7	46	43	9.8	12	27	2.8	13	617	50	18	66	202
8	47	35	11	12	28	2.5	12	619	43	9.4	59	357
9	43	30	12	12	35	2.0	12	723	40	2.4	158	268
10	41	27	11	12	45	2.1	12	862	106	.02	716	1590
11	41	26	11	12	44	4.7	11	857	101	.00	637	1530
12	47	23	11	11	33	5.2	8.6	797	76	.11	411	1070
13	50	22	11	11	25	6.3	7.4	716	37	420	2370	1190
14	45	20	13	10	21	7.2	6.6	704	29	4350	3290	1190
15	36	19	12	9.4	18	7.1	7.4	739	32	6340	680	1290
16	36	18	12	9.0	16	7.4	9.5	775	38	1500	312	1600
17	31	17	12	8.9	15	7.8	11	770	139	477	238	1530
18	30	17	11	8.8	14	9.7	11	774	51	238	224	1540
19	31	16	10	8.3	16	11	14	783	32	133	182	1550
20	31	16	9.3	7.7	16	12	16	833	23	83	143	1490
21	29	16	6.2	8.5	15	13	15	877	20	71	116	716
22	32	15	5.1	10	14	11	13	1070	17	71	95	636
23	27	15	5.3	8.6	12	9.2	10	1080	15	114	79	649
24	23	14	5.4	8.2	11	11	9.7	922	9.6	95	73	662
25	22	13	5.5	7.9	10	11	11	754	5.3	802	69	550
26	25	13	5.5	15	9.3	16	11	536	1.7	1620	51	409
27	23	12	5.5	17	8.9	22	10	290	.00	632	44	387
28	21	11	6.1	14	9.1	18	318	172	.00	410	37	357
29	23	11	10	12	---	16	431	112	.00	170	36	342
30	29	11	12	10	---	16	456	73	.00	94	39	296
31	30	---	14	12	---	25	---	55	---	67	37	---
TOTAL	1296	859	297.8	349.3	577.3	294.8	1523.2	19705	1363.60	17721.21	10609	21610
MEAN	41.8	28.6	9.61	11.3	20.6	9.51	50.8	636	45.5	572	342	720
MAX	120	120	14	17	45	25	456	1080	166	6340	3290	1600
MIN	21	11	5.1	7.7	8.9	2.0	6.6	55	.00	.00	36	29
AC-FT	2570	1700	591	693	1150	585	3020	39080	2700	35150	21040	42860

CAL YR 1990 TOTAL 39265.52 MEAN 108 MAX 1040 MIN .00 AC-FT 77880
WTR YR 1991 TOTAL 76206.21 MEAN 209 MAX 6340 MIN .00 AC-FT 151200

RIO GRANDE BASIN
08386000 PECOS RIVER NEAR ACME, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
NOV 08...	0915	36	2300	8.3	3.0	4.0	12.8	23	990	890	290	65	
MAR 07...	0845	3.1	5500	7.9	8.0	6.5	11.0	25	1700	1600	460	140	
MAY 16...	1045	797	1200	7.9	27.0	17.0	9.5	90	700	590	230	30	
SEP 11...	1415	1030	1290	7.3	29.5	21.0	7.5	95	530	460	170	26	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	
NOV 08...	160	2	3.0	129	0	106	1000	190	0.60	11	1780		
MAR 07...	560	6	5.6	107	0	88	1600	660	0.70	5.3	3480		
MAY 16...	40	0.7	2.7	127	0	104	610	43	0.40	7.8	1030		
SEP 11...	85	2	3.3	85	0	70	540	97	0.40	7.8	973		
DATE		NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 08...	0.370	0.330	<0.010	0.700	0.300	0.060	0.060	0.54	1.3	0.250	<0.010	2.9	
MAR 07...	--	<0.010	<0.010	<0.050	<0.050	0.050	0.020	0.25	--	<0.010	<0.010	2.0	
MAY 16...	0.040	0.020	<0.010	0.060	0.089	0.040	0.040	0.46	0.56	0.310	<0.010	7.1	
SEP 11...	0.210	0.020	<0.010	0.230	0.240	0.010	0.020	0.39	0.63	0.520	0.020	39	
DATE		ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 08...	--	1	200	<1	<1.0	11	2	10	2	<10	4	<1	
MAR 07...	--	--	370	--	--	--	--	--	--	30	--	--	
MAY 16...	--	--	70	--	--	--	--	--	--	6	--	--	
SEP 11...	2	1	140	2	<1.0	110	1	16	2	15	73	<1	

RIO GRANDE BASIN
08386000 PECOS RIVER NEAR ACME, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)
NOV 08...	0.10	<0.1	--	<1	30	<10	<2.0	1.9	60	<1	<1
SEP 11...	0.10	<0.1	<1	<1	240	10	--	--	--	--	--
DATE	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
NOV 08...	<1	<10	1	720	<10	130	<0.01	3	597	59	66
MAR 07...	--	--	--	--	--	--	--	--	401	3.4	58
MAY 16...	--	--	--	--	--	--	--	--	1310	2820	70
SEP 11...	--	--	--	--	--	--	--	--	7410	20600	96

RIO GRANDE BASIN

08387000 RIO RUIDOSO AT HOLLYWOOD, NM

LOCATION.--Lat 33°19'36", long 105°37'38", in SE¼SE¼NE¼ sec.25, T.11 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, on center pier on downstream side of bridge on Blooming Dale Road in Ruidoso Downs, 0.1 mi north of U.S. Highway 70, 0.7 mi downstream from Gavilan Canyon, 1.7 mi downstream from Carrizo Creek, and at mile 24.4.

DRAINAGE AREA.--120 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 6,420 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 14, 1953 to Mar. 28, 1985, at site 0.95 mi downstream at different datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Village of Ruidoso diverts from right bank 7.0 mi upstream for municipal use and returns a portion of this water as effluent from sewage disposal plant downstream from the gage.

AVERAGE DISCHARGE.--28 years (1954-81), 14.9 ft³/s, 10,800 acre-ft/yr, for period when sewage disposal plant effluent was discharged upstream from gage. 9 years (water years 1982-91), 32.2 ft³/s, 23,330 acre-ft/yr, since disposal plant effluent is discharged downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s, Aug. 11, 1984, gage height, 9.68 ft, from rating curve extended above 510 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 10.05 ft, datum then in use, June 17, 1965; minimum discharge, 0.30 ft³/s, Jan. 1, 1962 and May 8, 9, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 7	2130	143	2.62	Aug. 3	1445	194	2.83
May 19	1515	189	2.84	Aug. 14	0930	*317	*3.19
July 25	1800	158	2.70	Aug. 24	1300	222	2.79

Minimum discharge, 8.4 ft³/s, Dec. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	14	12	35	16	67	41	40	23	11	30	36
2	50	14	13	32	16	78	45	43	21	13	25	34
3	56	18	12	30	17	72	49	45	20	20	44	32
4	60	15	11	29	17	71	63	43	19	21	36	34
5	54	14	13	29	17	57	79	40	19	14	28	42
6	49	13	11	29	16	72	108	40	18	13	24	55
7	44	13	9.9	28	17	79	126	40	18	13	27	54
8	39	14	11	26	17	78	126	41	18	13	31	53
9	35	12	11	25	18	76	108	48	18	13	30	47
10	31	12	11	25	18	69	104	56	19	14	29	58
11	28	12	11	24	19	65	102	56	e15	14	30	77
12	27	12	11	23	31	60	93	54	14	16	36	82
13	25	12	17	22	65	56	79	48	14	16	49	73
14	23	12	21	21	50	52	74	45	13	29	245	63
15	23	12	17	21	44	47	62	44	14	21	181	56
16	20	12	31	21	42	48	60	41	14	19	129	50
17	17	12	52	21	52	44	64	37	13	18	106	46
18	18	12	36	20	45	42	68	36	12	24	101	44
19	17	12	29	19	40	42	69	52	12	25	102	46
20	17	12	25	19	35	41	73	42	12	25	116	39
21	16	11	23	20	35	42	82	52	12	31	108	37
22	16	12	22	20	35	42	74	52	11	43	86	36
23	16	11	17	20	38	40	67	46	11	52	73	33
24	16	11	18	17	39	38	62	40	11	84	83	31
25	15	11	18	18	41	38	59	35	10	140	73	28
26	15	18	18	17	42	38	57	31	10	139	64	27
27	16	16	18	17	41	41	58	29	11	102	58	26
28	15	13	37	17	49	46	54	28	11	72	52	25
29	15	12	59	16	---	46	47	27	12	54	50	24
30	15	13	46	16	---	44	41	26	14	43	44	24
31	15	---	39	16	---	41	---	25	---	35	39	---
TOTAL	849	387	679.9	693	912	1672	2194	1282	439	1147	2129	1312
MEAN	27.4	12.9	21.9	22.4	32.6	53.9	73.1	41.4	14.6	37.0	68.7	43.7
MAX	60	18	59	35	65	79	126	56	23	140	245	82
MIN	15	11	9.9	16	16	38	41	25	10	11	24	24
AC-FT	1680	768	1350	1370	1810	3320	4350	2540	871	2280	4220	2600

CAL YR 1990 TOTAL 8586.4 MEAN 23.5 MAX 200 MIN 7.6 AC-FT 17030
WTR YR 1991 TOTAL 13695.9 MEAN 37.5 MAX 245 MIN 9.9 AC-FT 27170

e Estimated

RIO GRANDE BASIN

08387000 RIO RUIDOSO AT HOLLYWOOD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-67, 1987 to current year.

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)
NOV 06...	1400	13	990	8.6	19.0	10.0	10.7	<10	530	150	38
MAR 06...	0930	90	490	7.5	6.5	7.5	8.6	69	230	70	14
MAY 15...	0925	43	495	7.8	17.0	8.0	12.5	14	220	64	14
SEP 25...	1040	28	750	8.2	21.0	8.5	10.4	<10	340	100	23
DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CaCO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
NOV 06...	48	0.9	1.6	147	390	54	0.30	13	783	--	--
MAR 06...	25	0.7	1.6	98	160	25	0.20	9.8	366	0.290	--
MAY 15...	20	0.6	0.80	77	160	23	0.20	9.6	339	--	0.310
SEP 25...	31	0.7	1.2	142	260	36	0.30	13	550	--	--
DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 06...	<0.010	0.020	<0.100	<0.100	0.040	0.050	0.26	--	<0.010	<0.010	1.7
MAR 06...	0.020	<0.010	0.310	0.280	0.060	0.020	0.54	0.91	0.070	0.020	14
MAY 15...	<0.010	0.010	0.310	0.320	<0.010	<0.010	--	0.61	0.020	<0.010	3.1
SEP 25...	<0.010	<0.010	0.075	0.061	0.030	0.010	--	--	0.050	0.010	1.8
DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	
NOV 06...	30	23	<2.0	72	470	4	<1	5	<10	9	
MAR 06...	20	42	--	--	--	--	--	--	--	--	
MAY 15...	10	17	--	--	--	--	--	--	--	--	
SEP 25...	20	10	--	--	--	--	--	--	--	--	
DATE	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	
NOV 06...	5900	30	240	0.03	80	12	0.41	71	K14	K14	
MAR 06...	--	--	--	--	--	492	119	83	350	500	
MAY 15...	--	--	--	--	--	40	4.6	81	50	96	
SEP 25...	--	--	--	--	--	37	2.8	89	150	350	

RIO GRANDE BASIN

08387600 EAGLE CREEK BELOW SOUTH FORK, NEAR ALTO, NM

LOCATION.--Lat 33°23'33", long 105°43'16", in SE¼SW¼ sec.31, T.10 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, in Lincoln National Forest on right bank, 100 ft upstream from culvert under State Road 532, 400 ft downstream from South Fork, and 2.5 mi west of Alto. Mouth at Rio Ruidoso mile 11.3.

DRAINAGE AREA.--8.14 mi².

PERIOD OF RECORD.--August 1969 to December 1980, April 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. August 26, 1969 to December 31, 1980, at site 360 ft downstream at datum 6.0 ft higher.

REMARKS.--Records fair. No diversions for irrigation upstream from station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years (water years 1970-80, 1989-91), 3.10 ft³/s, 2,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 206 ft³/s, Dec. 19, 1978, gage height, 3.79 ft, from rating curve extended above 21 ft³/s, site and datum then in use; minimum, no flow at times in 1989, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge 25 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 28	1945	32	5.54	Aug. 7	1500	30	5.51
July 24	1315	42	5.64	Aug. 14	0745	*106	*6.86

Minimum discharge 0.28 ft³/s, Dec. 3, 4, June 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	.98	.51	5.9	1.1	7.6	6.0	5.0	1.5	.37	2.8	3.6
2	13	1.1	.50	5.3	1.1	6.8	6.4	5.3	1.4	.41	2.9	3.2
3	14	1.5	.44	4.9	1.1	6.7	7.4	5.8	1.3	1.0	5.9	2.9
4	14	1.3	.42	5.4	1.1	7.9	8.8	5.7	1.2	1.1	4.6	2.9
5	11	1.2	.45	5.5	1.0	9.5	10	5.1	1.0	.50	3.2	4.5
6	8.8	1.1	.46	5.4	1.0	19	13	4.7	.86	.43	2.6	6.7
7	7.0	1.0	.44	5.1	1.0	19	15	4.8	.79	.39	7.4	7.5
8	5.7	1.1	.46	4.7	.94	14	17	5.5	.76	.35	7.6	7.6
9	4.7	.97	.46	4.5	.98	11	14	6.4	.75	.60	7.0	6.8
10	4.1	.90	.46	4.2	.98	9.8	12	7.6	.70	.55	9.3	7.9
11	3.6	.83	.46	3.9	1.1	8.8	12	7.4	.74	.46	8.6	8.4
12	3.2	.81	.46	3.5	3.2	7.8	11	6.9	.73	.57	11	10
13	2.8	.75	1.1	3.2	2.7	7.0	9.9	6.3	.63	.69	14	9.5
14	2.5	.75	2.5	3.0	2.9	6.3	8.5	5.7	.60	2.2	68	8.5
15	2.3	.72	1.1	2.7	4.1	5.7	7.5	5.4	.58	1.2	38	7.7
16	2.1	.68	9.4	2.6	4.3	5.3	7.4	4.8	.56	.85	23	7.0
17	1.9	.67	9.8	2.5	5.4	4.9	7.6	4.1	.53	1.1	15	6.4
18	1.8	.62	5.4	2.3	4.9	4.5	8.2	3.8	.50	1.3	15	6.1
19	1.7	.62	4.1	2.2	4.2	4.2	8.1	4.1	.49	.80	18	6.4
20	1.7	.63	3.4	2.1	4.0	4.2	8.6	4.2	.46	.78	18	5.5
21	1.6	.61	3.1	2.0	4.9	4.3	10	5.8	.44	2.7	15	5.0
22	1.5	.55	2.8	1.9	5.6	4.2	9.7	6.8	.42	6.0	12	4.7
23	1.4	.51	2.2	1.9	5.9	4.7	8.8	5.9	.40	18	9.7	4.2
24	1.3	.51	2.2	1.7	6.5	4.8	8.0	4.7	.39	24	9.3	4.0
25	1.2	.49	2.1	1.6	6.7	5.1	7.5	4.0	.36	20	7.7	3.6
26	1.2	1.2	1.9	1.5	6.3	5.6	7.4	3.5	.34	15	6.8	4.1
27	1.1	.77	1.8	1.4	5.8	6.5	7.4	3.3	.33	10	6.2	3.5
28	1.1	.57	14	1.4	7.2	7.2	7.0	3.1	.36	7.3	5.7	3.0
29	1.1	.53	13	1.2	---	7.1	6.2	2.8	.43	5.1	4.9	2.8
30	.98	.52	8.9	1.2	---	6.8	5.3	2.0	.40	3.8	4.3	2.8
31	.98	---	6.9	1.1	---	6.3	---	1.7	---	3.2	4.0	---
TOTAL	130.36	24.49	101.22	95.8	96.00	232.6	275.7	152.2	19.95	130.75	367.5	166.8
MEAN	4.21	.82	3.27	3.09	3.43	7.50	9.19	4.91	.66	4.22	11.9	5.56
MAX	14	1.5	14	5.9	7.2	19	17	7.6	1.5	24	68	10
MIN	.98	.49	.42	1.1	.94	4.2	5.3	1.7	.33	.35	2.6	2.8
AC-FT	259	49	201	190	190	461	547	302	40	259	729	331

CAL YR 1990 TOTAL 947.65 MEAN 2.60 MAX 49 MIN .00 AC-FT 1880
WTR YR 1991 TOTAL 1793.37 MEAN 4.91 MAX 68 MIN .33 AC-FT 3560

RIO GRANDE BASIN

08390500 RIO HONDO AT DIAMOND A RANCH, NEAR ROSWELL, NM

LOCATION.--33°20'57", long 104°51'05", in NE¼NE¼ sec.20, T.11 S, R.21 E., Chaves County, Hydrologic Unit 13060008, on right bank 40 ft downstream from bridge on Mossman Road at Diamond A Ranch farm, 1.3 mi south of U.S. Highway 70-380, 13 mi upstream from Two Rivers Reservoir, 21 mi upstream from mouth of Rocky Arroyo, 18 mi west of Roswell, and at mile 44.7.

DRAINAGE AREA.--947 mi², contributing area.

PERIOD OF RECORD.--May 1908 to August 1909, May 1939 to current year. Monthly discharge only for 1908-9, published in Technical Report 7, State of New Mexico, State Engineer Office, "Streamflow and Reservoir Content, 1888-1954."

REVISED RECORDS.--WSP 1392: Drainage area. WSP 1512: 1939-40(P), 1941, 1942-43(P), 1946(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,190 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 11, 1965, at site on left bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals upstream from station for irrigation above and below station of about 6,500 acres, 1959 determination. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--52 years (water years 1940-91), 25.9 ft³/s, 18,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,800 ft³/s, June 18, 1965, gage height, 26.40 ft, from rating curve extended above 3,100 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 28.78 ft, Sept. 22, 1941; no flow most of the time.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on June 1, 1937, reached a discharge of 24,900 ft³/s at Riverside, about 13 mi upstream. Other major floods occurred Oct. 31, 1901, Sept. 29, 30, 1904, and July 25, 1905.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 14	1845	*1,550	*18.51	No other peak greater than base discharge.			
No flow many days.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	7.9	14	e52	45	47	42	30	6.8	.00	82	87
2	91	9.9	22	e50	45	81	38	22	.06	.00	75	83
3	80	14	25	e47	43	93	32	20	.00	.00	96	e77
4	89	16	22	e47	41	71	45	20	.00	.00	126	e70
5	94	19	18	e48	39	63	58	32	.00	.00	125	e66
6	92	20	15	e50	40	52	72	27	8.7	.00	120	e68
7	82	20	17	e56	39	87	92	18	3.4	.00	93	71
8	72	21	13	58	35	130	113	20	5.0	.00	132	79
9	60	21	13	53	33	123	133	16	.01	.00	103	e73
10	58	24	14	62	29	114	118	15	.00	.00	80	e64
11	58	24	15	61	26	106	116	25	4.3	.00	88	64
12	57	20	11	62	26	82	106	30	.70	.00	119	92
13	48	14	11	61	24	72	107	29	.35	221	103	117
14	35	12	12	62	60	73	101	26	.22	186	176	103
15	34	11	16	60	47	64	72	21	1.2	52	424	85
16	35	9.2	18	60	37	59	56	18	.00	222	323	76
17	36	8.7	21	63	34	67	57	18	.00	121	262	65
18	34	10	48	64	50	61	57	15	.00	57	257	67
19	30	12	46	62	64	53	77	15	.00	45	227	85
20	26	12	40	59	56	37	93	26	.00	46	255	89
21	28	13	37	58	49	27	106	32	.00	47	252	75
22	28	13	37	59	37	31	123	54	.00	54	252	67
23	26	16	e33	59	34	32	119	83	.00	78	198	62
24	25	17	e31	59	28	37	104	70	.00	175	181	58
25	21	18	e28	55	31	33	84	45	.00	238	201	49
26	16	14	e26	54	34	30	83	31	.00	261	163	40
27	12	12	e24	53	35	31	70	28	.00	267	142	40
28	12	15	e22	50	37	35	70	20	.00	223	132	40
29	10	8.4	e33	48	---	50	61	13	.00	177	118	41
30	7.9	9.3	e58	46	---	54	39	13	.00	139	105	38
31	6.8	---	e54	45	---	44	---	11	---	106	88	---
TOTAL	1413.7	441.4	794	1723	1098	1939	2444	843	30.74	2715.00	5098	2091
MEAN	45.6	14.7	25.6	55.6	39.2	62.5	81.5	27.2	1.02	87.6	164	69.7
MAX	110	24	58	64	64	130	133	83	8.7	267	424	117
MIN	6.8	7.9	11	45	24	27	32	11	.00	.00	75	38
AC-FT	2800	876	1570	3420	2180	3850	4850	1670	61	5390	10110	4150

CAL YR 1990 TOTAL 7240.41 MEAN 19.8 MAX 456 MIN .00 AC-FT 14360
WTR YR 1991 TOTAL 20630.84 MEAN 56.5 MAX 424 MIN .00 AC-FT 40920

e Estimated

RIO GRANDE BASIN

08390600 TWO RIVERS RESERVOIR NEAR ROSWELL, NM

LOCATION.--08390610 Rio Hondo Reservoir: Lat 33°17'55", long 104°43'20", in SW¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, Hydrologic Unit 13060008, near center of Diamond A Dam on Rio Hondo, 13 mi southwest of Roswell at mile 33.4. 08390620 Rocky Arroyo Reservoir: Lat 33°16'20", long 104°43'20", in NW¼SE¼NE¼ sec.16, T.12 S., R.22 E., at left end of Rocky Dam on Rocky Arroyo, and 14 mi southwest of Roswell.

DRAINAGE AREA.--1,027 mi²; Rio Hondo, 963 mi²; Rocky Arroyo, 64 mi².

PERIOD OF RECORD.--July 1963 to current year (prior to October 1965 monthend contents only). Prior to October 1966, contents at 0800 hours.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Two Rivers Reservoir, completed July 16, 1963, is formed by earthfill dams on Rio Hondo, which forms Rio Hondo Reservoir, and on Rocky Arroyo, which forms Rocky Arroyo Reservoir. Above elevation 3,980.0 ft, the pools of the two reservoirs combine to form Two Rivers Reservoir with a total capacity of 163,800 acre-ft, at elevation 4,032.0 ft, crest of ungated spillway. Capacity by original survey was 167,900 acre-ft. Capacity of Rio Hondo Reservoir, 142 acre-ft, from capacity table dated January 1990, between elevations 3,957.0 ft, sill of outlet gate, and 3,980.0 ft. Capacity of Rocky Arroyo Reservoir, 12,860 acre-ft, from capacity table dated January 1990, between elevations 3,945.0 ft, sill of outlet gate, and 3,980.0 ft. No dead storage in Rio Hondo Reservoir or Rocky Arroyo Reservoir. Primary objective of project is flood control. Outlet conduits in Rocky Dam have fixed openings. Figures given herein represent total contents at 2400 hours. U.S. Army Corps of Engineers satellite telemeters at stations.

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

EXTREMES FOR PERIOD OF RECORD.--Rio Hondo Reservoir: Maximum contents, 1,260 acre-ft, July 29, 1965, elevation, 3,985.7 ft; no storage most of time. Rocky Arroyo Reservoir: Maximum contents, 6,090 acre-ft, June 18, 1965, elevation, 3,970.7 ft; no storage most of time.

EXTREMES FOR CURRENT YEAR.--Maximum contents, Rio Hondo Reservoir, 1,150 acre-ft, July 14, elevation, 3,988.59 ft; Rocky Arroyo Reservoir, 5,790 acre-ft, July 14, elevation 3971.33 ft, no contents both reservoirs most of time.

CONTENTS, IN ACRE-FEET, AND ELEVATION, IN FEET, WATER YEAR, OCTOBER 1990 TO SEPTEMBER 1991
NO CONTENTS AT 2400 HOURS DURING YEAR EXCEPT:

RIO HONDO RESERVOIR

DATE	ELEVATION	CONTENTS	DATE	ELEVATION	CONTENTS
Dec. 17	3976.40	56	Jan. 16	3980.07	185
18	3978.36	108	17	3980.20	194
19	3979.49	156	18	3980.22	195
20	3979.69	166	19	3980.21	194
21	3981.60	291	20	3980.12	189
22	3981.60	291	21	3979.98	180
23	3981.60	291	22	3980.03	183
24	3981.60	291	23	3979.89	176
25	3981.60	291	24	3979.91	177
26	3981.70	299	25	3980.09	187
27	3981.70	299	26	3976.69	166
28	3982.90	407	27	3979.61	162
29	3982.90	407	28	3978.51	157
30	3982.90	407	29	3979.36	150
31	3982.90	407	30	3979.30	147
Jan. 1	3983.20	438	31	3979.29	146
2	3983.00	416	July 13	3985.54	681
3	3982.80	397	14	3988.59	1,150
4	3982.60	378	15	3987.99	1,070
5	3982.40	360	16	3987.69	1,020
6	3982.20	341	17	3987.45	975
7	3981.99	321	18	3985.03	610
8	3981.71	299	19	3981.93	275
9	3981.22	261	25	3983.44	421
10	3981.05	248	26	3985.59	688
11	3980.80	231	27	3986.64	844
12	3980.40	206	28	3985.85	724
13	3980.40	206	29	3984.72	571
14	3980.30	200	30	3982.46	323
15	3980.24	196	31	3979.75	116
			Aug. 14	3980.75	169
			15	3984.28	517
			16	3983.82	462
			17	3982.06	286
			18	3980.28	159

ROCKY ARROYO RESERVOIR

DATE	ELEVATION	CONTENTS	DATE	ELEVATION	CONTENTS
July 13	3968.41	4,120	July 19	3975.00	535
14	3971.33	5,790	20	3945.00	177
15	3970.45	5,250	24	3960.12	1,180
16	3967.57	3,720	25	3957.40	617
17	3963.60	2,170	26	3954.08	215
18	3960.60	1,300			

RIO GRANDE BASIN

08390800 RIO HONDO BELOW DIAMOND A DAM, NEAR ROSWELL, NM

LOCATION.--Lat 33°18'05", long 104°43'12", in NE¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, Hydrologic Unit 13060008, on left bank, 500 ft downstream from outlet conduit of Diamond A Dam (Two Rivers Reservoir), 13 mi southwest of Roswell, and at mile 33.3.

DRAINAGE AREA.--963 mi², contributing area.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,949.68 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions and ground-water withdrawals for irrigation of about 6,500 acres, 1959 determination, upstream from station. This record represents the outflow from Two Rivers Reservoir through Diamond A Dam 0.1 mi upstream; flow from reservoir can also be discharged into Rocky Arroyo through Rocky Dam (see REMARKS for station 08390600). Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--28 years, 16.3 ft³/s, 11,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 659 ft³/s, July 29, 1965; gage height, 4.91 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 235 ft³/s, Aug. 16; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	3.7	6.3	.02	45	39	28	23	.00	.00	56	78
2	70	7.7	11	.02	38	62	26	11	.00	.00	49	76
3	61	17	14	.01	36	76	19	8.5	.00	.00	63	71
4	64	14	13	.00	35	61	24	7.8	.00	.00	76	61
5	67	20	12	.01	34	53	29	20	.00	.00	100	61
6	68	17	7.4	.00	35	48	41	19	6.4	.00	94	66
7	64	16	9.1	.00	34	52	51	7.8	8.1	.00	76	69
8	57	19	6.9	.00	31	94	73	6.2	3.0	.00	99	71
9	49	19	6.4	.00	30	91	91	4.4	.59	.00	87	68
10	48	19	6.9	.00	27	85	91	2.3	.00	.00	74	e63
11	46	20	7.4	.01	23	79	83	4.0	.00	.00	73	e63
12	49	18	5.6	.00	23	66	76	11	.00	.00	91	74
13	42	9.0	4.9	.00	21	54	73	9.2	.00	2.2	76	90
14	32	7.8	4.5	.01	44	58	74	10	.00	.11	29	87
15	e26	6.5	7.0	.01	42	49	60	5.7	.00	.10	158	71
16	e26	4.5	9.4	.01	33	47	49	4.1	.00	.10	235	66
17	e27	5.2	3.9	.01	32	49	42	1.9	.00	89	231	61
18	e26	6.6	.02	.00	37	48	39	.39	.00	146	227	63
19	e24	7.4	.05	.01	56	42	47	1.2	.00	139	211	70
20	e22	5.8	.07	.00	51	31	55	.13	.00	135	202	77
21	e22	6.5	.02	.01	47	21	62	14	.00	38	200	68
22	e22	7.6	.02	.01	36	21	69	23	.00	39	198	62
23	e22	10	.02	.02	34	25	64	36	.00	52	165	57
24	e21	10	.01	.03	26	26	59	33	.00	110	139	55
25	e16	11	.01	.03	28	22	54	21	.00	35	159	48
26	e13	9.4	.01	.03	33	21	51	9.3	.00	7.0	128	40
27	e10	3.0	.02	.03	36	22	44	9.3	.00	54	98	36
28	e9.8	8.0	.02	.03	36	22	43	3.2	.00	117	106	36
29	e8.0	3.8	.00	.03	---	32	45	.49	.00	174	100	30
30	5.4	5.2	.00	.03	---	40	30	.00	.00	168	89	30
31	3.0	---	.00	.02	---	30	---	.00	---	163	80	---
TOTAL	1096.2	317.7	135.97	0.39	983	1466	1592	306.91	18.09	1468.51	3769	1868
MEAN	35.4	10.6	4.39	.013	35.1	47.3	53.1	9.90	.60	47.4	122	62.3
MAX	76	20	14	.03	56	94	91	36	8.1	174	235	90
MIN	3.0	3.0	.00	.00	21	21	19	.00	.00	.00	29	30
AC-FT	2170	630	270	.8	1950	2910	3160	609	36	2910	7480	3710

CAL YR 1990 TOTAL 4615.61 MEAN 12.6 MAX 184 MIN .00 AC-FT 9160
WTR YR 1991 TOTAL 13021.77 MEAN 35.7 MAX 235 MIN .00 AC-FT 25830

e Estimated

RIO GRANDE BASIN

08393500 RIO HONDO AT ROSWELL, NM

LOCATION.--Lat 33°22'19", long 104°32'42", in NE¼SE¼ sec.7, T.11 S., R.24 E., Chaves County, Hydrologic Unit 13060008, on left bank, 0.3 mi upstream from bridge on Sunset Ave. in Roswell, 6.3 mi downstream from Rocky Arroyo and 11.7 mi upstream from mouth. Mouth at Pecos River mile 566.0.

DRAINAGE AREA.--1,070 mi², approximately, (contributing area).

PERIOD OF RECORD.--February 1981 to current year. Records for June 1903 to February 1906, published in WSP 358, are unreliable and should not be used.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Two Rivers Reservoir (station 08390600) 21.7 mi upstream. Diversions and ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--10 years, 23.3 ft³/s, 16,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft³/s, July 18, 1991, gage height, 6.54 ft, from rating curve extended above 360 ft³/s; maximum gage height, 7.5 ft, May 3, 1981, from floodmarks; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 378 ft³/s, at 0800 hours July 18, gage height, 6.54 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	.00	e.73	.00	5.4	.00	7.0	.85	.00	.00	31	64
2	4.8	.00	3.6	.00	.58	.00	6.2	.15	.00	.00	31	62
3	4.0	2.9	9.1	.00	.00	.00	3.1	.00	.00	.00	78	57
4	5.6	1.6	9.6	.00	.00	.00	4.2	.00	.00	.00	73	42
5	7.7	4.7	6.2	.00	.00	.00	6.5	.52	.00	.00	121	41
6	8.3	10	5.4	.00	.00	.00	7.0	1.4	.00	.00	72	51
7	9.4	8.0	5.3	.00	.00	e18	5.5	.00	.31	.00	61	57
8	6.0	12	5.9	.00	.00	26	8.8	.00	.00	.00	68	51
9	6.2	14	5.6	.00	.00	1.8	6.3	.00	.00	.00	74	53
10	4.5	12	4.9	.00	.00	1.2	5.4	.00	.00	.00	45	48
11	5.6	18	7.5	.00	.00	1.5	5.4	.00	.00	.00	e30	46
12	7.0	15	5.5	.00	.00	.94	5.0	.00	.00	.00	e20	57
13	7.7	9.1	e.36	.00	.00	.38	4.8	.00	.00	100	e15	73
14	7.7	4.6	4.8	.00	.00	1.4	5.0	.00	.00	190	e10	77
15	6.5	3.7	6.6	.00	.00	2.9	5.5	.00	.00	208	103	60
16	8.3	1.9	12	.00	.00	4.6	4.8	.00	.00	193	220	55
17	8.4	.26	11	.00	.00	4.4	4.0	.00	.00	221	210	50
18	8.1	2.8	e.16	.00	.00	4.4	12	.00	.00	275	201	48
19	9.1	5.1	.00	.00	.00	2.7	21	.00	.00	240	193	54
20	7.2	4.2	.00	.00	.00	1.3	34	.00	2.6	264	180	63
21	7.2	3.3	.00	.00	.00	.05	38	.00	.00	142	180	66
22	8.7	4.5	.00	.00	.00	.00	18	1.4	.00	42	176	53
23	7.0	8.7	.00	.00	.00	.00	7.2	7.2	.00	40	147	46
24	6.4	8.4	.00	.00	.00	.00	6.7	.00	.00	83	123	42
25	6.0	8.1	.00	.00	.00	.00	6.1	.00	.00	165	133	38
26	3.1	8.1	.00	.00	.00	.00	5.0	.00	.00	162	122	30
27	1.8	3.3	.00	.00	.00	.00	4.5	.00	.00	162	108	27
28	.21	e2.4	.00	.00	.00	.14	3.9	.00	.00	133	98	27
29	.19	e1.7	.00	.00	---	10	3.3	.00	.00	157	83	18
30	.09	e.33	.00	.00	---	13	1.3	.00	.00	145	70	18
31	.00	---	.00	.00	---	-10	---	.00	---	163	65	---
TOTAL	179.29	178.69	104.25	0.00	5.98	104.71	255.5	11.52	2.91	3085.00	3141	1474
MEAN	5.78	5.96	3.36	.000	.21	3.38	8.52	.37	.097	99.5	101	49.1
MAX	9.4	18	12	.00	5.4	26	38	7.2	2.6	275	220	77
MIN	.00	.00	.00	.00	.00	.00	1.3	.00	.00	.00	10	18
AC-FT	356	354	207	.00	12	208	507	23	5.8	6120	6230	2920

CAL YR 1990 TOTAL 1965.29 MEAN 5.38 MAX 138 MIN .00 AC-FT 3900
WTR YR 1991 TOTAL 8542.85 MEAN 23.4 MAX 275 MIN .00 AC-FT 16940

e Estimated

RIO GRANDE BASIN

08395500 PECOS RIVER NEAR LAKE ARTHUR, NM

LOCATION.--Lat 32°59'18", long 104°19'20", in SW¼NE¼ sec.27, T.15 S., R.26 E., Chaves County, Hydrologic Unit 13060007, on left bank 400 ft upstream from bridge on Yuma Road, 2.5 mi east of Lake Arthur, 7 mi upstream from Cottonwood Creek, 11 mi northeast of Artesia, and at mile 522.0.

DRAINAGE AREA.--14,760 mi², approximately (contributing area).

PERIOD OF RECORD.--August 1938 to current year.

GAGE.--Water-stage recorder and rock control. Elevation of gage is 3,327.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Lake Summer (station 08384000) 180 mi upstream, since August 1937, and by Two Rivers Reservoir (station 08390600) 77 mi upstream, since July 1963. Diversions and ground-water withdrawals for irrigation of about 124,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 224 ft³/s, 162,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft³/s, Sept. 24, 1941, gage height, 21.90 ft, from rating curve extended above 16,100 ft³/s on basis of slope-area measurement at gage height 21.77 ft; no flow at times in 1947, 1953, 1954, 1962, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1937, reached a stage of 21.77 ft, discharge, 51,500 ft³/s on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,280 ft³/s, at 2200 hours July 17, gage height, 13.87 ft; minimum, 3.2 ft³/s, July 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	60	61	59	58	44	29	481	83	4.0	185	152
2	202	66	60	61	54	45	28	493	67	4.7	138	151
3	214	84	59	62	50	43	27	504	63	7.9	98	155
4	178	97	58	64	58	49	25	532	126	4.9	101	150
5	154	124	62	66	73	92	29	553	77	3.7	106	131
6	151	182	66	62	83	54	24	571	58	7.1	140	129
7	173	171	65	60	68	47	16	597	45	6.2	180	160
8	165	145	65	61	67	49	19	623	42	7.3	155	313
9	137	126	63	58	66	43	21	631	34	7.2	135	500
10	130	115	64	58	68	50	24	753	32	4.7	215	662
11	131	109	63	57	71	47	22	876	23	4.7	725	1620
12	126	102	65	58	83	47	28	847	68	5.0	604	2490
13	130	100	65	56	89	48	44	729	58	6.9	517	1600
14	142	99	65	56	96	44	34	695	45	526	1320	1310
15	139	91	63	55	85	41	31	719	40	2200	2530	1180
16	125	83	64	55	67	38	21	732	24	3620	1390	1610
17	113	78	64	52	60	36	17	737	22	4850	567	1940
18	106	76	69	53	56	37	21	732	23	3400	510	1820
19	101	73	71	50	56	33	21	707	42	772	441	2000
20	99	70	65	50	60	35	22	694	16	569	393	1990
21	99	71	61	51	60	35	20	693	10	475	321	1650
22	92	71	57	50	55	40	28	776	7.3	385	279	793
23	72	70	55	52	54	40	31	915	6.1	281	249	694
24	77	69	64	54	53	36	31	985	6.1	275	233	704
25	78	71	65	52	53	26	24	826	5.7	283	215	691
26	71	72	57	53	51	22	23	671	5.3	1130	211	624
27	66	71	51	54	47	19	22	440	5.0	1360	204	465
28	58	66	53	53	46	19	25	258	5.1	599	179	403
29	56	64	55	62	---	21	165	191	4.4	449	163	405
30	52	61	57	63	---	32	445	152	3.8	396	164	363
31	53	---	57	60	---	31	---	109	---	252	157	---
TOTAL	3751	2737	1909	1757	1787	1243	1317	19222	1046.8	21896.3	12825	26855
MEAN	121	91.2	61.6	56.7	63.8	40.1	43.9	620	34.9	706	414	895
MAX	261	182	71	66	96	92	445	985	126	4850	2530	2490
MIN	52	60	51	50	46	19	16	109	3.8	3.7	98	129
AC-FT	7440	5430	3790	3490	3540	2470	2610	38130	2080	43430	25440	53270

CAL YR 1990 TOTAL 44000.0 MEAN 121 MAX 937 MIN 2.8 AC-FT 87270
WTR YR 1991 TOTAL 96346.1 MEAN 264 MAX 4850 MIN 3.7 AC-FT 191100

DAY	OCT	NOV	DEC	JAN	FEB	MEAN VALUES		APR	MAY	JUN	JUL	AUG	SEP
1	272	52	64	64	64	51		33	475	89	e4.1	291	157
2	161	56	63	66	63	48		30	492	76	e5.8	231	154
3	177	68	60	67	59	47		29	492	71	10	155	151
4	155	77	60	68	56	47		29	515	94	21	137	157
5	132	94	61	71	63	67		26	551	106	9.1	141	140
6	118	129	65	73	81	81		29	589	70	6.0	156	129
7	130	150	67	69	81	52		25	605	61	8.5	184	150
8	139	135	67	68	73	49		18	630	53	9.5	213	248
9	118	117	67	68	71	51		20	624	62	11	185	358
10	102	104	66	66	72	47		23	647	61	13	281	462
11	102	97	66	65	73	53		25	844	51	6.5	703	1020
12	101	91	67	63	81	49		24	850	54	7.4	1050	1390
13	98	86	67	63	91	49		31	810	82	8.4	864	1410
14	106	89	67	62	98	49		44	720	60	259	1370	1110
15	112	86	68	61	96	47		34	726	60	1370	1800	1020
16	108	80	66	61	83	43		32	726	e46	1720	1810	1130
17	95	75	68	60	70	40		24	740	e29	2350	975	1310
18	89	73	68	62	63	40		21	742	e27	3900	716	1340
19	86	70	71	60	61	38		23	742	e34	2110	570	1380
20	85	69	72	58	59	36		23	742	59	e1060	504	1420
21	82	68	67	57	66	37		24	762	28	e758	447	1360
22	84	68	63	58	63	37		22	800	e10	e504	381	969
23	74	68	59	58	59	40		29	866	e7.8	e335	338	702
24	66	66	57	60	58	40		31	989	e5.8	e311	319	588
25	70	67	53	60	57	35		31	954	e5.2	289	285	563
26	68	69	68	59	56	29		24	e740	e4.5	770	263	538
27	63	69	68	59	54	26		24	e500	e4.0	1270	249	481
28	60	68	60	61	52	25		23	e270	e3.8	1160	211	438
29	53	66	61	61	---	24		38	e190	e3.6	743	181	425
30	51	66	62	69	---	26		420	e150	e3.5	520	166	392
31	48	---	63	67	---	34		---	e118	---	390	163	---
TOTAL	3205	2473	2001	1964	1923	1337		1209	19601	1321.2	19939.3	15339	21092
MEAN	103	82.4	64.5	63.4	68.7	43.1		40.3	632	44.0	643	495	703
MAX	272	150	72	73	98	81		420	989	106	3900	1810	1420
MIN	48	52	53	57	52	24		18	118	3.5	4.1	137	129
AC-FT	6360	4910	3970	3900	3810	2650		2400	38880	2620	39550	30420	41840
CAL YR 1990	TOTAL	42111.7	MEAN	115	MAX	876	MIN	2.6	AC-FT	83530			
WTR YR 1991	TOTAL	91404.5	MEAN	250	MAX	3900	MIN	3.5	AC-FT	181300			
e Estimated													

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1937 to current year.

WATER TEMPERATURE: April 1949 to current year.

SUSPENDED-SEDIMENT DISCHARGE: January 1949 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 28,800 microsiemens, June 24, 1977; minimum daily, 111 microsiemens, Aug. 31, 1982.

WATER TEMPERATURE: Maximum daily, 36.0°C, July 27, 1966, July 25, 1969; minimum daily, 0.0°C on many days during winter months of most years.

SEDIMENT CONCENTRATION: Maximum daily mean, 21,300 mg/L, Aug. 1, 1962; minimum daily mean, 0 mg/L on several days in 1982, 1984, and 1986.

SEDIMENT LOAD: Maximum daily, 183,000 tons, Sept. 26, 1955; minimum daily, 0 ton on many days during 1953-54, 1957, 1964, 1982, 1984.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 9,930 microsiemens, Dec. 28; minimum daily, 400 microsiemens, April 15.

WATER TEMPERATURE: Maximum daily, 34.0°C, June 26, July 26; minimum daily, 0.0°C, Dec. 21.

SEDIMENT CONCENTRATION: Maximum daily mean, 7,470 mg/L, Aug. 12; minimum daily mean, 68 mg/L, Mar. 11.

SEDIMENT LOAD: Maximum daily, 21,200 tons, Aug. 12; minimum daily, 4.5 tons, April 8.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 01...	1200	53	7900	8.6	23.0	15.5	13.2	61	2100	540
MAR 01...	1015	52	10500	8.3	14.5	8.0	11.3	140	2200	470
MAY 03...	1600	507	3750	7.9	30.0	19.0	12.0	62	1800	560
SEP 05...	1345	137	7100	8.2	25.0	24.0	8.8	54	2100	510

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV 01...	190	1200	11	8.5	128	19	137	1800	1800
MAR 01...	240	1600	15	12	176	0	144	1900	2300
MAY 03...	100	220	2	4.9	115	0	94	1900	350
SEP 05...	190	930	9	13	171	0	140	1700	1600

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 01...	0.70	9.7	5630	0.180	0.180	0.020	0.020	0.200	0.200	0.090
MAR 01...	1.5	7.1	6620	--	--	<0.010	<0.010	<0.050	<0.050	0.070
MAY 03...	0.70	10	3200	--	--	--	--	--	--	--
SEP 05...	0.70	15	5040	0.800	--	0.020	<0.010	0.820	0.091	0.090

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 01...	0.060	0.51	0.80	0.060	<0.010	5.3	97	31	500	<10
MAR 01...	0.040	0.53	--	0.030	<0.010	3.5	K2	410	570	90
MAY 03...	--	--	--	--	--	14	>600	K83	180	10
SEP 05...	0.080	1.0	1.9	0.100	0.020	6.4	120	32	490	40

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
NOV 01...	1200	<1	2	<1	<1.0	2	4	2	1	<1
SEP 05...	1345	--	2	<1	<1.0	11	<1	4	3	<1

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)
NOV 01...	<1	--	<0.1	1	1	40	10	<2.0	1.0	41
SEP 05...	<1	<0.10	0.3	--	1	<10	20	--	--	--

DATE	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
NOV 01...	<1	<1	1	<10	1	1100	<10	180	<0.01	4

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 02...	0821	162	3410	20.0	452	198	95
NOV 01...	1200	53	7900	15.5	63	9.0	69
MAR 01...	1015	52	10500	8.0	2370	335	61
MAY 03...	1600	507	3750	19.0	2560	3500	94
SEP 05...	1345	137	7100	24.0	252	93	70

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3100	7760	8460	8960	8370	2000	1200	3780	2880	3700	4040	6150
2	---	7730	8590	9230	8800	2200	500	3490	3170	1440	4750	6300
3	2340	7600	8780	9080	8890	2200	1000	3290	3840	4430	5030	6600
4	2690	6970	8840	8680	9240	2300	500	3300	3910	5040	6030	5850
5	3080	6460	8820	8450	9470	660	800	3250	3770	3500	6800	5900
6	3320	6170	8870	8260	9260	1460	800	3140	3540	1500	6500	6030
7	3420	5960	8450	8100	8600	8000	500	3090	3800	3500	6350	6200
8	3240	5350	8160	8290	8350	5700	1500	3070	4430	3800	5700	6400
9	3240	5420	8120	8520	8330	9850	3000	3050	4420	6000	4750	6200
10	3650	5730	8180	8640	8300	600	2500	2970	4610	4500	4570	3670
11	3760	6000	8390	8550	8430	500	1800	2860	5410	3100	5150	3400
12	4680	5980	8240	8810	8170	9380	1800	2780	5410	3300	2720	2030
13	4800	6380	8350	8830	7750	9210	1400	2050	5560	2600	2170	1080
14	4620	6490	8350	8750	7290	9180	600	1930	4710	3300	1760	2010
15	4560	6500	8270	8980	7230	9470	400	1820	4510	2060	1380	1800
16	4700	6740	8230	9010	7240	9610	8820	1550	5070	1370	1510	1710
17	4850	7050	8470	8900	7580	1200	9210	1490	4570	1830	1680	1450
18	5010	7350	8570	8630	8470	1600	1100	1540	5060	1850	2280	1500
19	5150	7670	8460	8850	8980	1400	2000	1390	7000	2440	2350	1520
20	5360	7880	8150	9090	9290	1300	2400	1350	7180	2700	3340	1730
21	6120	7840	8380	9210	9260	1300	2400	1340	6330	3040	3600	1600
22	6180	7870	9050	9250	9600	1200	2400	1440	6570	3400	4050	1750
23	5940	8010	9390	9320	9540	1200	2300	1360	7140	4100	4400	2120
24	6000	8240	8730	9450	1200	900	1400	1390	8410	5100	4530	2400
25	5850	8160	8960	9340	1300	700	700	1700	9330	5300	4500	2480
26	6110	---	8960	9210	1400	700	700	1480	1200	4850	5150	2480
27	6150	---	9360	9530	1400	1800	1200	1640	3300	2720	5100	2550
28	6510	---	9930	9540	1700	2500	1500	1920	3400	1820	5100	2800
29	6780	---	9200	9470	---	3000	900	2100	1420	2420	5300	2850
30	7060	8370	9070	9260	---	2800	4730	2200	1440	2820	5800	3050
31	7610	---	8870	8910	---	2600	---	2380	---	3360	5970	---
MEAN	---	---	8670	8940	7270	3440	2000	2260	4710	3250	4270	3390
MAX	---	---	9930	9540	9600	9850	9210	3780	9330	6000	6800	6600
MIN	---	---	8120	8100	1200	500	400	1340	1200	1370	1380	1080

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	13.5	6.0	5.0	5.0	17.0	8.5	18.5	26.0	24.0	29.0	24.5
2	20.0	15.5	10.0	9.0	10.5	16.0	21.0	17.0	20.0	34.0	29.0	28.0
3	19.0	18.5	9.0	7.0	13.5	10.0	12.0	16.0	21.5	31.0	26.5	27.0
4	19.0	13.0	8.0	6.0	12.0	11.0	20.0	19.0	21.0	33.5	26.0	25.5
5	25.0	14.0	5.0	5.0	13.0	19.0	13.0	18.0	22.5	29.0	29.5	27.0
6	20.0	11.0	8.0	7.0	7.5	20.0	25.0	20.0	22.5	34.0	30.0	27.0
7	24.0	13.5	7.0	7.0	13.0	18.0	23.0	18.0	29.5	24.0	26.5	25.0
8	22.0	8.0	9.0	7.0	9.5	9.5	25.0	21.0	27.0	25.0	27.5	28.0
9	23.0	12.0	5.0	8.0	12.0	9.0	20.0	20.0	25.0	28.0	27.0	24.0
10	14.0	10.0	9.0	7.0	8.0	12.5	25.0	24.0	25.0	33.0	25.0	26.0
11	20.0	10.0	5.0	6.0	11.5	12.5	26.0	21.0	25.5	25.0	27.0	24.0
12	20.0	15.0	9.0	5.0	12.0	17.0	12.5	24.5	21.0	25.0	26.0	23.5
13	20.0	10.0	5.0	7.5	13.0	9.5	15.0	21.5	24.0	23.5	25.0	22.0
14	17.0	15.0	11.0	7.0	15.0	15.5	13.0	23.5	22.5	24.0	26.0	25.0
15	19.0	11.0	9.0	5.0	10.0	16.5	13.5	20.0	21.5	22.0	24.0	24.0
16	19.0	12.0	9.0	7.0	14.5	11.0	14.0	21.5	29.5	23.0	25.0	23.0
17	19.5	10.5	10.0	8.0	11.0	18.0	8.0	24.0	22.0	24.0	25.0	23.5
18	15.0	11.0	6.0	6.5	12.0	9.0	18.0	22.0	24.0	25.0	27.0	21.0
19	18.5	13.5	9.0	8.0	13.0	13.0	15.0	24.0	30.0	28.0	27.0	18.0
20	13.0	16.0	6.0	7.0	15.0	11.0	24.0	24.0	25.0	27.0	29.0	16.5
21	18.0	13.0	.0	5.0	9.0	9.5	16.0	24.0	28.0	28.0	28.5	15.0
22	13.0	13.0	3.0	3.0	10.0	10.0	21.0	22.5	32.0	28.0	29.5	16.0
23	19.0	12.0	1.0	5.0	13.0	9.0	25.0	24.0	24.0	29.0	27.0	17.0
24	14.0	14.0	1.0	10.0	10.0	12.0	26.0	24.0	25.0	26.0	28.0	23.0
25	20.0	9.0	5.0	10.0	9.5	13.0	24.0	22.0	32.0	25.0	26.0	17.0
26	14.0	---	7.0	10.0	9.0	13.0	24.0	22.0	34.0	24.0	28.5	20.0
27	19.5	---	8.0	10.0	8.0	18.0	25.0	22.0	32.0	24.0	28.5	22.0
28	15.0	7.0	7.0	6.0	10.0	10.0	14.0	27.0	33.0	26.0	28.0	22.0
29	20.0	5.0	10.5	7.0	---	11.0	25.0	27.0	28.0	28.0	25.0	20.0
30	13.5	11.0	5.0	7.0	---	10.0	19.0	24.0	30.5	29.0	25.0	20.0
31	13.0	---	9.5	5.0	---	6.0	---	22.0	---	29.5	29.0	---
MEAN	18.2	---	6.8	6.9	11.1	12.8	19.0	21.9	26.1	27.0	27.1	22.5
MAX	25.0	---	11.0	10.0	15.0	20.0	26.0	27.0	34.0	34.0	30.0	28.0
MIN	13.0	---	.0	3.0	5.0	6.0	8.0	16.0	20.0	22.0	24.0	15.0

RIO GRANDE BASIN

08398500 RIO PENASCO AT DAYTON, NM

LOCATION.--Lat 32°44'36", long 104°24'49", in NE¼SE¼SE¼ sec.18, T.18 S., R.26 E., Eddy County, Hydrologic Unit 13060010, on left bank 1.2 mi upstream from U.S. Highway 285, 1.9 mi northwest of old Dayton railway station, 5.6 mi upstream from mouth, and 7.0 mi south of Artesia. Mouth at Pecos River mile 496.4.

DRAINAGE AREA.--1,060 mi², approximately.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1953, published as "near Dayton."

REVISED RECORDS.--WSP 1242: 1951(M). WSP 1512: 1956. WSP 1923: 1955.

GAGE.--Water-stage recorder and rock and concrete control. Elevation of gage is 3,385.19 ft above National Geodetic Vertical Datum of 1929. Prior to May 9, 1968, at site 2.4 mi downstream, at datum 44.30 ft lower. May 9, 1968 to June 12, 1975, at present site at datum 1.98 ft higher.

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 3,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years, 5.64 ft³/s, 4,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft³/s, Aug. 23, 1966, gage height, 16.4 ft, from floodmarks, present site and datum, from rating curve extended above 7,800 ft³/s on basis of slope-area measurements at gage heights 6.82 ft and 7.90 ft, at previous site and datum; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about Sept. 22, 1941, reached a stage of about 9 ft, from floodmark, previous site and datum, discharge not determined. Peak discharge at discontinued station "near Dunken" (station 08397600), about 60 mi upstream, was 70,000 ft³/s, determined in 1956, from rating curve extended above a slope-area measurement of 36,000 ft³/s, for peak of Oct. 6 or 7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 10	2330	*284	*3.08				
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.6
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.9
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.6	.17
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	21	.07
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	32
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	3.2
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.16
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.74	53.86
MEAN	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.93	1.80
MAX	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	21	32
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	57	107

CAL YR 1990 TOTAL 0.46 MEAN .001 MAX .11 MIN .00 AC-FT .9
WTR YR 1991 TOTAL 82.64 MEAN .23 MAX 32 MIN .00 AC-FT 164

RIO GRANDE BASIN

08399500 PECOS RIVER (KAISER CHANNEL) NEAR LAKEWOOD, NM

LOCATION.--Lat 32°41'22", long 104°17'53", in NW¼SE¼ sec.5, T.19 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on left bank 3.0 mi upstream from high-water line of former Lake McMillan, 6.0 mi northeast of Lakewood, 12 mi southeast of Artesia, and at mile 492.1.

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1954, published as Kaiser Lake-McMillan Channel near Lakewood.

GAGE.--Water-stage recorder. Elevation of gage is 3,268.53 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation bench mark). Prior to Mar. 23, 1955, at site 3.0 mi downstream at datum 7.83 ft lower. Mar. 23, 1955 to Sept. 30, 1963, at present site at datum 2.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Considerable flow regulation by Lake Sumner (station 08384000) since August 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 170,000 acres, 1959 determination, upstream from station. Above about 1,500 ft³/s, flow will begin bypassing station and depending on the magnitude and duration of flow, may reach Lake McMillan (station 08400500). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 158 ft³/s, 114,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,920 ft³/s, July 12, 1960; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,630 ft³/s, July 18; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	41	54	53	61	46	30	450	97	.00	251	e157
2	172	48	53	55	59	45	28	482	79	.00	214	e150
3	190	54	52	57	56	43	24	481	69	.60	170	e150
4	173	67	52	58	50	43	25	508	70	17	137	e152
5	141	77	52	59	54	46	24	532	112	12	124	e141
6	123	108	54	62	68	81	24	568	72	1.4	120	133
7	128	146	57	61	77	57	23	578	59	.00	150	143
8	142	136	58	59	66	45	18	606	48	.28	189	212
9	123	117	58	60	64	46	13	608	47	1.5	133	312
10	109	102	57	59	64	43	17	604	65	3.5	185	412
11	106	94	57	58	66	46	20	799	40	1.9	434	993
12	105	88	57	56	69	44	21	841	29	.01	971	1490
13	101	82	58	56	78	43	21	824	68	.95	571	1550
14	105	82	58	55	86	44	36	683	65	109	1130	1290
15	112	81	58	55	93	42	36	698	53	1150	1460	1130
16	109	75	58	55	84	38	32	686	51	1570	1520	1200
17	97	69	58	55	69	35	25	716	33	1600	980	1460
18	87	67	59	58	61	34	19	708	27	1630	572	1510
19	84	65	61	55	58	35	18	709	28	1620	450	1540
20	80	63	63	53	56	31	20	708	47	976	399	1570
21	77	61	60	51	59	32	20	713	30	626	368	1580
22	78	60	55	52	62	32	20	758	15	507	321	1190
23	74	61	51	52	57	34	22	817	8.9	388	293	739
24	61	60	41	52	55	36	27	966	5.2	312	276	614
25	63	60	46	55	53	36	29	930	e2.5	296	255	571
26	64	60	53	54	53	26	24	790	e2.0	720	240	532
27	59	61	63	54	52	20	21	587	e1.2	1370	237	463
28	54	60	52	55	47	17	20	298	.61	1410	211	384
29	49	57	50	56	---	18	20	197	.34	810	e195	353
30	46	56	51	60	---	17	333	164	.10	537	e170	335
31	42	---	50	64	---	25	---	128	---	370	e164	---
TOTAL	3186	2258	1706	1744	1777	1180	1010	19137	1224.85	16040.14	12890	22456
MEAN	103	75.3	55.0	56.3	63.5	38.1	33.7	617	40.8	517	416	749
MAX	232	146	63	64	93	81	333	966	112	1630	1520	1580
MIN	42	41	41	51	47	17	13	128	.10	.00	120	133
AC-FT	6320	4480	3380	3460	3520	2340	2000	37960	2430	31820	25570	44540

CAL YR 1990 TOTAL 40593.13 MEAN 111 MAX 841 MIN .00 AC-FT 80520
WTR YR 1991 TOTAL 84608.99 MEAN 232 MAX 1630 MIN .00 AC-FT 167800

e Estimated

LOCATION.--Lat 32°40'20", long 104°22'07", in SW¼NW¼SE¼ sec.10, T.19 S., R.26 E., Eddy County, Hydrologic Unit 13060011, in left side of channel 360 ft downstream from ford on Lakewood-Dayton road, 1.9 mi downstream from U.S. Highway 285, 2.8 mi north of Lakewood, 3.8 mi upstream from mouth, and 11.5 mi south of Artesia. Mouth at Pecos River mile 490.6.

REVISID RECORDS.--WDR NM-68-1: 1967.

GAGE.--Water-stage recorder. Elevation of gage is 3,299.14 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1951 to June 19, 1962, at site 1.8 mi upstream at datum 30.61 ft higher. June 19, 1962 to Oct. 12, 1966, at site 410 ft upstream at datum 6.08 ft higher.

AVERAGE DISCHARGE.--40 years. 4.00 ft³/s. 2.900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,300 ft³/s, Aug. 23, 1966, gage height, 19.9 ft, from floodmarks, present datum, from rating curve extended above 5,000 ft³/s on basis of slope-area measurement of peak flow; no flow most of time. The flood of Aug. 23, 1966 (information from local resident), is believed to be the greatest since at least 1920.

EXTREMES FOR CURRENT YEAR.--No flow during the water year.

[illegible]

CAL YR 1990	TOTAL	0.00	MEAN	.000	MAX	.00	MIN	.00	AC-FT	.00
WTR YR 1991	TOTAL	0.00	MEAN	.000	MAX	.00	MIN	.00	AC-FT	.00

RIO GRANDE BASIN

08401200 SOUTH SEVEN RIVERS NEAR LAKEWOOD, NM

LOCATION.--Lat 32°35'19", long 104°25'17", in SE¼SE¼NW¼ sec.7, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on downstream side of center pier of bridge on U.S. Highway 285, 0.4 mi south of Seven Rivers, 2.6 mi upstream from mouth, and 4.0 mi southwest of Lakewood. Mouth at Pecos River mile 480.9.

DRAINAGE AREA.--220 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 8, 1965, at site 400 ft upstream at datum 0.52 ft higher.

REMARKS.--Records good. No surface diversions upstream from station, ground-water withdrawals for 240 acres, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 4.38 ft³/s, 3,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft³/s, May 30, 1965, gage height, 20.0 ft, from floodmarks, present site and datum, from rating curve extended above 5,700 ft³/s on basis of slope-area measurements at gage heights 18.15 ft and 20.0 ft; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1941, about 30,000 ft³/s, gage height, 22.8 ft, from old debris on left bank, former site and datum, from rating curve extended above 5,700 ft³/s on basis of slope-area measurement at gage height 21.8 ft. Probable date of flood, Oct. 7, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,770 ft³/s, at 1600 hours Aug. 17, gage height 11.73 ft; no flow most of time

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.35
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	27	2.5
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.0
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	265	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.9	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.39	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	310.90	11.85
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.014	10.0	.39
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.39	265	9.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.9	617	24

CAL YR 1990 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1991 TOTAL 323.19 MEAN .89 MAX 265 MIN .00 AC-FT 641

RIO GRANDE BASIN

08401450 BRANTLEY LAKE NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'48", long 104°22'43", in NE¼SE¼NE¼ sec.28, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, in control tower at Brantley Dam, 2.4 mi downstream from South Seven Rivers, 4.2 mi southeast of Seven Rivers, 6.0 mi south of Lakewood, 11.5 mi northwest of Carlsbad, and at mile 478.6.

DRAINAGE AREA.--17,650 mi², approximately (contributing area).

PERIOD OF RECORD.--August 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,202.5 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Lake is formed by a concrete and earthfill dam on Pecos River. Storage began August 31, 1988. Capacity, 966,360 acre-ft, from capacity table dated Aug. 24, 1981, between elevations 3,202.5 ft and 3,303.5 ft (stage at maximum flood). Dead storage 2,010 acre-ft. Lake was created primarily for irrigation storage and flood control.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 49,270 acre-ft, Sept. 22-24, 1991, elevation, 3,257.60 ft; minimum contents, 2,040 acre-ft, May 26, 1990, elevation, 3,224.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 49,270 acre-ft, Sept. 22-24, elevation, 3,257.60 ft; minimum, 5,940 acre-ft, April 28, 29, elevation, 3,234.00 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 07:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8420	7710	9880	11050	12580	13870	13340	6430	21360	11280	30060	35610
2	8790	7710	9880	11170	12700	13870	13210	6970	21170	10940	30060	35340
3	8980	7800	9880	11280	12700	13870	12700	7380	20990	10620	29820	35070
4	9180	7880	9980	11280	12700	14000	12330	7800	20630	10300	29820	34810
5	9370	7880	9980	11280	12700	14000	12090	8240	20450	10190	29590	34810
6	9470	7970	10090	11390	12820	14000	11970	8700	20450	10090	29590	34810
7	9570	8150	10090	11390	12820	14000	11850	9470	20450	10090	29130	35070
8	9670	8330	10090	11500	12950	14000	11620	10090	20070	9980	28680	35070
9	9880	8510	10090	11500	12950	14140	11390	10720	19570	9880	28460	35610
10	9880	8610	10190	11620	13080	14000	10830	11170	19390	9570	28240	36160
11	9980	8700	10300	11620	13080	14140	10510	11620	19220	9180	28460	37260
12	9880	8790	10300	11730	13210	14140	10190	12330	19220	8790	29130	39270
13	9780	8890	10300	11730	13210	14140	9880	13080	19050	8610	30290	40750
14	9570	8890	10400	11730	13340	14140	9470	13600	19050	8510	30770	42280
15	9470	8990	10400	11850	13340	14140	9280	14000	18880	9080	32480	43520
16	9570	9080	10510	11850	13470	14140	8840	14410	18540	10940	34540	44140
17	9370	9080	10510	11970	13600	14140	8510	14980	18210	13080	36710	44770
18	9080	9280	10620	12090	13600	14140	8240	15260	17720	15260	37830	45410
19	8790	9280	10620	12090	13600	14140	7880	15700	17240	17400	38400	46680
20	8610	9370	10620	12090	13600	14140	7540	16310	16610	19390	38690	47320
21	8510	9370	10720	12090	13730	14140	7370	16920	16000	20450	38980	48290
22	8330	9470	10720	12210	13730	14140	7210	17720	15560	20990	38980	49270
23	8330	9470	10870	12210	13730	14000	6970	18380	15120	21730	38690	49270
24	8240	9570	10870	12330	13730	14000	6820	19220	14550	22100	38400	49270
25	8060	9570	10870	12330	13730	14000	6660	20270	14140	22400	38400	48940
26	7880	9670	10870	12330	13870	14140	6360	21360	13600	22860	38110	48290
27	7710	9670	10870	12450	13870	14140	6080	22100	13080	24440	37830	47970
28	7630	9670	10940	12450	13870	14000	5940	22290	12580	26510	37260	47320
29	7540	9780	11050	12450	---	13870	5940	22290	11970	28240	36980	46360
30	7540	9780	11050	12580	---	13730	6010	21910	11620	29130	36430	45720
31	7630	---	11050	12580	---	13470	---	21540	---	29590	36160	---
MAX	9980	9780	11050	12580	13870	14140	13340	22290	21360	29590	38980	49270
MIN	7540	7710	9880	11050	12580	13470	5940	6430	11620	8510	28240	34810
(†)	-610	+2150	+1270	+1530	+1290	-400	-7460	+15530	-9920	+17970	+6570	+9560

CAL YR 1990 MAX 14270 MIN 2040 (†) +3590
WTR YR 1991 MAX 49270 MIN 5940 (†) +37480

(†) CHANGE IN CONTENTS, IN ACRE-FEET

RIO GRANDE BASIN

08401450 BRANTLEY LAKE NEAR CARLSBAD. NM -- Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 07:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3237.10	3236.30	3238.60	3239.70	3241.00	3242.00	3241.60	3234.70	3246.70	3239.90	3250.90	3253.10
2	3237.50	3236.30	3238.60	3239.80	3241.10	3242.00	3241.50	3235.40	3246.60	3239.60	3250.90	3253.00
3	3237.70	3236.40	3238.60	3239.90	3241.10	3242.00	3241.10	3235.90	3246.50	3239.30	3250.80	3252.90
4	3237.90	3236.50	3238.70	3239.90	3241.10	3242.10	3240.80	3236.40	3246.30	3239.00	3250.80	3252.80
5	3238.10	3236.50	3238.70	3239.90	3241.10	3242.10	3240.60	3236.90	3246.20	3238.90	3250.70	3252.80
6	3238.20	3236.60	3238.80	3240.00	3241.20	3242.10	3240.50	3237.40	3246.20	3238.80	3250.70	3252.80
7	3238.30	3236.80	3238.80	3240.00	3241.20	3242.10	3240.40	3238.20	3246.20	3238.80	3250.50	3252.90
8	3238.40	3237.00	3238.80	3240.10	3241.30	3242.10	3240.20	3238.80	3246.00	3238.70	3250.30	3252.90
9	3238.60	3237.20	3238.80	3240.10	3241.30	3242.20	3240.00	3239.40	3245.70	3238.60	3250.20	3253.10
10	3238.60	3237.30	3238.90	3240.20	3241.40	3242.10	3239.50	3239.80	3245.60	3238.30	3250.10	3253.30
11	3238.70	3237.40	3239.00	3240.20	3241.40	3242.20	3239.20	3240.20	3245.50	3237.90	3250.20	3253.70
12	3238.60	3237.50	3239.00	3240.30	3241.50	3242.20	3238.90	3240.80	3245.50	3237.50	3250.50	3254.40
13	3238.50	3237.60	3239.00	3240.30	3241.50	3242.20	3238.60	3241.40	3245.40	3237.30	3251.00	3254.90
14	3238.30	3237.60	3239.10	3240.30	3241.60	3242.20	3238.20	3241.80	3245.40	3237.20	3251.20	3255.40
15	3238.20	3237.70	3239.10	3240.40	3241.60	3242.20	3238.00	3242.10	3245.30	3237.80	3251.90	3255.80
16	3238.30	3237.80	3239.20	3240.40	3241.70	3242.20	3237.60	3242.40	3245.10	3239.60	3252.70	3256.00
17	3238.10	3237.80	3239.20	3240.50	3241.80	3242.20	3237.20	3242.80	3244.90	3241.40	3253.50	3256.20
18	3237.80	3238.00	3239.30	3240.60	3241.80	3242.20	3236.90	3243.00	3244.60	3243.00	3253.90	3256.40
19	3237.50	3238.00	3239.30	3240.60	3241.80	3242.20	3236.50	3243.30	3244.30	3244.40	3254.10	3256.80
20	3237.30	3238.10	3239.30	3240.60	3241.80	3242.20	3236.10	3243.70	3243.90	3245.60	3254.20	3257.00
21	3237.20	3238.10	3239.40	3240.60	3241.90	3242.20	3235.90	3244.10	3243.50	3246.20	3254.30	3257.30
22	3237.00	3238.20	3239.40	3240.70	3241.90	3242.20	3235.70	3244.60	3243.20	3246.50	3254.30	3257.60
23	3237.00	3238.20	3239.50	3240.70	3241.90	3242.10	3235.40	3245.00	3242.90	3246.90	3254.20	3257.60
24	3236.90	3238.30	3239.50	3240.80	3241.90	3242.10	3235.20	3245.50	3242.50	3247.10	3254.10	3257.60
25	3236.70	3238.30	3239.50	3240.80	3241.90	3242.10	3235.00	3246.10	3242.20	3247.30	3254.10	3257.50
26	3236.50	3238.40	3239.50	3240.80	3242.00	3242.20	3234.60	3246.70	3241.80	3247.50	3254.00	3257.30
27	3236.30	3238.40	3239.50	3240.90	3242.00	3242.20	3234.20	3247.10	3241.40	3248.30	3253.90	3257.20
28	3236.20	3238.40	3239.60	3240.90	3242.00	3242.10	3234.00	3247.20	3241.00	3249.30	3253.70	3257.00
29	3236.10	3238.50	3239.70	3240.90	---	3242.00	3234.00	3247.20	3240.50	3250.10	3253.60	3256.70
30	3236.10	3238.50	3239.70	3241.00	---	3241.90	3234.10	3247.00	3240.20	3250.50	3253.40	3256.50
31	3236.20	---	3239.70	3241.00	---	3241.70	---	3246.80	---	3250.70	3253.30	---
MAX	3238.70	3238.50	3239.70	3241.00	3242.00	3242.20	3241.60	3247.20	3246.70	3250.70	3254.30	3257.60
MIN	3236.10	3236.30	3238.60	3239.70	3241.00	3241.70	3234.00	3234.70	3240.20	3237.20	3250.10	3252.80
CAL YR 1990	MAX 3242.30	MIN 3224.60										
WTR YR 1991	MAX 3257.60	MIN 3234.00										

RIO GRANDE BASIN

08401500 PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'38", long 104°22'00", in NE¼NW¼SE¼ sec.27, T.20 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on left bank, 0.8 mi downstream from Brantley Dam, 3.2 mi downstream from South Seven Rivers, 4.7 mi southeast of Seven Rivers, 6.4 mi south of Lakewood, 11.0 mi northwest of Carlsbad, and at mile 477.8.

DRAINAGE AREA.--17,650 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1947 to September 1950, October 1971 to current year. Prior to October 1989 published as "below Major Johnson Springs." Prior to October 1988, operated as a low-flow station only. Records prior to October 1971 not equivalent due to spring inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 3,191.15 ft above National Geodetic Vertical Datum of 1929 (U.S. Bureau of Reclamation reference point). Prior to October 1971, at site 1.3 mi upstream at different datum. October 1971 to June 4, 1985, at site 0.8 mi upstream at datum 7.29 ft higher. Prior to October 1988, at site 0.2 mi downstream at same datum.

REMARKS.--Water-discharge records good. Flow completely regulated by Brantley Lake (station 08401450) 0.8 mi upstream since August 1988. Diversions and ground-water withdrawals for irrigation of about 173,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year. U.S. Bureau of Reclamation satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,160 ft³/s, Sept. 15, 1949, July 24, 1950, from rating curve extended above 780 ft³/s; maximum gage height, 5.38 ft, Sept. 15, 1949, site and datum then in use; minimum discharge, 0.29 ft³/s, Nov. 25, 26, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 913 ft³/s, Sept. 17; minimum daily, 16 ft³/s, Nov. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	22	22	23	21	20	144	97	149	252	121	320
2	25	21	21	23	22	19	232	129	135	288	257	302
3	24	21	22	23	22	21	308	144	140	278	188	302
4	24	21	22	23	21	21	243	145	143	186	123	256
5	24	21	22	23	21	20	177	111	175	108	124	102
6	24	21	22	23	21	21	146	50	139	61	262	22
7	24	21	23	23	20	22	146	19	176	42	379	21
8	24	22	23	23	20	22	220	28	234	68	397	22
9	23	22	23	23	20	20	293	96	255	135	397	22
10	23	22	23	23	20	21	309	169	199	270	308	24
11	91	22	23	23	20	20	307	189	109	309	212	23
12	158	22	23	23	20	20	289	189	85	266	223	278
13	190	23	23	22	20	21	262	223	88	173	278	459
14	191	16	23	23	21	21	261	241	130	19	300	464
15	84	19	23	23	21	21	295	274	186	18	250	466
16	144	19	23	23	21	20	311	322	233	17	203	670
17	280	20	22	23	19	21	309	308	309	17	200	913
18	263	20	22	19	20	21	306	290	340	18	196	879
19	246	20	22	21	21	21	277	191	377	18	196	780
20	192	19	23	22	21	20	224	160	407	18	188	785
21	158	20	23	22	21	20	202	180	405	18	258	789
22	107	20	23	26	21	20	201	179	376	19	364	791
23	127	20	23	23	21	21	201	216	358	19	333	791
24	175	20	23	22	21	21	200	161	325	19	296	790
25	187	20	23	23	21	21	222	61	304	23	296	789
26	186	17	23	22	21	19	255	62	361	20	332	789
27	150	20	23	23	21	20	238	123	396	20	415	787
28	129	22	23	22	21	39	74	207	367	20	420	785
29	85	22	22	22	---	85	47	267	325	20	373	783
30	22	22	23	23	---	120	78	234	273	20	355	782
31	22	---	23	22	---	142	---	177	---	20	354	---
TOTAL	3426	617	702	702	580	941	6777	5242	7499	2779	8598	14986
MEAN	111	20.6	22.6	22.6	20.7	30.4	226	169	250	89.6	277	500
MAX	280	23	23	26	22	142	311	322	407	309	420	913
MIN	22	16	21	19	19	19	47	19	85	17	121	21
AC-FT	6800	1220	1390	1390	1150	1870	13440	10400	14870	5510	17050	29720

CAL YR 1990 TOTAL 35693 MEAN 97.8 MAX 395 MIN 16 AC-FT 70800
WTR YR 1991 TOTAL 52849 MEAN 145 MAX 913 MIN 16 AC-FT 104800

RIO GRANDE BASIN

08401500 PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1962, 1978-79, 1981 to current year.

REMARKS.--This station prior to Brantley Dam was called Pecos River below Major Johnson Springs near Carlsbad, NM.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 01...	0900	21	4810	7.8	20.0	13.0	9.0	1400	380	120	540
FEB 05...	1310	22	7750	8.2	13.5	9.5	12.8	--	--	--	--
MAR 08...	1440	22	7050	8.4	21.0	16.0	12.0	1900	470	170	870
MAY 02...	1300	146	8100	8.2	33.0	19.0	9.2	2100	530	190	970
JUL 03...	1215	259	2590	8.0	31.0	25.0	8.1	1100	330	68	210
SEP 16...	1130	468	3280	--	25.5	24.5	8.5	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 01...	6	6.0	109	1200	990	0.80	10	3310	290	<10
MAR 08...	9	7.7	108	2100	1900	0.80	5.5	5590	410	50
MAY 02...	9	11	124	2100	1800	0.70	5.3	5680	430	<10
JUL 03...	3	4.9	100	1100	320	0.70	9.2	2100	150	130

RIO GRANDE BASIN

08401900 ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'23", long 104°22'28", in SE¼SE¼ sec.3, T.21 S., R.25 E., Eddy County, Hydrologic Unit 13060011, at downstream end of bridge pier nearest left bank on U.S. Highway 285, 2.1 mi upstream from mouth and 10 mi northwest of Carlsbad. Mouth at Pecos River mile 475.2.

DRAINAGE AREA.--285 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,250 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to February 1985, at site 60 ft downstream at same datum.

REMARKS.--Records good. Diversions for irrigation of 220 acres, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 7.47 ft³/s, 5,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft³/s, Aug. 23, 1966, gage height, 15.35 ft, from rating curve extended above 8,500 ft³/s on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Since about 1941 the maximum discharge probably occurred Oct. 7, 1954, discharge, 63,600 ft³/s, gage height, 19.2 ft, from floodmarks, on downstream end of bridge pier, by slope-area measurement at site 5 mi upstream.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 21	2145	*1,340	*7.43	No other peak greater than base discharge.			
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.9
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	42	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	30	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	106	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	77	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.19	78.20	5.98
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.91	2.52	.20
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	106	42	5.9
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	363	155	12

CAL YR 1990 TOTAL 66.20 MEAN .18 MAX 59 MIN .00 AC-FT 131
WTR YR 1991 TOTAL 267.37 MEAN .73 MAX 106 MIN .00 AC-FT 530

RIO GRANDE BASIN

08402000 PECOS RIVER AT DAMSITE 3, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'40", long 104°19'58", sec.6, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank at damsite 3 of Carlsbad Project of Bureau of Reclamation, about 1 mi upstream from flow line of Lake Avalon, 1.3 mi downstream from Rocky Arroyo, 8.0 mi northwest of Carlsbad, and at mile 473.8.

DRAINAGE AREA.--17,980 mi², approximately (contributing area).

PERIOD OF RECORD.--August 1939 to December 1940, August 1944 to current year.

