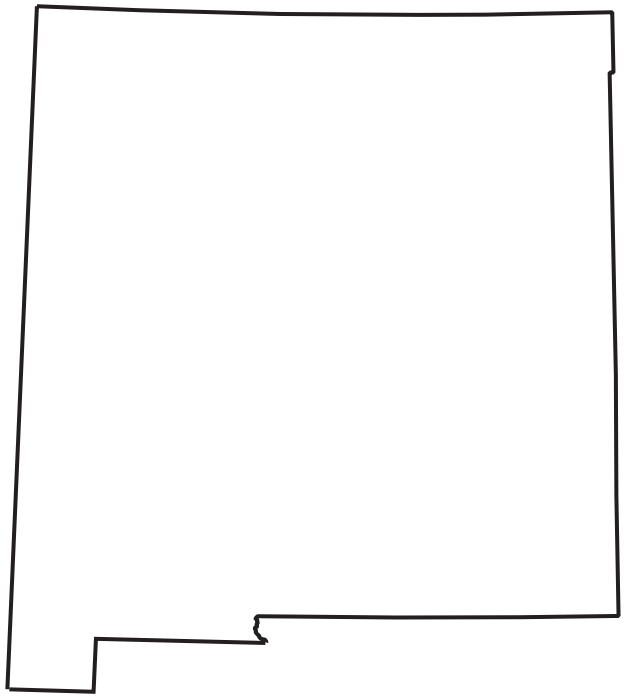
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Prepared in cooperation with the State of New Mex

Water Resources Data New Mexico Water Year 2003



Water-Data Report NM-03-1

CALENDAR FOR WATER YEAR 2003

2002

OCTOBER

S	M	T	W	T	F	S
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NOVEMBER

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2003

JANUARY

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JUNE

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31						

SEPTEMBER

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28	29	30				

Water Resources Data New Mexico Water Year 2003

By Dave Byrd, Harriet R. Allen, and Mary Montaño

Water-Data Report NM-03-1

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

U.S. Department of the Interior
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U.S. Department of the Interior
Gale A. Norton, Secretary

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2004

U.S. Geological Survey
5338 Montgomery Blvd. NE, Suite 400
Albuquerque, New Mexico 87109-1311
505-830-7900

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PREFACE

This annual hydrologic data report of New Mexico is one of a series of annual reports that documents 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 quality of water 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.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey of the New Mexico District 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 U.S. Geological Survey policies and guidelines.

The following personnel are recognized for their significant contributions to this report:

S.K. Anderholm	B.A. Hayhurst	D.R. Rankin
L.V. Beal	M. Jimenez	D.M. Roark
K.J. Burnley	T.M. Kelly	O.C. Romero
M.D. Carlson	J. Langman	R.D. Ross
B.J. Carr	S.H. Lewandowski	P.D. Seaton
A.R. Cox	D.W. Lutz	M.L. Shewmake
R.R. Cruz	L.C. Madrid	G.H. Sieber
R.K. Dewees	R.M. McBreen	J.A. Stiles
L.C. Donohoe	J.A. Medina	J.R. Summers
W.T. Evans	L.K. Miller	P.J. Swift
S.E. Falk	R.L. Moquino	E.B. Turner
R.G. Garcia	E.L. Nickerson	J.E. Veenhuis
B.R. Goddard	R.Y. Ochoa	S.D. Waltemeyer
R.L. Gold	T.J. Quintana	R.W. Wilcox
A.E. Gregory		

This report was prepared under the general supervision of Dave Byrd, Supervisory Hydrologic Technician, and Linda S. Weiss, District Chief, New Mexico, and in cooperation with the State of New Mexico and with other agencies.

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Water-resources data for the 2003 water year for New Mexico consist of records of discharge and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality in wells and springs. This report contains discharge records for 182 gaging stations; stage and contents for 24 lakes and reservoirs; water quality for 34 gaging stations, 83 wells, and 7 partial-record stations and miscellaneous sites; and water levels at 141 observation wells. Also included are 80 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. Two 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.

14. SUBJECT TERMS

*New Mexico, *Hydrologic data, *Surface water, *Water quality, Lakes, Reservoirs, Sediments, Water levels, Flow rates, Gaging stations, Chemical analyses, Water analyses, Water temperature, Sampling sites

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CONTENTS

	Page
Preface	iii
Report documentation page	iv
Surface-water stations, in downstream order, for which records are published in this volume	vii
Ground-water wells, by county, for which records are published in this volume	xiii
Discontinued surface-water-discharge stations	xvii
Discontinued surface-water-quality stations	xxx
Introduction	1
Cooperation	1
Summary of hydrologic conditions	2
Streamflow	2
Ground-water levels	3
Downstream order and station number	6
Numbering system for wells and miscellaneous sites	6
Special networks and programs	7
Explanation of stage- and water-discharge records	9
Data collection and computation	9
Data presentation	12
Station manuscript	12
Peak discharge greater than base discharge	13
Data table of daily mean values	13
Statistics of monthly mean data	13
Summary statistics	13
Identifying estimated daily discharge	15
Accuracy of field data and computed results	17
Other data records available	17
Explanation of precipitation records	17
Data collection and computation	17
Data presentation	17
Explanation of water-quality records	18
Collection and examination of data	18
Water analysis	18
Surface-water-quality records	18
Classification of records	19
Accuracy of the records	19
Arrangement of records	19
On-site measurements and sample collection	19
Water temperature	19
Sediment	21
Laboratory measurements	21
Data presentation	21
Remark codes	22
Water-quality control data	22
Blank samples	23
Reference samples	23
Replicate samples	23
Spike samples	24
Explanation of ground-water-level records	24
Site identification numbers	24
Data collection and computation	24

CONTENTS--Continued

	Page
Data presentation	25
Water-level tables	27
Hydrographs	27
Ground-water-quality data	27
Data collection and computation	27
Laboratory measurements	27
Access to USGS water data	27
Definition of terms	28
Publications on Techniques of Water-Resources Investigations	43
Surface-water records	47
Discharge at partial-record stations and miscellaneous sites	332
Seepage investigations	340
Analyses of samples collected at water-quality partial-record stations and miscellaneous sites	343
Ground-water levels	350
Quality of ground water	387
Index	433

ILLUSTRATIONS

Figure 1.	Map of New Mexico showing areas of 5-year ground-water-level monitoring and years measured or scheduled for measurement	4
2.	Ground-water-level trends for the last 20 years	5
3.	System for assigning latitude-longitude numbers to wells, springs, and miscellaneous sites	6
4.	New Mexico well-numbering system	8
5.	Texas well-numbering system	8
6.	Map of New Mexico showing location of surface-water gaging stations	10
7.	Map of New Mexico showing location of partial-record stations	16
8.	Map of New Mexico showing location of active surface-water-quality gaging stations	20
9.	Map of New Mexico showing location of observation wells	26

TABLES

Calendar for water year 2003 ..... inside front cover
Conversion factors ..... inside back cover

[Letters after station names designate type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (r) radiochemical, (s) sediment, (t) daily water temperature, (e) elevation, (v) contents]

	Station number	Page
LOWER MISSISSIPPI RIVER BASIN		
MISSISSIPPI RIVER:		
ARKANSAS RIVER BASIN		
ARKANSAS RIVER:		
CANADIAN RIVER:		
CHICORICA CREEK:		
LAKE MALOYA NEAR RATON, NM (v)	07199450	47
EAGLE TAIL DITCH NEAR MAXWELL, NM (d)	07202500	48
VERMEJO RIVER NEAR DAWSON, NM (d)	07203000	49
CIMARRON RIVER:		
MORENO CREEK AT EAGLE NEST, NM (d)	07204000	50
CIENEGUILLA CREEK NEAR EAGLE NEST, NM (d)	07204500	51
SIXMILE CREEK NEAR EAGLE NEST, NM (d)	07205000	52
EAGLE NEST LAKE NEAR EAGLE NEST, NM (v)	07205500	53
CIMARRON RIVER BELOW EAGLE NEST DAM, NM (d)	07206000	54
CIMARRON RIVER NEAR CIMARRON, NM (d)	07207000	55
PONIL CREEK NEAR CIMARRON, NM (d)	07207500	56
RAYADO CREEK NEAR CIMARRON, NM (d)	07208500	57
CIMARRON RIVER AT SPRINGER, NM (d)	07211000	58
CANADIAN RIVER NEAR TAYLOR SPRINGS, NM (d)	07211500	59
MORA RIVER AT LA CUEVA, NM (d)	07215500	60
MORA RIVER NEAR GOLONDRINAS, NM (d)	07216500	61
COYOTE CREEK NEAR GOLONDRINAS, NM (d)	07218000	62
CANADIAN RIVER NEAR SANCHEZ, NM (d)	07221500	63
CONCHAS LAKE AT CONCHAS DAM, NM (v)	07223500	64
UTE CREEK NEAR LOGAN, NM (d)	07226500	65
UTE RESERVOIR NEAR LOGAN, NM (v)	07226800	66
CANADIAN RIVER AT LOGAN NM (c,d)	07227000	67
REVUELTO CREEK NEAR LOGAN, NM (c,d)	07227100	69
CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, NM (c)	07227140	71
WESTERN GULF OF MEXICO BASINS		
RIO GRANDE BASIN		
RIO GRANDE NEAR LOBATOS, CO (c,d)	08251500	72
COSTILLA CREEK ABOVE COSTILLA DAM, NM (d)	08252500	75
CASIAS CREEK NEAR COSTILLA, NM (d)	08253000	76
SANTISTEVAN CREEK NEAR COSTILLA, NM (d)	08253500	77
COSTILLA RESERVOIR NEAR COSTILLA, NM (v)	08253900	78
COSTILLA CREEK BELOW COSTILLA DAM, NM (d)	08254000	79
COSTILLA CREEK NEAR COSTILLA, NM (d)	08255500	80
COSTILLA CREEK NEAR GARCIA, CO (d)	08261000	81
RIO GRANDE NEAR CERRO, NM (d)	08263500	82
RED RIVER NEAR QUESTA, NM (d)	08265000	83
RED RIVER BELOW FISH HATCHERY NEAR QUESTA, NM (d)	08266820	84
RIO HONDO NEAR VALDEZ, NM (c,d)	08267500	85
RIO GRANDE NEAR ARROYO HONDO, NM (d)	08268700	87

	Station number	Page
WESTERN GULF OF MEXICO BASINS		
RIO GRANDE BASIN - CONTINUED		
RIO PUEBLO DE TAOS NEAR TAOS, NM (d)	08269000	88
RIO LUCERO NEAR ARROYO SECO, NM (d)	08271000	89
RIO GRANDE DEL RANCHO NEAR TALPA, NM (d)	08275500	90
RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM (d)	08276300	91
RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM (c,d)	08276500	92
RIO PUEBLO NEAR PENASCO, NM (d)	08277470	95
RIO SANTA BARBARA NEAR PENASCO, NM (d)	08278500	96
EMBUDO CREEK AT DIXON, NM (d)	08279000	97
RIO GRANDE AT EMBUDO, NM (d)	08279500	98
RIO CHAMA:		
RIO CHAMA NEAR LA PUENTE, NM (c,d,s)	08284100	99
WILLOW CREEK:		
AZOTEA TUNNEL AT OUTLET NEAR CHAMA, NM (d)	08284160	101
WILLOW CREEK ABOVE HERON RESERVOIR NEAR LOS OJOS, NM (d)	08284200	102
HORSE LAKE CREEK ABOVE HERON RESERVOIR NEAR LOS OJOS, NM (d)	08284300	103
HERON RESERVOIR NEAR LOS OJOS, NM (v)	08284510	104
WILLOW CREEK BELOW HERON DAM, NM (d)	08284520	105
EL VADO RESERVOIR NEAR TIERRA AMARILLA, NM (v)	08285000	106
RIO CHAMA BELOW EL VADO DAM, NM (d)	08285500	107
RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM (d,t)	08286500	108
ABIQUIU RESERVOIR NEAR ABIQUIU, NM (v)	08286900	112
RIO CHAMA BELOW ABIQUIU DAM, NM (d)	08287000	113
RIO OJO CALIENTE AT LA MADERA, NM (d)	08289000	114
RIO CHAMA NEAR CHAMITA, NM (c,d,m,s)	08290000	115
SANTA CRUZ RIVER:		
SANTA CRUZ RIVER AT CUNDIYO, NM (d)	08291000	117
POJOAQUE RIVER		
RIO NAMBE:		
RIO NAMBE ABOVE NAMBE FALLS DAM NEAR NAMBE, NM (d)	08294195	118
NAMBE FALLS RESERVOIR NEAR NAMBE, NM (v)	08294200	119
RIO NAMBE BELOW NAMBE FALLS DAM, NEAR NAMBE, NM (d)	08294210	120
TESUQUE CREEK:		
TESUQUE CREEK ABOVE DIVERSIONS NEAR SANTA FE, NM (d)	08302500	121
LITTLE TESUQUE CREEK AT BISHOPS LODGE NEAR SANTA FE, NM (d)	08305030	122
RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, NM (c,d,m,s)	08313000	123
RIO GRANDE NEAR WHITE ROCK, NM (d)	08313268	127
SANTA FE RIVER:		
SANTA FE RIVER ABOVE MCCLURE RESERVOIR NEAR SANTA FE, NM (d)	08315480	128
MCCLURE RESERVOIR NEAR SANTA FE, NM (v)	08315500	129
SANTA FE RIVER NEAR SANTA FE, NM (d)	08316000	130
NICHOLS RESERVOIR NEAR SANTA FE, NM (v)	08316500	131
ARROYO HONDO NEAR SANTA FE, NM (d)	08317050	132
COCHITI LAKE NEAR COCHITI PUEBLO, NM (v)	08317300	133

Station number Page

WESTERN GULF OF MEXICO BASINS
RIO GRANDE BASIN - CONTINUED
RIO GRANDE BELOW COCHITI DAM, NM (d) 08317400 134
GALISTEO RESERVOIR NEAR CERRILLOS, NM (v) 08317900 135
GALISTEO CREEK BELOW GALISTEO DAM, NM (d) 08317950 136
RIO GRANDE AT SAN FELIPE, NM (c,d,s) 08319000 137
JEMEZ RIVER:
JEMEZ RIVER NEAR JEMEZ, NM (c,d,s) 08324000 141
JEMEZ CANYON RESERVOIR NEAR BERNALILLO, NM (v) 08328500 143
JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM (d) 08329000 144
NORTH FLOODWAY CHANNEL:
CAMPUS WASH AT ALBUQUERQUE, NM (d) 08329700 145
EMBUDO ARROYO AT ALBUQUERQUE, NM (d) 08329720 146
NORTH FLOODWAY CHANNEL AT ALBUQUERQUE, NM (d) 08329835 147
SOUTH FORK HAHN ARROYO AT ALBUQUERQUE, NM (d) 08329838 148
NORTH FORK HAHN ARROYO AT ALBUQUERQUE, NM (d) 08329839 149
HAHN ARROYO AT ALBUQUERQUE, NM (d) 08329840 150
ACADEMY ACRES DRAIN AT ALBUQUERQUE, NM (d) 08329880 151
PINO ARROYO AT JEFFERSON STREET AT ALBUQUERQUE, NM (d) 08329882 152
LA CUEVA ARROYO TRIBUTARY AT ALBUQUERQUE, NM (d) 08329888 153
NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM (d) 08329900 154
NORTH CAMINO ARROYO AT SUNSET HILLS IN ALBUQUERQUE, NM (c,d,s) 08329911 155
ARROYO 19A AT ALBUQUERQUE, NM (d) 08329935 156
MARIPOSA DIVERSION OF SAN ANTONIO ARROYO AT
ALBUQUERQUE, NM (d) 083299375 157
LADERA ARROYO AT ALBUQUERQUE, NM (d) 08329938 158
RIO GRANDE AT ALBUQUERQUE, NM (d,s) 08330000 159
TIJERAS ARROYO:
TRAMWAY FLOODWAY CHANNEL AT ALBUQUERQUE, NM (d) 08330540 163
TIJERAS ARROYO NEAR ALBUQUERQUE, NM (d) 08330600 164
SOUTH DIVERSION CHANNEL ABOVE TIJERAS ARROYO NEAR
ALBUQUERQUE, NM (d) 08330775 165
RIO GRANDE AT ISLETA LAKES NEAR ISLETA, NM (d) 08330875 166
RIO GRANDE AT ISLETA, NM (c,s) 08331000 167
RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, NM (d) 08331990 171
RIO GRANDE FLOODWAY NEAR BERNARDO, NM (c,d,s) 08332010 172
BERNARDO INTERIOR DRAIN NEAR BERNARDO, NM (d) 08332050 175
RIO PUERCO:
RIO PUERCO ABOVE ARROYO CHICO NEAR GUADALUPE, NM (d,s) 08334000 176
RIO SAN JOSE:
BLUEWATER LAKE NEAR BLUEWATER, NM (v) 08341400 177
RIO SAN JOSE AT GRANTS, NM (d) 08343000 178
RIO SAN JOSE NEAR GRANTS, NM (d) 08343500 179
RIO PUERCO NEAR BERNARDO, NM (c,d,s) 08353000 180
SOCORRO MAIN CANAL NORTH AT SAN ACACIA, NM (d) 08354500 183