REVISED RECORDS.--WSP 1512: 1946-47(M), 1948(P), 1949, 1950(P). WSP 1712: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,171.31 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Aug. 10, 1944, at site 1,000 ft downstream at datum 1.00 ft higher. Aug. 10, 1944 to Dec. 31, 1966, at present datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Brantley Lake (station 08401450) 4.8 mi upstream and other reservoirs and diversion dams. Diversions and ground-water withdrawals for irrigation of about 17,300 acres, 1959 determination, upstream from station. Discharge represents inflow to Lake Avalon. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years (water years 1940, 1945-91), 160 ft³/s, 115,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,000 ft³/s, Aug. 23, 1966, gage height, 21.32 ft, present datum, from floodmark, from rating curve extended above 25,000 ft³/s on basis of slope-area measurement at gage height 19.53 ft; no flow, Dec. 21, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks that probably exceeded 40,000 ft³/s occurred in Aug. 1893, Oct. 2, 1904, July 25, 1905, Apr. 17, 1915, Aug. 7, 1916, and May 30, 1937, based primarily on records for station "at Carlsbad." Peak of May 22, 1941, was estimated at 60,000 ft³/s. Floods of 1893 and 1904 originated upstream from McMillan Dam and contributed to the two failures of Avalon Dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s, at 1715 hours Sept. 16, gage height, 4.09 ft; minimum, 10 ft³/s, Nov. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	19	20	21	20	143	103	149	229	e81	316
2	23	19	19	20	20	20	203	124	131	262	223	292
3	22	21	19	20	20	23	304	149	141	266	201	292
4	22	19	19	20	21	22	256	150	148	195	122	268
5	22	18	19	20	20	21	184	127	185	117	122	135
6	22	18	20	20	19	21	150	73	157	73	221	31
7	22	18	18	20	19	23	149	27	186	45	353	25
8	21	21	18	20	18	22	204	28	242	60	380	25
9	21	20	18	21	19	22	284	82	270	115	388	23
10	21	19	18	21	18	22	306	161	232	234	340	24
11	61	19	18	20	18	20	306	188	139	289	205	23
12	142	19	20	20	19	22	292	188	102	260	202	214
13	177	20	20	20	21	22	257	210	101	179	255	453
14	179	19	19	21	21	22	257	236	131	41	284	452
15	110	15	19	21	21	22	286	260	184	31	212	449
16	94	18	19	22	21	21	308	308	212	22	129	644
17	253	17	18	22	18	21	307	307	293	22	131	929
18	254	18	17	22	19	22	301	275	316	21	134	923
19	229	18	18	17	21	21	275	210	355	22	135	764
20	195	18	18	21	21	21	224	147	390	22	157	764
21	152	18	19	22	22	21	196	171	384	24	232	764
22	117	17	20	24	22	20	197	170	361	23	339	764
23	110	17	20	22	20	21	196	192	333	24	335	770
24	160	17	18	20	20	22	194	181	309	24	282	770
25	177	16	18	20	20	22	209	70	282	e97	282	764
26	174	15	18	20	20	21	251	68	334	e34	314	770
27	150	15	19	21	20	21	246	105	385	e24	399	767
28	126	18	20	21	21	24	101	183	356	e24	427	763
29	102	19	20	23	---	84	53	235	310	e24	375	764
30	25	19	20	23	---	108	74	228	260	e24	347	762
31	20	---	20	23	---	139	---	160	---	e23	347	---
TOTAL	3225	545	585	647	560	933	6713	5116	7378	2850	7954	14704
MEAN	104	18.2	18.9	20.9	20.0	30.1	224	165	246	91.9	257	490
MAX	254	21	20	24	22	139	308	308	390	289	427	929
MIN	20	15	17	17	18	20	53	27	101	21	81	23
AC-FT	6400	1080	1160	1280	1110	1850	13320	10150	14630	5650	15780	29170

CAL YR 1990 TOTAL 34227 MEAN 93.8 MAX 409 MIN 15 AC-FT 67890
WTR YR 1991 TOTAL 51210 MEAN 140 MAX 929 MIN 15 AC-FT 101600

e Estimated

RIO GRANDE BASIN

08403500 CARLSBAD MAIN CANAL AT HEAD, NEAR CARLSBAD, NM

LOCATION.--Lat 32°29'25", long 104°15'08", in NW¼SW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank 220 ft downstream from headgates in Avalon Dam, and 3.3 mi north of Carlsbad. Pecos River mile 467.2.

PERIOD OF RECORD.--July 1939 to current year (monthly discharge only, July 1939 to September 1965). January 1941 to March 1951 published in WSP 1732.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,156.50 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to March 1951, at site 20 ft upstream at datum 0.9 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Carlsbad Main Canal diverts water from Lake Avalon (station 08403800) for irrigation of about 25,000 acres in the Carlsbad Irrigation District. About 1,600 acres are irrigated on the left bank, most of it upstream from gaging station 08405200. The remaining acreage (most of which is downstream from station 08405200) is on the right bank. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years, 104 ft³/s, 75,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 526 ft³/s, Sept. 15, 16, 1946; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	e.00	.00	.00	.00	.00	139	107	146	236	160	296
2	e41	.00	.00	.00	.00	.00	188	95	145	280	197	268
3	e.00	.00	.00	.00	.00	.00	212	100	163	220	153	265
4	e.00	.00	.00	.00	.00	.00	232	101	182	187	150	256
5	e.00	.00	.00	.00	.00	.00	162	80	194	131	249	135
6	e.00	.00	.00	.00	.00	.00	137	51	174	75	297	51
7	e.00	.01	.00	.00	.00	.00	151	44	166	78	328	.00
8	e.00	.00	.00	.00	.00	.00	216	72	184	112	357	.00
9	e.00	.00	.00	.00	.00	.00	237	107	153	145	358	.00
10	e40	.00	.00	.00	.00	.00	252	170	147	203	314	.15
11	e127	.00	.00	.00	.00	.00	261	149	128	253	284	.01
12	e132	.00	.00	.00	.00	.00	268	167	112	242	230	2.6
13	e119	.00	.00	.00	.00	.00	251	224	120	182	221	.11
14	e114	.00	.00	.00	.00	.00	246	210	131	57	221	.00
15	e152	.00	.00	.00	.00	.00	245	245	163	.25	184	.00
16	e205	.00	.00	.00	.00	.00	246	251	175	.00	158	40
17	e225	.00	.00	.00	.00	.00	251	261	244	.00	121	156
18	e219	.00	.00	.00	.00	.00	244	222	282	.00	100	200
19	e225	.00	.00	.00	.00	.00	230	194	315	.00	166	196
20	e162	.00	.00	.00	.00	.00	198	211	342	.00	197	196
21	e144	.00	.00	.00	.00	.00	184	227	338	.00	257	196
22	e157	.00	.00	.00	.00	.00	175	218	326	.00	279	196
23	e193	.00	.00	.00	.00	.00	201	197	295	.00	256	196
24	e178	.00	.00	.00	.00	.00	185	161	288	.00	262	196
25	e158	.00	.00	.00	.00	.00	184	149	310	27	283	196
26	e161	.00	.00	.00	.00	142	186	122	352	.46	315	196
27	e145	.00	.00	.00	.00	174	162	113	343	.28	347	197
28	e111	.00	.00	.00	.00	212	123	162	313	.01	359	197
29	e114	.00	.00	.00	---	207	114	210	258	.00	343	197
30	e137	.00	.00	.00	---	183	109	178	208	31	338	197
31	e54	---	.00	.00	---	116	---	153	---	131	329	---
TOTAL	3348.00	0.01	0.00	0.00	0.00	1034.00	5989	4951	6697	2591.00	7813	4025.87
MEAN	108	.000	.000	.000	.000	33.4	200	160	223	83.6	252	134
MAX	225	.01	.00	.00	.00	212	268	261	352	280	359	296
MIN	.00	.00	.00	.00	.00	.00	109	44	112	.00	100	.00
AC-FT	6640	.02	.00	.00	.00	2050	11880	9820	13280	5140	15500	7990

CAL YR 1990 TOTAL 29945.01 MEAN 82.0 MAX 311 MIN .00 AC-FT 59400
WTR YR 1991 TOTAL 36448.88 MEAN 99.9 MAX 359 MIN .00 AC-FT 72300

e Estimated

LOCATION.--Lat 32°29'27", long 104°15'05", in NW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on headwall at outlet gate of dam on Pecos River, 3.3 mi north of Carlsbad, and at mile 467.2.

DRAINAGE AREA.--18,070 mi², approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend gage heights and contents), October 1965 to current year. Monthend gage heights January 1919 to December 1938 in files of Pecos River Commission.

REVISID RECORDS.--WSP 898: 1939.

GAGE.--Nonrecording gage. Elevation of gage is 3,157.0 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Lake is formed by Avalon Dam, an earthfill structure. The original Eddy (Avalon) Dam was completed and storage began in 1891. The dam was destroyed by the flood of Aug. 3, 1893; repaired immediately. The dam was destroyed again Oct. 2, 1904; construction of present dam commenced on June 1, 1906, and was 88 percent complete June 30, 1907. Capacity, 4,330 acre-ft, from capacity table put into use January 1, 1982, between gage heights 0.0 (sill of outlet gates) and 20.4 ft, crest of spillway no. 2. No dead storage. No storage allocated to flood control. Figures given herein represent usable contents. Water is used by Carlsbad Irrigation District.

COOPERATION.--Records provided by Carlsbad Irrigation District.

EXTREMES FOR PERIOD OF RECORD (SINCE 1938).--Maximum contents, 11,000 acre-ft, May 22, 1941, gage height, 25.0 ft; no storage at times when natural flow is passing through reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,620 acre-ft, Sept. 29, 30, gage height, 19.60 ft; minimum, 573 acre-ft, Nov. 1-3, gage height, 15.20 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 08:00 VALUES[illegible]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.00	15.20	16.40	17.00	17.80	18.20	15.90	15.90	16.20	16.20	16.20	16.10
2	16.00	15.20	16.40	17.10	17.80	18.20	15.90	15.80	16.10	16.10	16.00	16.10
3	15.90	15.20	16.40	17.10	17.80	18.20	15.90	15.90	16.20	16.10	16.20	16.20
4	15.90	15.20	16.40	17.10	17.80	18.20	16.10	16.00	16.10	16.20	16.30	16.20
5	16.00	15.30	16.50	17.10	17.90	18.20	16.00	16.10	15.90	16.20	16.30	16.30
6	16.00	15.30	16.50	17.10	17.90	18.20	16.10	16.20	15.80	16.20	15.80	16.20
7	16.00	15.30	16.50	17.10	17.90	18.20	16.10	16.20	15.70	16.10	15.70	16.20
8	16.10	15.30	16.50	17.20	17.90	18.20	16.00	16.00	15.70	16.00	15.70	16.20
9	16.10	15.30	16.50	17.20	17.90	18.20	15.90	15.80	15.80	15.80	15.70	16.20
10	16.10	15.30	16.50	17.20	17.90	18.20	16.00	15.60	16.10	15.70	15.70	16.20
11	15.80	15.50	16.50	17.30	17.90	18.20	16.00	15.70	16.20	15.80	15.80	15.60
12	15.70	15.50	16.60	17.30	18.00	18.20	16.00	15.90	16.10	15.80	15.70	16.60
13	15.80	15.60	16.60	17.30	18.00	18.20	16.00	15.70	16.00	15.90	15.60	17.60
14	16.00	15.70	16.60	17.30	18.00	18.10	15.90	15.70	15.90	16.10	15.80	18.80
15	16.20	15.80	16.60	17.40	18.00	18.10	15.90	15.80	15.70	16.20	15.90	18.80
16	15.80	15.90	16.60	17.40	18.00	18.10	16.00	15.80	15.70	16.30	16.00	18.90
17	15.60	16.00	16.70	17.40	18.00	18.10	16.00	16.00	15.90	16.40	15.90	19.00
18	15.80	16.00	16.70	17.50	18.00	18.10	16.00	16.10	15.80	16.40	16.00	19.10
19	15.90	16.00	16.80	17.50	18.00	18.10	16.20	16.40	15.90	16.40	16.00	19.40
20	16.00	16.10	16.80	17.50	18.10	18.10	16.20	16.20	15.90	16.40	15.90	19.40
21	16.00	16.10	16.80	17.50	18.10	18.10	16.20	16.10	16.00	16.40	15.80	19.40
22	16.00	16.10	16.80	17.60	18.10	18.10	16.20	16.00	16.10	16.40	15.70	19.40
23	15.80	16.10	16.80	17.60	18.10	18.10	16.20	15.90	16.10	16.40	15.90	19.50
24	15.60	16.20	16.90	17.70	18.10	18.10	16.10	16.00	16.20	16.40	16.10	19.50
25	15.60	16.20	16.90	17.70	18.10	18.10	16.00	16.10	16.10	16.50	16.00	19.50
26	15.60	16.30	16.90	17.70	18.10	17.70	16.10	15.90	15.90	16.50	16.00	19.50
27	15.70	16.30	17.00	17.70	18.20	17.40	16.10	15.70	15.90	16.50	16.00	19.50
28	15.70	16.40	17.00	17.70	18.20	16.80	16.50	15.70	16.00	16.60	16.10	19.50
29	15.80	16.40	17.00	17.80	---	16.30	16.30	15.80	16.00	16.70	16.20	19.60
30	15.60	16.40	17.00	17.80	---	15.90	16.00	16.00	16.10	16.80	16.20	19.60
31	15.40	---	17.00	17.80	---	15.80	---	16.20	---	16.60	16.10	

RIO GRANDE BASIN

08404000 PECOS RIVER BELOW AVALON DAM, NM

LOCATION.--Lat 32°28'55", long 104°15'47", in SW/4SW/4NE/4 sec.14, T.21 S., R.26 E., Eddy County, Hydrologic Unit 13060011, on right bank 4,800 ft downstream from Avalon Dam, 4.5 mi northwest of Carlsbad, and at mile 466.3.

DRAINAGE AREA.--18,080 mi², approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1907 (published as "at Avalon"), June 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,130 ft above National Geodetic Vertical Datum of 1929, from topographic map. January 1906 to March 1907, nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.--Records good. Flow completely regulated by Lake Avalon (station 08403800) 0.9 mi upstream. Diversions and ground-water withdrawals upstream from station for irrigation of about 198,000 acres, 1959 determination. Station bypassed by Carlsbad Main Canal (station 08403500). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years, 34.8 ft³/s, 25,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,500 ft³/s, Aug. 23, 1966, gage height, 26.4 ft, from floodmarks, from rating curve extended above 33,000 ft³/s on basis of computation of peak flow over Tansill Dam 5.8 mi downstream; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1904, caused in part by failure of Avalon Dam, probably exceeded 90,000 ft³/s, and is probably the greatest flood since 1842. A major flood occurred Aug. 3, 1893, and was described as "greatest in 50 years"; it damaged McMillan Dam, then under construction, and washed out the original Avalon Dam. Another major flood occurred Aug. 7, 1916, discharge 70,000 ft³/s, at site 6.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 750 ft³/s, Sept. 17; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.49
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.64
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	236
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	401
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	526
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	750
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	681
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	578
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	578
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	578
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	578
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	584
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	578
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	590
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	590
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	590
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	584
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	584
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	584
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9591.13
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	320
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	750
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	19020

CAL YR 1990 TOTAL 1.77 MEAN .005 MAX 1.2 MIN .00 AC-FT 3.5
WTR YR 1991 TOTAL 9591.13 MEAN 26.3 MAX 750 MIN .00 AC-FT 19020

RIO GRANDE BASIN

08405150 DARK CANYON DRAW AT CARLSBAD, NM

LOCATION.--Lat 32°24'24", long 104°13'34", in NE¼NW¼SE¼ sec.7, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on downstream side of bridge on Canal Street in Carlsbad, and 0.6 mi upstream from mouth. Mouth at Pecos River mile 459.2.

DRAINAGE AREA.--450 mi², approximately.

PERIOD OF RECORD.--January 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,088.21 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. A Soil Conservation Service flood-control project on Hackberry Draw, an upstream tributary, has some effect on flood peaks and flow duration. Ground-water withdrawals upstream from station for irrigation of approximately 2,100 acres, 1973 determination, and for municipal supply for Carlsbad. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 6.72 ft³/s, 4,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft³/s Sept. 26, 1980, gage height, 12.10 ft, from rating curve extended above 7,100 ft³/s, maximum gage height, 12.53 ft, June 24, 1986; no flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a discharge of 66,000 ft³/s, as determined by slope-area measurement at site 1.2 mi upstream. Another flood of approximately the same magnitude occurred Sept. 20, 1941. Other major peaks occurred July 17, 1906, July 24, 1908, July 24, 1911, Apr. 18, 1915, Aug. 8, 1916, Sept. 15, 1919, Aug. 4, 1925, and May 23, 1941.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 13	0100	*2,420	*5.83	No other peak greater than base discharge.			
No flow most of time.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	523
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	524.30
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	17.5
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	523
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1040

CAL YR 1990 TOTAL 93.00 MEAN .25 MAX 93 MIN .00 AC-FT 184
WTR YR 1991 TOTAL 524.30 MEAN 1.44 MAX 523 MIN .00 AC-FT 1040

RIO GRANDE BASIN

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM

LOCATION.--Lat 32°24'37", long 104°12'58", in NE¼SW¼NW¼ sec.8, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on left bank, 700 ft downstream from mouth of Dark Canyon Draw, 0.3 mi downstream from Lower Tansill Dam and Bataan recreational area, 0.8 mi downstream from bridge on U.S. Highway 62-180 in Carlsbad, and at mile 459.1.

DRAINAGE AREA.--18,550 mi², approximately, contributing area.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,075.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by Lake Avalon (station 08403800) 8.1 mi upstream and by several other reservoirs and up to Nov. 1982 at low stages by power plant. Power plant discontinued operation Nov. 1982. Gage is bypassed on left bank by Carlsbad Main Canal East, which irrigates several hundred acres adjacent to and downstream from gage and on right bank by Carlsbad Main Canal South, which with supplemental ground-water withdrawals irrigates about 23,000 acres downstream. Diversions and ground-water withdrawals upstream from station for irrigation of about 198,000 acres, 1959 determination. U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--21 years, 59.6 ft³/s, 43,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft³/s, Aug. 10, 1984, gage height, 15.22 ft, from floodmarks, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a stage of about 22 ft, discharge not determined. (For dates of other historical floods see station 08404000.)

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft³/s, at 0115 hours Sept. 13, gage height, 5.42 ft; minimum discharge, 0.53 ft³/s, Dec. 3, 8, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	132	1.4	11	14	16	8.8	7.0	7.9	12	14	21
2	41	69	2.2	11	14	15	10	8.0	6.5	11	14	21
3	20	50	1.1	11	14	13	7.5	7.7	6.2	10	15	21
4	18	41	1.2	11	15	14	9.9	7.8	8.0	32	16	45
5	17	39	1.0	12	14	16	11	6.9	9.0	10	16	28
6	17	39	1.4	12	13	15	12	7.0	8.4	9.0	16	22
7	16	38	.85	12	13	14	13	8.3	6.5	8.7	18	20
8	16	37	.68	12	13	13	12	7.3	6.9	8.4	16	15
9	13	35	.66	15	14	13	9.5	7.1	6.5	8.8	24	8.8
10	13	35	.66	15	14	13	8.0	5.9	9.0	9.6	16	51
11	16	35	.72	15	15	15	9.1	5.2	7.4	8.1	16	40
12	15	35	.80	14	15	12	9.3	4.7	7.3	10	16	49
13	16	35	.66	14	15	12	9.5	4.4	6.6	23	19	435
14	17	35	.75	17	14	12	8.3	4.0	6.9	22	15	141
15	15	35	5.3	16	14	13	9.1	4.5	6.7	61	16	367
16	16	34	7.6	15	14	16	9.1	2.7	7.9	12	17	477
17	17	32	12	17	17	10	7.5	6.6	5.7	18	18	662
18	15	32	9.4	24	14	12	7.1	4.3	5.7	14	18	663
19	16	32	11	16	14	12	6.2	3.9	4.7	12	18	516
20	20	32	12	14	13	12	5.3	3.5	5.3	11	18	509
21	19	32	11	15	14	13	8.2	4.6	6.7	12	16	516
22	14	32	10	15	14	9.9	6.0	5.5	7.1	13	16	520
23	14	32	11	15	14	6.9	7.3	4.7	8.7	15	18	516
24	12	32	11	13	15	9.0	7.6	5.3	7.0	14	17	522
25	13	31	11	14	14	9.3	6.2	5.8	6.6	113	17	525
26	13	25	11	14	14	13	7.3	5.8	8.7	23	27	530
27	14	24	11	15	15	5.8	6.5	6.0	11	17	27	535
28	14	18	11	15	16	12	7.6	7.2	8.2	15	21	539
29	47	10	13	15	---	6.5	5.1	5.5	7.7	14	20	534
30	78	1.4	12	14	---	11	6.5	5.1	11	16	21	536
31	91	---	11	14	---	7.0	---	5.9	---	15	21	---
TOTAL	683	1089.4	194.38	443	399	371.4	250.5	178.2	221.8	577.6	557	9384.8
MEAN	22.0	36.3	6.27	14.3	14.2	12.0	8.35	5.75	7.39	18.6	18.0	313
MAX	91	132	13	24	17	16	13	8.3	11	113	27	663
MIN	12	1.4	.66	11	13	5.8	5.1	2.7	4.7	8.1	14	8.8
AC-FT	1350	2160	386	879	791	737	497	353	440	1150	1100	18610

CAL YR 1990 TOTAL 5589.89 MEAN 15.3 MAX 132 MIN .00 AC-FT 11090
WTR YR 1991 TOTAL 14350.08 MEAN 39.3 MAX 663 MIN .66 AC-FT 28460

RIO GRANDE BASIN

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

REMARKS.--Replaces station 08405000, Pecos River at Carlsbad, New Mexico, at which sample collection was discontinued after September, 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
OCT 29...	1530	75	--	3020	8.0	21.5	18.0	8.8	1100	270	92
FEB 06...	1035	14	2400	--	8.1	10.5	10.0	10.9	820	200	78
MAR 11...	0945	14	2280	--	7.7	22.0	12.5	10.8	820	200	78
MAY 01...	1515	7.0	2600	--	8.1	29.0	21.5	8.7	950	230	91
JUL 01...	1735	12	3750	--	7.9	30.5	27.5	8.6	1200	280	120
SEP 17...	1135	654	3700	--	7.9	23.5	24.0	--	1200	330	98

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 29...	280	4	4.2	157	930	450	0.80	14	2140	200	<10
FEB 06...	220	3	4.0	74	680	350	0.50	13	1590	180	10
MAR 11...	200	3	3.7	82	720	340	0.50	13	1600	160	<10
MAY 01...	260	4	4.5	136	840	440	0.50	10	1960	190	<10
JUL 01...	350	4	5.9	122	1100	580	0.80	15	2530	220	90
SEP 17...	430	5	6.1	100	1100	680	0.60	11	2720	250	<10

RIO GRANDE BASIN

08405500 BLACK RIVER ABOVE MALAGA, NM

LOCATION.--Lat 32°13'44", long 104°09'02", in SW¼NW¼SW¼ sec.12, T.24 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on right bank 0.6 mi upstream from Black River diversion dam, 4.6 mi west of Malaga, and 7.1 mi upstream from mouth. Mouth at Pecos River mile 436.3.

DRAINAGE AREA.--343 mi².

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

REVISED RECORDS.--WSP 1632: 1948, 1949-50(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. March to December 1940, water-stage recorder and Cippoletti weir at site 0.3 mi downstream at different datum.

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres, 1959 determination, upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--44 years (water years 1948-91), 13.2 ft³/s, 9,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,600 ft³/s, Aug. 23, 1966, gage height, 21.7 ft, from floodmarks, from rating curve extended above 5,900 ft³/s on basis of slope-area measurements at gage heights 12.60 ft and 21.7 ft; minimum, 0.51 ft³/s, June 1, 1983. The flood of Aug. 23, 1966, exceeded the previous maximum stage, which occurred in 1908, by about 1.0 ft, from information by local resident.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 20 or 21, 1941, reached a stage of 19.0 ft, present site and datum, determined in 1947 from well-defined floodmarks, discharge, 33,000 ft³/s, from rating curve extended above 1,400 ft³/s on basis of slope-area measurements at gage heights 8.41 ft and 12.60 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	2345	*972	*4.43	July 14	1715	658	3.91
July 13	2200	582	3.75	July 25	0015	545	3.67

Minimum discharge, 1.4 ft³/s, July 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	14	14	14	14	11	11	9.9	8.7	8.3	12	13
2	64	14	14	14	14	10	12	11	10	9.8	13	13
3	35	15	14	14	14	10	12	11	11	11	13	13
4	18	15	14	14	14	10	12	10	11	11	12	26
5	15	15	14	14	14	10	12	11	11	11	12	18
6	15	14	14	14	14	10	13	11	12	12	12	16
7	14	15	14	14	14	10	12	11	12	11	12	79
8	14	15	14	14	14	10	12	11	13	11	12	61
9	13	15	14	14	14	10	11	12	45	11	13	21
10	13	15	14	15	14	10	11	14	149	11	13	16
11	14	15	14	14	15	10	11	13	27	10	13	15
12	14	15	14	14	15	9.6	11	13	12	8.9	109	15
13	13	15	14	14	15	9.6	11	13	9.0	69	55	17
14	14	15	14	14	14	9.8	11	14	6.1	117	20	14
15	13	15	14	14	14	9.8	12	13	5.2	72	18	13
16	13	15	14	14	14	9.8	12	12	5.8	19	16	13
17	13	15	15	14	15	9.9	12	11	7.0	7.8	14	18
18	13	15	14	16	14	9.9	12	11	7.6	5.6	14	15
19	13	15	14	15	15	9.9	12	11	6.9	4.5	13	15
20	13	15	14	14	15	9.9	12	11	6.9	3.9	13	14
21	13	15	14	15	14	9.9	12	11	7.2	18	12	13
22	13	14	14	14	14	9.8	10	15	7.1	9.4	12	12
23	13	14	14	14	14	9.6	9.1	15	7.3	12	12	12
24	13	14	14	14	15	9.8	8.9	13	7.1	9.0	12	12
25	13	14	14	14	14	10	8.7	12	8.0	209	11	11
26	13	15	14	14	15	9.8	8.6	10	7.4	66	9.9	11
27	14	14	14	14	14	9.2	8.5	8.0	6.6	18	9.9	11
28	14	14	14	13	12	9.0	8.4	7.6	6.3	12	9.1	11
29	14	14	14	13	---	9.1	8.2	7.7	6.4	11	8.7	11
30	14	14	14	14	---	9.1	8.5	7.3	6.8	11	8.7	11
31	14	---	14	14	---	9.3	---	7.0	---	11	8.9	---
TOTAL	510	439	435	437	398	303.8	324.9	347.5	446.4	811.2	523.2	540
MEAN	16.5	14.6	14.0	14.1	14.2	9.80	10.8	11.2	14.9	26.2	16.9	18.0
MAX	64	15	15	16	15	11	13	15	149	209	109	79
MIN	13	14	14	13	12	9.0	8.2	7.0	5.2	3.9	8.7	11
AC-FT	1010	871	863	867	789	603	644	689	885	1610	1040	1070

CAL YR 1990 TOTAL 5286.2 MEAN 14.5 MAX 507 MIN 6.9 AC-FT 10490
WTR YR 1991 TOTAL 5516.0 MEAN 15.1 MAX 209 MIN 3.9 AC-FT 10940

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, NM

LOCATION.--Lat 32°12'26", long 104°01'22", in SW¼NW¼NE¼ sec.19, T.24 S., R.29 E., Eddy County, Hydrologic Unit 13060011, on right bank 3.1 mi southeast of Malaga, 4.3 mi downstream from Black River, and at mile 432.2.

DRAINAGE AREA.--19,190 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1920 to current year. Monthly discharge only for some periods, ~~published in WSP 1312.~~

REVISED RECORDS.--WSP 1632: 1925, 1932-37.

GAGE.--Water-stage recorder. Elevation of gage is 2,895.64 ft above National Geodetic Vertical Datum of 1929. May 1, 1920 to Mar. 24, 1949, at datum 3 ft higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from station for irrigation of about 202,000 acres, 1959 determination. Harroun canal bypasses gage on left bank and irrigates approximately 1,000 acres adjacent to and downstream from gage. This bypass is not gaged.

AVERAGE DISCHARGE.--16 years (water years 1921-36), 274 ft³/s, 198,500 acre-ft/yr, prior to completion of Lake Sumner. 55 years (water years 1938-91), 163 ft³/s, 118,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft³/s, Aug. 23, 1966, gage height, 42.1 ft, from floodmarks, from rating curve extended above 36,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.7 ft³/s, Oct. 20, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1904, discharge not determined. Flood of Aug. 7, 1916, reached a discharge of 70,000 ft³/s, at Carlsbad, 27 mi upstream. Flood in September 1919 reached a stage of 29.4 ft, present datum, discharge, 40,400 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft³/s, at 0145 hours Sept. 19, gage height, 7.47 ft; minimum daily, 3.7 ft³/s, May 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	110	67	57	55	44	26	e19	e10	9.5	38	29
2	126	160	57	57	55	41	23	e15	9.5	11	32	28
3	124	136	52	56	52	36	21	e15	9.2	14	28	25
4	95	97	51	51	56	33	20	e14	9.3	17	29	36
5	63	83	51	48	56	29	e18	e13	9.2	13	28	56
6	54	79	51	48	55	27	e17	e11	9.5	12	28	58
7	52	83	50	52	54	28	e17	e10	9.5	11	27	59
8	51	89	51	58	50	26	e16	e9.0	10	11	28	54
9	49	90	51	59	53	26	e16	e7.6	11	11	33	110
10	43	86	51	62	54	26	e15	e7.5	81	11	30	120
11	41	85	52	62	54	25	e15	e7.7	26	11	27	177
12	38	85	52	60	54	27	e14	e8.0	14	13	31	152
13	46	84	52	59	56	27	e12	e9.0	11	14	61	288
14	47	84	51	58	56	26	e7.0	e9.4	9.9	72	44	291
15	51	84	49	59	53	24	e5.8	e9.0	9.5	132	41	231
16	49	82	51	59	47	24	e7.0	e8.4	9.4	57	42	535
17	43	80	52	59	44	24	e9.4	e7.0	9.3	30	35	798
18	40	80	55	65	50	25	e11	e5.0	9.3	25	32	889
19	40	81	58	69	50	24	e12	e4.0	9.0	23	32	893
20	39	84	56	68	42	24	e11	e3.7	8.9	22	27	779
21	40	84	55	60	44	26	e11	e4.2	8.9	21	27	781
22	39	79	56	58	44	25	e11	e4.5	8.6	23	29	793
23	40	73	57	59	44	29	e11	e4.8	8.7	32	28	789
24	40	70	56	59	45	34	e12	e5.3	8.7	34	26	790
25	42	77	57	58	44	30	e13	e5.8	8.6	93	24	788
26	40	81	57	57	43	31	e16	e5.5	8.4	199	23	771
27	37	80	58	57	43	31	e19	e5.4	8.4	110	23	763
28	38	73	59	56	43	30	e23	e5.5	8.5	49	23	762
29	39	69	60	57	---	29	e29	e7.0	8.5	37	25	740
30	37	70	60	57	---	29	25	e8.0	8.8	40	27	749
31	62	---	59	56	---	27	---	e9.0	---	45	27	---
TOTAL	1659	2598	1694	1800	1396	887	463.2	257.3	370.6	1202.5	955	13334
MEAN	53.5	86.6	54.6	58.1	49.9	28.6	15.4	8.30	12.4	38.8	30.8	444
MAX	126	160	67	69	56	44	29	19	81	199	61	893
MIN	37	69	49	48	42	24	5.8	3.7	8.4	9.5	23	25
AC-FT	3290	5150	3360	3570	2770	1760	919	510	735	2390	1890	26450

CAL YR 1990 TOTAL 14410.0 MEAN 39.5 MAX 366 MIN 8.4 AC-FT 28580
WTR YR 1991 TOTAL 26616.6 MEAN 72.9 MAX 893 MIN 3.7 AC-FT 52790

e Estimated

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 31...	1215	60	6400	8.1	22.0	17.5	8.9	1900	470	180	810
FEB 04...	1230	57	6000	8.4	17.5	11.5	12.6	1800	420	180	710
MAR 04...	1245	33	6750	8.0	28.0	16.5	8.9	1900	460	190	810
APR 30...	1300	25	10300	8.3	31.0	20.0	11.1	2500	590	260	1300
JUL 01...	1135	9.5	12000	8.3	28.5	26.0	9.8	2800	650	280	1900
SEP 18...	0840	861	3250	8.1	17.0	22.0	--	1200	300	100	340

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 31...	8	16	158	1700	1400	1.0	11	4680	420	<10
FEB 04...	7	13	125	--	--	0.80	4.8	--	380	<10
MAR 04...	8	15	126	2300	2000	0.90	6.9	5860	450	10
APR 30...	11	29	132	2000	2200	2.7	7.2	6470	600	10
JUL 01...	16	51	114	2700	3300	1.3	5.8	8960	790	110
SEP 18...	4	5.2	143	910	530	0.60	13	2280	220	20

RIO GRANDE BASIN

08407000 Pecos River at Pierce Canyon Crossing, near Malaga, NM

LOCATION.--Lat 32°11'19", long 103°58'43", in SW¼SW¼NW¼ sec.27, T.24 S., R.29 E., Eddy County, Hydrologic Unit 13060011, on right bank 550 ft upstream from Pierce Canyon Crossing, 6.0 mi southeast of Malaga, and at mile 425.7.

DRAINAGE AREA.--19,260 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to September 1941, August 1951 to current year.

REVISED RECORDS.--WSP 898: 1938(M). WSP 1712: 1959.

GAGE.--Water-stage recorder. Elevation of gage is 2,889.18 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). July 1938 to Sept. 1941, at datum 1.19 ft higher.

REMARKS.--Water-discharge records good except those above 300 ft³/s, which are fair. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from station for irrigation of about 202,000 acres, 1959 determination.

AVERAGE DISCHARGE.--43 years (water years 1939-41, 1952-91), 130 ft³/s, 94,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge determined, 65,000 ft³/s, Aug. 23, 1966; maximum gage height, 31.6 ft, Aug. 23, 1966, from floodmarks; minimum, 0.54 ft³/s, May 30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s, at 0630 hours Sept. 19, gage height, 5.23 ft³/s; minimum, 3.2 ft³/s, May 19, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	98	e72	61	62	48	29	18	11	8.5	43	30
2	141	144	e62	60	62	48	27	16	11	9.5	37	31
3	131	161	e55	60	61	40	23	16	11	11	31	28
4	115	119	e53	57	63	37	21	16	10	17	28	29
5	81	98	e53	51	65	32	18	14	10	17	28	46
6	65	90	e53	50	64	25	18	12	10	15	28	74
7	60	94	e51	52	63	26	18	12	10	13	29	75
8	59	e96	e53	59	59	25	17	11	11	12	29	64
9	56	e96	e53	63	60	25	16	8.1	11	11	34	81
10	51	e94	e53	65	61	24	15	8.1	31	9.0	38	154
11	48	e90	e53	64	61	24	15	8.5	64	8.3	34	212
12	45	e90	e53	63	62	22	15	9.3	25	8.7	34	172
13	48	e88	50	63	63	25	13	9.7	17	20	54	152
14	55	e88	50	63	64	26	6.2	9.9	14	44	65	374
15	54	e88	47	63	60	25	5.6	9.7	12	108	53	175
16	61	e87	49	63	57	24	8.4	9.4	11	86	51	441
17	53	e85	51	65	51	22	10	8.2	10	39	48	682
18	48	e84	53	68	52	22	12	4.4	9.8	25	34	853
19	46	e84	57	69	60	25	13	3.6	9.4	20	37	960
20	46	e86	57	72	50	24	12	3.6	9.3	18	36	828
21	45	e86	55	67	49	25	12	4.0	9.1	17	31	798
22	45	86	56	64	48	27	12	4.7	8.8	16	32	804
23	46	79	57	63	48	24	12	4.9	8.5	18	34	800
24	46	74	57	63	49	23	12	5.8	8.1	27	34	799
25	49	74	57	63	49	32	13	5.8	8.3	43	31	794
26	48	e83	59	61	49	32	16	5.7	8.0	154	28	784
27	46	e82	60	61	48	32	20	5.5	8.3	152	23	762
28	41	e80	61	62	48	32	25	5.7	8.5	73	21	765
29	47	e75	61	63	---	31	31	7.2	8.2	45	21	745
30	44	e71	62	63	---	32	22	8.9	8.1	38	26	751
31	53	---	62	62	---	31	---	10	---	42	30	---
TOTAL	1862	2750	1725	1923	1588	890	487.2	275.7	391.4	1125.0	1082	13263
MEAN	60.1	91.7	55.6	62.0	56.7	28.7	16.2	8.89	13.0	36.3	34.9	442
MAX	141	161	72	72	65	48	31	18	64	154	65	960
MIN	41	71	47	50	48	22	5.6	3.6	8.0	8.3	21	28
AC-FT	3690	5450	3420	3810	3150	1770	966	547	776	2230	2150	26310

CAL YR 1990 TOTAL 14848.8 MEAN 40.7 MAX 394 MIN 2.3 AC-FT 29450
WTR YR 1991 TOTAL 27362.3 MEAN 75.0 MAX 960 MIN 3.6 AC-FT 54270

e Estimated

RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM -- Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected 0.2 mi downstream from streamflow-gaging station.

PERIOD OF RECORD.--Water years 1938-41, 1952 to current year.

REMARKS.--No significant inflow between streamflow-gaging station and sampling cross section.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 31...	1330	50	11900	8.3	27.5	19.0	12.2	2000	470	210	2100
FEB 04...	1110	67	10300	8.3	13.0	10.5	12.2	2100	500	200	1500
MAR 04...	1500	36	13100	8.3	29.5	16.5	10.4	2200	520	230	1900
APR 30...	1415	22	18500	8.5	33.0	21.0	10.8	2700	590	300	3200
JUL 01...	1535	8.4	32500	8.4	33.0	26.0	10.0	2900	580	360	6600
SEP 18...	1200	833	2910	8.0	17.0	22.0	--	1000	260	91	300

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 31...	20	67	161	2000	3600	1.4	10	8560	710	<10
FEB 04...	14	49	130	1700	2700	1.3	5.1	6730	570	10
MAR 04...	17	62	123	1900	3300	1.5	6.5	7990	700	10
APR 30...	27	120	150	2500	5700	1.9	8.6	12500	1100	10
JUL 01...	53	250	105	2800	11000	2.1	3.2	21700	1600	100
SEP 18...	4	6.7	154	670	540	0.70	12	1970	210	20

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, NM
(National stream-quality accounting network station)

LOCATION.--Lat 32°04'30", long 104°02'21", in SW¼NW¼NE¼ sec.1, T.26 S., R.28 E., Eddy County, Hydrologic Unit 13060011, on right bank at Red Bluff, 0.2 mi downstream from Red Bluff Draw, 1.6 mi northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 mi north of the New Mexico-Texas State line, 5.5 mi upstream from Delaware River, and at mile 411.2.

DRAINAGE AREA.--19,540 mi², approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,850.05 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by many reservoirs and diversion dams. Diversions and ground-water withdrawals upstream from station for irrigation of about 202,000 acres, 1959 determination. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years, 159 ft³/s, 115,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111,000 ft³/s, Aug. 23, 1966, gage height, 33.32 ft, from rating curve extended above 32,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.19 ft³/s, Aug. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1904 reached a stage of 28.0 ft, from information by Panhandle and Santa Fe Railway Co. (For dates of other historical floods see stations 08404000, 08406500.)

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,730 ft³/s, Sept. 7, gage height, unknown; minimum, 5.6 ft³/s, May 20-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	82	75	72	72	57	35	20	12	9.3	43	27
2	164	134	72	70	71	58	32	16	13	9.8	40	26
3	149	175	62	70	70	54	30	14	13	11	34	27
4	139	145	57	69	68	48	25	14	13	13	29	26
5	109	113	56	64	70	46	23	14	13	18	27	31
6	83	99	56	60	70	40	21	12	14	18	28	59
7	73	97	54	60	69	36	20	11	13	16	28	843
8	70	104	56	64	68	38	20	11	62	13	28	143
9	68	105	55	73	65	37	18	9.9	168	12	38	76
10	66	105	55	76	68	36	17	8.5	18	12	37	178
11	60	101	56	77	68	35	16	7.9	64	11	68	280
12	57	98	56	76	69	34	16	8.1	52	10	42	175
13	54	97	57	74	70	34	16	8.5	27	90	36	136
14	62	96	57	72	71	36	14	9.1	18	148	61	282
15	65	92	57	71	70	35	9.0	8.7	13	116	55	194
16	69	95	55	71	68	33	7.9	8.8	11	111	50	262
17	67	92	58	73	62	32	11	8.8	9.8	58	50	523
18	59	90	60	79	58	31	12	8.6	9.2	31	41	713
19	56	90	63	80	64	32	14	7.5	8.8	23	36	850
20	56	92	66	85	64	32	14	6.0	8.7	19	38	804
21	54	93	65	84	56	30	13	5.8	8.7	17	34	714
22	55	91	64	77	57	33	13	6.2	8.8	15	31	714
23	55	91	65	75	57	34	12	7.5	9.1	14	31	721
24	55	82	67	76	58	29	12	8.4	9.3	19	31	717
25	56	79	67	75	58	34	13	8.4	8.9	59	30	718
26	59	85	68	74	57	37	15	8.7	8.8	99	28	719
27	57	86	70	73	56	37	19	8.6	8.9	192	25	698
28	53	84	71	73	57	37	22	8.5	8.8	107	21	703
29	53	77	72	73	---	37	32	8.3	8.8	63	19	696
30	56	74	72	73	---	37	26	8.5	9.2	40	19	689
31	54	---	72	72	---	35	---	11	---	38	24	---
TOTAL	2223	2944	1936	2261	1811	1164	547.9	302.3	649.8	1412.1	1102	12744
MEAN	71.7	98.1	62.5	72.9	64.7	37.5	18.3	9.75	21.7	45.6	35.5	425
MAX	164	175	75	85	72	58	35	20	168	192	68	850
MIN	53	74	54	60	56	29	7.9	5.8	8.7	9.3	19	26
AC-FT	4410	5840	3840	4480	3590	2310	1090	600	1290	2800	2190	25280

CAL YR 1990 TOTAL 16532.8 MEAN 45.3 MAX 546 MIN 1.4 AC-FT 32790
WTR YR 1991 TOTAL 29097.1 MEAN 79.7 MAX 850 MIN 5.8 AC-FT 57710

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED AS CA (MG/L) (00915)
OCT 30...	1400	57	13700	8.1	28.0	17.0	2.5	12.0	2200	2100	480
JAN 31...	1300	71	9500	8.2	14.5	8.0	1.5	13.8	1900	1800	450
FEB 28...	1345	56	12300	8.1	18.5	12.0	3.0	9.0	2100	2000	470
APR 29...	1415	37	27300	8.7	24.0	21.0	3.4	11.0	3100	3000	590
JUN 27...	1145	8.8	23500	8.8	35.0	26.0	5.0	--	3000	2900	650
SEP 20...	1230	816	4100	8.1	12.0	15.0	8.5	8.6	1200	1100	330

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 30...	240	2000	19	67	178	0	146	1700	3700	1.4
JAN 31...	200	1700	17	48	160	0	131	1200	2700	1.5
FEB 28...	230	2100	20	61	164	0	134	2000	3000	1.6
APR 29...	390	6300	49	230	107	12	108	3200	11000	<0.10
JUN 27...	330	4500	36	150	39	10	48	3000	7600	1.6
SEP 20...	98	450	6	7.7	131	0	107	990	620	0.70

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 30...	7.1	8910	8300	0.840	0.840	0.060	0.060	0.900	0.900	0.090
JAN 31...	5.0	8300	6390	0.820	0.750	0.030	0.030	0.850	0.780	0.130
FEB 28...	4.3	8110	7950	0.690	0.630	0.060	0.060	0.750	0.690	0.320
APR 29...	0.20	20500	21800	--	--	0.020	0.010	<0.050	<0.050	0.050
JUN 27...	1.9	15800	16300	--	--	<0.010	<0.010	<0.050	<0.050	0.070
SEP 20...	12	2950	2580	0.290	0.260	0.020	0.020	0.310	0.280	0.110

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
OCT 30...	0.090	--	--	0.030	<0.010	20	<1	200	<10	<2.0
JAN 31...	0.120	0.67	1.7	0.050	<0.010	--	--	--	--	--
FEB 28...	0.330	0.48	1.5	0.050	<0.010	--	--	--	--	--
APR 29...	0.060	0.95	--	0.040	<0.010	30	1	<100	<10	<3.0
JUN 27...	0.060	0.83	--	0.040	<0.010	<10	3	<100	<10	<2.0
SEP 20...	0.100	0.49	0.91	0.080	<0.010	<10	1	200	<10	<1.0
DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT 30...	<1	<2	2	<10	<2	90	30	0.1	<4	2
APR 29...	1	<3	6	20	<3	120	60	0.6	5	<3
JUN 27...	<2	2	<1	20	<2	120	40	<0.1	3	2
SEP 20...	<1	<1	<1	<10	<1	50	<10	<0.1	3	<1
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 30...	<2	<2.0	7800	47	10	1030	159	94	K16	29
JAN 31...	--	--	--	--	--	235	45	95	>600	K1
FEB 28...	--	--	--	--	--	626	94	98	K2	K4
APR 29...	<4	<3.0	10000	170	40	679	67	98	K3	K1
JUN 27...	<1	<1.0	11000	120	<10	850	20	97	K4	590
SEP 20...	<1	<1.0	4900	15	<10	167	368	95	140	350

RIO GRANDE BASIN

08408500 DELAWARE RIVER NEAR RED BLUFF, NM

LOCATION.--Lat 32°01'23", long 104°03'15", in NE¼SW¼SE¼ sec.23, T.26 S., R.28 E., Eddy County, Hydrologic Unit 13070002, near center of channel on downstream side of pier of bridge on U.S. Highway 285, 2.1 mi north of the New Mexico-Texas State line, 3.6 mi southwest of Red Bluff, 3.7 mi upstream from mouth and 14 mi south of Malaga. Mouth at Pecos River mile 405.6.

DRAINAGE AREA.--689 mi².

PERIOD OF RECORD.--April 1912 to September 1913, May 1914 to June 1915, October 1937 to current year. Published as "near Malaga" 1912-13, and as "near Angeles, Tex." 1914-15.

GAGE.--Water-stage recorder. Elevation of gage is 2,900.66 ft above National Geodetic Vertical Datum of 1929 (U.S. Boundary Commission post). Prior to May 1914, at site 3.0 mi upstream at different datum. May 1914 to June 1915, at site 2.5 mi downstream at different datum.

REMARKS.--Records good. One small upstream diversion. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years (water years 1938-91), 12.3 ft³/s, 8,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,400 ft³/s, Oct. 2, 1955, gage height, 27.0 ft, from floodmarks, from rating curve extended above 6,500 ft³/s on basis of slope-area measurements at gage heights, 12.84 ft, 17.55 ft, and 27.0 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 3	0045	*701	*5.83				

No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	2.5	2.9	2.5	2.9	2.5	2.4	1.3	.47	.00	1.9	1.1
2	297	2.5	2.9	2.6	2.9	2.4	2.6	1.2	.43	.00	.96	1.3
3	171	3.0	2.7	2.6	3.0	2.2	2.8	1.1	.37	35	1.8	1.1
4	17	3.5	2.7	2.7	3.0	2.3	2.9	1.1	.30	31	6.9	7.5
5	9.6	3.3	2.7	2.7	2.7	2.2	3.1	1.0	.52	17	6.3	20
6	6.4	2.9	2.8	2.7	2.7	2.1	3.0	1.0	12	14	4.8	7.0
7	4.9	2.8	2.6	2.7	2.7	2.1	3.1	.99	1.2	12	4.6	4.8
8	3.9	3.1	2.7	2.7	2.6	2.1	3.0	.96	1.2	11	4.6	5.0
9	3.2	3.1	2.7	2.8	2.6	2.0	2.8	.91	.84	10	8.5	6.4
10	2.7	3.0	2.7	2.8	2.7	2.1	2.9	.83	7.2	10	6.7	12
11	2.7	2.9	2.8	2.6	2.7	2.1	2.6	.81	14	10	8.6	63
12	2.6	2.9	2.8	2.6	2.8	2.1	2.3	.78	1.5	11	21	8.6
13	2.4	2.9	2.7	2.6	2.9	2.1	2.2	.68	.83	94	18	6.4
14	2.5	2.9	2.7	2.7	2.6	2.1	2.2	.58	.57	52	8.5	6.3
15	2.5	2.9	2.7	2.7	2.5	2.1	2.4	.53	.39	40	26	5.5
16	2.4	2.9	2.9	2.7	2.5	2.2	2.4	.49	.32	20	10	5.0
17	2.3	2.9	2.8	2.8	2.5	1.9	2.2	.46	.25	14	7.1	3.8
18	2.3	2.9	2.8	3.2	2.5	2.0	1.9	.45	.19	9.6	6.6	6.9
19	2.3	3.0	2.7	3.2	2.5	2.0	1.8	.44	.07	8.3	6.7	12
20	2.3	2.9	2.7	3.0	2.5	2.1	1.8	.43	.00	7.6	6.7	12
21	2.1	2.8	2.8	3.1	2.6	2.2	1.7	.44	1.5	7.2	6.2	7.1
22	2.1	2.7	2.9	3.0	2.5	2.1	1.5	8.3	1.6	7.1	5.2	5.1
23	2.2	2.8	2.7	3.0	2.6	2.1	1.7	33	.42	8.1	e4.5	4.4
24	2.2	2.8	2.5	3.0	2.5	2.2	1.6	11	.07	7.2	e3.5	3.9
25	2.2	2.8	2.4	2.9	2.3	2.3	1.6	3.6	.02	58	e3.0	3.7
26	2.1	2.7	2.4	2.9	2.4	2.4	1.5	2.0	.00	92	e2.0	3.3
27	2.1	2.6	2.5	2.9	2.5	2.3	1.3	1.4	.00	20	e1.7	2.8
28	2.1	2.5	2.6	2.9	2.7	2.4	1.3	1.0	.00	16	e1.5	3.0
29	2.1	2.5	2.6	2.9	---	2.1	1.2	.89	.00	10	e1.2	2.8
30	2.3	2.6	2.5	2.9	---	2.0	1.3	.76	.00	4.4	.85	2.7
31	2.5	---	2.4	2.9	---	2.2	---	.57	---	3.1	.96	---
TOTAL	569.0	85.6	83.3	87.3	73.9	67.0	65.1	79.00	46.26	639.60	196.87	234.5
MEAN	18.4	2.85	2.69	2.82	2.64	2.16	2.17	2.55	1.54	20.6	6.35	7.82
MAX	297	3.5	2.9	3.2	3.0	2.5	3.1	33	14	94	26	63
MIN	2.1	2.5	2.4	2.5	2.3	1.9	1.2	.43	.00	.00	.85	1.1
AC-FT	1130	170	165	173	147	133	129	157	92	1270	390	465

CAL YR 1990 TOTAL 2201.03 MEAN 6.03 MAX 297 MIN .00 AC-FT 4370
WTR YR 1991 TOTAL 2227.43 MEAN 6.10 MAX 297 MIN .00 AC-FT 4420

e Estimated

RIO GRANDE BASIN

08410000 RED BLUFF RESERVOIR NEAR ORLA, TX

LOCATION.--Lat 31°54'04", long 103°54'35", Reeves County, Hydrologic Unit 13070001, at right end of Red Bluff Dam on the Pecos River, 2.8 mi upstream from Salt Creek, and 5.2 mi north of Orla.

DRAINAGE AREA.--20,720 mi², approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage. Datum of gage is 0.43 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--The reservoir is formed by a rock-faced earthfill dam 9,200 ft long. The dam was completed and storage began in September 1936. The dam and reservoir are owned and operated by the Red Bluff Water Power Control District. The water is used for power development and for irrigation from Mentone to Grandfalls. The uncontrolled emergency spillway, 790 ft wide, is a cut through natural ground located to the right of right end of dam. The controlled service spillway is equipped with 12 tainter gates that are 25- by 15-ft high. Inflow is regulated by many reservoirs and diversion dams. The capacity curve is based on Geological Survey topographic map and aerial photography, survey of 1986. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	2,856.0	-
Crest of emergency spillway.....	2,845.0	324,000
Top of gates (top of conservation pool).....	2,842.0	289,700
Crest of service spillway and bottom of tainter gates.....	2,827.0	155,700
Lowest gated outlet (invert).....	2,764.0	2,800

COOPERATION.--Gage-height records and capacity curve were furnished by the Red Bluff Water Power and Control District.

EXTREMES (AT 0800) FOR PERIOD OF RECORD.--Maximum contents observed, 352,000 acre-ft Sept. 27, 28, 1941 (gage height, 2,846.2 ft), observed on nonrecording gage at service spillway (affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft May 13, 1948 (gage height, 2,781.4 ft).

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents observed, 77,440 acre-ft Mar. 1-15 (gage height, 2,812.8 ft); minimum observed, 50,950 acre-ft Sept. 3 (gage height, 2,805.5 ft).

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

2,805.0	49,440	2,808.0	59,010	2,811.0	70,070
2,806.0	52,460	2,809.0	62,530	2,812.0	74,090
2,807.0	55,650	2,810.0	66,220	2,813.0	78,280

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64370	65480	70070	72080	75350	77440	76600	69680	59360	54050	56990	51250
2	64740	65480	70070	72080	75770	77440	76600	69300	59010	53740	56990	51250
3	65480	65480	70070	72080	75770	77440	76600	69300	59010	53740	56990	50950
4	65850	65480	70070	72080	75770	77440	76600	68910	59010	53740	56990	51250
5	66220	65480	70070	72480	75770	77440	76600	68530	58670	53740	56990	51250
6	66220	65480	70470	72480	75770	77440	76600	68140	58340	53420	56990	51250
7	66220	65850	70470	72480	75770	77440	76600	67760	58340	53420	56990	51860
8	66600	66220	70470	72480	76180	77440	76600	67370	58000	53420	56660	53100
9	66600	66600	70470	72880	76180	77440	76600	66600	58000	53100	56320	53420
10	66990	66990	70470	72880	76180	77440	76600	66220	58000	53100	56320	53420
11	66990	66990	70470	73290	76180	77440	76180	65850	58000	53100	56320	54690
12	66990	67370	70470	73290	76600	77440	76180	65110	58000	53740	55990	55010
13	66990	67370	70470	73290	76600	77440	75770	64370	58000	53740	55990	55650
14	66990	67370	70870	73290	76600	77440	75350	64000	58000	55010	56320	52780
15	67370	67760	70870	73690	76600	77440	74930	63260	57660	55010	56320	53100
16	67370	68140	70870	73690	76600	77020	74930	62530	57660	55650	55990	53740
17	67370	68140	70870	73690	76600	77020	74510	61820	57660	55650	55650	54370
18	67370	68530	70870	74090	76600	77020	74510	61470	57660	55650	55010	59010
19	67370	68530	70870	74090	76600	77020	74510	61120	57660	55650	54370	60420
20	66990	68910	71280	74090	77020	77020	74090	60770	57330	55650	54050	61820
21	66990	68910	71280	74090	77020	77020	74090	60420	56990	55650	53740	63260
22	66600	69300	71280	74510	77020	77020	73690	60420	56660	55650	53100	64370
23	66220	69300	71280	74510	77020	77020	73290	60060	56320	55650	53100	65850
24	66220	69300	71280	74510	77020	77020	72480	60060	55990	55330	52780	67370
25	66220	69300	71280	74930	77020	77020	71680	60060	55650	55330	52780	68530
26	66220	69680	71680	74930	77020	77020	71280	60060	55010	55330	52460	69680
27	66220	69680	71680	74930	77020	76600	70870	59710	54690	56320	52160	70870
28	66220	69680	71680	74930	77020	76600	70470	59710	54370	56660	52160	72080
29	66600	69680	71680	75350	---	76600	70470	59710	54050	56990	51860	73290
30	66600	69680	71680	75350	---	76600	70070	59710	54050	56990	51860	74510
31	66220	---	72080	75350	---	76600	---	59360	---	56990	51550	---
MAX	67370	69680	72080	75350	77020	77440	76600	69680	59360	56990	56990	74510
MIN	64370	65480	70070	72080	75350	76600	70070	59360	54050	53100	51550	50950
(†)	2810.0	2810.9	2811.5	2812.3	2812.7	2812.6	2811.0	2808.1	2806.5	2807.4	2805.7	2812.1
(†)	+1850	+3460	+2400	+3270	+1670	-420	-6530	-10710	-5310	+2940	-5440	+22960

CAL YR 1990 MAX 102700 MIN 58330 (†) -25600
WTR YR 1991 MAX 77440 MIN 50950 (†) +10140

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

MIMBRES RIVER BASIN

08477110 MIMBRES RIVER AT MIMBRES, NM

LOCATION.--Lat 32°51'17", long 107°58'23", in NW¼SW¼ sec.3, T.17 S., R.11 W., Grant County, Hydrologic Unit 13030202, on left bank 100 ft downstream from Willow Springs Canyon, 0.3 mi east of Mimbres, 1.1 mi downstream from Shepard Canyon, 2.5 mi downstream from Bear Canyon, and at mile 73.1.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--March 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,920 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 17, 1979, at datum 2.29 ft higher.

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

AVERAGE DISCHARGE.--13 years, 20.9 ft³/s, 15,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft³/s, Dec. 28, 1984, gage height, 8.05 ft, from floodmarks, from rating curve extended above 450 ft³/s on basis of slope-area measurements at gage heights 6.70 ft and 8.05 ft; minimum, 0.22 ft³/s, Aug. 22, 1980.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 6	1230	424	4.38	Aug. 9	1345	474	4.43
July 25	1500	*1,180	*5.48	Aug. 16	1645	373	4.22
Aug. 3	1900	338	4.14	Aug. 18	0330	737	4.86

Minimum discharge, 6.8 ft³/s, June 29, 30, July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	9.6	10	41	18	124	37	24	12	7.6	51	e74
2	11	11	10	34	18	159	38	23	11	7.8	80	e66
3	12	11	11	29	18	145	41	23	12	7.9	272	e82
4	10	11	11	32	17	159	45	24	12	7.3	237	e60
5	11	11	11	52	17	196	50	23	11	7.1	145	e54
6	12	11	10	74	18	367	55	24	10	7.0	61	e48
7	12	12	9.6	84	18	322	62	23	11	6.8	38	e43
8	13	13	9.2	76	19	193	71	23	11	7.4	33	e56
9	13	12	9.4	64	19	131	71	22	11	7.7	50	e55
10	13	11	11	57	20	101	67	22	12	7.5	115	32
11	13	11	11	50	21	86	62	21	12	7.2	135	e37
12	13	10	10	43	23	75	57	21	11	7.1	106	35
13	10	10	10	38	25	66	52	21	10	6.9	85	e23
14	11	10	10	36	26	60	45	20	9.8	7.5	88	e24
15	11	10	11	33	29	54	40	20	9.3	8.7	86	e21
16	11	10	19	31	33	49	36	19	8.7	7.8	133	e22
17	12	10	33	29	45	44	34	17	8.5	7.8	149	e21
18	11	10	19	27	58	41	34	16	8.7	7.4	438	e23
19	9.2	10	16	26	53	38	34	16	8.8	7.1	155	e27
20	9.8	11	15	25	50	35	35	17	8.4	7.4	118	e22
21	9.7	12	15	24	51	35	36	17	8.4	18	92	e23
22	11	12	14	23	56	33	37	17	7.9	10	e70	e23
23	11	11	13	23	61	31	37	16	8.0	9.8	e65	e24
24	12	11	13	21	64	31	35	15	8.1	9.5	e100	e24
25	12	11	13	21	64	32	33	15	8.1	48	e110	22
26	12	12	13	21	64	34	30	15	8.2	59	90	22
27	12	11	13	20	62	36	26	13	7.8	54	e139	21
28	13	11	43	20	84	37	25	14	7.0	34	e136	21
29	13	11	106	20	---	35	25	14	6.8	24	e129	20
30	11	11	90	19	---	36	25	13	6.8	21	e122	20
31	9.5	---	54	18	---	36	---	13	---	37	e115	---
TOTAL	353.7	327.6	643.2	1111	1051	2821	1275	581	285.3	473.3	3743	1045
MEAN	11.4	10.9	20.7	35.8	37.5	91.0	42.5	18.7	9.51	15.3	121	34.8
MAX	13	13	106	84	84	367	71	24	12	59	438	82
MIN	9.2	9.6	9.2	18	17	31	25	13	6.8	6.8	33	20
AC-FT	702	650	1280	2200	2080	5600	2530	1150	566	939	7420	2070

CAL YR 1990 TOTAL 2759.17 MEAN 7.56 MAX 106 MIN .52 AC-FT 5470
WTR YR 1991 TOTAL 13710.1 MEAN 37.6 MAX 438 MIN 6.8 AC-FT 27190

e Estimated

TULAROSA VALLEY BASIN

08481500 TULAROSA CREEK NEAR BENT, NM
(National stream-quality accounting network station)

LOCATION.--Lat 33°08'41", long 105°53'50", in SE¼NW¼ sec.32, T.13 S., R.11 E., Otero County, Hydrologic Unit 13044503, on right bank 45 ft downstream from bridge on old U.S. Highway 70, 2.6 mi west of Bent, 8.5 mi northeast of Tularosa, and at mile 19.4.

DRAINAGE AREA.--120 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1947 to current year. Prior to October 1982 published as "Rio Tularosa near Bent."

REVISED RECORDS.--WSP 1312: 1949(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,450 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,000 acres, 1959 determination, upstream from station.

AVERAGE DISCHARGE.--43 years (1949-91), 12.2 ft³/s, 8,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,280 ft³/s, June 18, 1965, gage height, 5.02 ft, from rating curve extended above 160 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 5.60 ft, Aug. 8, 1988, and July 14, 1991, discharge not determined; no flow May 14, 1955, result of unusual regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 ft³/s was computed for station approximately 6 mi downstream near Tularosa. Another flood may have occurred July 2, 1914.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 125 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 1	1415	422	3.18	Aug. 10	1500	930	3.41
July 14	1445	not determined	*5.60	Aug. 14	0145	*4,610	4.91
July 24	1440	605	3.21	Sept. 12	2345	162	2.72

Minimum discharge, 8.3 ft³/s, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e26	e25	23	23	22	27	20	19	16	28	e14	30
2	e28	e25	23	23	22	26	19	19	16	14	e14	30
3	e27	e25	23	23	22	26	22	20	16	14	e30	28
4	e27	e24	23	23	22	26	22	19	15	14	e21	27
5	e27	e24	23	23	22	25	21	19	15	14	e17	29
6	e27	e24	23	23	22	24	21	20	15	14	e15	30
7	e27	24	23	23	22	23	20	20	15	12	e14	30
8	e26	24	23	23	22	23	19	19	15	12	e18	30
9	e26	24	23	23	22	23	20	19	13	13	e24	30
10	e26	24	23	23	22	22	20	19	15	14	e47	34
11	26	24	23	22	22	23	20	19	15	14	e30	33
12	e26	25	23	22	23	23	19	16	15	14	e36	37
13	e26	26	26	22	23	23	19	17	15	14	e35	28
14	e26	26	25	22	23	23	17	17	16	e170	e347	27
15	e26	26	24	22	23	22	16	19	16	e83	e32	26
16	e26	26	25	22	23	23	18	19	15	e30	e27	e25
17	e26	26	25	22	24	19	18	19	15	e18	27	e25
18	e26	26	24	22	25	20	19	17	15	e16	28	e25
19	e26	26	24	22	24	22	20	18	15	16	29	e25
20	e26	26	24	22	24	22	20	18	15	20	30	e24
21	e26	26	24	22	24	23	19	19	15	28	31	e24
22	e26	25	24	21	25	22	19	18	15	22	31	e24
23	e26	25	23	21	24	22	19	17	12	20	30	e24
24	e26	25	23	21	24	22	19	17	12	43	30	e24
25	e25	26	23	21	24	22	19	17	11	e25	31	24
26	e25	28	23	21	24	21	19	15	13	e17	30	23
27	e25	23	23	21	24	21	19	14	13	e16	28	23
28	e25	23	25	21	27	21	17	16	13	e15	22	23
29	e25	23	25	22	---	22	19	16	14	e14	31	23
30	e25	23	24	22	---	22	17	15	13	e14	30	24
31	e25	---	24	22	---	19	---	16	---	e14	30	---
TOTAL	806	747	734	685	650	702	576	552	434	772	1159	809
MEAN	26.0	24.9	23.7	22.1	23.2	22.6	19.2	17.8	14.5	24.9	37.4	27.0
MAX	28	28	26	23	27	27	22	20	16	170	347	37
MIN	25	23	23	21	22	19	16	14	11	12	14	23
AC-FT	1600	1480	1460	1360	1290	1390	1140	1090	861	1530	2300	1600

CAL YR 1990 TOTAL 8472 MEAN 23.2 MAX 124 MIN 12 AC-FT 16800
WTR YR 1991 TOTAL 8626 MEAN 23.6 MAX 347 MIN 11 AC-FT 17110

e Estimated

TULAROSA VALLEY BASIN
08481500 TULAROSA CREEK NEAR BENT, NM -- Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 06...	1200	--	23	1220	8.1	19.5	9.5	6.5	9.3	11	690
JAN 24...	1045	--	21	1260	8.3	5.0	4.0	8.1	14.4	--	690
MAR 05...	1250	--	25	1200	8.1	19.0	12.5	10	11.1	--	660
MAY 14...	1225	0.73	18	1200	8.1	32.0	17.0	1.0	9.3	10	660
JUL 18...	1550	--	18	1350	7.8	32.0	19.5	35	9.1	13	800
SEP 24...	1345	--	24	1240	8.0	26.0	13.0	4.5	8.7	<10	670

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
NOV 06...	460	190	52	45	0.7	1.3	282	0	231	500
JAN 24...	450	190	52	43	0.7	1.1	259	14	236	490
MAR 05...	430	180	51	43	0.7	1.2	275	0	225	490
MAY 14...	430	180	51	40	0.7	1.3	279	0	229	500
JUL 18...	570	230	54	44	0.7	1.5	276	0	226	620
SEP 24...	450	180	52	44	0.7	1.2	268	0	220	480

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 06...	61	0.40	14	988	1010	0.490	0.480	0.010	0.020	0.500	0.500
JAN 24...	60	0.50	13	936	993	--	--	<0.010	<0.010	0.570	0.560
MAR 05...	63	0.40	12	961	978	--	--	<0.010	<0.010	0.510	0.490
MAY 14...	62	0.40	13	1000	989	--	0.430	<0.010	0.010	0.430	0.440
JUL 18...	62	0.40	14	1100	1170	0.550	--	0.020	<0.010	0.570	0.590
SEP 24...	58	0.40	14	930	966	--	--	<0.010	<0.010	0.460	0.470

TULAROSA VALLEY BASIN
08481500 TULAROSA CREEK NEAR BENT, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)
NOV 06...	0.060	0.050	0.14	0.70	<0.010	<0.010	2.8	330	<1	24	<0.5
JAN 24...	0.050	<0.010	0.25	0.87	<0.010	<0.010	--	--	--	--	--
MAR 05...	0.040	<0.010	0.16	0.71	<0.010	<0.010	--	--	--	--	--
MAY 14...	0.010	0.030	0.39	0.83	<0.010	<0.010	2.0	10	<1	22	<0.5
JUL 18...	0.030	0.040	0.57	1.2	0.090	0.010	4.7	<10	<1	31	<0.5
SEP 24...	0.020	0.020	--	--	<0.010	<0.010	1.4	<10	--	24	--

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
NOV 06...	<1.0	<1	<3	12	140	2	22	30	<0.1	<10	1
MAY 14...	<1.0	<1	<3	1	9	<1	13	18	<0.1	<10	<1
JUL 18...	<1.0	<1	<3	<1	4	<1	20	35	<0.1	<10	<1
SEP 24...	--	--	<3	--	3	--	19	24	--	<10	<1

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PEN- DED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PEN- DED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 06...	<1	<1.0	2300	<6	10	103	6.3	80	20	K23
JAN 24...	--	--	--	--	--	76	4.2	85	20	K9
MAR 05...	--	--	--	--	--	110	7.5	83	K6	30
MAY 14...	<1	<1.0	2200	<6	8	54	2.7	80	51	39
JUL 18...	1	<1.0	2500	<6	5	240	11	74	200	150
SEP 24...	1	<1.0	2200	<6	--	96	6.3	70	190	>2500

COLORADO RIVER BASIN

SAN JUAN RIVER BASIN

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi², approximately.

PERIOD OF RECORD.--October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,090 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. High-water diversions upstream from station into Rio Grande basin through Azotea tunnel (08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published in "Water resources data for Colorado."

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft³/s, 457,900 acre-ft/yr, prior to completion of Azotea tunnel. 21 years (water years 1971-91), 636 ft³/s, 460,800 acre-ft/yr, since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 9.29 ft, Jan. 15, 1987 (backwater from ice); minimum, about 5 ft³/s, Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	2400	--	*a6.30	May 21	2100	2,680	4.59
April 7	0300	* 3,360	*4.88				

Minimum daily, 140 ft³/s, Jan. 31. a-Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	335	e220	e200	e160	e300	1040	763	1850	840	269	217
2	495	355	e200	e200	e160	e280	1510	838	1690	723	311	217
3	633	468	e180	e200	e170	e290	1570	909	1640	645	645	203
4	511	411	e180	e210	e180	e320	1650	959	1300	593	875	200
5	448	361	e170	e230	e180	e400	2100	921	1300	541	880	199
6	399	350	e170	e280	e180	e470	2390	989	1450	498	782	342
7	366	350	e170	e270	e190	e420	2650	1070	1510	476	801	1020
8	542	335	e180	e250	e200	363	2340	1220	1590	476	616	1150
9	471	321	e180	e240	e220	322	1590	1750	1730	543	467	749
10	417	321	e180	e240	e220	349	1540	1860	1700	483	405	591
11	381	340	e180	e230	e230	370	1460	1990	1670	438	422	745
12	360	360	e190	e230	e230	386	1150	1880	1680	399	445	1160
13	336	369	e190	e210	e230	505	934	1880	1700	368	399	994
14	317	358	e190	e200	e240	586	814	2040	2000	355	421	777
15	299	355	e180	e200	e260	467	830	2030	2010	340	361	678
16	281	350	e170	e190	e300	393	918	1750	1670	319	370	566
17	269	335	e170	e180	e320	341	1150	1520	1610	374	350	495
18	269	326	e170	e170	e300	409	1380	1770	1530	363	304	441
19	269	312	e170	e170	e220	576	1400	2130	1470	331	378	387
20	516	303	e170	e170	e220	619	1390	2180	1390	328	392	361
21	490	316	e170	e170	e240	510	1620	2480	1320	349	327	336
22	372	286	e180	e170	e280	424	1560	2380	1210	450	286	317
23	392	273	e180	e170	e320	332	1350	2270	1120	473	269	282
24	380	281	e190	e160	e320	512	1190	2150	1030	399	277	269
25	375	277	e190	e170	e300	743	1160	1990	952	389	269	261
26	370	285	e200	e170	e280	779	1110	2060	901	392	265	245
27	360	289	e200	e170	e300	702	953	2350	810	368	257	231
28	355	285	e200	e160	e280	629	862	2360	773	330	242	221
29	340	242	e200	e170	---	698	789	2310	776	300	235	220
30	345	e240	e200	e150	---	567	733	2220	829	290	234	210
31	345	---	e200	e140	---	674	---	2030	---	280	234	---
TOTAL	12229	9789	5720	6070	6730	14736	41133	55049	42211	13453	12788	14084
MEAN	394	326	185	196	240	475	1371	1776	1407	434	413	469
MAX	633	468	220	280	320	779	2650	2480	2010	840	880	1160
MIN	269	240	170	140	160	280	733	763	773	280	234	199
AC-FT	24260	19420	11350	12040	13350	29230	81590	109200	83730	26680	25360	27940

CAL YR 1990 TOTAL 159086 MEAN 436 MAX 2800 MIN 60 AC-FT 315500
WTR YR 1991 TOTAL 233992 MEAN 641 MAX 2650 MIN 140 AC-FT 464100

e Estimated

SAN JUAN RIVER BASIN

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 4.6 mi northeast of Arboles Post Office, and 2.5 mi upstream from Navajo Reservoir.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99, 1910-27 at a site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Elevation of gage is 6,147.52 ft above National Geodetic Vertical Datum of 1929, from Colorado State Highway Department bench mark.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published in "Water resources data for Colorado."

AVERAGE DISCHARGE.--29 years, 407 ft³/s, 294,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s, Sept. 6, 1970, gage height, 6.38 ft recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft³/s on basis of slope-area measurement of peak flow; minimum, 11 ft³/s, Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
April 7	0200	*3,380	*4.52	May 22	0600	1,950	3.66

Minimum daily, 65 ft³/s, Jan. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	167	100	e80	e70	132	462	510	926	274	125	e190
2	552	197	95	e80	e70	163	743	605	838	234	135	e200
3	643	223	90	e80	e70	170	935	641	758	209	197	e190
4	521	205	85	e85	78	177	1040	676	668	185	283	e180
5	437	191	85	e95	78	318	1720	629	656	174	294	e280
6	386	188	e90	e110	e80	342	2320	697	746	161	307	e800
7	371	191	103	e100	e80	255	2540	747	779	138	388	e1400
8	389	181	e95	e100	e80	199	2070	905	854	130	305	e1300
9	331	180	e90	e100	e85	184	1360	1270	969	143	250	e1100
10	290	180	e90	e100	e85	187	1330	1340	917	130	237	e800
11	269	187	e95	e95	87	184	1210	1380	877	124	237	e800
12	249	201	e95	e95	84	174	899	1230	962	120	276	e1300
13	229	209	e95	e90	90	187	709	1240	976	115	269	e1200
14	213	205	e90	e85	96	224	616	1350	1210	113	347	e1000
15	197	205	e90	e80	103	213	628	1340	1220	115	365	e850
16	184	205	92	e80	113	205	662	1090	1040	106	331	e700
17	167	205	e90	e75	e115	174	840	966	981	110	299	e600
18	158	202	85	e70	e115	191	1010	1130	956	110	e280	e490
19	158	198	80	e70	118	240	1040	1380	885	117	e460	e440
20	231	195	75	e70	114	261	1020	1370	813	117	e340	e390
21	229	191	70	e70	122	241	1240	1560	769	120	e300	e360
22	199	162	70	e70	125	217	1220	1750	693	145	e270	e330
23	198	155	70	e70	130	192	1040	1450	596	197	e260	e310
24	198	161	75	e70	130	236	919	1210	516	159	e260	e290
25	191	158	75	e70	128	302	861	1090	481	155	e250	e270
26	191	164	80	e70	120	312	766	1090	441	164	e240	e250
27	194	161	80	e70	120	312	665	1230	391	164	e240	e230
28	191	146	80	e70	127	308	590	1240	370	143	e220	e220
29	188	e120	80	e70	---	316	553	1220	343	130	e230	e210
30	181	e110	80	e70	---	282	517	1180	303	130	e200	e200
31	174	---	e80	e65	---	325	---	1050	---	123	e210	---
TOTAL	8625	5443	2650	2505	2813	7223	31525	34566	22934	4555	8405	16880
MEAN	278	181	85.5	80.8	100	233	1051	1115	764	147	271	563
MAX	643	223	103	110	130	342	2540	1750	1220	274	460	1400
MIN	158	110	70	65	70	132	462	510	303	106	125	180
AC-FT	17110	10800	5260	4970	5580	14330	62530	68560	45490	9030	16670	33480

CAL YR 1990 TOTAL 117829 MEAN 323 MAX 2030 MIN 24 AC-FT 233700
WTR YR 1991 TOTAL 148124 MEAN 406 MAX 2540 MIN 65 AC-FT 293800

e Estimated

SAN JUAN RIVER BASIN

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--510 mi², approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.59 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published in "Water resources data for Colorado."

AVERAGE DISCHARGE.--41 years, 236 ft³/s, 171,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s, July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft³/s; minimum daily, 6.1 ft³/s, May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911, has not yet been exceeded.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 831 ft³/s, at 0600 hours April 7, gage height, 5.24 ft; maximum gage height, 9.00 ft (ice jam), sometime during period Dec. 23 to Jan. 17; minimum daily discharge 80 ft³/s, Jan. 27-31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	267	137	e130	e85	e160	322	223	205	164	210	192
2	271	279	141	e130	e85	e150	239	171	223	161	185	199
3	242	283	147	e110	e90	e160	286	136	241	148	170	199
4	220	252	e140	e120	e95	e170	557	130	227	145	e170	202
5	214	245	e130	e130	e95	e210	627	120	210	161	e180	196
6	216	241	e130	e150	e95	e250	697	94	220	170	e190	357
7	240	255	e130	e140	e100	218	752	89	217	173	e210	414
8	266	267	e130	e130	e110	177	729	101	189	185	e200	342
9	265	263	e130	e130	e110	164	653	209	185	206	e180	243
10	271	267	e130	e130	e120	167	640	189	192	199	e190	241
11	283	263	e100	e120	e120	161	573	202	206	176	202	458
12	366	252	e100	e120	e120	155	309	226	240	173	220	457
13	446	245	e100	e110	e120	170	361	227	248	195	198	325
14	441	241	e100	e110	e130	179	340	193	316	195	195	224
15	451	238	e100	e100	e140	176	333	185	340	192	199	183
16	449	234	e100	e100	e150	173	331	164	300	170	185	170
17	457	234	e100	e95	e160	164	349	152	279	173	170	167
18	452	237	e140	e90	e150	167	371	143	238	243	179	179
19	462	241	e180	e90	e110	182	371	120	224	227	243	182
20	608	241	e180	e90	e120	188	367	130	220	196	200	187
21	613	239	e180	e90	e130	182	380	232	189	199	182	192
22	367	238	e180	e90	e150	240	390	360	185	192	176	192
23	304	234	e180	e90	e170	325	442	254	170	206	188	168
24	283	207	e180	e90	e160	276	430	234	167	206	202	143
25	279	206	e180	e90	e150	287	415	215	161	227	233	133
26	275	e190	e180	e90	e150	299	386	210	167	237	237	120
27	275	169	e150	e80	e160	383	385	199	167	224	214	103
28	271	182	e130	e80	e150	281	405	176	173	210	213	117
29	267	156	e130	e80	---	303	390	192	155	220	199	127
30	267	133	e130	e80	---	291	273	176	155	230	174	130
31	267	---	e130	e80	---	304	---	170	---	196	192	---
TOTAL	10375	6999	4295	3265	3525	6712	13103	5622	6409	5999	6086	6542
MEAN	335	233	139	105	126	217	437	181	214	194	196	218
MAX	613	283	180	150	170	383	752	360	340	243	243	458
MIN	214	133	100	80	85	150	239	89	155	145	170	103
AC-FT	20580	13880	8520	6480	6990	13310	25990	11150	12710	11900	12070	12980
CAL YR 1990	TOTAL 59547	MEAN 163	MAX 1220	MIN 19	AC-FT 118100							
WTR YR 1991	TOTAL 78932	MEAN 216	MAX 752	MIN 80	AC-FT 156600							

e Estimated

SAN JUAN RIVER BASIN

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for flows above 100 ft³/s, which are fair, and those for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from the Los Pinos River near Bayfield, CO, which causes a considerable change in the annual pattern and natural flow. Several observations of specific conductance and water temperature were obtained and are published in "Water resources data for Colorado."

AVERAGE DISCHARGE.--41 years, 32.0 ft³/s, 23,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s, Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft³/s on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 ft³/s, Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 340 ft³/s, at 2000 hours May 21, gage height, 2.30 ft; maximum gage height, 4.40 ft, Feb. 17 (backwater from ice); minimum daily discharge, 3.4 ft³/s, Feb. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	5.5	4.9	e4.0	e3.6	18	5.8	23	66	90	e62	57
2	45	17	e4.8	e4.0	e3.4	84	7.3	14	70	82	60	60
3	43	20	e4.8	e4.0	e3.8	62	9.0	18	83	79	66	60
4	34	7.0	e4.6	e4.0	e4.0	35	9.1	20	72	80	65	64
5	36	6.2	e4.6	e4.4	e4.4	25	9.5	21	68	82	66	69
6	37	6.2	e4.5	e4.8	e4.6	22	10	21	68	85	91	144
7	45	9.0	e4.5	e5.0	e4.4	12	12	22	69	78	120	140
8	53	14	e4.6	e6.0	e4.4	7.8	11	26	65	80	66	69
9	38	13	e4.8	e5.5	e4.4	6.6	7.4	29	61	75	65	54
10	47	11	e4.6	e5.0	e4.8	6.6	6.6	34	62	69	65	64
11	50	7.8	e4.6	e5.0	e5.5	6.6	6.2	32	68	69	72	111
12	44	6.6	e4.8	e5.0	e5.5	6.2	5.8	33	80	72	89	130
13	40	6.2	e5.0	e5.0	e5.5	5.5	5.5	34	73	80	69	47
14	39	6.2	e5.0	e4.8	e5.5	6.0	5.1	36	112	75	65	38
15	37	5.8	e4.6	e4.6	e5.5	6.6	4.8	37	118	69	61	37
16	36	5.8	e4.6	e4.4	e6.0	8.1	4.8	40	92	70	57	37
17	34	5.5	e4.4	e4.4	e6.5	8.2	4.8	41	81	70	47	37
18	36	5.8	e4.2	e4.2	e7.5	6.2	4.8	40	73	79	56	37
19	39	5.2	e4.2	e4.0	e10	5.8	4.8	43	77	e65	72	37
20	52	5.8	e4.2	e3.8	e15	5.8	4.8	45	83	e60	57	37
21	25	6.2	e4.0	e3.6	e20	6.2	4.5	142	76	e60	49	37
22	8.7	5.5	e4.0	e3.6	28	6.2	4.5	172	75	e60	48	36
23	7.0	5.8	e3.8	e3.6	18	5.8	4.5	75	71	e64	49	33
24	6.6	5.2	e3.8	e3.6	24	5.5	4.3	79	68	e68	56	34
25	6.2	6.2	e3.8	e3.6	20	5.8	4.0	73	74	e70	62	35
26	5.8	6.6	e3.8	e3.6	12	6.2	4.0	68	82	69	64	35
27	5.8	7.7	e4.0	e3.6	9.7	7.3	34	70	80	69	60	36
28	5.5	6.6	e4.0	e3.8	7.5	7.0	13	65	89	e68	66	34
29	5.5	e6.0	e4.0	e3.6	---	5.5	12	61	93	e70	70	34
30	5.5	e5.5	e4.0	e3.6	---	5.5	16	53	88	68	54	32
31	5.1	---	e4.0	e4.0	---	5.0	---	60	---	e62	54	---
TOTAL	911.7	230.9	135.5	132.1	253.5	410.0	239.9	1527	2337	2237	2003	1675
MEAN	29.4	7.70	4.37	4.26	9.05	13.2	8.00	49.3	77.9	72.2	64.6	55.8
MAX	53	20	5.0	6.0	28	84	34	172	118	90	120	144
MIN	5.1	5.2	3.8	3.6	3.4	5.0	4.0	14	61	60	47	32
AC-FT	1810	458	269	262	503	813	476	3030	4640	4440	3970	3320

CAL YR 1990 TOTAL 9797.6 MEAN 26.8 MAX 186 MIN 2.0 AC-FT 19430
WTR YR 1991 TOTAL 12092.6 MEAN 33.1 MAX 172 MIN 3.4 AC-FT 23990

e Estimated

SAN JUAN RIVER BASIN

09355100 NAVAJO RESERVOIR NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'28", long 107°36'31", in SW¼SE¼ sec.18, T.30 N., R.7 W., San Juan County, Hydrologic Unit 14080101, in gate shaft of outlet works structure near right abutment of Navajo Dam on San Juan River, 5.5 mi east of Archuleta, 33 mi east of Farmington, and at mile 298.6.

DRAINAGE AREA.--3,230 mi², approximately.

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

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1968 dead storage included.

REMARKS.--Reservoir is formed by earth rock-fill dam, completed in June 1963; storage began June 27, 1962. Capacity, 1,708,600 acre-ft between elevation 5,720 ft upstream toe of dam and 6,085 ft crest of spillway. Usable capacity 1,696,000 acre-ft above elevation 5,774.9 ft minimum operating level. Dead storage below elevation 5,774.9 ft is 12,600 acre-ft. Figures given herein are usable contents. Reservoir is used for irrigation storage, river regulation, desilting, flood control, and recreation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,731,000 acre-ft, July 2-4, 1973, elevation, 6,087.25 ft; minimum contents after June 1964 (initial filling period), 234,300 acre-ft, Mar. 10, 11, 1965, elevation, 5,906.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,601,600 acre-ft, June 29, elevation, 6,078.77 ft; minimum contents, 1,362,100 acre-ft, Oct. 1, elevation, 6,061.43 ft.

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

6,015	864.5	6,035	1,056.7	6,055	1,281.3	6,075	1,546.2
6,020	910.1	6,040	1,109.4	6,060	1,343.5	6,080	1,619.5
6,025	957.2	6,045	1,164.3	6,065	1,408.3	6,085	1,696.0
6,030	1,006.0	6,050	1,221.6	6,070	1,475.8	6,090	1,775.7

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1362100	1383700	1391000	1381700	1370500	1368700	1397100	1487200	1538200	1601300	1574700	1565500
2	1363600	1384500	1390800	1381300	1370100	1369300	1401100	1485100	1541000	1601000	1573900	1564600
3	1365200	1385200	1390400	1381100	1369300	1369500	1406100	1484300	1543100	1600500	1573900	1563800
4	1366300	1385800	1390000	1381500	1368400	1372700	1413000	1484700	1544300	1600000	1575100	1563000
5	1367200	1386200	1389300	1381400	1368100	1375200	1420900	1484500	1546900	1599000	1575600	1563200
6	1368200	1387000	1389200	1381100	1367700	1377200	1430300	1482700	1549600	1598100	1577800	1565800
7	1368300	1387500	1388700	1381500	1367300	1377600	1440200	1480300	1552800	1597200	1578800	1570000
8	1368600	1388200	1388300	1381400	1366800	1378000	1446900	1478800	1556300	1596300	1578800	1572900
9	1369000	1388600	1388000	1381000	1366500	1378400	1452100	1478800	1559100	1595700	1578300	1573700
10	1369300	1388800	1387600	1380600	1366100	1378700	1456300	1478700	1562800	1594500	1577800	1575400
11	1369600	1389200	1387500	1379800	1365700	1378700	1460300	1479200	1565900	1593100	1577700	1578600
12	1371300	1389600	1387600	1379400	1365200	1379200	1464100	1479200	1568400	1592200	1577700	1583100
13	1373100	1389900	1387800	1378700	1365200	1380000	1466200	1479600	1570000	1591500	1577700	1585300
14	1374600	1390300	1387500	1378500	1365000	1380500	1468300	1479900	1577400	1590900	1577200	1587200
15	1375700	1390500	1387300	1378100	1365000	1381000	1469600	1480100	1581900	1589700	1576800	1588100
16	1375700	1390500	1387300	1377800	1365400	1381400	1471200	1480500	1584600	1588200	1576300	1588500
17	1375900	1390900	1387300	1377000	1367000	1381500	1473900	1480900	1588500	1587200	1575400	1589700
18	1376700	1391300	1387100	1377000	1367700	1381900	1476300	1482600	1591200	1586700	1574600	1589900
19	1377500	1391700	1386600	1375900	1367800	1382000	1478400	1485500	1593600	1585000	1574600	1589900
20	1380500	1391700	1386500	1375800	1367900	1382700	1480100	1489300	1595600	1584100	1574000	1590000
21	1381000	1391800	1386300	1375300	1368100	1383100	1483000	1495600	1597200	1583200	1573700	1590100
22	1381400	1392100	1385600	1374900	1368300	1384600	1485000	1501300	1598400	1582500	1572500	1590000
23	1382200	1392200	1385000	1374800	1368300	1385700	1487500	1506000	1599900	1581900	1571500	1590100
24	1381900	1392400	1384400	1374400	1368700	1385800	1489000	1509500	1600200	1581000	1570900	1589700
25	1382200	1392500	1383700	1374300	1368200	1386600	1490000	1513000	1600600	1581100	1570500	1589300
26	1382200	1392500	1383000	1373900	1368100	1387000	1490800	1516200	1600800	1579700	1569800	1588800
27	1382300	1392200	1383000	1373500	1368200	1390300	1491500	1520500	1601100	1579200	1569300	1587900
28	1382400	1392000	1382700	1372800	1368200	1391300	1492500	1524700	1601100	1578300	1568400	1587500
29	1382400	1391800	1382400	1372100	---	1392500	1492000	1528800	1601600	1577800	1567600	1587000
30	1383000	1391400	1382400	1371500	---	1393300	1491100	1532100	1601400	1576600	1566700	1586400
31	1383300	---	1382000	1370800	---	1395000	---	1535500	---	1575400	1566300	---
MAX	1383300	1392500	1391000	1381700	1370500	1395000	1492500	1535500	1601600	1601300	1578800	1590100
MIN	1362100	1383700	1382000	1370800	1365000	1368700	1397100	1478700	1538200	1575400	1566300	1563000
(+)	6063.07	6063.69	6062.97	6062.10	6061.90	6063.96	6071.08	6074.25	6078.76	6077.03	6076.38	6077.76
(++)	+22300	+8100	-9400	-11200	-2600	+26800	+96100	+44400	+65900	-26000	-9100	+20100

CAL YR 1990 MAX 1392500 MIN 1177500 (++) +151100
WTR YR 1991 MAX 1601600 MIN 1362100 (++) +225400

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

SAN JUAN RIVER BASIN

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'05", long 107°41'51", in NW¼NE¼ sec.20, T.30 N., R.8 W., San Juan County, Hydrologic Unit 14080101, on left bank 0.5 mi upstream from Gobernador Canyon, 0.8 mi northeast of Archuleta, 7.2 mi downstream from Navajo Dam, and at mile 291.4.

DRAINAGE AREA.--3,260 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1954 to current year.

REVISED RECORDS.--The annual runoff for the 1958 water year as published in table 2, WSP 1733, is 455,000 acre-ft. The correct value is 1,455,000 acre-ft.

GAGE.--Water-stage recorder. Elevation of gage is 5,653 ft above National Geodetic Vertical Datum of 1929, from river-profile survey. Prior to Dec. 29, 1959, at site 5.0 mi upstream at elevation 55 ft higher. Dec. 29, 1959 to Nov. 15, 1964, at site 0.4 mi upstream at elevation 5 ft higher. Prior to Nov. 28, 1966, at elevation 2.0 ft higher.

REMARKS.--Water-discharge records good. Flow completely regulated by Navajo Reservoir (station 09355100) 7 mi upstream except for minor inflow from 30 mi² intervening drainage area. High-water diversions through Azotea tunnel (station 08284160) into Rio Grande basin began in March 1971. Diversions for irrigation of about 47,000 acres upstream from station. Releases from Navajo Reservoir, beginning in January 1976, for use on Navajo Indian Irrigation Project bypass gage in tunnel on left bank. See tabulation below for monthly and annual releases as furnished by U.S. Bureau of Reclamation. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--7 years (water years 1956-62), 1,304 ft³/s, 944,700 acre-ft/yr, prior to closure of Navajo Dam. 29 years (water years 1963-91), 1,186 ft³/s, 859,300 acre-ft/yr, since closure of Navajo Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft³/s, July 27, 1957, gage height, 11.00 ft, site and datum then in use; minimum determined, 8 ft³/s, Feb. 28, 1963. Maximum discharge since construction of Navajo Dam in 1962, 6,500 ft³/s, June 20, 1965, gage height, 4.57 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,930 ft³/s, May 10; minimum daily, 504 ft³/s, Dec. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	553	525	506	535	556	564	2260	1090	585	645	599
2	592	555	524	506	535	551	562	2210	1080	585	642	599
3	595	554	521	506	535	553	566	1720	1090	583	647	597
4	591	549	520	525	535	549	565	1370	1080	591	643	595
5	589	547	520	538	535	552	567	1370	814	594	649	593
6	590	541	518	541	535	549	569	1710	542	598	630	617
7	591	542	520	543	531	542	576	2830	547	600	634	594
8	588	541	521	553	529	546	579	2880	547	603	613	593
9	583	541	538	541	532	543	573	2920	549	603	598	598
10	584	542	533	544	535	543	576	2930	553	599	589	610
11	586	539	518	535	540	549	578	2910	556	604	587	610
12	589	541	524	535	541	550	578	2900	560	605	587	642
13	585	544	528	535	544	547	578	2890	606	604	595	606
14	581	545	524	535	543	549	578	2890	563	604	592	604
15	581	541	520	535	544	547	760	2890	566	607	587	601
16	578	546	525	537	544	549	961	2690	561	610	590	600
17	577	549	525	535	549	553	1020	2230	560	612	590	600
18	569	553	512	535	545	552	1100	1910	561	614	591	606
19	556	548	513	532	549	550	1250	1730	566	614	592	606
20	536	550	522	529	550	554	1350	1700	566	614	592	606
21	522	547	517	537	557	550	1370	1360	566	617	595	607
22	529	547	517	534	551	553	1360	1240	563	618	593	606
23	536	548	512	542	547	556	1260	1130	561	620	589	609
24	546	541	509	535	543	560	1240	1310	560	624	589	605
25	545	541	506	535	544	561	1290	1100	560	621	592	605
26	547	546	510	536	548	567	1390	1080	562	623	591	600
27	547	535	509	533	542	565	1380	1090	569	619	596	602
28	549	528	509	535	546	567	1380	1090	576	622	591	601
29	545	524	507	534	---	570	1470	1090	585	637	591	601
30	547	521	507	529	---	572	1660	1080	584	629	597	598
31	550	---	504	531	---	566	---	1080	---	641	598	---
TOTAL	17595	16299	16058	16527	15164	17171	28250	59590	19243	18900	18715	18110
MEAN	568	543	518	533	542	554	942	1922	641	610	604	604
MAX	595	555	538	553	557	572	1660	2930	1090	641	649	642
MIN	522	521	504	506	529	542	562	1080	542	583	587	593
AC-FT	34900	32330	31850	32780	30080	34060	56030	118200	38170	37490	37120	35920
(†)	5658	0	0	0	0	3162	11210	18400	26800	36300	30200	19200

CAL YR 1990 TOTAL 192328 MEAN 527 MAX 643 MIN 463 AC-FT 381500
WTR YR 1991 TOTAL 261622 MEAN 717 MAX 2930 MIN 504 AC-FT 518900

(†) DISCHARGE, IN ACRE-FT, THROUGH NAVAJO INDIAN IRRIGATION TUNNEL.

SAN JUAN RIVER BASIN

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 26...	1230	546	272	8.4	9.0	5.5	2.0	12.0	110
JAN 08...	1630	570	258	8.7	6.0	6.0	5.0	11.3	110
FEB 04...	1341	550	259	8.2	7.5	5.5	5.4	11.4	100
APR 01...	1515	552	250	8.8	15.5	9.0	4.5	11.7	100
JUL 08...	1400	595	263	8.7	25.0	12.0	2.0	9.4	110
SEP 04...	1030	576	269	7.6	24.0	9.0	0.60	10.6	100

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
NOV 26...	15	33	6.3	15	0.6	1.9	93	10
JAN 08...	20	32	6.1	16	0.7	1.9	95	4
FEB 04...	19	32	6.0	15	0.6	2.0	98	3
APR 01...	17	31	5.6	15	0.7	1.9	90	6
JUL 08...	25	34	6.3	16	0.7	1.9	95	5
SEP 04...	18	31	6.0	14	0.6	1.9	103	0

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
NOV 26...	92	51	3.5	0.30	10	185	177
JAN 08...	84	50	1.4	<0.10	10	171	168
FEB 04...	85	42	3.6	0.10	10	151	162
APR 01...	84	48	4.0	0.20	9.5	158	165
JUL 08...	86	53	4.0	0.20	9.6	168	177
SEP 04...	84	53	3.0	0.20	9.5	157	169

SAN JUAN RIVER BASIN

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Elevation of gage is 5,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 20,000 acres upstream from station. During water years 1944-49, Twin Rocks Canal diverted upstream from station for irrigation downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Satellite telemeter at station.

AVERAGE DISCHARGE.--58 years, 914 ft³/s, 662,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, June 19, 1949, gage height, 11.45 ft; minimum, 63 ft³/s, Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in October 1911 at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11	0115	*4,250	*7.94	No other peak greater than base discharge.			
Minimum daily, 224 ft ³ /s, Dec. 23.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	917	528	400	e345	e244	298	377	689	2580	1270	472	428
2	941	576	416	e351	e233	361	449	711	2260	1150	502	420
3	1140	584	389	e339	e233	354	541	768	2040	1050	490	429
4	1030	504	355	e380	e242	349	600	739	1750	975	531	421
5	924	439	357	e424	240	464	767	710	1690	911	609	518
6	854	471	352	e358	225	448	1110	745	2020	861	557	821
7	822	508	335	e315	225	327	1440	897	2300	796	621	1540
8	853	510	361	e281	232	295	1400	1100	2630	742	590	2040
9	910	434	350	e260	234	285	1180	1770	3110	898	572	e1300
10	782	435	354	e297	230	287	1090	1950	2890	978	581	1020
11	755	435	351	e293	234	297	1070	2060	2660	817	581	2220
12	747	453	352	e280	242	290	936	1920	2810	735	640	2120
13	744	454	366	e268	249	293	822	1910	2850	732	701	1930
14	721	464	379	e269	260	304	746	2180	2810	678	627	1750
15	691	438	356	e272	262	306	707	2330	2730	749	595	1540
16	648	432	318	e269	280	311	684	1970	2390	708	528	1300
17	615	433	352	e271	377	303	737	1760	2440	699	492	1120
18	599	429	327	e276	348	295	913	2170	2640	728	456	942
19	598	419	348	e256	285	308	1050	2830	2400	775	494	848
20	715	407	367	e268	250	321	1060	2980	2180	690	574	792
21	617	404	e364	e296	275	324	1210	3080	2190	671	518	771
22	537	392	e301	e281	280	320	1300	2940	2110	740	503	675
23	580	365	e224	e270	280	315	1220	2620	1930	813	487	613
24	552	381	e245	e255	279	307	1080	2400	1760	821	503	616
25	530	371	e264	e228	277	335	979	2230	1590	767	451	557
26	558	375	e270	e246	256	352	981	2290	1420	679	460	542
27	540	385	e317	e265	249	388	909	2660	1230	654	493	472
28	547	352	e317	e271	269	360	836	3020	1140	582	444	475
29	530	332	e365	e260	---	356	773	3060	1280	520	454	443
30	537	338	e405	e268	---	331	733	3090	1270	474	437	e410
31	530	---	e363	e245	---	346	---	2930	---	479	418	---
TOTAL	22064	13048	10620	8957	7290	10230	27700	62509	65100	24142	16381	29073
MEAN	712	435	343	289	260	330	923	2016	2170	779	528	969
MAX	1140	584	416	424	377	464	1440	3090	3110	1270	701	2220
MIN	530	332	224	228	225	285	377	689	1140	474	418	410
AC-FT	43760	25880	21060	17770	14460	20290	54940	124000	129100	47890	32490	57670

CAL YR 1990 TOTAL 245015 MEAN 671 MAX 4200 MIN 144 AC-FT 486000
WTR YR 1991 TOTAL 297114 MEAN 814 MAX 3110 MIN 224 AC-FT 589300

e Estimated

SAN JUAN RIVER BASIN

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM -- Continued

PERIOD OF RECORD.--Water years 1943, 1945, 1958-59, 1969-73, 1975, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, NM
(National stream-quality accounting network station)

LOCATION.--Lat 36°43'17", long 108°12'05", in SW¼SW¼ sec.15, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080104, in Boyd City Park, on right bank 900 ft upstream from bridge on Miller Ave., 0.4 mi downstream from bridge on U.S. Highway 64 in Farmington, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--1,360 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1904 to October 1905 (published as "near Farmington"), September 1912 to current year.
Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1931. WSP 1313: 1913.

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1905, nonrecording gage at old bridge 0.1 mi upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.8 mi downstream at lower datums (datum lowered 2.0 ft Aug. 15, 1927, and raised 0.2 ft Dec. 16, 1929). Oct. 5, 1938, to Nov. 1, 1973, at site 900 ft downstream at datum 1.74 ft lower.

REMARKS.--Water-discharge records good. Diversions for irrigation of about 30,000 acres upstream from station.

AVERAGE DISCHARGE.--80 years, 918 ft³/s, 665,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 25,000 ft³/s, June 29, 1927, gage height, 8.5 ft, site and datum then in use, from rating curve extended above 10,000 ft³/s; minimum, 1.0 ft³/s, Aug. 11, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911, when a stage of about 16.5 ft was reached (datum in use Oct. 1938 to Nov. 1973). Flood of Sept. 6, 1909, reached a stage of 11.1 ft, 1904-5 site and datum (discharge, about 19,000 ft³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11	1900	*4,750	*7.83	No other peak greater than base discharge.			

Minimum discharge, 132 ft³/s, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	543	430	384	263	351	345	517	2310	1100	309	172
2	1030	635	485	396	251	369	369	463	2010	1010	307	175
3	1160	652	457	386	250	418	464	533	1790	901	336	163
4	1170	594	433	429	243	367	536	511	1500	829	348	180
5	1010	520	398	472	247	368	606	504	1330	771	460	218
6	908	509	419	403	259	506	905	473	1650	728	442	432
7	844	544	386	362	268	384	1280	595	1980	671	404	1090
8	800	553	373	330	281	331	1400	765	2300	610	452	1690
9	932	502	387	308	272	306	1240	1300	2750	654	325	1430
10	810	480	374	343	271	299	1060	1700	2700	837	291	1100
11	748	492	371	336	270	306	1040	1770	2480	730	289	2050
12	735	472	375	322	269	303	938	1710	2590	617	289	1600
13	711	499	388	308	278	309	785	1640	2730	604	370	1410
14	694	493	389	307	286	317	655	1860	2660	560	343	1260
15	645	497	380	308	287	325	594	2060	2640	532	304	1140
16	610	466	360	303	292	339	556	1780	2270	530	268	989
17	562	481	360	303	352	329	529	1510	2290	538	236	879
18	543	468	342	312	407	312	623	1760	2490	557	206	761
19	543	466	363	290	333	309	822	2450	2330	533	201	696
20	650	451	392	300	283	326	856	2650	2110	502	227	620
21	617	450	374	326	272	337	896	2780	2070	482	260	595
22	559	448	336	309	304	339	1080	2770	1990	520	228	542
23	550	439	294	296	298	346	1090	2440	1830	547	227	509
24	551	420	283	280	295	340	975	2240	1670	590	205	511
25	525	438	299	252	298	337	811	2020	1500	562	212	471
26	530	415	305	267	283	349	781	2010	1300	525	192	438
27	528	446	353	285	265	388	769	2300	1120	519	198	365
28	540	420	355	289	273	394	661	2670	976	453	205	347
29	527	400	404	276	---	362	587	2780	1090	392	189	334
30	550	398	445	284	---	350	533	2780	1130	350	192	327
31	541	---	404	265	---	344	---	2660	---	315	169	---
TOTAL	22183	14591	11714	10031	7950	10760	23786	54001	59586	19069	8684	22494
MEAN	716	486	378	324	284	347	793	1742	1986	615	280	750
MAX	1170	652	485	472	407	506	1400	2780	2750	1100	460	2050
MIN	525	398	283	252	243	299	345	463	976	315	169	163
AC-FT	44000	28940	23230	19900	15770	21340	47180	107100	118200	37820	17220	44620

CAL YR 1990 TOTAL 214002 MEAN 586 MAX 3900 MIN 68 AC-FT 424500
WTR YR 1991 TOTAL 264849 MEAN 726 MAX 2780 MIN 163 AC-FT 525300

SAN JUAN RIVER BASIN
09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to current year.

WATER TEMPERATURE: December 1950 to current year.

SUSPENDED-SEDIMENT DISCHARGE: December 1950 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,980 microsiemens, Aug. 19, 1944; minimum daily, 89 microsiemens, June 15, 1985.

WATER TEMPERATURE: Maximum daily, 32.0°C, Aug. 26, 1966 and July 16, 1977; minimum daily, 0.0°C, on many days during winter months each year.

SEDIMENT CONCENTRATION: Maximum daily mean, 36,800 mg/L, July 23, 1954; minimum daily mean, 1 mg/L on several days during 1956, 1958, and 1974.

SEDIMENT LOAD: Maximum daily, 337,000 tons, July 23, 1954; minimum daily, less than 0.50 ton on many days during 1955-57, 1959-60, 1963, 1972, 1974, and 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 887 microsiemens, Sept. 11; minimum daily, 215 microsiemens, June 10.

WATER TEMPERATURE: Maximum daily, 28.0°C, Aug. 20-23, Aug. 25-30; minimum daily, 0.0°C, on many days during winter months.

SEDIMENT CONCENTRATION: Maximum daily mean, 39,100 mg/L, Sept. 11; minimum daily mean, 25 mg/L, July 4.

SEDIMENT LOAD: Maximum daily, 262,000 tons, Sept. 11; minimum daily, 15 tons, Aug. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
15...	1530	557	460	8.6	--	13.5	--	--	210	66
NOV										
28...	1306	430	647	8.7	5.5	1.5	5.0	12.9	270	86
DEC										
18...	1315	358	600	9.5	--	0.0	--	--	290	92
FEB										
04...	1400	242	650	8.8	--	3.5	--	--	310	97
06...	0935	243	720	8.4	-0.5	1.5	23	13.2	300	95
MAY										
07...	1000	638	470	8.5	20.0	12.0	22	9.4	210	68
SEP										
06...	0830	292	706	8.0	18.5	18.0	27	7.3	300	95

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT										
15...	9.6	22	0.7	2.1	--	--	--	117	110	15
NOV										
28...	13	31	0.8	3.0	160	12	151	--	160	21
DEC										
18...	14	34	0.9	3.0	--	--	--	143	170	26
FEB										
04...	15	36	0.9	3.3	--	--	--	141	210	23
06...	14	40	1	3.0	182	4	155	--	190	24
MAY										
07...	9.6	18	0.5	1.8	140	4	121	--	120	13
SEP										
06...	15	38	1	3.8	205	0	168	--	190	26

SAN JUAN RIVER BASIN
09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE, DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT 15...	0.50	0.030	0.002	6.5	300	303	--	--	--	--
NOV 28...	0.40	--	--	6.4	391	413	0.020	0.010	<0.100	<0.100
DEC 18...	0.40	0.050	0.001	6.5	436	434	--	--	--	--
FEB 04...	0.40	0.050	0.002	5.7	432	476	--	--	--	--
06...	0.40	--	--	5.6	458	467	<0.010	<0.010	<0.100	<0.100
MAY 07...	0.30	--	--	6.2	280	311	0.020	0.010	<0.050	<0.050
SEP 06...	0.50	--	--	6.8	442	477	--	--	--	--
DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 15...	--	--	--	--	--	--	--	50	4	16
NOV 28...	0.020	0.030	--	0.030	<0.010	K2	<5	--	<3	75
DEC 18...	--	--	--	--	--	--	--	80	190	130
FEB 04...	--	--	--	--	--	--	--	80	<3	79
06...	<0.010	0.020	--	0.070	0.010	K24	K28	--	5	97
MAY 07...	0.020	0.020	0.28	0.080	<0.010	130	200	--	6	12
SEP 06...	--	--	--	--	--	33	>2500	--	7	12
DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 15...	1530	30	--	66	--	--	--	--	--	--
NOV 28...	1306	20	<1	70	<0.5	<1.0	<1	<3	2	<1
DEC 18...	1315	190	--	76	--	--	--	--	--	--
FEB 04...	1400	<10	--	75	--	--	--	--	--	--
06...	0935	<10	<1	71	<0.5	<1.0	<1	<3	2	<1
MAY 07...	1000	30	<1	73	<0.5	<1.0	<1	<3	3	<1
SEP 06...	0830	20	<1	86	<0.5	<1.0	<1	<3	2	<1

SAN JUAN RIVER BASIN
09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 15...	35	--	--	--	<1	--	790	--	6	5.40
NOV 28...	50	<0.1	<10	1	<2	<1.0	1000	<6	9	--
DEC 18...	49	--	--	--	<1	--	1100	--	19	5.00
FEB 04...	57	--	--	--	<1	--	1200	--	7	5.50
06...	54	<0.1	<10	<1	<1	<1.0	1100	<6	18	--
MAY 07...	28	<0.1	<10	<1	<1	<1.0	730	<6	9	--
SEP 06...	54	<0.1	<10	1	<1	<1.0	1300	<6	14	--

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 28...	1306	430	647	1.5	27	31	79
06...	0935	243	720	1.5	62	41	70
MAY 07...	1000	638	470	12.0	160	276	50

SAN JUAN RIVER BASIN
09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
NOV									
27...	0910	10	1.30	26	642	8.7	2.0	12.3	73
27...	0911	22	1.75	32	652	8.6	2.0	12.4	85
27...	0912	32	1.80	35	652	8.7	1.5	12.7	84
27...	0913	42	1.63	35	647	8.6	1.5	12.8	83
27...	0914	52	1.50	31	654	8.6	1.0	12.8	70
27...	0915	62	1.52	32	631	8.6	1.0	12.9	26
27...	0916	72	1.13	23	653	8.7	1.0	13.0	62
27...	0917	82	1.21	27	654	8.7	1.0	13.0	62
27...	0918	92	1.20	25	650	8.6	1.0	13.1	72
27...	0919	102	.92	21	634	8.6	1.0	13.1	89
27...	0920	112	1.20	31	640	8.7	1.0	13.1	89
27...	0921	122	1.99	48	658	8.6	1.0	13.2	61
27...	0922	132	1.88	39	658	8.7	1.0	13.2	69

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
FEB									
06...	0936	18	1.22	11	726	8.4	0.0	12.8	97
06...	0937	28	1.40	14	724	8.4	0.0	13.0	108
06...	0938	38	1.68	20	724	8.4	0.0	13.0	98
06...	0939	48	1.50	21	723	8.4	0.0	13.0	106
06...	0940	56	1.55	21	721	8.5	0.0	13.0	79
06...	0941	64	1.45	20	720	8.5	0.0	13.1	104
06...	0942	72	1.55	23	719	8.5	0.0	13.2	88
06...	0943	80	1.72	21	720	8.5	0.0	13.3	114
06...	0944	88	1.65	21	720	8.5	0.0	13.3	88
06...	0945	96	1.92	21	722	8.5	0.0	13.6	97
06...	0946	104	1.80	20	721	8.5	0.0	13.4	89
06...	0947	112	1.48	16	721	8.5	0.0	13.4	107
06...	0948	120	1.80	13	720	8.4	0.0	13.2	108

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
MAY									
07...	1001	37	1.72	29	471	8.4	10.5	9.5	94
07...	1002	47	2.00	38	470	8.4	11.0	9.4	152
07...	1003	56	2.25	55	469	8.4	11.0	9.4	135
07...	1004	64	2.25	58	468	8.4	11.0	9.4	130
07...	1005	72	2.18	52	469	8.4	11.0	9.4	118
07...	1006	80	2.20	54	468	8.4	11.0	9.3	115
07...	1007	88	2.42	57	469	8.4	11.0	9.3	122
07...	1008	96	2.38	61	469	8.4	11.0	9.3	138
07...	1009	104	2.20	55	469	8.4	11.0	9.3	115
07...	1010	112	2.52	56	472	8.5	11.0	9.4	119
07...	1011	120	2.30	52	474	8.5	11.0	9.4	90
07...	1012	129	2.05	46	474	8.4	11.0	9.4	85
07...	1013	139	2.38	31	475	8.5	11.0	9.4	79

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	537	508	576	589	599	535	465	264	345	582	---
2	409	552	524	643	640	---	---	457	264	376	555	---
3	403	536	520	586	581	620	---	467	326	394	558	610
4	405	523	522	658	580	603	511	444	324	403	559	595
5	399	533	---	---	---	---	505	429	333	396	563	605
6	461	---	601	694	720	626	331	428	313	422	531	593
7	448	505	541	687	---	618	326	---	268	451	525	564
8	446	522	587	616	634	594	324	---	251	456	497	383
9	450	---	512	550	649	586	368	359	219	508	550	372
10	451	524	524	---	655	554	377	307	215	485	---	---
11	473	505	538	568	655	557	371	290	236	499	549	887
12	486	521	563	569	643	552	438	297	238	497	551	---
13	482	---	540	597	653	569	---	282	231	---	575	448
14	490	498	553	559	---	565	458	280	248	471	567	429
15	491	494	522	580	---	567	447	298	237	468	565	466
16	516	533	518	573	---	572	451	250	249	495	584	454
17	516	531	546	567	624	565	452	242	245	498	541	457
18	540	534	537	566	633	561	456	242	242	---	536	442
19	---	503	547	554	660	563	411	241	---	---	588	---
20	---	531	555	572	650	568	398	284	---	---	501	492
21	546	521	535	554	659	551	384	---	---	532	538	521
22	540	524	601	565	650	538	350	---	---	537	543	542
23	535	524	625	---	619	545	363	291	---	514	579	521
24	543	536	594	558	593	---	364	304	---	508	---	466
25	509	555	581	553	560	---	409	282	---	505	525	495
26	515	534	596	555	570	539	410	290	322	---	567	536
27	517	527	---	566	585	548	431	276	342	559	579	565
28	536	540	578	527	566	537	---	248	362	571	553	525
29	523	521	585	558	---	503	451	246	343	580	566	527
30	501	536	581	556	---	530	447	240	341	581	567	521
31	499	---	582	591	---	517	---	240	---	576	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	13.0	3.5	.0	.0	6.0	12.0	---	13.0	23.0	26.0	---
2	18.0	13.0	3.0	.0	3.0	5.0	---	---	13.0	24.0	22.0	---
3	18.0	---	3.0	.0	4.0	9.0	---	---	15.0	25.0	20.0	26.0
4	20.0	10.0	3.0	.0	5.0	10.0	15.0	---	15.0	25.0	27.0	25.0
5	13.0	10.0	---	---	---	---	16.0	---	16.0	25.0	28.0	19.0
6	17.0	---	3.0	2.0	.0	7.0	16.0	---	16.0	25.0	27.0	20.0
7	18.0	8.0	3.0	2.0	---	8.0	12.0	---	13.0	26.0	27.0	18.0
8	18.0	8.0	3.0	3.0	4.0	4.0	12.0	---	14.0	24.0	26.0	16.0
9	14.0	---	3.0	4.0	5.0	5.0	---	---	13.0	25.0	26.0	16.0
10	14.0	10.0	3.0	---	3.0	6.0	---	---	13.0	25.0	---	---
11	15.0	10.0	3.5	4.0	5.0	8.0	---	---	14.0	26.0	27.0	16.0
12	15.0	11.0	6.0	4.0	6.0	10.0	---	---	14.0	26.0	27.0	---
13	15.0	11.0	7.0	4.0	7.0	12.0	---	---	12.0	---	27.0	18.0
14	15.0	11.0	6.0	4.0	---	8.0	---	---	14.0	27.0	27.0	12.0
15	15.0	11.0	4.0	4.0	---	8.0	---	15.0	13.0	27.5	27.0	19.0
16	15.0	11.0	4.0	3.5	---	12.0	---	15.0	14.0	26.0	27.0	19.0
17	15.0	11.0	3.0	2.0	7.0	12.0	---	15.0	16.0	26.0	26.0	20.0
18	15.0	10.0	1.5	3.0	7.0	12.0	---	16.0	18.0	---	26.0	19.0
19	---	10.0	1.0	3.0	7.0	10.0	---	12.0	---	---	24.0	---
20	---	8.0	.0	3.0	7.0	10.0	---	15.0	---	---	28.0	19.0
21	12.0	7.0	.0	3.0	7.0	9.0	---	---	---	26.0	28.0	15.0
22	12.0	7.0	.0	3.0	8.0	10.0	---	---	---	26.0	28.0	20.0
23	13.0	7.0	.0	---	7.0	12.0	---	18.0	---	26.0	28.0	20.0
24	13.0	7.0	.0	3.0	7.0	---	---	19.0	---	25.0	---	20.0
25	14.5	7.0	.0	3.0	7.0	---	---	15.0	---	25.0	28.0	20.0
26	15.0	10.0	.0	2.5	7.5	8.0	---	12.0	19.0	---	28.0	21.0
27	15.0	6.0	---	2.5	8.0	8.0	---	17.0	19.0	25.0	28.0	21.0
28	15.0	5.0	.0	2.5	7.0	8.0	---	17.0	23.0	26.0	28.0	21.0
29	14.5	5.0	.0	1.0	---	8.0	---	18.0	24.0	26.0	28.0	21.0
30	14.5	4.0	.0	1.0	---	10.0	---	17.0	23.0	26.0	28.0	18.0
31	13.0	---	.0	2.0	---	10.0	---	16.0	---	26.0	---	---

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	287	821	545	801	49	56	87	91	57	41	631	645
2	219	607	193	321	36	47	81	87	51	35	1640	1640
3	276	873	144	252	66	81	169	173	75	51	1570	1800
4	179	573	201	322	56	65	139	157	148	97	834	824
5	159	431	190	268	39	42	123	157	172	114	703	704
6	242	592	157	216	64	73	201	218	166	115	1240	1730
7	161	365	127	185	95	99	143	141	194	141	1230	1280
8	166	359	95	141	86	87	75	67	262	198	212	190
9	205	516	89	119	68	71	67	55	193	142	234	193
10	104	231	100	130	81	81	65	60	89	65	151	122
11	84	170	80	107	84	84	54	49	176	128	146	120
12	148	293	54	69	82	83	61	53	122	89	147	121
13	95	182	54	73	115	121	98	81	111	83	161	135
14	81	152	69	92	109	114	121	100	200	154	145	123
15	69	120	53	71	104	106	106	88	201	156	136	120
16	79	129	63	80	100	98	97	79	185	146	186	171
17	127	193	62	81	94	91	101	83	208	198	173	153
18	429	628	85	108	78	72	90	76	188	206	113	95
19	426	620	84	106	99	97	98	77	245	219	146	122
20	277	484	46	56	112	119	75	61	89	69	208	183
21	191	318	62	76	186	187	68	59	33	24	172	156
22	196	294	56	68	144	133	117	98	46	38	131	120
23	189	281	77	90	150	120	111	88	128	104	107	100
24	144	215	106	120	205	157	65	49	168	134	112	102
25	94	133	92	109	194	156	70	47	145	116	172	157
26	94	135	114	128	121	98	126	90	120	92	305	287
27	121	172	80	96	77	73	115	89	114	82	202	210
28	163	238	53	59	83	80	87	68	101	75	192	203
29	132	188	51	55	85	92	96	71	---	---	186	182
30	467	696	62	67	109	132	99	77	---	---	153	144
31	853	1250	---	---	110	121	63	46	---	---	148	137
TOTAL	---	12259	---	4466	---	3036	---	2735	---	3112	---	12269

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	177	165	123	171	108	675	40	119	67	55	42	19
2	272	275	178	222	77	420	40	110	86	72	39	18
3	399	503	174	251	82	399	28	69	261	236	37	16
4	485	704	176	243	124	511	25	55	183	172	36	17
5	597	983	153	209	135	488	38	79	95	118	37	22
6	802	2000	114	145	184	822	37	72	93	112	882	1290
7	959	3320	168	272	193	1050	37	67	58	64	3540	11300
8	879	3320	244	522	255	1590	53	87	62	76	4790	22200
9	554	1880	653	2450	414	3330	48	85	74	64	3870	15300
10	203	582	877	4030	523	3850	44	99	121	95	1220	3720
11	132	371	468	2180	226	1560	75	144	120	94	39100	262000
12	191	478	180	838	499	3610	85	143	89	69	23300	103000
13	262	555	183	819	439	3240	62	101	77	77	1010	3860
14	223	395	166	826	145	1050	47	72	75	70	916	3120
15	213	341	163	906	158	1130	42	61	66	54	595	1850
16	180	271	219	1050	110	677	63	91	64	46	370	987
17	175	250	232	945	127	788	43	62	65	42	347	824
18	183	306	258	1220	153	1030	40	61	56	31	301	617
19	166	365	492	3310	148	931	95	140	73	40	234	442
20	170	393	215	1510	127	722	144	195	72	44	197	329
21	195	487	131	991	131	734	134	174	63	44	190	306
22	363	1050	162	1210	133	711	142	199	66	41	132	194
23	227	667	93	612	109	538	94	138	50	31	105	144
24	143	378	39	237	91	410	90	142	52	29	119	164
25	98	217	66	359	74	298	96	145	55	32	107	136
26	82	174	238	1300	51	180	77	109	40	21	83	98
27	81	169	233	1440	46	137	70	98	30	16	77	75
28	83	149	197	1410	48	128	84	102	27	15	78	73
29	78	123	216	1630	43	127	100	105	39	20	70	63
30	82	118	192	1420	42	128	69	66	59	30	63	55
31	---	---	130	937	---	---	62	52	51	23	---	---
TOTAL	---	20989	---	33665	---	31264	---	3242	---	1933	---	432239

TOTAL LOAD FOR YEAR: 561209 TONS.

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, NM

LOCATION.--Lat 36°43'22", long 108°13'30", in NW¼SE¼ sec.17, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080105, on left bank 360 ft downstream from highway bridge on State Highway 371 in Farmington, 4,000 ft downstream from Animas River, 2.3 mi upstream from La Plata River, and at mile 251.4.

DRAINAGE AREA.--7,240 mi², approximately.

PERIOD OF RECORD.--June to December 1904, January 1905 to September 1906 (gage heights and discharge measurements only), September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Discharge records for January to December 1905, published in WSP 175, are unreliable and should not be used.

REVISED RECORDS.--WSP 1119: Drainage area. WSP 1243: 1938. WSP 1313: 1905, 1914. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 5,230.37 ft above National Geodetic Vertical Datum of 1929. See WSP 1313 or 1733 for history of changes prior to Nov. 19, 1933.

REMARKS.--Records good. Since June 1962 flow is partly controlled by operation of Navajo Reservoir (station 09355100) 50 mi upstream. Diversions upstream from station for irrigation of about 86,000 acres, 4,000 of which is irrigated by Farmers Mutual ditch, which diverts from Animas River and bypasses this station; ditch flow not included in record. At times this ditch may be supplied partly or entirely by diversion from San Juan River downstream from this station. National Weather Service gage-height telemeter and U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--79 years (water years 1913-91), 2,345 ft³/s, 1,699,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 68,000 ft³/s, June 29, 1927, gage height, 10.2 ft, site and datum then in use, from rating curve extended above 37,000 ft³/s; minimum, 14 ft³/s, Aug. 22, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911. Flood of Sept. 6, 1909, reached a stage of about 12.3 ft, site and datum in use May to September 1906.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 11	1930	*5,840	*4.71				

Minimum daily, 473 ft³/s, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1640	1140	897	835	806	844	841	2330	3430	1430	591	488
2	1520	1260	1000	887	824	1100	899	2650	3130	1300	591	488
3	1590	1350	973	880	843	1020	989	2500	2870	1130	628	473
4	1680	1270	968	949	842	1000	1110	1960	2520	1040	652	513
5	1570	1040	957	1140	862	1120	1200	1890	2250	990	849	591
6	1440	1010	933	1080	908	1360	1460	1810	2140	910	805	1130
7	1280	1100	906	1160	921	1180	1840	3020	2560	813	1010	1940
8	1310	1090	905	1100	971	984	1960	3660	2920	734	762	2330
9	1360	1020	954	1060	912	907	1800	4240	3450	850	607	2150
10	1290	1000	966	1060	860	867	1560	4620	3470	1080	601	1750
11	1200	1010	954	1010	982	874	1560	4570	3110	917	680	2870
12	1220	990	970	999	1040	886	1490	4520	3230	785	601	3720
13	1250	993	1040	980	1200	915	1300	4390	3540	787	612	2690
14	1220	996	998	944	1710	954	1160	4550	3570	716	601	2160
15	1200	1050	944	964	1700	967	1170	4850	3560	670	580	1990
16	1150	1020	968	1010	1530	1060	1420	4550	3070	661	564	1730
17	1100	975	945	965	1520	1020	1350	3820	3050	650	533	1500
18	1080	967	909	976	1530	928	1570	3680	3270	724	513	1330
19	1060	954	889	915	1430	820	1910	4220	3100	661	543	1230
20	2030	947	963	908	1100	771	2150	4630	2870	680	523	1170
21	1440	949	939	948	960	826	2230	4340	2820	652	528	1110
22	1140	970	852	916	950	822	2430	4250	2730	690	498	1050
23	1070	971	752	887	1030	804	2450	3620	2550	734	508	996
24	1110	919	719	880	1040	823	2200	3520	2360	878	492	952
25	1040	937	755	839	985	798	1920	3160	2120	967	523	917
26	1080	987	798	844	820	805	2070	3070	1840	982	488	881
27	1100	987	885	862	752	861	2050	3360	1580	791	513	821
28	1100	947	976	854	743	907	1950	3780	1320	640	508	768
29	1080	905	1020	877	---	866	1860	3910	1410	612	492	748
30	1110	884	978	836	---	874	1960	3910	1490	612	487	729
31	1100	---	826	806	---	812	---	3830	---	580	478	---
TOTAL	39560	30638	28539	29371	29771	28775	49859	113210	81330	25666	18361	41215
MEAN	1276	1021	921	947	1063	928	1662	3652	2711	828	592	1374
MAX	2030	1350	1040	1160	1710	1360	2450	4850	3570	1430	1010	3720
MIN	1040	884	719	806	743	771	841	1810	1320	580	478	473
AC-FT	78470	60770	56610	58260	59050	57080	98900	224600	161300	50910	36420	81750

CAL YR 1990 TOTAL 379534 MEAN 1040 MAX 4670 MIN 328 AC-FT 752800
WTR YR 1991 TOTAL 516295 MEAN 1415 MAX 4850 MIN 473 AC-FT 1024000

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-82, 1990 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	
OCT 15...	1700	1120	450	8.5	12.5	170	55	8.5	29	1	
DEC 18...	1630	747	450	9.0	1.0	190	59	9.7	35	1	
FEB 04...	1600	826	500	8.6	5.0	200	62	10	37	1	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 15...	2.2	108	130	9.7	0.30	0.020	0.003	8.2	294	309	
DEC 18...	2.3	115	140	10	0.30	0.020	0.004	9.2	325	336	
FEB 04...	8.6	117	150	10	0.30	0.030	0.003	8.4	331	357	
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 15...	<10	64	40	6	27	6	<1	680	7	3.40	
DEC 18...	30	63	360	5	20	21	<1	710	<3	3.90	
FEB 04...	<10	66	50	6	31	21	<1	780	4	3.50	

SAN JUAN RIVER BASIN

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, Colorado, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 15,000 acres, most of which are upstream from station.

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

AVERAGE DISCHARGE.--71 years, 35.8 ft³/s, 25,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft³/s on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 690 ft³/s, at 2330 hours Sept. 10, gage height, 5.47 ft; maximum gage height, 5.79 ft at 1630 hours Feb. 2 (backwater from ice); minimum daily, 0.94 ft³/s, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	6.2	e4.5	e4.0	e8.0	18	27	22	66	18	3.4	.99
2	9.0	9.7	e4.0	e4.5	e8.0	18	35	22	61	12	3.5	1.0
3	6.6	9.3	e4.0	e5.0	e9.0	18	39	28	53	12	2.9	.94
4	17	7.9	e4.5	e5.5	e9.0	18	36	28	39	15	5.2	1.2
5	21	7.3	e4.5	e6.0	e9.0	19	48	24	31	15	3.4	2.6
6	20	7.2	e4.0	e6.0	e10	23	68	24	37	11	3.2	4.7
7	16	8.4	e4.5	e5.0	e12	20	144	34	45	8.8	2.8	34
8	18	8.5	e5.0	e4.5	e12	19	143	53	48	7.8	1.9	66
9	15	7.3	e5.0	e4.5	e12	17	104	78	49	14	1.2	43
10	13	5.8	e5.0	e4.5	e13	16	78	51	55	23	1.5	95
11	11	5.3	e5.5	e4.0	e14	14	61	84	80	15	2.3	134
12	10	5.2	e6.0	e3.5	e14	13	39	80	68	8.6	2.6	106
13	9.7	4.0	e5.0	e3.5	e15	13	30	88	70	14	2.5	58
14	11	3.8	e4.1	e4.5	e16	18	26	82	70	14	2.1	41
15	8.9	3.9	e3.5	e4.0	17	20	26	68	71	11	2.0	38
16	9.1	3.2	e3.5	e4.5	19	18	24	67	45	9.4	1.8	28
17	8.6	3.4	e3.5	e4.0	25	16	25	62	47	7.3	1.7	25
18	9.7	3.7	e3.0	e4.0	21	14	32	65	47	11	1.8	19
19	10	3.8	e3.5	e4.0	18	15	37	73	54	22	2.6	14
20	16	3.3	e3.5	e3.0	17	17	39	93	42	14	1.8	14
21	10	3.1	e2.0	e2.5	16	17	45	101	37	16	1.5	15
22	8.6	3.0	e1.5	e2.5	16	16	52	77	33	13	1.4	14
23	8.2	3.2	e1.0	e3.0	16	14	46	68	29	12	1.4	12
24	6.8	3.4	e1.5	e3.0	15	14	38	76	27	32	1.5	9.9
25	5.9	3.7	e2.0	e3.0	14	17	36	73	27	15	1.4	8.1
26	6.4	3.6	e2.0	e3.0	13	18	49	75	26	14	1.2	5.9
27	6.2	3.8	e2.0	e3.0	13	17	47	77	19	9.6	1.2	4.5
28	6.1	e3.5	e3.0	e3.0	16	17	37	77	20	5.4	1.2	4.2
29	6.1	e3.5	e3.5	e3.5	---	18	31	66	19	5.0	1.4	4.9
30	6.0	e4.0	e2.5	e3.5	---	18	26	76	20	4.1	1.1	5.2
31	6.0	---	e3.0	e6.0	---	19	---	71	---	3.0	.98	---
TOTAL	321.4	152.0	110.1	124.5	397	529	1468	1963	1335	392.0	64.48	810.13
MEAN	10.4	5.07	3.55	4.02	14.2	17.1	48.9	63.3	44.5	12.6	2.08	27.0
MAX	21	9.7	6.0	6.0	25	23	144	101	80	32	5.2	134
MIN	5.5	3.0	1.0	2.5	8.0	13	24	22	19	3.0	.98	.94
AC-FT	637	301	218	247	787	1050	2910	3890	2650	778	128	1610

CAL YR 1990 TOTAL 4989.46 MEAN 13.7 MAX 135 MIN .78 AC-FT 9900
WTR YR 1991 TOTAL 7666.61 MEAN 21.0 MAX 144 MIN .94 AC-FT 15210

SAN JUAN RIVER BASIN

09367500 LA PLATA RIVER NEAR FARMINGTON, NM

LOCATION.--Lat 36°44'23", long 108°14'51", in NE¼SW¼ sec.7, T.29 N., R.13 W., San Juan County, Hydrologic Unit 14080105, on upstream between two culvert barrels that run under U.S. Highway 550 in Farmington, and 1,000 ft upstream from mouth.

DRAINAGE AREA.--583 mi².

PERIOD OF RECORD.--March 1938 to current year.

REVISED RECORDS.--WSP 1243: 1944-45. WSP 1313: 1943-44(M), 1946-50(M). WSP 1733: 1951(M).

GAGE.--Water-stage recorder. Elevation of gage is 5,210 ft above National Geodetic Vertical Datum of 1929, from river-profile map. Prior to July 28, 1978, at elevation 1.0 ft higher. March 17, 1938 to December 6, 1990 at site 1,300 ft upstream at different datum.

REMARKS.--Records poor. Diversions for irrigation of about 24,000 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 28.7 ft³/s, 20,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,770 ft³/s, Aug. 21, 1990, gage height, 13.6, from floodmarks; from rating curve extended on basis of slope-area measurement of peak flow; no flow for long periods in some years. Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911, and September 10, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,290 ft³/s, Sept. 11, gage height, 5.60 ft; no flow, Sept. 21-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.2	e2.4	e3.4	e2.6	e16	37	19	1.4	2.0	.10	.14	.04
2	e5.8	e6.3	e3.3	e2.5	e19	32	24	1.4	2.3	.10	.12	.04
3	e4.0	e4.6	e3.3	e2.5	e26	32	26	1.4	2.2	.10	.13	.04
4	e3.6	e3.2	e4.2	e2.6	e28	31	25	1.4	1.8	.10	.12	.04
5	e3.5	e2.4	e4.2	e4.7	e44	28	28	1.3	1.1	.09	.11	.06
6	e3.2	e2.4	e5.8	e5.4	e59	33	47	1.4	1.3	.08	.11	4.8
7	e3.2	e2.3	9.5	e6.1	e70	28	128	1.5	2.7	.08	.11	17
8	e3.0	e4.1	9.4	e7.5	e65	24	153	1.4	1.3	.09	.09	11
9	e2.9	e2.9	9.0	e8.2	e43	23	93	1.4	.92	.08	.08	2.7
10	e2.9	e2.6	11	e7.4	e36	23	51	11	.83	.07	.07	.33
11	e3.0	e2.4	14	e6.4	e41	22	33	2.0	.93	.08	.08	264
12	e3.0	e2.4	11	e6.1	e44	19	20	1.7	11	.07	.08	78
13	e3.1	e2.4	9.6	e6.3	46	19	8.9	1.5	36	.06	.08	54
14	e3.0	e2.3	8.3	e6.7	52	21	4.5	5.0	7.3	.05	.08	20
15	e3.0	e2.4	7.6	e6.3	32	27	3.8	4.7	6.4	.04	.07	9.0
16	e2.9	e2.2	10	e6.5	30	29	3.3	1.6	6.0	20	.07	1.6
17	e3.0	e2.3	9.3	e7.1	43	26	3.8	1.3	3.9	.77	.06	.34
18	e2.9	e2.4	4.9	e6.6	34	22	3.6	1.2	2.2	.22	.07	.12
19	e2.8	e2.5	7.3	e7.0	28	19	2.6	1.2	1.2	.18	.07	.05
20	e12	e2.3	14	e7.4	27	21	2.2	1.5	1.2	.17	.06	.03
21	e8.4	e2.2	6.3	e7.2	26	22	2.0	5.0	1.8	.17	.06	.00
22	e3.0	e2.1	e4.3	e7.9	24	22	2.0	10	1.1	.16	.05	.00
23	e2.6	e2.2	e2.8	e8.7	24	18	1.7	4.6	.82	.15	.05	.00
24	e2.6	e2.3	e2.1	e9.7	24	14	1.7	2.2	.30	50	.05	.00
25	e2.6	e2.5	e1.8	e8.3	22	14	1.6	1.5	.20	22	.06	.00
26	e2.7	e2.4	e1.8	e8.6	21	16	1.6	1.6	.16	1.7	.08	.00
27	e2.5	e2.5	e1.9	e8.9	21	16	1.5	1.4	.16	.78	.05	.00
28	e2.5	e2.4	e1.9	e9.2	23	16	1.5	1.3	.15	.22	.05	.00
29	e2.5	e2.4	e2.4	e9.5	---	16	1.4	1.5	.14	.14	.05	.00
30	e2.6	e2.9	e2.4	e9.8	---	17	1.4	1.0	.12	.13	.04	.00
31	e2.5	---	e2.4	e10	---	15	---	1.3	---	.13	.04	---
TOTAL	108.5	80.7	189.2	213.7	968	702	696.1	76.7	97.53	98.11	2.38	463.19
MEAN	3.50	2.69	6.10	6.89	34.6	22.6	23.2	2.47	3.25	3.16	.077	15.4
MAX	12	6.3	14	10	70	37	153	11	36	50	.14	264
MIN	2.5	2.1	1.8	2.5	16	14	1.4	1.0	.12	.04	.04	.00
AC-FT	215	160	375	424	1920	1390	1380	152	193	195	4.7	919

CAL YR 1990 TOTAL 2281.89 MEAN 6.25 MAX 850 MIN .14 AC-FT 4530
WTR YR 1991 TOTAL 3696.11 MEAN 10.1 MAX 264 MIN .00 AC-FT 7330

e Estimated

SAN JUAN RIVER BASIN

09367500 LA PLATA RIVER NEAR FARMINGTON, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1978-81, 1990 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
OCT 18...	0900	2.2	3710	8.4	4.0	1300	320	120	430	5	4.5	
DEC 20...	1230	17	2130	8.3	0.0	1000	240	100	200	3	2.9	
FEB 07...	1600	74	780	8.3	2.0	220	55	19	100	3	2.1	
DATE		ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 18...	250	1700	180	1.5	0.76	0.010	12	2980	2920	10	<100	
DEC 20...	268	990	75	0.30	0.47	0.007	11	1920	1780	20	<100	
FEB 07...	124	300	18	0.30	0.080	0.002	5.8	558	576	50	26	
DATE		BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34/S-32 STABLE ISOTOPE RATIO PER MIL (82086)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 18...	160	<10	40	680	<1	5100	<10	-7.30	--	--	--	
DEC 20...	110	<10	30	160	2	2900	<10	-9.10	--	--	--	
FEB 07...	50	42	11	33	<1	770	<3	-7.00	284	56	90	

SAN JUAN RIVER BASIN

09367540 SAN JUAN RIVER NEAR FRUITLAND, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 36°44'25", long 108°24'09", in NW¼SE¼ sec.10, T.29 N., R.15 W., San Juan County, Hydrologic Unit 14080105, on right bank 300 ft downstream from Four Corners Power Plant highway bridge, 0.4 mi west of Fruitland, 10 mi downstream from La Plata River, 14.0 mi upstream from Chaco River, and at mile 239.

DRAINAGE AREA.--8,010 mi², approximately.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Discharge record estimated from station 09365000 San Juan River at Farmington, which is approximately 11 mi upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV 28...	0855	E1100	564	8.3	-2.0	0.5	45	12.2
JAN 09...	1530	E1100	690	8.3	7.0	3.5	96	10.9
FEB 06...	1606	E850	623	8.5	8.5	5.0	40	12.8
APR 02...	1300	E952	540	8.5	18.0	11.5	100	9.8
JUL 09...	1415	E850	495	8.7	27.5	23.0	15	7.0
SEP 05...	1900	E815	691	8.0	21.0	19.5	1400	7.6

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)
NOV 28...	210	86	66	11	38	1	2.2	151	0
JAN 09...	230	98	72	12	65	2	2.8	150	5
FEB 06...	220	92	68	12	48	1	2.7	141	7
APR 02...	210	85	63	12	37	1	2.4	138	5
JUL 09...	190	74	62	8.2	31	1	2.4	128	6
SEP 05...	190	69	63	8.4	69	2	3.6	150	0

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
NOV 28...	124	130	11	0.40	8.6	361	341
JAN 09...	131	220	13	0.20	9.4	481	473
FEB 06...	127	170	14	0.30	8.7	397	400
APR 02...	121	150	11	0.30	8.4	377	357
JUL 09...	115	130	11	0.20	5.8	301	320
SEP 05...	123	220	17	0.40	8.8	455	464

SAN JUAN RIVER BASIN

09367950 CHACO RIVER NEAR WATERFLOW, NM

LOCATION.--Lat 36°43'28", long 108°35'27", in SW¼SW¼ sec.13, T.29 N., R.17 W., San Juan County, Hydrologic Unit 14080106, on downstream end of right bridge pier, 4.2 mi upstream from Dead Mans Wash, 5.3 mi downstream from the Hogback, 6.6 mi southwest of Waterflow, 7.2 mi southeast of Shiprock, and at mile 4.5.

DRAINAGE AREA.--4,350 mi².

PERIOD OF RECORD.--Water years 1959-69 (annual maximum only), November 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1975 at site 1.8 mi upstream at different datum.

REMARKS.--Water-discharge records poor. Base flow is mostly wastewater from Four Corners Power Plant.

AVERAGE DISCHARGE.--15 years (water years 1977-91), 48.2 ft³/s, 34,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s, Sept. 20, 1969, gage height, 7.88 ft, site and datum then in use; no flow at times.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	0720	*3,240	7.84	Aug. 18	2045	1,370	6.05
Feb. 14	1800	1,800	6.50	Sept. 5	1730	2,240	7.36
Aug. 7	0215	1,750	6.45	Sept. 11	1645	2,190	7.32

No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	4.1	3.1	e26	1.2	21	.95	.67	e15	e.02	e.12	6.2
2	19	2.8	3.3	e22	.96	23	.96	1.0	e13	e.02	1.4	3.3
3	9.7	5.5	e3.4	e20	e.80	17	e.04	2.1	e14	e.01	e8.0	8.1
4	9.9	30	e3.6	e16	e.75	19	e.03	1.0	e16	e.01	110	7.0
5	11	67	e3.3	e18	e.70	38	e.04	1.1	e14	e.01	e450	272
6	5.4	22	e3.4	e22	.86	e14	e.04	1.1	12	e.01	e90	e500
7	2.3	19	e3.2	e26	.83	e6.4	e.03	1.3	8.9	e.00	401	e1090
8	3.7	15	e3.5	e31	.29	e2.4	e.03	1.7	9.6	e.00	100	e770
9	2.3	19	e3.4	e27	333	e1.1	e.04	2.2	5.0	e.00	87	e430
10	2.9	20	e3.7	e58	211	.72	e.05	7.6	4.7	e.00	39	e410
11	3.6	11	e3.6	65	194	.17	e.04	8.5	6.5	e.00	11	e460
12	3.5	10	3.7	45	479	e.14	e.05	6.4	5.0	e.00	296	110
13	3.5	6.5	3.7	23	652	.02	e.06	7.2	117	e.00	39	379
14	4.0	3.8	3.7	11	953	.06	e.04	7.2	183	e.00	e9.0	70
15	4.0	3.0	5.1	20	1160	.11	e.03	8.5	260	e.00	e4.5	e16
16	4.2	2.4	4.7	12	1020	.13	e.03	9.0	184	e.00	e7.5	e13
17	5.2	2.2	4.0	14	498	.14	e.02	7.6	e50	e.00	e1.0	e12
18	5.4	2.0	4.7	8.7	333	.09	e.02	7.6	9.0	e.00	e120	e11
19	5.5	1.8	4.6	8.8	e190	.03	e.00	6.0	e3.0	e1.9	e90	e9.6
20	898	2.0	4.3	7.8	e120	.00	e.00	6.4	e1.4	4.5	e32	e8.6
21	1550	2.0	15	5.2	e63	.02	e.00	15	e1.4	e4.0	e7.8	e7.8
22	e300	2.0	e11	4.0	e47	.20	e.00	e44	e.38	e.78	5.5	e7.2
23	60	2.1	e13	2.9	e29	.37	e.00	e27	e.24	e.43	6.3	e6.6
24	30	2.2	e12	2.2	e17	.39	e.00	e20	e.15	e.26	6.4	e6.0
25	17	2.3	e16	1.9	14	.35	e.00	e16	e.11	e.18	6.3	e5.8
26	9.0	2.9	e19	1.9	30	1.9	e.00	e14	e.07	e.15	13	e5.6
27	5.1	3.3	e23	1.7	19	.97	e.00	e13	e.05	e.13	6.6	e5.4
28	3.4	3.3	e27	1.6	23	.69	e.00	e14	e.04	e.12	9.8	e5.2
29	1.7	2.9	e27	1.5	---	1.2	e.65	e17	e.03	e.11	6.4	e5.0
30	1.5	3.5	e26	1.5	---	.75	.86	e19	e.03	e.10	6.9	e5.0
31	2.2	---	e24	1.3	---	.83	---	e17	---	e.10	6.5	---
TOTAL	3138.0	275.6	289.0	507.0	6420.10	151.18	4.01	310.17	933.60	12.84	1978.02	4645.4
MEAN	101	9.19	9.32	16.4	229	4.88	.13	10.0	31.1	.41	63.8	155
MAX	1550	67	27	65	1160	38	.96	44	260	4.5	450	1090
MIN	1.5	1.8	3.1	1.3	.70	.00	.00	.67	.03	.00	.12	3.3
AC-FT	6220	547	573	1010	12730	300	8.0	615	1850	25	3920	9210

CAL YR 1990 TOTAL 15045.0 MEAN 41.2 MAX 2060 MIN 1.5 AC-FT 29840
WTR YR 1991 TOTAL 18664.92 MEAN 51.1 MAX 1550 MIN .00 AC-FT 37020

e Estimated

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM

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

LOCATION.--Lat 36°47'32", long 108°43'54", in NW¼ sec.27, T.30 N., R.18 W., San Juan County, Hydrologic Unit 14080105, on left bank 3 mi west of Shiprock, 6 mi downstream from Chaco River, and at mile 215.0.

DRAINAGE AREA.--12,900 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to October 1911, February 1927 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1931, 1934-38, 1951. WSP 1313: 1911, 1933. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,848.68 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Apr. 6, 1922, nonrecording gage and Apr. 7, 1922, to Oct. 25, 1933, water-stage recorder, at site 3 mi upstream at different datum. Oct. 26, 1933, to Sept. 30, 1936, water-stage recorder at present site at datum 3.31 ft higher and Oct. 1, 1936, to Sept. 30, 1952, at datum 1.77 ft higher. Supplementary water-stage recorders at nearby sites, same datum, used at times.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Since 1962 flow partly regulated by Navajo Reservoir (station 09355100). Diversions for irrigation of about 118,000 acres upstream from station. Ungaged canals bypass station on both right and left banks, though some of bypass flow is returned to river downstream from gage. Satellite telemeter at station.

AVERAGE DISCHARGE.--65 years (water years 1927-91), 2,188 ft³/s, 1,585,000 acre-ft/yr, unadjusted.EXTREMES FOR PERIOD OF RECORD (SINCE 1927).--Maximum discharge, about 80,000 ft³/s, Aug. 11, 1929, gage height, 5.7 ft, site and datum then in use; minimum daily, 8 ft³/s, Aug. 25, 26, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911, and reached a stage of 22 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 12	0100	*5,260	*6.15				

Minimum daily, 258 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1820	1070	1060	966	764	1010	935	2080	3340	1360	434	275
2	1610	1150	1130	978	792	e1220	993	2890	2910	1310	e398	283
3	1610	1500	1150	1040	811	1090	1060	2610	2680	1080	e409	273
4	1700	1440	1100	1150	811	1050	1180	2190	2510	949	500	273
5	1580	1210	1090	1380	826	1030	1290	1930	2380	878	766	392
6	1450	1090	1090	1260	858	1270	1420	1740	2260	863	719	840
7	1270	1100	1050	1360	962	1260	1900	2570	2450	845	961	2300
8	1320	1190	1050	1360	1130	1000	2250	3520	2750	743	1150	2380
9	1250	1140	1070	1220	1250	963	e2110	3830	2950	751	730	2390
10	1250	1070	1070	1180	1130	915	e1920	4620	3310	957	457	1980
11	1200	1040	1060	1120	1160	903	e1640	4560	2890	928	465	2520
12	1160	1090	992	1070	1320	906	1690	4660	2910	730	669	3890
13	1250	1130	1080	1070	1520	948	1550	4440	3070	674	623	3350
14	1270	1140	1070	1040	1980	962	1350	4470	3110	592	512	2890
15	1240	1170	1030	1040	2300	978	1270	4720	3100	610	e429	2110
16	1230	1150	1050	1070	2090	1040	1520	4560	2700	594	e349	1840
17	1190	1150	1010	1040	1970	1070	1560	3830	2600	597	e316	1570
18	1120	1180	996	1060	1880	1010	1570	3340	2580	678	e313	1330
19	1110	1170	1010	1060	e1420	1000	1810	3820	2480	693	e409	1190
20	2000	1090	1080	1060	e1150	1020	2160	4270	2450	647	e307	942
21	2570	1070	1070	1090	e1030	1060	2150	4210	2280	553	e298	870
22	1430	1060	1030	1020	e1080	1000	2320	4390	2280	539	279	844
23	1250	1110	868	976	e1050	991	2470	3610	2230	557	258	e795
24	1180	1040	744	944	e1000	997	2440	3280	1990	573	265	e749
25	1230	1030	784	931	e952	1030	2180	2970	1830	911	279	e684
26	1060	1050	803	944	926	1000	2060	2690	1580	852	287	e711
27	1070	1100	882	942	902	1060	2030	2910	1530	944	275	e634
28	1060	1060	969	962	967	1080	1910	3390	1400	828	302	e590
29	1050	1080	1100	996	---	1070	1840	3690	1330	635	328	e564
30	1040	1090	1090	1020	---	1010	1920	3560	1410	515	309	e601
31	1040	---	1010	e951	---	964	---	3630	---	483	277	---
TOTAL	41610	33960	31588	33300	34031	31907	52498	108980	73290	23869	14073	40060
MEAN	1342	1132	1019	1074	1215	1029	1750	3515	2443	770	454	1335
MAX	2570	1500	1150	1380	2300	1270	2470	4720	3340	1360	1150	3890
MIN	1040	1030	744	931	764	903	935	1740	1330	483	258	273
AC-FT	82530	67360	62650	66050	67500	63290	104100	216200	145400	47340	27910	79460

CAL YR 1990 TOTAL 375322 MEAN 1028 MAX 3870 MIN 109 AC-FT 744500
WTR YR 1991 TOTAL 519166 MEAN 1422 MAX 4720 MIN 258 AC-FT 1030000

e Estimated

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1941-45, 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1941 to September 1945, July 1957 to September 1986, October 1989 to current year.

WATER TEMPERATURE: December 1950 to September 1986, October 1989 to current year.

INSTRUMENTATION.--Water-temperature and specific-conductance monitor.

REMARKS.--Interruptions in record were due to probes silted, probes out of water, or malfunction of recording instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (water years, 1957-86, 1990-91) Maximum, 4,360 microsiemens July 31, 1959; minimum, 138 microsiemens, Nov. 1, 1981.

WATER TEMPERATURE: Maximum 34.0 °C, July 20, 1968; minimum, 0.0 °C on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,770 microsiemens, Sept. 13; minimum daily, 258 microsiemens, June 10.

WATER TEMPERATURE: Maximum daily, 27.6 °C, July 14; minimum daily, 0.0 °C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
NOV 27...	0903	1100	620	8.3	2.5	4.0	55	11.3	230	89	70	12	
FEB 05...	1003	850	632	8.4	9.0	2.5	33	11.7	230	99	69	13	
06...	0930	892	590	8.4	--	3.5	--	--	240	--	72	14	
MAY 08...	1600	3620	360	8.4	30.0	13.5	120	8.9	140	34	43	7.1	
SEP 05...	1230	338	977	8.1	19.5	20.5	1900	7.4	--	--	--	--	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)
NOV 27...	43	1	2.4	158	4	136	--	180	16	0.30	--	--	--
FEB 05...	46	1	2.4	156	0	128	--	170	17	0.30	--	--	--
06...	49	1	2.5	--	--	--	127	210	14	0.30	0.040	0.003	--
MAY 08...	20	0.7	2.1	118	4	103	--	85	5.0	0.20	--	--	--
SEP 05...	--	--	--	166	0	136	--	390	26	0.50	--	--	--
DATE		SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 27...	8.2	412	416	0.280	--	0.020	<0.010	0.300	0.300	0.040	0.030	0.36	--
FEB 05...	8.4	395	405	0.390	0.290	0.010	0.010	0.400	0.300	0.030	0.030	--	--
06...	8.3	417	447	--	--	--	--	--	--	--	--	--	--
MAY 08...	10	213	236	0.110	--	0.040	<0.010	0.150	0.110	0.040	0.030	0.36	--
SEP 05...	--	678	--	0.150	--	0.020	<0.010	0.170	0.170	0.020	0.020	1.3	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

SAN JUAN RIVER BASIN
09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDO- SULFAN, TOTAL (UG/L) (39388)
NOV 27...	30	90	350	--	--	--	--	--	--	--	--	--
FEB 05...	23	K7	K4	--	--	--	--	--	--	--	--	--
FEB 06...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 08...	33	K140	490	--	--	--	--	--	--	--	--	--
SEP 05...	--	4700	3800	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.01	<0.010	<0.010
DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	TOX- APHENE, TOTAL (UG/L) (39400)	TOTAL TRI- THION (UG/L) (39786)	2,4-D, TOTAL (UG/L) (39730)
MAY 08...	--	--	--	--	--	--	--	--	--	--	--	0.02
SEP 05...	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<1	<0.01	--
DATE	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PER- THANE TOTAL (UG/L) (39034)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	CHLOR- DYRIFOS TOTAL RECOVER (UG/L) (38932)	DI- SYSTON TOTAL (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	2, 4-DP TOTAL (UG/L) (82183)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	
MAY 08...	<0.01	<0.01	--	--	--	--	--	--	--	<0.01	--	
SEP 05...	--	--	<0.1	<0.10	<0.01	0.01	<0.01	<0.01	<0.01	--	<0.01	

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
FEB									
05...	1004	22	1.20	13	622	8.4	3.0	11.5	396
05...	1005	32	1.52	23	622	8.3	2.5	11.7	513
05...	1006	42	1.85	30	620	8.3	2.5	11.7	347
05...	1007	52	2.28	39	620	8.3	2.5	11.7	588
05...	1008	62	2.35	57	620	8.3	2.5	11.8	659
05...	1009	72	2.40	56	620	8.2	2.5	11.8	665
05...	1010	82	2.70	57	620	8.3	2.5	11.8	380
05...	1011	92	3.00	65	620	8.3	2.5	11.7	534
05...	1012	102	2.45	69	619	8.3	2.5	11.7	700
05...	1013	112	2.58	51	619	8.3	2.5	11.5	857
05...	1014	122	2.30	53	619	8.3	2.5	11.5	691
05...	1015	132	2.72	55	619	8.3	2.5	11.7	748
05...	1016	142	2.75	59	619	8.2	2.5	11.7	728
05...	1017	152	2.60	68	619	8.3	2.5	11.7	802
05...	1018	162	2.80	71	619	8.2	2.5	11.8	781
05...	1019	172	2.48	57	618	8.3	2.5	11.8	338
05...	1020	182	1.70	28	618	8.3	3.0	11.8	275
MAY									
08...	1601	155	1.3	68	357	8.3	12.5	8.7	340
08...	1602	185	2.3	327	357	8.3	12.5	8.8	310
08...	1603	211	2.5	379	356	8.3	12.5	8.8	284
08...	1604	235	2.8	429	356	8.3	12.5	8.8	260
08...	1605	256	5.0	602	356	8.3	12.5	8.8	239
08...	1606	271	4.1	405	357	8.3	12.5	8.8	224
08...	1607	286	4.6	484	357	8.3	12.5	8.8	209
08...	1608	301	5.3	545	356	8.3	12.5	8.8	194
08...	1609	319	4.3	471	357	8.3	12.5	8.8	176
08...	1610	345	2.6	80	356	8.3	12.5	8.8	150

SAN JUAN RIVER BASIN
09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	619	470	523	---	---	---	---	---	---	608	412	543
2	509	447	473	---	---	---	---	---	---	394	274	300
3	525	470	496	---	---	---	---	---	---	294	278	286
4	517	431	465	---	---	---	---	---	---	288	276	283
5	462	423	446	---	---	---	---	---	---	576	278	390
6	478	439	462	---	---	---	---	---	---	676	580	624
7	517	462	487	---	---	---	622	584	599	828	664	702
8	533	478	510	---	---	---	626	562	593	716	700	707
9	635	509	555	---	---	---	630	596	610	736	714	724
10	541	423	488	---	---	---	618	600	608	748	628	691
11	580	501	527	---	---	---	616	592	603	712	446	652
12	549	501	525	---	---	---	642	602	623	680	648	666
13	556	478	517	---	---	---	644	624	631	668	644	653
14	533	478	518	---	---	---	668	646	659	656	644	651
15	541	486	513	---	---	---	662	614	641	656	640	650
16	556	501	528	---	---	---	634	592	608	644	632	639
17	558	524	544	---	---	---	646	598	621	646	632	639
18	570	550	561	---	---	---	638	600	613	646	622	637
19	590	562	574	---	---	---	636	592	619	642	624	635
20	974	558	748	---	---	---	630	608	619	644	628	634
21	1000	772	895	---	---	---	632	598	612	636	620	630
22	---	---	---	---	---	---	628	602	617	634	618	624
23	---	---	---	---	---	---	672	626	650	628	604	616
24	---	---	---	---	---	---	716	672	685	638	586	613
25	---	---	---	---	---	---	734	684	712	638	588	605
26	---	---	---	---	---	---	718	642	678	632	582	605
27	---	---	---	---	---	---	666	616	639	642	584	611
28	---	---	---	---	---	---	624	422	500	638	594	614
29	---	---	---	---	---	---	524	406	451	614	596	607
30	---	---	---	---	---	---	558	516	538	608	594	601
31	---	---	---	---	---	---	600	558	582	606	590	597
MONTH	---	---	---	---	---	---	---	---	---	828	274	594

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	600	590	595	652	630	639	612	592	602	408	390	393
2	602	584	595	818	656	731	618	590	608	422	384	402
3	610	600	606	810	700	750	602	588	594	480	362	377
4	618	612	616	694	638	662	592	578	587	476	406	418
5	628	618	623	740	638	663	572	546	559	428	404	413
6	642	626	634	694	650	675	560	536	547	420	358	406
7	650	638	644	726	626	683	544	468	510	428	352	385
8	706	648	662	686	632	661	472	424	446	360	330	348
9	703	658	686	640	624	633	446	434	439	352	300	322
10	654	644	648	642	626	633	456	444	451	354	306	323
11	684	656	674	642	630	636	476	410	436	304	300	301
12	---	---	---	640	618	632	490	440	452	300	292	296
13	698	664	682	630	610	621	480	442	462	316	298	304
14	772	528	657	632	606	620	496	464	478	312	304	309
15	720	638	681	636	618	626	530	480	489	306	292	297
16	704	410	600	656	624	638	584	484	522	302	288	293
17	688	478	532	734	620	666	480	458	467	322	300	312
18	468	458	464	710	646	670	458	426	445	332	320	326
19	474	464	468	828	626	667	430	404	420	322	288	302
20	480	458	473	714	614	640	402	378	389	292	268	276
21	488	464	479	632	614	622	380	374	377	366	270	283
22	498	484	490	666	614	635	378	362	370	562	336	380
23	508	488	497	656	618	629	364	354	358	338	314	320
24	516	490	507	624	598	609	374	358	366	322	314	316
25	524	500	515	678	592	617	398	376	385	332	314	322
26	654	514	584	618	590	605	410	396	402	338	332	335
27	644	630	636	654	604	625	482	396	419	334	314	326
28	640	620	630	652	600	618	404	394	399	314	284	298
29	---	---	---	628	600	615	408	400	403	288	272	279
30	---	---	---	616	590	599	408	396	401	290	284	286
31	---	---	---	624	604	612	---	---	---	282	272	277
MONTH	---	---	---	828	590	643	618	354	459	562	268	330

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, NM -- Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	310	282	296	---	---	---	---	---	---	---	---	---
2	458	308	324	---	---	---	---	---	---	---	---	---
3	414	344	352	---	---	---	---	---	---	---	---	---
4	366	352	359	---	---	---	---	---	---	---	---	---
5	396	368	378	---	---	---	1310	726	995	---	---	---
6	415	389	397	---	---	---	794	630	693	---	---	---
7	407	361	377	---	---	---	832	548	617	1220	790	968
8	405	325	355	---	---	---	868	536	738	1110	292	874
9	323	282	299	---	---	---	746	624	665	832	582	690
10	282	258	270	559	506	543	620	580	603	582	438	486
11	310	278	294	504	483	496	596	558	577	454	436	447
12	310	298	305	534	485	515	674	592	640	678	444	488
13	477	297	344	555	532	547	670	622	651	1770	526	1130
14	733	325	438	574	551	562	620	572	595	900	684	772
15	353	311	329	615	560	578	572	510	543	806	556	719
16	375	341	353	724	581	608	---	---	---	574	522	546
17	346	332	336	634	599	610	---	---	---	520	504	511
18	334	306	316	720	591	610	---	---	---	520	506	513
19	304	290	296	897	601	686	---	---	---	524	512	520
20	323	302	312	787	610	655	---	---	---	530	512	522
21	335	323	330	617	599	610	---	---	---	540	528	534
22	331	319	324	614	596	605	---	---	---	538	520	529
23	332	321	327	611	600	605	---	---	---	550	522	532
24	---	---	---	608	589	600	---	---	---	556	530	544
25	---	---	---	914	575	672	---	---	---	560	540	550
26	---	---	---	916	609	744	---	---	---	562	548	554
27	---	---	---	749	659	705	---	---	---	592	558	573
28	---	---	---	684	616	635	---	---	---	608	582	592
29	---	---	---	624	612	617	---	---	---	612	590	601
30	---	---	---	631	606	618	---	---	---	616	600	607
31	---	---	---	648	328	620	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.6	14.5	15.8	10.7	8.9	9.8	3.8	.7	2.1	.1	.0	.1
2	17.2	14.5	15.7	9.5	7.9	8.8	2.8	.7	1.7	.1	.0	.1
3	16.2	13.1	14.4	7.9	5.3	7.0	1.5	.0	.5	.1	.0	.1
4	16.0	11.9	13.6	7.7	4.6	5.9	1.0	.0	.2	.4	.0	.2
5	16.2	11.9	13.9	8.2	5.2	6.6	.7	.0	.2	.6	.1	.3
6	16.2	12.7	14.3	8.5	5.6	6.9	1.0	.0	.3	2.8	.3	1.6
7	14.9	12.9	13.8	6.5	5.1	5.9	1.4	.0	.4	2.6	2.0	2.4
8	13.9	10.5	12.3	6.9	4.4	5.5	1.6	.1	.6	2.8	2.2	2.5
9	11.9	8.4	10.1	7.7	4.3	5.9	1.8	.1	.7	3.2	2.2	2.7
10	12.3	8.0	10.0	8.0	4.5	6.2	2.5	.1	1.0	2.5	1.2	2.1
11	12.9	8.2	10.2	8.6	4.8	6.6	2.9	.1	1.5	2.3	.1	1.2
12	13.3	8.0	10.5	8.9	5.2	7.0	4.4	2.2	3.2	1.3	.7	1.0
13	12.7	7.8	10.2	9.2	5.6	7.3	6.2	3.5	4.7	1.0	.5	.7
14	13.3	8.4	10.5	9.3	5.8	7.5	5.4	3.0	4.7	2.6	.1	1.2
15	13.9	8.8	11.0	9.2	5.9	7.5	3.3	1.5	2.4	1.7	.0	.9
16	13.3	9.2	11.2	8.5	5.8	7.2	3.1	1.6	2.4	3.4	1.0	2.0
17	12.3	9.5	10.8	9.4	6.4	7.7	3.2	1.4	2.6	3.1	.5	1.8
18	11.6	7.5	9.6	9.4	6.5	7.9	1.2	.1	.6	3.1	.1	1.5
19	12.7	9.3	11.0	8.9	6.3	7.6	.5	.1	.2	3.2	.2	1.6
20	10.9	8.3	9.8	8.3	7.3	7.7	1.3	.1	.6	2.9	.1	1.6
21	9.1	6.5	7.8	7.4	5.6	6.6	.4	.1	.2	3.0	1.3	2.0
22	9.8	6.3	8.0	6.2	3.5	4.9	.2	.1	.1	2.4	.2	1.1
23	10.6	6.6	8.5	5.4	2.5	3.9	.1	.1	.1	1.5	.0	.4
24	11.4	7.3	9.2	5.4	2.1	3.7	.1	.0	.1	.9	.0	.3
25	12.1	7.9	9.9	5.1	2.0	3.5	.1	.0	.1	1.8	.0	.6
26	12.2	8.2	10.2	4.7	3.2	4.0	.1	.0	.1	1.9	.1	.7
27	12.5	8.4	10.4	5.0	3.0	3.9	.1	.0	.1	2.3	.0	.8
28	13.0	9.0	10.9	3.3	1.1	2.2	.1	.0	.1	2.4	.0	.9
29	13.0	9.1	11.0	2.9	.0	1.3	.4	.1	.2	1.8	.0	.6
30	12.7	8.7	10.7	3.0	.0	1.5	.1	.0	.1	1.0	.0	.3
31	11.4	8.9	10.2	---	---	---	.1	.0	.1	1.5	.0	.5
MONTH	17.6	6.3	11.1	10.7	.0	5.9	6.2	.0	1.0	3.4	.0	1.1

SAN JUAN RIVER BASIN

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO

LOCATION.--Lat 37°00'20", long 109°02'00", SE¼NE¼ sec.21, T.32 N., R.20 W., Montezuma County, Hydrologic Unit 14080201, on left bank 1,300 ft upstream from bridge on U.S. Highway 160, 0.1 mi north of New Mexico-Colorado State line, 1.0 mi east of Four Corners Monument, 3.0 mi downstream from Mancos River, and at mile 187.2.