Station number Page

WESTERN GULF OF MEXICO BASINS
RIO GRANDE BASIN - CONTINUED
RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM (d) ... 08354800 184
RIO GRANDE FLOODWAY AT SAN ACACIA, NM (c,d,m,s) ... 08354900 185
RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM (d) ... 08358300 190
RIO GRANDE FLOODWAY AT SAN MARCIAL, NM (c,d,m,s) ... 08358400 191
ELEPHANT BUTTE RESERVOIR AT ELEPHANT BUTTE, NM (v) ... 08360500 197
RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM (d) ... 08361000 198
CABALLO RESERVOIR NEAR ARREY, NM (v) ... 08362000 199
RIO GRANDE BELOW CABALLO DAM, NM (d) ... 08362500 200
RIO GRANDE AT EL PASO, TX (c,s) ... 08364000 201
PECOS RIVER BASIN
RIO MORA NEAR TERRERO, NM (d) ... 08377900 204
PECOS RIVER NEAR PECOS, NM (d) ... 08378500 205
PECOS RIVER NEAR ANTON CHICO, NM (d) ... 08379500 206
GALLINAS CREEK NEAR MONTEZUMA, NM (d) ... 08380500 207
GALLINAS RIVER NEAR COLONIAS, NM (d) ... 08382500 208
PECOS RIVER ABOVE CANON DEL UTA NEAR COLONIAS, NM (d) ... 08382600 209
PECOS RIVER ABOVE SANTA ROSA LAKE, NM (c,d,s) ... 08382650 210
SANTA ROSA LAKE NEAR SANTA ROSA, NM (v) ... 08382810 212
PECOS RIVER BELOW SANTA ROSA DAM, NM (d) ... 08382830 213
PECOS RIVER NEAR PUERTO DE LUNA, NM (c,d,s) ... 08383500 214
LAKE SUMNER NEAR FORT SUMNER, NM (v) ... 08384000 217
PECOS RIVER BELOW SUMNER DAM, NM (d) ... 08384500 218
FORT SUMNER MAIN CANAL NEAR FORT SUMNER, NM (d) ... 08385000 219
PECOS RIVER NEAR FORT SUMNER, NM (d) ... 08385500 220
PECOS RIVER BELOW TAIBAN CREEK NEAR FORT SUMNER, NM (d) ... 08385522 221
PECOS RIVER NEAR DUNLAP, NM (d) ... 08385630 222
PECOS RIVER BELOW SIXMILE DRAW NEAR ROSWELL, NM (d) ... 08385643 223
PECOS RIVER NEAR ACME, NM (d) ... 08386000 224
RIO HONDO:
RIO RUIDOSO AT RUIDOSO, NM (d) ... 08386505 225
RIO RUIDOSO AT HOLLYWOOD, NM (d) ... 08387000 226
EAGLE CREEK BELOW SOUTH FORK, NEAR ALTO, NM (d) ... 08387600 227
RIO HONDO AT DIAMOND A RANCH, NEAR ROSWELL, NM (d) ... 08390500 228
TWO RIVERS RESERVOIR NEAR ROSWELL, NM (v) ... 08390600 229
RIO HONDO BELOW DIAMOND A DAM, NEAR ROSWELL, NM (d) ... 08390800 230
RIO HONDO NEAR ROSWELL, NM (d) ... 08393610 231
PECOS RIVER NEAR LAKE ARTHUR, NM (d) ... 08395500 232
PECOS RIVER NEAR ARTESIA, NM (c,d,m,s) ... 08396500 233
RIO PENASCO NEAR DUNKEN, NM (d) ... 08397600 237
RIO PENASCO NEAR HOPE, NM (d) ... 08397620 238
RIO PENASCO AT DAYTON, NM (d) ... 08398500 239
PECOS RIVER (KAISER CHANNEL) NEAR LAKEWOOD, NM (d) ... 08399500 240
FOURMILE DRAW NEAR LAKEWOOD, NM (d) ... 08400000 241

Station number Page

WESTERN GULF OF MEXICO BASINS
RIO GRANDE BASIN - CONTINUED
PECOS RIVER BASIN - CONTINUED
SOUTH SEVEN RIVERS NEAR LAKEWOOD, NM (d) ... 08401200 242
BRANTLEY LAKE NEAR CARLSBAD, NM (v) ... 08401450 243
PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM (d) ... 08401500 244
ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, NM (d) ... 08401900 245
PECOS RIVER AT DAMSITE 3, NEAR CARLSBAD, NM (d) ... 08402000 246
CARLSBAD MAIN CANAL AT HEAD, NEAR CARLSBAD, NM (d) ... 08403500 247
LAKE AVALON NEAR CARLSBAD, NM (v) ... 08403800 248
PECOS RIVER BELOW AVALON DAM, NM (d) ... 08404000 249
DARK CANYON DRAW NEAR WHITES CITY, NM (d) ... 08405105 250
DARK CANYON DRAW AT CARLSBAD, NM (d) ... 08405150 252
PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM (c,d,r,s) ... 08405200 253
BLUE SPRINGS ABOVE DIVERSIONS NEAR WHITES CITY, NM (d) ... 08405450 256
BLACK RIVER ABOVE MALAGA, NM (d) ... 08405500 257
BLACK RIVER AT MALAGA, NM (d) ... 08406000 258
PECOS RIVER NEAR MALAGA, NM (c,d,t) ... 08406500 259
PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM (c,d,m,s,t) ... 08407000 263
PECOS RIVER AT RED BLUFF, NM (d) ... 08407500 269
DELAWARE RIVER NEAR RED BLUFF, NM (d) ... 08408500 270
RED BLUFF RESERVOIR NEAR ORLA, TX (v) ... 08410000 271
PECOS RIVER NEAR ORLA, TX (c,d) ... 08412500 272
PECOS RIVER NEAR BARSTOW, TX (d) ... 08418010 275
MIMBRES RIVER:
MIMBRES RIVER AT MIMBRES, NM (c,d) ... 08477110 276
TULAROSA VALLEY BASIN:
MALPAIS SPRING NEAR OSCURA, NM (d) ... 08480594 279
SALT CREEK NEAR TULAROSA, NM (c,d,s) ... 08480595 280
TULAROSA CREEK NEAR BENT, NM (d) ... 08481500 283
COLORADO RIVER BASIN
COLORADO RIVER:
SAN JUAN RIVER BASIN:
SAN JUAN RIVER NEAR CARRACAS, CO (d) ... 09346400 284
PIEDRA RIVER NEAR ARBOLES, CO (d) ... 09349800 285
LOS PINOS RIVER AT LA BOCA, CO (d) ... 09354500 286
SPRING CREEK AT LA BOCA, CO (d) ... 09355000 287
NAVAJO RESERVOIR NEAR ARCHULETA, NM (v) ... 09355100 288
SAN JUAN RIVER NEAR ARCHULETA, NM (c,d,m,s) ... 09355500 289
ANIMAS RIVER NEAR CEDAR HILL, NM (d) ... 09363500 292
ANIMAS RIVER AT FARMINGTON, NM (c,d,m,s) ... 09364500 293
SAN JUAN RIVER AT FARMINGTON, NM (c,d,m,s) ... 09365000 296
LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE (d) ... 09366500 299
SAN JUAN RIVER AT SHIPROCK, NM (c,d,m,s) ... 09368000 300
SAN JUAN RIVER AT FOUR CORNERS, CO (c,d,s) ... 09371010 303

Station number Page

COLORADO RIVER BASIN
COLORADO RIVER- CONTINUED:
LITTLE COLORADO RIVER BASIN
ZUNI RIVER:
RIO NUTRIA NEAR RAMAH, NM (d) 09386900 305
ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM (d) 09386950 306
GILA RIVER BASIN
GILA RIVER NEAR GILA, NM (d) 09430500 307
MOGOLLON CREEK NEAR CLIFF, NM (d) 09430600 308
UPPER GILA DITCH NEAR GILA, NM (d) 09430815 309
FORT WEST DITCH NEAR GILA, NM (d) 09430820 310
GILA FARMS DITCH NEAR GILA, NM (d) 09430825 311
GILA RIVER NEAR REDROCK, NM (c,d,s) 09431500 312
GRANDPA HARPER DITCH NEAR REDROCK, NM (d) 09431503 315
GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM (d) 09432000 316
SAN FRANCISCO RIVER
NORTH SIDE LUNA DITCH NEAR LUNA, NM (d) 09442625 317
W.S. LANEY DITCH NEAR LUNA, NM (d) 09442666 318
LEWIS DITCH NEAR RESERVE, NM (d) 09442669 319
SAN FRANCISCO RIVER NEAR RESERVE, NM (d) 09442680 320
KIEHNE DITCH NEAR RESERVE, NM (d) 09442682 321
PARSONS DITCH NEAR RESERVE, NM (d) 09442683 322
MIDDLE FRISCO DITCH NEAR RESERVE, NM (d) 09442684 323
THOMASON FLAT DITCH NEAR GLENWOOD, NM (d) 09442956 324
SPURGEON #2 DITCH NEAR GLENWOOD, NM (d) 09442958 325
W.S. DITCH NEAR GLENWOOD, NM (d) 09442960 326
FISH POND DITCH ABOVE HATCHERY AT GLENWOOD, NM (d) 09443900 327
EAST PLEASANTON DITCH NEAR GLENWOOD, NM (d) 09443938 328
SAN FRANCISCO RIVER NEAR GLENWOOD, NM (c,d,s) 09444000 329

Page

BERNALILLO COUNTY
WELL 350256106390801. Local number, 10N.03E.32.314 350
WELL 351051106395304. Local number, 11N.03E.18.411D 350
CHAVES COUNTY
WELL 334138104343801. (formerly 334645104344501) Local number, 07S.23E.23.24431 350
WELL 332615104303601. Local number, 10S.24E.21.212222 350
WELL 332255104360401. Local number, 11S.23E.03.342223 351
WELL 331914104253701. (formerly 331930104261001) Local number, 11S.25E.29.34333 351
WELL 331705104262801. (formerly 332200104270001) Local number, 12S.25E.09.42230 351
WELL 331525104245201. (formerly 331205104245101) Local number, 12S.25E.23.344412 351
WELL 331524104245101. Local number, 12S.25E.23.344234A 352
WELL 331213104241601. (formerly 331216104241701) Local number, 13S.25E.12.311134 352
WELL 331002104254701. (formerly 331002104272001) Local number, 13S.25E.27.211144 352
WELL 330702104402401. (formerly 330700104402501) Local number, 14S.23E.08.144344 352
WELL 330646104173301. (formerly 330640104174501) Local number, 14S.26E.12.431331 353
WELL 330404104221201. Local number, 14S.26E.30.44444 353
WELL 325654105180101. Local number, 16S.16E.03.312132 363
CIBOLA COUNTY
WELL 350346107521201. (formerly 350400107510501) Local number, 10N.10W.26.331 353
WELL 350923107522701. (formerly 350925107523001) Local number, 11N.10W.27.241 354
WELL 351304107543701. (formerly 351400107524201) Local number, 12N.10W.29.434 354
WELL 351651107594501. (formerly 351650107535001) Local number, 12N.11W.09.424 354
WELL 351630107572801. (formerly 351637107584501) Local number, 12N.11W.14.213 354
COLFAX COUNTY
WELL 364522104034501. (formerly 364500104031501) Local number, 29N.27E.16.222 355
COSTILLA COUNTY (COLORADO)
WELL 370004105402201. (formerly 370009105410001) Local number, 01N.74W.33.322 355
CURRY COUNTY
WELL 341836103052001. Local number, 01N.37E.17.113133 355
WELL 342358103093601. Local number, 02N.36E.15.11111 355
WELL 342736103203701. (formerly 342815103270001) Local number, 03N.34E.23.433133 356
WELL 343347103345001. Local number, 04N.32E.22.111114 356
WELL 343615103123801. Local number, 05N.35E.35.31324 356
DONA ANA COUNTY
WELL 322203106484101. (formerly 322210106483001) Local number, 22S.01E.26.411 356
WELL 322323106314701. Local number, 22S.04E.15.331 357
WELL 321606106462901. (formerly 321620106461501) Local number, 23S.02E.31.213 357
EDDY COUNTY
WELL 325702104352801. (formerly 325735104360701) Local number, 16S.24E.04.411341 357
WELL 325638104274801. Local number, 16S.25E.11.111131A 357
WELL 325450104251101. (formerly 325445104253501) Local number, 16S.26E.19.21113 358
WELL 324838104435301. (formerly 324831104435701) Local number, 17S.23E.30.12344 358
WELL 324620104255001. (formerly 324624104244501) Local number, 18S.26E.06.442221A 358
WELL 324620104255101. Local number, 18S.26E.06.442212B 359
WELL 324325104233001. Local number, 18S.26E.28.122111 359
WELL 323705104225501. Local number, 19S.26E.33.41224 359
WELL 323542104242701. (formerly 323540104232001) Local number, 20S.26E.08.121111 359

Page

EDDY COUNTY--Continued
WELL 322637104142301. (formerly 322652104141901) Local number, 21S.26E.36.22110 360
WELL 322712104074501. (formerly 322710104073901) Local number, 21S.28E.30.14123 360
WELL 322120104151501. Local number, 22S.26E.25.333333.(formerly 22S.26E.36.111A) 360
WELL 322238104101801. (formerly 322231104131001) Local number, 22S.27E.22.421333 360
WELL 321939104113301. (formerly 321930104113301) Local number, 23S.27E.09.211124 361
WELL 320604104284101. (formerly 320602104285201) Local number, 25S.24E.27.421121 361
WELL 320316104294301. (formerly 320257104295201) Local number, 26S.24E.09.443111 361
GRANT COUNTY
WELL 324245108175603. Local number, 18S.14W.28.143B 361
WELL 324600108222501. Local number, 18S.15W.11.323 362
GUADALUPE COUNTY
WELL 350414104485101. Local number, 10N.20E.28.2241 362
HARDING COUNTY
WELL 355352104054201. Local number, 19N.27E.05.334 362
HIDALGO COUNTY
WELL 324051108594101. (formerly 324053108594101) Local number, 19S.21W.03.414 362
WELL 321849108392001. (formerly 321848108391401) Local number, 23S.18W.12.333 363
WELL 321248108331401. (formerly 321257108331201) Local number, 24S.17W.14.442 363
WELL 321624108504001. (formerly 321540108514101) Local number, 23S.20W.25.422 363
WELL 315610108483901. (formerly 315645108493501) Local number, 27S.19W.20.343 363
WELL 315738109004001. Local number, 27S.21W.17.124 364
WELL 315048109010201. (formerly 315010108570001) Local number, 28S.21W.30.222 364
WELL 313502108275001. Local number, 31S.16W.33.233 364
LEA COUNTY
WELL 332115103403301. Local number, 11S.32E.24.113222 364
WELL 331713103283301. (formerly 331740103285001) Local number, 12S.34E.11.42134 365
WELL 330458103251001. (formerly 330455103251301) Local number, 14S.35E.28.111133 365
WELL 330405103194501. (formerly 330400103193401) Local number, 14S.36E.32.12121 365
WELL 325730103213901. (formerly 325703103213201) Local number, 16S.36E.04.32232 365
WELL 325132103112501. Local number, 17S.38E.07.111311 366
WELL 324745103082001. Local number, 17S.38E.34.113143 366
LINCOLN COUNTY
WELL 333241105341101. (formerly 333242105340701) Local number, 09S.14E.10.13221 366
WELL 332110105092501. (formerly 332157105094101) Local number, 11S.18E.15.33313 366
LUNA COUNTY
WELL 322927107220101. (formerly 322930107221001) Local number, 21S.05W.08.444 367
WELL 321352107493901. Local number, 24S.10W.12.431 367
WELL 321328107565301. (formerly 321415107565501) Local number, 24S.11W.14.122 367
WELL 321010107260201. (formerly 321015107260501) Local number, 25S.06W.02.111 367
WELL 320918107293301. (formerly 320915104294501) Local number, 25S.06W.07.211 368
WELL 320647107490701. Local number, 25S.09W.19.31331 368
WELL 315517107375001. (formerly 315525107374501) Local number, 27S.08W.35.122 368
WELL 315903107424501. (formerly 315905107425001) Local number, 27S.09W.01.431 368
WELL 315009107352401. Local number, 28S.07W.30.443 369

Page

MCKINLEY COUNTY
WELL 352023107473201. Local number, 13N.09W.21.4123 369
WELL 353645108011501. Local number, 16N.11W.17.4322 369
WELL 353521108284901. Local number, 16N.16W.25.142 369
WELL 354235108170702. Local number, 17N.14W.13.1144B 370
WELL 354235108170703. Local number, 17N.14W.13.1144C 370
OTERO COUNTY
WELL 330321106011101. (formerly 330324106011201) Local number, 14S.10E.31.144 370
WELL 325115105321401. Local number, 17S.14E.08.12111 370
WELL 320657105061501. Local number, 25S.18E.21.233 371
WELL 320138105063101. (formerly 320650105034801) Local number, 26S.18E.21.331 371
WELL 320008105064501. Local number, 26S.18E.33.133 371
QUAY COUNTY
WELL 343848103555801. Local number, 05N.28E.23.222232 371
WELL 343855103482901. (formerly 343810103463001) Local number, 05N.30E.18.331311 372
WELL 344406103555501. Local number, 06N.28E.13.33333 372
WELL 351040103433602. Local number, 11N.30E.14.144D 372
WELL 353239103111301. Local number, 15N.35E.11.21222 372
WELL 354238103132301. Local number, 17N.35E.16.221 373
ROOSEVELT COUNTY
WELL 341014103264401. Local number, 01S.33E.35.434344 373
WELL 341037103254501. Local number, 01S.33E.36.23111 373
WELL 340753103083101. Local number, 02S.36E.14.311111 373
WELL 340844103055001. Local number, 02S.37E.07.432222 374
WELL 334700103030601. (formerly 335655103032001) Local number, 06S.38E.21.233131 374
SANDOVAL COUNTY
WELL 352121106285501. (formerly 352235106282401) Local number, 13N.04E.12.112 374
WELL 351319106373501. Local number, 12N.03E.33.414A 374
WELL 351319106373502. Local number, 12N.03E.33.414B 375
WELL 351319106373503. Local number, 12N.03E.33.414C 375
WELL 351319106373504. Local number, 12N.03E.33.414D 375
WELL 351319106373505. Local number, 12N.03E.33.414E 375
WELL 351319106373506. Local number, 12N.03E.33.414F 376
SAN JUAN COUNTY
WELL 364744108225001. Local number, 30N.15W.23.4411 376
SAN MIGUEL COUNTY
WELL 353346105145201. Local number, 15N.16E.04.242 376
WELL 353418105145601. Local number, 16N.16E.33.143 376
SANTA FE COUNTY
WELL 350534106024801. (formerly 350525106025001) Local number, 10N.08E.13.1332 377
WELL 350344106004601. (formerly 350340106005001) Local number, 10N.09E.29.1334 377
WELL 350859106002901. Local number, 11N.09E.29.143 377
WELL 353636106021001. Local number, 16N.08E.13.444 377
WELL 353516106035801. Local number, 16N.08E.26.32112 378
WELL 353735105581201. (formerly 353753105580501) Local number, 16N.09E.10.42114 378
WELL 354013105580601. (formerly 354005105574501) Local number, 17N.09E.27.441 378