DRAINAGE AREA.--14,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Flow partly regulated by Navajo Reservoir (09355100).

AVERAGE DISCHARGE.--14 years, 2,367 ft³/s, 1,715,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s, May 29, 1979, gage height, 6.25 ft; maximum gage height, 14.43 ft, Dec. 12, 1978 (backwater from ice); minimum, 110 ft³/s, Aug. 19, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 12	0200	*6,260	*4.19	No other peak greater than base discharge.			
Minimum daily, 365 ft ³ /s, Aug. 23.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2170	940	997	e1020	e850	912	860	1980	3850	1210	e511	e430
2	1700	e1200	1050	e1050	e870	1280	892	2610	3160	1210	e535	e415
3	1740	e1600	1170	e1170	e880	1140	966	2550	2900	1030	e487	e420
4	1920	e1500	1150	e1380	e890	1100	1100	2220	2600	902	e870	e490
5	1800	e1300	1200	e1500	899	1130	1240	1810	2350	820	746	e520
6	1710	e1100	1230	e1400	904	1270	1360	1760	2150	828	936	704
7	1500	1000	1200	e1500	1030	1480	1850	3000	2330	815	836	1880
8	1440	1220	1100	e1610	1200	1120	2470	3600	2690	766	1080	2390
9	1440	1210	1060	e1380	1440	1000	2430	3750	3220	888	842	2490
10	1550	1120	1120	e1260	1300	960	2060	4650	3660	862	e548	2090
11	1400	1060	1080	e1190	1210	930	1820	4750	2940	1020	e465	2740
12	1250	1100	974	e1140	1430	915	1880	4880	2800	885	e617	4590
13	1330	e1200	1010	e1130	1640	910	1760	4800	3450	717	707	3420
14	1390	e1240	1090	e1120	2070	908	1530	4810	3660	684	604	2460
15	1320	e1280	1030	e1150	2500	939	1390	5050	3600	659	e535	2040
16	1290	e1180	e1120	e1180	2300	959	1520	5160	3030	606	e500	1920
17	1160	1120	e1110	e1110	2100	1020	1680	4530	2620	645	e449	1680
18	1090	1150	e1060	e1120	2240	927	1670	3750	2680	653	e460	1580
19	1070	1140	950	e1130	1870	904	1920	3940	2870	742	e495	1440
20	1720	1110	1080	e1130	1360	888	2230	4590	2640	682	e425	1190
21	3060	1010	1180	e1190	1100	926	2300	4760	2440	670	e415	1140
22	1730	995	1120	e1110	1020	931	2560	4910	2410	596	e385	1040
23	1270	1010	e1000	e1060	960	902	2600	3900	2280	584	e365	973
24	1330	989	e870	e1000	933	882	2500	3600	2160	592	e390	927
25	1220	938	e890	e990	867	878	2100	3300	1880	765	e420	849
26	1070	954	e990	e1010	813	903	1800	2800	1630	979	e430	835
27	1100	1040	e1070	e1010	829	915	1930	3000	1490	1070	e410	794
28	1090	999	e1180	e1040	854	963	2030	3500	1310	976	e470	717
29	1070	1020	e1170	e1100	---	965	1900	4000	1210	740	e440	e550
30	958	1020	e1140	e1110	---	947	1860	3840	1240	631	e415	e510
31	956	---	e1040	e1020	---	900	---	3920	---	e548	e408	---
TOTAL	44844	33745	33431	36310	36359	30804	54208	115720	77250	24775	17196	43224
MEAN	1447	1125	1078	1171	1299	994	1807	3733	2575	799	555	1441
MAX	3060	1600	1230	1610	2500	1480	2600	5160	3850	1210	1080	4590
MIN	956	938	870	990	813	878	860	1760	1210	548	365	415
AC-FT	88950	66930	66310	72020	72120	61100	107500	229500	153200	49140	34110	85730

CAL YR 1990 TOTAL 396775 MEAN 1087 MAX 4300 MIN 139 AC-FT 787000
WTR YR 1991 TOTAL 547866 MEAN 1501 MAX 5160 MIN 365 AC-FT 1087000

e Estimated

SAN JUAN RIVER BASIN

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-81, 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	CHARGE, INST. CUBIC FEET PER SECOND (00061)	DIS- SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 27...	1504	1060	684	8.3	4.0	3.0	45	11.9	240
FEB 05...	1544	920	665	8.3	8.5	4.5	44	11.6	240
MAR 13...	1200	895	690	8.5	13.0	7.0	130	10.5	260
APR 03...	1330	977	660	8.5	18.0	14.0	95	9.0	260
JUL 09...	1030	752	557	8.7	27.0	23.0	18	7.3	220
SEP 05...	0900	314	807	8.3	21.0	19.0	17	8.6	280

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
NOV 27...	110	73	15	46	1	2.4	149	7
FEB 05...	110	71	15	45	1	2.6	147	7
MAR 13...	120	75	17	49	1	2.6	153	7
APR 03...	130	73	18	47	1	2.7	149	4
JUL 09...	94	68	11	34	1	2.4	132	8
SEP 05...	140	81	19	65	2	3.3	167	0

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
NOV 27...	134	200	17	0.40	8.2	438	442
FEB 05...	132	190	17	0.30	8.2	443	428
MAR 13...	137	220	14	0.30	9.2	471	469
APR 03...	128	220	13	0.30	8.2	461	459
JUL 09...	122	150	13	0.30	4.3	340	356
SEP 05...	137	300	21	0.40	3.2	546	575

LITTLE COLORADO RIVER BASIN

09386900 RIO NUTRIA NEAR RAMAH, NM

LOCATION.--Lat 35°16'57", long 108°33'10", in NW¼SW¼ sec.8, T.12 N., R.16 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank at mouth of Nutria Canyon, 0.9 mi upstream from Nutria diversion dam, 1.3 mi northeast of Upper Nutria, and 10.4 mi northwest of Ramah.

DRAINAGE AREA.--71.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year.

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

GAGE.--Water-stage recorder and concrete control. Concrete control raised 1.0 ft June 6, 1975. Control raised 2.35 ft June 28, 1984. Elevation of gage is 6,860 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

AVERAGE DISCHARGE.--22 years, 6.51 ft³/s, 4,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 782 ft³/s, Apr. 14, 1973, gage height, 5.58 ft, datum then in use, from rating curve extended above 470 ft³/s; maximum gage height, 7.90 ft, Mar. 12, 1985; no flow Oct. 1-20, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
April 2	1830	*297	*7.07	Sept. 5	1100	121	6.03

Minimum daily, 0.01 ft³/s, July 24, 25, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.12	.09	.21	.16	4.9	81	1.2	.08	.08	.04	.09
2	.16	.17	.08	.21	.17	4.4	151	1.2	.07	.08	.05	.08
3	.11	.18	e.08	.21	.18	11	175	.93	.09	.08	.07	.08
4	.09	.18	e.10	.23	.20	31	172	.80	.07	.07	.15	2.5
5	.10	.15	e.10	6.6	.23	87	152	.80	.06	.08	.08	37
6	.09	.15	.12	8.7	.25	99	128	.80	.06	.08	.09	8.8
7	.10	.18	.11	4.6	.45	30	97	.79	.06	.09	.14	.59
8	.10	.19	.12	4.0	.87	12	61	.68	.06	.10	.07	.16
9	.10	.18	.13	3.7	1.6	9.6	36	.68	.06	.09	.06	.11
10	.10	.17	.14	1.9	2.2	11	28	.64	.07	.09	.07	.09
11	.11	.18	.16	.86	3.3	15	19	.52	.09	.10	.07	.09
12	.11	.18	.15	.63	5.0	11	13	.45	.15	.10	.07	.12
13	.10	.18	.20	.41	6.5	8.8	10	.46	.10	.10	.07	.13
14	.10	.18	.18	.37	6.7	8.8	9.0	.37	.10	.10	.07	.12
15	.09	.20	.15	.33	6.1	5.7	7.6	.44	.09	.09	.07	.12
16	.10	.20	.20	.24	8.2	4.6	6.2	.23	.08	.10	.07	.12
17	.10	.18	.18	.18	13	9.3	5.3	.20	.08	.10	.08	.14
18	.09	.18	.16	.14	4.8	11	4.4	.16	.08	.13	.08	.13
19	.10	.19	.16	.12	1.5	13	3.6	.12	.08	.23	.07	1.2
20	.21	.21	.17	.12	1.0	12	3.4	.10	.08	.15	.06	.28
21	.13	.21	.16	.12	1.3	16	2.9	.11	.07	.15	.06	.18
22	.10	.21	.16	.13	2.1	12	2.3	.10	.07	.15	.07	.17
23	.11	.21	.16	.13	2.7	26	2.0	.09	.06	.15	.08	.16
24	.12	.23	.16	.12	3.4	27	1.8	.07	.06	.01	.07	.18
25	.10	.24	.16	.12	2.7	31	1.6	.06	.07	.01	.07	.18
26	.10	.29	.16	.13	1.9	51	1.7	.07	.08	.02	.13	.20
27	.12	.15	.16	.14	1.6	36	2.3	.07	.06	.02	.16	.19
28	.10	.08	.16	.14	2.9	50	1.7	.05	.06	.03	.11	.21
29	.10	.10	.17	.14	---	46	1.2	.04	.07	.03	.11	.21
30	.10	.10	.21	.12	---	32	1.1	.04	.08	.01	.10	.24
31	.10	---	.21	.15	---	42	---	.05	---	.02	.10	---
TOTAL	3.42	5.37	4.65	35.20	81.01	768.1	1181.1	12.32	2.29	2.64	2.59	53.87
MEAN	.11	.18	.15	1.14	2.89	24.8	39.4	.40	.076	.085	.084	1.80
MAX	.21	.29	.21	8.7	13	99	175	1.2	.15	.23	.16	.37
MIN	.09	.08	.08	.12	.16	4.4	1.1	.04	.06	.01	.04	.08
AC-FT	6.8	11	9.2	70	161	1520	2340	24	4.5	5.2	5.1	107

CAL YR 1990 TOTAL 158.44 MEAN .43 MAX 23 MIN .01 AC-FT 314
WTR YR 1991 TOTAL 2152.56 MEAN 5.90 MAX 175 MIN .01 AC-FT 4270

e Estimated

LITTLE COLORADO RIVER BASIN
09386900 RIO NUTRIA NEAR RAMAH, NM -- Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978, 1980, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
DEC 05...	1430	0.10	550	7.7	5.0	6.5	9.8	320	36	88	24
FEB 26...	1230	2.2	260	7.9	8.0	2.0	10.7	120	17	36	8.5
MAY 14...	1315	0.24	498	8.0	19.5	13.0	8.5	250	13	68	19
JUL 17...	1020	0.10	580	7.7	22.0	18.5	7.3	280	16	81	20
DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD HCO3 (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD CO3 (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD CACO3 (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	
DEC 05...	12	0.3	1.0	345	0	283	65	6.5	0.40	11	
FEB 26...	4.4	0.2	1.1	132	0	108	21	3.1	<0.10	--	
MAY 14...	11	0.3	1.5	286	0	234	36	6.4	0.40	12	
JUL 17...	12	0.3	1.1	327	0	268	49	13	0.40	11	
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
DEC 05...	378	<1	1	40	<1	<1.0	<1	<1	2	1	29
FEB 26...	139	<1	<1	10	<1	<1.0	3	<1	1	1	29
MAY 14...	295	<1	1	30	2	<1.0	<1	<1	7	<1	11
JUL 17...	348	2	1	40	7	<1.0	--	<1	17	<1	11
DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 05...	1	<1	--	<0.1	<1	<1	<10	7	--	--	--
FEB 26...	1	1	<0.10	<0.1	<1	<1	<10	<3	34	0.20	100
MAY 14...	4	<1	0.20	<0.1	<1	<1	<10	5	39	0.02	79
JUL 17...	1	<1	<0.10	<0.1	<1	<1	<10	11	63	0.02	49

LITTLE COLORADO RIVER BASIN

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM.

LOCATION.--Lat 35°06'03", long 108°45'03", in NE¼ sec.17, T.10 N., R.18 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank downstream from highway bridge on State Highway 36, 0.8 mi upstream from flow line of Black Rock Reservoir, 2.3 mi northeast of Black Rock, and 5.9 mi northeast of Zuni Pueblo.

DRAINAGE AREA.--848 mi², of which 13 mi² is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year. Prior to October 1974 published as "above Zuni Reservoir."

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year. Satellite telemeter available at station.

AVERAGE DISCHARGE.--22 years, 12.1 ft³/s, 8,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft³/s, Aug. 4, 1974, gage height, 6.61 ft, from rating curve extended above 670 ft³/s on basis of slope-area measurements at gage heights 4.05 ft, 3.94 ft, 5.16 ft, and 6.61 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 160 ft³/s, April 5; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.21	.27	.56	.82	3.1	2.5	1.1	.00	.00	.00	.00
2	.04	.35	.36	.67	.89	4.5	2.3	.95	.00	.00	.00	.00
3	.01	.60	.37	1.0	1.1	4.1	2.1	.83	.00	.00	.00	.00
4	.00	.64	.31	1.1	1.4	2.8	33	.70	.00	.00	.00	.14
5	.00	.59	.29	e1.5	1.6	2.4	e160	.65	.00	.00	.00	38
6	.00	.48	.38	e1.3	1.9	3.3	e120	.64	.00	.00	.00	19
7	.00	.47	.34	e1.6	2.9	2.6	e90	.64	.00	.00	.00	9.6
8	.00	.53	.34	e1.9	4.5	2.0	e64	.60	.00	.00	.00	3.2
9	.00	.60	.34	e1.5	4.5	2.0	e51	.60	.00	.00	.00	1.5
10	.00	.59	.41	e1.4	5.3	1.9	e36	.58	.00	.00	.00	1.1
11	.00	.45	.48	e1.1	6.0	1.8	e22	.58	.00	.00	.00	.93
12	.00	.28	.57	e1.1	5.3	1.7	e17	.50	.00	.00	.00	.88
13	.04	.18	.98	e1.2	4.7	1.8	e14	.52	.00	.00	.00	.99
14	.18	.16	1.3	1.4	4.0	1.8	e13	.47	.00	.00	.00	.96
15	.20	.16	1.0	1.5	3.2	1.9	e12	.25	.00	.00	.00	.95
16	.15	.16	1.0	1.3	2.7	2.4	e11	.06	.00	.00	.00	.89
17	.07	.17	1.4	1.4	2.4	2.7	e10	.00	.00	.00	.00	.75
18	.00	.17	1.4	1.2	2.2	3.1	5.7	.00	.00	.00	.00	.69
19	.01	.14	1.0	1.1	1.6	2.6	4.7	.00	.00	.00	.00	.57
20	1.2	.36	.90	1.0	1.5	2.4	4.2	.00	.00	.00	.00	.32
21	2.2	.50	.70	1.1	1.5	2.8	3.3	.00	.00	.00	.00	.33
22	1.1	.54	.73	1.2	1.4	3.1	2.6	.00	.00	.00	.00	.25
23	.45	.53	.61	1.2	1.4	3.1	2.1	.00	.00	.00	.00	.06
24	.34	.48	.57	1.0	1.4	3.0	1.7	.00	.00	.00	.00	.00
25	.24	.49	.75	.99	1.4	2.6	1.6	.00	.00	.00	.00	.00
26	.18	.60	.85	.98	1.3	2.6	1.8	.00	.00	.00	.00	.00
27	e.18	.58	.63	.98	1.3	3.2	1.4	.00	.00	.00	.00	.00
28	e.18	.47	.59	.95	1.5	3.7	1.4	.00	.00	.00	.71	.00
29	e.18	.30	.72	.95	---	4.7	1.3	.00	.00	.00	1.3	.00
30	.18	.21	.77	.87	---	3.3	1.2	.00	.00	.00	.34	.00
31	.20	---	.58	.81	---	2.8	---	.00	---	.00	.02	---
TOTAL	7.33	11.99	20.94	35.86	69.71	85.8	692.9	9.67	0.00	0.00	2.37	81.11
MEAN	.24	.40	.68	1.16	2.49	2.77	23.1	.31	.000	.000	.076	2.70
MAX	2.2	.64	1.4	1.9	6.0	4.7	160	1.1	.00	.00	1.3	38
MIN	.00	.14	.27	.56	.82	1.7	1.2	.00	.00	.00	.00	.00
AC-FT	15	24	42	71	138	170	1370	19	.00	.00	4.7	161

CAL YR 1990 TOTAL 208.26 MEAN .57 MAX 8.1 MIN .00 AC-FT 413
WTR YR 1991 TOTAL 1017.68 MEAN 2.79 MAX 160 MIN .00 AC-FT 2020

e Estimated

LITTLE COLORADO RIVER BASIN

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	
DEC 05...	1030	--	0.21	810	8.3	6.5	1.0	--	11.8	300	0	
FEB 26...	1500	--	1.3	710	8.6	13.0	6.0	--	11.6	240	0	
APR 04...	1520	--	59	780	8.7	--	--	--	--	--	--	
APR 04-05	1520	101	--	--	--	--	--	--	--	--	--	
04...	1720	--	74	790	8.2	--	--	--	--	--	--	
04...	1930	--	82	575	8.5	--	--	--	--	--	--	
04...	2120	--	90	550	8.5	--	--	--	--	--	--	
04...	2320	--	103	510	8.3	--	--	--	--	--	--	
05...	0120	--	110	505	8.5	--	--	--	--	--	--	
05...	0320	--	114	500	8.5	--	--	--	--	--	--	
05...	0520	--	119	480	8.6	--	--	--	--	--	--	
05...	0720	--	119	480	8.6	--	--	--	--	--	--	
05...	0920	--	119	490	8.6	--	--	--	--	--	--	
05...	1120	--	119	420	8.5	--	--	--	--	--	--	
05...	1403	--	142	490	8.3	--	--	--	--	170	--	
05...	1430	--	146	491	8.0	--	15.5	--	7.8	170	--	
MAY 14...	1030	--	0.53	710	8.0	21.0	12.5	--	8.5	200	0	
SEP 06...	0915	--	14	340	7.9	19.0	16.0	930	6.8	120	--	
DATE		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
DEC 05...	72	30	110	3	4.4	432	14	378	--	355	130	
FEB 26...	63	20	72	2	4.0	305	19	282	--	275	99	
APR 05...	42	15	40	1	6.3	--	--	--	--	147	100	
05...	42	15	40	1	6.2	--	--	--	--	148	100	
MAY 14...	38	25	94	3	3.9	349	0	286	--	277	96	
SEP 06...	36	6.6	28	1	7.1	--	--	--	101	--	71	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)
DEC 05...	29	0.20	--	15	--	617	<1	1	--	--	120	
FEB 26...	23	0.30	--	--	--	450	<1	<1	--	--	70	
APR 05...	14	0.30	0.070	7.6	312	314	--	1	77	<0.5	60	
05...	13	0.30	0.080	7.7	311	314	--	1	76	<0.5	60	
MAY 14...	25	0.40	--	4.0	--	458	<1	<1	--	--	120	
SEP 06...	11	0.40	0.030	8.6	240	230	--	<1	70	<0.5	70	

LITTLE COLORADO RIVER BASIN

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
DEC 05...	<1	<1.0	<1	<1	--	5	3	8	2	<1	--
FEB 26...	<1	<1.0	3	<1	--	3	1	12	<1	1	--
APR 05...	--	<1.0	--	<5	<3	--	<10	10	--	<10	5
MAY 05...	--	<1.0	--	<5	<3	--	<10	10	--	<10	6
MAY 14...	2	<1.0	<1	<1	--	9	<1	11	7	1	--
SEP 06...	--	<1.0	--	<5	<3	--	<10	74	--	<10	5

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)
DEC 05...	--	0.40	0.1	--	--	<1	<1	--	--	--
FEB 26...	--	<0.10	<0.1	--	--	<1	<1	--	--	--
APR 05...	<1	--	--	<10	<10	--	<1	<1.0	370	<6
MAY 05...	1	--	--	<10	<10	--	<1	<1.0	370	<6
MAY 14...	--	<0.10	0.1	--	--	<1	<1	--	--	--
SEP 06...	<1	--	--	<10	<10	--	<1	<1.0	300	<6

DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, DIS- SOLVED (PCI/L AS SR-90) (80050)	SEDI- MENT, DIS- SOLVED (MG/L PENDE) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	GROSS ALPHA SEDI- MENT (PCI/G) (01507)
DEC 05...	<10	4	--	--	--	215	0.12	49	--	--
FEB 26...	<10	3	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	821	131	--	--	--
APR 04-05	--	--	--	--	--	--	--	--	--	<6
APR 04...	--	--	--	--	--	418	84	--	--	--
APR 04...	--	--	--	--	--	266	59	--	--	--
APR 04...	--	--	--	--	--	255	62	--	--	--
APR 04...	--	--	--	--	--	218	61	--	--	--
APR 05...	--	--	--	--	--	221	66	--	--	--
APR 05...	--	--	--	--	--	202	62	--	--	--
APR 05...	--	--	--	--	--	173	56	--	--	--
APR 05...	--	--	--	--	--	156	50	--	--	--
APR 05...	--	--	--	--	--	164	53	--	--	--
APR 05...	--	--	--	--	--	206	66	--	--	--
APR 05...	--	<3	3.8	9.3	7.0	210	81	98	--	--
APR 05...	--	<3	2.8	8.8	6.2	186	73	98	--	--
MAY 14...	<10	5	--	--	--	47	0.07	82	--	--
SEP 06...	--	8	1.0	8.5	7.0	1210	47	99	100	--

LITTLE COLORADO RIVER BASIN

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	URANIUM -238 WATER DISSOLV (PCI/L) (22603)	URANIUM -234 WATER DISSOLV (PCI/L) (22610)	URANIUM -235 WATER, DISS (PCI/L) (22620)	TH-230 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75939)	U-238 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75940)	U-234 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75942)	RA-226 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75944)	TH-232 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75953)	U-235 SED, SUSP, TOTAL, DRY WGT (PCI/L) (75975)	SAM- PLING METHOD, CODES (82398)
APR										
04...	--	--	--	--	--	--	--	--	--	50
APR										
04-05	--	--	--	1.3	1.1	0.9	1.0	1.2	<0.1	--
04...	--	--	--	--	--	--	--	--	--	50
04...	--	--	--	--	--	--	--	--	--	50
04...	--	--	--	--	--	--	--	--	--	50
04...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	--	--	--	--	--	50
05...	--	--	--	--	1.3	1.3	--	--	<0.1	50
05...	--	--	--	--	1.2	1.1	--	--	<0.1	10
SEP										
06...	0.30	0.40	<0.1	1.2	1.0	1.3	--	1.4	<0.1	10

LITTLE COLORADO RIVER BASIN

09387300 ZUNI RIVER AT NEW MEXICO-ARIZONA STATE LINE

LOCATION.--Lat 34°52'35", long 109°02'29", in SW¼SW¼ sec.34, T.7 N., R.21 W., Cibola County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on the left bank 0.2 mi upstream from the New Mexico-Arizona State line, 5 mi southwest of Ojo Caliente, and 14 mi southwest of Zuni.

DRAINAGE AREA.--1,314 mi², of which 13 mi² is non-contributing.

PERIOD OF RECORD.--October 1983 to April 1987 (annual maximum only), May 1987 to September 1989, September 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,020 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 12, 1987, crest-stage gage at site 200 ft upstream at same datum.

REMARKS.--Discharge records good. Flow partly regulated by Black Rock Reservoir 18 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, July 31, 1988, gage height, 5.63 ft, from rating curve extended above 1.0 ft³/s on basis of step-backwater analysis; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft³/s, at 2300 hours Oct. 1, gage height, 2.91 ft, from rating curve extended above 1.0 ft³/s on basis of step-backwater analysis; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
2	2.0	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
12	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
13	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
14	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
15	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
16	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
17	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
18	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
19	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
20	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
21	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
22	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
23	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
24	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
25	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
26	e.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
27	e.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.93	.00
28	e.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
29	e.00	.00	e.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	e.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	e.00	e.00	---	.00	---	.00	---	.00	.00	---
TOTAL	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00
MEAN	.15	.000	.000	.000	.000	.000	.000	.000	.000	.000	.030	.000
MAX	2.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.93	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	9.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	.00
WTR YR 1991	TOTAL 5.53	MEAN .015	MAX 2.6	MIN .00	AC-FT 11							

e Estimated

LITTLE COLORADO RIVER BASIN

09395350 PUERCO RIVER NEAR CHURCH ROCK, NM

LOCATION--Lat 35°36'04", long 108°35'12" in SE¼NW¼ sec.24, T.16 N., R.17 W., McKinley County, Hydrologic Unit 15020006, on right bank 100 ft downstream from three 5-ft CMC pipe bridge on dirt road 1 mi northwest of State Highway 566, 2.7 mi upstream from Hard Ground Canyon, 7.4 mi upstream from South Fork, and 9.5 mi northeast of Gallup.

DRAINAGE AREA.-- 205 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to September 1982, May 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,710 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to December 4, 1980 at site 1.7 mi upstream at different datum.

REMARKS.--Water-discharge records poor.

AVERAGE DISCHARGE.--7 years (water years 1978-82, 1990-91), 7.16 ft³/s, 5,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,040 ft³/s Aug. 24, 1982, gage height, 4.94 ft from floodmarks, from rating curve extended above 20 ft³/s on basis of slope-area measurements at gage heights 3.80 ft and 4.80 ft; no flow at times.

EXTREMES FOR MAY TO SEPTEMBER 1989.--Maximum discharge, 1,460 ft³/s at 2400 hours Aug. 1, gage height, 4.01 ft; no flow most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 890 ft³/s at 2030 hours July 9, gage height, 3.37 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft³/s at 2115 hours Aug. 6, gage height, 3.68 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.00	.00	10	.00
2	---	---	---	---	---	---	---	.00	.00	.00	18	.00
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	---	---	---	---	---	---	---	.00	.00	.00	.00	65
6	---	---	---	---	---	---	---	.00	.00	.00	.00	1.4
7	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
17	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	---	.00	.00	12	.00	.00
25	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
26	---	---	---	---	---	---	---	.00	.00	46	.00	.00
27	---	---	---	---	---	---	---	.00	.00	9.7	.00	.00
28	---	---	---	---	---	---	---	.00	.00	53	.00	.00
29	---	---	---	---	---	---	---	.00	.00	.35	.00	.00
30	---	---	---	---	---	---	---	.00	.00	1.7	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	---	0.00	122.75	28.00	66.40
MEAN	---	---	---	---	---	---	---	---	.000	3.96	.90	2.21
MAX	---	---	---	---	---	---	---	---	.00	53	18	65
MIN	---	---	---	---	---	---	---	---	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	---	.00	243	56	132

LITTLE COLORADO RIVER BASIN

09395350 PUERCO RIVER NEAR CHURCH ROCK, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.7
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	52	11	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	30	4.4	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	32	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	80	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	78	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	74	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.9	20	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	47	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	40	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.6
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.6
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.7
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	381.90	122.40	26.20
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	12.3	3.95	.87
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	80	47	6.6
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	757	243	52

WTR YR 1990 TOTAL 530.50 MEAN 1.45 MAX 80 MIN .00 AC-FT 1050

LITTLE COLORADO RIVER BASIN

09395350 PUERCO RIVER NEAR CHURCH ROCK, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	.00	.00	.00	e.00	.00	.00	.00	.00	.00	18	.00
2	3.0	.00	.00	.00	e.00	.00	.00	.00	.00	.00	84	.00
3	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e5.0	.00
4	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	e3.0	.00
5	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	100	.00
7	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	32	.00
8	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	e5.0	.00
9	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	e3.0	.00
10	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	6.5	.00
11	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	9.3	.00
12	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	e1.0	.00
13	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
19	18	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
20	194	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
21	e10	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
22	e5.0	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
27	e.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
28	e.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	e.00	---	.00	---	.00	---	.00	.00	---
TOTAL	266.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.80	0.00
MEAN	8.58	.000	.000	.000	.000	.000	.000	.000	.000	.000	8.61	.000
MAX	194	.00	.00	.00	.00	.00	.00	.00	.00	.00	100	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	528	.00	.00	.00	.00	.00	.00	.00	.00	.00	529	.00

CAL YR 1990 TOTAL 796.50 MEAN 2.18 MAX 194 MIN .00 AC-FT 1580
WTR YR 1991 TOTAL 532.80 MEAN 1.46 MAX 194 MIN .00 AC-FT 1060

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979, 1988 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL (82085)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)
AUG										
01...	1900	294	530	7.5	-64.0	-9.35	73300	58200	--	41
02...	0120	449	990	7.4	--	--	160000	194000	80	--
02...	0130	271	1120	7.4	--	--	179000	131000	80	--
02...	0210	325	930	7.5	--	--	160000	140000	81	--
02...	0230	486	860	7.5	--	--	155000	203000	81	--
02...	0310	495	820	7.5	-84.5	-12.35	144000	192000	--	42
02...	0350	349	810	7.3	--	--	141000	133000	74	--
02...	0430	211	800	7.4	--	--	132000	75200	77	--
06...	2100	375	930	7.5	--	--	462000	468000	46	--
06...	2110	1020	830	7.4	-55.5	-9.15	258000	713000	--	36
06...	2140	993	650	7.4	--	--	168000	450000	55	--
06...	2200	987	630	7.4	--	--	178000	474000	45	--
06...	2240	769	620	7.5	--	--	182000	378000	46	--
06...	2320	598	630	7.4	--	--	199000	321000	42	--
06...	2350	413	640	7.4	--	--	162000	181000	51	--
07...	0010	286	650	7.5	--	--	132000	102000	61	--

[illegible]

LITTLE COLORADO RIVER BASIN

09395630 PUERCO RIVER NEAR MANUELITO, NM

LOCATION.--Lat 35°27'42", long 108°56'42" in SE¼NW¼ sec.10, T.14 N., R.20 W., McKinley County, Hydrologic Unit 15020006, on right bank on downstream side of Atchison, Topeka and Santa Fe Railway bridge, 200 ft upstream from Interstate Highway 40, 1.2 mi upstream from Hunting Canyon, and 12.6 mi west of Gallup.

DRAINAGE AREA.-- 990 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder, crest stage gage, and concrete control. Elevation of gage is 6,290 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,900 ft³/s, July 13, 1990, gage height, 9.26 ft, from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow.; minimum 1.6 ft³/s, most of time.

EXTREMES FOR MAY TO SEPTEMBER 1989.--Maximum discharge, 1,400 ft³/s, at 0115 hours, July 27, gage height, 5.75 ft; minimum, 1.6 ft³/s most of time.

EXTREMES FOR 1990 WATER YEAR.--Maximum discharge, 7,900 ft³/s, at 1930 hours, July 13, gage height, 9.26 ft; minimum, 1.6 ft³/s most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,950 ft³/s, at 0230 hours, Oct. 20, gage height, 6.90 ft; minimum, 1.6 ft³/s, most of time each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e1.6	e1.6	44	e1.6
2	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	104	e1.6
3	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e24	e1.6
4	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
5	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	20
6	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e500
7	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
8	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
9	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
10	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
11	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
12	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
13	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
14	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
15	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
16	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
17	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
18	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	82	e1.6
19	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	149	13
20	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	5.1	e1.6
21	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
22	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
23	---	---	---	---	---	---	---	e1.6	e1.6	e1.6	e1.6	e1.6
24	---	---	---	---	---	---	---	e1.6	e1.6	e20	e1.6	e1.6
25	---	---	---	---	---	---	---	e1.6	e1.6	e15	e1.6	e1.6
26	---	---	---	---	---	---	---	e1.6	e1.6	75	e1.6	e1.6
27	---	---	---	---	---	---	---	e1.6	e1.6	211	e1.6	e1.6
28	---	---	---	---	---	---	---	e1.6	e1.6	89	e1.6	e1.6
29	---	---	---	---	---	---	---	e1.6	e1.6	189	e1.6	e1.6
30	---	---	---	---	---	---	---	e1.6	e1.6	44	e1.6	e1.6
31	---	---	---	---	---	---	---	e1.6	---	192	e1.6	---
TOTAL	---	---	---	---	---	---	---	---	48.0	871.8	448.1	576.2
MEAN	---	---	---	---	---	---	---	---	1.60	28.1	14.5	19.2
MAX	---	---	---	---	---	---	---	---	1.6	211	149	500
MIN	---	---	---	---	---	---	---	---	1.6	1.6	1.6	1.6
AC-FT	---	---	---	---	---	---	---	---	95	1730	889	1140

e Estimated

LITTLE COLORADO RIVER BASIN

09395630 PUERCO RIVER NEAR MANUELITO, NM -- Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
2	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	36
3	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
4	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
5	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	23
6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	23	e1.6	e1.6
7	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	48	77	e1.6
8	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	63	e1.6	e1.6
9	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
10	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	38	e1.6	e1.6
11	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
12	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	32	e1.6	e1.6
13	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	630	e1.6	e1.6
14	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	77	243	e1.6
15	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	171	e1.6
16	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	244	16
17	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	46	105	e1.6
18	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	10	e1.6	e1.6
19	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	9.7	e1.6	e1.6
20	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	20	88	18
21	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	85	15
22	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	13
23	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	34	e1.6	165
24	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	52	e1.6	80
25	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	35
26	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
27	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
28	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
29	e1.6	e1.6	e1.6	e1.6	---	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
30	e1.6	e1.6	e1.6	e1.6	---	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
31	20	---	e1.6	e1.6	---	e1.6	---	e1.6	---	e1.6	e1.6	---
TOTAL	68.0	48.0	49.6	49.6	44.8	49.6	48.0	49.6	48.0	1111.5	1051.4	434.6
MEAN	2.19	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	35.9	33.9	14.5
MAX	20	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	630	244	165
MIN	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
AC-FT	135	95	98	98	89	98	95	98	95	2200	2090	862

WTR YR 1990 TOTAL 3052.7 MEAN 8.36 MAX 630 MIN 1.6 AC-FT 6060

e Estimated

LITTLE COLORADO RIVER BASIN

09395630 PUERCO RIVER NEAR MANUELITO, NM -- Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	72	e1.6
2	29	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	190	e1.6
3	18	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	28	e1.6
4	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	35	33
5	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	43	e1.6	e1.6	e1.6	4.7	11
6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	92	e1.6	e1.6	e1.6	106	e1.6
7	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	122	e1.6
8	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	59	e1.6	e1.6	e1.6	e1.6	e1.6
9	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
10	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
11	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	64	e1.6	20	e1.6
12	9.3	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	59	e1.6	e1.6	e1.6
13	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	45	e1.6	e1.6	e1.6
14	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	44	e1.6	e1.6	e1.6
15	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
16	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
17	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
18	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
19	54	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	2.8
20	707	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	6.3
21	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
22	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
23	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
24	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
25	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
26	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	47	258	e1.6
27	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	62	145	e1.6
28	e1.6	e1.6	e1.6	e1.6	e1.6	42	e1.6	e1.6	e1.6	e1.6	23	e1.6
29	e1.6	e1.6	e1.6	e1.6	---	32	e1.6	e1.6	e1.6	37	7.3	e1.6
30	e1.6	e1.6	e1.6	e1.6	---	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6	e1.6
31	e1.6	---	e1.6	e1.6	---	e1.6	---	e1.6	---	e1.6	e1.6	---
TOTAL	863.2	48.0	49.6	49.6	44.8	120.4	237.2	49.6	253.6	190.8	1041.4	94.7
MEAN	27.8	1.60	1.60	1.60	1.60	3.88	7.91	1.60	8.45	6.15	33.6	3.16
MAX	707	1.6	1.6	1.6	1.6	42	92	1.6	64	62	258	33
MIN	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
AC-FT	1710	95	98	98	89	239	470	98	503	378	2070	188

CAL YR 1990 TOTAL 3847.9 MEAN 10.5 MAX 707 MIN 1.6 AC-FT 7630
WTR YR 1991 TOTAL 3042.9 MEAN 8.34 MAX 707 MIN 1.6 AC-FT 6040

e Estimated

LITTLE COLORADO RIVER BASIN

09395630 PUERCO RIVER NEAR MANUELITO, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT											
20...	0030	--	1140	269	7.8	--	--	--	--	--	--
OCT											
20-20	0030	1190	--	--	--	--	98	31	4.9	52	2
20...	0100	--	1260	492	7.6	--	--	--	--	--	--
20...	0200	--	2800	341	7.7	--	77	24	4.1	44	2
20...	0200	--	--	--	--	--	--	--	--	--	--
20...	0330	--	1890	412	7.8	--	--	--	--	--	--
OCT											
20-20	0330	1770	--	--	--	--	120	37	6.4	43	2
20...	0410	--	1660	489	7.7	--	--	--	--	--	--
JUN											
11...	1200	--	--	--	--	--	--	--	--	--	--
13...	2120	--	1270	890	7.5	--	--	--	--	--	--
AUG											
02...	1445	--	93	--	--	--	--	--	--	--	--
06...	0030	--	1470	1050	7.4	--	--	--	--	--	--
15...	0800	--	--	--	--	14.5	--	--	--	--	--
26...	2240	--	2000	420	7.4	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
OCT										
20-20	3.6	160	64	10	0.40	0.020	8.6	271	1	50
20...	3.5	92	56	9.3	0.30	0.030	6.6	204	<1	35
OCT										
20-20	4.3	144	100	9.6	0.50	0.030	8.4	296	1	54

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT										
20-20	<0.5	90	<1.0	<5	<3	<10	72	<10	8	3
20...	<0.5	60	1.0	<5	<3	<10	99	<10	7	4
OCT										
20-20	<0.5	90	<1.0	<5	<3	<10	62	<10	9	3

LITTLE COLORADO RIVER BASIN
09395630 PUERCO RIVER NEAR MANUELITO, NM -- Continued
WATER-QUALITY RECORDS

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL (82085)	SEDI- MENT, SUS- PENDE D (MG/L) (80154)
OCT 20...	--	--	--	--	--	--	--	--	--	80200
OCT 20-20	<10	<10	<1	<1.0	400	<6	12	--	--	102000
20...	--	--	--	--	--	--	--	--	--	119000
20...	<10	<10	<1	<1.0	310	<6	<3	--	--	92500
20...	--	--	--	--	--	--	--	--	--	69600
20...	--	--	--	--	--	--	--	--	--	69200
OCT 20-20	<10	<10	<1	<1.0	490	<6	4	--	--	77200
20...	--	--	--	--	--	--	--	--	--	57300
JUN 11...	--	--	--	--	--	--	--	-93.5	-11.60	--
13...	--	--	--	--	--	--	--	-54.5	-7.25	96600
AUG 02...	--	--	--	--	--	--	--	--	--	E130000
06...	--	--	--	--	--	--	--	--	--	264000
15...	--	--	--	--	--	--	--	--	--	66500
26...	--	--	--	--	--	--	--	-31.0	-5.60	102000

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)
OCT 20...	248000	55	--	--	--	--	--	--	--	--
OCT 20-20	328000	--	33	36	40	45	54	--	--	--
20...	403000	50	--	--	--	--	--	--	--	--
20...	698000	--	29	36	39	45	54	--	--	--
20...	--	--	17	22	30	44	54	70	90	100
20...	353000	66	--	--	--	--	--	--	--	--
OCT 20-20	369000	--	13	17	23	33	40	--	--	--
20...	256000	83	--	--	--	--	--	--	--	--
JUN 13...	330000	--	37	46	49	55	70	81	95	99
AUG 02...	--	--	58	66	71	81	90	93	98	99
06...	1050000	68	--	--	--	--	--	--	--	--
15...	--	--	44	54	63	73	83	92	97	100
26...	549000	--	46	48	53	59	70	78	93	99

DATE	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	GROSS ALPHA SEDI- MENT (PCI/G) (01507)	TH-230 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75939)	U-238 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75940)	U-234 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75942)	RA-226 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75944)	TH-232 SED, SUSP, TOTAL, DRY WGT (PCI/G) (75953)	U-235 SED, SUSP, TOTAL, DRY WGT (PCI/L) (75975)	SAM- PLING METHOD, CODES (82398)
OCT 20...	--	--	--	--	--	--	--	--	--	50
OCT 20-20	--	--	9	1.6	1.2	1.3	--	1.7	<0.1	50
20...	--	--	--	--	--	--	--	--	--	50
20...	--	--	<6	1.5	1.3	1.1	--	1.6	<0.1	50
20...	100	100	--	--	--	--	--	--	--	30
20...	--	--	--	--	--	--	--	--	--	50
OCT 20-20	--	--	--	1.2	1.4	1.0	--	1.3	<0.1	50
20...	--	--	--	--	--	--	--	--	--	50
JUN 13...	100	--	--	1.1	1.2	1.2	--	0.9	<0.1	50
AUG 02...	100	--	--	--	--	--	--	--	--	10
06...	--	--	--	--	--	--	--	--	--	50
15...	--	--	--	--	--	--	--	--	--	30
26...	100	--	11	1.1	1.5	1.4	1.5	1.0	<0.1	50

GILA RIVER BASIN

09430500 GILA RIVER NEAR GILA, NM

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼NW¼ sec.30, T.14 S., R.16 W., Grant County, Hydrologic Unit 15040001, on left bank at Hooker damsite, 1.6 mi upstream from Mogollon Creek, 7 mi northeast of Gila, and at mile 572.5.

DRAINAGE AREA.--1,864 mi².

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1944 (M), 1949 (M). WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft above National Geodetic Vertical Datum of 1929, (river-profile survey). Prior to Dec. 31, 1928, at site 5 mi upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

REMARKS.--Records good. Diversions for irrigation of about 500 acres upstream from station. Several observations of water temperature were made during the year. National Weather Service gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1928-91), 151 ft³/s, 109,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft³/s, Dec. 28, 1984, gage height, 13.0 ft, from floodmark, from rating curve extended above 7,000 ft³/s on basis of slope-area measurement at gage height 12.5 ft; maximum gage height, 17.2 ft, from floodmark, Sept. 29, 1941; minimum, 14 ft³/s, July 15, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in November 1905, December 1906, and January 1916.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	1430	670	2.13	April 8	0130	759	2.64
Dec. 30	0400	4,360	5.25	Aug. 5	0045	1,300	3.17
Jan. 7	0145	1,060	2.85	Aug. 11	0100	748	2.40
Feb. 19	0245	659	2.13	Aug. 18	0445	1,380	3.27
Mar. 2	0245	*4,670	*5.43	Aug. 27	1115	842	2.57
Mar. 6	2215	3,120	4.57	Sept. 7	0030	1,020	2.83
				Sept. 10	2100	892	2.66

Minimum daily discharge, 46 ft³/s, July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	75	98	747	119	1930	572	227	137	46	167	271
2	182	81	96	555	119	3740	550	210	136	54	187	219
3	185	91	95	436	120	1980	570	210	131	58	323	181
4	198	91	93	403	118	1530	580	224	124	71	610	205
5	174	88	91	826	117	1550	618	221	115	61	752	259
6	155	85	89	971	116	2410	643	210	108	55	480	622
7	137	95	89	943	114	2320	710	198	100	50	325	825
8	125	117	88	699	112	1410	735	201	94	47	405	574
9	115	124	87	548	112	1030	683	223	92	49	390	426
10	109	116	86	485	116	836	598	271	102	54	394	548
11	103	110	85	414	117	738	543	299	108	52	613	609
12	99	105	85	351	128	685	502	298	112	52	418	436
13	94	103	90	309	217	648	454	276	104	53	284	348
14	90	102	97	278	248	589	399	252	96	65	208	295
15	89	99	99	249	282	529	343	237	89	59	232	254
16	86	97	124	231	307	483	317	236	85	56	293	223
17	84	96	595	219	359	430	303	223	79	64	549	197
18	83	93	449	202	590	374	299	206	75	61	1160	179
19	81	91	298	183	573	358	310	197	70	63	816	171
20	81	89	236	169	462	364	317	197	65	73	608	163
21	81	90	220	166	423	361	316	207	61	70	453	151
22	80	88	200	162	434	378	332	213	57	71	355	142
23	79	88	174	157	454	372	333	215	57	93	399	146
24	78	86	149	148	479	432	314	203	55	107	401	134
25	78	86	135	141	476	530	295	185	53	111	528	127
26	77	98	138	136	449	563	275	171	50	159	493	132
27	76	108	139	133	405	590	278	162	47	164	706	131
28	75	109	292	130	452	600	270	157	48	193	482	134
29	73	105	2080	131	---	612	264	155	49	148	417	126
30	74	100	3070	130	---	654	247	148	48	128	395	121
31	74	---	1210	125	---	629	---	138	---	124	331	---
TOTAL	3276	2906	10877	10777	8018	29655	12970	6570	2547	2511	14174	8349
MEAN	106	96.9	351	348	286	957	432	212	84.9	81.0	457	278
MAX	198	124	3070	971	590	3740	735	299	137	193	1160	825
MIN	73	75	85	125	112	358	247	138	47	46	167	121
AC-FT	6500	5760	21570	21380	15900	58820	25730	13030	5050	4980	28110	16560

CAL YR 1990 TOTAL 39307 MEAN 108 MAX 3070 MIN 21 AC-FT 77970
WTR YR 1991 TOTAL 112630 MEAN 309 MAX 3740 MIN 46 AC-FT 223400

GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, NM
(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", in SE¼SE¼ sec.13, T.13 S., R.18 W., Grant County, Hydrologic Unit 15040001, on right bank 0.3 mi downstream from Rain Creek, 0.8 mi downstream from Gila Wilderness Boundary, 12 mi upstream from mouth, and 14 mi north of Cliff.

DRAINAGE AREA.--69 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--24 years, 30.0 ft³/s, 21,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s, Aug. 12, 1967, gage height, 13.7 ft, from floodmarks, from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 1	2000	166	2.29	Mar. 6	1130	*626	*3.87
Dec. 16	2015	346	3.09	April 7	0615	284	2.93
Dec. 29	2230	343	3.07	July 25	1515	167	2.42
Jan. 4	2345	226	2.58	Aug. 17	1915	312	3.12
Mar. 1	1900	456	3.40	Sept. 5	2300	510	3.73
				Sept. 9	2030	189	2.49

No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	1.5	7.4	106	13	376	101	48	11	.01	16	8.3
2	92	3.0	7.0	82	12	317	114	57	9.5	.06	17	6.9
3	53	5.0	6.4	66	13	222	139	55	7.7	.43	29	8.5
4	32	4.2	5.7	111	16	267	169	47	6.4	.86	26	45
5	22	3.1	5.4	179	19	308	189	42	6.2	1.4	31	189
6	17	2.6	5.1	170	e18	526	233	44	6.4	.63	29	277
7	14	6.9	4.5	157	e19	351	250	50	5.8	.35	26	107
8	11	14	4.4	117	e18	229	217	62	5.4	.16	20	62
9	8.7	13	4.4	92	e17	181	170	75	5.2	.18	35	76
10	7.5	9.5	4.2	75	e19	160	151	68	5.7	.19	46	117
11	6.7	8.4	4.0	61	e18	165	139	59	6.8	.02	56	69
12	5.9	7.7	4.1	49	45	157	113	50	5.5	.15	50	48
13	5.1	7.1	7.1	43	84	139	93	42	4.3	.14	28	35
14	4.6	6.7	39	41	75	117	76	45	3.9	.18	20	25
15	4.3	6.5	25	37	76	97	68	41	3.1	.32	26	20
16	3.9	6.2	178	34	72	84	72	34	2.4	2.7	40	15
17	3.6	5.6	161	31	86	72	78	32	1.8	2.0	108	12
18	3.3	5.2	72	27	93	72	88	33	1.4	1.1	103	11
19	3.1	5.0	52	24	77	75	90	33	1.1	1.1	55	9.7
20	3.4	4.7	38	23	62	76	93	32	.95	.89	45	8.9
21	3.6	4.9	32	21	64	75	104	33	.75	11	30	7.8
22	3.1	4.6	27	18	72	72	91	34	.61	5.8	21	7.3
23	2.7	3.9	33	17	74	80	80	27	.47	29	19	6.7
24	2.5	3.7	e32	15	71	91	69	21	.33	29	22	5.9
25	2.3	3.4	e31	e14	67	98	71	20	.22	38	17	5.3
26	2.2	14	e30	e13	62	101	74	20	.11	44	19	4.7
27	2.0	22	e32	e12	54	105	66	18	.05	19	21	4.7
28	1.9	13	125	e13	177	102	60	15	.05	10	14	4.0
29	1.8	9.4	271	15	---	102	50	13	.04	6.8	13	3.6
30	1.7	8.0	238	15	---	101	45	11	.01	21	17	3.8
31	1.6	---	138	14	---	100	---	9.6	---	22	12	---
TOTAL	382.5	212.8	1623.7	1692	1493	5018	3353	1170.6	103.19	248.47	1011	1204.1
MEAN	12.3	7.09	52.4	54.6	53.3	162	112	37.8	3.44	8.02	32.6	40.1
MAX	92	22	271	179	177	526	250	75	11	44	108	277
MIN	1.6	1.5	4.0	12	12	72	45	9.6	.01	.01	12	3.6
AC-FT	759	422	3220	3360	2960	9950	6650	2320	205	493	2010	2390

CAL YR 1990 TOTAL 4751.60 MEAN 13.0 MAX 271 MIN .00 AC-FT 9420
WTR YR 1991 TOTAL 17512.36 MEAN 48.0 MAX 526 MIN .01 AC-FT 34740

e Estimated

GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
DEC 20...	1200	37	69	7.8	4.0	2.5	8.2	11.4	28	2	8.2	1.8
FEB 05...	1100	19	78	7.0	8.5	2.0	2.2	11.3	28	2	8.3	1.8
MAY 02...	1000	59	50	7.0	16.5	8.5	2.7	9.5	18	1	5.7	0.99
AUG 14...	1050	20	80	7.3	27.0	21.0	0.90	7.6	30	1	9.1	1.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
DEC 20...	4.3	0.4	0.70	32	0	26	12	1.6	0.50	20	65
FEB 05...	4.4	0.4	0.70	32	0	26	9.5	0.90	0.20	18	60
MAY 02...	3.7	0.4	0.80	21	0	17	6.9	0.90	0.10	18	31
AUG 14...	4.9	0.4	0.70	36	0	30	8.0	0.70	0.30	19	74

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
DEC 20...	66	<0.010	<0.010	<0.100	<0.100	0.030	0.040	0.17	--	0.020	<0.010
FEB 05...	60	<0.010	<0.010	<0.100	<0.100	0.020	<0.010	0.58	--	<0.010	0.010
MAY 02...	48	0.010	<0.010	<0.050	<0.050	0.030	<0.010	0.17	--	0.040	<0.010
AUG 14...	62	<0.010	<0.010	<0.050	<0.050	0.030	0.040	0.37	0.26	0.020	0.020

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
DEC 20...	640	<1	4	<0.5	<1.0	1	<3	2	200	1	<4
FEB 05...	60	<1	2	<0.5	<1.0	<1	<3	2	21	<1	<4
MAY 02...	90	<1	2	<0.5	<1.0	<1	<3	1	44	1	<4
AUG 14...	70	<1	3	<0.5	<1.0	<1	<3	2	34	<1	<4

GILA RIVER BASIN
09430600 MOGOLLON CREEK NEAR CLIFF, NM -- Continued
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
DEC 20...	4	<0.1	<10	1	<2	<1.0	42	<6	6	0.6	<0.6
FEB 05...	<1	<0.1	<10	<1	<1	<1.0	41	<6	8	--	--
MAY 02...	1	<0.1	<10	2	<1	<1.0	32	<6	10	2.3	<0.6
AUG 14...	3	<0.1	<10	<1	<1	<1.0	46	<6	10	--	--
DATE	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED (PCI/L METHOD (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 20...	0.8	<0.6	0.7	<0.6	0.05	0.10	--	--	--	K3	11
FEB 05...	--	--	--	--	--	--	73	3.7	73	<1	K3
MAY 02...	1.6	<0.6	1.5	<0.6	0.04	0.11	17	2.7	72	K3	15
AUG 14...	--	--	--	--	--	--	15	0.80	73	K9	100

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	STREAM DEPTH, MEAN (FT) (000064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
DEC 20...	1201	9	.60	4.4	85	7.3	2.5	11.4	10
20...	1202	13	.90	5.1	85	7.6	2.3	11.4	22
20...	1203	15	.83	4.2	86	7.8	2.3	11.4	23
20...	1204	19	1.22	8.0	86	7.8	2.3	11.4	12
20...	1205	23	.99	3.7	85	7.9	2.4	11.4	13
20...	1206	27	.62	3.9	86	7.9	2.4	11.4	19

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM
(National stream-quality accounting network and radiochemical network station)

LOCATION.--Lat 32°43'37", long 108°40'30", in W¼ sec.23, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 0.2 mi downstream from Copper Canyon, 0.2 mi upstream from lower end of box canyon, 4.7 mi northeast of Redrock, 14 mi downstream from Mangas Creek, and at mile 539.2.

DRAINAGE AREA.--2,829 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1904 to February 1905 (gage heights only). May 1905 to December 1906, January to December 1907 and July to October 1908 (gage heights only). November 1908 to December 1910, January 1911 to January 1912 and May to June 1912 (gage heights only). August 1912 to September 1955, October 1962 to current year. Monthly or annual discharge only for some periods, published in WSP 1313. Published as "near Cliff" 1904-7.

REVISED RECORDS.--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above National Geodetic Vertical Datum of 1929, from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi downstream at different datum. June 13, 1980 to Feb. 23, 1983 at site 1,300 ft downstream at same datum.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 5,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--75 years (water years 1906, 1909-10, 1913-55, 1963-91), 210 ft³/s, 152,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,800 ft³/s, Dec. 19, 1978, gage height, 29.8 ft, in gage well, 34.1 ft from floodmarks, from rating curve extended above 9,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 2.2 ft³/s, Aug. 5, 1947.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 30	1100	4,230	10.99	Mar. 7	0045	3,170	10.13
Mar. 2	0445	*11,600	*14.83	Sept. 10	0600	3,190	10.15

Minimum daily discharge, 47 ft³/s, June 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	95	107	958	e202	1670	794	315	172	68	181	682
2	244	93	105	755	e188	6980	771	310	160	72	187	633
3	266	100	103	589	e174	2270	777	291	157	73	212	610
4	233	96	97	518	e167	1970	802	274	153	74	359	626
5	210	92	104	828	e169	2220	840	266	150	71	608	830
6	166	98	114	1200	e175	2820	891	257	153	55	485	1070
7	148	120	109	1400	176	2620	962	260	141	50	392	1390
8	146	148	91	1150	168	1610	972	270	111	49	348	1110
9	143	140	88	906	156	1240	912	272	103	51	386	945
10	131	128	94	786	155	1070	823	286	101	58	416	1710
11	126	120	109	660	159	950	773	283	102	73	553	1060
12	115	131	103	562	187	884	752	284	119	72	532	855
13	97	129	108	524	208	845	706	275	130	59	454	776
14	92	127	109	503	278	790	662	261	122	60	403	686
15	87	120	96	487	307	727	619	257	102	84	401	636
16	87	105	104	450	324	708	582	258	92	74	513	572
17	101	102	304	436	364	634	540	243	91	68	553	522
18	95	98	537	e397	527	581	510	225	99	74	1010	482
19	91	116	409	e364	702	573	505	214	100	68	1030	421
20	81	114	289	e340	591	565	503	202	94	62	794	383
21	82	115	265	e333	545	573	512	202	91	69	646	370
22	82	98	253	e336	532	583	530	201	73	91	602	353
23	78	96	229	e321	533	566	522	203	61	171	706	335
24	87	99	195	e307	546	622	505	209	54	169	620	293
25	99	115	176	e287	547	713	453	209	51	210	702	262
26	97	125	170	e256	553	783	417	197	60	300	790	231
27	81	129	153	e238	527	818	397	188	50	190	955	224
28	76	134	238	e236	532	813	374	175	47	169	874	215
29	83	135	1600	e246	---	812	356	170	53	172	760	218
30	96	124	3290	e232	---	838	333	166	56	185	781	196
31	94	---	1390	e221	---	836	---	164	---	199	765	---
TOTAL	3784	3442	11139	16826	9692	39684	19095	7387	3048	3240	18018	18696
MEAN	122	115	359	543	346	1280	636	238	102	105	581	623
MAX	266	148	3290	1400	702	6980	972	315	172	300	1030	1710
MIN	76	92	88	221	155	565	333	164	47	49	181	196
AC-FT	7510	6830	22090	33370	19220	78710	37870	14650	6050	6430	35740	37080

CAL YR 1990 TOTAL 42143.3 MEAN 115 MAX 3290 MIN 6.9 AC-FT 83590
WTR YR 1991 TOTAL 154051 MEAN 422 MAX 6980 MIN 47 AC-FT 305600
e Estimated

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT 24...	1500	85	362	8.3	22.0	16.0	11	9.4	12	130	0
NOV 27...	1000	132	348	7.9	3.5	9.0	23	10.8	12	120	0
DEC 19...	1125	428	229	8.2	2.5	4.0	95	11.2	28	76	0
JAN 23...	1105	343	310	8.2	9.5	7.5	11	9.5	<10	98	0
FEB 06...	1000	175	321	7.9	7.5	6.5	7.4	10.9	<10	110	0
MAR 06...	1000	2900	156	8.3	16.5	10.0	250	9.8	59	58	4
APR 02...	1030	765	192	7.7	16.0	11.0	45	9.4	24	68	0
MAY 01...	1430	311	226	8.0	24.0	17.5	14	8.3	15	74	0
JUN 04...	1145	153	274	8.1	29.0	19.5	4.6	8.0	<10	97	0
JUL 16...	0930	79	340	7.9	21.0	20.5	87	8.1	23	120	0
AUG 13...	1040	458	237	7.8	33.5	23.5	64	7.3	37	87	3
SEP 10...	0955	1390	145	7.8	23.5	20.0	1200	7.8	310	49	0

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 24...	40	7.8	33	1	2.1	171	0	140	34	14
NOV 27...	36	7.2	30	1	1.8	161	0	132	37	3.7
DEC 19...	22	5.0	17	0.9	1.4	109	0	89	22	9.1
JAN 23...	29	6.1	23	1	1.5	154	0	126	30	11
FEB 06...	33	6.5	26	1	1.6	143	0	117	29	14
MAR 06...	17	3.7	9.5	0.5	1.2	66	0	54	19	3.7
APR 02...	20	4.4	14	0.7	1.3	83	0	68	20	4.2
MAY 01...	22	4.7	18	0.9	1.7	100	0	82	21	7.0
JUN 04...	29	5.9	23	1	1.9	126	0	103	23	9.4
JUL 16...	38	7.0	30	1	2.3	154	0	126	36	12
AUG 13...	26	5.3	19	0.9	2.0	102	0	83	21	7.0
SEP 10...	15	2.8	10	0.6	1.8	70	0	57	8.6	3.1

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 24...	2.0	36	245	255	24	--	<0.010	<0.010	0.400	0.400	0.020
NOV 27...	0.20	--	226	195	5	0.380	0.020	--	0.400	--	0.020
DEC 19...	1.4	29	175	162	<1	--	<0.010	<0.010	0.200	0.200	0.030
JAN 23...	1.5	--	187	178	51	--	<0.010	--	0.300	--	<0.010
FEB 06...	1.6	32	208	216	28	--	<0.010	<0.010	0.400	0.400	<0.010
MAR 06...	0.60	--	120	87	728	0.070	0.040	--	0.110	--	0.080
APR 02...	1.0	29	137	136	95	0.090	0.020	<0.010	0.110	0.100	0.030
MAY 01...	1.4	--	157	125	43	0.170	0.010	--	0.180	--	0.040
JUN 04...	1.7	35	185	192	6	0.300	0.020	<0.010	0.320	0.260	0.020
JUL 16...	2.0	--	206	203	205	0.520	0.060	--	0.580	--	0.080
AUG 13...	1.4	36	174	169	165	--	<0.010	<0.010	0.210	0.220	0.050
SEP 10...	0.70	--	102	77	3670	0.170	0.020	--	0.190	--	0.010

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
OCT 24...	0.010	0.58	--	1.0	0.040	0.040	<10	--	1	1	20
NOV 27...	--	0.28	--	0.70	0.120	--	--	1	1	1	18
DEC 19...	0.030	0.27	--	0.50	0.070	0.030	--	--	1	1	14
JAN 23...	--	--	--	--	0.050	--	--	2	1	2	13
FEB 06...	<0.010	--	--	0.90	0.060	0.050	20	--	<1	2	13
MAR 06...	--	0.42	--	0.61	0.130	--	--	<1	1	<1	10
APR 02...	0.030	0.27	--	0.41	0.110	0.040	60	--	1	<1	8
MAY 01...	--	0.16	--	0.38	<0.010	--	--	<1	1	1	10
JUN 04...	<0.010	0.28	--	0.62	0.060	0.020	--	--	1	2	11
JUL 16...	--	0.72	--	1.4	0.330	--	--	<1	2	2	18
AUG 13...	0.030	0.55	0.37	0.81	0.260	0.050	70	--	2	1	13
SEP 10...	--	1.5	--	1.7	0.390	--	--	2	1	2	11

GILA RIVER BASIN
09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
OCT 24...	--	<0.5	50	<1	<1.0	2	<1	<3	13	2	1000
NOV 27...	<10	--	40	<1	<1.0	2	<1	--	16	2	1400
DEC 19...	--	--	30	<1	<1.0	6	<1	--	9	4	5600
JAN 23...	<10	--	30	<1	<1.0	<1	1	--	6	1	1300
FEB 06...	--	0.5	30	<1	<1.0	2	5	<3	4	4	650
MAR 06...	<10	--	10	<1	<1.0	15	<1	--	40	3	240
APR 02...	--	<0.5	10	<1	<1.0	2	<1	<3	8	--	2800
MAY 01...	<10	--	30	<1	<1.0	<1	<1	--	5	1	1500
JUN 04...	--	--	30	<1	<1.0	<1	<1	--	3	2	330
JUL 16...	<10	--	40	<1	<1.0	7	<1	--	15	3	5100
AUG 13...	--	<0.5	30	2	<1.0	4	<1	<3	18	3	5000
SEP 10...	<10	--	30	2	<1.0	73	<1	--	190	7	80000

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT 24...	4	5	1	23	60	3	<0.10	<0.1	<10	--	<1
NOV 27...	18	4	<1	--	70	2	<0.10	--	--	3	--
DEC 19...	140	10	1	--	190	9	<0.10	--	--	--	--
JAN 23...	9	2	<1	--	40	5	<0.10	--	--	3	--
FEB 06...	64	1	1	23	20	9	<0.10	<0.1	<10	--	20
MAR 06...	79	22	<1	--	560	4	<0.10	--	--	26	--
APR 02...	32	5	<1	11	80	2	<0.10	<0.1	<10	--	1
MAY 01...	48	7	1	--	40	2	<0.10	--	--	2	--
JUN 04...	10	3	2	--	<10	2	<0.10	--	--	--	--
JUL 16...	18	10	<1	--	160	1	<0.10	--	--	11	--
AUG 13...	40	16	<1	14	160	2	0.20	<0.1	<10	--	<1
SEP 10...	73	120	<1	--	3900	3	<0.10	--	--	90	--

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)
OCT 24...	<1	<1	<1.0	170	<6	20	<3	2.1	0.9	3.3
NOV 27...	<1	<1	<1.0	--	--	<10	<3	--	--	--
DEC 19...	<1	<2	<1.0	--	--	20	12	--	--	--
JAN 23...	<1	<1	<1.0	--	--	<10	5	--	--	--
FEB 06...	<1	<1	<1.0	130	<6	<10	10	--	--	--
MAR 06...	<1	<1	<1.0	--	--	80	6	--	--	--
APR 02...	<1	<1	<1.0	85	<6	<10	4	1.2	10	2.1
MAY 01...	<1	<1	1.0	--	--	30	20	--	--	--
JUN 04...	<1	<1	<1.0	--	--	<10	<3	--	--	--
JUL 16...	<1	1	<1.0	--	--	20	<3	--	--	--
AUG 13...	<1	<1	<1.0	110	7	50	13	--	--	--
SEP 10...	<1	<1	<1.0	--	--	320	12	--	--	--
DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 24...	1.4	2.4	1.3	0.07	0.62	66	15	95	26	53
NOV 27...	--	--	--	--	--	54	19	96	K64	230
DEC 19...	--	--	--	--	--	288	333	58	62	210
JAN 23...	--	--	--	--	--	43	40	66	K6	87
FEB 06...	--	--	--	--	--	140	66	17	K3	63
MAR 06...	--	--	--	--	--	1010	7910	38	K48	K380
APR 02...	5.1	1.7	4.7	0.02	0.49	1450	2990	15	K15	62
MAY 01...	--	--	--	--	--	991	832	5	K4	20
JUN 04...	--	--	--	--	--	56	23	66	<1	K7
JUL 16...	--	--	--	--	--	240	51	94	340	500
AUG 13...	--	--	--	--	--	2440	3020	10	180	300
SEP 10...	--	--	--	--	--	7010	26300	76	4800	>10000

GILA RIVER BASIN
09431500 GILA RIVER NEAR REDROCK, NM -- Continued

WATER-QUALITY RECORDS

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	STREAM DEPTH, MEAN (FT) (00064)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
DEC									
19...	1126	5	0.50	13	237	8.2	5.0	11.2	255
19...	1127	15	1.30	38	245	8.2	5.0	11.3	275
19...	1128	25	2.10	56	223	8.2	5.0	11.2	307
19...	1129	35	1.99	46	243	8.2	5.0	11.2	448
19...	1130	45	1.63	57	223	8.1	5.0	11.2	315
19...	1131	55	1.68	58	227	8.1	5.0	11.2	328
19...	1132	65	1.41	43	246	8.1	5.0	11.1	256
19...	1133	75	1.40	45	234	8.1	5.0	11.0	220
19...	1134	85	1.30	34	233	8.0	5.0	11.0	252
19...	1135	95	0.82	16	232	8.0	5.0	11.0	223
19...	1136	105	0.50	3.0	245	8.0	5.0	11.0	211
19...	1137	115	0.48	2.2	242	8.0	5.0	10.8	223

GILA RIVER BASIN

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1,300 ft downstream from Rainbow Bridge Canyon, 1.7 mi northwest of Reserve, and at mile 563.1.

DRAINAGE AREA.--350 mi², approximately.

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

REVISED RECORDS.--WDR NM-78-1: 1977. WDR NM-84-1: 1973, 1979-80.

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 15, 1972 at site 1,800 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 27.8 ft³/s, 20,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft³/s, Oct. 1, 1983, gage height, 11.71 ft recorded, 11.3 ft, from outside floodmarks, from rating curve extended above 1,400 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.78 ft³/s, June 6, 1990.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft³/s at Alma (downstream). See WSP 1313.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 2	1500	563	3.37	July 17	1830	563	2.81
Mar. 6	0830	*661	*3.39	Aug. 7	1700	595	3.07

Minimum discharge, 1.4 ft³/s, Aug. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	4.5	8.1	11	12	116	216	e25	8.5	3.4	3.0	2.1
2	61	9.0	6.8	11	13	116	230	e24	11	3.5	8.0	5.1
3	48	17	6.4	11	12	81	205	20	7.8	3.9	3.8	3.9
4	38	13	6.1	16	12	100	197	17	7.1	4.3	2.0	3.9
5	27	11	7.1	26	12	168	201	15	5.6	5.0	3.4	30
6	17	9.9	7.1	52	11	445	206	16	6.0	4.4	4.9	20
7	18	43	6.8	42	11	229	209	14	7.7	5.2	20	12
8	17	24	6.2	30	13	130	184	14	7.0	5.2	6.2	12
9	15	16	5.9	25	11	105	153	12	6.2	5.7	34	11
10	13	16	5.5	23	13	84	135	11	7.1	7.9	31	8.6
11	13	15	5.5	19	15	79	111	11	6.2	5.3	40	8.0
12	11	13	6.4	17	17	61	95	10	9.7	3.6	31	6.2
13	12	13	7.3	16	21	47	81	10	9.3	3.3	17	5.8
14	10	12	8.0	16	24	36	75	10	8.0	4.9	8.2	6.2
15	10	11	7.2	14	29	26	65	9.6	8.0	4.6	24	6.2
16	10	11	11	15	41	27	61	7.6	6.2	7.9	15	5.1
17	7.3	11	17	14	53	22	e61	6.7	4.8	36	7.5	5.1
18	7.2	10	13	14	48	26	e58	8.4	5.5	7.7	7.8	6.2
19	8.0	11	11	13	33	44	e56	6.8	4.9	6.5	6.6	5.4
20	7.0	10	10	10	27	39	e53	8.5	4.6	6.4	5.2	4.8
21	6.7	10	8.6	11	27	58	e51	7.2	4.5	26	3.5	4.7
22	7.5	10	8.1	12	28	43	e48	8.5	4.5	9.8	4.1	6.9
23	5.9	9.2	7.6	12	35	60	e46	8.8	4.4	8.9	20	6.8
24	5.3	8.9	7.9	12	43	86	e43	8.1	4.4	24	7.3	5.0
25	4.6	9.2	8.1	12	46	118	e40	8.7	4.6	11	5.3	4.9
26	5.1	10	7.8	12	47	141	e38	8.5	3.7	9.4	5.0	5.2
27	4.8	11	6.5	10	43	123	e35	8.1	4.3	6.6	4.0	9.6
28	5.3	9.0	8.6	10	56	148	e33	7.9	3.6	4.4	2.8	6.4
29	5.8	7.8	28	9.9	---	118	e31	8.2	3.4	3.7	2.6	6.0
30	6.1	7.9	18	9.7	---	152	e28	6.5	3.0	3.3	2.2	6.8
31	4.1	---	13	11	---	184	---	5.8	---	2.6	2.3	---
TOTAL	431.7	373.4	284.6	516.6	753	3212	3045	342.9	181.6	244.4	337.7	229.9
MEAN	13.9	12.4	9.18	16.7	26.9	104	101	11.1	6.05	7.88	10.9	7.66
MAX	61	43	28	52	56	445	230	25	11	36	40	30
MIN	4.1	4.5	5.5	9.7	11	22	28	5.8	3.0	2.6	2.0	2.1
AC-FT	856	741	565	1020	1490	6370	6040	680	360	485	670	456

CAL YR 1990 TOTAL 2957.49 MEAN 8.10 MAX 69 MIN .86 AC-FT 5870
WTR YR 1991 TOTAL 9952.8 MEAN 27.3 MAX 445 MIN 2.0 AC-FT 19740

e Estimated

GILA RIVER BASIN

09442692 TULAROSA RIVER ABOVE ARAGON, NM

LOCATION.--Lat 33°53'29", long 108°30'54", in NE¼NW¼ sec.9, T.5 S., R.16 W., Catron County, Hydrologic Unit 15040004, on right bank 0.4 mi upstream from first diversion, 1.4 mi northeast of Aragon, and 8 mi upstream from Apache Creek.

DRAINAGE AREA.--94 mi².

PERIOD OF RECORD.--July 1966 to current year. 1955 to 1965 at site 0.6 mi upstream (drainage area, 89 mi²), annual maximum only.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--25 years, 3.47 ft³/s, 2,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 660 ft³/s, Oct. 2, 1983, gage height, 3.90 ft in gage well, 4.23 ft from floodmarks, from rating curve extended above 80 ft³/s on basis of slope-area measurements at gage heights 3.13 ft and 3.90 ft; minimum, 1.1 ft³/s July 22, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 3	2000	* 37	* 2.18	Mar. 24	1930	28	2.05

Minimum discharge, 2.3 ft³/s, Oct. 9, 10, June 25, July 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.4	3.2	3.4	3.3	4.4	5.0	3.5	3.2	3.0	3.1	3.2
2	3.0	3.5	3.2	3.4	3.3	11	4.5	3.5	3.3	3.1	3.1	3.2
3	2.8	3.4	3.2	3.4	3.4	14	4.2	3.5	3.2	3.1	3.1	3.3
4	2.7	3.2	3.2	3.5	3.4	15	4.0	3.5	3.2	3.1	3.1	3.3
5	2.6	3.3	3.2	3.5	3.4	13	4.1	3.5	3.2	3.1	3.1	4.7
6	2.6	3.4	3.2	3.9	3.4	14	4.5	3.5	3.1	3.0	3.1	3.5
7	2.5	3.6	3.2	4.3	3.3	7.0	4.2	3.5	3.1	3.1	3.1	3.2
8	2.4	3.5	3.3	3.7	3.3	4.7	3.9	3.4	3.1	3.1	3.1	3.2
9	2.4	3.5	3.3	3.5	3.3	4.2	3.8	3.4	3.2	3.1	3.2	3.1
10	2.9	3.4	3.2	3.5	3.4	3.8	3.8	3.4	3.2	3.0	3.1	3.1
11	3.0	3.4	3.1	3.5	3.3	3.7	3.8	3.3	3.2	3.0	3.2	2.9
12	3.2	3.4	3.1	3.4	3.4	3.6	3.7	3.3	3.2	3.0	3.1	2.9
13	3.1	3.3	3.1	3.4	3.4	3.6	3.8	3.3	3.2	3.1	3.1	3.0
14	3.2	3.3	3.1	3.4	3.4	3.6	3.8	3.3	3.2	3.1	3.1	2.9
15	3.2	3.3	3.1	3.4	3.4	3.6	3.7	3.3	3.2	3.1	3.3	2.9
16	3.2	3.2	3.1	3.5	3.3	3.6	3.8	3.3	3.1	3.1	3.1	2.9
17	3.2	3.3	3.3	3.4	3.6	3.6	3.8	3.2	3.0	3.1	3.1	2.9
18	3.1	3.3	3.4	3.4	3.5	3.6	3.7	3.2	3.0	3.0	3.3	2.9
19	3.0	3.2	3.4	3.4	3.4	3.6	3.7	3.2	3.0	3.0	3.2	2.9
20	3.2	3.1	3.5	3.4	3.4	3.5	3.5	3.2	3.0	3.0	3.1	2.9
21	2.9	3.3	3.5	3.5	3.4	3.7	3.5	3.3	3.0	3.0	3.0	2.9
22	2.7	3.2	3.5	3.4	3.4	3.7	3.5	3.3	3.0	3.1	3.0	2.9
23	2.6	3.3	3.3	3.4	3.4	7.1	3.5	3.2	2.9	3.1	3.2	2.9
24	2.5	3.3	3.2	3.4	3.4	15	3.6	3.2	3.0	3.2	3.1	2.9
25	3.2	3.2	3.4	3.4	3.4	11	3.7	3.2	2.9	3.1	3.1	2.9
26	3.3	3.4	3.4	3.4	3.5	14	3.6	3.2	2.9	3.1	3.1	3.0
27	3.3	3.2	3.4	3.4	3.4	15	3.6	3.1	3.0	3.0	3.1	3.0
28	3.3	3.2	3.5	3.4	3.6	15	3.7	3.1	3.0	3.0	3.1	3.0
29	3.3	3.1	3.7	3.4	---	11	3.5	3.1	3.1	3.0	3.1	3.1
30	3.3	3.1	3.6	3.3	---	7.6	3.5	3.1	3.0	3.1	3.1	3.0
31	3.3	---	3.5	3.3	---	5.8	---	3.2	---	3.1	3.1	---
TOTAL	92.2	99.3	102.4	107.6	95.1	236.0	115.0	102.3	92.7	95.0	96.7	92.5
MEAN	2.97	3.31	3.30	3.47	3.40	7.61	3.83	3.30	3.09	3.06	3.12	3.08
MAX	3.3	3.6	3.7	4.3	3.6	15	5.0	3.5	3.3	3.2	3.3	4.7
MIN	2.4	3.1	3.1	3.3	3.3	3.5	3.5	3.1	2.9	3.0	3.0	2.9
AC-FT	183	197	203	213	189	468	228	203	184	188	192	183

CAL YR 1990 TOTAL 1145.4 MEAN 3.14 MAX 4.4 MIN 2.4 AC-FT 2270
WTR YR 1991 TOTAL 1326.8 MEAN 3.64 MAX 15 MIN 2.4 AC-FT 2630

GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, Hydrologic Unit 15040004, on left bank 0.2 mi upstream from hot springs, 5 mi south of Glenwood, 6 mi downstream from Whitewater Creek, and at mile 511.5.