Page

SANTA FE COUNTY--Continued
WELL 353945105574501. Local number, 17N.09E.35.1314A 379
WELL 353945105574502. Local number, 17N.09E.35.1314B 379
WELL 353945105574503. Local number, 17N.09E.35.1314C 379
WELL 355000106092802. Local number, 19N.07E.36.3113B 380
WELL 355000106092803. Local number, 19N.07E.36.3113C 380
WELL 355002106093701. Local number, 19N.07E.35.4222A 380
WELL 355002106093702. Local number, 19N.07E.35.4222B 381
WELL 355002106093703. Local number, 19N.07E.35.4222C 381
WELL 355003106094301. Local number, 19N.07E.35.4212A 381
WELL 355003106094302. Local number, 19N.07E.35.4212B 381
WELL 355003106094303. Local number, 19N.07E.35.4212C 382
WELL 355006106094803. Local number, 19N.07E.35.4122C 382
SIERRA COUNTY
WELL 331002107150001. Local number, 13S.04W.21.213 382
WELL 325921107185101. (formerly 325550107184001) Local number, 15S.05W.24.312 382
WELL 325340107183001. (formerly 325350107175501) Local number, 16S.05W.25.211 383
TAOS COUNTY
WELL 365035105360501. (formerly 365036105355301) Local number, 30N.13E.18.1121 383
WELL 365644105363501. (formerly 365650105370001) Local number, 01S.74W.24.244 383
TORRANCE COUNTY
WELL 343443106024401. Local number, 04N.09E.07.334 383
WELL 344016106070901. (formerly 344016106064701) Local number, 05N.08E.08.424 384
WELL 344234106070601. (formerly 344234106074901) Local number, 06N.08E.32.212 384
WELL 344604105574601. (formerly 344622105575501) Local number, 06N.09E.11.211 384
WELL 344842106032701. Local number, 07N.08E.25.121 384
UNION COUNTY
WELL 355144103041201. (formerly 360940103083501) Local number, 19N.36E.23.2444 385
WELL 361847103064701. (formerly 361910103170501) Local number, 24N.36E.17.244 385
WELL 362540103095001. Local number, 25N.35E.02.441 385
WELL 363410103064801. Local number, 27N.36E.17.434 385
WELL 364444104000201. (formerly 364430103595501) Local number, 29N.28E.18.341 386

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
Vermejo River at Vermejo Park, NM	07202400	36.7	1985-93
Vermejo River near Maxwell, NM	07203525	486	1983-94
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
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

Station name	Station number	Drainage area (mi^2)	Period of record
ARKANSAS RIVER BASIN--Continued			
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
Mora River near Watrous, NM	07218100	521	1956-63
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
Mora River near Shoemaker, NM	07221000	6,015	1912-14, 1935-96
Canadian River near Bell Ranch, NM	07222000	6,200	1915-17, 1927-39
Bell Ranch Canal near Conchas Dam, NM	07223000	--	1942-84
Canchos Canal below Conchas Dam, NM	07223300	--	1961-82, 1984-92
Canadian River below Conchas Dam, NM	07224500	7,417	1936-38, 1942-72
Conchas River at Variadero, NM	07225000	523	1936-96
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	072271401	2,616	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 #2 near Amalia, NM	08254425	--	1986-88
Costilla Creek near Amalia, NM	08254500	152	1949-59, 1961-81

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Ute Creek near Amalia, NM	08255000	12	1949-59
Acequia Madre at Costilla, NM	08256000	--	1944-92
Mesa ditch near Garcia, CO	08256500	--	1944-65, 1969-83
Middle ditch at Garcia, CO	08257000	--	1944-56
Cerro Canal at Costilla, NM	08258000	--	1944-92
Association ditch at Costilla, NM	08258500	--	1955-71
Cerro Canal below Association Ditch at Costilla, NM	08258600	--	1972-92
Cerro Canal near Jaroso, CO	08259000	--	1944-72
Cerro Canal at State line near Jaroso, CO	08259600	--	1973-92
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
Cabresto Creek near Questa, NM	08266000	36.7	1943-96
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
Rio Grande near Arroyo Hondo, NM	08268700	8,760	1963-96
Acequia Madre at Taos, NM	08269500	--	1940-41
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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
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
Santa Clara Creek near Espanola, NM	08292000	34.5	1936-41, 1949-50, 1984-94
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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Rio Nambe at Nambe Falls, NM	08294300	25.1	1963-78
Nambe Canal near Nambe, NM	08294500	--	1932-51
Rio Nambe near Nambe, NM	08295000*	38.2	1932-51
Rio En Medio near Santa Fe, NM	08295200	0.63	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	0 .43	1961-73
South Fork Tesuque Creek near Santa Fe, NM	08302400	0 .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	0 .64	1962-73
Little Tesuque Creek tributary No. 4 near Santa Fe, NM	08304200	0 .69	1964-73
Little Tesuque Creek tributary No. 3 near Santa Fe, NM	08304300	0 .65	1963-73
Little Tesuque Creek tributary No. 2 near Santa Fe, NM	08304400	0 .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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Rio Tesuque at Grant Boundary at Tesuque, NM	08308025	12	1998-99
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
Los Alamos Canyon near Los Alamos, NM	08313042	9.1	1970-71 , 1991-95
Rito de los Frijoles near Los Alamos, NM	08313300	8.9	1959-63
Rito de los Frijoles in Bandelier National Monument, NM	08313350	18.1	1963-69, 1977-82, 1983-96
Rio Grande at Cochiti, NM	08314500	14,600	1924-70
Santa Fe River at Monument Rock, near Santa Fe, NM	08315000	14	1910
Santa Fe River below Nichols Reservoir near Santa Fe, NM	08316505	--	1998-99
Santa Fe River above St. Francis Dr. at Santa Fe, NM	08316530	--	1998-99
Santa Fe River at Ricardo Road at Santa Fe, NM	08316535	--	1998-99
Santa Fe River above Cochiti Lake, NM	08317200	232	1970-99
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 del las Vacas near Cuba, NM	08322000	--	1939-41
Rio Cebolla near Jemez Springs, NM	08322500	--	1939
Rio Guadalupe at Box Canyon near Jemez, NM	08323000	235	1938-42

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
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
Grant Line Arroyo at Villa del Oso at Albuquerque, NM	08329860	0.052	1976-98
Grant Line Arroyo at Albuquerque, NM	08329865	0.052	1987-91
Pino Arroyo at Ventura Blvd. at Albuquerque, NM	08329872	5.40	1990-2000
Hoffmantown Church Outlet No. 1 at Albuquerque, NM	08329873	0.859	1990-97
Hoffmantown Church Outlet No. 2 at Albuquerque, NM	08329874	0.413	1990-97
Cherry Hills Arroyo No. 1 at Albuquerque, NM	08329875	0.147	1990-97
Cherry Hills Arroyo No. 2 at Albuquerque, NM	08329876	0.796	1990-97
Pino Arroyo at Wyoming Blvd at Albuquerque, NM	08329877	5.80	1990-97
Taylor Ranch Drain at Albuquerque, NM	08329936	0.132	1978-98
Rio Grande near Alameda, NM	08329928	17,263	1989-95
Corrales Riverside Drain near Corrales, NM	08329930	--	1996-99
Corrales Main Canal outflow at Albuquerque, NM	08329931	--	1996-99
Rio Grande at Rio Bravo Bridge near Albuquerque, NM	08330150	17,500	1991-95
Tijeras Arroyo at Albuquerque, NM	08330500*	75.3	1921-22, 1943-49
Tijeras Arroyo above Four Hills Bridge at Albuquerque, NM	08330505	77.0	1989-91
Tijeras Arroyo at Kirtland Air Force Base, NM	08330560	80.6	1987-88
Arroyo Del Coyote near Albuquerque, NM	08330565	35	1989-95
Arroyo Del Coyote at mouth near Albuquerque, NM	08330567	39	1989-95
Tijeras Arroyo below Arroyo del Coyote near Albuquerque, NM	08330569	121	1989-95
Tijeras Arroyo at Montessa Park near Albuquerque, NM	08330580	122	1987-95
Tijeras Arroyo below South Diversion Channel inlet near Albuquerque, NM	08330800	--	1974-88
Albuquerque Riverside Drain near Isleta, NM	08330915	--	1997-99
Atrisco Riverside Drain at Isleta, NM	08330940	--	1997-99

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Rio Grande near Isleta, NM	08331000	17,900	1925-29, 1936-38
Barr/Chical diversion at Isleta, NM	08331105	--	1997-99
North Pajarito Arroyo at Albuquerque, NM	08331130	0.58	1979-87
North Pajarito Arroyo at Albuquerque, NM	08331140	0.81	1979-83
Rio Grande near Belen, NM	08331500	18,230	1941-57
Abo Arroyo near Blue Springs, NM	08331660	242	1996-2000
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 Cabezon, NM	08333000	360	1943-51
Rio Puerco at Cabezon, NM	08333500	397	1944-51
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 above Bluewater Dam, near Bluewater, NM	08341300	75.0	1953-78, 1989-2001
Cottonwood Creek near Thoreau, NM	08341365	77.0	1989-2001
Bluewater Creek below Bluewater Dam, NM	08341500	201	1951-60, 1989-2001
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
Rio San Jose at Grants	08343000	1,020	1949-66, 1968-94
Grants Canyon at Grants	08343100	13	1961-95
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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
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
Rio Paguate below Jackpile Mine near Laguna, NM	08349800	107	1976-93
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 San Jose at Correo, NM	08351500	3,660	1943-94
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
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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Tecolote Creek below Wright Canyon near El Porvenir, NM	08379187	5.42	1987-92
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 Fort Sumner, NM	08385500	5,600	1957-58, 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
Pecos River above Acme, NM	08385648	--	1992-2000
F. Herrera ditch S. at Hollywood, NM	08386900	--	1960-68, 1970-83
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 near Lincoln, NM	08389055	--	1999-2002
Rio Bonito at Hondo, NM	08389500	295	1930-55
Rio Hondo at Hondo, NM	08390000	1,000	1930-31
Rio Hondo at Picacho, NM	08390100	715	1908-09, 1956-62
Rio Hondo at Hondo Reservoir site, near Roswell, NM	08392500	970	1903-05
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	--	1903-06 , 1981-97
North Spring River at Roswell, NM	08393600	19.5	1958-77
Pecos River near Roswell, NM	08394000	--	1903-06
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

Station name	Station number	Drainage area (mi^2)	Period of record
RIO GRANDE BASIN--Continued			
Cottonwood Creek near Lake Arthur, NM	08396000	199	1932-65
Rio Penasco at Elk, NM	08397450	--	1910-11
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	8,100	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
TULAROSA VALLEY BASIN			
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
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

Station name	Station number	Drainage area (mi^2)	Period of record
TULAROSA VALLEY BASIN--Continued			
Indian Creek at mouth, near Three Rivers, NM	08480900	10.9	1956-58
Rio Tularosa at Mescalero, NM	08481300	--	1910-11
Tularosa Creek near Bent, NM	08481500	120	1947-96
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
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 CREEK BASIN			
Sacramento River near Sunspot, NM	08492900	12.8	1984-89
SAN JUAN BASIN			
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
La Plata River near Farmington, NM	09367500	583	1938-2002
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

Station name	Station number	Drainage area (mi^2)	Period of record
SAN JUAN BASIN--Continued			
Chaco Wash at Chaco Culture National Monument, NM	09367800*	578	1976-90
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-
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
Chaco River near Waterflow, NM	09367950	4,350	1975-94
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, 1990-94
Puerco River near Church Rock, NM	09395350	193	1978-82, 1989-91
Puerco River at Gallup, NM	09395500*	558	1940-46, 1977-82
Puerco River near Manuelito, NM	09395630	990	1989-93
Whitewater Arroyo near Cheechilgeetho, NM	09395700	78.5	1964-67
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
Tularosa River above Aragon, NM	09442692	94	1966-96
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

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 2003 water year. Records of (c) chemical, (b) biological, (m) microbiological, (s) sediment, or (t) daily 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
Ponil Creek near Cimarron, NM	07207500	171	c	1981-95
Rayado Creek at Sauble Ranch, near Cimarron, NM	07208500	85	c	1981-95
Canadian River near Taylor Springs, NM	07211500	2,850	b,c,s	1966-75
Mora River at La Cueva, NM	07215500	173	c	1981-95
Conchas Canal below Conchas Dam, NM	07223300	--	c	1964-77
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
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 1994
Red River at Fish Hatchery near Questa, NM	08266800	185	c,k,s,t	1966-77

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
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 Pueblo De Taos below Los Cordovas, NM	08276300	380	b,c,t	1981, 1986-98
Embudo Creek at Dixon, NM	08279000	305	c	1970-97
Rio Grande above San Juan Pueblo, NM	08281100	10,550	c,m,s	1987-88
Willow Creek above Azotea Creek near Park View, NM	08284150	42	c,s	1973
Azotea Tunnel at outlet near Chama, NM	08284160	--	c,s	1974-75
Willow Creek above Heron Reservoir near Park View, NM	08284200	112	c,s	1973-74
Horse Lake Creek above Heron Reservoir near Los Ojos, NM	08284300	0 45	c,s	1973
Willow Creek near Park View, NM	08284500	193	c,s	1962-65
Rio Chama below Heron Dam, NM	08284540	--	c,s	1973-74
El Vado Reservoir near Tierra Amarilla, NM	08285000	873	c	1973
Rio Chama Seep below El Vado Dam, NM	08285100	873	c	1973-74
Rio Chama below El Vado Dam, NM	08285500	877	c,s	1974
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 Grande at Santa Clara, NM	08291600	--	c,m,s	1987-94
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
Cochiti Lake near Cochiti Pueblo, NM	08317300	--	c,s	1981-98
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
Campus Wash at Albuquerque, NM	08329700	3.80	c,m,s	1991-94

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
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	
Bluewater Lake near Bluewater, NM	08341400	201	c	1966-69
Rio San Jose at Grants, NM	08343000	1,020	c,s	1980
Rio Paguate below Jackpile Mine near Luguna, NM	08349800	107	c	1977-93
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 Conveyance Channel at San Marcial, NM	08358300	--	c,m,s,t	1954-94
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
Tortugas Arroyo at Las Cruces, NM	08363700	20.7	c,s	1963-74
Rio Grande at Vinton Bridge near Anthony, TX	08363840	28,680	b,c,m,s	1975-78
Rio Grande below Old Fort Quintman, TX	08370500	31,990	c,m,s	1930-93
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
Gallinas Creek near Montezuma, NM	08380500	84	c	1964-67
Pecos River at Santa Rosa, NM	08383000	2,650	c,t	1905-07 1959-98
Pecos River below Sumner Dam, NM	08384500	4,390	b,c,m,s,t	1962-66, 1972-87
Pecos River below Taiban Creek near Fort Sumner, NM	08385522	--	c,t	1937-98
Pecos River near Acme, NM	08386000	11,380	b,c,s,t	1937-98
Rio Ruidoso at Hollywood, NM	08387000	120	c	1963-67, 1987-97
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

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
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
Black River at Harkey Crossing near Malaga, NM	08405400	343	c	1947-66
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
Tularosa Creek near Bent, NM	08481500	120	c	1963-95
Rio Blanco near Pagosa Springs, CO	09343000	58		1962-65
Rio Blanco at U.S. Highway 84 near Pagosa Springs, NM	09343400	--	c,s	1972-74
Navajo River above Chromo, CO	09344300	96.4	s	1962-65
Navajo River below Oso Diverson Dam near Chromo, CO	09344450	--	c,s	1972-75
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
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
Animas River near Cedar Hill, NM	09363500	1,090	c,m,s,t	1943-45, 1958-59, 1969-73, 1975, 1987-98
San Juan River at Farmington, NM	09365000	7,240	c,s,t	1962-82
La Plata River at Colorado-New Mexico State line	09366500	331	b,c,m,s	1970-73
La Plata River near Farmington, NM	09367500	583	c,s	1970-73, 1978-81

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
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
San Juan River near Fruitland, NM	09367540	8,010	c	1978-95
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
Puerco River near Manuelito, NM	09395630	990	c,s	1989-93
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
San Francisco River at Clifton, AZ	09445000	2,766	s	1963-67
Dry Beaver Creek near Rimrock, AZ	09505350	139	s	1964-65
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 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 database 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."