DRAINAGE AREA.--1,653 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area. WDR NM-78-1: 1977. WDR NM-79-1: 1973, 1975-77 (P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 15, 1934, at site 4.5 mi upstream at datum 98.82 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 2,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--64 years, 84.8 ft³/s, 61,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s, Oct. 2, 1983, gage height, 18.15 ft recorded, 20.80 ft from outside floodmarks, from rating curve extended above 4,200 ft³/s on basis of slope-area measurements at gage heights 10.74 ft, 15.6 ft and 20.8 ft; minimum, 1.5 ft³/s Aug. 6, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 60,000 ft³/s or greater were computed for station at Clifton, AZ. On Nov. 26, 1905, a peak of 25,000 ft³/s was measured (by float-area method) at station at Alma (about 12 mi upstream, drainage area, 1,560 mi²); a similar measurement of 21,000 ft³/s was made at the Alma station for peak of Dec. 3, 1906.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 30	unknown	1,560	4.55	Mar. 6	2215	2,190	5.26
Jan. 6	1600	1,000	4.11	Mar. 29	0445	855	3.65
Mar. 2	0615	*7,320	*8.93	Apr. 7	2130	839	3.65

Minimum discharge, 15 ft³/s, Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	31	39	e240	67	2520	637	129	69	26	30	74
2	58	34	37	e170	68	4460	684	129	65	24	62	55
3	52	36	36	134	67	1580	680	122	54	24	46	43
4	52	38	33	130	68	1030	677	108	51	24	45	34
5	51	39	33	603	66	982	705	101	48	28	43	408
6	48	40	32	776	67	1360	759	101	59	28	133	505
7	44	48	31	833	65	1570	799	102	55	27	90	394
8	38	97	27	490	64	875	754	112	54	28	192	219
9	33	95	26	357	65	607	639	138	48	31	139	138
10	32	74	25	290	67	516	553	151	50	28	128	224
11	32	62	24	234	68	467	493	148	56	26	124	217
12	30	54	24	200	78	441	441	141	56	26	e100	159
13	31	50	25	176	80	398	388	127	49	26	e75	112
14	29	47	25	156	78	364	344	124	43	28	58	86
15	30	45	28	140	93	323	289	121	38	30	95	68
16	31	43	31	128	122	294	250	115	35	31	103	53
17	25	42	149	117	167	265	229	109	35	26	205	44
18	22	41	96	110	355	239	230	106	33	29	159	39
19	23	40	66	101	380	235	230	103	32	27	112	38
20	26	40	61	96	289	248	229	104	32	25	91	37
21	32	41	62	91	267	256	234	107	29	50	70	35
22	29	40	59	88	285	266	232	106	28	37	54	33
23	30	40	e60	86	313	261	221	104	28	56	35	34
24	29	40	e60	83	340	359	209	91	25	41	63	35
25	31	40	e60	82	353	559	194	86	26	39	68	29
26	32	42	e60	79	347	574	187	86	28	59	66	29
27	32	41	e62	78	326	685	182	84	30	50	59	33
28	32	42	e175	75	508	748	172	77	30	33	73	36
29	32	41	e362	76	---	791	159	76	30	28	59	39
30	32	40	e824	73	---	736	145	72	28	30	78	38
31	31	---	e397	69	---	665	---	68	---	30	110	---
TOTAL	1071	1403	3029	6361	5113	24674	11945	3348	1244	995	2765	3288
MEAN	34.5	46.8	97.7	205	183	796	398	108	41.5	32.1	89.2	110
MAX	58	97	824	833	508	4460	799	151	69	59	205	505
MIN	22	31	24	69	64	235	145	68	25	24	30	29
AC-FT	2120	2780	6010	12620	10140	48940	23690	6640	2470	1970	5480	6520

CAL YR 1990 TOTAL 13572 MEAN 37.2 MAX 824 MIN 14 AC-FT 26920
WTR YR 1991 TOTAL 65236 MEAN 179 MAX 4460 MIN 22 AC-FT 129400

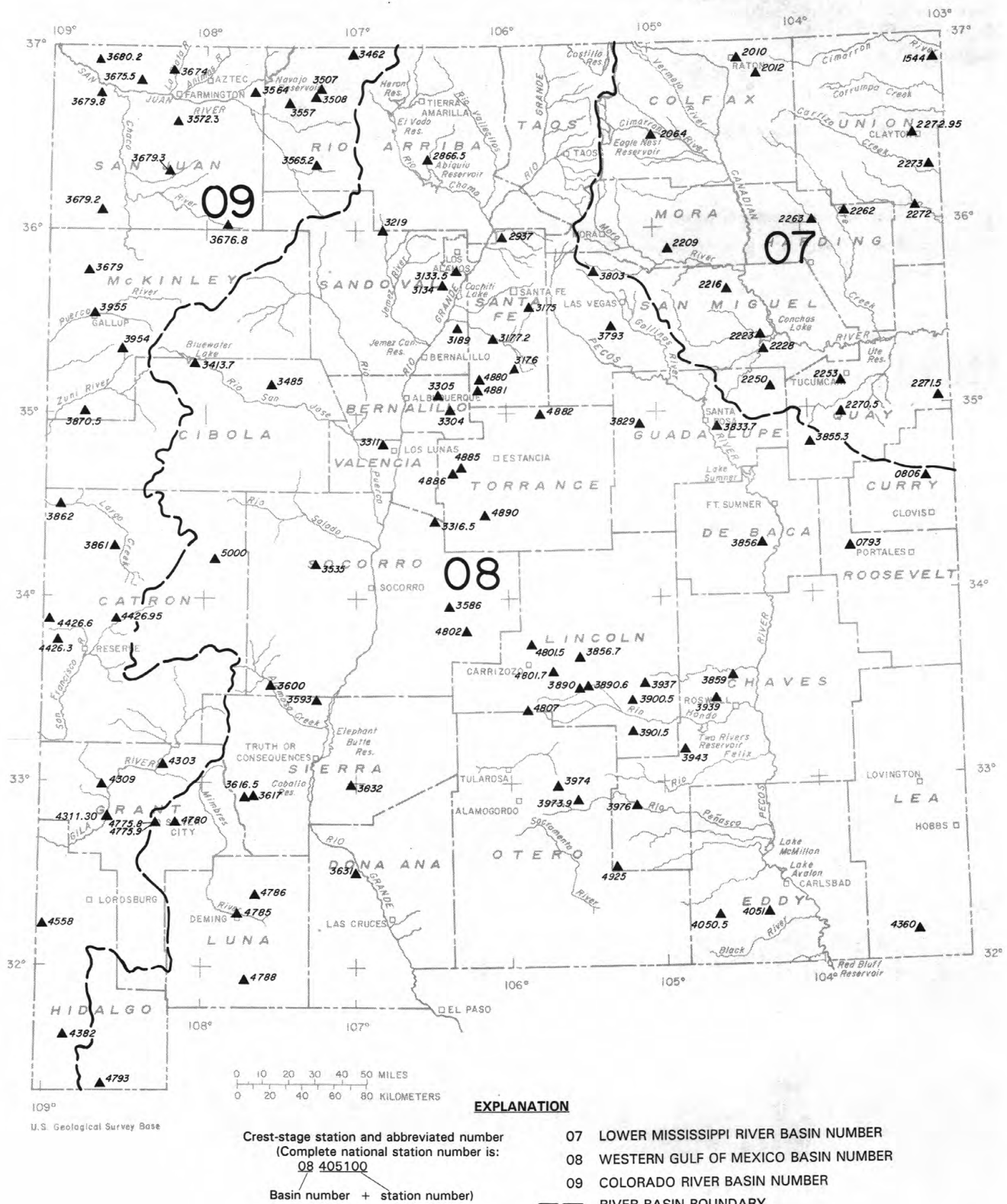


Figure 7.--Location of partial-record stations.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in floodflow analyses. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in the second table.

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each year is given. Information on some lower floods may have been obtained, and discharge measurements made for purposes of establishing the stage-discharge relation, but these are not published herein. The year given in the period of record column represents the first year of a period extending through the current year unless otherwise noted. For some stations, publication of discharge is delayed pending definition of stage-discharge relationship. Published maximums are for water years.

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
ARKANSAS RIVER BASIN								
Carrizozo Creek near Kenton, OK. (07154400)	Lat 36°52'55", long 103°01'05", Union County, Hydrologic Unit 11040001, under bridge on New Mexico State Highway 406; 4 mi southwest of Kenton, OK. Drainage area is 111 mi ² .	1953-	06-08-91	4.80	1,520	07-06-58	12.22	15,600
Raton Creek at Raton. (07201000)	Lat 36°55'38", long 104°26'22", Colfax County, Hydrologic Unit 11080001, 60 ft upstream from bridge on State Highway 72 at Raton. Drainage area is 14.4 mi ² .	1953-	08-11-91	3.60	1,070	06-17-65	14.80	3,990
Chicorica Creek tributary near Raton. (07201200)	Lat 36°49'41", long 104°19'58", Colfax County, Hydrologic Unit 11080001, upstream from culvert on U.S. Highway 64-87, 7.7 mi southeast of Raton. Drainage area is 5.18 mi ² .	1971-	08-11-91	4.76	33	08-05-82	18.30	1,340
Clear Creek near Ute Park. (07206400)	Lat 36°31'35", long 105°10'30", Colfax County, Hydrologic Unit 11080002, 0.25 mi upstream from mouth, and 4 mi southwest of Ute Park. Drainage area is 7.44 mi ² .	1962-67* 1968-	05-21-91	2.96	134	06-18-65	3.05	151
Dog Creek near Shoemaker. (07220900)	Lat 36°49'32", long 104°53'28", Mora County, Hydrologic Unit 11080004, 0.5 mi upstream from Valmora-Shoemaker road, and 1.8 mi northwest of Shoemaker. Drainage area is 18.4 mi ² .	1954-	08-09-91	8.70	1,080	07-08-82	14.90	7,180
Lagartija Creek tributary near Sanchez. (07221600)	Lat 35°39'21", long 104°24'57", San Miguel County, Hydrologic Unit 11080003, at bridge on State Highway 419; 0.9 mi northeast of Sanchez. Drainage area is 1.19 mi ² .	1961-	08-13-91	3.04	255	07-07-82	5.42	1,130
Trementina Creek at Trementina. (07222300)	Lat 35°29'28", long 104°24'59", San Miguel County, Hydrologic Unit 11080005, at bridge on State Highway 419; at Trementina. Drainage area is 63.9 mi ² .	1959-	07-22-91	4.57	764	09-11-65	12.00	14,100

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
ARKANSAS RIVER BASIN -- Continued								
Garita Creek tributary near Variadero. (07222800)	Lat 35°20'10", long 104°21'50", San Miguel County, Hydrologic Unit 11080005, 1.2 mi upstream from mouth, and 6.3 mi southeast of Variadero. Drainage area is 23.0 mi ² .	1971-	07-25-91	6.14	251	08-29-77	17.37	7,020
Pajarito Creek at Newkirk. (07225000)	Lat 35°04'20", long 104°14'50", Guadalupe County, Hydrologic Unit 11080006, downstream side of bridge on old U.S. Highway 66, 1 mi east of Newkirk. Drainage area is 55.0 mi ² .	1954-	08-13-91	3.97	978	09-16-62	8.09	3,550
Bluewater Creek near Tucumcari. (07225300)	Lat 35°08'31", long 103°47'32", Quay County, Hydrologic Unit 11080006, in Tucumcari Metropolitan Park, 1,600 ft north of the park's southern boundary, and 4.8 mi southwest of Tucumcari. Drainage area is 15.2 mi ² .	1971-	07-15-91	5.78	215	08-11-81	12.71	2,350
Bueyeros Creek at Bueyeros. (07226200)	Lat 35°58'10", long 103°41'05", in E1/2 sec.7, T.20 N., R.31 E., Harding County, Hydrologic Unit 11080007, on right upstream wingwall of culvert on State Road 102 at Bueyeros. Drainage area is 33.4 mi ² .	1957-	09-10-91	2.78	<100	07-17-72	12.77	5,800
Carriazo Creek near Roy. (07226300)	Lat 36°02'58", long 103°57'48", Harding County, Hydrologic Unit 11080007, 800 ft down- stream from State Highway 120, and 15 mi northeast of Roy. Drainage area is a68 mi ² .	1954-	08-12-91	4.30	488	08-11-81	7.11	1,800
Plaza Larga Creek tributary near Ragland. (07227050)	Lat 34°48'29", long 103°45'35", Quay County, Hydrologic Unit 11080008, at culvert on State Highway 209, 1.2 mi northwest of Ragland. Drainage area is 0.36 mi ² .	1952-	07-14-91	8.37	406	07-16-58	12.70	1,170
Arroyo del Puerto near Endee. (07227150)	Lat 35°03'32", long 103°06'04", Quay County, Hydrologic Unit 11090101, at bridge on State Highway 93, 5.4 mi south of Endee. Drainage area is a25 mi ² .	1961-	08-10-91	9.19	1,450	08-10-91	9.19	1,450
Tramperos Creek near Stead. (07227200)	Lat 36°04'15", long 103°12'10", in NW1/4 sec.10, T.21 N., R.35 E., Union County, Hydrologic Unit 11090102, at bridge on State Highway 402, 2.1 mi south of Stead, and 26 mi south of Clayton. Drainage area is a556 mi ² .	1966-73* 1974-	08-20-91	6.22	621	10-17-65	16.5	12,300
Sand Draw tributary near Clayton. (07227295)	Lat 36°23'20", long 103°19'05", Union County, Hydrologic Unit 11090103, upstream from culvert on U.S. Highway 56, 8 mi southwest of Clayton. Drainage area is 1.25 mi ² .	1952-	08-03-91	0.87	39	07-16-56	7.33	388
Sand Draw near Clayton. (07227300)	Lat 36°20'30", long 103°11'30", Union County, Hydrologic Unit 11090103, on downstream side of bridge on State Highway 402, 7.5 mi south of Clayton. Drainage area is a42 mi ² .	1953-	08-03-91	3.02	82	08-03-91	3.02	82

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
BRAZOS RIVER BASIN								
Blackwater Draw tributary near Floyd. (08079300)	Lat 34°14'52", long 103°44'51", Roosevelt County, Hydrologic Unit 12050001, 0.5 mi down- stream from section road, and 10 mi west of Floyd. Drainage area is 110 mi ² .	1963-	07-13-91	1.68	123	- -69	5.96	3,400
Running Water Draw near Clovis. (08080600)	Lat 34°31'55", long 103°12'05", Curry County, Hydrologic Unit 12050005, 0.25 mi upstream from State Highway 209; and 8 mi north of Clovis. Drainage area is 109 mi ² .	1953-56 1957-64* 1965-	07-15-91	5.18	2,710	07-24-72	---	8,000
RIO GRANDE BASIN								
Canjilon Creek above Abiquiu Reservoir. (08286650)	Lat 36°18'55", long 106°29'05", Rio Arriba County, Hydrologic Unit 13020102, in Piedra Lumbre Grant, 300 ft upstream from bridge on U.S. Highway 84, 0.2 mi northwest of entrance to Ghost Ranch, and about 12 mi northwest of Abiquiu. Drainage area is 144 mi ² .	1965-	08-01-91	5.16	588	07-23-70	8.10	2,450
Arroyo Seco tributary near Pojoaque. (08293700)	Lat 35°56'33", long 106°01'12", Santa Fe County, Hydrologic Unit 13020101, upstream from culvert on U.S. Highway 84-285, 3.5 mi north of Pojoaque. Drainage area is 0.72 mi ² .	1971-	08-04-91	7.24	169	07-28-74	10.62	508
Rito de los Frijoles in Bandelier National Monument. (08313350)	Lat 35°46'35", long 106°16'06", Sandoval County, Hydrologic Unit 13020201, in Bandelier National Monument, downstream from Monument headquarters, 6.5 mi south of Los Alamos, and 18.5 mi northwest of Santa Fe. Drainage area is 18.1 mi ² .	1963-69* 1977-82* 1983-	08-19-91	4.15	105	07-21-78	6.34	3,030
Bland Canyon near Cochiti Pueblo. (08313400)	Lat 35°42'11", long 106°24'56", Sandoval County, Hydrologic Unit 13020201, 200 ft south of Forest Service Road, 0.3 mi inside Santa Fe National Forest, and 7.5 mi north of Cochiti Pueblo. Drainage area is 7.57 mi ² .	1962-	07-24-91	1.52	11	08-10-85	3.54	243
Galisteo Creek at Canoncito. (08317500)	Lat 35°33'02", long 105°49'20", Santa Fe County, Hydrologic Unit 13020201, upstream from railroad bridge, 0.2 mi upstream from Apache Canyon at Canoncito. Drainage area is 11.3 mi ² .	1955-56 1959-	08-06-91	2.94	759	08-23-66	5.35	2,000
San Cristobal Arroyo near Galisteo. (08317600)	Lat 35°22'55", long 105°51'05", Santa Fe County, Hydrologic Unit 13020201, at bridge on U.S. Highway 285, 5.5 mi east of Galisteo. Drainage area is 116 mi ² .	1955-	- -	---	(m)	08-17-61	13.34	9,500
Canada de la Cueva near Galisteo. (08317720)	Lat 35°26'13", long 106°00'45", Santa Fe County, Hydrologic Unit 13020201, 6.4 mi east of Cerrillos, and 4.8 mi northwest of Galisteo. Drainage area is 1.81 mi ² .	1970-	09-29-90 08-07-91	3.34 2.95	(h)186 125	09-18-82	4.78	919

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
RIO GRANDE BASIN -- Continued								
San Pedro Creek near Golden. (08318900)	Lat 35°13'45", long 106°18'00", Sandoval County, Hydrologic Unit 13020201, 1 mi down- stream from bridge on State Highway 14, and 5.5 mi southwest of Golden. Drainage area is 45.2 mi ² .	1953-	07-25-91	2.58	1,800	09-24-55	12.45	10,800
Rio de las Vacas near Senorita. (08321900)	Lat 35°59'35", long 106°47'45", Sandoval County, Hydrologic Unit 13020204, at bridge on side road, 0.1 mi south of State Highway 126, and 6.5 mi east of Senorita. Drainage area is 26.8 mi ² .	1957-	12-16-90	4.78	500	05-23-58	5.05	590
Juan Toro Canyon near Miera. (08330400)	Lat 35°00'57", long 106°20'14", Bernalillo County, Hydrologic Unit 13020203, 150 ft east of State Highway 337, 1 mi south- east of Cedro, and 4.5 mi northwest of Miera. Drainage area is 1.57 mi ² .	1959-	09-06-91	1.05	22	07-20-71	1.33	44
Tijeras Arroyo at Albuquerque. (08330500)	Lat 35°03'40", long 106°28'40", Bernalillo County, Hydrologic Unit 13020203, 300 ft south of old U.S. Highway 66, and 0.4 mi southeast of city limits of Albuquerque. Drainage area is 75.3 mi ² .	1943-48* 1958-	- -91	<1.83	<250	06-24-67	6.85	6,500
Belen Highline Canal tributary near Los Lunas. (08331100)	Lat 34°49'20", long 106°49'10", Valencia County, Hydrologic Unit 13020203, upstream from culvert on State Highway 6, 5.0 mi west of Los Lunas. Drainage area is 0.16 mi ² .	1952-53 1955-	08-17-91	5.73	300	07-11-65	9.52	754
Canada Montoso near Scholle. (08331650)	Lat 34°23'11", long 106°28'37", Socorro County, Hydrologic Unit 13020203, 130 ft upstream from dip on abandoned highway, 500 ft upstream from bridge on U.S. Highway 60, and 3.6 mi southwest of Scholle. Drainage area is 35 mi ² .	1961-	07-25-91	2.47	460	08-09-67	7.02	4,700
Pine Canyon near Thoreau. (08341370)	Lat 35°18'34", long 108°10'14", McKinley County, Hydrologic Unit 13020207, about 1 mi southwest of the north end of Bluewater Lake, and about 7 mi southeast of Thoreau. Drainage area is 6.09 mi ² .	1969-	03-28-91	2.96	120	04- -73	3.21	148
Encinal Creek near Casa Blanca. (08348500)	Lat 35°08'35", long 107°27'55", Cibola County, Hydrologic Unit 13020207, 1.8 mi north of village of Encinal, and 6.8 mi north of Casa Blanca. Drainage area is 6.19 mi ² .	1937-39* 1959-	03-26-91	2.85	135	09-09-67	11.50	4,330
La Jencia Creek near Magdalena. (08353500)	Lat 34°09'45", long 107°12'35", Socorro County, Hydrologic Unit 13020209, 3.5 mi north- east of Magdalena. Drainage area is 195 mi ² .	1957-	09-06-91	1.67	530	09- -62	10.85	4,830
Chupadera Wash tributary at Bingham. (08358600)	Lat 33°51'39", long 106°22'06", Socorro County, Hydrologic Unit 13020210, 75 ft upstream from culvert on U.S. Highway 380, and 0.1 mi west of Bingham. Drainage area is 1.29 mi ² .	1961-	07-23-91	2.23	190	09-10-80	4.75	620

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
RIO GRANDE BASIN -- Continued								
San Jose Arroyo near Monticello. (08359300)	Lat 33°28'05", long 107°14'30", Sierra County, Hydrologic Unit 13020211, at head of box canyon just downstream from major tributary, 800 ft downstream from culvert on old U.S. Highway 85, and 13 mi northeast of Monticello. Drainage area is 26.9 mi ² .	1959-	- -91	<1.52	(+)	06-10-88	6.09	(+)
Alamosa Creek near Monticello. (08360000)	Lat 33°34'09", long 107°35'33", Socorro County, Hydrologic Unit 13020211, on left bank at Alamosa damsite and downstream from Old Fort Ojo Caliente, just downstream from Wildhorse Creek, 15 mi northwest of Monticello. Drainage area is 403 mi ² .	1931-42* 1956-58 1958-71* 1973-	09-05-91	4.22	620	08-13-64	14.04	10,800
Percha Creek near Kingston. (08361650)	Lat 32°55'05", long 107°38'55", Sierra County, Hydrologic Unit 13030101, at bridge on State Highway 152, 3.3 mi east of Kingston. Drainage area is 21.5 mi ² .	1953-	09-05-91	4.18	510	09-03-72	15.80	3,740
Percha Creek near Hillsboro. (08361700)	Lat 32°54'55", long 107°36'05", Sierra County, Hydrologic Unit 13030101, 150 ft south of State Highway 152, and 2 mi west of Hillsboro. Drainage area is 35.4 mi ² .	1957-78 1980-	09-05-91	5.82	2,350	09-03-72	11.70	12,200
Rio Grande tributary near Radium Springs. (08363100)	Lat 32°30'05", long 106°57'05", Dona Ana County, Hydrologic Unit 13030102, upstream from culvert on State Highway 185, 120 ft upstream from mouth, and 1.4 mi west of Radium Springs. Drainage area is 0.40 mi ² .	1955-	08-18-91	4.67	86	08-24-59	8.20	332
Aleman Draw at Aleman. (08363200)	Lat 33°00'00", long 107°00'20", Sierra County, Hydrologic Unit 13030103, on Santa Fe Railroad bridge, 140 ft upstream from dip on Engle-Rincon road, and 0.26 mi west of Aleman. Drainage area is 25.5 mi ² .	1959-	11-08-90	3.75	410	08-07-67	19.10	16,400
Tecolote Creek at Tecolote. (08379300)	Lat 35°27'20", long 105°16'55", San Miguel County, Hydrologic Unit 13060001, on bridge on old U.S. Highway 85 at Tecolote. Drainage area is 122 mi ² .	1954-	08-14-91	9.05	3,500	08-17-61	12.92	12,300
Sandoval Canyon at Gallinas. (08380300)	Lat 35°41'19", long 105°21'17", San Miguel County, Hydrologic Unit 13060001, about 500 ft upstream from culvert on State Highway 65, at north edge of Gallinas. Drainage area is 7.6 mi ² .	1957 1961-	09-10-91	2.96	340	08-01-66	5.26	2,530
Pecos River tributary near Pintada. (08382900)	Lat 34°58'06", long 105°05'38", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, 1,500 ft south of Interstate Highway 40, and 6.8 mi north of Pintada. Drainage area is 16.0 mi ² .	1961-	- -91	<0.83	<20	07-19-71	4.80	6,600

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
RIO GRANDE BASIN -- Continued								
Pecos River tributary near Puerto de Luna. (08383370)	Lat 34°52'35", long 104°38'16", Guadalupe County, Hydrologic Unit 13060001, 25 ft upstream from culvert on State Highway 91, and 3.1 mi north of Puerto de Luna. Drainage area is 0.37 mi ² .	1961-	07-14-91	6.59	72	08-23-87	15.89	2,000
Alamosa Creek tributary near Jordan. (08385530)	Lat 34°47'44", long 103°58'07", Quay County, Hydrologic Unit 13060004, 500 ft upstream from dip on State Highway 156, and 6.9 mi west of Jordan. Drainage area is 9.71 mi ² .	1962-	09-21-90	2.77	78	07-11-72	6.86	2,850
Yeso Creek near Fort Sumner. (08385600)	Lat 34°16'32", long 104°17'28", De Baca County, Hydrologic Unit 13060003, at abandoned bridge 1 mi downstream from State Highway 20, and 14.5 mi south of Fort Sumner. Drainage area is 242 mi ² .	1937-	07-14-91	4.29	2,650	10-07-54	11.60	14,800
Aragon Creek tributary near Encinosa. (08385670)	Lat 33°43'35", long 105°31'43", Lincoln County, Hydrologic Unit 13060005, 0.3 mi upstream from wooden bridge on dirt road, 1.2 mi north of State Highway 246, and 4.3 mi west of Encinosa. Drainage area is 6.07 mi ² .	1961-	- -91	<3.26	<230	09-06-61	5.10	1,610
Salt Creek tributary near Roswell. (08385900)	Lat 33°32'22", long 104°31'08", Chavez County, Hydrologic Unit 13060005, at culvert on U.S. Highway 285, 4.7 mi north of junction of U.S. Highways 70 and 285, and 10 mi north of Roswell. Drainage area is 0.04 mi ² .	1952-	07-14-91	1.20	(+)	08-11-77	3.75	73
Rio Bonito near Fort Stanton. (08389000)	Lat 33°31'05", long 105°29'10", Lincoln County, Hydrologic Unit 13060008, at bridge on U.S. Highway 380, 2.5 mi northeast of Fort Stanton. Drainage area is 85 mi ² .	1955-	- -91	<3.80	<230	05-17-79	7.20	4,100
Rio Bonito tributary near Fort Stanton. (08389060)	Lat 33°31'15", long 105°28'05", Lincoln County, Hydrologic Unit 13060008, at culvert on U.S. Highway 380, 150 ft upstream from mouth, and 3.5 mi northeast of Fort Stanton. Drainage area is 0.72 mi ² .	1955-	- -91	<2.88	(k)	09-30-82	6.40	512
Rio Hondo tributary at Tinnie. (08390050)	Lat 33°22'36", long 105°13'01", Lincoln County, Hydrologic Unit 13060008, upstream from culvert on U.S. Highway 70-380, 0.5 mi east of junction of U.S. Highway 70-380 and State Highway 368, and at Tinnie. Drainage area is 0.23 mi ² .	1971-	07-14-91	(e)	(+)	09-07-72	10.80	420
Gallo Canyon near Picacho. (08390150)	Lat 33°17'23", long 105°10'49", Lincoln County, Hydrologic Unit 13060009, 500 ft east of road, 5 mi south of Arabela. Drainage area is 1.32 mi ² .	1962-	- -91	<2.42	(k)	09-10-73	9.19	2,400

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
RIO GRANDE BASIN -- Continued								
Pancho Canyon near Arabela. (08393700)	Lat 33°30'36", long 105°11'38", Lincoln County, Hydrologic Unit 13060008, 200 ft down- stream from dip on State Highway 368, and 5.6 mi south of Arabela. Drainage area is 16.7 mi ² .	1962-	07-15-91	6.63	(+)	08-10-65	5.49	1,700
Eight Mile Draw near Roswell. (08393900)	Lat 33°24'05", long 104°37'54", Chavez County, Hydrologic Unit 13060008, 6.5 mi west of Roswell. Drainage area is 397 mi ² .	1941 1952-	- -91	<12.45	(k)	10-06-54	18.09	10,200
Twin Butte Canyon tributary near Roswell. (08394300)	Lat 33°10'34", long 104°51'30", Chavez County, Hydrologic Unit 13060009, about 0.1 mi upstream from mouth, and about 22 mi southwest of Roswell. Drainage area is 5.01 mi ² .	1968-	07-13-90	5.98	1,650	06-25-86	7.75	3,600
Curtis Canyon near Mayhill. (08397390)	Lat 32°51'52", long 105°31'05", Otero County, Hydrologic Unit 13060010, 0.26 mi upstream from SCS dam, 0.4 mi west of State Highway 130, and 2.5 mi southwest of Mayhill. Drainage area is 10.3 mi ² .	1959-	08-24-91	-0.56	(+)	08-23-87	0.58	23
Hyatt Canyon near Cloudcroft. (08397400)	Lat 32°56'06", long 105°37'37", Otero County, Hydrologic Unit 13060010, 0.5 mi south of U.S. Highway 82, and 7 mi east of Cloudcroft. Drainage area is 3.08 mi ² .	1953-	08-24-91	1.47	(+)	08-10-67	1.56	86
Rio Penasco near Dunken. (08397600)	Lat 33°52'55", long 105°10'40", Chavez County, Hydrologic Unit 13060010, on bridge on State Highway 24, 5 mi north of Dunken. Drainage area is 583 mi ² .	1952-56 1956-62* 1963-	08-17-91	10.59	2,600	07-06-58	13.36	10,200
Last Chance Canyon tributary near Carlsbad Caverns. (08405050)	Lat 32°17'30", long 104°36'20", Eddy County, Hydrologic Unit 13060011, upstream from culvert on State Highway 137, 0.1 mi north of road to Sitting Bull Falls, and 12.5 mi northwest of Carlsbad Caverns. Drainage area is 0.2 mi ² .	1959-	08-12-91	1.85	44	08-23-66	7.77	683
Mosley Canyon near Whites City. (08405100)	Lat 32°15'27", long 104°22'43", Eddy County, Hydrologic Unit 13060011, 600 ft downstream from dip on Dark Canyon Road, and 5.5 mi north of Whites City. Drainage area is 14.6 mi ² .	1959-	07-02-91	6.93	2,950	05-30-65	13.70	16,400
Antelope Draw near Jal. (08436000)	Lat 32°09'18", long 103°21'51", Lea County, Hydrologic Unit 13070007, 0.4 mi south of State Highway 128, and 10.7 mi west of Jal. Drainage area is 20 mi ² .	1963-	07-24-91	1.50	(+)	06-24-86	0.07	69

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
MIMBRES BASIN								
Silva Creek at Silver City. (08477580)	Lat 32°46'41", long 108°16'41", Grant County, Hydrologic Unit 13030202, 190 ft upstream from Twelfth Street bridge in Silver City. Drainage area is 10.0 mi ² .	1958-	02-12-91	1.91	115	08-11-60	6.01	2,670
Pinos Altos Creek at Silver City. (08477590)	Lat 32°46'52", long 108°16'04", Grant County, Hydrologic Unit 13030202, downstream from U.S. Highway 180 in Silver City. Drainage area is 4.63 mi ² .	1958-	- -91	<0.78	<50	09-03-72	4.09	3,700
Cameron Creek at Central. (08478000)	Lat 32°47'38", long 108°08'58", Grant County, Hydrologic Unit 13030202, 0.5 mi upstream from culvert on U.S. Highway 180, at north edge of Central. Drainage area is 18.8 mi ² .	1954-	08-10-91	4.03	900	08-28-59	7.30	2,200
Mimbres River at Deming. (08478500)	Lat 32°17'00", long 107°45'35", Luna County, Hydrologic Unit 13030202, culvert on U.S. Highway 180, at north end of Deming. Drainage area is 1,370 mi ² .	1954-79 1983-	07-30-91	6.23	670	10-20-72	6.68	2,690
Mimbres basin tributary near Florida. (08478600)	Lat 32°21'30", long 107°37'30", Luna County, Hydrologic Unit 13030202, upstream from culvert on State Highway 26, and 5 mi southwest of Florida. Drainage area is 0.55 mi ² .	1959-	06-14-91	4.74	480	06-14-91	4.74	480
Seventysix Draw tributary near Waterloo. (08478800)	Lat 31°56'34", long 107°44'38", Luna County, Hydrologic Unit 13030202, upstream from culvert on State Road 11, 3.9 mi southeast of Waterloo, and 7.9 mi north of Columbus. Drainage area is 0.2 mi ² .	1967-	07-30-91	4.57	105	08-04-67	7.30	222
PLAYAS BASIN								
Deer Creek tributary near Antelope Wells. (08479300)	Lat 31°23'00", long 108°42'15", Hidalgo County, Hydrologic Unit 13030201, 0.1 mi downstream from dip on State Highway 81, 2.5 mi east of San Luis Pass, and 12 mi west of Antelope Wells. Drainage area is 4.3 mi ² .	1959-	07-30-91	3.01	660	08-05-60	4.59	1,680
TULAROSA BASIN								
White Oaks Canyon near Carrizozo. (08480150)	Lat 33°43'51", long 105°50'11", Lincoln County, Hydrologic Unit 13050003, 100 ft upstream from culvert on U.S. Highway 54, 6 mi north of Carrizozo. Drainage area is 31 mi ² .	1959- 1961-	07-05-91	2.47	940	07-26-59	14.30	7,690
Nogal Creek tributary near Nogal. (08480170)	Lat 33°34'54", long 105°41'10", Lincoln County, Hydrologic Unit 13050003, upstream from culvert on U.S. Highway 380, about 2.0 road mi west of Indian Divide, 7 mi northwest of Capitan, and 2 mi north of Nogal. Drainage area is 1.94 mi ² .	1968-	08-03-91	2.36	<15	08-10-77	8.45	655

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
TULAROSA BASIN -- Continued								
Taylor Canyon tributary near Bingham. (08480200)	Lat 33°48'11", long 106°12'00", Socorro County, Hydrologic Unit 13050003, 200 ft north of U.S. Highway 380, and 12 mi southeast of Bingham. Drainage area is 2.66 mi ² .	1961-	07-23-91	1.82	150	08-12-61	2.39	551
Indian Creek near Three Rivers. (08480700)	Lat 33°22'10", long 105°53'25", Otero County, Hydrologic Unit 13050003, 150 ft upstream from diversion dam, and 12 mi east of Three Rivers. Drainage area is 6.8 mi ² .	1956-58* 1959-	- -	(e)	(+)	09- -61	7.50	990
ESTANCIA BASIN								
Estancia Valley tributary at Cedar Grove. (08488000)	Lat 35°10'05", long 106°10'08", Santa Fe County, Hydrologic Unit 13050001, 50 ft upstream from culvert on State Highway 344, 0.1 mi south of Cedar Grove. Drainage area is 1.21 mi ² .	1955 1961-	08-07-91	7.30	(+)	07-11-77	7.92	144
Juan Tomas Canyon near Edgewood. (08488100)	Lat 35°04'35", long 106°13'46", Santa Fe County, Hydrologic Unit 13050001, 140 ft upstream from culvert on Interstate Highway 40, 2.5 mi northwest of Edgewood. Drainage area is a20 mi ² .	1962-	09-10-91	2.48	(+)	08-01-89	2.48	150
Osita Draw near Clines Corners. (08488200)	Lat 35°00'18", long 105°48'00", Torrance County, Hydrologic Unit 13050001, 100 ft upstream from culvert on Interstate Highway 40, 7.5 mi west of Clines Corners. Drainage area is a10 mi ² .	1961-	08-03-91	1.34	100	06-09-69	7.41	2,000
Canon de Torreon at Torreon. (08488500)	Lat 34°43'20", long 106°17'50", Torrance County, Hydrologic Unit 13050001, at culvert on State Highway 55, in Torreon. Drainage area is 18.2 mi ² .	1954-	07-21-91	2.18	1,550	08-09-67	4.23	4,310
Arroyo del Cuervo near Torreon. (08488600)	Lat 34°41'35", long 106°18'27", Torrance County, Hydrologic Unit 13050001, in Town of Torreon Grant, about 0.3 mi upstream from culvert on State Highway 55, and 2 mi south of Torreon. Drainage area is 11.8 mi ² .	1969-	09-06-91	2.07	102	10-02-83	5.34	1,320
Big Draw near Mountainair. (08489000)	Lat 34°18'45", long 106°11'35", Torrance County, Hydrologic Unit 13050001, 0.25 mi upstream from culvert on State Highway 55, and 8.4 mi south- east of Mountainair. Drainage area is 4.06 mi ² .	1953-	09-10-91	3.87	21	09-25-54	8.68	1,710
SALT BASIN								
Fleming Draw near Pinon. (08492500)	Lat 32°31'01", long 105°20'42", Otero County, Hydrologic Unit 13050004, 0.2 mi upstream from dip in ranch road, and 7.5 mi south of Pinon. Drainage area is 16.6 mi ² .	1959-	06-29-91	6.47	2,300	- -69	8.75	5,800

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum		Period of record maximum		Date	Gage height (ft)	Dis- charge (ft ³ /s)
			Date		Date				
SAN AGUSTIN PLAINS BASIN									
Swingle Canyon near Datil. (08500000)	Lat 34°11'17", long 107°53'55", Catron County, Hydrologic Unit 13020208, 0.3 mi upstream from U.S. Highway 60, and 4.3 mi northwest of Datil. Drainage area is 6.35 mi ² .	1970-72 1976-	07-23-91	4.42	12	07-16-77	5.73	900	
SAN JUAN RIVER BASIN									
Rio Amargo at Dulce. (09346200)	Lat 36°56'00", long 107°00'00", Rio Arriba County, Hydrologic Unit 14080101, under bridge on U.S. Highway 64, at Dulce. Drainage area is 168 mi ² .	1956-	10-20-90	6.58	1,150	07-31-68	10.57	2,860	
Ruben Canyon near Gobernador. (09350700)	Lat 36°44'26", long 107°14'33", Rio Arriba County, Hydrologic Unit 14080101, in Carson National Forest, upstream from culvert on U.S. Highway 64, and 6.5 mi east of Gobernador. Drainage area is 5.06 mi ² .	1970-	09-06-91	5.06	160	08-17-88	5.89	380	
Vaqueros Canyon near Gobernador. (09350800)	Lat 36°43'23", long 107°16'47", Rio Arriba County, Hydrologic Unit 14080101, 100 ft east of U.S. Highway 64, and 4.2 mi east of Gobernador. Drainage area is 60.5 mi ² .	1956-	09-06-91	3.47	215	08-02-65	10.37	2,520	
Gobernador Canyon near Gobernador. (09355700)	Lat 36°41'05", long 107°25'10", San Juan County, Hydrologic Unit 14080101, 0.2 mi south of U.S. Highway 64, and 4 mi southwest of Gobernador. Drainage area is 19.8 mi ² .	1956-	08-06-91	5.26	560	08-06-63	9.30	3,450	
Manzanares Canyon near Turley. (09356400)	Lat 36°44'15", long 107°42'15", San Juan County, Hydrologic Unit 14080101, 600 ft upstream from culvert on U.S. Highway 64, and 4.2 mi east of Turley. Drainage area is 3.20 mi ² .	1956-	- -91	<1.48	<0.02	08-03-69	6.19	2,210	
Burro Canyon near Lindrith. (09356520)	Lat 36°16'21", long 107°14'46", Rio Arriba County, Hydrologic Unit 14080103, upstream from culvert on State Highway 537, 11.5 mi west of Lindrith. Drainage area is 9.11 mi ² .	1970-	- -91	---	(k)	06-29-81	10.87	725	
West Draw near Farmington. (09357230)	Lat 36°35'24", long 108°11'03", San Juan County, Hydrologic Unit 14080101, 15 ft upstream from culvert on State Highway 371, 11 mi south of Farmington. Drainage area is 0.32 mi ² .	1975-	h08-15-90 09-06-91	3.46 2.85	37 24	07-26-76	4.61	74	
La Plata River tributary near Farmington. (09367400)	Lat 36°47'10", long 108°13'31", San Juan County, Hydrologic Unit 14080105, about 700 ft upstream from culvert on State Highway 170, and 4.1 mi northwest of Farmington. Drainage area is 1.03 mi ² .	1970-	09-06-91	2.15	23	03- -73	4.25	1,130	
Stevens Arroyo near Kirtland. (09367550)	Lat 36°45'56", long 108°21'59", San Juan County, Hydrologic Unit 14080105, upstream from gravel road to Young's Lake, 0.6 mi north of El Paso Natural Gas, San Juan Plant, and 2.3 mi north of Kirtland. Drainage area is 4.52 mi ² .	1970-	08-21-90	14.25	1,000	08-21-90	14.25	1,000	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum		Period of record maximum			
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SAN JUAN RIVER BASIN -- Continued								
Chaco Wash at Chaco Culture National Monument. (09367680)	Lat 36°01'43", long 107°55'04", San Juan County, Hydrologic Unit 14080106, on downstream side of center bridge pier, 800 ft downstream from Fajada Wash, and 0.5 mi southwest of Chaco Culture National Historical Park Visitors Center. Drainage area is 578 mi ² .	1976-90* 1991-	10-20-90	4.75	710	09-02-88	8.55	1,920
Black Springs Wash near Mexican Springs. (09367900)	Lat 35°45'40", long 108°49'00", McKinley County, Hydrologic Unit 14080106, 2.5 mi south of Mexican Springs, and 17 mi north of Gallup. Drainage area is 7.05 mi ² .	1954-78 1979-82* 1983-	03-28-91	2.66	455	08-18-55		2,200
Coyote Wash tributary near Naschitti. (09367920)	Lat 36°05'56", long 108°41'48", San Juan County, Hydrologic Unit 14080106, on bridge on U.S. Highway 666, 2.4 mi north of Naschitti, and 39 mi north of Gallup. Drainage area is 12.0 mi ² .	1967-	10-19-90	2.80	(+)	06-29-67	10.80	(+)
Hunter Wash at Bisti Trading Post. (09367930)	Lat 36°16'37", long 108°15'12", San Juan County, Hydrologic Unit 14080106, on right bank upstream from road crossing at Bisti Trading Post. Drainage area is 45.6 mi ² .	1975-82* 1983-	06-01-91	4.45	800	08-19-76	6.22	1,570
Rattlesnake Arroyo near Shiprock. (09367980)	Lat 36°46'14", long 108°43'32", San Juan County, Hydrologic Unit 14080105, upstream from bridge on U.S. Highway 64, 0.8 mi west of Shiprock. Drainage area is	1980-	h08-21-90 - -91	6.07 ---	2,800 (k)	09-10-80	6.19	3,100
Malpais Arroyo near Shiprock. (09368020)	Lat 36°55'33", long 108°43'26", San Juan County, Hydrologic Unit 14080105, upstream from culvert on U.S. Highway 666, 8.3 mi north of Shiprock. Drainage area is	1980-	h08-18-89 - -91	1.25 ---	60 (k)	08-06-88	1.87	190
LITTLE COLORADO RIVER BASIN								
Largo Creek near Quemado. (09386100)	Lat 34°19'25", long 108°31'40", Catron County, Hydrologic Unit 15020003, on downstream side of bridge on ranch road, 2.5 mi southwest of Quemado. Drainage area is 151 mi ² .	1954-	07-29-91	2.01	260	08-06-54	4.70	1,320
Carrizo Wash near Salt Lake. (09386200)	Lat 34°30'39", long 109°01'35", Catron County, Hydrologic Unit 15020003, on left downstream wingwall of bridge, 1.3 mi east of New Mexico-Arizona State line, and 15 mi west of Salt Lake. Drainage area is 1560 mi ² .	1957-	07-29-91	0.89	295	08-25-59	7.82	8,380
Galestena Canyon tributary near Black Rock. (09387050)	Lat 34°58'45", long 108°40'00", McKinley County, Hydrologic Unit 15020004, 100 ft downstream from bridge on State Highway 36, and 10.5 mi southeast of Black Rock. Drainage area is 19 mi ² .	1957-	10-19-90	1.84	62	09-05-70	6.40	660

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
LITTLE COLORADO RIVER BASIN -- Continued								
Milk Ranch Canyon near Fort Wingate. (09395400)	Lat 35°25'55", long 108°33'30", McKinley County, Hydrologic Unit 15020006, 0.5 mi downstream from culvert on secondary road between Fort Wingate and McGaffey, and 3 mi south of Fort Wingate. Drainage area is 14.0 mi ² .	1949-	- -91	---	(k)	- -49	4.20	1,360
Puerco River at Gallup. (09395500)	Lat 35°31'45", long 108°44'41", McKinley County, Hydrologic Unit 15020006, near center of span on downstream side of Third St. bridge in Gallup. Drainage area is 558 mi ² .	1940-46* 1957-77 1977-82* 1983-	06-11-91	2.86	39	07-17-72	15.30	12,000
GILA RIVER BASIN								
Copperas Canyon near Pinos Altos. (09430300)	Lat 33°04'42", long 108°12'14", Grant County, Hydrologic Unit 15040001, on east side of State Highway 15, and 15 mi north of Pinos Altos. Drainage area is 3.95 mi ² .	1963-	08-18-91	4.04	290	08-13-80	4.82	650
Duck Creek at Cliff. (09430900)	Lat 32°58'03", long 108°36'36", Grant County, Hydrologic Unit 15040002, at Cliff 100 ft downstream from bridge on State Highway 211, and 0.6 mi upstream from mouth. Drainage area is 228 mi ² .	1957-	07-30-91	5.68	2,850	07-30-71	11.03	6,900
Mangas Creek near Cliff. (09431130)	Lat 32°51'39", long 108°34'01", Grant County, Hydrologic Unit 15040002, on right bank, about 0.5 mi upstream of U.S. Forest Service Road 806, in close proximity to Bill Evans Lake, 7 mi south of Cliff. Drainage area is	1986-	07-30-91	6.18	240	09-07-90	5.04	1,400
Animas Creek near Cloverdale. (09438200)	Lat 31°34'15", long 108°52'30", Hidalgo County, Hydrologic Unit 15040003, near head of small box canyon, 0.1 mi west of State Highway 338, and 11 mi north of Cloverdale. Drainage area is 157 mi ² .	1959-	03-02-91	5.09	830	10-13-74	7.78	3,400
Mail Hollow near Luna. (09432630)	Lat 33°47'38", long 108°56'59", Catron County, Hydrologic Unit 15040004, 1,000 ft upstream from culvert on U.S. Highway 180, 2.3 mi south of Luna. Drainage area is 4.20 mi ² .	1970-	07-05-91	2.75	50	10-02-83	4.35	264
Trout Creek at Luna. (09442660)	Lat 33°50'50", long 108°59'38", Catron County, Hydrologic Unit 15040004, 500 ft downstream from bridge on Luna-Red Hill road, and 2.6 mi north of Luna. Drainage area is 31.9 mi ² .	1954-	03-01-91	2.38	340	10-02-83	4.93	2,790
Negro Canyon at Aragon. (09442695)	Lat 33°52'47", long 108°33'08", Catron County, Hydrologic Unit 15040004, upstream from culvert on State Highway 12, at west edge of Aragon. Drainage area is 9.62 mi ² .	1958-	07-05-91	1.14	165	07-28-59	11.60	5,200

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Annual maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1991 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)

GILA RIVER BASIN -- Continued

Steins Creek at Steins. (09455800)	Lat 32°13'47", long 109°00'01", Hidalgo County, Hydrologic Unit 15040006, at culvert on Interstate Highway 10, and 0.9 mi west of Steins. Drainage area is 1.26 mi ² .	1959-	08-10-91	2.22	96	09-03-65	4.80	317
--	--	-------	----------	------	----	----------	------	-----

< Less than.
+ Discharge not yet determined.
* Operated as continuous-record gaging station.
a Approximately.
b Peak too low to register on gage.
c Estimated.
d From floodmark.
e Gage height not determined.

f Contributing area.
g Discontinued at end of year.
h Revised.
j May not have been peak for year.
k No evidence of any flow during water year.
m No record.
n Correction.
o Discharge for period of record revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at Miscellaneous Sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge Measurements Made at Miscellaneous Sites during Water Year 1990

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
RIO GRANDE BASIN						
Santa Clara Creek above Turkey Creek	Rio Grande	Lat 35°58'53", long 106°23'53", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation 100 ft above confluence with Turkey Creek, 500 ft downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	5.98	1990-91	10-02-90	0.91
					10-05-90	0.71
					10-30-90	0.60
					05-08-91	1.64
					06-13-91	0.89
					07-26-91	0.78
					08-19-91	1.27
09-23-91	1.27					
Turkey Creek 08291900	Santa Clara Creek	Lat 35°58'53", long 106°23'57", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation, at mouth, 400 ft downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	3.28	1984-87 1990-91	10-05-90	0.83
					10-30-90	0.86
					05-08-91	2.37
					06-01-91	1.58
					07-26-91	1.01
					08-19-91	1.73
					09-23-91	2.88
Santa Clara Creek below Turkey Creek 08291950	Rio Grande	Lat 35°58'43", long 106°23'37", Sandoval County, Hydrologic Unit 13020101, on Santa Clara Indian Reservation, 700 ft below confluence with Turkey Creek, 0.3 mi downstream from Grant Boundary, 7.5 mi west of Santa Clara Ranger Station and 19 mi southwest of Espanola.	10.5	1984-87 1990-91	10-05-90	2.08
					10-30-90	1.79
					05-08-91	3.93
					06-13-91	2.97
					07-26-91	1.97
					08-19-91	3.18
					09-23-91	4.23
La Cienega Stream	Santa Fe River	Lat 35°34'35", long 106°05'45", in SW¼NE¼ sec. 33, T. 16 N., R. 8 E., Santa Fe County, Hydrologic Unit 13020201, 0.5 mi downstream from I-25 bridge, 1.8 mi northeast of Cienega School, 12.1 mi southwest of Santa Fe.	---	1986 1989 1990-91	06-19-86	0.47
					05-19-89	0.62
					07-19-90	0.48
					10-18-90	0.58
					03-25-91	0.64
					06-17-91	0.56
					08-28-91	0.33
Lea Lake Drain 08394018	Pecos River	Lat 33°18'56", long 104°19'56", in SW¼SE¼SW¼ sec. 34, T. 11 S., R. 26 E., Chaves County, Hydrologic Unit 13060007, on downstream side of road crossing at Bottomless Lakes State Park near Roswell.	---	1976-	12-18-90	4.65
					02-25-91	5.25
					04-17-91	3.59
					07-26-91	4.45
Blue Springs 08405450	Black River	Lat 32°11'07", long 104°16'50", in SW¼NE¼SW¼ sec. 27, T. 24 S., R. 26 E., Eddy County, Hydrologic Unit 13060011, upstream from all diversions, 5.5 mi east of Whites City.	---	1907 1919-20 1923 1935 1952-70 1974-	10-30-90	14.6
					12-13-90	15.3
					02-06-91	14.4
					04-01-91	15.6
					07-31-91	13.7
Castle Springs 08405490	Black River	Lat 32°11'59", long 104°15'13", in SW¼SW¼SW¼ sec. 24, T. 24 S., R. 26 E., Eddy County, Hydrologic Unit 13060011, upstream from mouth at Black River Village, 7.2 mi east of Whites City.	---	1975-	10-30-90	1.60
					12-13-90	1.23
					02-06-91	0.97
					04-01-91	0.67
					07-31-91	0.74
GILA RIVER BASIN						
Mangas Creek 09431100	Gila River	Lat 32°50'48", long 108°30'57", in NW¼NE¼ sec. 8, T. 17 S., R. 16 W., Grant County, Hydrologic Unit 15040002, 0.4 mi northwest of Mangas Springs.	177	1970-	11-07-90	4.0
					12-18-90	4.0
					02-05-91	4.0
					03-05-91	4.8
					04-30-91	3.8
					06-03-91	4.0
					08-13-91	4.2

RIO GRANDE BASIN

Rio Grande Seepage Investigation

REACH.--The seepage investigation was conducted along a 62.4-mile reach on the Rio Grande downstream from Leasburg Dam near Radium Springs, New Mexico, to the Rio Grande at El Paso, Texas (08364000). The river has been channelized through much of this reach and the gradient is quite flat. About 71,000 acres are irrigated in the Mesilla Valley between Leasburg Dam and El Paso, with ground-water withdrawals used to supplement the surface-water supply.

PREVIOUS INVESTIGATIONS.--A seepage investigation of the reach between the gaging station "below Caballo Dam" (08362500) and a site 0.3 mi upstream from the gaging station "at El Paso" (08364000) was conducted by the U.S. Geological Survey on February 12-13, 1974. A seepage investigation of this same reach was conducted on January 5-6, 1988, January 10-11, 1989, and January 9-10, 1990.

DATE.--January 8-9, 1991.

WEATHER.--Weather was favorable for the seepage investigation. No measurable precipitation occurred. Temperature extremes at Las Cruces, New Mexico, ranged from a low of 0 degrees Celsius on January 8 to a high of 16 degrees Celsius on January 9. Precipitation did not affect streamflow conditions.

STREAMFLOW.--The seepage investigation was conducted during a period of constant base flow. Discharge measurements indicate a net seepage loss of 42.3 cubic feet per second from river mile 1,312.3 to river mile 1,249.9. Indicated gains and losses throughout the reach are shown in the following table. Tributary flow recorded as inflow is considered a contribution and not a gain; no outflow (diversions) occurred during the investigation. Evaporation from the water surface of the river in January is considered negligible.

REMARKS.--The seepage investigation is rated good on the basis of steady streamflow conditions. Recorded river stage in the Rio Grande at the New Mexico 227 Bridge near Vado, New Mexico (site 17) showed no change in gage height during the seepage investigation. Indicated gains or losses may be significantly in error as affected by small inaccuracies in open-channel discharge measurements.

River mile	Stream	Location	Time	Water temp (°C)	Specific conduct- ance (uS/cm)	Discharge, in ft ³ /s		
						Main stream	Inflow	Gain or loss
January 8, 1991								
1,312.3	Rio Grande	Below Leasburg Dam near Radium Springs, NM	0955	8.0	1,400	38.4		--
		Lat 32°28'41", long 106°55'10"						
1,310.2	Rio Grande	Near Leasburg, NM	1110	8.5	1,420	39.8		+1.4
		Lat 32°27'21", long 106°54'08"						
*1,307.6	Selden Drain	Near Leasburg, NM	1150	--	--		10	--
		Lat 32°25'38", long 106°52'50"						
1,306.3	Rio Grande	Near Hill, NM	1220	--	1,590	48.5		+8.7
		Lat 32°25'05", long 106°52'01"						
1,302.7	Rio Grande	At Shalem Bridge near Dona Ana, NM	1330	11.0	1,580	47.6		-0.9
		Lat 32°22'34", long 106°51'16"						
*1,301.2	Wasteway no. 5	Near Dona Ana, NM	1415	--	--		10	--
		Lat 32°22'14", long 106°50'14"						
1,298.8	Rio Grande	Near Picacho, NM	1000	5.5	1,580	57.4		+9.8
		Lat 32°20'18", long 106°50'09"						
1,295.6	Rio Grande	Below Picacho Bridge near Las Cruces, NM	1120	9.0	1,580	134.6		-22.8
		Lat 32°17'45", long 106°49'25"						
*1,295.4	Wastewater inflow	City of Las Cruces, NM	1200	--	1,100		112.9	--
		Lat 32°17'35", long 106°49'26"						
1,293.1	Rio Grande	At NM-359 Bridge near Mesilla, NM	1315	10.5	1,500	54.7		+7.2
		Lat 32°15'49", long 106°49'29"						
*1,291.8	Picacho Drain	Above Mesilla Dam	1410	9.5	1,450		2.16	--
		Lat 32°14'34", long 106°48'56"						
1,291.7	Rio Grande	Below Picacho Drain	1445	9.5	1,500	45.5		-11.4
		Lat 32°14'30", long 106°48'49"						
1,289.5	Rio Grande	Below Mesilla Dam	1030	9.0	1,450	33.7		-11.8
		Lat 30°13'17", long 106°47'15"						
1,287.3	Rio Grande	At NM-28 Bridge near San Pablo, NM	1345	--	1,460	31.0		-2.7
		Lat 32°12'24", long 106°45'32"						
*1,283.6	Santo Tomas River Drain	Near San Miguel, NM	1400	--	--		0	--
		Lat 32°10'16", long 106°43'11"						
1,282.7	Rio Grande	At NM-228 Bridge near San Miguel, NM	1530	13.5	1,400	32.9		+1.9
		Lat 32°09'43", long 106°42'58"						
1,277.8	Rio Grande	At NM-227 Bridge near Vado, NM	1530	14.0	1,440	30.4		-2.5
		Lat 32°06'48", long 106°40'05"						

RIO GRANDE BASIN
Rio Grande Seepage Investigation

River mile	Stream	Location	Time	Water temp (°C)	Specific conduct- ance (uS/cm)	Discharge, in ft ³ /s		Gain or loss
						Main stream	Inflow	
January 9, 1991								
1,277.8	Rio Grande	At NM-227 Bridge near Vado, NM Lat 32°06'48", long 106°40'05"	0915	5.0	1,450	29.0		--
*1,276.6	Del Rio Drain	Near Vado, NM Lat 32°06'09", long 106°39'27"	1000	10.5	1,280		26.2	--
1,273.8	Rio Grande	At NM-226 Bridge near Berino, NM Lat 32°03'56", long 106°39'45"	1045	9.0	1,380	53.4		-1.8
*1,271.6	La Mesa Drain	Near Chamberino, NM Lat 32°02'15", long 106°39'23"	1130	10.5	1,940		9.47	--
1,271.5	Rio Grande	Below La Mesa Drain near Chamberino, NM Lat 32°02'12", long 106°39'18"	1215	10.5	1,680	61.7		-1.2
1,268.5	Rio Grande	At NM-225 Bridge near Anthony, NM Lat 31°59'58", long 106°38'07"	0945	7.5	1,500	73.9		+12.2
1,268.5	Pipe inflow	At NM-225 Bridge near Anthony, NM Lat 31°59'58", long 106°38'07"	1020	--	--		0.10	--
*1,265.4	East Drain	Near Vinton, TX Lat 31°58'09", long 106°36'17"	1040	9.0	3,190		6.77	--
1,264.7	Rio Grande	At Vinton Bridge near Vinton, TX Lat 31°57'33", long 106°36'16"	1140	9.0	1,670	79.4		-1.4
1,261.6	Rio Grande	At TX-259 Bridge, Canutillo, TX Lat 31°54'54", long 106°36'06"	1305	10.0	1,630	71.6		-7.8
1,259.3	Rio Grande	At Borderland Bridge near Borderland, TX Lat 31°53'09", long 106°35'55"	1355	10.5	1,610	71.7		+0.1
1,256.2	Rio Grande	At TX-260 Bridge near Santa Teresa, NM Lat 31°50'46", long 106°36'18"	1040	9.5	1,600	62.4		-9.3
1,252.8	Rio Grande	Near Sunland Park, NM Lat 31°48'24", long 106°34'57"	1230	11.0	1,620	61.6		-0.8
*1,252.4	Wastewater inflow	Sunland Plant, City of Sunland Park, NM Lat 31°47'55", long 106°33'25"	1300	19.0	1,870		20.75	--
1,251.9	Rio Grande	At Sunland Park Bridge, Sunland Park, NM Lat 31°47'56", long 106°33'16"	1405	12.5	1,600	59.6		-2.8
*1,250.3	Montoya Drain	Near Sunland Park, NM Lat 31°48'10", long 106°32'47"	1640	--	2,640		34.7	--
*1,250.1	Keystone Reservoir outlet	Near El Paso, TX Lat 31°48'18", long 106°32'39"	1500	13.0	5,720		0.08	
1,249.9	Rio Grande	At Courchesne Bridge, El Paso, TX Lat 31°48'09", long 106°32'26"	1350	12.0	2,010	88.0		-6.4

* River mile at mouth of drain or point of discharge.

¹ Estimated discharge.

² Reported mean daily discharge.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical data are collected systematically over a period of years for use in hydrological analyses. The data are collected less than quarterly, usually one to three times a year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN

08329800 ARROYO DEL EMBUDO INLET TO FLOODWAY CHANNEL AT ALBUQUERQUE, NM

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 19...	1302	0.40	420	8.6	21.0	12.5	--	<10	--	140	43
FEB 20...	1245	0.62	435	8.9	12.0	10.0	12.8	19	<3.0	140	45
APR 11...	1445	0.25	456	9.1	24.0	19.0	8.7	30	5.0	140	46
MAY 15...	1230	1.6	350	9.8	22.0	23.5	10.7	10	1.3	--	--
JUN 19...	1250	1.2	434	9.6	32.0	28.0	11.4	34	<3.0	140	44

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RINE, TOTAL RESI-DUAL (MG/L) (50060)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 19...	7.2	38	1	3.6	147	53	--	14	0.70	24
FEB 20...	5.7	35	1	4.2	129	41	0.0	40	0.70	31
APR 11...	5.7	43	2	5.8	153	44	0.0	26	0.60	32
MAY 15...	--	--	--	--	--	--	0.0	--	--	--
JUN 19...	7.2	42	2	3.7	146	59	--	28	0.40	36

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 19...	258	272	--	<0.010	--	<0.100	--	0.030	--	--
FEB 20...	260	280	--	<0.010	<0.010	<0.100	<0.100	<0.010	0.020	--
APR 11...	270	295	--	0.020	<0.010	<0.050	<0.050	0.030	0.020	0.87
MAY 15...	--	--	0.040	0.010	0.010	<0.050	0.050	0.010	0.010	0.19
JUN 19...	296	308	--	<0.010	<0.010	<0.050	<0.050	0.020	<0.010	0.78

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 19...	0.090	--	1.8	<0.010	4	<1	K11	K14	<1	1
FEB 20...	0.040	0.020	2.7	<0.010	4	<1	K6	30	<1	2
APR 11...	0.130	0.030	7.0	<0.010	1	<1	K29	340	<1	2
MAY 15...	--	--	2.7	--	2	<1	--	110	--	--
JUN 19...	0.070	0.020	8.5	<0.010	<1	<1	160	100	<1	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08329800 ARROYO DEL EMBUDO INLET TO FLOODWAY CHANNEL AT ALBUQUERQUE, NM -- Continued

DATE		BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV	19...	<10	<1	1	4	6	<0.20	1	<1	<1	40
FEB	20...	<10	<1	2	3	1	<0.10	<1	1	<1	<10
APR	11...	<10	<1	<1	4	1	<0.10	1	<1	<1	<10
MAY	15...	--	--	--	--	--	--	--	--	--	--
JUN	19...	<10	1	1	9	2	<0.10	2	<1	<1	<10

DATE		PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)
NOV	19...	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
FEB	20...	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
APR	11...	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MAY	15...	--	--	--	--	--	--	--	--	--	--	--
JUN	19...	<0.1	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

DATE		LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	PER- THANE TOTAL (UG/L) (39034)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)
NOV	19...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
FEB	20...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
APR	11...	0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MAY	15...	--	--	--	--	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN	19...	<0.010	<0.01	<1	<0.1	<0.10	<0.01	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE		TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ANTHRA- CENE TOTAL (UG/L) (34220)	BENZO B FLUOR- AN- THENE TOTAL (UG/L) (34230)	BENZO K FLUOR- AN- THENE TOTAL (UG/L) (34242)	BENZO A- PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L) (34259)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (UG/L) (34278)
NOV	19...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
FEB	20...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
APR	11...	<0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0
MAY	15...	0.50	<0.20	--	--	--	--	--	--	--	--	--
JUN	19...	0.20	<0.20	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08329800 ARROYO DEL EMBUDO INLET TO FLOODWAY CHANNEL AT ALBUQUERQUE, NM -- Continued

DATE	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L) (34292)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHRY- SENE TOTAL (UG/L) (34320)	DIETHYL PHTHAL- ATE TOTAL (UG/L) (34336)	DI- METHYL PHTHAL- ATE TOTAL (UG/L) (34341)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L) (34386)	HEXA- CHLORO- ETHANE TOTAL (UG/L) (34396)
NOV 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
FEB 20...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
APR 11...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
MAY 15...	--	--	<0.20	<0.20	--	--	--	<0.20	--	--	--	--
JUN 19...	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0
DATE	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L) (34403)	ISO- PHORONE TOTAL (UG/L) (34408)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	N- NITRO- SODI-N- PROPYL- AMINE TOTAL (UG/L) (34428)	N-NITRO -SODI- -PHENY- LAMINE TOTAL (UG/L) (34433)	N-NITRO -SODI- -METHY- LAMINE TOTAL (UG/L) (34438)	NITRO- BENZENE TOTAL (UG/L) (34447)	PARA- CHLORO- META CRESOL TOTAL (UG/L) (34452)	PHENAN- THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)
NOV 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
FEB 20...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
APR 11...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
MAY 15...	--	--	<0.20	<0.20	<0.20	--	--	--	--	--	--	--
JUN 19...	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0
DATE	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2- TRANSDI CHLORO- ETHENE TOTAL (UG/L) (34546)
NOV 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
FEB 20...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
APR 11...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
MAY 15...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20
JUN 19...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<10.0	<10.0	<5.0	<0.20	<0.20
DATE	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L) (34551)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L) (34556)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	2- CHLORO- NAPH- THALENE TOTAL (UG/L) (34581)	2- CHLORO- PHENOL TOTAL (UG/L) (34586)	2- NITRO- PHENOL TOTAL (UG/L) (34591)	DI-N- OCTYL PHTHAL- ATE TOTAL (UG/L) (34596)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L) (34601)	2,4-DI- METHYL- PHENOL TOTAL (UG/L) (34606)
NOV 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
FEB 20...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
APR 11...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0
MAY 15...	--	--	<0.20	<0.20	<0.20	<0.20	--	--	--	--	--	--
JUN 19...	<5.0	<10.0	<0.20	<5.0	<5.0	<0.20	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08329800 ARROYO DEL EMBUDO INLET TO FLOODWAY CHANNEL AT ALBUQUERQUE, NM -- Continued

DATE	2,4-DI-NITRO-TOLUENE TOTAL (UG/L) (34611)	2,4-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L) (34626)	3,3'-DI-CHLORO-BENZI-DINE TOTAL (UG/L) (34631)	4-BROMO-PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLORO-PHENYL ETHER TOTAL (UG/L) (34641)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)
NOV 19...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
FEB 20...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
APR 11...	<5.0	<20.0	<20.0	<5.0	--	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0
MAY 15...	--	--	--	--	--	--	--	--	--	<0.20	--	--
JUN 19...	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0

DATE	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	METHY-LENE BLUE ACTIVE SUB-STANCE TOTAL (MG/L) (38260)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L) (39110)	BENZI-DINE TOTAL (UG/L) (39120)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)
NOV 19...	<5.0	<0.20	<0.20	<30.0	--	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
FEB 20...	<5.0	<0.20	<0.20	<30.0	0.08	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
APR 11...	<5.0	<0.20	<0.20	<30.0	0.10	<5.0	<5.0	--	<0.20	<0.2	<0.01	<0.01
MAY 15...	--	<0.20	<0.20	--	<0.07	--	--	--	<0.20	<0.2	--	--
JUN 19...	<5.0	<0.20	<0.20	<30.0	0.12	<5.0	<5.0	<40.0	<0.20	<0.2	<0.01	<0.01

DATE	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	HEXA-CHLORO-BUT-BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)	1,2-DIBROMO-ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
NOV 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
FEB 20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
APR 11...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2
MAY 15...	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2
JUN 19...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2	<0.2	<0.2

08329865 GRANT LINE ARROYO AT ALBUQUERQUE, NM

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
MAY 21...	1022	0.24	75	8.3	16.0	32	11	1.2	2.8	0.2	5.0	37

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08329865 GRANT LINE ARROYO AT ALBUQUERQUE, NM -- Continued

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
MAY 21...	5.3	3.2	<0.10	2.5	57	0.440	0.470	0.100	0.030	0.540	0.500	0.450

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
MAY 21...	0.350	1.3	2.3	0.590	0.300	18	30	56	1	1	<1	<1.0

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
MAY 21...	7	<1	9	6	21	1	<0.10	<0.1	<1	<1	60	19

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08329865 GRANT LINE ARROYO AT ALBUQUERQUE, NM -- Continued

DATE	2- CHLORO- ETHYL- VINYL- TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
MAY 21...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
JUL 23...	1140	1.5	630	8.2	23.0	21.5	250	77	13	28	0.8
AUG 05...	1026	2.5	840	8.2	24.0	24.0	330	100	20	35	0.8
SEP 06...	0850	3.7	860	8.2	19.0	17.0	320	97	18	36	0.9

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
JUL 23...	4.9	157	75	61	0.40	13	368	--	--	<0.010	<0.010
AUG 05...	4.1	210	96	78	0.50	16	478	--	--	<0.010	<0.010
SEP 06...	7.9	192	100	83	0.50	14	476	0.710	0.870	0.020	0.020

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
JUL 23...	0.370	0.370	0.010	0.030	1.3	1.7	0.070	<0.010	9.7	2	<1
AUG 05...	0.400	0.440	<0.010	0.020	--	1.6	0.570	0.020	13	2	<1
SEP 06...	0.730	0.890	0.080	0.080	0.92	1.7	0.100	0.050	14	1	<1

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
JUL 23...	50	<1	2.0	11	<1	21	5	8	17	<1	<0.10
AUG 05...	50	<1	<1.0	10	1	20	2	8	--	<1	<0.10
SEP 06...	50	<1	<1.0	24	<1	30	3	9	40	<1	<0.10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08330505 TIJERAS ARROYO ABOVE FOUR HILLS BRIDGE AT ALBUQUERQUE, NM -- Continued

DATE	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)
JUL 23...	<0.1	<1	<1	50	4	403	1.7	61	<0.20	<0.20	<0.20
AUG 05...	<0.1	<1	<1	70	<3	807	5.5	73	<0.20	<0.20	<0.20
SEP 06...	<0.1	1	<1	190	<3	520	5.2	49	<0.20	<0.20	<0.20

DATE	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)
JUL 23...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SEP 06...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L) (34516)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2- TRANSDI- CHLORO- ETHENE TOTAL (UG/L) (34546)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34561)
JUL 23...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
AUG 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SEP 06...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)
JUL 23...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
AUG 05...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2
SEP 06...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379175 TECOLOTE CR NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
05...	1645	1028	1028	1.6	45	6.6	--	--	--	1	--
05...	1715	1028	1028	1.8	44	6.4	--	--	--	1	--
05...	1745	1028	1028	2.1	42	6.5	--	--	--	1	--
05...	1815	1028	1028	2.5	43	6.4	--	--	--	1	--
05...	1845	1028	1028	2.7	44	6.7	--	--	--	1	--
05...	1915	1028	1028	2.8	43	6.4	--	--	--	1	--
05...	1945	1028	1028	2.8	42	6.5	--	--	--	0	--
05...	2015	1028	1028	2.8	43	6.3	--	--	--	0	--
05...	2045	1028	1028	2.8	42	6.5	--	--	--	0	--
05...	2115	1028	1028	2.7	42	6.5	--	--	--	1	--
05...	2145	1028	1028	2.7	44	6.5	--	--	--	0	--
05...	2215	1028	1028	2.6	43	6.6	--	--	--	0	--
05...	2245	1028	1028	2.6	42	6.6	--	--	--	0	--
05...	2315	1028	1028	2.5	44	6.5	--	--	--	1	--
05...	2345	1028	1028	2.5	43	6.6	--	--	--	0	--
06...	0015	1028	1028	2.5	43	6.4	--	--	--	0	--
06...	0045	1028	1028	2.4	43	6.7	--	--	--	1	--
06...	0115	1028	1028	2.4	43	6.7	--	--	--	0	--
06...	0145	1028	1028	2.3	43	6.5	--	--	--	0	--
06...	0215	1028	1028	2.2	47	6.6	--	--	--	0	--
06...	0245	1028	1028	2.2	45	6.7	--	--	--	0	--
12...	1030	1028	B9735	0.80	33	7.4	8.5	4.5	--	0	9.2
NOV											
07...	1130	1028	B9735	0.33	32	7.3	6.0	1.0	--	1	--
APR											
05...	1045	1028	B9735	0.60	49	6.9	7.0	1.5	25	--	--
MAY											
01...	1100	1028	B9735	1.6	35	7.8	0.5	2.0	15	--	--
23...	1130	1028	B9735	0.82	38	7.5	19.0	7.0	5	1	--
JUN											
21...	1030	1028	B9735	E0.20	42	8.1	18.0	12.0	10	1	--
JUL											
20...	0130	1028	1028	0.51	48	7.0	--	--	--	5	--
20...	0200	1028	1028	0.54	45	6.7	--	--	--	20	--
20...	0230	1028	1028	0.66	43	6.7	--	--	--	15	--
20...	0300	1028	1028	0.70	43	6.8	--	--	--	10	--
JUL											
20-20	0330	1028	1028	0.69	44	7.2	--	--	--	--	--
20...	0400	1028	1028	0.69	47	6.9	--	--	--	6	--
20...	0500	1028	1028	0.66	48	7.0	--	--	--	5	--
20...	0530	1028	1028	0.67	49	7.1	--	--	--	5	--
20...	0600	1028	1028	0.67	50	7.2	--	--	--	5	--
20...	0700	1028	1028	0.69	50	7.2	--	--	--	3	--
20...	0800	1028	1028	0.72	50	7.2	--	--	--	3	--
20...	0900	1028	1028	0.71	51	7.3	--	--	--	3	--
20...	1000	1028	1028	0.70	50	7.2	--	--	--	3	--
20...	1100	1028	1028	0.69	50	7.2	--	--	--	3	--
20...	1200	1028	1028	0.67	52	7.3	--	--	--	3	--
20...	1300	1028	1028	0.64	52	7.3	--	--	--	3	--
24...	1015	1028	B9735	0.52	49	7.5	15.0	9.5	25	1	8.0

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT											
12...	55	10	7.3	<5.0	--	1.0	18	22	0	<5.0	<5.0
NOV											
07...	64	24	1.1	7.0	0.4	5.0	18	22	0	5.2	<5.0
APR											
05...	25	9.0	<3.0	<10	--	<1.0	16	19	--	7.4	<5.0
MAY											
01...	27	5.0	3.6	<10	--	3.0	12	15	--	11	<5.0
23...	20	6.0	1.2	<10	--	<1.0	13	16	--	5.3	6.6
JUN											
21...	27	9.0	1.2	<10	--	3.0	18	22	0	7.7	6.3
JUL											
24...	27	9.0	1.1	<10	--	2.0	20	24	0	<5.0	<5.0

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379175 TECOLOTE CR NR EL PORVENIR, NM -- Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT										
05...	--	--	--	--	--	--	--	--	12	0.05
05...	--	--	--	--	--	--	--	--	25	0.12
05...	--	--	--	--	--	--	--	--	21	0.12
05...	--	--	--	--	--	--	--	--	20	0.13
05...	--	--	--	--	--	--	--	--	22	0.16
05...	--	--	--	--	--	--	--	--	14	0.11
05...	--	--	--	--	--	--	--	--	7	0.05
05...	--	--	--	--	--	--	--	--	24	0.18
05...	--	--	--	--	--	--	--	--	24	0.18
05...	--	--	--	--	--	--	--	--	12	0.09
05...	--	--	--	--	--	--	--	--	20	0.15
05...	--	--	--	--	--	--	--	--	22	0.15
05...	--	--	--	--	--	--	--	--	22	0.15
05...	--	--	--	--	--	--	--	--	20	0.13
05...	--	--	--	--	--	--	--	--	17	0.11
06...	--	--	--	--	--	--	--	--	18	0.12
06...	--	--	--	--	--	--	--	--	14	0.09
06...	--	--	--	--	--	--	--	--	15	0.10
06...	--	--	--	--	--	--	--	--	11	0.07
06...	--	--	--	--	--	--	--	--	13	0.08
06...	--	--	--	--	--	--	--	--	12	0.07
12...	0.35	36	<3	<0.040	<0.100	--	<0.14	0.030	9	0.02
NOV										
07...	0.36	80	1	<0.040	<0.100	--	<0.14	0.010	23	0.02
APR										
05...	0.32	48	11	<0.040	0.500	0.16	0.66	0.140	20	0.03
MAY										
01...	0.21	48	3	<0.040	0.100	0.0	<0.14	<0.010	5	0.02
23...	0.26	58	<5	<0.040	<0.100	--	<0.14	0.010	5	0.01
JUN										
21...	0.33	52	<3	<0.040	<0.100	--	0.22	0.020	2	--
JUL										
20...	--	--	--	--	--	--	--	--	27	0.04
20...	--	--	--	--	--	--	--	--	198	0.29
20...	--	--	--	--	--	--	--	--	130	0.23
20...	--	--	--	--	--	--	--	--	55	0.10
JUL										
20-20	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	16	0.03
20...	--	--	--	--	--	--	--	--	9	0.02
20...	--	--	--	--	--	--	--	--	1	0.00
20...	--	--	--	--	--	--	--	--	12	0.02
20...	--	--	--	--	--	--	--	--	13	0.02
20...	--	--	--	--	--	--	--	--	16	0.03
20...	--	--	--	--	--	--	--	--	10	0.02
20...	--	--	--	--	--	--	--	--	10	0.02
20...	--	--	--	--	--	--	--	--	10	0.02
20...	--	--	--	--	--	--	--	--	11	0.02
20...	--	--	--	--	--	--	--	--	67	0.12
24...	0.33	52	<3	0.060	<0.100	--	0.23	<0.010	2	0.00

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379175 TECOLOTE CR NR EL PORVENIR, NM -- Continued

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)
AUG									
05...	1530	1028	1028	E1.0	30	7.0	--	--	--
05...	1600	1028	1028	E1.0	31	6.9	--	--	--
05...	1630	1028	1028	E1.0	30	6.9	--	--	--
05...	1700	1028	1028	E0.96	49	7.1	--	--	--
05...	1730	1028	1028	E0.96	47	7.1	--	--	--
05...	1800	1028	1028	E0.96	47	7.1	--	--	--
05...	1830	1028	1028	E0.96	30	7.1	--	--	--
05...	1900	1028	1028	E0.89	31	7.1	--	--	--
05...	1930	1028	1028	E0.89	35	7.1	--	--	--
05...	2000	1028	1028	E0.89	32	7.2	--	--	--
05...	2100	1028	1028	E0.89	34	7.2	--	--	--
05...	2200	1028	1028	E0.89	34	7.2	--	--	--
05...	2300	1028	1028	E0.96	44	7.4	--	--	--
05...	2400	1028	1028	E1.0	35	6.8	--	--	--
06...	0100	1028	1028	E1.0	35	7.2	--	--	--
06...	0200	1028	1028	E1.0	35	7.2	--	--	--
21...	1600	1028	1028	1.2	42	7.1	--	--	--
21...	1630	1028	1028	1.5	41	7.1	--	--	--
21...	1700	1028	1028	1.6	35	7.2	--	--	--
21...	1730	1028	1028	1.6	45	7.3	--	--	--
21...	1800	1028	1028	1.6	48	7.1	--	--	--
21...	1830	1028	1028	1.6	42	7.1	--	--	--
AUG									
21-21	1900	1028	1028	1.6	49	7.2	--	--	--
21...	1930	1028	1028	1.5	43	7.3	--	--	--
21...	2030	1028	1028	1.5	44	7.2	--	--	--
21...	2130	1028	1028	1.5	44	7.2	--	--	--
21...	2230	1028	1028	1.4	45	7.3	--	--	--
21...	2330	1028	1028	1.4	48	7.2	--	--	--
22...	0030	1028	1028	1.4	45	7.8	--	--	--
22...	0130	1028	1028	1.4	47	7.5	--	--	--
22...	0230	1028	1028	1.4	50	7.5	--	--	--
22...	0330	1028	1028	1.4	50	7.1	--	--	--
28...	1000	1028	B9735	0.87	41	7.5	13.5	8.5	10
SEP									
23...	0130	1028	1028	1.2	45	7.4	--	--	--
23...	0200	1028	1028	1.3	45	7.4	--	--	--
23...	0230	1028	1028	1.3	44	7.5	--	--	--
23...	0300	1028	1028	1.3	44	7.5	--	--	--
SEP									
23-23	0330	1028	1028	1.3	44	7.5	--	--	--
23...	0400	1028	1028	1.3	44	7.5	--	--	--
23...	0500	1028	1028	1.3	46	7.5	--	--	--
23...	0530	1028	1028	1.3	46	7.5	--	--	--
23...	0600	1028	1028	1.3	47	7.5	--	--	--
23...	0630	1028	1028	1.3	46	7.5	--	--	--
23...	0700	1028	1028	1.3	48	7.5	--	--	--
23...	0800	1028	1028	1.3	47	7.6	--	--	--
23...	0900	1028	1028	1.3	46	7.6	--	--	--
23...	1000	1028	1028	1.3	50	8.6	--	--	--
23...	1100	1028	1028	1.3	48	7.8	--	--	--
23...	1200	1028	1028	1.3	45	7.6	--	--	--
23...	1300	1028	1028	1.3	45	7.6	--	--	--
26...	1030	1028	B9735	0.90	45	7.8	9.5	7.5	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379175 TECOLOTE CR NR EL PORVENIR, NM -- Continued

DATE	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L) AS (CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CAC03 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)
AUG									
05...	10	--	--	--	--	--	--	--	--
05...	10	--	--	--	--	--	--	--	--
05...	10	--	--	--	--	--	--	--	--
05...	10	--	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
05...	3	--	--	--	--	--	--	--	--
06...	5	--	--	--	--	--	--	--	--
06...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
AUG									
21-21	--	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
21...	3	--	--	--	--	--	--	--	--
22...	3	--	--	--	--	--	--	--	--
22...	3	--	--	--	--	--	--	--	--
22...	3	--	--	--	--	--	--	--	--
22...	3	--	--	--	--	--	--	--	--
28...	1	8.4	32	9.0	2.4	<10	2.0	16	20
SEP									
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
SEP									
23-23	--	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
23...	3	--	--	--	--	--	--	--	--
26...	1	--	25	8.0	1.2	<10	2.0	17	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379175 TECOLOTE CR NR EL PORVENIR, NM -- Continued

DATE	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
AUG								
05...	--	--	--	--	--	--	102	--
05...	--	--	--	--	--	--	59	--
05...	--	--	--	--	--	--	37	--
05...	--	--	--	--	--	--	16	--
05...	--	--	--	--	--	--	17	--
05...	--	--	--	--	--	--	11	--
05...	--	--	--	--	--	--	8	--
05...	--	--	--	--	--	--	9	--
05...	--	--	--	--	--	--	14	--
05...	--	--	--	--	--	--	17	--
05...	--	--	--	--	--	--	20	--
05...	--	--	--	--	--	--	10	--
05...	--	--	--	--	--	--	11	--
05...	--	--	--	--	--	--	18	--
06...	--	--	--	--	--	--	11	--
06...	--	--	--	--	--	--	21	--
21...	--	--	--	--	--	--	29	0.09
21...	--	--	--	--	--	--	30	0.12
21...	--	--	--	--	--	--	29	0.13
21...	--	--	--	--	--	--	29	0.13
21...	--	--	--	--	--	--	29	0.13
21...	--	--	--	--	--	--	25	0.11
AUG								
21-21	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	22	0.09
21...	--	--	--	--	--	--	23	0.09
21...	--	--	--	--	--	--	23	0.09
21...	--	--	--	--	--	--	23	0.09
21...	--	--	--	--	--	--	22	0.08
22...	--	--	--	--	--	--	19	0.07
22...	--	--	--	--	--	--	19	0.07
22...	--	--	--	--	--	--	23	0.09
22...	--	--	--	--	--	--	22	0.08
28...	0	<5.0	<5.0	0.23	52	<3	2	0.00
SEP								
23...	--	--	--	--	--	--	28	0.09
23...	--	--	--	--	--	--	26	0.09
23...	--	--	--	--	--	--	32	0.11
23...	--	--	--	--	--	--	30	0.10
SEP								
23-23	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	35	0.12
23...	--	--	--	--	--	--	23	0.08
23...	--	--	--	--	--	--	24	0.08
23...	--	--	--	--	--	--	22	0.08
23...	--	--	--	--	--	--	22	0.08
23...	--	--	--	--	--	--	23	0.08
23...	--	--	--	--	--	--	21	0.07
23...	--	--	--	--	--	--	21	0.07
23...	--	--	--	--	--	--	21	0.07
23...	--	--	--	--	--	--	24	0.08
23...	--	--	--	--	--	--	23	0.08
23...	--	--	--	--	--	--	20	0.07
26...	0	<5.0	<5.0	0.24	42	<3	1	0.00

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379178 TECOLOTE CR AT WRIGHT CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
04...	2215	1028	1028	1.4	100	7.0	--	--	--	5	--
04...	2245	1028	1028	1.4	102	7.0	--	--	--	5	--
12...	1245	1028	B9735	0.80	88	7.5	21.5	7.5	--	0	8.5
NOV											
07...	1330	1028	B9735	0.46	98	7.3	8.5	2.5	--	0	--
APR											
05...	1230	1028	B9735	1.2	80	7.4	8.5	3.0	25	--	--
MAY											
01...	1215	1028	B9735	1.7	60	8.0	0.5	2.5	10	--	--
23...	1250	1028	B9735	0.87	69	8.1	20.0	10.5	5	1	--
JUN											
21...	1550	1028	B9735	0.30	90	7.7	--	15.0	10	1	--
JUL											
19...	1400	1028	B9735	0.49	110	7.8	16.5	12.0	--	--	--
20...	0230	1028	1028	0.69	105	7.5	--	--	--	5	--
20...	0300	1028	1028	0.73	104	7.5	--	--	--	5	--
20...	0330	1028	1028	0.89	95	7.5	--	--	--	5	--
20...	0400	1028	1028	0.94	95	7.5	--	--	--	5	--
20...	0430	1028	1028	0.96	90	7.5	--	--	--	5	--
20...	0500	1028	1028	0.93	99	7.5	--	--	--	5	--
20...	0530	1028	1028	0.91	100	7.4	--	--	--	5	--
24...	1215	1028	B9735	0.82	88	7.7	20.5	12.5	25	2	8.5
31...	1230	1028	1028	E0.79	112	7.6	--	--	--	3	--
31...	1300	1028	1028	E0.92	118	7.5	--	--	--	3	--
31...	1330	1028	1028	E0.85	113	7.6	--	--	--	5	--
31...	1400	1028	1028	E0.86	89	7.4	--	--	--	5	--
31...	1430	1028	1028	E0.82	108	7.5	--	--	--	5	--
31...	1500	1028	1028	E0.76	118	7.6	--	--	--	3	--
31...	1530	1028	1028	E0.74	117	7.5	--	--	--	5	--
31...	1600	1028	1028	E0.72	121	7.7	--	--	--	5	--
31...	1630	1028	1028	E0.72	128	7.7	--	--	--	5	--
31...	1700	1028	1028	E0.71	111	7.4	--	--	--	10	--
31...	1730	1028	1028	E0.75	109	7.4	--	--	--	8	--
31...	1800	1028	1028	E0.95	112	7.5	--	--	--	5	--
31...	1830	1028	1028	E0.99	115	7.4	--	--	--	5	--
31...	1900	1028	1028	E1.1	108	7.4	--	--	--	10	--
31...	1930	1028	1028	E1.2	91	7.4	--	--	--	10	--
31...	2000	1028	1028	E1.3	85	7.3	--	--	--	8	--
31...	2030	1028	1028	E1.3	86	7.3	--	--	--	8	--
31...	2100	1028	1028	E1.3	86	7.4	--	--	--	8	--
31...	2130	1028	1028	E1.2	93	7.5	--	--	--	5	--
31...	2200	1028	1028	E1.2	98	7.5	--	--	--	5	--
31...	2230	1028	1028	E1.2	100	7.5	--	--	--	5	--
31...	2300	1028	1028	E1.2	105	7.6	--	--	--	5	--
31...	2330	1028	1028	E1.2	106	7.8	--	--	--	5	--
31...	2400	1028	1028	E1.2	107	7.7	--	--	--	5	--
AUG											
20...	1945	1028	1028	1.1	116	7.3	--	--	--	5	--
28...	1215	1028	B9735	1.2	68	7.9	23.5	11.0	15	0	7.7
SEP											
26...	1130	1028	B9735	1.3	98	8.0	17.0	9.0	25	1	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT										
12...	95	24	8.6	<5.0	1.0	43	53	0	5.8	<5.0
NOV										
07...	65	20	3.6	<5.0	<1.0	47	57	0	12	<5.0
APR										
05...	48	17	<3.0	<10	<1.0	37	46	--	9.6	<5.0
MAY										
01...	45	15	<3.0	<10	2.0	32	39	--	13	<5.0
23...	44	15	1.7	<10	2.0	34	42	0	9.3	<5.0
JUN										
21...	50	19	<1.0	<10	2.0	46	56	0	10	6.3
JUL										
24...	47	17	1.1	<10	4.0	44	54	0	<5.0	<5.0
AUG										
28...	--	--	--	<10	2.0	38	47	0	6.7	<5.0
SEP										
26...	57	19	2.4	<10	2.0	47	58	0	7.4	<5.0

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379178 TECOLOTE CR AT WRIGHT CANYON NR EL PORVENIR, NM -- Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT										
04...	--	--	--	--	--	--	--	--	7	0.03
04...	--	--	--	--	--	--	--	--	9	0.03
12...	0.29	67	0	<0.040	<0.100	--	<0.14	0.030	--	--
NOV										
07...	0.29	134	1	<0.040	<0.100	--	<0.14	0.010	11	0.01
APR										
05...	0.31	78	<3	<0.040	0.100	1.7	1.8	0.170	--	--
MAY										
01...	0.20	72	<3	<0.040	<0.100	--	<0.14	<0.010	13	0.06
23...	0.24	84	6	<0.040	<0.100	--	<0.14	0.010	2	0.00
JUN										
21...	0.29	90	<3	<0.040	<0.100	--	<0.14	0.160	--	--
JUL										
19...	--	--	--	0.040	<0.100	--	0.74	<0.010	1	0.00
20...	--	--	--	--	--	--	--	--	38	0.07
20...	--	--	--	--	--	--	--	--	42	0.08
20...	--	--	--	--	--	--	--	--	40	0.10
20...	--	--	--	--	--	--	--	--	32	0.08
20...	--	--	--	--	--	--	--	--	26	0.07
20...	--	--	--	--	--	--	--	--	30	0.08
20...	--	--	--	--	--	--	--	--	37	0.09
24...	0.30	86	<3	<0.040	<0.100	--	<0.24	0.010	3	0.01
31...	--	--	--	--	--	--	--	--	22	--
31...	--	--	--	--	--	--	--	--	27	--
31...	--	--	--	--	--	--	--	--	21	--
31...	--	--	--	--	--	--	--	--	82	--
31...	--	--	--	--	--	--	--	--	80	--
31...	--	--	--	--	--	--	--	--	27	--
31...	--	--	--	--	--	--	--	--	27	--
31...	--	--	--	--	--	--	--	--	25	--
31...	--	--	--	--	--	--	--	--	25	--
31...	--	--	--	--	--	--	--	--	25	--
31...	--	--	--	--	--	--	--	--	40	--
31...	--	--	--	--	--	--	--	--	41	--
31...	--	--	--	--	--	--	--	--	35	--
31...	--	--	--	--	--	--	--	--	56	--
31...	--	--	--	--	--	--	--	--	48	--
31...	--	--	--	--	--	--	--	--	78	--
31...	--	--	--	--	--	--	--	--	35	--
31...	--	--	--	--	--	--	--	--	46	--
31...	--	--	--	--	--	--	--	--	36	--
31...	--	--	--	--	--	--	--	--	34	--
31...	--	--	--	--	--	--	--	--	38	--
31...	--	--	--	--	--	--	--	--	38	--
31...	--	--	--	--	--	--	--	--	37	--
31...	--	--	--	--	--	--	--	--	38	--
AUG										
20...	--	--	--	--	--	--	--	--	32	0.09
28...	--	70	5	--	--	--	--	--	26	0.08
SEP										
26...	0.23	78	<3	0.080	<0.100	--	0.18	<0.010	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379182 WRIGHT CANYON AT MILE 1.2 NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
04...	1000	1028	1028	0.71	166	--	--	--	--	--	--
04...	1030	1028	1028	0.71	165	--	--	--	--	--	--
04...	1100	1028	1028	0.71	163	--	--	--	--	--	--
04...	1130	1028	1028	0.71	160	--	--	--	--	--	--
04...	1200	1028	1028	0.71	162	--	--	--	--	--	--
04...	1230	1028	1028	0.71	166	--	--	--	--	--	--
04...	1300	1028	1028	0.71	168	--	--	--	--	--	--
04...	1330	1028	1028	0.71	165	--	--	--	--	--	--
04...	1400	1028	1028	0.66	165	--	--	--	--	--	--
04...	1430	1028	1028	0.66	169	--	--	--	--	--	--
04...	1500	1028	1028	0.66	218	--	--	--	--	--	--
04...	1530	1028	1028	0.66	176	--	--	--	--	--	--
04...	1600	1028	1028	0.66	180	--	--	--	--	--	--
04...	1630	1028	1028	0.66	178	--	--	--	--	--	--
04...	1700	1028	1028	0.61	175	--	--	--	--	--	--
04...	1730	1028	1028	0.61	180	--	--	--	--	--	--
04...	1800	1028	1028	0.61	180	--	--	--	--	--	--
04...	1830	1028	1028	0.61	182	--	--	--	--	--	--
04...	1900	1028	1028	0.61	170	--	--	--	--	--	--
04...	1930	1028	1028	0.61	169	--	--	--	--	--	--
04...	2000	1028	1028	0.61	162	--	--	--	--	--	--
04...	2030	1028	1028	0.56	162	--	--	--	--	--	--
04...	2100	1028	1028	0.56	160	--	--	--	--	--	--
04...	2130	1028	1028	0.56	158	--	--	--	--	--	--
12...	1430	1028	B9735	0.18	170	8.0	14.5	7.5	--	1	8.6
NOV											
07...	1500	1028	B9735	0.06	240	8.1	5.5	2.0	--	0	--
APR											
05...	1500	1028	B9735	E0.08	270	7.8	6.0	3.0	5	--	--
MAY											
01...	1400	1028	B9735	0.51	212	8.4	-1.0	4.0	5	--	--
23...	1435	1028	B9735	0.29	231	8.3	19.0	10.0	5	--	--
JUN											
21...	1217	1028	B9735	E0.01	482	8.4	--	--	5	3	--
JUL											
19...	1000	1028	B9735	E0.17	220	8.2	16.0	12.0	--	--	--
24...	1430	1028	B9735	E0.20	220	8.3	18.5	14.0	10	7	7.8
31...	1215	1028	1028	0.26	217	7.5	--	--	--	40	--
31...	1245	1028	1028	0.29	189	7.5	--	--	--	45	--
31...	1315	1028	1028	0.25	182	7.5	--	--	--	75	--
31...	1445	1028	1028	0.25	212	7.7	--	--	--	60	--
31...	1515	1028	1028	0.23	219	7.9	--	--	--	40	--
31...	1545	1028	1028	0.19	221	7.9	--	--	--	25	--
31...	1615	1028	1028	0.19	235	7.9	--	--	--	25	--
31...	1645	1028	1028	0.58	236	8.0	--	--	--	25	--
31...	1715	1028	1028	0.53	240	8.0	--	--	--	10	--
31...	1745	1028	1028	0.53	246	8.1	--	--	--	10	--
31...	1815	1028	1028	0.53	243	8.0	--	--	--	5	--
AUG											
20...	1830	1028	1028	0.38	232	7.6	--	--	--	20	--
20...	1900	1028	1028	0.38	230	8.0	--	--	--	20	--
20...	1930	1028	1028	0.38	225	7.9	--	--	--	20	--
20...	2000	1028	1028	0.42	220	7.8	--	--	--	20	--
20...	2100	1028	1028	0.42	213	7.8	--	--	--	20	--
20...	2200	1028	1028	0.47	214	7.9	--	--	--	20	--
20...	2230	1028	1028	0.47	209	8.2	--	--	--	20	--
20...	2300	1028	1028	0.47	212	7.7	--	--	--	18	--
20...	2330	1028	1028	0.47	214	7.9	--	--	--	18	--
20...	2400	1028	1028	0.52	213	8.0	--	--	--	15	--
21...	0030	1028	1028	0.52	211	7.9	--	--	--	15	--
21...	0100	1028	1028	0.52	218	8.0	--	--	--	15	--
28...	1440	1028	B9735	0.28	205	8.3	20.0	12.0	5	3	8.1
SEP											
16...	1130	1028	1028	0.29	155	8.0	--	--	--	20	--
16...	1200	1028	1028	0.53	157	8.1	--	--	--	20	--
16...	1230	1028	1028	0.58	155	8.1	--	--	--	20	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379182 WRIGHT CANYON AT MILE 1.2 NR EL PORVENIR, NM -- Continued

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 12...	110	44	1.2	<5.0	--	2.0	87	110	0	7.6
NOV 07...	200	56	16	<5.0	--	<1.0	121	150	0	12
APR 05...	140	52	3.0	10	0.4	12	132	160	--	14
MAY 01...	130	45	4.8	<10	--	2.0	114	140	--	17
23...	140	50	3.6	<10	--	2.0	125	150	3	12
JUN 21...	170	64	2.4	<10	--	6.0	159	190	0	19
JUL 24...	120	42	3.6	<10	--	6.0	117	140	0	7.0
AUG 28...	100	39	1.7	<10	--	2.0	100	120	0	8.5

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379182 WRIGHT CANYON AT MILE 1.2 NR EL PORVENIR, NM -- Continued

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)
SEP										
16-16	1300	1028	B9735	0.45	157	8.2	--	--	--	--
16...	1330	1028	1028	0.42	155	8.1	--	--	--	15
16...	1430	1028	1028	0.33	159	8.2	--	--	--	15
16...	1500	1028	1028	0.42	160	8.2	--	--	--	10
16...	1530	1028	1028	0.42	162	8.2	--	--	--	10
16...	1600	1028	1028	0.38	162	8.2	--	--	--	10
16...	1630	1028	1028	0.38	162	8.2	--	--	--	10
26...	1230	1028	B9735	0.30	165	8.3	15.5	10.0	20	4
28...	2100	1028	1028	0.47	148	7.9	--	--	--	35
28...	2130	1028	1028	0.58	142	7.8	--	--	--	30
28...	2200	1028	1028	0.58	145	7.9	--	--	--	20
28...	2230	1028	1028	1.2	147	8.0	--	--	--	15
28...	2300	1028	1028	1.5	150	8.0	--	--	--	15
28...	2330	1028	1028	1.4	152	8.1	--	--	--	10
28...	2400	1028	1028	1.2	157	8.2	--	--	--	10
29...	0030	1028	1028	1.2	160	8.1	--	--	--	10
29...	0100	1028	1028	1.1	165	8.2	--	--	--	10
29...	0130	1028	1028	1.1	165	8.2	--	--	--	5
29...	0230	1028	1028	1.1	170	8.2	--	--	--	5

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP										
26...	90	33	1.8	<10	2.0	83	100	0	8.2	<5.0

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
SEP									
16-16	--	--	--	0.040	<0.100	0.74	0.140	--	--
16...	--	--	--	--	--	--	--	88	0.10
16...	--	--	--	--	--	--	--	37	0.03
16...	--	--	--	--	--	--	--	47	0.05
16...	--	--	--	--	--	--	--	44	0.05
16...	--	--	--	--	--	--	--	32	0.03
16...	--	--	--	--	--	--	--	33	0.03
26...	0.14	112	4	<0.040	<0.100	<0.14	0.020	16	0.01
28...	--	--	--	--	--	--	--	312	0.40
28...	--	--	--	--	--	--	--	106	0.17
28...	--	--	--	--	--	--	--	94	0.15
28...	--	--	--	--	--	--	--	87	0.28
28...	--	--	--	--	--	--	--	47	0.19
28...	--	--	--	--	--	--	--	33	0.12
28...	--	--	--	--	--	--	--	39	0.13
29...	--	--	--	--	--	--	--	32	0.10
29...	--	--	--	--	--	--	--	36	0.11
29...	--	--	--	--	--	--	--	45	0.13
29...	--	--	--	--	--	--	--	24	0.07

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379185 WRIGHT CANYON AT MILE .55 NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JCU) (00070)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
04...	1100	1028	1028	0.81	238	--	--	--	--	3	--
04...	1130	1028	1028	0.81	224	--	--	--	--	5	--
04...	1200	1028	1028	0.81	215	--	--	--	--	4	--
04...	1230	1028	1028	0.81	215	--	--	--	--	4	--
04...	1300	1028	1028	0.81	234	--	--	--	--	4	--
04...	1330	1028	1028	0.81	239	--	--	--	--	4	--
04...	1400	1028	1028	0.81	239	--	--	--	--	--	--
13...	1145	1028	B9735	0.29	265	8.2	18.0	10.5	--	2	8.1
NOV											
08...	0900	1028	B9735	0.09	312	8.2	4.5	1.0	--	1	--
APR											
05...	1600	1028	B9735	0.29	275	7.9	5.5	4.5	10	--	--
MAY											
01...	1440	1028	B9735	0.65	245	8.5	2.0	5.0	--	--	--
23...	1520	1028	B9735	0.31	262	8.4	20.5	12.0	5	2	--
JUN											
21...	1517	1028	B9735	E0.03	315	8.2	--	19.0	5	22	--
JUL											
19...	1030	1028	B9735	E0.25	310	8.3	19.0	13.5	--	--	--
24...	1515	1028	B9735	0.15	292	8.4	19.0	15.5	5	--	7.4
AUG											
28...	1550	1028	B9735	0.36	265	8.4	19.0	14.0	5	11	7.3
SEP											
26...	1400	1028	B9735	0.43	276	8.4	19.0	12.5	5	6	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT										
13...	190	60	8.6	<5.0	1.0	129	160	0	9.5	<5.0
NOV										
08...	200	56	16	<5.0	<1.0	155	190	0	21	<5.0
APR										
05...	150	60	<3.0	<10	<1.0	136	170	--	16	<5.0
MAY										
01...	150	52	4.8	<10	2.0	126	150	1	18	<5.0
23...	160	61	1.7	<10	<1.0	141	170	1	17	<5.0
JUN										
21...	190	72	3.6	<10	2.0	161	200	0	20	6.5
JUL										
19...	--	--	--	--	--	--	--	--	--	--
24...	160	60	1.7	<10	2.0	123	150	0	11	<5.0
AUG										
28...	150	54	3.6	<10	2.0	135	160	0	10	<5.0
SEP										
26...	150	57	2.4	<10	2.0	139	170	0	11	<5.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
(DATA NOT PREVIOUSLY PUBLISHED)

RIO GRANDE BASIN -- Continued

08379185 WRIGHT CANYON AT MILE .55 NR EL PORVENIR, NM --Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT										
04...	--	--	--	--	--	--	--	--	180	0.39
04...	--	--	--	--	--	--	--	--	182	0.40
04...	--	--	--	--	--	--	--	--	63	0.14
04...	--	--	--	--	--	--	--	--	100	0.22
04...	--	--	--	--	--	--	--	--	104	0.23
04...	--	--	--	--	--	--	--	--	128	0.28
04...	--	--	--	--	--	--	--	--	56	0.12
13...	0.16	169	4	<0.040	<0.100	--	<0.18	0.040	181	0.14
NOV										
08...	0.12	200	1	<0.040	<0.100	--	<0.14	0.010	49	0.01
APR										
05...	0.16	172	11	<0.040	<0.100	--	0.58	0.150	26	0.02
MAY										
01...	0.18	172	3	<0.040	0.240	0.0	<0.14	<0.010	26	0.05
23...	0.16	196	9	<0.040	<0.100	--	<0.14	0.010	16	0.01
JUN										
21...	0.16	216	10	<0.040	<0.100	--	<0.23	0.050	30	--
JUL										
19...	--	--	--	0.060	<0.100	--	0.30	0.020	50	--
24...	0.16	188	5	0.050	<0.100	--	0.21	<0.010	31	0.01
AUG										
28...	0.15	170	8	--	--	--	--	--	26	0.02
SEP										
26...	0.14	166	<3	0.080	<0.100	--	<0.18	0.010	21	0.02

08379940 GALLINAS CR AB BURRO CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	TEMPER-	TEMPER-	COLOR	OXYGEN,	
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANALYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM) (00095)						(STAND- ARD UNITS) (00400)
JUL 1990											
27...A	0940	1028	B9735	2.6	130	7.9	20.0	9.5	15	8.6	
AUG											
29...A	1530	1028	B9735	3.0	85	8.3	20.0	13.0	5	7.5	
OCT											
02...	1000	1028	B9735	3.2	100	7.9	9.5	7.5	5	--	
DATE		HARD-	MAGNE-	SODIUM,	POTAS-	ALKA-	BICAR-	CAR-	SULFATE	CHLO-	
		NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SOLVED (MG/L AS K) (00935)	LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)		BONATE WATER WH FET FIELD (MG/L AS CO3) (00445)	RIDE, DIS- SOLVED (MG/L AS SO4) (00945)
JUL 1990											
27...	57	18	3.0	<10	2.0	47	57	0	5.9	<5.0	
AUG											
29...	49	18	1.1	<10	2.0	45	55	0	5.3	<5.0	
OCT											
02...	60	20	2.4	<10	2.0	50	61	0	6.3	<5.0	
DATE		FLUO-	SOLIDS,	RESIDUE	NITRO-	NITRO-	NITRO-	NITRO-	PHOS-	ARSENIC	BARIUM,
		RIDE, DIS- SOLVED (MG/L AS F) (00950)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)							
JUL 1990											
27...	0.24	74	<3	<0.040	0.100	0.10	<0.24	<0.010	--	--	
AUG											
29...	0.15	76	<3	--	--	--	--	--	<5	<100	
OCT											
02...	0.20	68	<3	<0.040	<0.100	--	<0.14	<0.010	--	--	

A Data not previously published

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08379940 GALLINAS CR AB BURRO CANYON NR EL PORVENIR, NM -- Continued

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 1990 27...	--	--	--	--	--	--	4	0.03	--
AUG 29...	<1	<5	<5	<0.50	<5	<1	6	0.05	--
OCT 02...	--	--	--	--	--	--	0	0.0	100

08380000 GALLINAS CR NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUL 1990 27...A	1110	1028	B9735	8.1	160	8.1	23.0	15.0	25	7.5
AUG 30...A	0830	1028	B9735	9.3	135	8.0	17.0	12.0	10	8.2
OCT 02...	1035	1028	B9735	17	135	7.9	12.0	10.0	25	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL 1990 27...	68	22	3.1	<10	2.0	58	71	0	5.8	<5.0
AUG 30...	67	24	1.8	<10	2.0	63	77	0	6.1	<5.0
OCT 02...	80	26	4.0	<10	2.0	64	78	0	7.7	<5.0

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
JUL 1990 27...	0.25	88	4	<0.040	0.100	0.20	0.30	0.010	--	--
AUG 30...	0.19	102	4	--	--	--	--	--	<5	<100
OCT 02...	0.20	96	4	0.070	<0.100	--	0.17	0.010	--	--

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 1990 27...	--	--	--	--	--	--	9	0.20	--
AUG 30...	<1	<5	<5	<0.50	<5	<1	13	0.33	--
OCT 02...	--	--	--	--	--	--	0	0.0	100

A Data not previously published

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08380075 PORVENIR CANYON NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUL 1990 27...A	1330	1028	B9735	9.0	101	7.8	23.0	13.5	20	7.8
AUG 30...A	0945	1028	B9735	7.4	128	8.0	22.0	12.0	5	8.2
OCT 02...	1115	1028	B9735	20	95	7.8	15.0	10.0	25	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL 1990 27...	57	19	2.4	<10	2.0	45	55	0	6.9	<5.0
AUG 30...	59	22	1.1	<10	2.0	58	71	0	6.2	<5.0
OCT 02...	55	17	3.1	<10	2.0	44	53	0	6.8	<5.0

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
JUL 1990 27...	0.38	82	<3	<0.040	0.100	0.10	<0.24	<0.010	--	--
AUG 30...	0.31	94	<3	--	--	--	--	--	<5	<100
OCT 02...	0.31	110	3	0.070	<0.100	--	<0.17	0.010	--	--

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 1990 27...	--	--	--	--	--	--	7	0.17	--
AUG 30...	<1	<5	<5	<0.50	<5	<1	2	0.04	--
OCT 02...	--	--	--	--	--	--	0	0.0	100

A Data not previously published

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

08380090 PORVENIR CANYON AT MOUTH NR EL PORVENIR, NM

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUL 1990 27...A	1505	1028	B9735	10	108	8.0	20.5	17.0	35	7.8
AUG 30...A	1200	1028	B9735	8.6	135	8.2	24.0	16.0	10	7.5
OCT 02...	1200	1028	B9735	E21	102	8.0	15.5	12.0	30	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE WATER WH FET FIELD (MG/L AS HCO3) (00440)	CAR- BONATE WATER WH FET FIELD (MG/L AS CO3) (00445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL 1990 27...	60	20	2.4	<10	2.0	50	61	0	6.5	<5.0
AUG 30...	65	23	1.8	<10	2.0	60	73	0	6.2	<5.0
OCT 02...	52	18	1.8	<10	2.0	47	57	0	7.0	<5.0

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
JUL 1990 27...	0.38	90	7	<0.040	0.100	0.20	0.30	<0.010	<5	<100
AUG 30...	0.25	104	<3	--	--	--	--	--	<5	<100
OCT 02...	0.31	87	<3	0.070	<0.100	--	0.17	0.010	--	--

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 1990 27...	<1	<5	<5	<0.50	<5	<1	9	0.25	--
AUG 30...	<1	<5	<5	<0.50	<5	<1	4	0.09	--
OCT 02...	--	--	--	--	--	--	0	--	100

A Data not previously published

B Chemical analyses performed by New Mexico State Health Laboratory

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN

• RIO GRANDE 1.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345956106411210)
(CITY R-14)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JUL 25...	1040	1960	308	8.0	--	22.0	6.4	--	--	--
AUG 29...	1000	356	551	7.8	29.0	25.0	6.3	150	49	6.2
SEP 26...	0950	587	425	8.4	23.5	20.5	7.3	--	--	--
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	
JUL 25...	--	--	--	--	--	0.60	--	--	--	
AUG 29...	48	2	5.5	112	86	0.22	31	0.60	24	
SEP 26...	--	--	--	--	--	--	--	--	--	
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	
JUL 25...	--	--	0.190	--	0.050	--	0.240	--	0.350	
AUG 29...	327	325	0.100	0.090	0.160	0.140	0.260	0.230	3.10	
SEP 26...	--	--	0.010	--	0.150	--	0.160	--	1.20	
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. X FINER THAN .062 MM (70331)	
JUL 25...	--	--	--	1.60	--	<0.010	3150	16700	71	
AUG 29...	3.00	0.0	3.3	1.00	0.860	0.010	186	179	82	
SEP 26...	--	0.60	2.0	0.400	--	<0.010	173	274	59	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE NR LEFT EDGE OF WATER 1.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345956106411211)
(CITY R-14A)

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1110	0.80	358	7.8	--	22.5	6.1	0.40
AUG 29...	1050	0.70	596	7.5	29.0	25.5	6.4	0.48
SEP 26...	1044	1.50	484	7.9	23.5	21.0	7.0	0.53

RIO GRANDE NR CENTER OF FLOW 1.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345956106411212)
(CITY R-14B)

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1100	2.30	304	7.9	--	22.0	6.4	0.50
AUG 29...	1110	0.20	564	7.5	29.0	25.0	6.3	0.40
SEP 26...	1051	1.90	428	8.2	23.5	20.5	7.2	0.33

RIO GRANDE NR RIGHT EDGE OF WATER 1.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345956106411213)
(CITY R-14C)

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1041	3.40	277	7.8	--	21.5	6.6	0.35
AUG 29...	1120	0.90	577	7.5	29.0	25.0	6.4	0.53
SEP 26...	1058	1.90	400	8.4	23.5	20.0	7.6	0.26

RIO GRANDE 2.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345908106411010)
(CITY R-15)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)
JUL 25...	1300	1760	320	8.0	30.0	23.5	6.3	--	--	--
AUG 29...	1330	356	588	7.9	32.0	29.5	5.8	140	47	6.0
SEP 26...	1250	698	470	8.1	28.0	22.5	6.7	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE 2.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345908106411010) -- Continued
(CITY R-15)

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
JUL 25...	--	--	--	--	--	0.40	--	--	--
AUG 29...	54	2	6.1	145	86	0.47	39	0.70	27
SEP 26...	--	--	--	--	--	0.48	--	--	--
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
JUL 25...	--	--	0.270	--	0.090	--	0.360	--	0.420
AUG 29...	348	364	0.160	0.160	0.380	0.370	0.540	0.530	4.70
SEP 26...	--	--	0.080	--	0.310	--	0.390	--	2.50
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOR- THO, DIS- SOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 25...	--	3.7	4.5	4.10	--	<0.010	6190	29400	90
AUG 29...	4.60	1.4	6.6	1.30	1.00	<0.010	176	169	87
SEP 26...	--	0.90	3.8	0.510	--	<0.010	205	386	72

RIO GRANDE NR LEFT EDGE OF WATER 2.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345908106411011)
(CITY R-15A)

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1330	1.60	369	7.8	30.0	23.5	6.0	0.45
AUG 29...	1410	1.30	553	7.6	32.0	29.5	5.8	0.59
SEP 26...	1355	--	436	8.1	28.0	23.0	6.4	0.45

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE NR CENTER OF FLOW 2.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345908106411012)
(CITY R-15B)

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1321	2.70	294	8.0	30.0	23.0	6.3	0.30
AUG 29...	1418	0.50	580	7.7	32.0	29.5	5.8	0.45
SEP 26...	1405	--	443	8.1	28.0	22.5	6.8	0.40

RIO GRANDE NR RIGHT EDGE OF WATER 2.5 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345908106411013)
(CITY R-15C)

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1307	3.30	283	8.1	30.0	23.5	6.7	0.30
AUG 29...	1425	2.40	565	7.8	32.0	29.5	5.9	0.41
SEP 26...	1410	--	498	7.9	28.0	22.0	6.9	0.55

RIO GRANDE 4.9 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345705106405210)
(CITY R-02)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
JUL 25...	1600	1690	327	7.9	35.0	25.0	5.6	--	--	--	--	--
AUG 29...	1700	354	591	7.5	25.0	30.5	--	150	48	6.1	55	2
SEP 26...	1633	708	469	8.2	22.5	22.5	5.9	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)
JUL 25...	--	--	--	0.45	--	--	--	--	--	0.410	--	0.090
AUG 29...	6.9	126	84	0.17	40	0.70	28	347	356	0.370	0.400	0.500
SEP 26...	--	--	--	0.14	--	--	--	--	--	0.320	--	0.380

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE 4.9 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345705106405210) -- Continued
(CITY R-02)

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CYANIDE TOTAL (MG/L AS CN) (00720)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
JUL 25...	--	0.500	--	0.320	--	6.0	6.8	0.330	--	<0.010	--	--
AUG 29...	0.490	0.870	0.890	3.90	3.80	1.2	6.0	1.20	0.880	0.010	6	6
SEP 26...	--	0.700	--	2.10	--	0.70	3.5	0.430	--	<0.010	--	--

DATE	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	180	170	<1	1.0	4	<1	<1	8	4	3100	6	<1
SEP 26...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUL 25...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	90	<0.10	<0.1	7	1	<1	<1	<1	<1.0	20	10
SEP 26...	--	--	--	--	--	--	--	--	--	--	--

RIO GRANDE NR LEFT EDGE OF WATER 4.9 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345705106405211)
(CITY R-02A)

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (000400)	TEMPER- ATURE AIR (DEG C) (000020)	TEMPER- ATURE WATER (DEG C) (000010)	OXYGEN, DIS- SOLVED (MG/L) (000300)	CHLO- RINE, TOTAL RESI- DUAL (MG/L) (50060)
JUL 25...	1625	1.90	354	8.0	35.0	25.5	5.3	0.45
AUG 29...	1750	1.10	585	7.4	25.0	31.0	--	0.20
SEP 26...	1700	3.30	481	7.9	22.5	23.0	5.8	0.22

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE NR CENTER OF FLOW 4.9 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345705106405212)
(CITY R-02B)

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (000400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI DUAL (MG/L) (50060)
JUL 25...	1600	0.60	319	8.0	35.0	25.0	5.7	0.00
AUG 29...	1755	0.70	583	7.4	25.0	31.0	--	0.19
SEP 26...	1715	1.20	460	8.0	22.5	22.5	5.9	0.15

RIO GRANDE NR RIGHT EDGE OF WATER 4.9 MI BL ALB. WASTE WATER TREATMENT PLANT, NM (345705106405213)
(CITY R-02C)

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH (STAND- ARD UNITS) (000400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RINE, TOTAL RESI DUAL (MG/L) (50060)
JUL 25...	1700	1.90	302	8.1	35.0	25.0	5.8	0.50
AUG 29...	1807	0.70	585	7.4	25.0	30.0	--	0.20
SEP 26...	1730	1.30	469	8.0	22.5	22.5	5.9	0.13

RIO GRANDE BELOW LEASBURG DAM, NM (322841106551010)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
JAN 08...	1030	38	1370	8.3	9.0	8.0	9.1	370	190	110	23	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
JAN 08...	160	4	7.3	205	7	180	195	350	140	0.20	14	
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
JAN 08...	930	914	0.090	0.010	<0.010	0.100	0.100	0.020	0.020	0.010	0.010	
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	
JAN 08...	10	2	98	<0.5	2.0	<1	<3	2	7	<1		

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW LEASBURG DAM, NM (322841106551010) -- Continued

		LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
JAN 08...		120	37	0.1	<10	<1	<2	<1.0	1300	<6	14	
RIO GRANDE BELOW PICACHO BRIDGE NR LAS CRUCES, NM (321745106492510)												
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
JAN 08...	1315	56	1490	8.4	13.0	12.0	15	400	210	120	24	
DATE	TIME	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
JAN 08...	190	4	11	217	7	190	196	370	170	0.40	15	

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JAN 08...	1500	34	1470	8.7	17.0	14.0	23	370	180	110	22	180

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE BELOW MESILLA DAM NR SANTO TOMAS, NM (321317106471510) -- Continued

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
JAN 08...	4	12	203	12	186	198	320	170	0.40	15	972
DATE	SOLIDS, SUM OF CONSTIT- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
JAN 08...	953	1.23	1.33	0.170	0.170	1.40	1.50	0.860	0.800	0.14	2.4
DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
JAN 08...	1.10	0.950	20	2	110	<0.5	2.0	<1	<3	1	31
DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JAN 08...	<1	140	13	0.2	<10	<1	<1	<1.0	1300	<6	79

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JAN 09...	0900	29	1450	9.0	9.0	6.5	7.6	370	150	110	22	180
DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	
JAN 09...	4	11	225	22	220	206	310	170	0.30	10	940	
DATE	SOLIDS, SUM OF CONSTIT- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	
JAN 09...	960	1.80	1.82	0.200	0.180	2.00	2.00	0.240	0.210	0.36	2.6	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

RIO GRANDE AT NM 227 BRIDGE NEAR VADO, NM (320648106400510) -- Continued

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
JAN 09...	1.20	1.00	<10	2	110	<0.5	<1.0	<1	<3	2	12	
DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
JAN 09...	<1	140	23	<0.1	<10	<1	<1	<1.0	1300	<6	65	
RIO GRANDE AT TX 259 BRIDGE AT CANUTILLO, TX (315454106360610)												
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JAN 09...	1115	72	1590	8.6	18.5	9.0	9.4	400	160	120	24	210
DATE	RATIO	SODIUM AD- SORP- TION (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
JAN 09...	5	12	246	22	238	245	360	180	0.40	16	1090	
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	
JAN 09...	1070	1.03	1.03	0.070	0.070	1.10	1.10	0.070	0.090	0.23	1.4	
DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
JAN 09...	0.580	0.600	<10	3	82	<0.5	<1.0	2	<3	1	9	
DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
JAN 09...	<1	160	18	<0.1	10	1	<1	<1.0	1400	<6	30	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

RIO GRANDE BASIN -- Continued

WRIGHT CANYON AT MI 0.40 (BLW ROAD) NR EL PROVE, NM (354140105284010)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 19...	1335	217	13.5	101	77

SAN JUAN RIVER BASIN

SAN JUAN RIVER AT DIVERSION, NM (364447107483910)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)
NOV 13...	1000	385	300	8.3	6.0	11.0	110	34	6.6	18	0.7	2.1

DATE	ALKA- LITY LAB (MG/L) AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	BROMIDE DIS- SOLVED (MG/L) AS BR (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)
NOV 13...	91	49	3.2	0.70	<0.010	180	169	<0.010	0.200	<0.010	<0.010

DATE	ARSENIC DIS- SOLVED (UG/L) AS AS (01000)	BORON, DIS- SOLVED (UG/L) AS B (01020)	CADMIUM DIS- SOLVED (UG/L) AS CD (01025)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR (01030)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO (01060)	SELE- NIUM, DIS- SOLVED (UG/L) AS SE (01145)	VANA- DIUM, DIS- SOLVED (UG/L) AS V (01085)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)
NOV 13...	<1	20	<1.0	<1	2	<1	<0.1	1	<1	2	4

DRAIN ABOUT 8.0 MILES E OF NM HWY 44, NM (364203107502410)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	ALKA- LITY LAB (MG/L) AS CACO3 (90410)
JUN 19...	1400	7720	7.4	580	140	56	1600	29	4.1	285

DATE	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	ARSENIC DIS- SOLVED (UG/L) AS AS (01000)
JUN 19...	4400	47	1.3	6460	6420	<0.010	<0.050	0.030	<0.010	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

DRAIN ABOUT 8.0 MILES E OF NM HWY 44, NM (364203107502410) -- Continued
(HAMMOND IRRIGATION PROJECT)

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 19...	450	<1.0	<1	2	<1	<0.1	2	<1	4	<10

DRAIN ABOUT 3.5 MI EAST OF NM HIGHWAY 44, NM (364207107552010)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
NOV 07...	1000	--	--	--	--	--	--	--	--	--	--	--	
DEC 04...	1000	1030	7.1	9.0	260	87	10	160	4	1.7	382	160	
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
NOV 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 04...	12	0.60	0.17	748	697	8.09	0.010	8.10	0.050	<0.010	<1	120	

DATE	TIME	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)
NOV 07...	--	--	--	--	--	--	--	--	--	--	<1	<0.1
DEC 04...	--	<1.0	<1	3	<1	<0.1	5	1	1	<3	--	--
DATE	TIME	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
NOV 07...	--	<1.0	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--

POND NR DRAIN ABOUT 3.5 MILES E OF NM HWY 44, NM (364211107552310)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
DEC 04...	1030	34900	7.8	2.0	1200	400	60	11000	140	39	1330

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

POND NR DRAIN ABOUT 3.5 MILES E OF NM HWY 44, NM (364211107552310) -- Continued

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
DEC 04...	26000	470	<0.10	2.3	40800	38800	<0.010	<0.050	0.060	<0.010	2
DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
DEC 04...	2000	<10	<5	<10	<10	<0.1	15	<1	16	<10	

WEST HAMMOND POND, ABOUT 2.5 MI WEST OF NM HIGHWAY 44, NM (364121108020010)
(HAMMOND IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
DEC 03...	1700	0.23	2860	7.4	--	8.0	11.8	1100	340	49
JUN 19...	1130	--	1910	7.9	21.5	16.5	--	660	210	33
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
DEC 03...	290	4	4.2	252	1600	27	0.50	0.12	2330	2480
JUN 19...	220	4	3.7	274	850	13	0.50	--	1470	1500
DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
DEC 03...	4.29	0.210	4.50	0.180	<0.010	<1	260	<1.0	<1	2
JUN 19...	2.18	0.020	2.20	0.020	<0.010	<1	180	<1.0	<1	1
DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)
NOV 07...	--	--	--	--	--	--	<1	<0.1	<1.0	0.2
DEC 03...	<1	<0.1	<1	6	1	10	--	--	--	--
JUN 19...	1	0.2	1	2	<1	7	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

WEST HAMMOND POND, ABOUT 2.5 MI WEST OF NM HIGHWAY 44, NM (364121108020010) -- Continued
(HAMMOND IRRIGATION PROJECT)

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN IN BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
NOV 07...	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
DEC 03...	--	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--	--

SAN JUAN RIVER 1.0 MI UPSTREAM FROM MOUTH OF GALLEGOS CANYON, NM (364136108062010)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 13...	1400	584	430	7.4	9.5	9.7	150	47	7.9	33	1	2.1
DATE		ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 13...	102	98	3.7	0.40	<0.010	277	254	<0.010	0.200	<0.010	<0.010	
DATE		ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 13...		<1	40	<1.0	<1	1	<1	<0.1	<1	<1	2	5

SOUTH POND-GALLEGOS CANYON DRAINAGE, 3.0 MI SOUTH OF HIGHWAY 3003, NM (363555108080610)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
DEC 03...	1000	--	--	--	--	--	--	--	--	--	--	--
03...	1000	0.01	1790	8.0	3.5	480	140	32	210	4	7.1	357
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	410	71	0.40	0.44	1230	1100	3.69	0.110	3.80	0.020	<0.010	<1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

SOUTH POND-GALLEGOS CANYON DRAINAGE, 3.0 MI SOUTH OF HIGHWAY 3003, NM (363555108080610) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)
DEC 03...	--	--	--	--	--	--	--	--	--	--	<1	<0.1
03...	320	<1.0	<1	1	<1	<0.1	<1	3	3	3	--	--
DATE	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)	
DEC 03...	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<10	
03...	--	--	--	--	--	--	--	--	--	--	--	

MIDDLE POND-GALLEGOS CANYON DRAINAGE, 0.5 MI NORTH OF HIGHWAY 3003, NM (363841108070210)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 07...	1600	--	--	--	--	--	--	--	--	--
DEC 03...	1300	0.25	2940	7.8	--	5.5	14.0	860	290	33
JUN 19...	0945	--	2660	8.7	22.0	20.5	--	640	200	33
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
NOV 07...	--	--	--	--	--	--	--	--	--	--
DEC 03...	340	5	1.6	244	970	130	1.6	1.5	2250	2000
JUN 19...	370	6	0.30	117	1100	140	0.50	--	2060	1950
DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
NOV 07...	--	--	--	--	--	--	--	--	--	--
DEC 03...	18.8	0.150	19.0	0.200	<0.010	<1	330	<1.0	<1	1
JUN 19...	8.79	0.210	9.00	0.040	<0.010	<1	380	<1.0	<1	<1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

MIDDLE POND-GALLEGOS CANYON DRAINAGE, 0.5 MI NORTH OF HIGHWAY 3003, NM (363841108070210) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)
NOV 07...	--	--	--	--	--	--	<1	<0.1	<1.0	<0.1
DEC 03...	<1	<0.1	<1	35	5	<10	--	--	--	--
JUN 19...	<1	<0.1	3	21	5	<10	--	--	--	--

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
NOV 07...	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<10

NORTH POND-GALLEGOS CANYON DRAINAGE, 1.0 MI NORTH OF HIGHWAY 3003, NM (363843108061010)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 17...	0900	0.56	1650	7.8	7.5	9.1	520	150	36	160	3	2.5
DATE	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 17...	174	490	86	0.50	0.89	1170	1040	1.88	0.020	1.90	0.210	<0.010
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
NOV 17...	1	350	<1.0	<1	2	<1	<0.1	3	5	2	5	

GALLEGOS CANYON 2.0 MI NORTH OF HIGHWAY 3003, NM (364000108065410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 17...	1100	2490	8.3	--	13.0	8.5	560	180	26	360	7	3.9
JUN 19...	0830	3200	8.7	22.5	--	8.4	600	190	30	510	9	4.9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

GALLEGOS CANYON 2.0 MI NORTH OF HIGHWAY 3003, NM (364000108065410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 17...	181	960	110	1.0	1.4	1880	1790	8.19	0.010	8.20	<0.010	<0.010
JUN 19...	152	1600	110	1.1	--	2510	2560	5.67	0.030	5.70	0.020	<0.010

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 17...	<1	300	<1.0	1	3	<1	<0.1	1	15	4	<10
JUN 19...	<1	430	<1.0	<1	5	<1	0.2	12	16	5	<10

ANIMAS RIVER 0.1 MI UPSTREAM FROM MOUTH, NM (364248108130410)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 14...	0800	358	610	7.3	5.5	11.2	250	80	12	29	0.8	2.6

DATE	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 14...	121	150	22	0.60	0.040	384	370	<0.010	0.200	<0.010	<0.010

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 14...	<1	70	<1.0	<1	2	<1	<0.1	1	<1	<1	9

LA PLATA RIVER AT MOUTH, NM (364410108150410)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 16...	1300	0.87	4160	7.2	10.5	9.5	1300	330	110	530	6	4.3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

LA PLATA RIVER AT MOUTH, NM (364410108150410) -- Continued

DATE	ALKA- LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 16...	114	1900	230	<0.10	0.98	3370	3170	<0.010	0.140	0.010	<0.010
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 16...	<1	170	<1.0	<1	1	<1	<0.1	2	<1	1	<10

SOUTHWEST POND-OJO AMARILLO CANYON TRIBUTARY DRAINAGE 1.0 MI NORTH OF HIGHWAY 3003, NM (363943108190610)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
DEC 03...	1400	520	9.0	5.0	16.6	170	50	12	37	1	6.7
DATE	ALKA- LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
DEC 03...	74	140	22	0.60	0.10	334	313	<0.010	<0.100	<0.010	<0.010
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
DEC 03...	<1	60	<1.0	<1	2	<1	<0.1	<1	<1	2	<3

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
NOV 08...	1000	--	--	--	--	--	--	--	--	--	--
JUN 10...	1100	3030	7.9	1000	300	72	360	5	1.4	184	1400

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

OJO AMARILLO CANYON 2.25 MI NORTH OF HIGHWAY 3003, NM (364043108195410) -- Continued
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
NOV 08...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	150	1.1	2510	2470	17.0	0.050	17.0	0.010	<0.010	<1	400
DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)
NOV 08...	--	--	--	--	--	--	--	--	--	<1	<0.1
JUN 10...	<1.0	2	1	<1	<0.1	11	40	7	<10	--	--
DATE	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
NOV 08...	<1.0	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
JUN 10...	--	--	--	--	--	--	--	--	--	--	--

OJO AMARILLO CANYON 4.0 MI SOUTH OF HIGHWAY 3003, NM (364217108204410)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
		NOV 16...	1700	1.3	3910	7.4	9.0	9.4	1000	280	72	550
DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 16...	289	1300	220	0.70	1.7	3080	2680	17.0	0.020	17.0	<0.010	<0.010
DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	
NOV 16...	<1	370	<1.0	<1	2	<1	<0.1	6	67	8	<10	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

WETLAND SOUTH SIDE OF SAN JUAN RIVER 2 MI UPSTREAM FROM FRUITLAND BRIDGE, NM (364333108223410)
(FRUITLAND IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV 06...	0900	--	--	--	--	--	--	--	--	--	--	--	
16...	1600	0.26	5890	8.1	13.0	12.6	760	210	58	1200	19	4.3	
DATE		ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)
NOV 06...	--	--	--	--	--	--	--	--	--	--	--	--	
16...	392	2600	180	2.2	0.27	4640	4490	<0.010	0.100	<0.010	<0.010	1	
DATE		BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)
NOV 06...	--	--	--	--	--	--	--	--	--	--	--	--	
16...	400	<1.0	<1	1	<1	0.1	9	<1	6	10	<1	<0.1	
DATE		CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39363)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE, TOT. IN BOT-TOM MA-TERIAL (UG/KG) (39423)	LINDANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOT-TOM MA-TERIAL (UG/KG) (39481)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	
NOV 06...	1.0	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	
16...	--	--	--	--	--	--	--	--	--	--	--	--	

SAN JUAN RIVER NEAR FRUITLAND BRIDGE, NM (364432108241610)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
		NOV 14...	1100	1100	580	7.4	8.0	10.1	210	67	11	40
DATE		ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
		NOV 14...	157	130	15	0.10	0.030	379	361	<0.010	0.300	<0.010

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER NEAR FRUITLAND BRIDGE, NM (364432108241610) -- Continued

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 14...	<1	50	<1.0	<1	2	<1	<0.1	1	<1	<1	13

AVOCET POND, NM (364018108241510)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
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DEC 02...	1600	440	8.4	3.5	11.9	180	51	12	25	0.8	6.0
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DATE	TIME	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
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DEC 02...	162	55	8.9	0.70	0.020	263	256	<0.010	<0.100	<0.010	0.060
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DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
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DEC 02...	5	50	<1.0	<1	1	<1	<0.1	2	<1	5	<3
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NORTHWEST POND-BLOCK 3, NM (363942108255510)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
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JUN 10...	1200	100	22	11	98	4	14	231	56	25
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DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)
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JUN 10...	1.0	482	366	0.030	<0.050	0.050	0.090	6	200
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DATE	TIME	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
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JUN 10...	<1.0	<1	2	<1	<0.1	4	<1	13	34
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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

SHUMWAY ARROYO 0.25 MI UPSTREAM OF FARMERS MUTUAL DITCH, NM (364600108265110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
		NOV 16...	1200	0.06	7230	6.9	4.5	9.6	2000	410	230	1100	11
DATE	TIME	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
		NOV 16...	335	2800	480	1.4	0.66	5990	5260	6.20	0.100	6.30	0.070
DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	
		NOV 16...		<1	420	<1.0	1	<1	<1	<0.1	2	2	9

SAN JUAN RIVER ABOVE HOGBACK, NM (364447108320710)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	
FEB 05...	1000	827	550	8.4	3.0	220	68	12	44	1	
DATE	TIME	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
FEB 05...	2.5	127	190	13	0.30	0.040	0.003	8.4	394	415	
DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
FEB 05...	<10	63	50	5	32	7	<1	840	4	2.20	

SAN JUAN RIVER BL HOGBACK, NM (363502108342110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
FEB 05...	1400	815	560	8.3	5.0	220	68	12	43	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

EAGLE NEST ARROYO NR FRUITLAND, NM (364628108353210)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	
FEB 05...	1730	0.05	36500	8.3	6.0	6300	390	1300	9200	50	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
FEB 05...	29	458	13000	8300	5.2	9.5	0.016	4.9	34400	32500	
DATE		ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
FEB 05...	20	100	1100	10	680	<10	150	11000	<10	-16.10	

SOUTHEAST POND-CHINDE WASH DRAINAGE, NM (363624108243710)
(NAVAJO IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS (CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORE- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	
JUN 10...	1300	364	7.9	93	31	3.8	42	2	5.1	130	
DATE		SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
JUN 10...	53	4.2	1.0	260	219	0.030	<0.050	0.010	0.180	4	
DATE		BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 10...	60	<1.0	<1	9	<1	<0.1	3	<1	7	32	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

SOUTHWEST POND-CHINDE WASH DRAINAGE, NM (363537108264710)
(NAVAJO INDIAN IRRIGATION PROJECT)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
DEC 02...	1500	340	9.0	4.0	13.4	75	20	6.2	44	2	4.0	
DATE		ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
DEC 02...	109	51	12	0.50	<0.010	195	204	<0.010	0.200	<0.010	<0.010	
DATE		ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
DEC 02...	1	60	<1.0	<1	3	12	<0.1	2	<1	6	<3	

CHINDE WASH NEAR FRUITLAND, NM (363829108285210)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	
OCT 17...	1230	0.14	2650	8.8	14.5	430	120	30	410	9	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 17...	4.1	124	900	150	<0.10	0.25	0.008	5.1	1800	1700	
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 17...	<10	<100	140	<10	50	<10	10	2700	<10	0.50	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER AT HOGBACK, NM (364234108315110)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	SPE-CIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)
OCT 16...	1000	4.4	1800	--	8.5	18.0	520	110	60	200	4
DEC 19...	1230	5.2	1850	--	8.5	11.0	520	110	59	190	4
FEB 07...	1400	0.18	--	11200	8.3	11.0	3700	300	720	1800	13

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)
OCT 16...	7.4	140	680	57	1.0	0.12	0.010	6.9	1280	1210
DEC 19...	6.9	146	700	58	0.70	0.13	0.009	4.7	1290	1220
FEB 07...	24	270	7400	500	0.30	0.89	0.034	7.4	11700	10900

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 16...	10	130	500	<3	88	1	3	2000	<3	-4.40
DEC 19...	10	120	480	<3	78	4	3	1900	<3	-4.00
FEB 07...	20	100	2400	<10	490	70	<4	5900	<10	-12.00

CHACO RIVER BL HOGBACK, NM (364254108334510)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	SPE-CIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)
OCT 16...	1230	5.4	1700	--	8.5	19.5	510	110	56	190	4
DEC 19...	1430	--	1650	--	8.4	0.5	480	100	55	180	4
FEB 07...	1200	0.31	--	7170	8.2	3.0	2200	260	370	1000	9

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IODIDE, DIS-SOLVED (MG/L AS I) (71865)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)
OCT 16...	7.3	139	660	60	0.70	0.12	0.010	6.8	1230	1180
DEC 19...	6.6	140	650	55	0.70	0.13	0.008	3.5	1160	1140
FEB 07...	14	204	3600	310	0.80	0.69	0.024	6.0	6550	5690

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

CHACO RIVER BL HOGBACK, NM (364254108334510) -- Continued

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 16...	10	140	480	<3	86	2	2	2000	<3	-3.50
DEC 19...	40	94	430	5	72	1	2	1700	<3	-3.90
FEB 07...	10	100	1500	20	360	30	15	4500	<10	-12.00

CHACO RIVER AB CONFLUENCE WITH SAN JUAN RIVER, NM (364601108382910)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT 16...	1730	4.5	1700	8.6	15.5	500	110	55	200	4
DEC 20...	0930	4.2	1710	8.4	0.0	570	120	66	220	4
FEB 07...	0930	3.1	4200	8.5	2.0	1000	190	130	640	9

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
OCT 16...	7.3	139	660	58	1.1	0.12	0.010	7.1	1250	1180
DEC 20...	6.9	146	780	68	0.70	0.16	0.008	4.6	1410	1360
FEB 07...	8.3	125	2000	180	0.70	0.29	0.013	5.5	408	3230

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
OCT 16...	10	170	480	6	89	3	2	2000	<3	-3.10
DEC 20...	40	79	490	8	91	3	3	1900	<3	-5.10
FEB 07...	<10	79	590	<3	270	24	9	3700	3	-6.00

CHACO RIVER 0.5 MI UPSTREAM FROM MOUTH, NM (364614108383810)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 15...	0900	5.2	1730	7.5	4.5	11.1	450	110	42	220	5	6.6

[illegible]

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

SAN JUAN RIVER AT SHIPROCK MUNICIPAL DIVERSION, NM (364652108412610)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
DEC 02...	1300	680	7.6	3.0	11.6	250	76	14	50	1	2.8	132
DATE		SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
DEC 02...	180	19	0.40	0.040	434	424	0.480	0.020	0.500	0.010	0.040	
DATE		ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
DEC 02...		<1	60	<1.0	<1	2	<1	<0.1	<1	1	<1	3

DRAIN EAST SIDE OF SAN JUAN RIVER, 1.5 MI DOWNSTREAM OF U.S.G.S. GAGING STATION, NM (364843108432910)
(HOGBACK IRRIGATION PROJECT)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
DEC 02...	1030	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	1030	0.09	1170	8.2	3.0	11.6	480	130	38	75	1	1.8
DATE	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
DEC 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	224	310	28	1.0	0.070	802	723	0.980	0.020	1.00	0.030	<0.010
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
DEC 02...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	<1	120	<1.0	<1	2	<1	<0.1	<1	3	1	7	<1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

SAN JUAN RIVER BASIN -- Continued

DRAIN EAST SIDE OF SAN JUAN RIVER, 1.5 MI DOWNSTREAM OF U.S.G.S. GAGING STATION, NM (364843108432910) -- Continued
(HOGBACK IRRIGATION PROJECT)

DATE	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39363)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39481)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
DEC 02...	<0.1	2.0	0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<10

SAN JUAN RIVER AB 4.0 MI DOWNSTREAM FROM CUDEI, NM (365251108491210)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
		ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
NOV 15...	1300	1090	630	7.5	9.5	9.9	240	73	13	44	1	2.5
DATE												
NOV 15...	128	170	15	0.70	0.030	403	397	0.290	0.010	0.300	<0.010	0.040
DATE												
NOV 15...		<1	60	<1.0	<1	3	<1	<0.1	1	<1	1	6

SAN JUAN RIVER BL SHIPROCK, NM (365543108573710)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	
FEB 06...	1300	909	600	8.4	6.5	230	70	14	50	1	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
FEB 06...	2.4	126	210	10	0.30	0.040	0.003	8.1	435	441	
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
FEB 06...	<10	<100	50	10	30	<10	<1	940	<10	0.30	

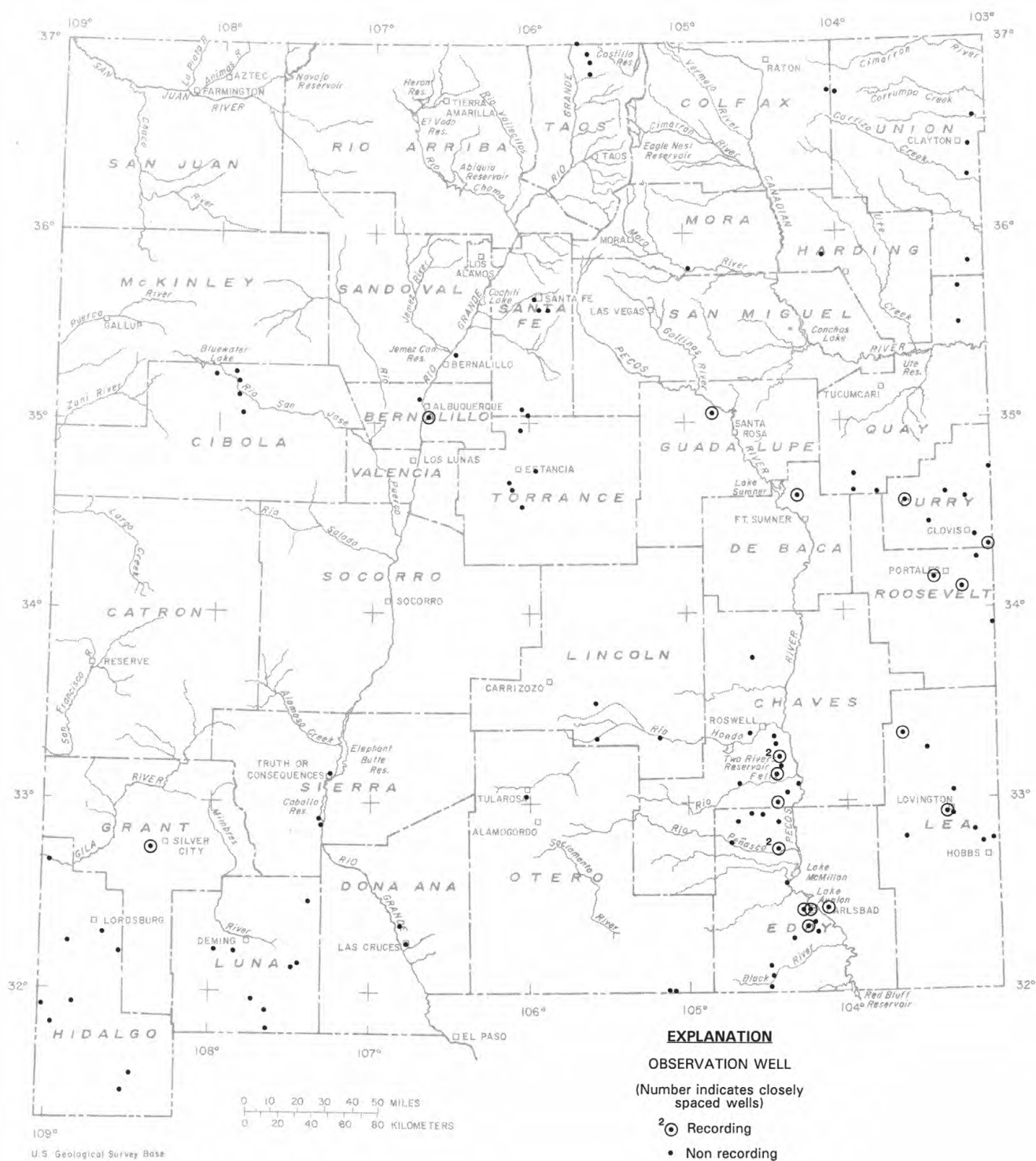


Figure 8.--Location of observation wells.

GROUND-WATER LEVELS

BERNALILLO COUNTY
Albuquerque Area

350256106390801. Local number, 10N.03E.32.314.

LOCATION.--Lat 35°02'56", long 106°39'08", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 764 ft, perforated 188-764 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,941 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.07 ft below land-surface datum, Jan. 5, 1987; lowest measured, 41.05 ft below land-surface datum, July 2, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.79	32.25	31.29	31.99	31.67	31.89	34.21	34.33	35.95	38.28	36.05	37.26
10	37.19	32.09	31.42	31.47	31.90	33.64	34.89	34.95	36.80	39.53	36.07	35.32
15	37.25	31.89	32.08	30.75	31.12	34.16	35.72	36.32	34.71	36.95	36.48	34.29
20	35.49	31.26	31.42	31.66	31.53	33.31	34.96	37.33	34.51	38.15	35.39	34.99
25	33.69	31.40	30.80	31.43	32.11	33.92	35.63	35.46	37.53	36.42	35.88	34.98
EOM	33.09	31.51	31.33	31.40	32.51	34.17	34.18	36.06	39.00	35.92	38.04	34.98

WTR YEAR 1991 HIGHEST 30.75 JAN 15, 1991. LOWEST 39.63 JUL 9, 1991

351051106395304. Local number, 11N.03E.18.411.

LOCATION.--Lat 35°10'51", long 106°39'53", Hydrologic Unit 13020203. Owner: City of Albuquerque.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table observation well, casing diameter 6 in., with 2 in., P.V.C. piezometer set at 980 ft., casing is screened from 870 to 1,050 ft.

INSTRUMENTATION.--Monthly steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,995 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. P.V.C., 1.80 ft, above land-surface datum.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.29 ft below land-surface datum, Feb. 22, 1984; lowest measured, 38.20 ft below land-surface datum, July 26, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	36.42	NOV --	-- --	DEC 23	35.50	JAN 30	34.95	FEB 27	35.25	MAR 29	35.36
APR 29	36.40	MAY 29	36.97	JUNE 26	37.69	JULY 26	38.20	AUG 30	38.08	SEP 27	37.71

CHAVES COUNTY
Roswell Basin

334138104343801. (formerly 334645104344501) Local number, 07S.23E.23.244.

LOCATION.--Lat 33°46'45", long 104°34'45", Hydrologic Unit 13060005. Owner: Jess Corn.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter 14 in., depth 436 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,810 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower outer edge of mouth of discharge pipe, 3.71 ft above land-surface datum.

PERIOD OF RECORD.--May 1951 to Mar. 1960, Jan. 1962 to Jan. 1966, Jan. 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 239.83 ft below land-surface datum, May 26, 1951; lowest measured, 290.80 ft below land-surface datum, Aug. 21, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	265.70
Aug. 14	266.99

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

332615104303601. Local number, 10S.24E.21.212.

LOCATION.--Lat 33°26'15", long 104°30'36", Hydrologic Unit 13060008. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well completed in San Andres Limestone, diameter 10 in., depth 324 ft.

INSTRUMENTATION.--Monthly steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,580.65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.60 ft above land-surface datum.

REMARKS.--Recorder removed Nov. 26, 1990.

PERIOD OF RECORD.--June 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.06 ft below land-surface datum, Jan. 19, 1946; lowest measured, 74.40 ft below land-surface datum, July 30, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	44.27	NOV 27	41.69	DEC 26	40.10	JAN 25	38.40	FEB 25	38.10	MAR 25	41.80
APR 25	45.20	MAY 24	45.50	JUNE 25	47.60	JULY 25	44.80	AUG 26	45.70	SEP 25	41.00

332255104360401. Local number, 11S.23E.03.342.

LOCATION.--Lat 33°22'55", long 104°36'04", Hydrologic Unit 13060008. Owner: J. L. Mask.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 15 in., depth 478 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,725 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--Mar. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 156.97 ft below land-surface datum, Mar. 11, 1952; lowest measured, 198.96 ft below land-surface datum, Oct. 18, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	178.53
Aug. 19	180.65

331914104253701. (formerly 331930104261001) Local number, 11S.25E.29.34333.

LOCATION.--Lat 33°19'30", long 104°26'10", Hydrologic Unit 13060007. Owner: Valle Ranch.

AQUIFER.--Valley Fill

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 160 ft, cased to 160 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,535 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of pump base, southeast corner, at land-surface datum.

PERIOD OF RECORD.--Aug. 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.30 ft below land-surface datum, Aug. 19, 1991; lowest measured, 21.72 ft below land-surface datum, Aug. 26, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	15.32
Aug. 19	12.30

331705104262801. (formerly 332200104270001) Local number, 12S.25E.09.422.

LOCATION.--Lat 33°17'05", long 104°26'28", Hydrologic Unit 13060007. Owner: Cumberland Townsite.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 10 in., reported depth 90 ft, cased to 90 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,564 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4 in. collar, 0.62 ft above land-surface datum.

PERIOD OF RECORD.--May 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.64 ft below land-surface datum, Oct. 16, 1941; lowest measured, 83.06 ft below land-surface datum, Aug. 21, 1973.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	70.01
Aug. 18	70.64

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

331525104245201. (formerly 331205104245101) Local number, 12S.25E.23.344.

LOCATION.--Lat 33°15'25", long 104°24'52", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 9 to 7 in., depth 930 ft, 9 in. casing 0-304 ft, 7 in. casing 304-714 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,539 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

REMARKS.--Lost record due to recorder malfunction.

PERIOD OF RECORD.--Jan. 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.80 ft below land-surface datum, Jan. 14, 1991; lowest measured, 199.68 ft below land-surface datum, June 20, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	18.72	12.73	13.14	31.73	104.11	102.33	131.77	134.00	---	98.20
10		---	18.14	13.20	13.17	35.93	109.74	114.60	112.24	130.06	---	76.74
15		---	17.02	12.19	17.50	57.11	102.32	115.30	111.17	92.19	---	55.33
20		---	15.74	13.24	20.21	83.84	114.23	98.42	120.83	---	---	39.75
25		---	14.59	14.51	21.05	91.60	114.00	107.58	127.56	---	---	39.46
EOM		19.97	13.52	15.13	28.18	92.71	---	123.85	131.09	---	104.15	39.12

WTR YEAR 1991 HIGHEST 11.80 JAN 14, 1991 LOWEST 143.85 JUN 28, 1991

331524104245101. Local number, 12S.25E.23.344A.

LOCATION.--Lat 33°15'24", long 104°24'51", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 7 in., total depth 231 ft, cased to total depth, perforated 105-231 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 2.90 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.79 ft below land-surface datum, Apr. 6, 1969; lowest measured, 111.17 below land-surface datum, Sep. 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	105.04	105.07	104.98	104.83	104.56	104.26	104.15	104.21	104.43	104.73	104.97	105.22
10	105.00	105.24	105.00	104.77	104.55	104.19	103.93	104.17	104.52	104.79	105.02	105.26
15	105.13	105.20	105.01	104.70	104.50	104.21	104.05	104.19	104.54	104.86	105.01	105.32
20	105.05	105.11	104.91	104.76	104.48	104.17	104.05	104.26	104.53	104.92	105.09	105.29
25	105.21	105.03	104.91	104.67	104.43	104.15	104.02	104.22	104.61	104.94	105.15	105.32
EOM	105.18	104.99	104.91	104.67	104.28	104.19	104.17	104.31	104.64	104.97	105.19	105.38

WTR YEAR 1991 HIGHEST 103.93 APR 10, 1991 LOWEST 105.47 SEP 28, 1991

331213104241601. (formerly 331216104241701) Local number, 13S.25E.12.311.

LOCATION.--Lat 33°12'16", long 104°24'17", Hydrologic Unit 13060007. Owner: Hal Bogle.

AQUIFER.--Alluvium

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 13 in., depth 190 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,506 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.23 ft below land-surface datum, Feb. 3, 1942; lowest measured, 90.13 ft below land-surface datum, Aug. 27, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	80.89
Aug. 20	not measured

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

331002104254701. (formerly 331002104272001) Local number, 13S.25E.27.211.
 LOCATION.--Lat 33°10'02", long 104°25'47", Hydrologic Unit 13060007. Owner: Hal Bogle.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian observation well completed in San Andres Limestone, diameter 10 in., depth 880 ft.
 INSTRUMENTATION.--Monthly steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,523.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 3.59 ft above land-surface datum.
 REMARKS.--Recorder removed Nov. 25, 1990.
 PERIOD OF RECORD.--1940 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.23 ft above land-surface datum, Jan. 27, 1989; lowest measured, 198.30 ft below land-surface datum, July 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	40.45	NOV 27	14.13	DEC --	-- --	JAN --	-- --	FEB --	-- --	MAR 25	106.31
APR 25	140.51	MAY 24	126.76	JUNE 25	149.36	JULY 25	95.10	AUG 26	124.05	SEP 25	35.31

330702104402401. (formerly 330700104402501) Local number, 14S.23E.08.144.
 LOCATION.--Lat 33°07'00", long 104°40'25", Hydrologic Unit 13060009. Owner: M. D. Kincaid.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian stock well, diameter 8 in., depth 460 ft, casing information not available.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,844 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1940 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 257.55 ft below land-surface datum, Feb. 9, 1943; lowest measured, 327.34 ft below land-surface datum, Aug. 27, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	not measured
Aug. 19	289.37

330646104173301. (formerly 330640104174501) Local number, 14S.26E.12.431331.
 LOCATION.--Lat 33°06'40", long 104°17'45", Hydrologic Unit 13060007. Owner: C. B. Donaghay.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 13 in., depth 125 ft, cased 0-125 ft, perforated 50-115 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,396.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing at land-surface datum.
 PERIOD OF RECORD.--Jan. 1940 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.50 ft below land-surface datum, Jan. 22, 1942; lowest measured, 23.77 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	18.80
Aug. 19	18.49

330404104221201. Local number, 14S.26E.30.444.
 LOCATION.--Lat 33°04'04", long 104°22'12", Hydrologic Unit 13060007. Owner: Bartlett.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 1,150 ft, cased to 740 ft, open hole 740-1,150 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,484 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.19 ft below land-surface datum, Feb. 10, 1988; lowest measured, 261.75 ft below land-surface datum, Aug. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	68.69
Aug. 19	212.68

GROUND-WATER LEVELS

CHAVES COUNTY
Roswell Basin

325845104295501. Local number, 15S.24E.25.433.

LOCATION.--Lat 32°58'45", long 104°29'55", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 5/8 in., depth 910 ft, casing 0-548 ft.

INSTRUMENTATION.--Periodic steel-tape, pressure measurements, and Digital recorder with 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,528.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, for steel-tape measurements, 1.45 ft above land surface.

REMARKS.--Water levels and pressure readings provided by N.M. State Engineer Office and Pecos Valley Artesian Conservancy District.

PERIOD OF RECORD.--Jan. 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.27 ft above land-surface datum, Feb. 5, 1991; lowest measured, 102.30 ft below land-surface datum, July 17, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	+ 14.91	+ 20.22	+ 22.53		+ 24.27		37.64	24.32	40.59	46.97	18.87	32.24
10							42.28	20.35	26.46		15.73	9.76
15	+ 17.22	+ 21.03		+ 23.92	+ 18.84		32.24	26.64	41.32		5.42	
20							39.93	37.43	52.66	17.77	6.02	
25	+ 18.37			+ 23.92	+ 7.06	35.10	36.06	58.31	53.15	+ 1.09	9.08	+ 14.91
EOM						29.10	30.77	46.36	61.22	2.83	26.06	
WTR YEAR 1991 HIGHEST +24.27 FEB 5, 1991 LOWEST 64.62 JUL 1, 1991												

CIBOLA COUNTY
Grants-Bluewater Area

350346107521201. (formerly 350400107510501) Local number, 10N.10W.26.331.

LOCATION.--Lat 35°04'00", long 107°51'05", Hydrologic Unit 13020207. Owner: Monico Mirabal.

AQUIFER.--Glorieta Sandstone of Permian Age.

WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter 16 in., depth 216 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,455 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1/2 in. hole in pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.18 ft below land-surface datum, Feb. 21, 1952; lowest measured, 34.69 ft below land-surface datum, Jan. 17, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 22	29.40
July 9	28.89

350925107523001. Local number, 11N.10W.27.241.

LOCATION.--Lat 35°09'25", long 107°52'30", Hydrologic Unit 13020207. Owner: City of Grants.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled water-table industrial well, diameter 16 to 12 in., depth 158 ft, perforated 50 to 150 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,480 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.23 ft below land-surface datum, Sep. 29, 1988; lowest measured, 39.08 ft below land-surface datum, Aug. 1, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 22	22.68
July 9	25.05

351400107524201. Local number, 12N.10W.29.434.

LOCATION.--Lat 35°14'00", long 107°52'42", Hydrologic Unit 13020207. Owner: A. R. Card.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled artesian unused well, diameter 18 in., reported depth 205 ft, cased 0-150 ft, perforated 93-130 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 6,552 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower edge of hole in north side of casing, 2.20 ft above land-surface datum.

PERIOD OF RECORD.--Oct. 1944, Feb. 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.46 ft below land-surface datum, Oct. 14, 1944; lowest measured, 107.61 ft below land-surface datum, Aug. 6, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 22	79.62
July 9	78.63

GROUND-WATER LEVELS

CIBOLA COUNTY
Grants-Bluewater Area

351650107535001. Local number, 12N.11W.09.424.
 LOCATION.--Lat 35°16'50", long 107°53'50", Hydrologic Unit 13020207. Owner: Tom Yager.
 AQUIFER.--San Andres Limestone and Yeso Formation of Permian Age.
 WELL CHARACTERISTICS.--Drilled artesian unused well, diameter 16 in., reported depth 505 ft, 16 in. casing to 175 ft, 12 in. casing to 325 ft.
 INSTRUMENTATION.--Monthly steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,642 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 3.05 ft above land-surface datum.
 PERIOD OF RECORD.--May, 1946 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.69 ft below land-surface datum, Sep. 29, 1988; lowest measured, 274.81 ft below land-surface datum, Jan. 23, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	101.08	NOV 23	102.39	DEC 28	100.87	JAN 24	100.26	FEB 22	102.56	MAR 26	102.73
APR 30	103.17	MAY 30	100.45	JUNE 20	100.24	JULY 23	99.42	AUG 22	98.48	SEP 30	98.25

351637107584501. Local number, 12N.11W.14.213.
 LOCATION.--Lat 35°16'37", long 107°58'45", Hydrologic Unit 13020207. Owner: Duane Berryhill.
 AQUIFER.--San Andres Limestone and Yeso Formation of Permian Age.
 WELL CHARACTERISTICS.--Drilled test well, diameter 4 in., depth 130.4 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,605 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.70 ft above land-surface datum.
 PERIOD OF RECORD.--June 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.74 ft below land-surface datum, Sept. 25, 1986; lowest measured, 101.39 ft below land-surface datum, June 10, 1954.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 22	85.60
July 9	86.10

COLFAX COUNTY
Capulin Basin

364500104031501. Local number, 29N.27E.16.222.
 LOCATION.--Lat 36°45'00", long 104°03'15", Hydrologic Unit 11040001. Owner: John King.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 8 in., depth 120 ft, cased to 20 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,821.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1957 to Feb. 1969, Feb. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.65 ft below land-surface datum, Feb. 3, 1960; lowest measured, 9.37 ft below land-surface datum, Aug. 13, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 8	8.15
July 1	8.38

GROUND-WATER LEVELS

COSTILLA COUNTY (in Colorado)
Sunshine Valley

370009105410001. Local number, 01N.74W.33.322.

LOCATION.--Lat 37°00'09", long 105°41'00", Hydrologic Unit 13020101. Owner: Waller and Allen.

AQUIFER.--Santa Fe Group.

WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 15 in., depth 232 ft, casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 7,495 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of hole inside pump base, 2.00 ft above land surface-datum (since 1971).

PERIOD OF RECORD.--Feb. 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 101.82 ft below land-surface datum, Aug. 26, 1968; lowest measured, 139.24 ft below land-surface datum, Sep. 2, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 8	135.92
Aug. 9	136.09

CURRY COUNTY
Clovis area

341825103031301. Local number, 01N.37E.15.13311.

LOCATION.--Lat 34°18'25", long 103°03'13", Hydrologic Unit 12050002. Owner: Levi Robbins.

AQUIFER.--Ogallala formation.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 248 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 4,109 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.56 ft above land surface datum.

REMARKS.--Recorder installed Aug. 1988. Lost record, several days, due to recorder malfunction.

PERIOD OF RECORD.--Feb. 1954, Jan. 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 137.43 ft above land-surface datum, Feb. 17, 1954; lowest measured, 231.51 ft below land-surface datum, Aug. 3, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	224.93	225.10	224.49	224.23	224.01	223.97	224.80	226.13	227.85	---	230.52	230.69
10	224.83	224.85	224.45	224.15	223.96	225.43	224.74	227.21	226.44	---	230.51	228.42
15	224.77	225.02	224.40	224.11	223.95	226.16	225.02	227.69	226.78	---	228.35	227.58
20	224.71	224.96	224.35	224.08	223.95	227.22	228.67	228.25	---	---	227.51	227.33
25	224.75	224.69	224.34	224.07	223.95	225.52	228.96	226.58	---	---	227.25	227.20
EOM	225.44	224.59	224.28	224.06	223.96	225.06	227.21	226.56	---	228.12	227.42	227.12

WTR YEAR 1991 HIGHEST 223.93 FEB 17, 1991 LOWEST 231.51 AUG 3, 1991

342358103093601. Local number, 02N.36E.15.111.

LOCATION.--Lat 34°23'58", long 103°09'36", Hydrologic Unit 12050002. Owner: Anne Humphreys.

AQUIFER.--Ogallala formation.