This report include 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 182 gaging stations and contents for 24 lakes and reservoirs; water quality for 34 gaging stations, 83 wells, and 7 partial-record stations and miscellaneous sites, and water levels at 141 observation wells. Also included are 80 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. Two 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, Information Services Center, Box 25286, 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 published annually for each State.

These reports have an identification number consisting of the two-letter State beginning with water year 1975; data for streamflow, water quality, and ground water were combined in reports 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-03-1." These Water-Data Reports are for sale by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

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 Office of State Engineer,

New Mexico Interstate Stream Commission,

Pecos River Commission,

New Mexico State Highway and Transportation Department,

Canadian River Municipal Water Authority,

Costilla Creek Compact Commission,

Albuquerque Metropolitan Arroyo Flood Control Authority,

City of Albuquerque,

City of Santa Fe,

City of Santa Rosa,

City of Raton,

Pueblo of Zuni,

Pecos Valley Artesian Conservancy District,

Lea County Water User's Association,

Red Bluff Water and Power District,

Village of Ruidoso, and

New Mexico Environment Department, Surface Water Quality Bureau.

Financial assistance for the collection of water-resources data published in this report was provided by the U.S. Army Corps of Engineers, the Bureau of Reclamation, the Bureau of Indian Affairs, and the Bureau of Land Management.

Assistance in the form of services was provided by the Carlsbad Irrigation District. Organizations that provided data are recognized in the station description.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Perennial streams in New Mexico generally are in mountainous regions in the north-central, south-central, and southwestern parts of the State. Other perennial streams include the San Juan and Animas Rivers in northwestern New Mexico, which originate in the San Juan Mountains of southwestern Colorado. 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.

The quantity of water in the hydrologic system, as evidenced by precipitation records, was generally near normal in most areas of the State at the beginning of water year 2003. Rainfall decreased somewhat in November to below normal in most areas of the State. Rainfall at the end of the calendar year was generally below normal in all but the southern areas of the State. In January most sites recorded no precipitation. Winter precipitation during February and March rebounded to just below normal levels with several exceptions where precipitation was well above normal. For example, precipitation in March was 180 percent of normal in Albuquerque in contrast to 73 percent of normal in Las Vegas and 73 percent of normal in Carlsbad. Snowpack at the beginning of January was 95 percent of normal statewide, which was significantly better than the year before. Snowpack levels continued to be the same through the end of January. However, January was the warmest and driest in 100 years. This resulted in predicted spring runoff significantly below normal amounts. In contrast, cooler and wetter conditions occurred in February and March, but predicted runoff amounts continued to be well below normal. This resulted in a call for water conservation measures to make use of limited surface-water supplies. Precipitation, with a few exceptions, continued at below-normal levels from April through the end of water year 2003.

The quantity of water stored in New Mexico's reservoirs often does not represent natural hydrologic conditions because operators of those reservoirs need to meet demands for such uses as irrigation, flood control, legal compacts, endangered species, and recreation. During periods of heavy storm activity, for example, reservoir operators can reduce the amount of water in storage. A review of water storage during water year 2003 indicates various trends. Storage at several reservoirs varied only slightly; for example, storage at Brantley ranged from 0 to 2 percent of capacity, Abiquiu ranged from 3 to 6 percent of capacity, Conchas varied from 23 percent to 28 percent of capacity, Ute varied from 65 percent to 71 percent of capacity, and Cochiti stayed at 10 percent of capacity. Storage in other reservoirs, however, represented operating schedules that resulted in a general decline in storage throughout the year with a small increase during March to June. For example, storage in El Vado Reservoir at the beginning of water year 2003 was 4 percent of capacity in October, peaked at 54 percent of capacity in May, then declined to 21 percent of capacity at the end of the water year. Other reservoirs experienced steady decreases in storage throughout most of the year. The combined storage in Lake Sumner and Santa Rosa Reservoir capacity ranged from 9 percent of capacity in December to 5 percent in April, declining to 1 percent of capacity from June through September. The combined storage in Elephant Butte-Caballo Reservoirs closely reflected this trend. Storage in Elephant Butte-Caballo was 18 percent of normal in January, 17 percent of normal in May, 11 percent of normal in July, and 7 percent of normal at the end of September. Reservoir storage in most of the State's reservoirs at the end of water year 2003 generally was at lower levels than at the beginning of the water year. Specifically, the combined storage of 13 major reservoirs in the State decreased by 358,000 acre-feet during water year 2003, totaling 1,461,000 acre-feet by

September 30, 2003. The combined capacity of these 13 reservoirs is 8,530,000 acre-feet.

Streamflow in New Mexico varied greatly at the end of water year 2002. Recorded flows were well below normal at index stations in the Rio Grande, Pecos, and Animas River Basins. In contrast, recorded streamflows were well above normal in the Gila and Delaware River Basins at the end of the water year. However, by December all index stations recorded below-normal flows. Spring runoff was below normal at all sites with the exception of the Pecos River. Streamflow recorded in April at Rio Grande below Taos Junction Bridge (station 08276500) was 41 percent of normal, streamflow at Gila River near Gila (station 09430500) was 72 percent of normal, and streamflow at Delaware River near Red Bluff (station 08408500) was 19 percent of normal. In contrast, the April streamflow at Pecos River near Pecos (station 08378500) was 108 percent of normal. Streamflow was generally well below normal at all the index stations for the balance of the year with the exception of Delaware River near Red Bluff, which was 229 percent of normal in May. These flows reflected the lower than normal precipitation recorded throughout the State.

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. Seventeen selected wells in various parts of the State are equipped with continuous water-level recorders.

Hydrographs of water levels in wells (fig. 2) in the four quadrants of the State illustrate the water-level trends for the last 20 years. 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 since 1979. The current decrease in the water level in the Cibola County well may be a result of recent withdrawals for industrial use and drought. The wells in Luna, Union, and Chaves Counties are in areas of intensive irrigation. The water level in the Luna County well (Mimbres Valley) decreased from water year 1991, 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 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.

Discharges for water year 2003 at four index streamflow-gaging stations compared to median annual discharge for water years 1972-2002 at the same stations are listed below:

Station number	Station name	Median annual discharge in acre-ft water years 1972-2002	Annual mean discharge in acre-ft water year 2003	2003 discharge as a percentage of median
08276500	Rio Grande below Taos Junction Bridge	576,900	220,300	38
08378500	Pecos River near Pecos	75,380	46,710	62
08408500	Delaware River near Red Bluff	3,680	1,600	43
09430500	Gila River near Gila	127,900	48,160	38

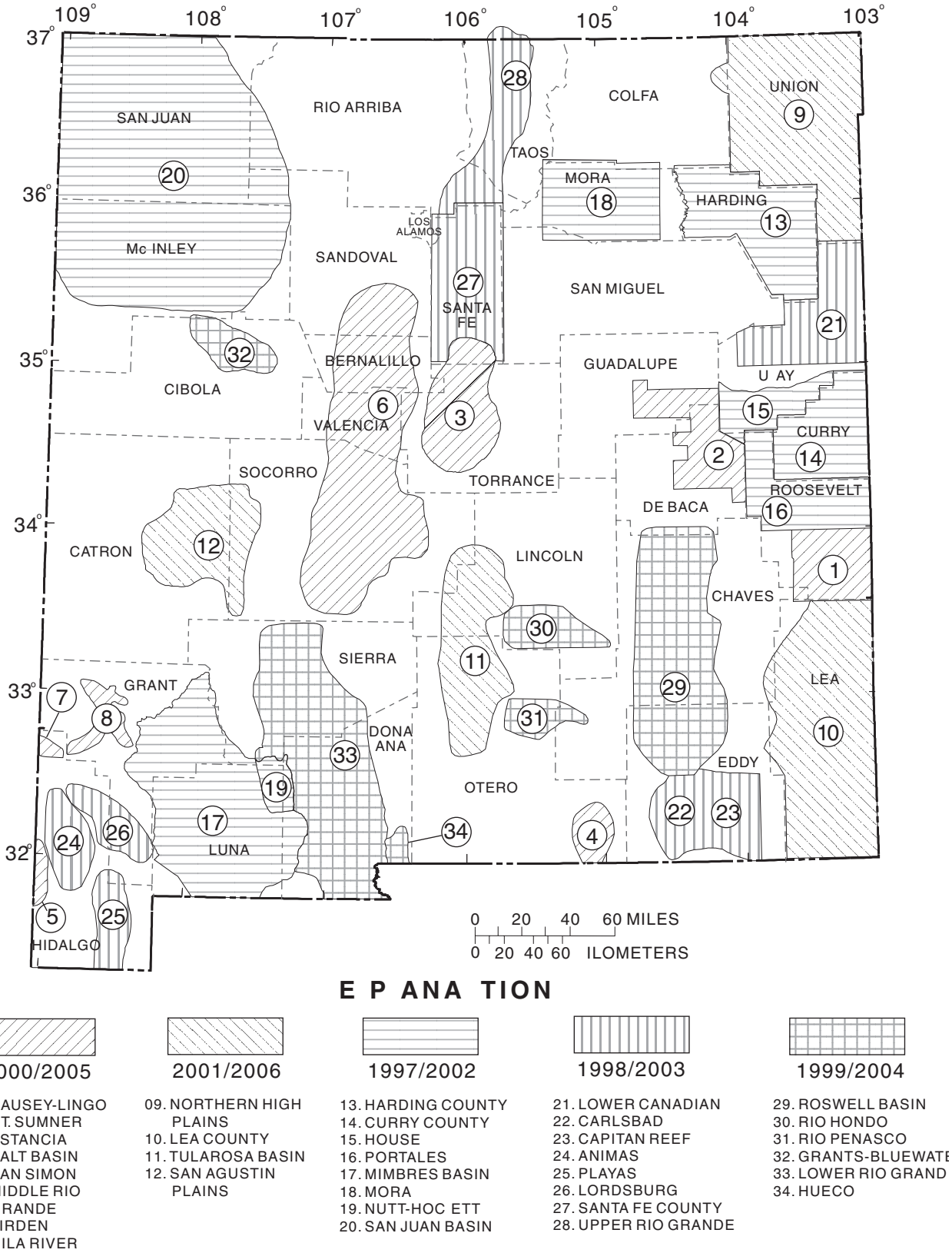


Figure 1.--Areas of 5-year ground-water-level monitoring and years measured or scheduled for measurement.

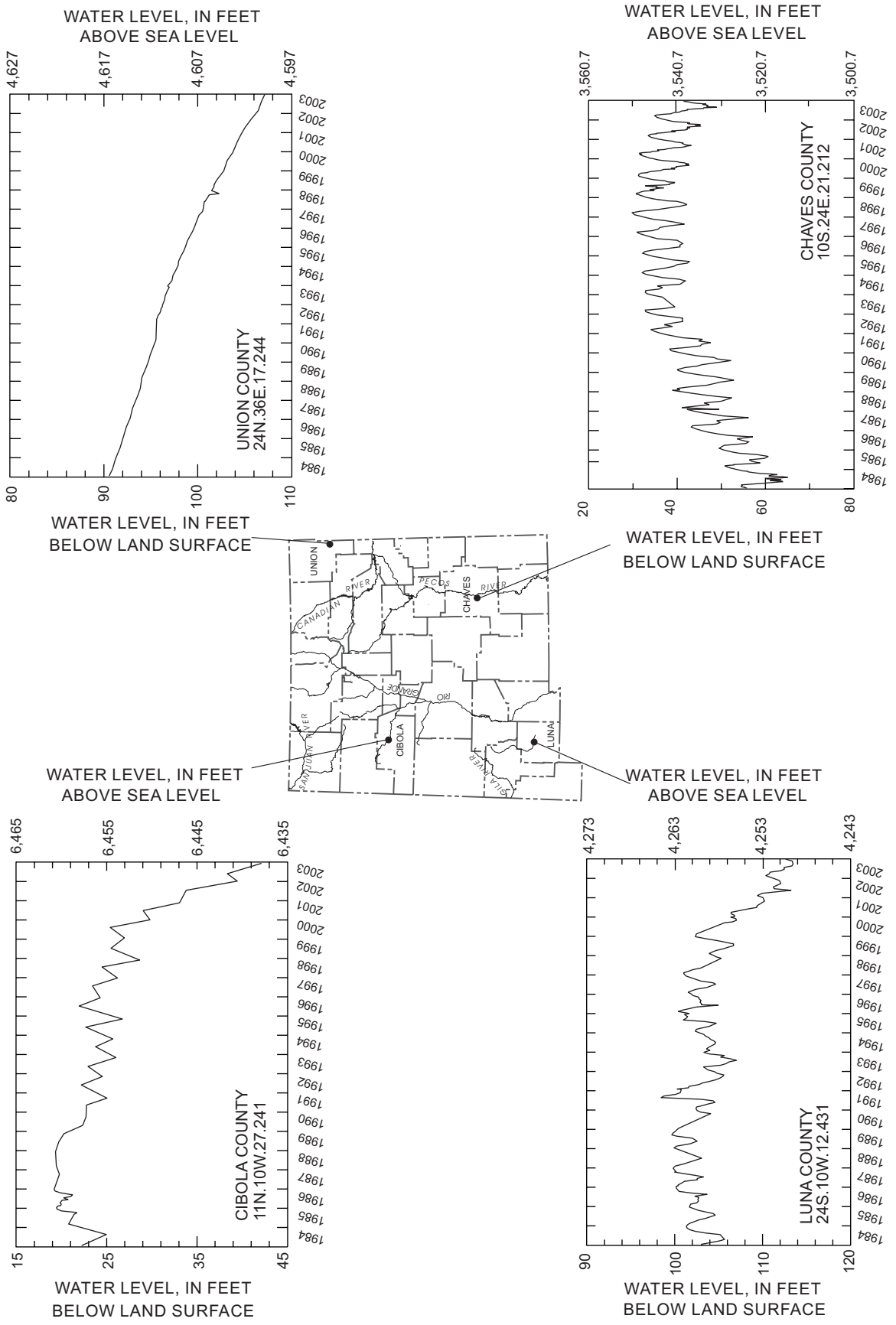


Figure 2.--Ground-water-level trends for the last 20 years.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. 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 located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well 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, and the next seven digits denote degrees, minutes, and seconds of longitude; the last two digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number, such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 3). The eight-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

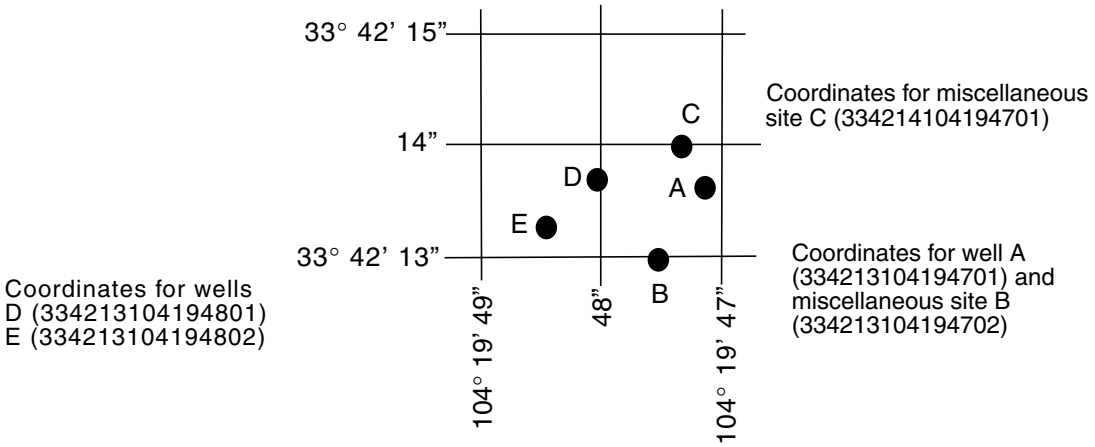


Figure 3.--System for assigning latitude-longitude numbers to wells, springs, and miscellaneous sites.

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of New Mexico and shows the location of the well by quadrant, township, range section, and position within the section (see fig. 4). 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. Four quadrants are formed by the intersection of the base line and the principal meridian—1 indicates the northwest quadrant, 2 the northeast, 3 the southwest, and 4 the southeast. 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.

The well numbering system in Texas was developed by the Texas Water Development Board for use throughout the State. Under this system, each 1-degree quadrangle is given a number consisting of two digits. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7-1/2-minute quadrangles, which are given two digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7-1/2-minute quadrangle is divided into 2-1/2-minute quadrangles, which are given a single-digit number from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2-1/2-minute quadrangle is given a two-digit number in the order in which it was inventoried, starting with 01. These are the last two digits of the well number. In addition to this seven-digit well number, a two-letter prefix is used to identify the county. An example of the Texas well-numbering system is provided in figure 5.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from *http://water.usgs.gov/hbn/*.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River Basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of five stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from *http://water.usgs.gov/nasqan/*.