WELL CHARACTERISTICS.--Drilled water-table irrigation well; diameter, depth and casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,227 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete base 1.20 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 266.89 ft below land-surface datum, Jan. 4, 1974; lowest measured, 291.29 ft below land-surface datum, Aug. 6, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	285.28
July 30	284.08

GROUND-WATER LEVELS

CURRY COUNTY
Clovis area

342736103203701. (formerly 342815103270001) Local number, 03N.34E.23.433.
 LOCATION.--Lat 34°27'36", long 103°20'37", Hydrologic Unit 12050001. Owner: Archie Baker.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., depth 418 ft, cased to 418 ft, perforated 365-418 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,432 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1954 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 340.62 ft below land-surface datum, Mar. 16, 1957; lowest measured, 358.70 ft below land-surface datum, Aug. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 4	357.24
July 31	357.64

343347103345001. Local number, 04N.32E.22.111.
 LOCATION.--Lat 34°33'47", long 103°34'50", Hydrologic Unit 12050001. Owner: Noel Dougherty.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 401 ft.
 INSTRUMENTATION.--Continuous strip-chart recorder.
 DATUM.--Elevation of land-surface datum is 4,587 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 3.50 ft above land surface datum.
 REMARKS.--Recorder installed Aug. 1988. Lost record due to recorder malfunction.
 PERIOD OF RECORD.--Jan. 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 298.97 ft above land-surface datum, May 2, 1991; lowest measured, 309.92 ft below land-surface datum, Jan. 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	299.54	299.25	299.28	---	299.50	299.21	299.43	299.53	299.34	299.09	299.22	299.18
10	299.37	299.55	299.43	---	299.50	299.34	298.98	299.15	299.22	299.17	299.25	299.24
15	299.58	299.42	299.52	---	299.57	299.28	299.33	299.08	299.28	299.24	299.18	299.09
20	299.22	299.27	299.37	299.45	299.60	299.22	299.29	299.28	299.26	299.20	299.20	299.17
25	299.63	299.33	299.50	299.43	299.54	299.28	299.09	299.15	299.17	299.28	299.27	299.23
EOB	299.45	299.33	299.65	299.82	299.05	299.71	299.42	299.02	299.12	299.27	299.26	299.34

WTR YEAR 1991 HIGHEST 298.97 MAY 2, 1991 LOWEST 299.88 NOV 29, 1990

343745103201501. (formerly 343743103201501) Local number, 05N.34E.21.443.
 LOCATION.--Lat 34°37'45", long 103°20'15", Hydrologic Unit 12050005. Owner: Garrett Farms.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 510 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,632 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 ft X 4 ft concrete pump base, 0.50 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 438.50 ft below land-surface datum, July 30, 1991; lowest measured, 448.41 ft below land-surface datum, Jan. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	439.05
July 30	438.50

343615103123801. Local number, 05N.35E.35.313.
 LOCATION.--Lat 34°36'15", long 103°12'38", Hydrologic Unit 12050005. Owner: S. W. Pipkin.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 527 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,504 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.
 REMARKS.--"r" indicates well pumped recently.
 PERIOD OF RECORD.--Jan. 1954 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 376.40 ft below land-surface datum, Mar. 26, 1954; lowest measured, 446.23r ft below land-surface datum, Aug. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	445.85
July 30	445.70

GROUND-WATER LEVELS

DEBACA COUNTY
Ft. Sumner Area

343657104162501. Local number, 05N.25E.34.232.

LOCATION.--Lat 34°36'57", long 104°16'25", Hydrologic Unit 13060003. Owner: Dunn Land and Cattle Co.

AQUIFER.--Santa Rosa Sandstone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., 0-200 ft, 14 in., 194-326 ft, depth 326 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 4,392.2 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum.

REMARKS.--Lost record, several days, due to recorder malfunction.

PERIOD OF RECORD.--Sept. 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 252.14 ft above land-surface datum, Sept. 28, 1971; lowest measured, 274.63 ft below land-surface datum, Jan. 4, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	272.47	272.04	272.19	272.14	272.31	271.84	272.09	272.22	272.03	271.90	271.77	271.77
10	---	272.32	272.23	272.06	272.33	272.02	271.60	271.94	272.09	271.83	271.94	271.75
15	---	272.18	271.98	271.97	272.22	271.94	271.85	271.88	271.45	271.98	271.86	271.84
20	---	271.97	272.07	272.16	272.27	271.85	271.92	272.08	271.90	271.85	271.86	271.73
25	---	271.95	272.28	272.15	272.21	271.90	271.74	271.94	271.89	271.92	271.90	271.75
EQM	---	272.18	272.33	272.43	271.79	272.28	271.96	271.80	271.87	271.88	271.87	271.72

WTR YEAR 1991 HIGHEST 271.42 JUN 14, 1991 LOWEST 272.47 OCT 5, 1990

DONA ANA COUNTY
Rincon and Mesilla Valleys

322203106484101. (formerly 322210106483001) Local number, 22S.01E.26.411.

LOCATION.--Lat 32°22'10", long 106°48'30", Hydrologic Unit 13030102. Owner: H. Wortheim.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., depth 107 ft, cased to 107 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,920 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of east side of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.10 ft below land-surface datum, Sep. 11, 1989; lowest measured, 25.57 ft below land-surface datum, Apr. 25, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 5	12.37
Aug. 15	10.81

321606106462901. (formerly 321620106461501) Local number, 23S.02E.31.213.

LOCATION.--Lat 32°16'20", long 106°46'15", Hydrologic Unit 13030102. Owner: New Mexico State University.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 14 in., reported depth 70 ft, cased to 70 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,880 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 5/8 in. hole in pump base, 1.08 ft above land-surface datum.

PERIOD OF RECORD.--Feb. 1948, Apr. 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.13 ft below land-surface datum, Feb. 10, 1948; lowest measured, 29.12 ft below land-surface datum, Jan. 7, 1958.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 6	18.41
Aug. 15	17.52

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

325516104404601. (formerly 325510104410001) Local number, 16S.23E.15.322333.
 LOCATION.--Lat 32°55'10", long 104°41'00", Hydrologic Unit 13060007. Owner: D. W. Runyan.
 AQUIFER.--Yesso formation
 WELL CHARACTERISTICS.--Drilled oil test well, used for stock water, diameter 10 in., depth 1,458 ft, cased.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,807 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.70 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1951 to Jan. 1965, Feb. 1970 to Aug. 1971, Jan. 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 225.16 ft below land-surface datum, Jan. 12, 1951; lowest measured, 277.60 ft below land-surface datum, Aug. 5, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 25	236.82
Aug. 19	239.18

325702104352801. (formerly 325735104360701) Local number, 16S.24E.04.411341.
 LOCATION.--Lat 32°57'35", long 104°36'07", Hydrologic Unit 13060007. Owner: Ellis Hunlic.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter not available, depth 610 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,624 ft above National Geodetic Vertical Datum of 1929. Measuring point: Southwest side of pump, 1.50 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1969 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.23 ft below land-surface datum, Jan. 25, 1991; lowest measured, 100.54 ft below land-surface datum, Aug. 27, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 25	57.23
Aug. 19	61.44

325656104315401. (formerly 325712104314501) Local number, 16S.25E.06.313.
 LOCATION.--Lat 32°57'12", long 104°31'45", Hydrologic Unit 13060007. Owner: Frank Childress.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 20 in., depth 39 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,558 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of cribbing 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Sep. 1937 to Jan. 1966, Aug. 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.41 ft below land-surface datum, Aug. 24, 1989; lowest measured, 31.66 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 25	23.56
Aug. 19	well plugged

325638104274801. Local number, 16S.25E.11.111A.
 LOCATION.--Lat 32°56'38", long 104°27'48", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 7 in., depth 171 ft, casing 0-171 ft, perforated 94-170 ft.
 INSTRUMENTATION.--Recorder removed Nov. 27, 1990. Monthly steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,450 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf 3.00 ft above land-surface datum.
 PERIOD OF RECORD.--1964 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.90 ft below land-surface datum, Feb. 18, 1966; lowest measured, 64.72 ft below land-surface datum, July 24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	61.95	NOV 27	60.96	DEC --	-- --	JAN 25	59.52	FEB 22	59.69	MAR 20	59.79
APR --	-- --	MAY 28	60.95	JUNE 26	61.33	JULY 23	61.58	AUG 21	61.22	SEP 27	60.14

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

325450104251101. (formerly 325445104253501) Local number, 16S.26E.19.211.
 LOCATION.--Lat 32°54'45", long 104°25'35", Hydrologic Unit 13060007. Owner: John Crook.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 160 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,399 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. by 3 in. vertical slot under pump base, at land-surface datum.
 PERIOD OF RECORD.--Jan. 1969 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.60 ft below land-surface datum, Jan. 16, 1969; lowest measured, 112.85 ft below land-surface datum, Sep. 13, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	102.07
Aug. 19	108.19

324838104435301. (formerly 324831104435701) Local number, 17S.23E.30.12344
 LOCATION.--Lat 32°48'31", long 104°43'57", Hydrologic Unit 13060007. Owner: Village of Hope.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian public-supply well, diameter 16 in., depth 600 ft, cased to 558 ft, perforated 498-558 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,085 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. pipe extension on north side of concrete base, 2.00 ft above land-surface datum.
 PERIOD OF RECORD.--Dec. 1968, Jan. 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 514.85 ft below land-surface datum, Jan. 27, 1988; lowest measured, 553.18 ft below land-surface datum, Aug. 7, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 23	534.98
Aug. 16	533.36

324620104255001. (formerly 324624104244501) Local number, 18S.26E.06.442A.
 LOCATION.--Lat 32°46'20", long 104°24'45", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.
 AQUIFER.--San Andres Limestone.
 WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 9 in., depth 1,008 ft, cased to 726 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,402.1 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.40 ft above land-surface datum.
 REMARKS.--Lost record, several days, due to recorder being removed.
 PERIOD OF RECORD.--June 1961 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.57 ft below land-surface datum, Feb. 20, 1989; lowest measured 209.15 ft below land-surface datum, July 31-Aug. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	113.56	96.69	85.51	78.68	72.44	75.81	113.88	122.37	138.61	149.94	---	139.04
10	109.57	94.09	85.13	76.80	71.49	82.01	122.22	121.59	128.58	---	---	131.61
15	106.56	91.46	83.23	76.18	71.37	93.05	129.87	121.85	124.28	---	---	121.71
20	103.83	89.38	82.33	75.71	70.69	103.84	137.31	124.03	128.59	---	---	113.25
25	100.85	87.80	81.52	74.17	71.99	108.40	135.04	128.54	140.31	---	---	107.01
EOB	98.69	86.45	80.50	72.93	73.89	109.58	128.50	134.87	149.41	---	137.39	106.77

WTR YEAR 1991 HIGHEST 70.45 FEB 21, 1991 LOWEST 154.60 JUL 3, 1991

GROUND-WATER LEVELS

EDDY COUNTY
Roswell Basin

324620104255101. Local number, 18S.26E.06.442B.

LOCATION.--Lat 32°46'20", long 104°24'45", Hydrologic Unit 13060007. Owner: Pecos Valley Artesian Conservancy District.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 7 in., depth 246 ft, casing 0-246 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 3,402 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.70 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.83 ft below land-surface datum, Jan. 7, 1974; lowest measured, 140.59 ft below land-surface datum, Sep. 13, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	132.50	126.75	122.28	118.84	116.02	113.79	120.57	127.24	130.01	132.73	133.77	132.99
10	131.45	126.22	121.75	118.32	115.66	113.83	121.83	127.14	130.51	133.42	134.46	133.52
15	130.61	125.31	121.26	117.78	115.22	114.32	123.43	127.24	130.11	133.92	133.88	133.13
20	129.61	124.51	120.47	117.43	114.81	115.46	124.84	127.83	129.93	133.45	133.23	132.14
25	---	123.69	120.00	117.04	114.51	116.77	125.87	128.41	130.69	133.04	132.95	131.13
ECM	127.71	122.98	119.51	116.63	114.01	119.05	126.86	129.13	131.77	133.03	132.80	130.20

WTR YEAR 1991 HIGHEST 113.79 MAR 5, 1991 LOWEST 134.54 AUG 10, 1991

324325104233001. Local number, 18S.26E.28.122.

LOCATION.--Lat 32°43'25", long 104°23'30", Hydrologic Unit 13060011. Owner: Town of Dayton.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 250 ft, cased to 182 ft, casing slotted 92-182 ft.

INSTRUMENTATION.--Monthly steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,403 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.06 ft above land-surface datum.

REMARKS.--Recorder removed Nov. 27, 1990.

PERIOD OF RECORD.--Aug. 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.79 ft below land-surface datum, Feb. 5, 1952; lowest measured, 124.87 ft below land-surface datum, Feb. 25, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	122.73	NOV 26	122.68	DEC 19	122.70	JAN 28	122.72	FEB 22	122.70	MAR 20	122.75
APR 30	122.86	MAY 28	122.88	JUNE 26	122.96	JULY 23	123.02	AUG 20	123.00	SEP 26	123.11

323542104242701. (formerly 323540104232001) Local number, 20S.26E.08.1211.

LOCATION.--Lat 32°35'40", long 104°23'20", Hydrologic Unit 13060011. Owner: Moutry.

AQUIFER.--Valley Fill

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 13 in., depth 346 ft, casing information not available.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,286 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of basal flange of pump head, 0.20 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.87 ft below land-surface datum, Jan. 2, 1943; lowest measured, 90.25 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 28	36.84
Aug. 20	32.04

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

322637104142301. (formerly 322652104141901) Local number, 21S.26E.36.221.
 LOCATION.--Lat 32°26'52", long 104°14'19", Hydrologic Unit 13060011. Owner: City of Carlsbad.
 AQUIFER.--Capitan Limestone.
 WELL CHARACTERISTICS.--Drilled water-table municipal well, diameter 20 in., depth 327 ft, casing 0-290 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,121.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 4.14 ft above land-surface datum.
 REMARKS.--Lost records, several days, due to recorder malfunction.
 PERIOD OF RECORD.--April 1962 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.98 ft below land-surface datum, June 14, 1987; lowest measured, 26.07 ft below land-surface datum, Aug. 2, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.81	23.14	23.49	---	22.51	22.44	22.97	23.51	23.67	23.74	22.94	22.77
10	22.78	23.34	23.32	---	22.51	22.54	23.10	23.63	23.72	23.80	22.98	22.70
15	22.79	23.36	23.13	---	22.49	22.64	23.20	23.70	23.83	23.59	22.87	22.22
20	22.88	23.37	---	---	22.49	22.85	23.42	23.90	23.92	23.44	22.83	21.75
25	---	23.44	---	---	22.51	22.90	23.38	23.61	23.87	23.26	23.03	21.38
EOM	23.02	23.53	---	22.57	22.32	22.95	23.45	23.66	23.89	23.02	23.03	21.16

WTR YEAR 1991 HIGHEST 21.16 SEP 30, 1991 LOWEST 24.08 JUL 2, 1991

322636104125801. (formerly 322640104165801) Local number, 21S.27E.32.112.
 LOCATION.--Lat 32°26'40", long 104°12'58", Hydrologic Unit 13060011. Owner: L. E. Loman.
 AQUIFER.--Capitan Limestone.
 WELL CHARACTERISTICS.--Drilled water-table domestic well, diameter 12 in., reported depth 305 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,112 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Oct. 1947 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.64 ft below land-surface datum, Jan. 17, 1950; lowest measured, 17.35 ft below land-surface datum, Aug. 9, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 28	13.09
Aug. 20	13.94

322712104074501. (formerly 322710104073901) Local number, 21S.28E.30.141.
 LOCATION.--Lat 32°27'10", long 104°07'39", Hydrologic Unit 13060011. Owner: Forrest Miller.
 AQUIFER.--Capitan Limestone.
 WELL CHARACTERISTICS.--Drilled exploration well, diameter 8 5/8 - 5 1/2 in., reported depth 1,060 ft, plugged back, total depth 906 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,181.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.64 ft above land-surface datum.
 REMARKS.--Records good.
 PERIOD OF RECORD.--1963 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.13 ft below land-surface datum, June 29, 1987; lowest measured, 98.68 ft below land-surface datum, Aug. 3, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.20	94.38	94.79	94.26	94.01	93.92	94.45	95.01	95.25	95.26	94.46	94.35
10	94.16	94.63	94.71	94.15	93.99	94.03	94.60	95.17	95.28	95.34	94.51	94.31
15	94.16	94.64	94.55	94.08	93.96	94.20	94.80	95.25	95.34	95.20	94.38	93.87
20	94.26	94.64	94.30	94.10	93.97	94.38	94.90	95.49	95.39	95.04	94.29	---
25	94.37	94.72	94.36	94.01	93.95	94.36	94.86	95.12	95.37	94.88	94.63	93.04
EOM	94.32	94.78	94.35	94.08	93.74	94.34	95.03	95.24	95.40	94.60	94.60	92.81

WTR YEAR 1991 HIGHEST 92.81 SEP 30, 1991 LOWEST 95.64 JUL 12, 1991

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

322120104151501. Local number, 22S.26E.25.3333. (formerly 22S.26E.36.111A)
 LOCATION.--Lat 32°21'20", long 104°15'15", Hydrologic Unit 13060011. Owner: Carlsbad Airfield.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 12 in., depth 260 ft, cased to 260 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,225 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.
 REMARKS.--Records good.
 PERIOD OF RECORD.--July 1942 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.50 ft below land-surface datum, Oct. 14, 1942; lowest measured, 214.82 ft below land-surface datum, Sep. 15, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	168.82	164.38	158.84	155.14	153.10	151.89	157.11	165.57	170.55	174.98	173.11	174.49
10	167.57	163.57	158.15	154.68	152.92	152.16	158.22	165.82	171.07	176.02	173.92	173.84
15	166.63	162.51	157.43	154.18	152.68	152.61	160.02	166.15	171.55	176.67	174.92	172.60
20	166.43	161.39	156.60	153.93	152.54	153.40	162.05	167.52	171.77	176.04	175.40	171.13
25	166.36	160.41	156.24	153.66	152.40	154.30	163.67	168.86	172.47	174.95	174.87	169.53
EOM	165.60	159.67	155.69	153.42	152.02	156.25	164.76	169.92	173.77	173.45	174.57	168.12

WTR YEAR 1991 HIGHEST 151.87 MAR 6, 1991 LOWEST 176.75 JUL 16, 1991

322238104101801. (formerly 322231104131001) Local number, 22S.27E.22.421.
 LOCATION.--Lat 32°22'31", long 104°10'10", Hydrologic Unit 13060011. Owner: Enea Grandi.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 150 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,100 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--Sep. 1947 to Aug. 1968, Jan. 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.43 ft below land-surface datum, Sep. 15, 1950; lowest measured, 81.10 ft below land-surface datum, Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 28	38.77
Aug. 20	46.90

321741104204901. (formerly 321721104204801) Local number, 23S.25E.24.213.
 LOCATION.--Lat 32°17'21", long 104°20'48", Hydrologic Unit 13060011. Owner: City of Carlsbad.
 AQUIFER.--Capitan Limestone.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in. 0-20 ft, open hole 20-900 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,501.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.17 ft above land-surface datum.
 REMARKS.--Lost record, several days, due to recorder malfunction.
 PERIOD OF RECORD.--1963 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 369.53 ft below land-surface datum, June 27, 1986; lowest measured, 404.06 ft below land-surface datum, July 10, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	400.13	400.32	400.71	400.23	400.08	400.11	400.57	401.25	401.66	401.79	400.59	400.47
10	400.16	400.51	400.64	400.15	399.95	400.23	400.65	401.43	401.38	401.85	400.66	400.24
15	400.12	400.51	400.42	400.07	399.92	400.25	400.81	401.44	401.59	401.57	---	399.83
20	400.20	400.47	400.24	400.10	400.12	400.40	401.01	401.58	401.89	401.21	---	399.53
25	400.34	400.53	400.39	---	400.14	400.54	401.06	401.24	402.13	394.27	400.67	399.28
EOM	400.27	400.72	400.37	400.07	400.01	400.63	401.17	401.57	402.08	400.55	400.68	399.05

WTR YEAR 1991 HIGHEST 392.74 JUL 26, 1991 LOWEST 402.28 JUN 27, 1991

GROUND-WATER LEVELS

EDDY COUNTY
Carlsbad Area

321939104113301. (formerly 321930104113301) Local number, 23S.27E.09.211.
 LOCATION.--Lat 32°19'30", long 104°11'33", Hydrologic Unit 13060011. Owner: H. C. Bindel.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 200 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,143 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, under pump base, 1.25 ft above land-surface datum.
 PERIOD OF RECORD.--July 1949 to Nov. 1955, Jan. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.70 ft below land-surface datum, Sep. 15, 1950; lowest measured, 60.92 ft below land-surface datum, Jan. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 28	55.18
Aug. 20	53.33

320604104284101. (formerly 320602104285201) Local number, 25S.24E.27.421.
 LOCATION.--Lat 32°06'02", long 104°28'52", Hydrologic Unit 13060011. Owner: Walker Hood.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 101 ft, uncased.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,701 ft above National Geodetic Vertical Datum of 1929. Measuring point: Northwest corner of pump base, 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1952 to Aug. 1967, Jan. 1969 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.12 ft below land-surface datum, Aug. 22, 1988; lowest measured, 85.10 ft below land-surface datum, Aug. 25, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 22	54.40
Aug. 21	55.05

320316104294301. (formerly 320257104295201) Local number, 26S.24E.09.441.
 LOCATION.--Lat 32°03'16", long 104°29'43", Hydrologic Unit 13060011. Owner: John Mayes.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 100 ft, cased to 85 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,749.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of air-line flange support, 1.40 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1952 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.31 ft below land-surface datum, Aug. 22, 1988; lowest measured, 54.98 ft below land-surface datum, Sep. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 22	41.22
Aug. 21	39.19

GRANT COUNTY
Silver City Area

324600108222501. Local number, 18S.15W.11.323.
 LOCATION.--Lat 32°46'00", long 108°22'25", Hydrologic Unit 15040002. Owner: Town of Silver City.
 AQUIFER.--Gila Conglomerate.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 12 in., depth 580 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 5,845 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 12 in. casing, 1.50 ft above land-surface datum.
 REMARKS.--Records good.
 PERIOD OF RECORD.--Mar. 1957 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 262.34 ft below land-surface datum, Mar. 3, 1962; lowest measured, 294.52 ft below land-surface datum, Apr. 20, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	290.74	290.34	290.15	289.89	289.78	289.46	289.53	289.89	290.40	291.79	292.51	292.24
10	290.63	290.64	290.14	289.89	289.71	289.51	289.29	289.71	290.71	291.98	292.51	292.29
15	290.66	290.45	290.01	289.70	289.65	289.29	289.43	289.90	290.91	292.10	292.45	292.22
20	290.48	290.15	289.77	289.78	289.79	289.23	289.71	290.07	291.01	292.14	292.41	292.31
25	290.81	290.09	290.07	289.83	289.63	289.31	289.67	290.14	291.23	292.38	292.35	292.38
EOM	290.54	290.27	290.17	290.06	289.30	289.55	289.81	290.05	291.49	292.52	292.35	292.42

WTR YEAR 1991 HIGHEST 289.18 MAR 26, 1991 LOWEST 292.67 AUG 7, 1991

GROUND-WATER LEVELS

GUADALUPE COUNTY
Santa Rosa Area

350414104485101. Local number, 10N.20E.28.2214.

LOCATION.--Lat 35°04'14", long 104°48'51", Hydrologic Unit 13060001. Owner: Town of Santa Rosa.

AQUIFER.--San Andres Limestone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 12 3/4 in., casing 0-514 ft, 10 3/4 in. 505-575 ft, casing perforated 515-575 ft.

INSTRUMENTATION.--Digital recorder, 1-hour punch.

DATUM.--Elevation of land-surface datum is 5,162.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.10 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--May 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 345.59 ft below land-surface datum, Sep. 27, 1991; lowest measured, 362.36 ft below land-surface datum, Apr. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	350.40	350.17	350.32	350.96	351.47	352.08	352.48	351.73	350.19	349.26	348.34	346.61
10	350.31	350.23	350.48	350.92	351.58	352.28	352.13	351.53	349.97	349.26	347.96	346.25
15	350.33	350.18	350.57	350.97	351.68	352.31	352.12	351.27	349.70	349.29	347.67	345.93
20	350.22	350.11	350.55	351.09	351.95	352.35	352.02	351.14	349.56	349.23	347.36	345.77
25	350.31	350.13	350.81	351.15	352.07	352.40	351.88	350.70	349.35	348.98	347.14	345.66
EOM	350.29	350.24	350.98	351.40	351.98	352.53	351.80	350.31	349.42	348.74	346.88	345.61

WTR YEAR 1991 HIGHEST 345.59 SEP 27, 1991 LOWEST 353.07 MAR 17, 1991

HARDING COUNTY
Roy Area

355352104054201. Local number, 19N.27E.05.334.

LOCATION.--Lat 35°53'52", long 104°05'42", Hydrologic Unit 11080007. Owner: Town of Roy.

AQUIFER.--Ogallala formation.

WELL CHARACTERISTICS.--Drilled water-table municipal well, diameter 10 in., depth 75 ft, cased to 75 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 5,658 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4" plugged hole, east side, 1.50 ft above land-surface datum.

REMARKS.--Submersible pump installed in 1984.

PERIOD OF RECORD.--Jan. 1967 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.34 ft below land-surface datum, Jan. 18, 1983; lowest measured, 55.76 ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 9	50.40
June 22	51.19

HIDALGO COUNTY
Virden Valley

324051108594101. (formerly 324053108594101) Local number, 19S.21W.03.414.

LOCATION.--Lat 32°40'51", long 108°59'41", Hydrologic Unit 15040002. Owner: Jones, Clouse, and Jensen.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 20 in., depth 72 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 3,750 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole inside pump shell, 0.90 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.27 ft below land-surface datum, Jan. 12, 1979; lowest measured, 15.79 ft below land-surface datum, Aug. 4, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	10.73
July 8	13.14

GROUND-WATER LEVELS

HIDALGO COUNTY
Lordsburg Area

321849108392001. (formerly 321848108391401) Local number, 23S.18W.12.333.
 LOCATION.--Lat 32°18'49", long 108°39'20", Hydrologic Unit 15040003. Owner: R. I. McDonald.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 220 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,240 ft above National Geodetic Vertical Datum of 1929. Measuring point: End of entry port pipe, 1.50 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1957 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.02 ft below land-surface datum, Jan. 11, 1958; lowest measured, 190.45 ft below land-surface datum, Aug. 7, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 9	165.49
July 8	169.13

321248108331401. (formerly 321257108331201) Local number, 24S.17W.14.442.
 LOCATION.--Lat 32°12'48", long 108°33'14", Hydrologic Unit 15040003. Owner: E. W. Richens.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., depth 420 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,265 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--May 1955 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.97 ft below land-surface datum, Jan. 7, 1981; lowest measured, 114.90 ft below land-surface datum, Jan. 15, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 9	87.98
July 8	90.22

Animas Valley

321624108504001. (formerly 321540108514101) Local number, 23S.20W.25.422.
 LOCATION.--Lat 32°16'24", long 108°50'40", Hydrologic Unit 15040003. Owner: Kerr Cattle Co.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 150 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,150 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--May 1948 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.36 ft below land-surface datum, May 21, 1948; lowest measured, 53.44 ft below land-surface datum, July 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	53.19
July 10	53.22

315610108483901. (formerly 315645108493501) Local number, 27S.19W.20.343.
 LOCATION.--Lat 31°56'10", long 108°49'35", Hydrologic Unit 15040003. Owner: Felix Gauthier.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 358 ft, cased to 358 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,414 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 1 1/4 in. pipe in concrete pump base, 1.25 ft above land-surface datum.
 PERIOD OF RECORD.--July 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.90 ft below land-surface datum, July 29, 1949; lowest measured, 198.50 ft below land-surface datum, Aug. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	182.70
July 10	pumping

GROUND-WATER LEVELS

HIDALGO COUNTY
San Simon Valley

315738109004001. Local number, 27S.21W.17.124.
 LOCATION.--Lat 34°57'38", long 109°00'40", Hydrologic Unit 15040006. Owner: E. J. Bagwell.
 AQUIFER.--Bolson.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 220 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,020 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in west side of pump base, 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1978, Jan. 1980, July 1984 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 120.98 ft above land-surface datum, Jan. 10, 1980; lowest measured, 126.20 ft below land-surface datum, July 9, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 8	125.49
July 9	126.20

315048109010201. (formerly 315010108570001) Local number, 28S.21W.30.222.
 LOCATION.--Lat 31°50'48", long 109°01'02", Hydrologic Unit 15040006. Owner: C. L. Johnston.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 8 in. depth 471 ft, cased to 471 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,128 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in west side of casing, 0.70 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.88 ft below land-surface datum, Jan. 15, 1969; lowest measured, 124.93 ft below land-surface datum, July 16, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 8	122.08
July 9	123.04

Playas Valley

313502108275001. Local number, 31S.16W.33.233.
 LOCATION.--Lat 31°33'00", long 108°27'50", Hydrologic Unit 13030201. Owner: U-Bar Ranch.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 654 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,404 ft above National Geodetic Vertical Datum of 1929. Measuring point: Bottom edge of shelf, 4.05 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1965 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.66 ft below land-surface datum, Apr. 18-20, 1973; lowest measured, 54.95 ft below land-surface datum, Sep. 4, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	46.89
July 8	46.25

312938108302301. Local number, 32S.16W.30.134.
 LOCATION.--Lat 31°29'38", long 108°30'23", Hydrologic Unit 13030201. Owner: C. C. Edwards.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 150 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,490 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4 in. pipe nipple inside pump shell, 1.45 ft above land-surface datum.
 REMARKS.--"p" indicates pumping water level.
 PERIOD OF RECORD.--Mar. 1952 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 85.11 ft below land-surface datum, Mar. 27, 1952; lowest measured, 129.10 ft below land-surface datum, Aug. 20, 1962.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	87.32
July 8	87.22

GROUND-WATER LEVELS

LEA COUNTY
Tatum-Lovington-Hobbs Area

332115103403301. Local number, 11S.32E.24.113.
 LOCATION.--Lat 33°21'15", long 103°40'33", Hydrologic Unit 12080001. Owner: Paul Hamilton.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 1/2 in., depth 110 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 4,336 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft. above land-surface datum.
 REMARKS.--Lost record, several days, due to recorder malfunction.
 PERIOD OF RECORD.--Oct. 1977 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.74 ft above land-surface datum, Oct. 3 1989; lowest measured, 62.28 ft below land-surface datum, June 6, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	61.95	61.91	61.96	62.01	62.07	62.10	62.12	62.08	62.14
10			---	61.94	61.91	61.96	61.99	62.08	62.13	62.12	62.06	62.18
15			61.93	61.94	61.91	61.98	62.03	62.09	62.18	62.13	62.05	62.20
20			61.93	61.96	61.93	61.99	62.02	62.09	62.15	62.12	62.04	62.19
25			61.94	61.95	61.94	62.00	62.04	62.10	62.14	62.11	62.05	62.21
EOM			61.94	61.93	61.95	62.00	62.07	62.11	62.12	62.10	62.09	62.23

WTR YEAR 1991 HIGHEST 61.90 DEC 16, 1991 LOWEST 62.28 JUN 6, 1991

331740103285001. Local number, 12S.34E.11.421.
 LOCATION.--Lat 33°17'22", long 103°28'50", Hydrologic Unit 12080006. Owner: A. D. Jones.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 15 in., depth 87 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,144 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.80 ft above land-surface datum.
 PERIOD OF RECORD.--May 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.57 ft below land-surface datum, May 24, 1949; lowest measured, 34.14 ft below land-surface datum, Aug. 17, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	31.30
July 29	31.57

330455103251301. Local number, 14S.35E.28.1111.
 LOCATION.--Lat 35°04'55", long 103°25'13", Hydrologic Unit 12080003. Owner: Paul Fisher.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 137 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,031 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1983 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.09 ft below land-surface datum, Jan. 6, 1982; lowest measured, 43.80 ft below land-surface datum, Sept. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 5	43.50
July 29	43.71

330400103193401. Local number, 14S.36E.32.121.
 LOCATION.--Lat 33°04'00", long 103°19'34", Hydrologic Unit 12080003. Owner: E. T. Howell.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth and casing information not available.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,990 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.50 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1949 to Jan. 1950, Jan. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.38 ft below land-surface datum, Jan. 19, 1949; lowest measured, 70.07 ft below land-surface datum, Jan. 14, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 5	66.82
July 29	67.86

GROUND-WATER LEVELS

LEA COUNTY
Tatum-Lovington-Hobbs Area

325730103213901. (formerly 325703103213201) Local number, 16S.36E.04.322.
 LOCATION.--Lat 32°57'03", long 103°21'32", Hydrologic Unit 12080003. Owner: City of Lovington.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 13 in., depth 212 ft, perforated 80-208 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,926 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelf, 4.00 ft above land-surface datum.
 REMARKS.--Lost record, several days, due to recorder malfunction.
 PERIOD OF RECORD.--Aug. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.54 ft below land-surface datum, Mar. 14, 1991; lowest measured, 67.11 ft below land-surface datum, Aug. 24, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	60.06	59.89	59.77	---	59.62	59.56	59.67	59.87	60.09	60.28	60.26	60.05
10	60.02	59.92	59.77	59.66	59.62	59.56	59.63	59.87	60.16	60.30	60.25	60.04
15	60.00	59.88	59.75	59.64	59.62	59.57	59.70	59.93	60.16	60.36	60.18	60.02
20	59.96	59.84	59.71	59.66	59.62	59.58	59.74	59.98	60.17	60.34	60.15	59.98
25	59.98	59.80	---	59.64	59.60	59.61	59.75	60.01	60.24	60.34	60.10	59.94
EQM	59.94	59.80	---	59.66	59.56	59.68	59.82	60.05	60.26	60.29	60.07	59.91

WTR YEAR 1991 HIGHEST 59.54 MAR 14, 1991 LOWEST 60.38 JUL 13, 1991

325658103200001. Local number, 16S.37E.11.111.
 LOCATION.--Lat 32°56'58", long 103°20'00", Hydrologic Unit 12080003. Owner: H. J. Taylor.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 118 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,900 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in southwest side of pump, 1.34 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.93 ft below land-surface datum, Jan. 23, 1949; lowest measured, 78.64 ft below land-surface datum, Jan. 3, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 7	65.79
July 30	66.56

324947103371001. Local number, 17S.33E.13.341.
 LOCATION.--Lat 32°49'47", long 103°37'10", Hydrologic Unit 12080003. Owner: Potash Co. of America.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 252 ft, cased to 252 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,124 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.10 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1953 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 146.00 ft below land-surface datum, Jan. 21, 1953; lowest measured, 174.79 ft below land-surface datum, Aug. 7, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	171.50
July 29	174.59

325132103112501. Local number, 17S.38E.07.111A.
 LOCATION.--Lat 32°51'32", long 103°11'25", Hydrologic Unit 12080003. Owner: L. R. Seblings.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 125 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,740 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of small pipe projecting from west side of pump, 0.95 ft above land-surface datum.
 PERIOD OF RECORD.--July 1951 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.59 ft below land-surface datum, Mar. 21, 1952; lowest measured, 74.15 ft below land-surface datum, July 22, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	66.55
July 30	66.59

GROUND-WATER LEVELS

LEA COUNTY

Tatum-Lovington Hobbs Area

324745103082001. Local number, 17S.38E.34.113.
 LOCATION.--Lat 32°47'45", long 103°08'20", Hydrologic Unit 12080003. Owner: W. E. Busby.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 125 ft, cased to 90 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,660 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Nov. 1943 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.78 ft below land-surface datum, Jan. 15, 1944; lowest measured, 63.70 ft below land-surface datum, July 30, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	62.94
July 30	63.70

LINCOLN COUNTY

Hondo Valley

333241105341101. (formerly 333242105340701) Local number, 09S.14E.10.132.
 LOCATION.--Lat 33°32'42", long 105°34'07", Hydrologic Unit 13060008. Owner: Village of Capitan.
 AQUIFER.--Mancos Shale of Late Cretaceous age.
 WELL CHARACTERISTICS.--Drilled water-table municipal well, diameter 8 in., depth 324 ft, cased to 271 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,340 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of breather hole on west side of pump base, 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--June 1955 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.34 ft below land-surface datum, Aug. 30, 1979; lowest measured, 69.77 ft below land-surface datum, Nov. 28, 1956.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 23	37.83
Aug. 15	39.44

332102105333601. (formerly 332145105333001) Local number, 11S.14E.15.432.
 LOCATION.--Lat 33°21'08", long 105°33'30", Hydrologic Unit 13060008. Owner: E. H. Fuchs.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 8 in., depth 90 ft, casing information not available.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,200 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--July 1955 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.16 ft below land-surface datum, Mar. 26, 1958; lowest measured, 63.75 ft below land-surface datum, Aug. 10, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 23	59.92
Aug. 15	63.06

332110105092501. (formerly 332157105094101) Local number, 11S.18E.15.333.
 LOCATION.--Lat 33°21'02", long 105°09'41", Hydrologic Unit 13060008. Owner: Lincoln County Livestock Co.
 AQUIFER.--Yezo formation of Permian age.
 WELL CHARACTERISTICS.--Drilled water-table domestic and stock well, diameter 12 in., depth 125 ft, cased to 110 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,989 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.50 ft above land-surface datum.
 PERIOD OF RECORD.--Oct. 1955 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.43 ft below land-surface datum, Aug. 18, 1988; lowest measured, 60.18 ft below land-surface datum, Jan. 15, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 24	49.37
Aug. 15	46.46

GROUND-WATER LEVELS

LUNA COUNTY
Nutt-Hockett

322930107221001. Local number, 21S.05W.08.444.
 LOCATION.--Lat 32°29'30", long 107°22'10", Hydrologic Unit 13030202. Owner: Leonard Farms.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 435 ft, cased to 435 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,530 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in NE side of pump shell, 1.60 ft above land-surface datum.
 PERIOD OF RECORD.--Nov. 1961 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.06 ft below land-surface datum, Jan. 17, 1962; lowest measured, 198.05 ft below land-surface datum, July 15, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 3	191.86
July 15	198.05

Mimbres Valley

321352107493901. Local number, 24S.10W.12.431.
 LOCATION.--Lat 32°13'52", long 107°49'39", Hydrologic Unit 13030202. Owner: Steve Hrna.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Dug and drilled water-table unused well, diameter 36 in., reported depth 132 ft.
 INSTRUMENTATION.--Monthly steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,330 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter shelf, 1.36 ft above land-surface datum.
 REMARKS.--Recorder removed June 30, 1986.
 PERIOD OF RECORD.--Apr. 1939 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 71.61 ft below land-surface datum, May 6-13, 1940; lowest measured, 113.30 ft below land-surface datum, Aug. 12 and 20, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	104.49	NOV 21	103.33	DEC 21	102.92	JAN 24	102.79	FEB 25	102.85	MAR 21	103.48
APR 22	104.17	MAY 21	104.99	JUNE 21	104.79	JULY 19	103.43	AUG 20	98.73	SEP 19	99.07

321415107565501. Local number, 24S.11W.14.122.
 LOCATION.--Lat 32°13'28", long 107°56'55", Hydrologic Unit 13030202. Owner: Charles Waldrop.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., reported depth 350 ft, cased to 198 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,405 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in pump base, 0.80 ft above land-surface datum.
 PERIOD OF RECORD.--July 1951 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.66 ft below land-surface datum, Jan. 23, 1952; lowest measured, 228.00 ft below land-surface datum, May 11, 1956.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	166.31
July 1	169.91

321015107260501. Local number, 25S.06W.02.111.
 LOCATION.--Lat 32°10'15", long 107°26'05", Hydrologic Unit 13030202. Owner: C. W. Johnson, Jr.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Drilled artesian irrigation well, diameter 16 in., depth 235 ft, perforated 180-235 ft, gravel packed.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,090 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
 PERIOD OF RECORD.--May 1952 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.45 ft below land-surface datum, Mar. 14, 1953; lowest measured, 117.66 ft below land-surface datum, Aug. 6, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	26.85
July 1	pumping

GROUND-WATER LEVELS

LUNA COUNTY
Mimbres Valley

320915104294501. Local number, 25S.06W.07.211.

LOCATION.--Lat 32°09'15", long 107°29'45", Hydrologic Unit 13030202. Owner: H. C. Telles.

AQUIFER.--Bolson deposits.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 230 ft, cased to 230 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,084.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in pump base, 1.20 ft above land-surface datum (since Jan. 15, 1966).

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.34 ft below land-surface datum, Mar. 14, 1953; lowest measured, 122.16 ft below land-surface datum, Aug. 13, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	84.52
July 1	84.45

315525107374501. Local number, 27S.08W.35.122.

LOCATION.--Lat 31°55'25", long 107°37'45", Hydrologic Unit 13030202. Owner: M. M. Gibson.

AQUIFER.--Bolson deposits.

WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 12 to 8 in., depth 550 ft, cased to 550 ft, perforated 155-550 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,070 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.20 ft above land-surface datum.

PERIOD OF RECORD.--July 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.84 ft below land-surface datum, Mar. 16, 1953; lowest measured, 119.34 ft below land-surface datum, Aug. 3, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	75.80
July 2	75.95

315905107425001. Local number, 27S.09W.01.431.

LOCATION.--Lat 31°59'05", long 107°42'50", Hydrologic Unit 13030202. Owner: I. G. Burns.

AQUIFER.--Valley Fill.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 62 ft, cased to 62 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,135 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of rectangular hole in pump base, 0.65 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.61 ft below land-surface datum, Jan. 19, 1954; lowest measured, 47.26 ft below land-surface datum, Aug. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	38.03
July 1	38.61

314938107371401. Local number, 28S.08W.36.411.

LOCATION.--Lat 31°49'38", long 107°37'14", Hydrologic Unit 13030202. Owner: M. R. Hemley.

AQUIFER.--Bolson deposits.

WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 250 ft, cased to 250 ft.

INSTRUMENTATION.--Periodic steel-tape measurements.

DATUM.--Elevation of land-surface datum is 4,008 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.85 ft above land-surface datum.

PERIOD OF RECORD.--Jan. 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.18 ft below land-surface datum, Aug. 2, 1983; lowest measured, 27.85 ft below land-surface datum, Jan. 14, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 2	11.16
July 1	10.99

GROUND-WATER LEVELS

MORA COUNTY
Watrous Area

354840104590301. Local number, 18N.18E.01.333.
 LOCATION.--Lat 35°48'40", long 104°59'03", Hydrologic Unit 11080004. Owner: Sellman Bros.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 14 in., depth 100 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,420 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in southeast corner of pump base, 2.00 ft above land-surface datum.
 PERIOD OF RECORD.--1976 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.21 ft below land-surface datum, July 17, 1984; lowest measured, 6.74 ft below land-surface datum, Feb. 14, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 28	6.12
July 10	2.57

OTERO COUNTY
Tularosa-Alamogordo Area

330321106011101. (formerly 330324106011201) Local number, 14S.10E.31.144.
 LOCATION.--Lat 33°03'21", long 106°01'11", Hydrologic Unit 13050003. Owner: Luther Watson.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, depth 230 ft, diameter 17 in., casing 0-130 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,450 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 1 in. hole in pump base, 0.70 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1952 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.75 ft below land-surface datum, Apr. 8, 1952; lowest measured, 134.21 ft below land-surface datum, Aug. 3, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb.	not measured
Aug. 15	91.87

Crow Flats Basin
(Salt Basin)

320657105061501. Local number, 25S.18E.21.233.
 LOCATION.--Lat 32°06'57", long 105°06'15", Hydrologic Unit 13050004. Owner: Gene Lewis.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,690 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 0.50 ft above land-surface datum.
 PERIOD OF RECORD.--Apr. 1956 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.80 ft below land-surface datum, Apr. 20, 1956; lowest measured, 101.55 ft below land-surface datum, Sep. 15, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 22	90.78
Aug. 21	92.03

320138105063101. (formerly 320650105034801) Local number, 26S.18E.21.332.
 LOCATION.--Lat 32°01'38", long 105°06'31", Hydrologic Unit 13050004. Owner: Frank Gentry.
 AQUIFER.--Bolson deposits.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., depth 544 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,655 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.08 ft below land-surface datum, Jan. 8, 1973; lowest measured, 82.94 ft below land-surface datum, Aug. 17, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 22	56.10
Aug. 21	64.46

GROUND-WATER LEVELS

QUAY COUNTY
House Area

343848103555801. Local number, 05N.28E.23.222232.
 LOCATION.--Lat 34°38'48", long 103°55'58", Hydrologic Unit 13060004. Owner: Jimmy Snipes.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table stock well, diameter 6 in., depth 93.5 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,788 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, west side, 2.00 ft above land-surface datum.
 REMARKS.--"r" indicates well pumped recently.
 PERIOD OF RECORD.--Jan. 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.88 ft below land-surface datum, Apr. 1, 1991; lowest measured, 84.22r ft below land-surface datum, Feb. 18, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Apr. 1	74.88
Sep. 17	74.92

343855103482901. (formerly 343810103463001) Local number, 05N.30E.18.331.
 LOCATION.--Lat 34°38'55", long 103°48'29", Hydrologic Unit 13060004. Owner: W. C. and H. J. Lee.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 75 ft, cased to 60 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,630 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete pump base, 0.50 ft above land-surface datum.
 PERIOD OF RECORD.--May, 1944 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.76 ft below land-surface datum, Mar. 28, 1946; lowest measured, 51.49 ft below land-surface datum, Aug. 11, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Apr. 1	47.20
Sep. 17	43.22

344406103555501. Local number, 06N.28E.13.33333.
 LOCATION.--Lat 34°44'06", long 103°55'55", Hydrologic Unit 13060004. Owner: Jack Jennings.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled domestic well, diameter 16 in., depth 131 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,816 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4 in. hole in cover plate, 0.40 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1948 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.47 ft below land-surface datum, Jan. 20, 1948; lowest measured, 119.28 ft below land-surface datum, Sep. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Apr. 1	118.85
Sep. 17	119.17

GROUND-WATER LEVELS

QUAY COUNTY
Northern High Plains

353239103111301. Local number, 15N.35E.11.22111.
 LOCATION.--Lat 35°32'39", long 103°11'13", Hydrologic Unit 11080006. Owner: J. L. Smith.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 175 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,126 ft above National Geodetic Vertical Datum of 1929. Measuring point: 2 1/2 in. hole, in east side of casing, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--July 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.59 ft below land-surface datum, July 12, 1989; lowest measured, 114.67 ft below land-surface datum, Feb. 5, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 10	90.55
Apr. 10	90.40

354238103132301. Local number, 17N.35E.16.221.
 LOCATION.--Lat 35°42'38", long 103°13'23", Hydrologic Unit 11090101. Owner: L. C. Morrison.
 AQUIFER.--Dakota formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter unknown, depth 250 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,465 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in south side of pump base, 2.00 ft. above land-surface datum.
 PERIOD OF RECORD.--Oct. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 159.30 ft below land-surface datum, Apr. 10, 1991; lowest measured, 171.59 ft below land-surface datum, Sep. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 10	159.53
Apr. 10	159.30

ROOSEVELT COUNTY
Portales Valley

341037103254501. Local number, 01S.33E.36.23111.
 LOCATION.--Lat 34°10'37", long 103°25'45", Hydrologic Unit 12050002. Owner: State of New Mexico.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 18 in., depth 105 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 4,048 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.95 ft above land-surface datum.
 REMARKS.--Records good.
 PERIOD OF RECORD.--Jan. 1952 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.19 ft below land-surface datum, Jan. 25, 1952; lowest measured, 86.42 ft below land-surface datum, Jan. 17, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	83.93	83.89	83.81	83.76	83.63	83.49	83.50	83.51	83.51	83.58	83.61	83.69
10	83.90	83.94	83.82	83.71	83.62	83.47	83.44	83.50	83.53	83.60	83.64	83.70
15	83.93	83.90	83.81	83.68	83.58	83.52	83.48	83.50	83.57	83.65	83.62	---
20	83.91	83.88	83.76	83.75	83.59	83.49	83.48	83.52	83.56	83.62	83.65	83.63
25	83.92	83.85	83.77	83.70	83.54	83.47	83.46	83.49	83.57	83.64	83.65	83.61
EOB	83.92	83.84	83.76	83.69	83.52	83.52	83.51	83.50	83.57	83.62	83.67	83.64
WTR YEAR 1991	HIGHEST	83.44	APR 10, 1991	LOWEST	84.08	OCT	4, 1991					

GROUND-WATER LEVELS

ROOSEVELT COUNTY
Portales Valley

340753103083101. Local number, 02S.36E.14.311.
 LOCATION.--Lat 34°07'53", long 103°08'31", Hydrologic Unit 12050001. Owner: Glen McAfee.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 151 ft.
 INSTRUMENTATION.--Digital recorder, 1-hour punch.
 DATUM.--Elevation of land-surface datum is 3,938 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of recorder shelter, 5.00 ft above land-surface datum.
 REMARKS.--Lost record, several days, due to recorder malfunction.
 PERIOD OF RECORD.--Jan. 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.37 ft above land-surface datum, Jan. 6, 1975; lowest measured, 79.44 ft below land-surface datum, July 25, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY HIGHEST VALUES, FROM RECORDER GRAPH

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.23	67.08	66.89	66.93	66.82	66.85	67.20	---	---	79.13	71.43	70.50
10	67.11	67.04	67.09	66.87	67.13	67.57	67.53	---	---	79.14	78.86	69.09
15	67.39	67.02	67.11	66.86	67.08	68.56	68.09	---	69.98	68.95	70.38	69.73
20	67.42	66.96	67.18	66.89	66.98	67.91	68.92	---	72.50	77.60	79.06	69.70
25	68.22	66.91	67.02	66.86	66.92	67.41	68.78	---	78.94	79.09	70.70	69.66
EQM	67.24	66.87	66.98	66.83	66.87	67.30	69.00	---	79.13	70.42	70.22	69.63

WTR YEAR 1991 HIGHEST 66.81 FEB 3, 1991 LOWEST 79.27 AUG 11, 1991

Causey-Lingo Area

335655103032001. Local number, 06S.38E.21.233.
 LOCATION.--Lat 33°47'00", long 103°03'11", Hydrologic Unit 12050001. Owner: C. C. Harvey.
 AQUIFER.--Undifferentiated Cretaceous rocks.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 140 ft, cased to 140 ft, casing slotted 100-140 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 3,939 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in. hole in north side of pump, 2.10 ft above land-surface datum.
 REMARKS.--"p" means well pumping during measurement.
 PERIOD OF RECORD.--Jan. 1956 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.18 ft below land-surface datum, Jan. 13, 1956; lowest measured, 115.21p ft below land-surface datum, Aug. 11, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 8	92.46
July 30	99.54

SANDOVAL COUNTY
Bernalillo Area

352235106282401. Local number, 13N.04E.12.112.
 LOCATION.--Lat 35°22'35", long 106°28'24", Hydrologic Unit 13020201. Owner: John Bowers.
 AQUIFER.--Valley Fill
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 50 ft, cased.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 5,117 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower inside edge of hole in south side of casing 0.45 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1976 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.57 ft below land-surface datum, July 18, 1991; lowest measured, 25.27 ft below land-surface datum, Jan. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 6	23.68
July 18	20.57

GROUND-WATER LEVELS

SANTA FE COUNTY
Estancia Valley

350534106024801. (formerly 350525106025001) Local number, 10N.08E.13.133.
 LOCATION.--Lat 35°05'34", long 106°02'48", Hydrologic Unit 13050001. Owner: W. R. Irby.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 513 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,274 ft above National Geodetic Vertical Datum of 1929. Measuring point: Lower inside edge of hole in south side of casing, 0.45 ft above land-surface datum.
 REMARKS.--"r" indicates well pumped recently. "p" indicates pumping water level.
 PERIOD OF RECORD.--Feb. 1950 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.75 ft below land-surface datum, Feb. 22, 1950; lowest measured, 181.55p ft below land-surface datum, Aug. 4, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	139.35
July 11	156.45r

350344106004601. (formerly 350340106005001) Local number, 10N.09E.29.133.
 LOCATION.--Lat 35°03'44", long 106°00'46", Hydrologic Unit 13050001. Owner: Phil Wallen.
 AQUIFER.--Glorieta Sandstone of Permian age.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 14 in., reported depth 200 ft, cased to 140 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,248 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of 3 in. pipe on north side of pump, 1.30 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.00 ft below land-surface datum, May 4, 1949; lowest measured, 124.46 ft below land-surface datum, Aug. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 11	108.75
July 11	119.76

Santa Fe Area

353636106021001. Local number, 16N.08E.13.444.
 LOCATION.--Lat 35°36'36", long 106°02'10", Hydrologic Unit 13020201. Owner: Harold Nelson.
 AQUIFER.--Tesuque Formation of Santa Fe Group.
 WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 1/2 in., depth 337 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,400 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.70 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1972 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 256.04 ft below land-surface datum, Jan. 20, 1982; lowest measured, 262.91 ft below land-surface datum, Aug. 31, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 26	262.48
Aug. 30	262.64

353735105581201. (formerly 353753105580501) Local number, 16N.09E.10.42114.
 LOCATION.--Lat 35°37'53", long 105°58'05", Hydrologic Unit 13020201. Owner: Paul Ragel.
 AQUIFER.--Ancha Formation of Santa Fe Group.
 WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in., depth 243 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,820 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1/2 in. plug in cover plate, 6.00 ft below land-surface datum.
 PERIOD OF RECORD.--Aug. 1957 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 149.52 ft below land-surface datum, Dec. 11, 1957; lowest measured, 228.62 ft below land-surface datum, Aug. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 26	226.93
Aug. 30	228.62

GROUND-WATER LEVELS

SANTA FE COUNTY
Santa Fe Area

354013105580601. (formerly 354005105574501) Local number, 17N.09E.27.441.
 LOCATION.--Lat 35°40'05", long 105°57'45", Hydrologic Unit 13020201. Owner: U.S. Indian School.
 AQUIFER.--Tesuque Formation of Santa Fe Group.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 8 in., depth 989 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,848 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.40 ft above land-surface datum.
 PERIOD OF RECORD.--Dec. 1951 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.33 ft below land-surface datum, Dec. 27, 1951; lowest measured, 223.09 ft below land-surface datum, Aug. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 26	219.64
Aug. 30	223.09

SIERRA COUNTY
Hot Springs Area

331002107150001. Local number, 13S.04W.21.213.
 LOCATION.--Lat 33°10'02", long 107°15'00", Hydrologic Unit 13030101. Owner: Unknown.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 13 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,355 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1 in. hole in west side of pump base, and 1.50 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1972 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.93 ft below land-surface datum, Aug. 15, 1991; lowest measured, 65.56 ft below land-surface datum, Feb. 25, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 19	50.28
Aug. 15	49.93

325550107184001. Local number, 15S.05W.24.312.
 LOCATION.--Lat 32°59'20", long 107°18'40", Hydrologic Unit 13030101. Owner: William M. Dawson.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth and casing information not available.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,279 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--May 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.13 ft below land-surface datum, Sep. 11, 1975; lowest measured, 41.97 ft below land-surface datum, Feb. 29, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 19	not measured
Aug. 15	35.82

Rincon Valley

325350107175501. Local number, 16S.05W.25.211.
 LOCATION.--Lat 32°53'35", long 107°17'55", Hydrologic Unit 13030102. Owner: U.S. Government.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 10 in., depth 32 ft, cased to 32 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,198 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1961 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.29 ft below land-surface datum, Feb. 12, 1987; lowest measured, 25.95 ft below land-surface datum, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 19	22.47
Aug. 15	23.07

GROUND-WATER LEVELS

TAOS COUNTY
Sunshine Valley

365035105360501. (formerly 365036105355301) Local number, 30N.13E.18.1121.
 LOCATION.--Lat 36°50'35", long 105°36'05", Hydrologic Unit 13020101. Owner: U. S. Government.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 10 in., depth 500 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 7,597 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.
 PERIOD OF RECORD.--Sep. 1973 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.52 ft below land-surface datum, Jan. 21, 1985; lowest measured, 77.33 ft below land-surface datum, Aug. 9, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 8	70.85
Aug. 9	70.88

365644105363501. (formerly 365650105370001) Local number, 01S.74W.24.244.
 LOCATION.--Lat 36°56'44", long 105°36'35", Hydrologic Unit 13020101. Owner: Dimmitt.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 270 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 7,620 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 3.00 ft above land-surface datum.
 PERIOD OF RECORD.--June 1955 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 186.79 ft below land-surface datum, Mar. 3, 1989; lowest measured, 213.53 ft below land-surface datum, Aug. 10, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 27	187.43
Aug. 9	187.80

365410105345601. (formerly 365410105354501) Local number, 02S.73W.05.244.
 LOCATION.--Lat 36°54'10", long 105°34'56", Hydrologic Unit 13020101. Owner: Unknown.
 AQUIFER.--Alluvium.
 WELL CHARACTERISTICS.--Drilled water-table domestic and stock well, diameter 6 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 7,590 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1 in. hole in plate over casing, 0.10 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 71.85 ft below land-surface datum, Aug. 9, 1991; lowest measured, 84.78 ft below land-surface datum, Jan. 27, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Feb. 8	74.30
Aug. 9	71.85

TORRANCE COUNTY
Estancia Valley

343443106024401. Local number, 04N.09E.07.334.
 LOCATION.--Lat 34°34'43", long 106°02'44", Hydrologic Unit 13050001. Owner: Franklin Development.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., reported depth 163 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,118 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in northwest side of pump base, 1.50 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1956 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.70 ft below land-surface datum, Feb. 10, 1958; lowest measured, 93.91 ft below land-surface datum, Aug. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	82.92
July 11	86.19

GROUND-WATER LEVELS

TORRANCE COUNTY
Estancia Valley

344016106070901. (formerly 344016106064701) Local number, 05N.08E.08.424.
 LOCATION.--Lat 34°40'16", long 106°07'09", Hydrologic Unit 13050001. Owner: J. J. Spangler.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., reported depth 204 ft, cased to 98 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,218 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4 in. inch plug in south side of discharge pipe, 1.80 ft above land-surface datum.
 PERIOD OF RECORD.--Mar. 1948 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.03 ft below land-surface datum, Mar. 23, 1948; lowest measured, 129.74 ft below land-surface datum, Sep. 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	123.44
July 11	not measured

344234106070601. (formerly 344234106074901) Local number, 06N.08E.32.212.
 LOCATION.--Lat 34°42'34", long 106°07'06", Hydrologic Unit 13050001. Owner: Robert McMath.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., reported depth 209 ft, cased to 84 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,174 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 1/2 in. hole in pump base, 0.04 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1947 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.22 ft below land-surface datum, Feb. 18, 1947; lowest measured, 83.51 ft below land-surface datum, Sep. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	78.49
July 11	not measured

344604105574601. (formerly 344622105575501) Local number, 06N.09E.11.211.
 LOCATION.--Lat 34°46'04", long 105°57'46", Hydrologic Unit 13050001. Owner: Paragon Corp.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 18 in., reported depth 148 ft, cased to 140 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,086 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.75 ft above land-surface datum.
 PERIOD OF RECORD.--May 1949 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.07 ft below land-surface datum, May 4, 1949; lowest measured, 28.25 ft below land-surface datum, July 19, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	14.54
July 11	27.66

345908106024901. (formerly 345900106034301) Local number, 09N.08E.24.332.
 LOCATION.--Lat 34°59'08", long 106°02'49", Hydrologic Unit 13050001. Owner: Unknown.
 AQUIFER.--Valley Fill.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., depth unknown.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,205 ft above National Geodetic Vertical Datum of 1929. Measuring point: Anchor bolt hole, northwest corner, 1.00 ft above land-surface datum.
 PERIOD OF RECORD.--Jan. 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.08 ft below land-surface datum, Jan. 30, 1980; lowest measured, 86.82 ft below land-surface datum, July 11, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Mar. 7	84.86
July 11	86.82

GROUND-WATER LEVELS

UNION COUNTY
Clayton Area

355144103041201. (formerly 360940103083501) Local number, 19N.36E.23.244.
 LOCATION.--Lat 35°51'44", long 103°04'12", Hydrologic Unit 11090102. Owner: Stevens.
 AQUIFER.--Dakota and Purgatoire formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 14 in., depth 206 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,326 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land-surface datum.
 REMARKS.--"s" indicates nearby well pumping during measurement.
 PERIOD OF RECORD.--Nov. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.22 ft below land-surface datum, Mar. 17, 1971; lowest measured, 158.58 ft below land-surface datum, Aug. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 10	148.09
Apr. 11	153.33

361847103064701. (formerly 361910103170501) Local number, 24N.36E.17.244.
 LOCATION.--Lat 36°18'47", long 103°06'47", Hydrologic Unit 11090103. Owner: Glen Burrows.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 20 in., depth 231 ft.
 INSTRUMENTATION.--Monthly steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,707 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.95 ft above land-surface datum.
 PERIOD OF RECORD.--May 1968 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.38 ft below land-surface datum, May 8, 1968; lowest measured, 95.54 ft below land-surface datum, May. 23, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 25	95.35
May 23	95.54

362540103095001. Local number, 25N.35E.02.441.
 LOCATION.--Lat 36°25'40", long 103°10'02", Hydrologic Unit 11090103. Owner: Bill Winchester.
 AQUIFER.--Ogallala formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter unknown, depth 185 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,984 ft above National Geodetic Vertical Datum of 1929. Measuring point: Plugged hole in pump base, 1.70 ft above land-surface datum.
 PERIOD OF RECORD.--Dec. 1965 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 91.14 ft below land-surface datum, Jan. 9, 1989; lowest measured, 106.85 ft below land-surface datum, Feb. 2, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 10	91.97
July 2	93.20

GROUND-WATER LEVELS

UNION COUNTY
Clayton Area

363410103064801. Local number, 27N.36E.17.434.
 LOCATION.--Lat 36°34'10", long 103°06'48", Hydrologic Unit 11100101. Owner: Paul Carter.
 AQUIFER.--Ogalalla formation.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 200 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 4,837 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, north side, 1.20 ft above land-surface datum.
 PERIOD OF RECORD.--Feb. 1967 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.16 ft below land-surface datum, Jan. 21, 1975; lowest measured, 93.92 ft below land-surface datum, Feb. 20, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 23	89.80
July 2	90.13

Capulin Area

364444104000201. (formerly 364430103595501) Local number, 29N.28E.18.341.
 LOCATION.--Lat 36°44'44", long 104°00'02", Hydrologic Unit 11040001. Owner: City of Raton.
 AQUIFER.--Cinders.
 WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 16 in., depth 78 ft.
 INSTRUMENTATION.--Periodic steel-tape measurements.
 DATUM.--Elevation of land-surface datum is 6,820.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Edge of 2 in. hole in west side of steel plate, at land-surface datum.
 REMARKS.--"p" indicates well pumping during measurement.
 PERIOD OF RECORD.--July 1951, Aug. 1958 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.01 ft below land-surface datum, Feb. 8, 1974; lowest measured, 53.38p ft below land-surface datum, Aug. 7, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL
Jan. 8	34.17
July 1	34.05

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE) U-UPPER, M-MIDDLE, L-LOWER: 000 EXRV-UNKNOWN, Extrusive rocks; 110 AVMB-Cenozoic, Quaternary, Alluvium, bolson deposits and other surface deposits; 110 BLSN-Cenozoic, Quaternary, bolson fill; 122 SNTFL-Cenozoic, Tertiary, Miocene, Santa Fe Group, lower part; 210-MNCS-Mesozoic, Cretaceous, Mancos Shale; 325 MDER-Paleozoic, Middle Pennsylvanian, Des Moinesian, Madera Limestone; 325 MDERU-Paleozoic, Middle Pennsylvanian; Des Moinesian, Madera Limestone, Upper arkosic limestone member; 400 PCMB-Paleozoic, Precambrian, Precambrian Erathem.

REMARKS.--Ground water sites in this table are segregated by county, which appear alphabetically. The sites are then listed in ascending local indentifiers.

BERNALILLO COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
08N.07E.29.324A DOW	345319106135101	001	BERNALILLO	GW	10-11-90	1022	325MDER	27.50	100.00
		001		GW	11-14-90	1050	325MDER	26.29	100.00
		001		GW	12-14-90	1020	325MDER	26.00	100.00
		001		GW	01-09-91	0949	325MDER	25.51	100.00
		001		GW	02-15-91	1113	325MDER	25.72	100.00
		001		GW	03-15-91	1300	325MDER	--	100.00
		001		GW	04-18-91	1318	325MDER	26.27	100.00
		001		GW	05-15-91	1144	325MDER	28.21	100.00
		001		GW	06-20-91	0902	325MDER	32.38	100.00
		001		GW	07-15-91	1320	325MDER	36.59	100.00
		001		GW	08-13-91	0920	325MDER	28.93	100.00
		001		GW	09-12-91	1046	325MDER	23.08	100.00
		001		GW	10-15-90	1008		32.03	--
		001		GW	11-15-90	0916		33.00	--
		001		GW	12-12-90	1220		32.15	--
09N.05E.12.241 STANTON	350119106210901	001	BERNALILLO	GW	01-18-91	0815		31.60	--
		001		GW	02-22-91	0827		31.54	--
		001		GW	03-13-91	1030		31.40	--
		001		GW	04-16-91	1016		31.91	--
		001		GW	05-15-91	1001		32.04	--
		001		GW	06-19-91	1228		32.16	--
		001		GW	07-12-91	0843		32.15	--
		001		GW	08-15-91	1235		30.77	--
		001		GW	09-20-91	1407		31.08	--
		001		GW	10-15-90	1204	325MDER	--	680.00
		001		GW	11-15-90	1115	325MDER	423.00	680.00
		001		GW	12-18-90	1150	325MDER	--	680.00
		001		GW	01-09-91	1440	325MDER	--	680.00
		001		GW	02-21-91	1115	325MDER	424.18	680.00
		001		GW	03-13-91	1313	325MDER	447.83	680.00
09N.06E.19.413 CLAYTON	345918106202001	001	BERNALILLO	GW	04-16-91	1234	325MDER	431.96	680.00
		001		GW	05-17-91	1312	325MDER	--	680.00
		001		GW	06-20-91	1209	325MDER	--	680.00
		001		GW	07-17-91	1145	325MDER	--	680.00
		001		GW	08-15-91	1540	325MDER	464.79	680.00
		001		GW	09-20-91	1005	325MDER	438.34	680.00
		001		GW	10-11-90	1352	325MDERU	31.13	100.00
		001		GW	11-14-90	1425	325MDERU	31.49	100.00
		001		GW	12-14-90	1350	325MDERU	31.40	100.00
		001		GW	01-09-91	1328	325MDERU	31.03	100.00
		001		GW	02-15-91	1358	325MDERU	30.04	100.00
		001		GW	03-15-91	1015	325MDERU	28.24	100.00
		001		GW	04-16-91	1516	325MDERU	28.31	100.00
		001		GW	05-17-91	1113	325MDERU	28.97	100.00
		001		GW	06-21-91	1320	325MDERU	29.68	100.00
09N.06E.20.333 BUSTER	345858106194601	001	BERNALILLO	GW	07-17-91	1350	325MDERU	30.18	100.00
		001		GW	08-13-91	1235	325MDERU	27.46	100.00
		001		GW	09-20-91	1205	325MDERU	26.06	100.00
		001		GW	10-11-90	1210	325MDER	156.00	315.00
		001		GW	11-14-90	1258	325MDER	157.44	315.00
		001		GW	12-14-90	1215	325MDER	159.00	315.00
		001		GW	01-09-91	1158	325MDER	159.38	315.00
		001		GW	02-15-91	1245	325MDER	182.00	315.00
		001		GW	03-13-91	1600	325MDER	160.44	315.00
		001		GW	04-16-91	1659	325MDER	161.53	315.00
		001		GW	05-15-91	1342	325MDER	160.00	315.00
		001		GW	06-20-91	1056	325MDER	163.71	315.00
		001		GW	07-16-91	1222	325MDER	165.04	315.00
		001		GW	08-13-91	1450	325MDER	150.32	315.00
		001		GW	09-12-91	1247	325MDER	143.21	315.00
09N.06E.29.244 MOSIER	345833106185101	001	BERNALILLO	GW	10-11-90	1210	325MDER	156.00	315.00
		001		GW	11-14-90	1258	325MDER	157.44	315.00
		001		GW	12-14-90	1215	325MDER	159.00	315.00
		001		GW	01-09-91	1158	325MDER	159.38	315.00
		001		GW	02-15-91	1245	325MDER	182.00	315.00
		001		GW	03-13-91	1600	325MDER	160.44	315.00
		001		GW	04-16-91	1659	325MDER	161.53	315.00
		001		GW	05-15-91	1342	325MDER	160.00	315.00
		001		GW	06-20-91	1056	325MDER	163.71	315.00
		001		GW	07-16-91	1222	325MDER	165.04	315.00
		001		GW	08-13-91	1450	325MDER	150.32	315.00
		001		GW	09-12-91	1247	325MDER	143.21	315.00

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
08N.07E.29.324A DO	10-11-90	6790	10	3.0	690	7.4	17.0	13.0	--
	11-14-90	6790	10	2.5	720	7.4	19.0	12.0	--
	12-14-90	6790	8	3.0	690	7.3	--	12.5	--
	01-09-91	6790	10	2.0	760	7.3	13.5	13.5	--
	02-15-91	6790	10	2.0	740	7.3	12.0	10.5	--
	03-15-91	6790	18	6.0	730	7.2	5.5	12.0	--
	04-18-91	6790	10	6.0	818	7.2	18.5	13.0	--
	05-15-91	6790	10	2.0	700	7.3	15.5	13.0	--
	06-20-91	6790	10	2.0	710	7.3	16.0	14.5	--
	07-15-91	6790	13	2.0	710	7.3	28.0	13.5	--
	08-13-91	6790	--	3.0	730	7.3	24.5	15.0	--
	09-12-91	6790	10	3.0	900	7.3	--	13.5	--
	10-15-90	7060	10	4.0	1090	7.1	20.0	11.5	--
	11-15-90	7060	3	4.0	1130	7.1	13.5	11.0	--
	12-12-90	7060	10	6.0	1170	7.5	--	12.0	--
09N.05E.12.241 STA	01-18-91	7060	5	6.0	1100	7.1	-15.0	--	--
	02-22-91	7060	6	6.0	1030	7.1	5.0	11.5	--
	03-13-91	7060	15	5.0	1180	7.3	11.0	12.0	--
	04-16-91	7060	60	12	1260	7.1	14.5	11.5	--
	05-15-91	7060	4	3.0	1110	7.1	15.0	12.5	--
	06-19-91	7060	10	6.0	1180	7.1	24.5	11.5	--
	07-12-91	7060	10	6.0	1180	7.1	19.5	11.0	--
	08-15-91	7060	15	3.0	1010	7.1	23.5	11.5	--
	09-20-91	7060	10	6.0	1100	7.2	15.5	11.5	--
	10-15-90	7660	5	6.0	705	8.2	21.0	15.0	--
	11-15-90	7660	4	6.0	780	8.2	13.5	12.5	--
	12-18-90	7660	7	6.0	690	8.2	2.0	14.5	--
	01-09-91	7660	2	6.0	720	8.1	4.0	16.0	--
	02-21-91	7660	3	8.0	710	8.2	8.0	14.5	--
	03-13-91	7660	10	8.0	730	8.1	10.0	14.0	398
09N.06E.19.413 CLA	04-16-91	7660	10	10	737	8.0	19.0	15.5	403
	05-17-91	7660	5	4.0	720	8.1	26.0	14.5	--
	06-20-91	7660	4	6.0	725	8.2	20.5	13.5	--
	07-17-91	7660	4	5.5	725	8.1	24.0	15.5	--
	08-15-91	7660	15	3.0	730	8.1	26.0	14.0	--
	09-20-91	7660	5	8.0	715	8.1	8.5	14.5	--
	10-11-90	7490	10	6.0	1110	7.1	16.0	10.0	--
	11-14-90	7490	12	4.0	1110	7.1	15.0	10.0	--
	12-14-90	7490	10	5.0	1110	7.1	6.5	10.0	--
	01-09-91	7490	11	4.0	1170	7.2	3.0	12.5	--
	02-15-91	7490	7	2.0	1190	7.0	11.5	10.0	--
	03-15-91	7490	15	10	1110	7.2	0.0	10.5	--
	04-16-91	7490	12	10	1250	7.0	19.0	11.0	--
	05-17-91	7490	12	3.0	1200	7.1	21.0	10.5	--
	06-21-91	7490	10	5.0	1200	7.1	--	11.0	--
09N.06E.20.333 BUS	07-17-91	7490	10	5.0	1120	7.1	25.5	11.0	--
	08-13-91	7490	--	4.0	1020	7.0	23.0	11.0	--
	09-20-91	7490	7	5.0	815	7.1	13.5	10.5	--
	10-11-90	7420	10	5.0	1120	7.2	14.5	12.0	--
	11-14-90	7420	10	4.0	1100	7.2	16.0	13.0	--
	12-14-90	7420	13	5.0	1030	7.2	--	12.5	--
	01-09-91	7420	11	4.0	1060	7.2	2.0	15.0	--
	02-15-91	7420	4	6.0	1020	7.3	--	12.0	--
	03-13-91	7420	10	12	2220	7.1	12.5	13.0	--
	04-16-91	7420	14	12	961	7.3	18.5	13.5	--
	05-15-91	7420	12	4.0	1190	7.3	18.0	13.0	--
	06-20-91	7420	12	3.5	990	7.4	17.0	13.5	--
	07-16-91	7420	10	3.0	1080	7.5	21.0	13.0	--
	08-13-91	7420	--	6.0	2390	7.1	25.5	13.0	--
	09-12-91	7420	12	6.0	2400	7.2	--	13.0	--
09N.06E.29.244 MOS	10-11-90	7420	10	5.0	1120	7.2	14.5	12.0	--
	11-14-90	7420	10	4.0	1100	7.2	16.0	13.0	--
	12-14-90	7420	13	5.0	1030	7.2	--	12.5	--
	01-09-91	7420	11	4.0	1060	7.2	2.0	15.0	--
	02-15-91	7420	4	6.0	1020	7.3	--	12.0	--
	03-13-91	7420	10	12	2220	7.1	12.5	13.0	--
	04-16-91	7420	14	12	961	7.3	18.5	13.5	--
	05-15-91	7420	12	4.0	1190	7.3	18.0	13.0	--
	06-20-91	7420	12	3.5	990	7.4	17.0	13.5	--
	07-16-91	7420	10	3.0	1080	7.5	21.0	13.0	--
	08-13-91	7420	--	6.0	2390	7.1	25.5	13.0	--
	09-12-91	7420	12	6.0	2400	7.2	--	13.0	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
08N.07E.29.324A DO	10-11-90	--	--	40	24	<0.10	--	<0.010	1.90
	11-14-90	--	--	39	23	<0.10	--	<0.010	1.80
	12-14-90	--	--	39	28	0.60	--	<0.010	1.80
	01-09-91	--	--	46	29	0.30	2.29	0.010	2.30
	02-15-91	--	--	42	29	0.20	--	<0.010	2.50
	03-15-91	--	--	--	37	--	2.09	0.010	2.10
	04-18-91	--	--	--	42	--	--	<0.010	2.20
	05-15-91	--	--	--	31	--	--	<0.010	2.40
	06-20-91	--	--	--	33	--	--	<0.010	2.20
	07-15-91	--	--	--	28	--	--	<0.010	2.30
	08-13-91	--	--	--	28	--	--	<0.010	2.50
	09-12-91	--	--	--	28	--	--	<0.010	5.10
	10-15-90	--	--	51	140	0.30	--	<0.010	4.00
	11-15-90	--	--	54	140	0.20	--	<0.010	3.70
	12-12-90	--	--	54	140	0.20	--	<0.010	3.90
09N.05E.12.241 STA	01-18-91	--	--	49	160	0.30	--	<0.010	4.10
	02-22-91	--	--	51	140	0.40	--	<0.010	3.70
	03-13-91	--	--	--	170	--	--	<0.010	5.30
	04-16-91	--	--	--	140	--	--	<0.010	5.20
	05-15-91	--	--	--	170	--	4.89	0.010	4.90
	06-19-91	--	--	--	170	--	--	<0.010	5.00
	07-12-91	--	--	--	170	--	--	<0.010	5.20
	08-15-91	--	--	--	130	--	--	<0.010	6.80
	09-20-91	--	--	--	130	--	--	<0.010	5.50
	10-15-90	--	--	20	27	4.2	--	<0.010	<0.100
	11-15-90	--	--	30	39	5.9	--	<0.010	<0.100
	12-18-90	--	--	18	27	3.9	--	<0.010	<0.100
	01-09-91	--	--	30	29	4.6	--	<0.010	<0.100
	02-21-91	--	--	25	29	4.7	--	<0.010	<0.100
	03-13-91	0	326	--	35	--	0.050	0.010	0.060
09N.06E.19.413 CLA	04-16-91	0	330	--	28	--	--	<0.010	<0.050
	05-17-91	--	--	--	22	--	0.024	0.040	0.064
	06-20-91	--	--	--	35	--	--	0.010	<0.050
	07-17-91	--	--	--	32	--	--	<0.010	<0.050
	08-15-91	--	--	--	30	--	--	<0.010	<0.050
	09-20-91	--	--	--	30	--	--	<0.010	<0.050
	10-11-90	--	--	52	190	<0.10	--	<0.010	8.80
	11-14-90	--	--	50	170	0.20	--	<0.010	7.40
	12-14-90	--	--	51	180	0.40	--	<0.010	8.50
	01-09-91	--	--	46	190	0.30	--	<0.010	1.80
	02-15-91	--	--	47	190	0.30	--	<0.010	11.0
	03-15-91	--	--	--	170	--	7.09	0.010	7.10
	04-16-91	--	--	--	170	--	--	<0.010	10.0
	05-17-91	--	--	--	52	--	13.0	0.020	13.0
	06-21-91	--	--	--	19	--	--	<0.010	5.50
09N.06E.20.333 BUS	07-17-91	--	--	--	180	--	--	<0.010	11.0
	08-13-91	--	--	--	160	--	--	<0.010	3.30
	09-20-91	--	--	--	69	--	--	<0.010	1.20
	10-11-90	--	--	110	140	0.90	--	<0.010	2.20
	11-14-90	--	--	110	130	1.2	--	<0.010	2.10
	12-14-90	--	--	110	130	1.2	--	<0.010	1.60
	01-09-91	--	--	46	14	0.70	0.390	0.010	0.400
	02-15-91	--	--	86	110	1.9	0.480	0.020	0.500
	03-13-91	--	--	--	340	--	--	<0.010	1.20
	04-16-91	--	--	--	82	--	--	<0.010	0.950
	05-15-91	--	--	--	130	--	0.230	0.030	0.260
	06-20-91	--	--	--	110	--	0.330	0.050	0.380
	07-16-91	--	--	--	120	--	0.120	0.030	0.150
	08-13-91	--	--	--	340	--	--	<0.010	6.00
	09-12-91	--	--	--	350	--	--	<0.010	6.70
09N.06E.29.244 MOS	10-11-90	--	--	110	140	0.90	--	<0.010	2.20
	11-14-90	--	--	110	130	1.2	--	<0.010	2.10
	12-14-90	--	--	110	130	1.2	--	<0.010	1.60
	01-09-91	--	--	46	14	0.70	0.390	0.010	0.400
	02-15-91	--	--	86	110	1.9	0.480	0.020	0.500
	03-13-91	--	--	--	340	--	--	<0.010	1.20
	04-16-91	--	--	--	82	--	--	<0.010	0.950
	05-15-91	--	--	--	130	--	0.230	0.030	0.260
	06-20-91	--	--	--	110	--	0.330	0.050	0.380
	07-16-91	--	--	--	120	--	0.120	0.030	0.150
	08-13-91	--	--	--	340	--	--	<0.010	6.00
	09-12-91	--	--	--	350	--	--	<0.010	6.70