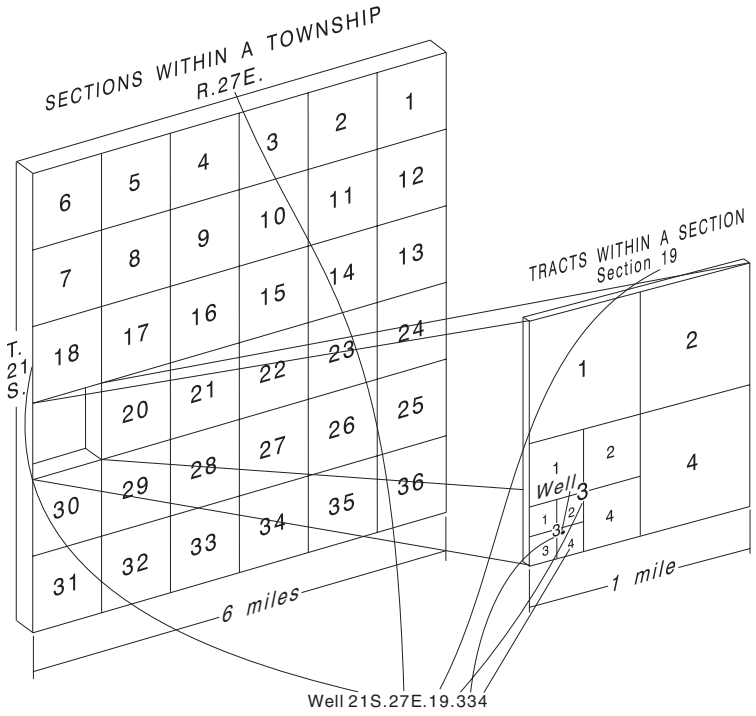


Figure 4.--New Mexico well-numbering system.

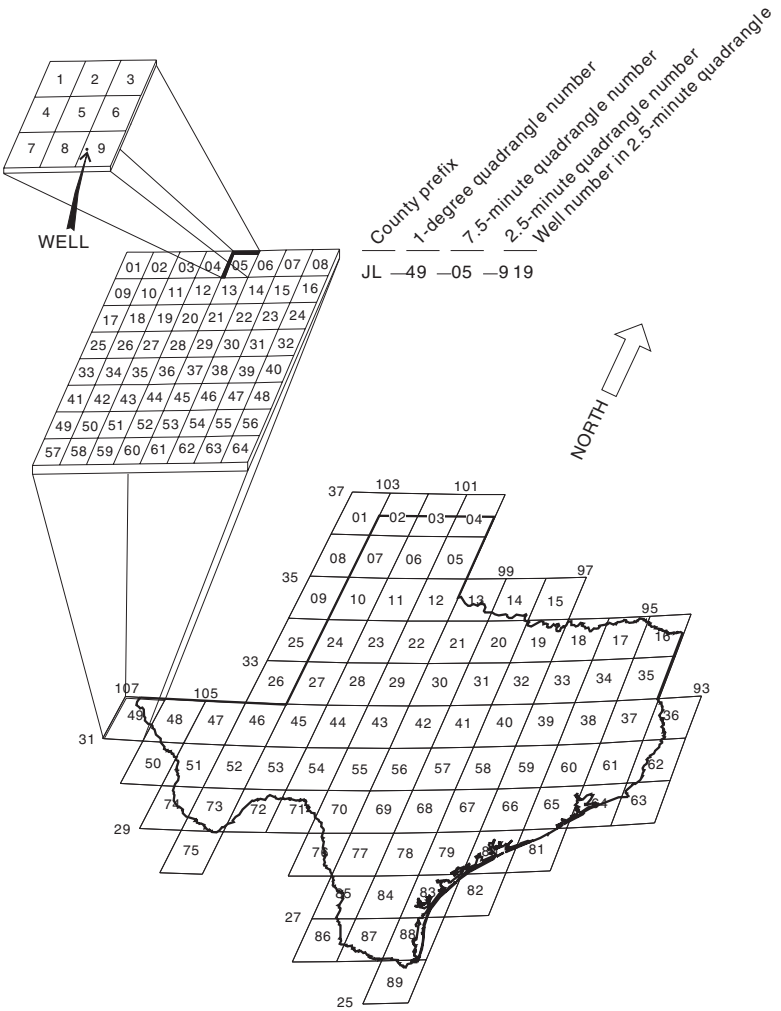


Figure 5.--Texas well-numbering system.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from *http://bqs.usgs.gov/acidrain/*.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

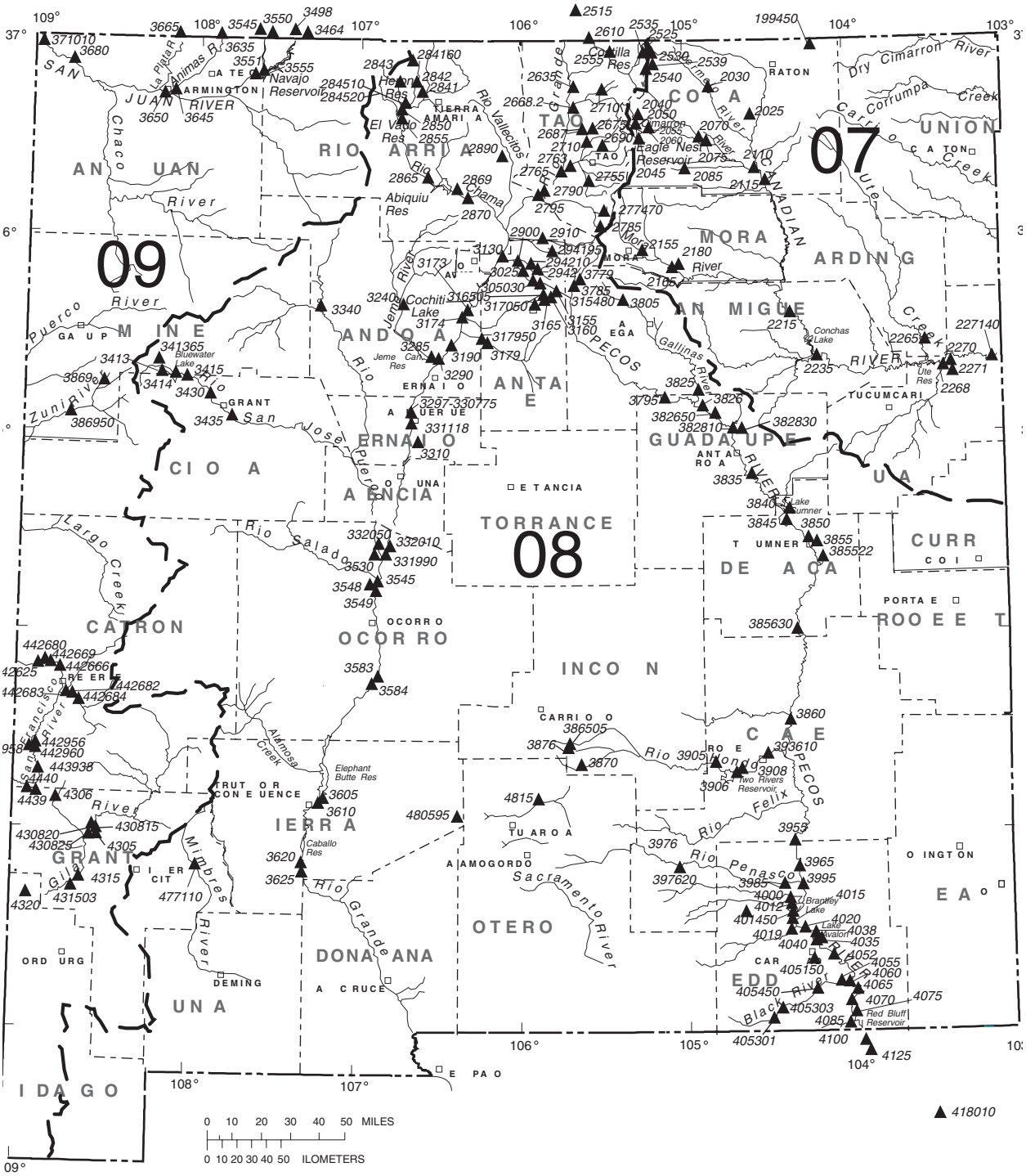
Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from *http://water.usgs.gov/nawqa/*.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 6) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are



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401450▲ GAGING STATION AND NUMBER--

Number by symbol is abbreviated station number. Complete national station number is 08 401450

Basin number station number

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

described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. 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 by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

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

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

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the 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 from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of

operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; 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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://water.usgs.gov/nwis/nwis*). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stations in the nature of the REMARKS and in the inclusion of a stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS __-__, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a

statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the

manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-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 about 326,000 gallons or 1,233 cubic meters.

Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations (fig. 7) follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record 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. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

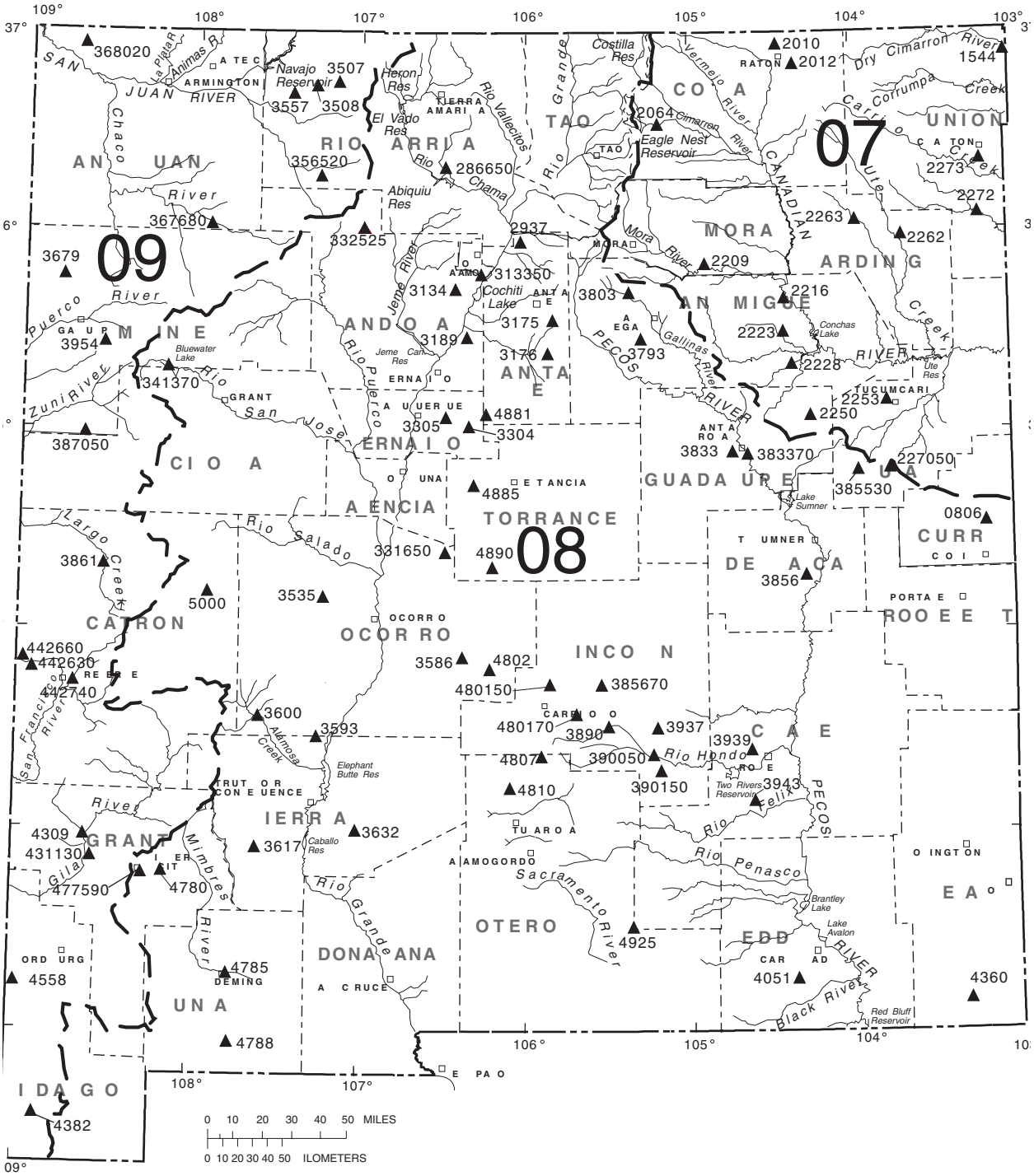
Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified. This identification is shown either by flagging individual daily values with the letter "e" and noting in a table footnote, "e–Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±5%	> ±5 to 10%	> ±10 to 15%	> ±15%



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08 WESTERN GULF OF ME ICO BASIN NUMBER

09 COLORADO RIVER BASIN NUMBER

— — RIVER BASIN BOUNDARY

477590▲ GAGING STATION AND NUMBER--

Number by symbol is abbreviated station number. Complete national station number is 08 477590

Basin number station number

Figure 7.--Location of partial-record stations.

Accuracy of Field Data and Computed Results

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

The degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates 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. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

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

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 to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. 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 Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are 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 (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs. A list of TWRIs is provided in this report.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between 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 and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data is useful in the interpretation of surface-water quality. Records of surface-water quality in this report 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 *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one 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 continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. 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 on the quality of surface water appear in this report are shown in figure 8.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Arrangement of Records

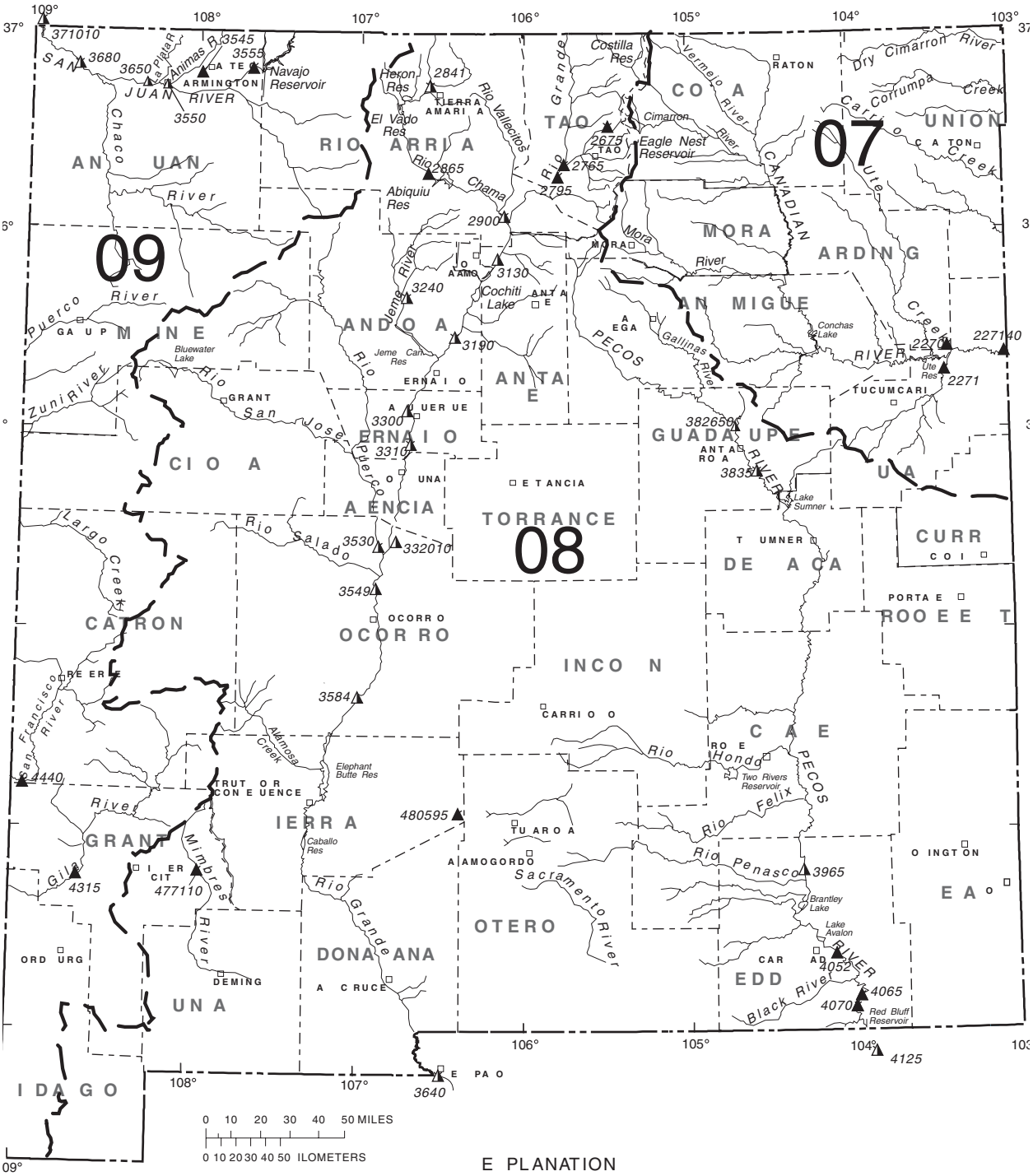
Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water 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 is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. These TWRIs are listed in this report. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in 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 a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.



E PLANATION

.S. Geological Survey base

BASIN AND STATION NUMBER

07 LOWER MISSISSIPPI RIVER BASIN NUMBER

08 WESTERN GULF OF ME ICO BASIN NUMBER

09 COLORADO RIVER BASIN NUMBER

RIVER BASIN BOUNDARY

480595 STATION AND NUMBER--Number by symbol is abbreviated station number. Complete national station number is 08 480595

Basin number station number

STATION AND SAMPLING FRE UENCY

CHEMICAL U ALITY	▲ Daily	▲ Other than daily
SUSPENDED SEDIMENT	△ Daily	△ Other than daily
CHEMICAL U ALITY AND SUSPENDED SEDIMENT	◭ Both daily	◭ Both other than
	◭ Daily chemical quality and other than daily suspended sediment	◭ Daily suspended sediment and other than da chemical qual

Figure 8.--Location of active surface-water-quality gaging stations.

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 section.

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 were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These methods are consistent with ASTM standards and generally follow ISO standards.

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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE-AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. 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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://waterdata.usgs.gov/nwis*). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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 section:

Printed Output	Remark
E or 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).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration

equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in

composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation.)

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure 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-level measurements in this report are given in feet with reference to land-surface datum (lsd). 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 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 of 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

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figure 9*;* each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

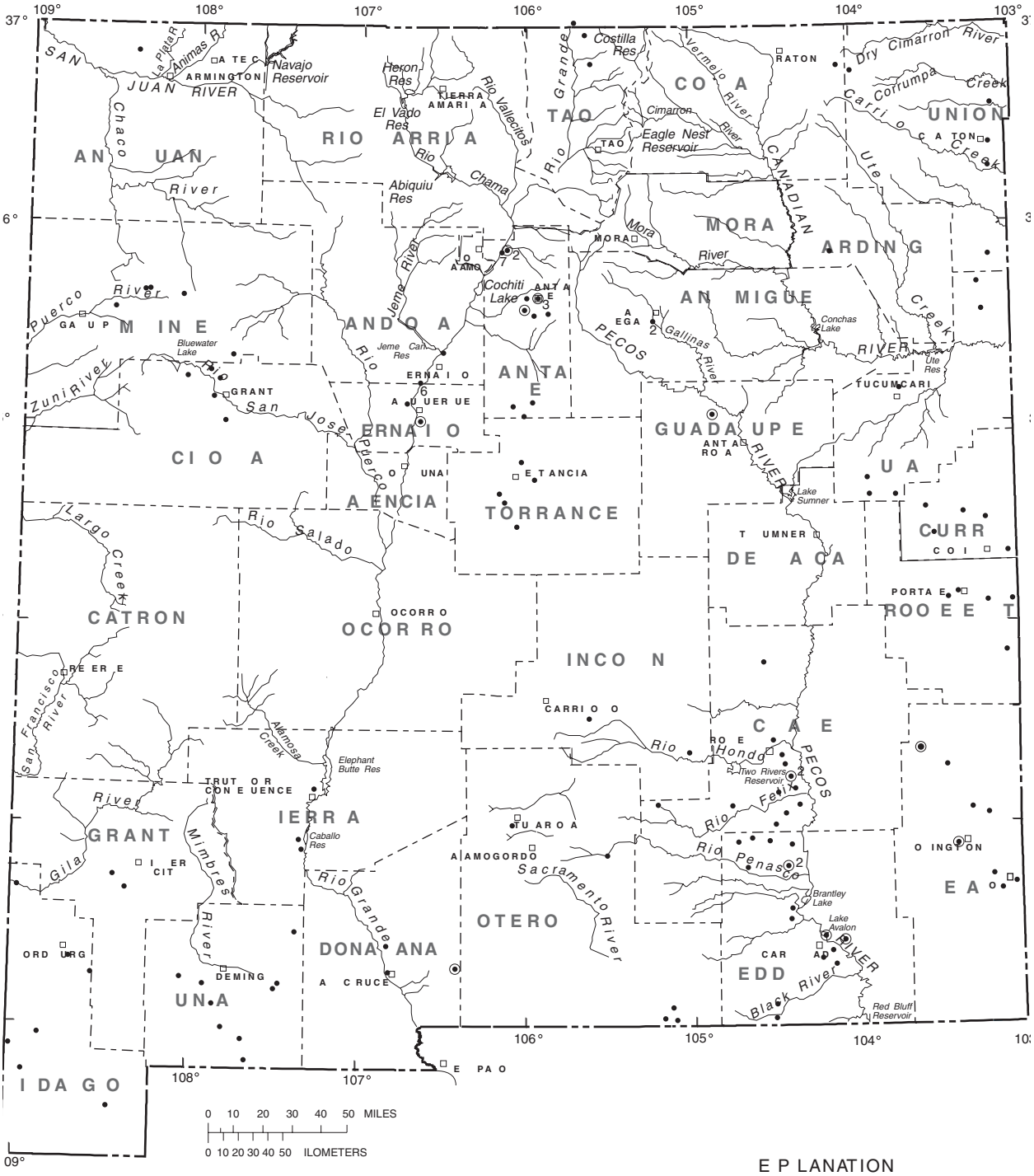
INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), 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 National Geodetic Vertical Datum of 1929 (NGVD 29); 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, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.



J.S. Geological Survey base

E P LANATION

OBSERVATION WELL--
Number indicates closely spaced wells

2◉ Recording

• Nonrecording

Figure 9.--Location of observation wells.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRIs. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (see address that is shown on the back of the title page of this report).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

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

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

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. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is 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 collected. 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. (See also "Substrate")

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

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

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 mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that 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 volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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 BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, 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 saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Verti-

cal Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved solids concentration in water is the quantity of dissolved material in a sample of water. It 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, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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. 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 specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, 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. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 ˚C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus*

feacium, Streptococcus avium, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli *(E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are 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 plus or minus 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 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. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

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

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening tech-

nique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

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

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA Web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'non-detection value' (NDV).

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

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-

sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA Web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

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

Mean high or **low tide** is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

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

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

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.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). 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, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass

(kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

Open or **screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. 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 milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) 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, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of

the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are 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 commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

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.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

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 (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines 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 with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The oxygen method defines 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. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (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 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. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few

being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 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.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

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

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.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as 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 suspended water-sediment sample that is retained on a 0.45-micrometer 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 are 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

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 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 ˚C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial 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:	Arthropeda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a 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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that 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 plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the 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 length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution because of the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to USEPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are components of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS 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, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

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.)

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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are 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. (See also "Plankton")

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals, the Techniques of Water-Resources Investigations, 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.

Reports in the Techniques of Water-Resources Investigations series, which are listed below, are online at http://water.usgs.gov/pubs/twri/. Printed copies are for sale by the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office), telephone 1-888-ASK-USGS. Please telephone 1-888-ASK-USGS for current prices, and refer to the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Products can then be ordered by telephone, or online at http://www.usgs.gov/sales.html, or by FAX to (303) 236-469 of an order form available online at http://mac.usgs.gov/isb/pubs/forms/. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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, chap. D1. 1975. 65 p.

1–D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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

2–D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2–E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2–E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2–F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3–A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3–A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3–A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3–A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3–A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

3–A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3–A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3–A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

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, chap. A9. 1989. 27 p.

3–Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3–A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3–A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3–A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3–A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3–A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

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3–A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3–A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3–A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3–B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3–B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3–B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3–B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3–B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3–B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3–B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3–B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3–C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3–C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3–C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

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Section A. Statistical Analysis

4–A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4–A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

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Section B. Surface Water

4–B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

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4–B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4–D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5–A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

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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, chap. A4. 1989. 363 p.

5–A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

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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, chap. A1. 1988. 586 p.

6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

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6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.

6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and

S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

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

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Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8–A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.

8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8–B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

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9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

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9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

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 mi^2.

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

GAGE.--Water-stage recorder. Datum 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-ft, 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, 7,513.01 ft, May 29, 1995; minimum observed, 911 acre-ft, Feb. 28, 1979, elevation, 7,479.85 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,820 acre-ft, Apr. 23 and 24, elevation, 7,512.10 ft; minimum contents, 3,210 acre-ft, Oct. 10, 20, and 22, elevation 7,506.95 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,220	3,230	3,260	3,330	3,260	3,290	3,750	3,730	3,670	3,630	3,480	3,470
2	3,220	3,230	3,260	3,330	3,270	3,300	3,780	3,720	3,680	3,630	3,480	3,470
3	3,220	3,230	3,280	3,320	3,270	3,300	3,770	3,710	3,690	3,620	3,470	3,480
4	3,220	3,230	3,280	3,320	3,270	3,300	3,760	3,710	3,690	3,620	3,470	3,480
5	3,230	3,230	3,290	3,320	3,260	3,300	3,750	3,710	3,700	3,620	3,470	3,480
6	3,230	3,230	3,290	3,320	3,270	3,300	3,750	3,700	3,700	3,610	3,470	3,480
7	3,230	3,230	3,300	3,310	3,270	3,300	3,740	3,700	3,690	3,610	3,470	3,490
8	3,230	3,230	3,300	3,310	3,270	3,300	3,730	3,690	3,680	3,600	3,470	3,490
9	3,230	3,230	3,300	3,310	3,270	3,300	3,730	3,690	3,670	3,580	3,470	3,500
10	3,230	3,230	3,310	3,300	3,270	3,310	3,750	3,680	3,670	3,570	3,470	3,500
11	3,230	3,230	3,310	3,300	3,270	3,320	3,760	3,680	3,660	3,560	3,470	3,500
12	3,230	3,230	3,320	3,300	3,270	3,330	3,770	3,670	3,660	3,560	3,470	3,500
13	3,220	3,240	3,320	3,290	3,270	3,340	3,770	3,660	3,650	3,550	3,470	3,500
14	3,220	3,240	3,320	3,290	3,270	3,360	3,760	3,660	3,660	3,550	3,470	3,500
15	3,220	3,240	3,320	3,290	3,280	3,380	3,770	3,670	3,660	3,540	3,470	3,500
16	3,220	3,240	3,320	3,290	3,280	3,400	3,750	3,670	3,680	3,540	3,460	3,500
17	3,220	3,250	3,320	3,290	3,280	3,410	3,750	3,670	3,690	3,540	3,460	3,490
18	3,220	3,250	3,320	3,280	3,280	3,430	3,740	3,680	3,700	3,530	3,460	3,490
19	3,220	3,250	3,320	3,280	3,280	3,470	3,740	3,680	3,700	3,530	3,460	3,490
20	3,220	3,250	3,320	3,280	3,290	3,470	3,740	3,680	3,700	3,530	3,460	3,490
21	3,220	3,250	3,330	3,280	3,290	3,480	3,750	3,680	3,700	3,520	3,460	3,490
22	3,220	3,250	3,320	3,280	3,290	3,500	3,790	3,680	3,690	3,520	3,460	3,490
23	3,220	3,250	3,320	3,270	3,290	3,510	3,820	3,670	3,680	3,510	3,460	3,490
24	3,220	3,260	3,330	3,270	3,290	3,530	3,790	3,660	3,670	3,510	3,450	3,490
25	3,220	3,260	3,330	3,270	3,290	3,560	3,780	3,660	3,650	3,500	3,450	3,490
26	3,220	3,260	3,330	3,270	3,290	3,600	3,760	3,660	3,640	3,500	3,450	3,490
27	3,230	3,260	3,330	3,270	3,290	3,640	3,750	3,670	3,630	3,500	3,450	3,490
28	3,230	3,260	3,330	3,270	3,290	3,660	3,750	3,670	3,630	3,500	3,450	3,480
29	3,230	3,260	3,330	3,270	---	3,680	3,740	3,670	3,630	3,490	3,460	3,480
30	3,230	3,260	3,320	3,270	---	3,690	3,730	3,670	3,630	3,490	3,470	3,480
31	3,230	---	3,320	3,260	---	3,720	---	3,670	---	3,480	3,470	---
MAX	3,230	3,260	3,330	3,330	3,290	3,720	3,820	3,730	3,700	3,630	3,480	3,500
MIN	3,220	3,230	3,260	3,260	3,260	3,290	3,730	3,660	3,630	3,480	3,450	3,470
(+)	7,507.07	7,507.38	7,507.93	7,507.40	7,507.67	7,511.27	7,511.37	7,510.83	7,510.52	7,509.26	7,509.14	7,509.29
(++)	+10	+30	+60	-60	+30	+430	+10	-60	-40	-150	-10	+10
(+++)	0	0	0	0	105	21	52	163	97	86	13	0
(++++)	0	0	0	0	0	0	0	225	235	30	0	0

CAL YR 2002 MAX 3,340 MIN 3,140 (++) -20 (+++) 435 (++++) 0
WTR YR 2003 MAX 3,820 MIN 3,220 (++) +260 (+++) 537 (++++) 490

(+) Elevation in feet, at end of month.
(++) Change in contents, in acre-feet.
(+++) Diversion for Lake Maloya, in acre-feet.
(++++)Release, in acre-feet, to Vermejo Conservancy District.

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. Eagle Tail ditch diverts water from Chicorica Creek for use near Maxwell. No diversions upstream from station. No flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	3.9	30	0.29	0.14	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	31	26	7.3	0.07	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	61	17	4.0	0.01	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	77	11	3.7	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	66	10	28	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	54	9.1	19	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	42	11	9.1	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	35	12	10	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	27	9.2	7.4	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	23	6.1	6.4	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	38	5.0	6.6	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	54	4.8	7.3	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	66	4.1	5.9	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	72	3.9	8.3	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	3.5	61	3.3	17	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	2.7	57	1.3	8.7	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.12	46	0.62	1.6	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.04	38	0.51	1.3	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	31	0.37	33	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	35	0.52	32	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.74	34	0.79	25	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	7.7	46	0.92	13	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	2.6	89	0.36	9.1	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	1.2	139	0.14	6.9	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.18	110	0.10	5.2	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.09	71	16	5.3	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	1.8	28	7.5	5.2	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	5.2	62	2.3	4.7	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	1.2	43	1.2	1.6	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.55	36	0.71	0.51	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.35	---	0.40	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	27.97	1,575.9	196.24	293.40	0.22	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.90	52.5	6.33	9.78	0.007	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	7.7	139	30	33	0.14	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	3.9	0.10	0.29	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	55	3,130	389	582	0.4	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2003, BY WATER YEAR (WY)

MEAN	1.91	2.27	2.12	2.16	2.68	5.31	12.2	19.0	9.80	5.73	8.76	3.84
MAX	7.06	7.27	8.06	11.3	13.5	26.9	68.7	91.0	46.9	32.0	43.9	12.8
(WY)	(1985)	(1998)	(1998)	(1998)	(1993)	(1997)	(1984)	(1993)	(1949)	(1949)	(1981)	(1989)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000
(WY)	(1976)	(1946)	(1946)	(1946)	(1981)	(1986)	(1978)	(2002)	(1946)	(2003)	(2003)	(1946)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1945 - 2003	
ANNUAL TOTAL	117.53		2,093.73			
ANNUAL MEAN	0.32		5.74		6.57	
HIGHEST ANNUAL MEAN					17.8	1984
LOWEST ANNUAL MEAN					0.32	2002
HIGHEST DAILY MEAN	27	Jun 15	139	Apr 24	a217	Aug 27, 1946
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	May 16, 1945
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	May 16, 1945
MAXIMUM PEAK FLOW			146	Apr 24	375	May 30, 1995
MAXIMUM PEAK STAGE			3.69	Apr 24	5.15	May 30, 1995
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 2000
ANNUAL RUNOFF (AC-FT)	233		4,150		4,760	
10 PERCENT EXCEEDS	0.00		18		16	
50 PERCENT EXCEEDS	0.00		0.00		1.3	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 85 ft^3/s.

07203000 VERMEJO RIVER NEAR DAWSON, NM

LOCATION.--Lat 36°40'48", long 104°47'09", Colfax County, Hydrologic Unit 11080001, in Maxwell Grant, on right bank 1.3 mi north of Dawson, 2.3 mi upstream from Rail Canyon, and at mile 28.2.

DRAINAGE AREA.--301 mi^2.

PERIOD OF RECORD.--October 1915 to July 1918, April 1919 to May 1923, March 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 with satellite telemetry and crest-stage gage. 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. Sept. 24, 1953, to May 21, 2002, at site 200 ft downstream at same datum.