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
08N.07E.29.324A DO	10-11-90	<0.010	--	2.3	0.020	1.9	40	<10	0.06
	11-14-90	<0.010	--	--	<0.010	2.0	50	<10	0.04
	12-14-90	0.010	--	--	0.020	1.7	50	<10	0.03
	01-09-91	0.010	0.29	2.6	0.010	1.8	50	<10	<0.04
	02-15-91	<0.010	--	2.8	0.020	1.6	50	20	0.03
	03-15-91	0.020	--	--	0.030	1.7	50	10	0.06
	04-18-91	<0.010	--	2.4	0.010	1.6	50	20	0.07
	05-15-91	<0.010	--	--	0.020	1.9	40	10	0.04
	06-20-91	0.020	0.28	2.5	<0.010	1.6	40	20	0.03
	07-15-91	0.070	0.53	2.9	0.020	1.3	40	10	0.03
	08-13-91	<0.010	--	2.7	0.020	1.9	40	10	0.03
	09-12-91	<0.010	--	5.7	0.040	2.7	70	<10	0.07
	10-15-90	<0.010	--	4.8	<0.010	1.6	50	20	0.08
	11-15-90	<0.010	--	4.2	<0.010	2.0	50	<10	0.07
	12-12-90	0.020	0.48	4.4	0.010	2.2	50	<10	0.07
	01-18-91	<0.010	--	4.9	<0.010	1.9	50	<10	<0.09
09N.05E.12.241 STA	02-22-91	<0.010	--	4.2	<0.010	1.9	40	10	0.06
	03-13-91	0.050	0.45	5.8	<0.010	2.4	50	<10	0.09
	04-16-91	<0.010	--	5.5	<0.010	1.6	50	20	0.11
	05-15-91	0.010	0.39	5.3	0.020	1.8	40	<10	0.07
	06-19-91	0.020	0.38	5.4	0.010	2.0	50	30	0.08
	07-12-91	0.050	0.45	5.7	0.020	1.7	40	<10	0.08
	08-15-91	0.010	0.49	7.3	0.020	2.1	50	30	0.08
	09-20-91	<0.010	--	6.1	0.010	1.8	40	10	0.09
	10-15-90	0.030	0.37	--	<0.010	0.4	280	10	0.01
	11-15-90	<0.010	--	--	0.020	0.8	280	<10	0.03
	12-18-90	0.050	--	--	<0.010	0.5	280	<10	0.01
	01-09-91	0.060	--	--	<0.010	0.6	270	<10	<0.02
	02-21-91	0.040	--	--	0.020	0.3	270	10	<0.01
	03-13-91	0.070	--	--	<0.010	0.5	260	20	0.01
	04-16-91	0.040	0.76	--	<0.010	0.6	280	20	0.03
	05-17-91	0.030	0.27	0.36	0.040	0.5	280	10	0.01
09N.06E.19.413 CLA	06-20-91	0.010	--	--	0.010	0.7	270	20	0.01
	07-17-91	0.040	0.16	--	0.010	0.4	270	20	0.01
	08-15-91	0.080	--	--	<0.010	0.6	270	40	0.03
	09-20-91	0.050	--	--	<0.010	0.6	270	20	0.02
	10-11-90	<0.010	--	10	0.030	3.7	30	20	0.12
	11-14-90	<0.010	--	8.0	0.020	3.3	30	<10	0.11
	12-14-90	0.020	0.58	9.1	0.040	3.4	40	<10	0.13
	01-09-91	<0.010	--	2.7	0.020	3.3	30	<10	<0.13
	02-15-91	<0.010	--	12	0.020	3.1	40	10	0.12
	03-15-91	0.040	0.56	7.7	0.030	2.8	30	<10	0.11
	04-16-91	<0.010	--	--	0.020	3.3	30	10	0.15
	05-17-91	0.020	1.1	14	0.080	3.0	40	20	0.11
	06-21-91	<0.010	--	6.1	0.020	3.6	50	<10	0.76
	07-17-91	<0.010	--	12	0.030	3.1	40	10	0.11
	08-13-91	<0.010	--	3.8	0.040	3.0	30	<10	0.07
	09-20-91	<0.010	--	1.4	0.030	2.2	20	<10	0.05
09N.06E.29.244 MOS	10-11-90	<0.010	--	2.9	0.020	3.4	130	10	0.07
	11-14-90	<0.010	--	2.5	<0.010	3.3	140	10	0.07
	12-14-90	0.030	0.27	1.9	<0.010	3.0	150	30	0.05
	01-09-91	0.020	0.38	0.80	<0.010	0.3	630	<10	<0.02
	02-15-91	<0.010	--	--	<0.010	2.5	200	180	0.04
	03-13-91	<0.010	--	1.8	0.010	9.5	90	20	0.12
	04-16-91	0.010	0.89	1.8	0.010	2.3	190	30	0.06
	05-15-91	0.020	--	--	0.010	2.9	200	240	0.04
	06-20-91	0.030	0.27	0.68	<0.010	2.7	200	80	0.03
	07-16-91	0.090	--	--	0.020	1.9	210	160	0.02
	08-13-91	0.020	0.88	6.9	0.050	15	30	30	0.15
	09-12-91	0.020	1.7	8.4	0.050	13	30	70	0.16

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
10N 06E 07 331A SANDIA WE	350604106204801	001		GW	04-19-91	1500		31.37	--	--
10N 06E 07 331B FRANKEN	350605106204901	001		GW	04-19-91	1720		35.28	--	--
10N.05E.02.233A SOUTHWICK	350721106222101	001		GW	10-18-90	1025		47.59	200.00	6765
		001		GW	11-26-90	0828		39.65	200.00	6765
		001		GW	12-17-90	1403		37.47	200.00	6765
		001		GW	01-10-91	1302		35.24	200.00	6765
		001		GW	02-20-91	1053		36.75	200.00	6765
		001		GW	03-21-91	1350		34.89	200.00	6765
		001		GW	04-17-91	1230		31.81	200.00	6765
		001		GW	05-14-91	0823		31.77	200.00	6765
		001		GW	06-18-91	0835		31.92	200.00	6765
		001		GW	07-16-91	0820		33.63	200.00	6765
		001		GW	08-20-91	0820		56.92	200.00	6765
		001		GW	09-18-91	0810		88.07	200.00	6765
10N.05E.11.324 CUSHING	350615106223301	001		GW	10-10-90	1301	210MNCS	16.00	80.00	6580
		001		GW	11-13-90	1201	210MNCS	15.12	80.00	6580
		001		GW	12-19-90	1350	210MNCS	14.02	80.00	6580
		001		GW	01-10-91	1448	210MNCS	13.50	80.00	6580
		001		GW	02-14-91	1605	210MNCS	13.02	80.00	6580
		001		GW	03-21-91	1600	210MNCS	12.82	80.00	6580
		001		GW	04-15-91	1615	210MNCS	13.36	80.00	6580
		001		GW	05-06-91	1355	210MNCS	13.60	80.00	6580
		001		GW	06-12-91	1350	210MNCS	14.30	80.00	6580
		001		GW	07-11-91	1138	210MNCS	16.37	80.00	6580
		001		GW	08-20-91	1220	210MNCS	13.70	80.00	6580
		001		GW	09-13-91	1310	210MNCS	14.00	80.00	6580
10N.05E.14.312 AESCHLIMEN	350531106224301	001		GW	10-17-90	1147		40.94	160.00	6540
		001		GW	11-13-90	1400		40.29	160.00	6540
		001		GW	12-20-90	1350		39.23	160.00	6540
		001		GW	01-14-91	1250		38.70	160.00	6540
		001		GW	02-21-91	1543		38.32	160.00	6540
		001		GW	03-20-91	1640		38.11	160.00	6540
		001		GW	04-10-91	1650		38.74	160.00	6540
		001		GW	05-16-91	1343		41.09	160.00	6540
		001		GW	06-17-91	1326		43.54	160.00	6540
		001		GW	07-11-91	1321		45.31	160.00	6540
		001		GW	08-21-91	1300		40.65	160.00	6540
		001		GW	09-16-91	1325		40.00	160.00	6540
10N.05E.14.413A CZERNY	350522106222501	001		GW	10-16-90	0950		29.40	73.00	6400
		001		GW	11-13-90	1007		30.46	73.00	6400
		001		GW	12-17-90	1207		29.52	73.00	6400
		001		GW	01-07-91	1017		28.34	73.00	6400
		001		GW	02-28-91	1028		26.96	73.00	6400
		001		GW	03-18-91	1510		27.35	73.00	6400
		001		GW	04-15-91	1415		27.56	73.00	6400
		001		GW	05-13-91	1231		28.76	73.00	6400
		001		GW	06-19-91	1358		29.61	73.00	6400
		001		GW	07-15-91	1154		29.84	73.00	6400
		001		GW	08-16-91	1255		--	73.00	6400
		001		GW	09-23-91	1411		24.00	73.00	6400
10N.05E.19.322 LEIB	350423106263301	001		GW	10-15-90	1402	110AVMB	42.70	146.00	6255
		001		GW	11-19-90	1352	110AVMB	--	146.00	6255
		001		GW	12-20-90	1040	110AVMB	42.35	146.00	6255
		001		GW	01-08-91	1530	110AVMB	42.22	146.00	6255
		001		GW	02-19-91	1412	110AVMB	42.21	146.00	6255
		001		GW	03-12-91	1620	110AVMB	42.43	146.00	6255
		001		GW	04-10-91	1410	110AVMB	42.24	146.00	6255
		001		GW	05-20-91	1132	110AVMB	43.00	146.00	6255
		001		GW	06-14-91	1135	110AVMB	42.90	146.00	6255
		001		GW	07-09-91	1055	110AVMB	43.25	146.00	6255

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BICAR- BONATE WATER DIS IT FIELD HCO3 MG/L AS (00453)	CAR- BONATE WATER DIS IT FIELD CO3 MG/L AS (00452)
10N 06E 07 331A S	04-19-91	13	2.3	1180	7.1	18.0	12.5	--	--
10N 06E 07 331B F	04-19-91	20	4.0	1370	7.3	18.0	14.0	--	--
10N.05E.02.233A SO	10-18-90	4	6.0	705	9.4	14.0	14.0	--	--
	11-26-90	5	8.0	700	9.5	5.5	12.5	--	--
	12-17-90	3	5.0	715	9.3	2.5	14.5	--	--
	01-10-91	3	6.0	710	9.4	4.0	13.5	--	--
	02-20-91	6	7.0	694	9.5	8.0	14.0	--	--
	03-21-91	12	6.0	720	9.4	6.5	13.5	268	67
	04-17-91	10	6.0	739	9.2	16.5	14.5	288	50
	05-14-91	4	4.0	810	9.4	19.0	14.0	--	--
	06-18-91	5	6.0	730	9.4	26.0	13.5	--	--
	07-16-91	5	4.0	720	9.4	18.5	14.0	--	--
	08-20-91	10	6.0	710	9.3	20.0	14.0	--	--
	09-18-91	5	6.0	710	9.3	12.5	13.5	--	--
10N.05E.11.324 CUS	10-10-90	--	--	720	7.4	14.0	15.0	--	--
	11-13-90	--	3.0	780	7.4	18.5	13.0	--	--
	12-19-90	5	3.0	820	7.4	9.5	13.5	--	--
	01-10-91	6	2.0	810	7.4	--	14.5	--	--
	02-14-91	4	2.0	792	7.3	--	12.5	--	--
	03-21-91	10	2.0	790	7.4	3.5	12.5	--	--
	04-15-91	10	4.0	827	7.3	20.0	13.0	--	--
	05-06-91	1	2.0	800	7.2	25.5	14.5	--	--
	06-12-91	6	5.0	770	7.4	--	14.5	--	--
	07-11-91	8	3.0	760	7.4	25.5	14.5	--	--
	08-20-91	12	2.0	720	7.4	24.5	15.5	--	--
	09-13-91	10	3.0	730	7.4	--	15.0	--	--
10N.05E.14.312 AES	10-17-90	9	4.0	920	7.2	19.0	14.0	--	--
	11-13-90	10	3.5	970	7.2	14.0	14.0	--	--
	12-20-90	5	6.0	990	7.2	6.5	14.0	--	--
	01-14-91	10	5.0	1020	7.2	4.0	13.5	--	--
	02-21-91	8	5.0	990	7.1	11.5	14.0	--	--
	03-20-91	20	6.0	990	7.2	7.0	13.5	--	--
	04-10-91	19	4.5	1030	7.2	20.5	14.0	--	--
	05-16-91	9	4.0	910	7.2	25.0	14.5	--	--
	06-17-91	12	5.0	980	7.2	29.0	14.5	--	--
	07-11-91	10	4.0	980	7.1	26.5	14.5	--	--
	08-21-91	10	4.0	990	7.2	30.0	14.5	--	--
	09-16-91	10	4.0	990	7.1	24.0	14.5	--	--
10N.05E.14.413A CZ	10-16-90	10	5.0	1120	7.3	16.5	13.5	--	--
	11-13-90	5	2.0	1130	7.4	13.0	12.0	--	--
	12-17-90	10	3.0	1200	7.5	1.0	11.0	--	--
	01-07-91	7	3.0	1160	7.4	--	13.5	--	--
	02-28-91	20	--	1230	7.4	9.0	12.5	--	--
	03-18-91	20	8.0	1220	7.3	16.5	13.0	--	--
	04-15-91	18	8.0	1250	7.2	17.0	13.0	--	--
	05-13-91	5	3.0	1280	7.3	25.0	13.5	--	--
	06-19-91	5	3.0	1240	7.3	14.0	14.0	--	--
	07-15-91	11	5.0	1220	7.3	24.0	13.5	--	--
	08-16-91	10	3.0	1300	7.3	28.0	14.0	--	--
	09-23-91	14	6.0	1320	7.3	22.5	13.5	--	--
10N.05E.19.322 LEI	10-15-90	10	5.0	560	7.6	24.5	16.5	--	--
	11-19-90	12	4.0	570	7.6	18.5	16.0	--	--
	12-20-90	11	1.5	580	7.7	5.0	16.5	--	--
	01-08-91	12	4.0	540	7.6	10.5	18.0	--	--
	02-19-91	8	4.5	555	7.7	5.5	16.5	--	--
	03-12-91	20	4.0	570	7.6	11.0	17.0	--	--
	04-10-91	17	12	579	7.6	22.5	17.0	--	--
	05-20-91	8	3.0	550	7.3	18.5	16.5	--	--
	06-14-91	6	4.0	540	7.7	25.5	16.5	--	--
	07-09-91	15	4.0	560	7.6	30.0	17.0	--	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRATE (MG/L AS N) (00620)	NITRO- GEN, NITRITE (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
10N 06E 07 331A S	04-19-91	--	--	--	--	--	<0.010	1.10	1.20
10N 06E 07 331B F	04-19-91	--	--	--	--	--	<0.010	11.0	1.10
10N.05E.02.233A SO	10-18-91	322	39	13	0.90	0.290	0.010	0.300	--
	11-26-90	320	42	14	0.90	0.280	0.020	0.300	--
	12-17-90	322	44	63	1.2	0.280	0.020	0.300	--
	01-10-91	322	98	--	1.7	--	<0.010	1.60	--
	02-20-91	322	40	14	0.80	0.290	0.010	0.300	--
	03-21-91	332	--	13	--	0.280	0.030	0.310	--
	04-17-91	320	--	14	--	0.270	0.020	0.290	--
	05-14-91	320	--	16	--	0.230	0.020	0.250	--
	06-18-91	320	--	16	--	0.190	0.020	0.210	--
	07-16-91	322	--	13	--	0.200	0.030	0.230	--
	08-20-91	322	--	15	--	0.200	0.040	0.240	--
	09-18-91	315	--	14	--	0.460	0.030	0.490	--
10N.05E.11.324 CUS	10-10-90	--	62	18	<0.10	--	<0.010	1.30	--
	11-13-90	--	65	17	0.10	--	<0.010	2.40	--
	12-19-90	--	48	24	0.30	--	<0.010	4.60	--
	01-10-91	--	82	23	0.20	--	<0.010	5.30	--
	02-14-91	--	85	19	0.30	--	<0.010	4.70	--
	03-21-91	--	--	15	--	--	<0.010	3.10	--
	04-15-91	--	--	14	--	--	<0.010	3.50	--
	05-06-91	--	--	16	--	--	<0.010	3.40	--
	06-12-91	--	--	16	--	--	<0.010	2.80	--
	07-11-91	--	--	13	--	--	<0.010	1.80	--
	08-20-91	--	--	15	--	--	<0.010	1.40	--
	09-13-91	--	--	24	--	--	<0.010	2.6	--
10N.05E.14.312 AES	10-17-90	--	170	63	0.20	--	<0.010	<0.100	--
	11-13-90	--	180	62	0.20	--	<0.010	<0.100	--
	12-20-90	--	200	67	0.40	--	<0.010	<0.100	--
	01-14-91	--	210	64	0.20	--	<0.010	<0.100	--
	02-21-91	--	200	70	0.40	--	<0.010	<0.100	--
	03-20-91	--	--	56	--	--	<0.010	0.098	--
	04-10-91	--	--	69	--	--	<0.010	0.056	--
	05-16-91	--	--	73	--	--	<0.010	0.078	--
	06-17-91	--	--	77	--	--	<0.010	0.140	--
	07-11-91	--	--	79	--	--	<0.010	<0.050	--
	08-21-91	--	--	72	--	--	<0.010	<0.050	--
	09-16-91	--	--	83	--	--	<0.010	<0.050	--
10N.05E.14.413A CZ	10-16-90	--	140	130	0.20	--	<0.010	1.60	--
	11-13-90	--	160	130	0.10	--	<0.010	1.70	--
	12-17-90	--	160	130	<0.10	--	<0.010	1.60	--
	01-07-91	--	170	140	0.30	--	<0.010	1.70	--
	02-28-91	--	--	170	--	--	<0.010	2.00	--
	03-18-91	--	--	160	--	2.09	0.010	2.10	--
	04-15-91	--	--	140	--	--	<0.010	2.00	--
	05-13-91	--	--	160	--	--	<0.010	2.10	--
	06-19-91	--	--	170	--	1.99	0.010	2.00	--
	07-15-91	--	--	160	--	--	<0.010	2.00	--
	08-16-91	--	--	160	--	--	<0.010	1.90	--
	09-23-91	--	--	190	--	2.39	0.010	2.40	--
10N.05E.19.322 LEI	10-15-90	--	73	11	1.8	--	<0.010	0.900	--
	11-19-90	--	77	11	2.8	--	<0.010	0.900	--
	12-20-90	--	76	11	2.0	--	<0.010	0.800	--
	01-08-91	--	77	11	2.6	--	<0.010	0.700	--
	02-19-91	--	43	11	2.1	--	<0.010	0.700	--
	03-12-91	--	--	11	--	--	<0.010	0.970	--
	04-10-91	--	--	12	--	--	<0.010	0.830	--
	05-20-91	--	--	22	--	0.930	0.020	0.950	--
	06-14-91	--	--	11	--	--	<0.010	0.870	--
	07-09-91	--	--	11	--	--	<0.010	0.900	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N 06E 07 331A S	04-19-91	<0.010	--	1.3	<0.010	4.5	--	--	--
10N 06E 07 331B F	04-19-91	<0.010	--	11	0.020	1.8	--	--	--
10N.05E.02.233A SO	10-18-90	0.010	0.19	0.50	0.020	0.3	630	10	0.01
	11-26-90	0.020	--	--	0.030	0.5	640	<10	0.02
	12-17-90	<0.010	--	--	<0.010	0.2	650	<10	0.02
	01-10-91	<0.010	--	2.0	<0.010	2.8	160	20	<0.06
	02-20-91	<0.010	--	0.50	<0.010	0.2	650	10	<0.01
	03-21-91	<0.010	--	--	0.020	0.6	50	20	0.01
	04-17-91	<0.010	--	0.59	<0.010	0.2	640	20	0.01
	05-14-91	<0.010	--	0.45	0.010	0.1	650	<10	0.01
	06-18-91	<0.010	--	0.51	<0.010	0.3	630	50	<0.01
	07-16-91	0.070	0.13	0.43	<0.010	0.4	630	20	<0.01
	08-20-91	<0.010	--	--	0.010	0.7	650	20	0.01
	09-18-91	<0.010	--	0.79	0.020	0.2	650	<10	0.02
10N.05E.11.324 CUS	10-10-90	<0.010	--	1.6	0.020	0.7	40	20	0.05
	11-13-90	<0.010	--	2.7	0.010	1.3	60	<10	0.05
	12-19-90	0.020	0.38	5.0	0.040	1.7	50	<10	0.05
	01-10-91	<0.010	--	5.7	0.020	0.7	50	<10	<0.07
	02-14-91	<0.010	--	5.0	0.040	0.5	40	20	0.04
	03-21-91	<0.010	--	3.3	0.040	1.0	40	<10	0.03
	04-15-91	<0.010	--	3.8	0.030	0.7	40	30	0.04
	05-06-91	<0.010	--	3.7	0.030	1.0	40	<10	0.04
	06-12-91	0.010	0.39	3.2	0.040	1.5	40	10	0.04
	07-11-91	0.010	0.39	2.2	0.030	0.7	40	10	0.03
	08-20-91	<0.010	--	--	0.050	0.3	50	<10	0.03
	09-13-91	<0.010	--	2.0	0.030	0.7	50	<10	0.03
10N.05E.14.312 AES	10-17-90	<0.010	--	--	<0.010	1.0	40	110	0.02
	11-13-90	<0.010	--	--	<0.010	1.6	40	160	0.04
	12-20-90	0.020	--	--	<0.010	1.5	40	130	0.03
	01-14-91	<0.010	--	--	0.050	1.3	40	90	<0.04
	02-21-91	0.010	--	--	<0.010	2.2	40	290	0.03
	03-20-91	0.020	--	--	<0.010	0.9	40	110	0.03
	04-10-91	0.010	--	--	<0.010	1.5	30	90	0.03
	05-16-91	<0.010	--	--	<0.010	0.9	40	100	0.03
	06-17-91	<0.010	--	0.34	<0.010	1.1	40	80	<0.01
	07-11-91	0.010	--	--	0.020	1.3	40	80	0.03
	08-21-91	<0.010	--	--	<0.010	1.4	40	80	0.03
	09-16-91	0.030	0.17	--	<0.010	1.0	40	90	0.04
10N.05E.14.413A CZ	10-16-90	<0.010	--	2.0	0.010	0.7	--	20	0.04
	11-13-90	<0.010	--	2.1	<0.010	0.9	40	50	0.05
	12-17-90	<0.010	--	1.9	<0.010	0.9	40	<10	0.04
	01-07-91	0.020	--	--	0.040	0.7	30	10	0.06
	02-28-91	<0.010	--	2.6	0.010	1.0	50	20	0.05
	03-18-91	0.020	--	--	<0.010	0.7	50	<10	0.05
	04-15-91	<0.010	--	2.5	0.010	0.7	40	10	0.05
	05-13-91	<0.010	--	2.5	<0.010	0.9	40	10	0.05
	06-19-91	<0.010	--	2.5	0.030	0.9	50	20	0.03
	07-15-91	0.070	0.33	2.4	0.030	0.5	50	10	0.06
	08-16-91	0.010	0.29	2.2	0.010	1.0	40	<10	0.06
	09-23-91	0.040	0.36	2.8	<0.010	0.8	40	<10	0.07
10N.05E.19.322 LEI	10-15-90	<0.010	--	1.2	<0.010	0.5	30	10	0.02
	11-19-90	0.040	--	--	<0.010	0.8	30	<10	0.02
	12-20-90	0.010	--	--	<0.010	0.8	30	<10	0.02
	01-08-91	<0.010	--	--	0.020	0.6	30	<10	<0.03
	02-19-91	<0.010	--	0.90	<0.010	0.7	30	10	0.02
	03-12-91	0.010	--	--	<0.010	0.7	30	30	0.42
	04-10-91	<0.010	--	1.0	<0.010	0.7	30	<10	0.01
	05-20-91	0.010	1.1	2.1	0.020	0.5	40	10	0.02
	06-14-91	<0.010	--	--	<0.010	0.3	30	10	0.01
	07-09-91	0.030	--	--	<0.010	0.4	40	20	0.02

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
10N.05E.19.322 LEIB	350423106263301	001	GW	08-14-91	1340	110AVMB		37.39	146.00	6255
		001	GW	09-18-91	1047	110AVMB		43.90	146.00	6255
10N.05E.22.234 TIJERAS PO	350449106231901	001	GW	10-12-90	1340			27.23	--	6355
		001	GW	11-19-90	1040			27.00	--	6355
		001	GW	12-18-90	0950			27.25	--	6355
		001	GW	01-07-91	0940			27.00	--	6355
		001	GW	02-15-91	1514			26.76	--	6355
		001	GW	03-19-91	1019			26.83	--	6355
		001	GW	04-11-91	1333			26.72	--	6355
		001	GW	05-06-91	1225			27.70	--	6355
		001	GW	06-13-91	1259			27.70	--	6355
		001	GW	07-09-91	0910			28.30	--	6355
		001	GW	08-14-91	0840			34.56	--	6355
10N.05E.29.132 CDMW-2	350358106255101	001	GW	09-13-91	1120			25.53	--	6355
		001	GW	10-10-90	1300			--	--	--
10N.05E.30.213 MCIVER	350410106262601	001	GW	10-17-90	1327	110AVMB		68.34	120.00	6030
		001	GW	11-19-90	1225	110AVMB		68.65	120.00	6030
		001	GW	12-20-90	1220	110AVMB		69.00	120.00	6030
		001	GW	01-08-91	1411	110AVMB		68.72	120.00	6030
		001	GW	02-19-91	1253	110AVMB		68.44	120.00	6030
		001	GW	03-12-91	1410	110AVMB		68.31	120.00	6030
		001	GW	04-10-91	1145	110AVMB		68.25	120.00	6030
		001	GW	05-22-91	1540	110AVMB		68.43	120.00	6030
		001	GW	06-14-91	1306	110AVMB		69.20	120.00	6030
		001	GW	07-09-91	1225	110AVMB		69.48	120.00	6030
		001	GW	08-14-91	1125	110AVMB		69.42	120.00	6030
10N.06E.05.441 MCCRAKEN	350655106185601	001	GW	09-23-91	1230	110AVMB		69.14	120.00	6030
		001	GW	10-16-90	1242			--	300.00	6880
		001	GW	11-15-90	1308			--	300.00	6880
		001	GW	12-13-90	1050			--	300.00	6880
		001	GW	01-11-91	1145			--	300.00	6880
		001	GW	02-20-91	1307			--	300.00	6880
		001	GW	03-19-91	1540			191.06	300.00	6880
		001	GW	04-12-91	1251			191.85	300.00	6880
		001	GW	05-13-91	1443			--	300.00	6880
		001	GW	06-17-91	1144			--	300.00	6880
		001	GW	07-12-91	1213			192.80	300.00	6880
		001	GW	08-16-91	0840			--	300.00	6880
10N.06E.07.331 FOSTER	350604106205801	001	GW	09-16-91	1141			186.16	300.00	6880
		001	GW	10-16-90	1124			28.96	85.00	6520
		001	GW	11-26-90	1052			--	85.00	6520
		001	GW	12-13-90	1250			28.60	85.00	6520
		001	GW	01-11-91	1402			27.06	85.00	6520
		001	GW	02-20-91	1424			27.67	85.00	6520
		001	GW	03-19-91	1250			27.56	85.00	6520
		001	GW	04-11-91	1551			26.65	85.00	6520
		001	GW	04-19-91	1600			27.33	85.00	6520
		001	GW	05-17-91	0910			31.07	85.00	6520
		001	GW	06-17-91	0945			31.10	85.00	6520
		001	GW	07-15-91	1030			32.52	85.00	6520
		001	GW	08-12-91	1440			26.03	85.00	6520
10N.06E.13.321 TOLMAN	350525106151701	001	GW	09-27-91	0915			20.22	85.00	6520
		001	GW	10-17-90	0957	325MDER		145.85	275.00	6775
		001	GW	11-20-90	0833	325MDER		145.99	275.00	6775
		001	GW	12-12-90	1025	325MDER		146.11	275.00	6775
		001	GW	01-11-91	1029	325MDER		146.09	275.00	6775
		001	GW	02-21-91	1348	325MDER		145.85	275.00	6775
		001	GW	03-15-91	1515	325MDER		145.79	275.00	6775
		001	GW	04-12-91	1612	325MDER		145.80	275.00	6775
		001	GW	05-13-91	1045	325MDER		--	275.00	6775

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
10N.05E.19.322 LEI	08-14-91	--	3.0	540	--	7.6	28.0	17.5	--
	09-18-91	10	3.0	580	--	7.7	17.5	16.5	--
10N.05E.22.234 TIJ	10-12-90	12	5.0	1070	--	7.3	20.0	14.0	--
	11-19-90	13	4.0	920	--	7.5	15.0	14.0	--
	12-18-90	11	6.0	930	--	7.4	0.0	14.5	--
	01-07-91	15	5.0	980	--	7.6	4.0	16.0	--
	02-15-91	11	7.0	910	--	7.4	15.0	14.0	--
	03-19-91	17	10	825	--	7.6	14.0	14.5	--
	04-11-91	30	12	879	--	7.5	22.0	14.5	--
	05-06-91	12	3.0	860	--	7.4	24.0	15.0	--
	06-13-91	14	4.0	990	--	7.3	22.5	14.5	--
	07-09-91	12	5.0	980	--	7.4	24.5	14.0	--
	08-14-91	--	5.0	980	--	7.5	20.0	14.5	--
	09-13-91	9	6.0	920	--	7.5	--	14.0	--
10N.05E.29.132 CD	10-10-90	52	0.2	--	914	7.2	--	16.5	380
10N.05E.30.213 MCI	10-17-90	11	4.0	1090	--	7.5	20.0	16.5	--
	11-19-90	8	6.0	1110	--	7.5	17.5	16.0	--
	12-20-90	11	3.0	1100	--	7.6	7.5	15.0	--
	01-08-91	11	3.0	1030	--	7.6	12.0	16.5	--
	02-19-91	9	4.0	1110	--	7.6	5.0	13.0	--
	03-12-91	20	4.0	1100	--	7.6	12.0	16.0	--
	04-10-91	14	8.0	1150	--	7.6	20.5	16.0	--
	05-22-91	13	2.5	1140	--	7.6	25.0	17.0	--
	06-14-91	10	3.0	1080	--	7.5	25.0	16.5	--
	07-09-91	12	4.0	1160	--	7.5	33.0	18.0	--
	08-14-91	--	3.0	1060	--	7.5	24.0	18.0	--
10N.06E.05.441 MCC	09-23-91	12	5.0	1110	--	7.6	23.5	17.0	--
	10-16-90	11	5.0	2530	--	7.2	19.5	14.0	--
	11-15-90	10	6.0	2510	--	7.2	20.5	13.5	--
	12-13-90	14	6.0	2600	--	7.2	6.0	12.0	--
	01-11-91	10	3.0	2620	--	7.1	1.5	12.5	--
	02-20-91	16	2.5	2690	--	7.1	9.0	11.5	--
	03-19-91	21	4.0	2710	--	7.1	13.0	13.5	--
	04-12-91	20	8.0	2780	--	7.2	8.5	14.5	--
	05-13-91	6	4.0	2680	--	7.1	27.0	14.0	--
	06-17-91	12	4.0	2650	--	7.1	29.5	14.5	--
	07-12-91	13	6.0	2670	--	7.1	24.0	14.5	--
	08-16-91	12	4.0	2580	--	7.2	16.5	14.5	--
	09-16-91	12	7.5	2620	--	7.2	21.0	14.0	--
10N.06E.07.331 FOS	10-16-90	10	6.0	1520	--	7.3	19.0	13.5	--
	11-26-90	10	4.0	1500	--	7.3	7.5	12.0	--
	12-13-90	12	5.0	1490	--	7.3	8.0	13.0	--
	01-11-91	10	6.0	1530	--	7.3	4.0	13.5	--
	02-20-91	13	3.0	1460	--	7.1	11.5	13.5	--
	03-19-91	21	12	1480	--	7.4	16.0	14.0	--
	04-11-91	20	2.0	1520	--	7.1	20.0	15.5	--
	04-19-91	12	4.0	1420	--	7.3	18.0	14.5	--
	05-17-91	15	5.0	1430	--	7.2	17.5	13.5	--
	06-17-91	25	5.0	1520	--	7.2	27.0	13.5	--
	07-15-91	10	5.0	1490	--	7.3	21.0	13.5	--
	08-12-91	--	4.0	1450	--	7.2	27.0	13.5	--
10N.06E.13.321 TOL	09-27-91	15	6.0	1590	--	7.2	17.5	13.5	--
	10-17-90	16	4.0	1900	--	7.3	16.0	14.0	--
	11-20-90	8	8.0	1900	--	7.3	11.5	12.5	--
	12-12-90	12	8.0	1890	--	7.3	12.0	14.5	--
	01-11-91	15	3.0	2000	--	7.3	0.0	13.5	--
	02-21-91	6	7.0	1910	--	7.3	11.5	14.5	--
	03-15-91	10	12	1920	--	7.4	10.0	14.5	--
	04-12-91	16	12	2010	--	7.2	9.5	13.5	--
	05-13-91	12	3.0	1910	--	7.1	24.5	15.5	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
10N.05E.19.322 LEI	08-14-91	--	--	--	--	--	--	--	12
	09-18-91	--	--	--	--	--	--	--	8.2
10N.05E.22.234 TIJ	10-12-90	--	--	--	--	--	--	110	130
	11-19-90	--	--	--	--	--	--	100	110
	12-18-90	--	--	--	--	--	--	53	89
	01-07-91	--	--	--	--	--	--	120	110
	02-15-91	--	--	--	--	--	--	100	110
	03-19-91	--	--	--	--	--	--	--	93
	04-11-91	--	--	--	--	--	--	--	89
	05-06-91	--	--	--	--	--	--	--	100
	06-13-91	--	--	--	--	--	--	--	120
	07-09-91	--	--	--	--	--	--	--	130
	08-14-91	--	--	--	--	--	--	--	120
	09-13-91	--	--	--	--	--	--	--	110
10N.05E.29.132 CD	10-10-90	110	25	42	0.9	2.2	245	100	93
10N.05E.30.213 MCI	10-17-90	--	--	--	--	--	--	120	120
	11-19-90	--	--	--	--	--	--	110	120
	12-20-90	--	--	--	--	--	--	110	120
	01-08-91	--	--	--	--	--	--	99	120
	02-19-91	--	--	--	--	--	--	130	110
	03-12-91	--	--	--	--	--	--	--	130
	04-10-91	--	--	--	--	--	--	--	120
	05-22-91	--	--	--	--	--	--	--	22
	06-14-91	--	--	--	--	--	--	--	120
	07-09-91	--	--	--	--	--	--	--	140
	08-14-91	--	--	--	--	--	--	--	110
	09-23-91	--	--	--	--	--	--	--	120
10N.06E.05.441 MCC	10-16-90	--	--	--	--	--	--	190	590
	11-15-90	--	--	--	--	--	--	180	600
	12-13-90	--	--	--	--	--	--	180	640
	01-11-91	--	--	--	--	--	--	170	660
	02-20-91	--	--	--	--	--	--	180	670
	03-19-91	--	--	--	--	--	--	--	610
	04-12-91	--	--	--	--	--	--	--	650
	05-13-91	--	--	--	--	--	--	--	700
	06-17-91	--	--	--	--	--	--	--	670
	07-12-91	--	--	--	--	--	--	--	700
	08-16-91	--	--	--	--	--	--	--	730
	09-16-91	--	--	--	--	--	--	--	610
10N.06E.07.331 FOS	10-16-90	--	--	--	--	--	--	69	260
	11-26-90	--	--	--	--	--	--	70	270
	12-13-90	--	--	--	--	--	--	70	260
	01-11-91	--	--	--	--	--	--	58	280
	02-20-91	--	--	--	--	--	--	83	250
	03-19-91	--	--	--	--	--	--	--	260
	04-11-91	--	--	--	--	--	--	--	270
	04-19-91	--	--	--	--	--	--	--	--
	05-17-91	--	--	--	--	--	--	--	57
	06-17-91	--	--	--	--	--	--	--	280
	07-15-91	--	--	--	--	--	--	--	280
	08-12-91	--	--	--	--	--	--	--	270
	09-27-91	--	--	--	--	--	--	--	320
10N.06E.13.321 TOL	10-17-90	--	--	--	--	--	--	120	460
	11-20-90	--	--	--	--	--	--	120	470
	12-12-90	--	--	--	--	--	--	120	440
	01-11-91	--	--	--	--	--	--	120	470
	02-21-91	--	--	--	--	--	--	130	450
	03-15-91	--	--	--	--	--	--	--	250
	04-12-91	--	--	--	--	--	--	--	480
	05-13-91	--	--	--	--	--	--	--	480

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
10N.05E.19.322 LEI	08-14-91	--	--	--	--	<0.010	0.590	--	0.020
	09-18-91	--	--	--	--	<0.010	0.880	--	<0.010
10N.05E.22.234 TIJ	10-12-90	0.20	--	--	--	<0.010	1.30	--	<0.010
	11-19-90	0.20	--	--	--	<0.010	0.500	--	0.040
	12-18-90	<0.10	--	--	--	<0.010	0.400	--	<0.010
	01-07-91	0.20	--	--	--	<0.010	0.500	--	0.020
	02-15-91	0.30	--	--	--	<0.010	0.500	--	<0.010
	03-19-91	--	--	--	0.320	0.010	0.330	--	0.020
	04-11-91	--	--	--	--	<0.010	0.360	--	<0.010
	05-06-91	--	--	--	--	<0.010	0.450	--	<0.010
	06-13-91	--	--	--	--	<0.010	0.700	--	0.010
	07-09-91	--	--	--	--	<0.010	0.720	--	<0.010
	08-14-91	--	--	--	--	<0.010	1.10	--	<0.010
	09-13-91	--	--	--	--	<0.010	0.340	--	0.030
10N.05E.29.132 CD	10-10-90	0.30	18	537	--	<0.010	0.800	--	<0.010
10N.05E.30.213 MCI	10-17-90	1.4	--	--	--	<0.010	15.0	--	0.060
	11-19-90	1.9	--	--	--	<0.010	15.0	--	0.060
	12-20-90	1.5	--	--	--	<0.010	15.0	--	0.030
	01-08-91	1.5	--	--	--	<0.010	18.0	--	<0.010
	02-19-91	1.4	--	--	--	<0.010	13.0	--	<0.010
	03-12-91	--	--	--	15.0	0.010	15.0	--	0.090
	04-10-91	--	--	--	--	<0.010	15.0	--	<0.010
	05-22-91	--	--	--	16.0	0.020	16.0	--	<0.010
	06-14-91	--	--	--	--	<0.010	15.0	--	<0.010
	07-09-91	--	--	--	--	<0.010	15.0	--	0.010
	08-14-91	--	--	--	--	<0.010	14.0	--	0.020
	09-23-91	--	--	--	15.0	0.010	15.0	--	0.040
10N.06E.05.441 MCC	10-16-90	0.20	--	--	--	<0.010	14.0	--	0.020
	11-15-90	<0.10	--	--	--	<0.010	14.0	--	<0.010
	12-13-90	0.10	--	--	--	<0.010	14.0	--	0.020
	01-11-91	0.30	--	--	--	<0.010	18.0	--	0.020
	02-20-91	0.50	--	--	--	<0.010	13.0	--	0.020
	03-19-91	--	--	--	--	<0.010	12.0	--	0.030
	04-12-91	--	--	--	14.0	0.010	14.0	--	0.010
	05-13-91	--	--	--	--	<0.010	16.0	--	<0.010
	06-17-91	--	--	--	--	<0.010	15.0	--	<0.010
	07-12-91	--	--	--	--	<0.010	13.0	--	0.020
	08-16-91	--	--	--	14.0	0.040	14.0	--	0.050
	09-16-91	--	--	--	--	<0.010	14.0	--	0.020
10N.06E.07.331 FOS	10-16-90	<0.10	--	--	--	<0.010	15.0	--	0.010
	11-26-90	0.40	--	--	--	<0.010	5.10	--	0.030
	12-13-90	0.10	--	--	--	<0.010	14.0	--	0.020
	01-11-91	0.30	--	--	--	<0.010	18.0	--	0.020
	02-20-91	0.20	--	--	--	<0.010	12.0	--	<0.010
	03-19-91	--	--	--	11.0	0.020	11.0	--	0.030
	04-11-91	--	--	--	13.0	0.020	13.0	--	0.010
	04-19-91	--	--	--	12.0	0.020	12.0	2.50	<0.010
	05-17-91	--	--	--	16.0	0.020	16.0	--	0.010
	06-17-91	--	--	--	--	<0.010	15.0	--	<0.010
	07-15-91	--	--	--	--	<0.010	14.0	--	0.070
	08-12-91	--	--	--	--	<0.010	12.0	--	<0.010
	09-27-91	--	--	--	11.0	0.020	11.0	--	0.050
10N.06E.13.321 TOL	10-17-90	<0.10	--	--	--	<0.010	6.80	--	0.020
	11-20-90	0.20	--	--	6.69	0.010	6.70	--	0.060
	12-12-90	<0.10	--	--	--	<0.010	6.60	--	0.020
	01-11-91	0.30	--	--	--	<0.010	8.60	--	0.020
	02-21-91	0.20	--	--	--	<0.010	4.30	--	<0.010
	03-15-91	--	--	--	5.79	0.010	5.80	--	0.030
	04-12-91	--	--	--	--	<0.010	6.90	--	0.010
	05-13-91	--	--	--	--	<0.010	6.90	--	0.010

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, ORGANIC (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.05E.19.322 LEI	08-14-91	0.28	0.89	0.010	0.6	20	<10	--	0.01
	09-18-91	--	--	<0.010	0.6	40	<10	--	0.02
10N.05E.22.234 TIJ	10-12-90	--	1.6	<0.010	0.7	160	60	--	0.05
	11-19-90	--	--	<0.010	0.9	180	70	--	0.03
	12-18-90	--	--	<0.010	1.2	190	70	--	0.03
	01-07-91	0.28	0.80	<0.010	0.7	190	90	--	0.03
	02-15-91	--	--	<0.010	0.7	180	70	--	0.04
	03-19-91	--	--	<0.010	0.9	200	130	--	0.03
	04-11-91	--	--	<0.010	0.8	200	200	--	0.02
	05-06-91	--	--	<0.010	0.7	210	40	--	0.03
	06-13-91	--	--	<0.010	0.8	160	80	--	0.04
	07-09-91	--	--	<0.010	0.7	170	70	--	0.03
	08-14-91	--	--	<0.010	0.9	190	<10	--	0.03
	09-13-91	0.57	0.94	<0.010	0.9	190	80	--	0.03
10N.05E.29.132 CD	10-10-90	--	1.0	<0.010	1.2	50	<3	8	0.05
10N.05E.30.213 MCI	10-17-90	0.94	16	<0.010	0.8	40	40	--	0.16
	11-19-90	0.64	16	<0.010	0.9	30	20	--	0.14
	12-20-90	0.47	15	<0.010	1.0	30	<10	--	0.13
	01-08-91	--	19	<0.010	0.7	40	<10	--	<0.16
	02-19-91	--	14	<0.010	0.9	40	10	--	0.11
	03-12-91	0.61	16	<0.010	0.9	30	<10	--	0.15
	04-10-91	--	16	<0.010	0.3	30	20	--	0.13
	05-22-91	--	18	0.050	0.9	40	20	--	0.11
	06-14-91	--	15	<0.010	1.0	40	20	--	0.13
	07-09-91	0.59	16	<0.010	0.7	40	10	--	0.11
	08-14-91	0.58	15	0.020	1.0	30	<10	--	0.13
	09-23-91	0.26	15	<0.010	0.7	40	10	--	0.11
10N.06E.05.441 MCC	10-16-90	0.98	15	<0.010	1.1	50	70	--	0.22
	11-15-90	--	15	<0.010	3.3	60	30	--	0.21
	12-13-90	0.78	15	<0.010	3.0	50	20	--	0.20
	01-11-91	0.88	19	<0.010	2.9	50	20	--	<0.23
	02-20-91	0.58	14	<0.010	3.0	50	40	--	0.15
	03-19-91	0.67	13	<0.010	2.7	60	30	--	0.21
	04-12-91	0.89	15	0.010	2.9	60	30	--	0.20
	05-13-91	--	17	<0.010	2.7	50	20	--	0.19
	06-17-91	--	16	<0.010	2.8	60	20	--	0.19
	07-12-91	0.48	13	<0.010	2.7	50	30	--	0.18
	08-16-91	0.85	15	<0.010	2.7	50	80	--	0.18
	09-16-91	0.48	15	<0.010	2.7	60	20	--	0.17
10N.06E.07.331 FOS	10-16-90	0.89	16	0.020	1.9	10	50	--	0.18
	11-26-90	0.67	5.8	0.020	1.9	120	<10	--	0.17
	12-13-90	0.68	15	0.020	2.0	110	<10	--	0.17
	01-11-91	0.78	19	0.020	1.7	110	<10	--	<0.17
	02-20-91	--	13	0.010	2.2	140	10	--	0.11
	03-19-91	0.47	12	0.020	1.6	120	10	--	0.14
	04-11-91	1.1	14	0.020	2.2	120	10	--	0.14
	04-19-91	--	12	0.020	1.8	--	--	--	--
	05-17-91	0.69	17	0.080	1.8	120	20	--	0.13
	06-17-91	--	16	<0.010	1.7	120	20	--	0.15
	07-15-91	0.53	15	0.040	1.6	110	10	--	0.13
	08-12-91	--	13	0.030	2.0	120	<10	--	0.14
	09-27-91	0.45	12	0.060	1.5	100	<10	--	0.11
10N.06E.13.321 TOL	10-17-90	0.88	7.7	<0.010	3.2	50	40	--	0.19
	11-20-90	0.54	7.3	<0.010	2.9	50	20	--	0.14
	12-12-90	0.58	7.2	0.020	3.1	50	10	--	0.14
	01-11-91	0.68	9.3	0.020	3.0	50	20	--	<0.16
	02-21-91	--	4.9	<0.010	3.0	50	50	--	0.11
	03-15-91	0.47	6.3	0.020	3.1	60	20	--	0.13
	04-12-91	0.59	7.5	<0.010	3.1	50	10	--	0.12
	05-13-91	0.29	7.2	0.030	2.6	50	<10	--	0.13

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
10N.06E.13.321 TOLMAN	350525106151701	001		GW	06-18-91	1232	325MDER	149.34	275.00
		001		GW	07-12-91	1028	325MDER	145.73	275.00
		001		GW	08-16-91	1045	325MDER	135.73	275.00
		001		GW	09-19-91	1410	325MDER	136.09	275.00
11N.05E.23.222B MATHEWS	351011106220401	001		GW	10-10-90	1436		17.00	--
		001		GW	11-16-90	1236		17.68	--
		001		GW	12-19-90	1210		15.76	--
		001		GW	01-07-91	1225		15.48	--
		001		GW	02-14-91	1500		14.65	--
		001		GW	03-22-91	1100		13.05	--
		001		GW	04-17-91	1517		13.75	--
		001		GW	05-14-91	1113		14.53	--
		001		GW	06-13-91	1107		15.09	--
		001		GW	07-11-91	0955		16.36	--
		001		GW	08-19-91	1400		10.74	--
		001		GW	09-17-91	1251		11.75	--
		001		GW	10-10-90	1054		191.70	260.00
		001		GW	11-20-90	1022		191.75	260.00
		001		GW	12-19-90	1020		191.84	260.00
001	GW	01-07-91	1307		191.93	260.00			
11N.05E.24.412 ANISON	350949106211801	001		GW	02-20-91	0945		192.08	260.00
		001		GW	03-22-91	1331		192.10	260.00
		001		GW	04-17-91	1700		192.15	260.00
		001		GW	05-01-91	0930		192.23	260.00
		001		GW	05-14-91	1252		192.29	260.00
		001		GW	06-13-91	0930		192.49	260.00
		001		GW	07-10-91	0834		192.68	260.00
		001		GW	08-21-91	0950		191.00	260.00
		001		GW	09-17-91	0956		192.21	260.00
		001		GW	05-30-91	1010		--	--
		001		GW	06-21-91	1135		71.50	--
		001		GW	10-09-90	1242		50.70	120.00
		001		GW	12-06-90	1301		51.09	120.00
		001		GW	02-28-91	1331		48.25	120.00
		001		GW	03-20-91	1400		47.71	120.00
11N.05E.24.443 WESTBROOK	350930106210701	001		GW	07-16-91	1012		49.90	120.00
		001		GW	08-20-91	1040		44.18	120.00
		001		GW	09-11-91	1309		43.90	120.00
		001		GW	10-09-90	1403		47.68	--
		001		GW	11-26-90	1227		--	--
11N.06E.19.122 LIEBLING	351014106202801	001		GW	12-20-90	1410		50.61	--
		001		GW	01-14-91	1119		50.64	--
		001		GW	02-14-91	1352		50.51	--
		001		GW	03-22-91	1600		49.80	--
		001		GW	04-18-91	1618		49.41	--
		001		GW	05-14-91	1000		51.06	--
		001		GW	06-12-91	1029		49.61	--
		001		GW	07-10-91	1137		50.01	--
		001		GW	08-21-91	0830		47.99	--
		001		GW	09-11-91	1205		45.71	--
		001		GW	10-09-90	1026		154.00	280.00
		001		GW	05-20-91	1336		151.72	280.00
		001		GW	06-18-91	1043		152.30	280.00
		001		GW	07-10-91	1004		152.27	280.00
		001		GW	08-21-91	1120		151.69	280.00
11N.06E.21.133 PAVEL	350949106184501	001		GW	09-17-91	1120		151.38	280.00

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
10N.06E.13.321 TOL	06-18-91	6775	8	6.0	1900	7.3	30.0	14.5
	07-12-91	6775	8	9.0	1960	7.3	22.0	14.5
	08-16-91	6775	10	3.0	2100	7.2	23.0	14.5
	09-19-91	6775	12	4.0	1460	7.3	13.5	14.0
	10-10-90	7100	10	6.0	855	7.1	16.0	12.0
11N.05E.23.222B MA	11-16-90	7100	8	6.0	875	7.2	13.0	11.5
	12-19-90	7100	8	4.0	830	7.2	5.5	11.5
	01-07-91	7100	10	5.0	870	7.2	4.5	12.5
	02-14-91	7100	9	6.0	880	7.2	9.0	10.5
	03-22-91	7100	19	10	920	7.2	2.5	10.5
	04-17-91	7100	12	10	979	7.1	18.5	11.0
	05-14-91	7100	11	4.0	780	7.2	--	10.5
	06-13-91	7100	9	4.0	830	7.2	17.0	10.5
	07-11-91	7100	10	6.0	820	7.2	24.0	11.0
	08-19-91	7100	10	6.0	910	7.1	20.5	11.5
	09-17-91	7100	10	4.0	900	7.1	21.0	12.0
	10-10-90	6940	10	5.0	438	7.5	13.0	12.0
	11-20-90	6940	8	7.0	448	7.4	12.0	11.0
	12-19-90	6940	12	5.0	440	7.5	4.5	11.0
	01-07-91	6940	7	6.0	438	7.4	4.5	12.5
11N.05E.24.412 ANI	02-20-91	6940	9	6.0	430	7.3	4.5	10.5
	03-22-91	6940	15	12	470	7.3	4.5	11.0
	04-17-91	6940	15	12	484	7.4	17.5	12.0
	05-01-91	6940	5	5.0	479	7.3	311.0	11.5
	05-14-91	6940	7	5.0	429	7.4	25.0	12.5
	06-13-91	6940	10	5.0	430	7.4	17.0	12.5
	07-10-91	6940	13	5.5	420	7.4	21.0	13.0
	08-21-91	6940	10	7.5	470	7.4	23.5	13.0
	09-17-91	6940	15	6.0	445	7.3	17.5	13.0
	05-30-91	--	--	--	--	--	--	13.5
	06-21-91	--	10	5.0	3200	7.1	27.5	13.5
	10-09-90	6860	14	4.0	1140	7.2	10.0	14.0
	12-06-90	6860	12	5.0	1190	7.3	13.0	3.0
	02-28-91	6860	30	7.0	1180	7.2	5.0	13.5
	03-20-91	6860	20	8.0	1190	7.2	9.0	13.5
11N.05E.24.443 WE	07-16-91	6860	12	4.0	1160	7.2	22.5	13.5
	08-20-91	6860	10	12	1180	7.2	22.5	13.5
	09-11-91	6860	9	7.5	1170	7.1	--	13.5
	10-09-90	6798	5	2.0	710	7.5	10.0	14.0
	11-26-90	6798	6	2.0	680	7.5	6.0	11.0
	12-20-90	6798	12	3.0	730	7.6	--	12.5
	01-14-91	6798	11	2.5	700	7.5	9.0	9.0
	02-14-91	6798	8	1.5	695	7.5	--	10.5
	03-22-91	6798	25	1.3	710	7.4	6.5	10.0
	04-18-91	6798	12	1.5	776	7.4	20.0	11.5
	05-14-91	6798	15	3.5	670	7.5	22.0	13.0
	06-12-91	6798	10	1.7	680	7.5	--	14.5
	07-10-91	6798	10	2.0	700	7.5	25.0	14.0
	08-21-91	6798	10	1.5	800	7.5	22.0	16.5
	09-11-91	6798	10	2.5	770	7.5	--	16.5
11N.06E.19.122 LIE	10-09-90	6700	10	--	710	7.5	7.0	13.5
	05-20-91	6700	6	3.0	610	7.3	17.5	13.5
	06-18-91	6700	13	2.0	660	7.5	29.0	14.0
	07-10-91	6700	5	--	680	7.4	23.5	14.0
	08-21-91	6700	10	0.5	680	7.4	27.0	14.0
	09-17-91	6700	5	3.0	620	7.4	20.5	13.5
11N.06E.21.133 PAV	10-09-90	6700	10	--	710	7.5	7.0	13.5
	05-20-91	6700	6	3.0	610	7.3	17.5	13.5
	06-18-91	6700	13	2.0	660	7.5	29.0	14.0
	07-10-91	6700	5	--	680	7.4	23.5	14.0
	08-21-91	6700	10	0.5	680	7.4	27.0	14.0
	09-17-91	6700	5	3.0	620	7.4	20.5	13.5

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
10N.06E.13.321 TOL	06-18-91	--	480	--	--	<0.010	7.10	<0.010
	07-12-91	--	520	--	--	<0.010	7.10	0.020
	08-16-91	--	510	--	--	<0.010	7.10	0.030
	09-19-91	--	300	--	--	<0.010	5.80	<0.010
	10-10-90	40	88	0.30	--	<0.010	0.300	<0.010
11N.05E.23.222B MA	11-16-90	34	87	0.40	--	<0.010	0.300	0.030
	12-19-90	26	79	0.50	--	<0.010	0.300	<0.010
	01-07-91	41	83	0.60	--	<0.010	0.300	0.020
	02-14-91	39	93	0.50	--	<0.010	0.300	<0.010
	03-22-91	--	110	--	0.440	0.020	0.460	0.010
	04-17-91	--	94	--	--	<0.010	0.320	<0.010
	05-14-91	--	94	--	--	<0.010	0.270	<0.010
	06-13-91	--	95	--	--	<0.010	0.210	<0.010
	07-11-91	--	99	--	--	<0.010	0.240	0.040
	08-19-91	--	110	--	--	<0.010	0.740	0.010
	09-17-91	--	120	--	--	<0.010	0.220	<0.010
	10-10-90	16	9.0	0.10	--	<0.010	0.400	<0.010
	11-20-90	15	10	0.20	--	<0.010	0.400	0.040
	12-19-90	16	11	0.30	--	<0.010	0.300	0.010
	01-07-91	18	9.4	0.30	--	<0.010	0.300	0.020
11N.05E.24.412 ANI	02-20-91	14	9.2	0.20	--	<0.010	0.300	<0.010
	03-22-91	--	8.8	--	0.350	0.010	0.360	<0.010
	04-17-91	--	9.1	--	--	<0.010	0.330	<0.010
	05-01-91	--	9.6	--	--	<0.010	0.330	<0.010
	05-14-91	--	9.3	--	--	<0.010	0.340	<0.010
	06-13-91	--	9.5	--	--	<0.010	0.340	<0.010
	07-10-91	--	9.5	--	--	<0.010	0.350	<0.010
	08-21-91	--	9.5	--	--	<0.010	0.350	<0.010
	09-17-91	--	10	--	--	<0.010	0.330	<0.010
	05-30-91	--	510	--	--	<0.010	10.0	<0.010
	06-21-91	--	110	--	--	<0.010	5.50	0.050
	10-09-90	28	150	<0.10	--	<0.010	22.0	<0.010
	12-06-90	29	160	0.20	--	<0.010	18.0	0.020
	02-28-91	--	160	--	--	<0.010	20.0	0.010
	03-20-91	--	160	--	18.0	0.010	18.0	0.030
11N.05E.24.443 WE	07-16-91	--	160	--	--	<0.010	20.0	0.080
	08-20-91	--	150	--	--	<0.010	18.0	<0.010
	09-11-91	--	170	--	--	<0.010	19.0	<0.010
	10-09-90	72	110	0.20	--	<0.010	2.30	<0.010
	11-26-90	47	87	0.40	--	<0.010	2.10	0.020
	12-20-90	56	100	0.30	--	<0.010	2.40	0.020
	01-14-91	50	88	0.20	--	<0.010	2.20	<0.010
	02-14-91	53	99	0.10	--	<0.010	2.30	<0.010
	03-22-91	--	95	--	--	<0.010	2.30	<0.010
	04-18-91	--	97	--	--	<0.010	2.30	<0.010
	05-14-91	--	99	--	--	<0.010	2.40	<0.010
	06-12-91	--	98	--	--	<0.010	2.40	<0.010
	07-10-91	--	97	--	2.49	0.010	2.50	0.020
	08-21-91	--	100	--	--	<0.010	2.30	<0.010
	09-11-91	--	110	--	--	<0.010	2.20	<0.010
11N.06E.19.122 LIE	10-09-90	54	23	<0.10	--	<0.010	1.30	<0.010
	05-20-91	--	63	--	1.28	0.020	1.30	<0.010
	06-18-91	--	26	--	--	<0.010	1.20	<0.010
	07-10-91	--	24	--	--	<0.010	1.30	0.010
	08-21-91	--	27	--	--	<0.010	1.20	<0.010
	09-17-91	--	24	--	--	<0.010	0.980	<0.010
11N.06E.21.133 PAV	10-09-90	54	23	<0.10	--	<0.010	1.30	<0.010
	05-20-91	--	63	--	1.28	0.020	1.30	<0.010
	06-18-91	--	26	--	--	<0.010	1.20	<0.010
	07-10-91	--	24	--	--	<0.010	1.30	0.010
	08-21-91	--	27	--	--	<0.010	1.20	<0.010
	09-17-91	--	24	--	--	<0.010	0.980	<0.010

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
BERNALILLO COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
10N.06E.13.321 TOL	06-18-91	--	7.6	0.010	3.2	50	30	0.12
	07-12-91	0.48	7.6	0.020	3.0	50	<10	0.13
	08-16-91	0.47	7.6	0.020	2.9	50	40	0.15
	09-19-91	--	6.3	0.020	3.2	70	20	0.12
11N.05E.23.222B MA	10-10-90	--	0.60	<0.010	0.9	20	10	0.04
	11-16-90	--	--	<0.010	0.9	160	<10	0.04
	12-19-90	--	--	<0.010	1.0	20	20	0.03
	01-07-91	--	--	<0.010	0.7	20	<10	0.02
	02-14-91	--	--	<0.010	0.7	30	10	0.02
	03-22-91	--	--	<0.010	1.1	20	20	0.03
	04-17-91	--	--	<0.010	0.7	20	<10	0.06
	05-14-91	--	--	<0.010	1.0	20	<10	0.02
	06-13-91	--	--	<0.010	0.8	20	<10	0.03
	07-11-91	--	--	<0.010	0.6	20	<10	0.03
	08-19-91	0.19	0.94	<0.010	1.1	30	<10	0.04
	09-17-91	--	--	<0.010	1.0	30	20	0.04
11N.05E.24.412 ANI	10-10-90	--	0.70	<0.010	0.2	<10	<10	0.03
	11-20-90	--	--	<0.010	0.2	<10	<10	0.02
	12-19-90	--	--	<0.010	0.3	<10	<10	0.01
	01-07-91	--	--	0.020	0.2	<10	<10	0.06
	02-20-91	--	--	<0.010	0.7	<10	<10	0.02
	03-22-91	--	--	0.010	0.2	10	10	0.01
	04-17-91	--	--	0.010	0.3	20	<10	0.03
	05-01-91	--	--	0.020	0.6	<10	10	0.01
	05-14-91	--	--	0.010	0.3	10	<10	0.01
	06-13-91	--	--	<0.010	0.7	10	<10	0.01
	07-10-91	--	0.65	<0.010	0.3	10	10	0.01
	08-21-91	--	--	0.010	0.2	20	<10	0.02
	09-17-91	--	--	0.020	0.3	20	<10	0.01
11N.05E.24.443 WE	05-30-91	--	10	0.010	1.3	<10	40	0.12
	06-21-91	0.45	6.0	0.060	2.2	90	60	0.22
11N.05E.24.443 WES	10-09-90	--	24	0.040	1.6	60	20	0.16
	12-06-90	0.58	19	0.020	1.5	60	<10	0.20
	02-28-91	0.79	21	0.020	1.5	60	20	0.57
	03-20-91	0.37	18	0.020	1.2	70	10	0.18
	07-16-91	0.92	21	0.050	1.0	70	10	0.14
	08-20-91	--	18	0.020	1.3	70	<10	0.17
	09-11-91	--	20	0.030	1.3	70	<10	0.16
11N.06E.19.122 LIE	10-09-90	--	2.8	<0.010	2.0	50	20	0.06
	11-26-90	0.28	2.4	<0.010	2.1	60	<10	0.06
	12-20-90	--	--	<0.010	2.1	50	10	0.05
	01-14-91	--	2.5	0.030	1.7	50	<10	<0.06
	02-14-91	--	2.6	<0.010	1.6	50	10	0.05
	03-22-91	--	3.1	0.020	2.2	50	<10	0.05
	04-18-91	--	--	0.020	1.9	50	20	0.08
	05-14-91	--	2.8	0.010	1.7	50	<10	0.05
	06-12-91	--	2.6	0.010	1.6	50	10	0.05
	07-10-91	0.28	2.8	<0.010	1.3	50	<10	0.04
	08-21-91	--	2.8	0.010	2.0	50	<10	0.06
	09-11-91	--	2.6	0.010	1.9	50	<10	0.06
11N.06E.21.133 PAV	10-09-90	--	1.7	0.020	0.6	80	10	0.04
	05-20-91	--	1.9	0.040	0.7	70	10	0.02
	06-18-91	--	--	0.010	0.5	70	160	<0.01
	07-10-91	0.59	1.9	0.010	0.5	70	<10	0.02
	08-21-91	--	--	0.020	1.0	70	<10	0.04
	09-17-91	--	1.3	0.020	0.7	70	<10	0.03

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DONA ANA COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
19S.05E.19.214 MAR-3SW	323848106275901	013	GW	10-22-90	0915	110AVMB	--	--	--	
		013	GW	10-29-90	1200	110AVMB	--	--	--	
21S.04E.10.322 (HTA-12)	322943106312301	013	GW	08-13-91	0200	400PCMB	81.93	155.00	150	
		013	GW	08-13-91	1200	400pcmb	81.93	155.00	150	
21S.04E.10.411 HTA-10	322941106311501	013	GW	08-13-91	1535	400pcmb	62.07	84.00	83	
21S.04E.10.411B (HTA-11)	322941106311301	013	GW	08-13-91	1430	400pcmb	65.39	85.00	80	
22S.04E.13.311 SW-13	322331106293801	013	GW	10-29-90	1330	110BLSN	--	534.00	--	
23S.05E.28.223 SC2	321703106255301	013	GW	10-22-90	1140	110AVMB	--	810.00	--	
		013	GW	10-29-90	0905	110AVMB	--	810.00	--	
23S.05E.34.114 SC3	321605106252601	013	GW	10-22-90	1205	110AVMB	--	810.00	--	
		013	GW	10-29-90	1005	110AVMB	--	810.00	--	

LOCAL IDENT- I- FIER	DATE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF HOLE, TOTAL (FEET) (72001)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
19S.05E.19.214 MAR	10-22-90	--	--	--	850	--	--	--	27.5	--
	10-29-90	--	--	--	820	--	7.7	22.5	27.5	340
21S.04E.10.322 (HT	08-13-91	130	5765	165	--	979	7.6	28.0	20.0	390
	08-13-91	130	5765	165	920	--	--	28.0	20.0	--
21S.04E.10.411 HTA	08-13-91	63	5680	--	960	--	7.6	25.5	19.5	430
21S.04E.10.411B (H	08-13-91	60	5690	205	960	--	7.8	32.5	19.5	390
22S.04E.13.311 SW-	10-29-90	--	4330	--	620	--	--	23.5	23.0	--
23S.05E.28.223 SC2	10-22-90	--	4100	1610	270	--	--	--	30.5	--
	10-29-90	--	4100	1610	270	--	8.6	18.0	27.0	13
23S.05E.34.114 SC3	10-22-90	--	4025	1640	290	--	--	--	28.0	--
	10-29-90	--	4025	1640	290	--	8.2	18.5	28.0	74

LOCAL IDENT- I- FIER	DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	69	40	43	1	2.2	221	160	38	0.20
21S.04E.10.322 (HT	08-13-91	110	28	63	1	1.3	260	200	35	3.9
	08-13-91	--	--	--	--	--	--	--	--	--
21S.04E.10.411 HTA	08-13-91	120	32	63	1	1.4	258	180	49	4.5
21S.04E.10.411B (H	08-13-91	110	28	59	1	1.3	213	170	40	4.1
22S.04E.13.311 SW-	10-29-90	--	--	--	--	--	--	100	22	0.40
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	4.9	0.06	50	6	0.60	79	29	9.5	1.2
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	27	1.4	30	2	1.7	80	36	16	0.50

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	<0.010	--	1.70	--
	10-29-90	0.16	25	521	511	--	--	--	--	--
21S.04E.10.322 (HT	08-13-91	0.27	25	673	623	--	--	--	--	--
	08-13-91	--	--	--	--	--	<0.010	<0.010	5.00	5.00
21S.04E.10.411 HTA	08-13-91	0.26	25	697	665	8.39	0.010	<0.010	8.40	7.70
21S.04E.10.411B (H	08-13-91	0.25	25	662	606	--	<0.010	<0.010	9.50	9.10
22S.04E.13.311 SW-	10-29-90	--	--	--	--	--	<0.010	--	1.10	--
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	<0.010	--	0.800	--
	10-29-90	0.060	22	164	165	--	--	--	--	--
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	<0.010	--	0.900	--
	10-29-90	0.060	31	197	192	--	--	--	--	--
LOCAL IDENT- IFIER	DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOR- THO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)
19S.05E.19.214 MAR	10-22-90	0.020	--	--	--	0.080	--	--	--	--
	10-29-90	--	--	--	--	--	--	<1	51	50
21S.04E.10.322 (HT	08-13-91	--	--	--	--	--	--	<1	31	50
	08-13-91	0.020	<0.010	0.48	5.5	0.010	<0.010	--	--	--
21S.04E.10.411 HTA	08-13-91	0.030	<0.010	0.27	8.7	0.120	0.030	<1	42	60
21S.04E.10.411B (H	08-13-91	0.010	<0.010	0.39	9.9	0.030	<0.010	<1	36	60
22S.04E.13.311 SW-	10-29-90	<0.010	--	--	1.4	0.030	--	--	--	--
23S.05E.28.223 SC2	10-22-90	<0.010	--	--	--	<0.010	--	--	--	--
	10-29-90	--	--	--	--	--	--	8	2	40
23S.05E.34.114 SC3	10-22-90	0.010	--	--	--	<0.010	--	--	--	--
	10-29-90	--	--	--	--	--	--	2	120	30
LOCAL IDENT- IFIER	DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	<1.0	1	1	6	<1	17	100	<0.1	1
21S.04E.10.322 (HT	08-13-91	<1.0	20	<1	15	<1	22	6	<0.1	2
	08-13-91	--	--	--	--	--	--	--	--	--
21S.04E.10.411 HTA	08-13-91	<1.0	<1	1	13	<1	23	11	<0.1	1
21S.04E.10.411B (H	08-13-91	<1.0	<1	<1	18	<1	20	2	<0.1	2
22S.04E.13.311 SW-	10-29-90	--	--	--	--	--	--	--	--	--
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	<1.0	10	2	11	<1	7	<1	<0.1	<1
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--	--
	10-29-90	<1.0	8	1	8	<1	9	6	<0.1	<1

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DONA ANA COUNTY -- Continued

LOCAL IDENT- IFIER	DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)
19S.05E.19.214 MAR	10-22-90	--	--	--	5.9	<0.6	3.9	<0.6	2.9	<0.6
	10-29-90	<1.0	1000	6	--	--	--	--	--	--
21S.04E.10.322 (HT	08-13-91	<1.0	280	140	--	--	--	--	--	--
	08-13-91	--	--	--	94	1.4	22	8.9	17	8.4
21S.04E.10.411 HTA	08-13-91	<1.0	320	70	120	59	16	60	12	55
21S.04E.10.411B (H	08-13-91	<1.0	270	26	110	1.5	18	15	14	15
22S.04E.13.311 SW-	10-29-90	--	--	--	8.6	<0.6	6.7	1.2	5.0	1.1
23S.05E.28.223 SC2	10-22-90	--	--	--	0.7	<0.6	1.0	<0.6	0.7	<0.6
	10-29-90	<1.0	33	3	--	--	--	--	--	--
23S.05E.34.114 SC3	10-22-90	--	--	--	2.4	<0.6	2.4	0.7	1.8	0.6
	10-29-90	<1.0	310	<3	--	--	--	--	--	--

LOCAL IDENT- IFIER	DATE	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
21S.04E.10.322 (HT	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
21S.04E.10.411 HTA	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
21S.04E.10.411B (H	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
22S.04E.13.311 SW-	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	0.30	<0.20	<0.20
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	0.20	<0.20	<0.20	<0.20	<0.20	2.0	<0.20	<0.20
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	0.40	<0.20	<0.20	<0.20	<0.20	7.7	<0.20	<0.20

LOCAL IDENT- IFIER	DATE	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	0.50	<0.20	<0.20	<0.20
21S.04E.10.322 (HT	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	<0.20	<0.20	<0.20	<0.20	1.4	<0.20	<0.20	<0.20
21S.04E.10.411 HTA	08-13-91	<0.20	<0.20	<0.20	<0.20	1.3	<0.20	0.20	<0.20
21S.04E.10.411B (H	08-13-91	<0.20	<0.20	<0.20	<0.20	1.2	<0.20	<0.20	<0.20
22S.04E.13.311 SW-	10-29-90	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	<0.20	<0.20
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	1.0	<0.20	<0.20	<0.20
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	1.3	<0.20	<0.20	<0.20

QUALITY OF GROUND WATER

WATER-QUALITY DATA. WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DONA ANA COUNTY -- Continued

[illegible]

LOCAL IDENTIFIER	DATE	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYLENE TOTAL (UG/L) (39180)	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.1	<0.010
21S.04E.10.322 (HT	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	--	--
21S.04E.10.411 HTA	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	--	--
21S.04E.10.411B (H	08-13-91	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	--	--
22S.04E.13.311 SW-	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	--	--
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.1	<0.010
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.1	<0.010

[illegible]

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DONA ANA COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	PER- THANE TOTAL (UG/L) (39034)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.010	<0.010	<0.01	<1	<0.01	<0.01	<0.01	<0.1
21S.04E.10.322 (HT)	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	--	--	--	--	--	--	--	--
21S.04E.10.411 HTA	08-13-91	--	--	--	--	--	--	--	--
21S.04E.10.411B (H)	08-13-91	--	--	--	--	--	--	--	--
22S.04E.13.311 SW-	10-29-90	--	--	--	--	--	--	--	--
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.010	<0.010	<0.01	<1	<0.01	<0.01	<0.01	<0.1
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.010	<0.010	<0.01	<1	<0.01	<0.01	<0.01	<0.1
LOCAL IDENT- I- FIER	DATE	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	MIREX, TOTAL (UG/L) (39755)	1,2-DI- CHLORO- ETHENE WATER WHOLE RECOVER (UG/L) (45617)	STYRENE TOTAL (UG/L) (77128)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI- CHLORO- PRO- PANE, WAT, WH TOTAL (UG/L) (77173)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.10	<0.01	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
21S.04E.10.322 (HT)	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	--	--	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
21S.04E.10.411 HTA	08-13-91	--	--	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
21S.04E.10.411B (H)	08-13-91	--	--	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
22S.04E.13.311 SW-	10-29-90	--	--	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.10	<0.01	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.10	<0.01	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20
LOCAL IDENT- I- FIER	DATE	PARA- CHLORO- TOLUENE WATER, WHOLE, TOTAL (UG/L) (77277)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,1,1,2 TETRA- CHLORO- ETHANE, WAT, WH TOTAL (UG/L) (77562)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L) (81551)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	2, 4-DP TOTAL (UG/L) (82183)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)
19S.05E.19.214 MAR	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.04	<0.2	<0.20	<0.01	<0.03
21S.04E.10.322 (HT)	08-13-91	--	--	--	--	--	--	--	--
	08-13-91	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	--	--
21S.04E.10.411 HTA	08-13-91	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	--	--
21S.04E.10.411B (H)	08-13-91	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	--	--
22S.04E.13.311 SW-	10-29-90	<0.20	<0.20	<0.20	<0.04	<0.2	<0.20	--	<0.03
23S.05E.28.223 SC2	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.04	<0.2	<0.20	<0.01	<0.03
23S.05E.34.114 SC3	10-22-90	--	--	--	--	--	--	--	--
	10-29-90	<0.20	<0.20	<0.20	<0.04	<0.2	<0.20	<0.01	<0.03

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
SAN JUAN COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	FLOW RATE, INSTAN- TANEOUS (G/M) (00059)
29N.16W.09.342 SAN JUAN FL	364430108312501	045	GW	10-17-90	1530	110AVMB	--	5060	20	
		045		11-29-90	1500	--	5060	--		
		045		01-31-91	1430	110AVMB	--	5060	--	
		045		10-17-90	0930	110AVMB	9.50	5140	--	
ALLUVIAL WELL ON CHACO RIV	363458108342401	045	GW	11-30-90	1000	--	5140	--		
		045		01-31-91	0930	110AVMB	--	5140	--	
		045		10-16-90	1500	110AVMB	9.00	4980	--	
		045		11-29-90	1230	110AVMB	9.00	4980	--	
NR032.0505X0180 CHACO R WE	364325108353001	045	GW	01-31-91	1230	110AVMB	9.00	4980	--	
		045		01-31-91	1230	110AVMB	9.00	4980	--	
		045		01-31-91	1230	110AVMB	9.00	4980	--	
		045		01-31-91	1230	110AVMB	9.00	4980	--	

LOCAL IDENT- IFIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
29N.16W.09.342 SAN	10-17-90	1100	7.1	16.0	540	150	40	50	0.9
	11-29-90	990	7.4	12.0	540	150	40	50	0.9
	01-31-91	1270	7.3	5.5	620	170	47	51	0.9
	10-17-90	1300	7.8	16.5	190	66	5.5	210	7
ALLUVIAL WELL ON C	11-30-90	1000	7.8	12.5	190	66	5.6	200	6
	01-31-91	1000	7.7	7.0	170	60	4.9	170	6
	10-16-90	1880	7.6	18.5	300	66	33	280	7
	11-29-90	1820	7.9	13.5	310	67	34	300	7
NR032.0505X0180 CH	01-31-91	1950	7.9	9.5	300	64	33	270	7

LOCAL IDENT- IFIER	DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
29N.16W.09.342 SAN	10-17-90	2.0	--	--	--	385	260	14	<0.10
	11-29-90	1.8	449	0	363	--	--	27	0.40
	01-31-91	1.6	--	--	--	358	370	35	0.70
	10-17-90	4.3	--	--	--	262	410	12	0.70
ALLUVIAL WELL ON C	11-30-90	3.3	250	0	204	--	390	11	0.40
	01-31-91	2.8	--	--	--	222	350	9.6	0.90
	10-16-90	6.3	--	--	--	147	700	63	1.3
	11-29-90	6.2	192	0	157	--	750	58	0.80
NR032.0505X0180 CH	01-31-91	5.3	--	--	--	133	710	61	1.2

LOCAL IDENT- IFIER	DATE	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
29N.16W.09.342 SAN	10-17-90	0.050	0.012	21	790	770	0.60	<10	32
	11-29-90	0.040	0.006	18	748	--	0.80	<10	31
	01-31-91	0.060	0.007	17	858	909	1.6	<10	30
	10-17-90	0.080	0.003	14	874	881	0.40	<10	28
ALLUVIAL WELL ON C	11-30-90	0.040	0.001	12	760	813	0.40	<10	22
	01-31-91	0.040	0.002	9.3	698	742	0.20	<10	24
	10-16-90	0.33	0.010	9.3	1280	1260	1.3	<10	24
	11-29-90	0.15	0.011	8.5	1350	1330	1.3	<10	24
NR032.0505X0180 CH	01-31-91	0.16	0.011	7.5	1240	1240	1.2	30	20

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
SAN JUAN COUNTY -- Continued

LOCAL IDENT- I- FIER	DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL (82086)
29N.16W.09.342 SAN	10-17-90	100	11	57	18	<1	1500	4	-1.20
	11-29-90	90	11	54	<1	2	1500	9	-1.20
	01-31-91	90	10	53	<1	2	1600	10	-3.00
ALLUVIAL WELL ON C	10-17-90	80	63	24	100	<1	810	<3	-3.80
	11-30-90	60	260	21	270	<1	790	3	-2.40
	01-31-91	50	25	17	58	<1	690	4	-1.20
NR032.0505X0180 CH	10-16-90	1100	8100	140	440	<1	3300	120	-4.70
	11-29-90	1100	9000	150	490	<1	3400	630	-4.70
	01-31-91	850	7400	120	420	<1	3100	910	-3.90

TAOS COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	COUNTY	SITE	DATE	TIME	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
28N.12E.08 BIG ARSENIC SEE	364058105412201	055	SP	08-29-91	0930	000EXRV	--	--	6880
28N.12E.09.BLM VISITOR CEN	364057105401701	055	GW	08-28-91	1150	122SNTFL	546.00	7570	
28N.12E.17. LITTLE ARSENIC	363957105411401	055	SP	08-29-91	1030	000EXRV	--	--	
29N.12E.20.BLM CHIFLO WELL	364422105403201	055	GW	08-29-91	1610	122SNTFL	415.00	7530	

LOCAL IDENT- I- FIER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
28N.12E.08 BIG ARS	08-29-91	200	8.1	22.5	17.5	65	18	4.8	20
28N.12E.09.BLM VIS	08-28-91	210	8.1	26.0	18.5	68	19	5.0	21
28N.12E.17. LITTLE	08-29-91	190	7.8	25.0	15.0	64	18	4.7	20
29N.12E.20.BLM CHI	08-29-91	220	8.3	25.0	18.5	71	20	5.1	21

LOCAL IDENT- I- FIER	DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
28N.12E.08 BIG ARS	08-29-91	1	2.3	97	0	80	17	8.3	1.1
28N.12E.09.BLM VIS	08-28-91	1	2.4	97	0	80	24	8.2	1.1
28N.12E.17. LITTLE	08-29-91	1	2.5	94	0	77	16	5.1	1.4
29N.12E.20.BLM CHI	08-29-91	1	2.6	98	0	80	21	8.0	0.90

LOCAL IDENT- I- FIER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
28N.12E.08 BIG ARS	08-29-91	33	155	155	<0.010	<0.010	0.700	0.730
28N.12E.09.BLM VIS	08-28-91	25	162	156	<0.010	<0.010	0.670	0.620
28N.12E.17. LITTLE	08-29-91	36	147	152	<0.010	<0.010	0.500	0.460
29N.12E.20.BLM CHI	08-29-91	34	157	165	<0.010	<0.010	0.850	0.840

LOCAL IDENT- I- FIER	DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
28N.12E.08 BIG ARS	08-29-91	<0.010	<0.010	--	0.020	<0.010	16	<1
28N.12E.09.BLM VIS	08-28-91	<0.010	<0.010	1.1	0.020	<0.010	5	<1
28N.12E.17. LITTLE	08-29-91	<0.010	<0.010	--	0.010	<0.010	5	<1
29N.12E.20.BLM CHI	08-29-91	<0.010	<0.010	--	0.010	<0.010	<3	<1

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

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

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

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