REMARKS.--Records good except for those estimated, 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Aug. 2, 1921, when discharge probably exceeded 10,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	e2.0	2.6	2.3	2.2	e3.4	4.6	11	19	8.8	5.1	8.4
2	2.6	e2.2	3.1	e2.5	2.6	e3.2	4.2	11	18	8.6	4.3	6.5
3	2.3	e2.2	3.4	3.0	e2.4	e3.2	3.9	9.7	14	8.0	3.7	6.3
4	2.0	e2.3	3.6	4.0	e2.0	e3.1	3.9	10	12	6.8	3.5	8.4
5	2.0	e2.3	3.3	3.5	e2.0	e3.0	4.4	11	15	6.5	3.2	9.4
6	2.3	2.6	3.0	4.9	e1.9	e3.1	4.7	9.2	23	6.3	2.9	10
7	2.5	2.2	3.3	4.0	e1.5	e3.0	4.8	9.8	18	6.3	2.5	9.9
8	2.2	2.1	2.3	2.8	e1.6	3.0	4.4	9.0	16	5.8	2.7	8.8
9	1.9	2.6	3.0	1.9	e1.9	3.3	3.8	8.3	14	5.0	3.5	8.5
10	1.7	3.4	e1.6	e1.9	e2.1	3.3	4.1	7.6	13	4.7	4.8	9.9
11	1.5	3.5	e1.6	e2.6	e2.5	3.1	4.1	9.0	13	5.3	5.5	15
12	1.4	3.3	e1.4	3.0	3.0	2.9	4.0	9.2	11	4.6	4.7	13
13	1.7	2.7	e1.5	3.5	4.8	2.8	4.8	e9.1	10	3.9	4.9	11
14	1.5	e1.7	e1.4	3.3	3.8	2.8	5.4	9.0	11	3.5	4.6	9.9
15	1.3	2.8	e1.8	3.4	3.2	2.9	5.9	e9.4	10	3.3	2.9	9.1
16	1.0	e1.9	e2.0	e2.9	3.2	3.3	4.9	e9.6	12	3.2	2.3	8.1
17	1.00	2.9	e1.8	e2.6	2.9	3.6	2.7	11	11	3.1	2.1	7.5
18	1.0	2.8	e1.6	e2.4	2.8	3.7	5.4	e12	12	2.6	1.8	7.3
19	0.97	2.7	e1.8	2.8	2.9	4.8	8.8	e14	15	2.3	1.3	7.2
20	1.2	e1.7	e1.6	3.5	3.2	5.4	10	e16	23	2.5	1.7	7.1
21	1.5	2.5	e1.5	3.6	3.0	8.7	8.0	18	18	4.3	3.0	6.7
22	1.3	2.7	e1.5	3.7	2.7	9.9	8.6	16	12	4.3	2.1	6.2
23	1.3	2.8	e1.4	2.9	e2.7	7.0	8.5	e17	9.8	3.7	1.5	5.7
24	1.8	3.3	e1.4	2.7	e2.5	6.4	6.3	e17	8.5	4.9	2.1	5.4
25	2.0	e1.8	e1.3	3.0	e2.1	5.9	5.6	18	8.1	4.4	3.8	5.2
26	2.6	e1.6	e1.4	2.8	e2.4	5.6	5.7	20	7.9	3.3	8.2	5.1
27	5.9	e1.6	e1.6	2.4	e3.2	5.2	6.6	20	7.7	2.5	11	4.8
28	4.1	e1.2	e1.9	2.8	3.5	5.3	8.3	15	8.1	3.4	7.9	5.3
29	3.3	e1.3	2.1	2.5	---	5.3	8.3	14	8.7	6.6	6.0	6.3
30	2.7	2.6	4.2	2.3	---	4.5	9.4	19	9.0	9.5	9.6	4.9
31	2.7	---	3.3	1.8	---	4.6	---	19	---	6.5	9.6	---
TOTAL	63.97	71.3	67.3	91.3	74.6	135.3	174.1	397.9	387.8	154.5	132.8	236.9
MEAN	2.06	2.38	2.17	2.95	2.66	4.36	5.80	12.8	12.9	4.98	4.28	7.90
MAX	5.9	3.5	4.2	4.9	4.8	9.9	10	20	23	9.5	11	15
MIN	0.97	1.2	1.3	1.8	1.5	2.8	2.7	7.6	7.7	2.3	1.3	4.8
AC-FT	127	141	133	181	148	268	345	789	769	306	263	470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2003, BY WATER YEAR (WY)

MEAN	8.88	6.91	5.76	5.58	6.34	6.79	21.1	51.4	35.4	29.0	40.5	18.2
MAX	51.6	30.5	25.5	16.6	16.7	34.8	370	372	179	138	178	109
(WY)	(1942)	(1942)	(1995)	(2000)	(1920)	(1987)	(1942)	(1941)	(1965)	(1919)	(1999)	(2002)
MIN	0.15	0.040	0.59	0.65	1.20	0.80	1.21	0.75	0.65	1.85	4.28	0.37
(WY)	(1952)	(1952)	(1952)	(1975)	(1952)	(1951)	(1955)	(2002)	(1946)	(1963)	(2003)	(1951)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1916 - 2003	
ANNUAL TOTAL	4,757.67		1,987.77			
ANNUAL MEAN	13.0		5.45		19.3	
HIGHEST ANNUAL MEAN					89.0	1942
LOWEST ANNUAL MEAN					2.05	1951
HIGHEST DAILY MEAN	2,300	Sep 1	23	Jun 6	2,340	Apr 23, 1942
LOWEST DAILY MEAN	0.18	Aug 24	0.97	Oct 19	0.00	Nov 21, 1931
ANNUAL SEVEN-DAY MINIMUM	0.19	Aug 23	1.1	Oct 14	0.00	Nov 21, 1931
MAXIMUM PEAK FLOW			38	Jun 16	a12,600	Jun 17, 1965
MAXIMUM PEAK STAGE			3.47	Jun 16	15.25	Jun 17, 1965
INSTANTANEOUS LOW FLOW			0.55	Nov 29	0.00	Nov 21, 1931
ANNUAL RUNOFF (AC-FT)	9,440		3,940		13,990	
10 PERCENT EXCEEDS	5.0		11		43	
50 PERCENT EXCEEDS	2.3		3.5		7.7	
90 PERCENT EXCEEDS	0.55		1.7		1.8	

a From rating curve extended above 400 ft^3/s, on basis of slope-area measurement of peak flow.
e Estimated

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, and about 1,000 ft upstream from high-water line of Eagle Nest Lake at Eagle Nest.

DRAINAGE AREA.--73.8 mi^2.

PERIOD OF RECORD.--April 1928 to October 1955 and June 1964 to current year (seasonal 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 fair. Diversions for irrigation of about 1,200 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 240 ft^3/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.--Maximum discharge during period of seasonal operation, 12 ft^3/s, at 0300 hours, Apr. 3, gage height, 1.97 ft; minimum daily discharge, 0.00 ft^3/s, many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	6.1	5.9	2.5	0.02	0.00	0.00
2	---	---	---	---	---	---	8.7	5.2	2.2	0.02	0.00	0.00
3	---	---	---	---	---	---	9.9	4.8	1.9	0.00	0.00	0.00
4	---	---	---	---	---	---	7.7	4.7	1.7	0.00	0.00	0.00
5	---	---	---	---	---	---	5.6	4.5	1.6	0.00	0.00	0.00
6	---	---	---	---	---	---	3.8	4.1	1.6	0.00	0.00	0.00
7	---	---	---	---	---	---	2.7	4.1	1.7	0.00	0.00	0.00
8	---	---	---	---	---	---	2.7	3.6	1.5	0.00	0.00	0.00
9	---	---	---	---	---	---	2.1	3.3	1.4	0.00	0.00	0.00
10	---	---	---	---	---	---	1.9	3.5	1.4	0.00	0.00	0.00
11	---	---	---	---	---	---	2.2	3.5	1.3	0.00	0.00	0.00
12	---	---	---	---	---	---	2.5	4.4	1.2	0.00	0.00	0.00
13	---	---	---	---	---	---	2.8	4.2	1.1	0.00	0.00	0.00
14	---	---	---	---	---	---	3.4	4.2	1.0	0.00	0.00	0.00
15	---	---	---	---	---	---	4.2	4.2	1.1	0.00	0.00	0.00
16	---	---	---	---	---	---	4.1	4.0	1.3	0.00	0.00	0.00
17	---	---	---	---	---	---	5.6	3.5	1.4	0.00	0.00	0.00
18	---	---	---	---	---	---	5.1	3.2	1.7	0.00	0.00	0.00
19	---	---	---	---	---	---	6.0	3.0	1.3	0.00	0.00	0.00
20	---	---	---	---	---	4.4	5.6	3.4	1.2	0.00	0.00	0.00
21	---	---	---	---	---	4.2	5.3	3.4	1.0	0.00	0.00	0.00
22	---	---	---	---	---	5.3	5.6	2.8	0.84	0.00	0.00	0.00
23	---	---	---	---	---	6.7	6.5	2.6	0.66	0.00	0.00	0.00
24	---	---	---	---	---	7.6	5.7	2.5	0.49	0.00	0.00	0.00
25	---	---	---	---	---	7.7	6.0	2.3	0.15	0.00	0.00	0.00
26	---	---	---	---	---	7.6	5.9	2.6	0.06	0.00	0.00	0.00
27	---	---	---	---	---	7.7	6.3	2.7	0.09	0.00	0.00	0.00
28	---	---	---	---	---	7.6	6.6	2.8	0.03	0.00	0.00	0.00
29	---	---	---	---	---	6.2	6.5	2.7	0.02	0.00	0.00	0.00
30	---	---	---	---	---	5.9	6.5	2.6	0.03	0.00	0.00	0.00
31	---	---	---	---	---	5.3	---	2.7	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	153.6	111.0	33.47	0.04	0.00	0.00
MEAN	---	---	---	---	---	---	5.12	3.58	1.12	0.001	0.000	0.000
MAX	---	---	---	---	---	---	9.9	5.9	2.5	0.02	0.00	0.00
MIN	---	---	---	---	---	---	1.9	2.3	0.02	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	305	220	66	0.08	0.00	0.00

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 mi^2.

PERIOD OF RECORD.--April 1928 to September 1955 and June 1964 to current year (seasonal 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 fair. 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 ft^3/s, June 16, 1965, gage height, 5.63 ft, Mar. 19, 1994, from rating curve extended above 110 ft^3/s; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 55 ft^3/s, Apr. 26, gage height, 3.82 ft; minimum daily discharge, 0.32 ft^3/s, July 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.58	---	---	---	---	---	11	27	3.6	1.2	0.79	1.4
2	---	---	---	---	---	---	12	23	3.2	1.2	0.80	1.3
3	---	---	---	---	---	---	14	21	2.7	1.1	1.0	1.8
4	---	---	---	---	---	---	12	21	2.3	0.97	0.98	4.1
5	---	---	---	---	---	---	10	18	2.2	0.92	0.67	3.5
6	---	---	---	---	---	---	10	16	2.2	0.89	0.66	2.6
7	---	---	---	---	---	---	8.7	15	1.7	0.88	0.90	1.9
8	---	---	---	---	---	---	8.7	14	1.8	0.80	1.1	1.5
9	---	---	---	---	---	---	8.2	13	1.6	0.63	1.2	1.4
10	---	---	---	---	---	---	9.0	12	1.6	0.57	1.1	3.0
11	---	---	---	---	---	---	11	11	1.5	0.58	0.93	3.6
12	---	---	---	---	---	---	12	10	1.4	0.61	1.1	2.5
13	---	---	---	---	---	---	14	7.1	1.4	0.66	1.9	1.7
14	---	---	---	---	---	---	26	6.6	1.4	0.65	1.3	1.4
15	---	---	---	---	---	---	30	6.4	1.4	0.72	0.96	1.2
16	---	---	---	---	---	---	26	6.2	2.1	0.56	0.82	1.1
17	---	---	---	---	---	---	28	5.7	2.5	0.47	0.74	1.1
18	---	---	---	---	---	---	34	5.2	2.7	0.37	0.63	1.0
19	---	---	---	---	---	---	36	5.2	5.3	0.32	0.78	1.0
20	---	---	---	---	---	7.6	25	6.1	4.0	0.44	0.77	1.0
21	---	---	---	---	---	9.0	24	5.6	2.6	0.85	0.71	1.0
22	---	---	---	---	---	9.7	36	4.8	1.8	1.1	0.88	0.95
23	---	---	---	---	---	15	44	4.3	1.6	1.1	1.8	0.95
24	---	---	---	---	---	20	33	4.2	1.6	1.0	2.7	0.96
25	---	---	---	---	---	18	40	4.3	1.4	0.86	2.1	0.96
26	---	---	---	---	---	15	46	4.4	1.4	0.72	1.5	0.94
27	---	---	---	---	---	15	41	4.0	1.4	0.64	1.3	0.94
28	---	---	---	---	---	14	38	3.9	1.3	0.87	1.2	0.96
29	---	---	---	---	---	14	35	5.5	1.3	1.1	1.6	0.93
30	---	---	---	---	---	13	32	4.0	1.5	1.1	1.7	0.88
31	---	---	---	---	---	10	---	3.4	---	0.93	1.3	---
TOTAL	---	---	---	---	---	---	714.6	297.9	62.5	24.81	35.92	47.57
MEAN	---	---	---	---	---	---	23.8	9.61	2.08	0.80	1.16	1.59
MAX	---	---	---	---	---	---	46	27	5.3	1.2	2.7	4.1
MIN	---	---	---	---	---	---	8.2	3.4	1.3	0.32	0.63	0.88
AC-FT	---	---	---	---	---	---	1,420	591	124	49	71	94

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 mi^2.

PERIOD OF RECORD.--April 1928 to September 1955 (seasonal records in water years 1929-31, 1933-55), July 1958 to current year (seasonal 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. 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 ft^3/s, 1,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1930-55 and since 1957).--Maximum discharge, 128 ft^3/s, Aug. 5, 1969, gage height, 2.86 ft, from rating curve extended above 32 ft^3/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.--Maximum discharge during period of seasonal operation, 5.0 ft^3/s, Mar. 28 and Apr. 30, gage height, 0.84 ft; minimum daily discharge, 0 ft^3/s, many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	2.7	4.0	0.41	0.06	0.00	0.03
2	---	---	---	---	---	---	3.2	3.4	0.34	0.06	0.00	0.03
3	---	---	---	---	---	---	3.5	3.1	0.24	0.05	0.00	0.35
4	---	---	---	---	---	---	3.3	2.3	0.17	0.03	0.00	0.27
5	---	---	---	---	---	---	3.1	0.90	0.14	0.00	0.00	0.07
6	---	---	---	---	---	---	2.9	0.56	0.13	0.00	0.00	0.06
7	---	---	---	---	---	---	3.0	0.50	0.09	0.00	0.00	0.08
8	---	---	---	---	---	---	3.2	0.86	0.08	0.00	0.00	0.05
9	---	---	---	---	---	---	2.4	1.6	0.03	0.00	0.00	0.05
10	---	---	---	---	---	---	1.7	1.9	0.00	0.00	0.00	1.3
11	---	---	---	---	---	---	2.0	1.6	0.00	0.00	0.00	0.21
12	---	---	---	---	---	---	2.3	1.5	0.00	0.00	0.02	0.10
13	---	---	---	---	---	---	2.6	1.3	0.00	0.00	0.02	0.06
14	---	---	---	---	---	---	2.5	1.3	0.00	0.00	0.00	0.05
15	---	---	---	---	---	---	2.4	1.4	0.01	0.00	0.00	0.04
16	---	---	---	---	---	---	2.1	1.3	0.06	0.00	0.00	0.03
17	---	---	---	---	---	---	2.1	1.2	0.08	0.00	0.00	0.03
18	---	---	---	---	---	---	3.0	1.1	0.08	0.00	0.00	0.02
19	---	---	---	---	---	---	e2.1	3.2	1.1	0.29	0.00	0.00	0.02
20	---	---	---	---	---	---	2.3	2.9	1.1	0.45	0.00	0.00	0.03
21	---	---	---	---	---	---	2.3	2.6	0.87	0.21	0.00	0.00	0.03
22	---	---	---	---	---	---	2.5	2.7	0.78	0.04	0.00	0.03	0.02
23	---	---	---	---	---	---	2.5	2.9	0.63	0.03	0.00	0.03	0.02
24	---	---	---	---	---	---	2.8	2.8	0.44	0.04	0.00	0.05	0.02
25	---	---	---	---	---	---	2.9	2.8	0.64	0.05	0.00	0.05	0.02
26	---	---	---	---	---	---	3.1	3.1	0.68	0.06	0.00	0.06	0.02
27	---	---	---	---	---	---	2.9	4.3	0.72	0.06	0.00	0.05	0.00
28	---	---	---	---	---	---	2.8	4.4	0.56	0.06	0.00	0.08	0.00
29	---	---	---	---	---	---	3.8	4.3	0.53	0.06	0.00	0.09	0.00
30	---	---	---	---	---	---	3.7	4.7	0.50	0.07	0.00	0.07	0.00
31	---	---	---	---	---	---	2.5	---	0.44	---	0.00	0.05	---
TOTAL	---	---	---	---	---	---	88.7	38.81	3.28	0.20	0.60	3.01
MEAN	---	---	---	---	---	---	2.96	1.25	0.11	0.006	0.019	0.10
MAX	---	---	---	---	---	---	4.7	4.0	0.45	0.06	0.09	1.3
MIN	---	---	---	---	---	---	1.7	0.44	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	176	77	6.5	0.4	1.2	6.0

e Estimated

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 mi^2.

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 with satellite telemetry. Datum of gage is 8,056.8 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 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, 81,360 acre-ft, May 21-29, 1994, gage height, 137.86 ft; minimum observed, 635 acre-ft, Dec. 14, 1954, gage height, 61.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 37,500 acre-ft, May 3-7, gage height, 116.06 ft; minimum, 26,400 acre-ft, Sept. 30, gage height, 108.07 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36,000	34,900	34,500	e34,900	e34,700	e34,100	37,300	37,400	36,300	34,900	30,900	27,700
2	35,900	34,900	34,500	e34,900	e34,600	e34,200	37,300	37,400	36,200	34,900	30,800	27,700
3	35,800	34,800	34,600	e34,900	e34,600	34,400	e37,300	37,500	36,200	34,800	30,700	27,700
4	35,800	34,800	e34,600	e34,900	e34,600	34,600	e37,200	37,500	36,200	34,800	30,600	27,700
5	35,700	34,700	e34,600	e34,900	e34,600	e34,600	e37,200	37,500	36,200	34,700	30,400	27,700
6	35,700	34,700	e34,600	e34,900	e34,600	34,700	e37,200	37,500	36,100	34,600	30,300	27,700
7	35,700	34,800	e34,600	e34,900	e34,500	34,800	e37,200	37,500	36,100	34,600	30,200	27,600
8	35,700	34,700	e34,600	34,900	e34,500	34,900	e37,200	37,400	36,000	34,500	30,100	e27,600
9	35,700	34,800	e34,600	e34,900	e34,500	35,000	e37,100	37,400	36,000	34,300	30,000	27,500
10	35,700	34,900	e34,700	e34,900	e34,500	35,100	e37,100	37,300	36,000	34,200	29,900	27,400
11	35,700	34,900	e34,700	e34,900	e34,400	35,600	e37,100	37,200	35,900	34,100	29,800	27,300
12	35,700	34,900	e34,700	e34,900	e34,400	35,800	e37,100	37,100	35,800	33,900	29,600	27,200
13	35,600	34,800	e34,700	e35,000	e34,400	36,100	e37,100	37,100	35,800	33,600	29,400	27,100
14	35,600	34,900	e34,700	e35,000	e34,300	36,200	e37,000	37,000	35,700	33,300	29,200	27,200
15	35,600	e34,900	e34,700	e35,000	e34,300	36,400	e37,000	36,900	35,700	33,000	29,200	27,000
16	35,500	34,900	e34,700	e35,000	e34,300	36,500	e36,900	36,800	35,600	32,700	29,100	27,000
17	35,500	34,900	e34,700	35,000	e34,200	36,600	e36,800	36,700	35,600	32,400	29,100	27,000
18	35,400	34,800	e34,700	e35,000	e34,200	36,700	36,800	36,500	35,600	32,100	29,000	e26,900
19	35,400	34,800	e34,700	e35,000	e34,200	36,800	36,800	36,500	35,500	31,900	28,900	e26,900
20	35,300	34,700	e34,700	e35,000	e34,200	e36,900	e36,900	36,500	35,500	31,900	28,700	26,800
21	35,300	34,700	e34,800	e35,000	e34,100	37,000	37,000	36,400	35,500	31,800	28,400	26,800
22	35,300	34,600	e34,800	e35,000	e34,100	37,100	37,000	36,400	35,400	31,700	28,300	26,700
23	35,200	34,600	e34,800	e34,900	34,100	37,200	37,000	36,300	35,400	31,600	28,300	26,700
24	35,200	34,600	e34,800	e34,900	34,100	37,200	37,100	36,300	35,300	31,500	28,100	26,600
25	35,200	34,600	e34,800	e34,900	33,900	37,200	37,100	36,300	35,200	31,400	28,000	26,600
26	35,200	34,600	34,800	e34,900	34,000	37,300	37,200	36,300	35,200	31,300	27,900	26,600
27	35,100	34,600	34,900	e34,800	34,100	e37,300	37,200	36,300	35,100	31,200	27,900	26,500
28	35,100	34,600	e34,900	e34,800	34,000	e37,300	37,300	36,300	35,100	31,200	27,800	26,500
29	35,100	34,500	e34,900	e34,800	---	e37,400	37,300	36,300	35,000	31,100	27,800	26,500
30	35,000	34,500	e34,900	e34,700	---	37,400	37,400	36,200	35,000	31,000	27,800	26,400
31	34,900	---	e34,900	e34,700	---	37,400	---	36,300	---	30,900	27,700	---
MAX	36,000	34,900	34,900	35,000	34,700	37,400	37,400	37,500	36,300	34,900	30,900	27,700
MIN	34,900	34,500	34,500	34,700	33,900	34,100	36,800	36,200	35,000	30,900	27,700	26,400
(+)	114.30	114.06	e114.30	e114.18	113.70	115.97	115.97	115.24	114.37	111.52	109.10	108.07
(++)	-1,200	-400	+400	-200	-700	+400	0	-1,100	-1,300	-4,100	-3,200	-1,300

CAL YR	2002	MAX 48,300	MIN 34,500	(++)	-11,200
WTR YR	2003	MAX 37,500	MIN 26,400	(++)	-9,700

(+) Gage height, in feet, at end of month.
(++) Change in contents, in acre-feet.
e Estimated

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 mi^2.

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

REVISED RECORDS.--WSP 1281: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. 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 those estimated, which are fair. Flow regulated by Eagle Nest Lake (station 07205500) 300 ft upstream. Diversions for irrigation of about 2,500 acres upstream from station. No flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	17	4.5	2.1	0.11	0.20	29	7.7	7.4	22	35	20
2	7.4	14	4.8	0.10	0.09	0.21	28	7.5	3.2	22	35	20
3	7.4	14	4.9	0.10	0.11	0.22	28	7.1	7.1	22	35	19
4	7.5	14	4.9	0.10	0.10	0.22	28	7.2	13	22	52	31
5	7.8	13	5.1	0.10	0.10	0.23	28	13	12	22	59	35
6	7.8	7.3	5.2	0.08	0.11	0.23	30	19	12	26	59	35
7	7.0	3.4	4.7	0.09	0.11	0.29	31	19	12	29	59	35
8	5.6	2.8	4.6	e0.11	0.65	0.30	31	29	12	42	45	42
9	5.3	2.5	12	e0.11	0.11	0.29	31	32	16	48	37	45
10	4.7	2.4	15	0.11	0.11	0.28	31	32	19	48	37	44
11	4.4	2.2	15	0.11	0.30	0.29	31	42	19	48	72	44
12	4.2	3.8	15	e0.11	0.11	0.30	31	49	24	98	97	44
13	9.2	4.9	15	e0.10	0.11	0.30	31	52	27	137	100	22
14	12	4.9	15	e0.10	0.11	0.29	31	54	26	137	56	12
15	12	4.9	14	e0.10	0.11	0.30	31	54	26	137	14	12
16	12	4.9	6.9	e0.10	0.11	0.30	31	52	27	136	14	12
17	18	4.9	4.1	e0.10	0.11	0.30	31	50	21	136	16	15
18	21	20	4.9	e0.10	0.11	0.30	31	50	18	136	16	16
19	21	26	4.9	e0.11	0.11	0.19	31	50	15	89	16	16
20	21	27	4.9	e0.11	0.14	0.05	31	41	13	48	103	16
21	21	27	4.9	e0.11	0.20	0.05	26	31	13	48	146	16
22	21	27	4.8	e0.12	0.20	0.06	20	23	13	49	59	16
23	20	11	4.6	e0.12	0.20	0.06	17	23	13	49	16	16
24	23	3.3	4.6	0.13	0.20	0.06	15	23	13	44	116	16
25	24	4.4	4.3	0.12	0.20	0.05	15	20	13	38	84	16
26	24	5.6	4.3	0.11	0.20	3.6	15	14	13	36	26	12
27	24	5.1	4.6	0.11	0.20	5.3	15	14	13	36	26	9.7
28	24	5.1	4.6	0.11	0.20	6.3	10	10	13	36	25	9.7
29	24	4.9	4.6	0.11	---	13	7.7	7.8	25	36	20	9.7
30	24	4.5	4.4	0.11	---	25	7.7	7.3	25	35	22	9.7
31	24	---	4.1	0.11	---	29	---	7.4	---	35	20	---
TOTAL	455.7	291.8	215.2	5.30	4.52	87.57	753.4	848.0	483.7	1,847	1,517	665.8
MEAN	14.7	9.73	6.94	0.17	0.16	2.82	25.1	27.4	16.1	59.6	48.9	22.2
MAX	24	27	15	2.1	0.65	29	31	54	27	137	146	45
MIN	4.2	2.2	4.1	0.08	0.09	0.05	7.7	7.1	3.2	22	14	9.7
AC-FT	904	579	427	11	9.0	174	1,490	1,680	959	3,660	3,010	1,320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	15.8	5.34	1.18	0.92	2.31	9.06	22.8	35.1	31.9	37.0	23.2	17.1
MAX	50.3	25.9	20.4	19.1	47.0	146	171	212	112	73.3	85.6	51.3
(WY)	(1976)	(1982)	(1986)	(1992)	(1992)	(1987)	(1994)	(1994)	(1994)	(1950)	(1995)	(1968)
MIN	0.16	0.000	0.000	0.000	0.000	0.000	0.000	0.74	2.66	7.15	0.74	0.083
(WY)	(1957)	(1960)	(1956)	(1956)	(1956)	(1960)	(1957)	(1957)	(1986)	(1956)	(1954)	(1981)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	5,956.91		7,174.99			
ANNUAL MEAN	16.3		19.7		16.7	
HIGHEST ANNUAL MEAN					56.5	1994
LOWEST ANNUAL MEAN					5.85	1955
HIGHEST DAILY MEAN	45	Apr 18	146	Aug 21	303	May 24, 1994
LOWEST DAILY MEAN	0.43	Mar 21	0.05	Mar 20	0.00	May 1, 1950
ANNUAL SEVEN-DAY MINIMUM	0.52	Mar 20	0.07	Mar 19	0.00	May 1, 1950
ANNUAL RUNOFF (AC-FT)	11,820		14,230		12,090	
10 PERCENT EXCEEDS	42		46		45	
50 PERCENT EXCEEDS	13		13		6.5	
90 PERCENT EXCEEDS	0.70		0.11		0.00	

e Estimated

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, and 3.6 mi west of Cimarron.

DRAINAGE AREA.--294 mi^2.

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

REVISED RECORDS.--WSP 1281: drainage area.

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

REMARKS.--Records good except for those estimated, 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. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	18	5.5	e7.4	3.2	3.8	28	20	23	17	25	20
2	2.8	13	6.0	e5.6	3.2	4.4	29	19	21	16	24	19
3	3.0	12	6.0	e6.8	3.2	4.5	31	18	15	15	23	23
4	3.2	12	6.0	e7.8	2.8	3.6	31	18	18	15	29	35
5	4.7	12	4.7	e8.2	4.0	4.2	31	17	20	16	43	39
6	4.0	11	e4.6	4.6	e5.0	3.2	32	25	19	16	45	38
7	4.2	6.7	e6.0	10	e4.0	4.1	34	26	18	19	47	38
8	3.6	5.0	e9.0	6.1	e3.0	3.9	32	28	17	25	42	37
9	2.9	5.0	e6.4	5.5	e3.8	3.6	30	37	15	35	29	42
10	2.7	5.7	e6.8	4.9	4.7	3.6	31	39	20	37	29	45
11	1.7	4.6	e9.3	5.6	5.7	3.6	34	44	19	39	41	42
12	1.2	3.8	e10	5.0	6.2	3.8	36	56	20	52	77	41
13	1.2	3.3	e7.6	6.4	4.9	2.6	37	57	26	111	87	32
14	5.6	4.7	e8.2	6.0	2.2	1.5	38	61	27	118	78	10
15	6.8	4.9	e9.4	6.3	3.1	1.4	41	62	30	121	17	8.3
16	7.0	5.5	e8.0	4.5	3.8	1.4	41	62	31	121	12	7.2
17	7.6	4.6	6.7	4.8	4.5	1.4	41	62	30	120	11	7.3
18	13	5.0	8.5	5.5	4.5	1.4	42	65	25	120	13	8.8
19	13	19	e5.6	e4.4	4.3	1.8	43	68	24	107	14	8.7
20	13	21	e5.0	5.5	4.2	1.6	42	67	19	48	42	8.4
21	13	22	e5.6	3.7	4.0	3.2	40	57	17	43	117	8.2
22	14	22	e5.0	3.9	4.1	3.3	34	43	16	41	89	7.9
23	15	20	e5.4	3.4	4.1	3.1	32	38	15	41	23	7.6
24	16	7.6	e4.2	3.3	3.2	3.5	28	39	15	38	56	7.1
25	18	5.8	e3.4	3.8	6.4	4.1	27	41	14	30	107	6.9
26	19	e5.6	e4.6	3.9	6.0	4.4	27	34	14	26	34	7.9
27	20	e5.2	e5.6	3.3	6.3	5.9	29	31	14	25	29	7.2
28	19	e5.0	e6.4	3.3	4.7	6.7	28	29	13	25	29	6.6
29	18	e6.5	e7.8	3.4	---	7.2	22	24	16	28	25	6.3
30	19	e8.2	e7.2	3.5	---	16	21	25	21	24	24	6.0
31	19	---	e5.4	3.2	---	26	---	23	---	26	22	---
TOTAL	292.5	284.7	199.9	159.6	119.1	142.8	992	1,235	592	1,515	1,283	581.4
MEAN	9.44	9.49	6.45	5.15	4.25	4.61	33.1	39.8	19.7	48.9	41.4	19.4
MAX	20	22	10	10	6.4	26	43	68	31	121	117	45
MIN	1.2	3.3	3.4	3.2	2.2	1.4	21	17	13	15	11	6.0
AC-FT	580	565	397	317	236	283	1,970	2,450	1,170	3,010	2,540	1,150
(+)	0	0	0	0	0	0	0	0	0	291	129	158
(++)	124	178	180	0	0	0	0	0	0	222	243	245

CAL YR 2002 AC-FT (+) 672 (++) 1,483
WTR YR 2003 AC-FT (+) 578 (++) 1,192

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	17.5	9.95	5.03	4.23	5.07	12.3	35.2	65.0	48.6	38.2	27.9	19.4
MAX	44.9	26.7	18.5	18.5	43.7	149	237	329	158	79.5	81.0	50.4
(WY)	(1976)	(1982)	(1995)	(1992)	(1992)	(1987)	(1994)	(1994)	(1994)	(1995)	(1995)	(1968)
MIN	0.14	1.80	1.32	1.13	1.11	1.56	2.70	23.5	8.55	6.13	1.95	0.12
(WY)	(1957)	(1993)	(1957)	(1957)	(1997)	(2002)	(1955)	(1957)	(1956)	(1956)	(1954)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	4,835.50		7,397.0			
ANNUAL MEAN	13.2		20.3		24.0	
HIGHEST ANNUAL MEAN					80.7	1994
LOWEST ANNUAL MEAN					9.09	1956
HIGHEST DAILY MEAN	44	Apr 26	121	Jul 15	1,240	Jun 17, 1965
LOWEST DAILY MEAN	0.12	Mar 30	1.2	Oct 12	0.00	Sep 14, 1956
ANNUAL SEVEN-DAY MINIMUM	0.67	Mar 25	1.5	Mar 14	0.00	Sep 14, 1956
MAXIMUM PEAK FLOW			138	Aug 25	a15,500	Jun 17, 1965
MAXIMUM PEAK STAGE			2.15	Aug 25	b12.42	Jun 17, 1965
INSTANTANEOUS LOW FLOW			0.55	Oct 1	0.00	Sep 14, 1956
ANNUAL RUNOFF (AC-FT)	9,590		14,670		17,370	
10 PERCENT EXCEEDS	32		42		55	
50 PERCENT EXCEEDS	9.1		13		14	
90 PERCENT EXCEEDS	2.0		3.4		2.8	

a From rating curve extended above 800 ft^3/s, on basis of slope-area measurement at gage heights 4.88 ft and 12.4 ft.
b From floodmarks.
(+) Diversion, in acre-feet, by Philmont Ditch; data provided by Cimarron River Watermaster.
(++) Diversion,in acre-feet, by Raton Diversion; data provided by City of Raton.
e Estimated

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 l.6 mi downstream from confluence of North and South Ponil Creeks, and 4.7 mi northwest of Cimarron.

DRAINAGE AREA.--171 mi^2.

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 with satellite telemetry. 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.--Records fair except for those estimated, 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. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge for flood of Aug. 8, 1929, which destroyed gage, was estimated as 5,200 ft^3/s by New Mexico State Engineer.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.03	0.74	e0.50	e0.60	e0.90	e1.1	8.6	22	5.7	3.8	0.10	1.4
2	e0.04	0.74	e0.60	e0.50	e0.90	e1.2	11	21	4.4	2.0	0.08	0.82
3	0.04	0.70	e0.60	e0.70	e0.80	e1.3	16	19	3.2	1.6	0.33	96
4	0.05	0.72	e0.60	e0.80	e0.80	e1.2	e16	18	2.6	1.3	0.10	15
5	0.04	0.71	e0.60	e0.70	e0.90	e1.3	e16	17	2.9	0.97	1.8	6.7
6	0.03	0.52	e0.50	e0.60	e0.90	e1.0	e15	16	2.7	0.67	1.8	3.6
7	0.02	0.46	e0.60	e0.50	e0.90	e1.1	e15	15	2.0	0.62	0.58	3.5
8	0.02	0.45	e0.60	e0.50	e0.90	e1.2	e14	14	1.9	0.53	41	2.5
9	0.02	0.50	e0.60	e0.50	e1.0	e1.2	e17	11	1.4	0.32	1.9	2.1
10	0.01	0.74	e0.60	e0.55	e1.4	e1.5	e18	10	19	0.22	1.1	13
11	0.01	0.83	e0.60	e0.55	e1.7	2.1	e19	11	4.6	0.76	19	e7.6
12	0.00	0.59	e0.60	e0.55	2.0	2.4	e20	9.7	3.4	0.88	4.8	e8.9
13	0.00	0.52	e0.60	e0.50	2.3	2.5	e21	7.6	3.3	0.44	5.2	e8.0
14	0.00	e0.50	e0.60	e0.60	2.0	3.0	e22	7.5	4.5	0.30	0.73	e6.2
15	0.02	e0.50	e0.60	e0.70	2.3	3.9	e21	7.1	9.2	0.24	0.22	e4.9
16	0.03	e0.50	e0.60	e0.60	2.1	4.6	21	6.9	3.8	0.20	0.12	e4.2
17	0.03	e0.50	e0.60	e0.50	2.0	4.9	21	6.5	4.1	0.15	0.09	e2.9
18	0.03	e0.50	e0.60	e0.50	2.1	4.5	21	5.9	11	0.13	0.06	e2.1
19	0.03	0.55	e0.60	e0.50	2.0	4.3	22	7.3	23	0.11	0.05	e2.0
20	0.04	0.51	e0.60	e0.50	1.9	3.7	21	6.9	20	0.13	0.02	e1.8
21	0.04	0.60	e0.70	e0.60	1.7	5.2	21	7.1	7.6	0.14	0.00	1.6
22	0.04	0.62	e0.80	e0.70	e1.4	4.0	22	4.9	4.4	0.55	0.29	1.4
23	0.05	0.66	e0.80	e0.80	e1.3	5.6	21	3.7	3.2	0.19	1.5	1.2
24	0.07	e0.60	e0.70	e0.80	e1.1	8.6	21	3.3	2.4	1.4	0.60	0.97
25	0.09	e0.50	e0.70	e0.70	e1.3	11	20	4.4	1.8	0.39	0.27	0.82
26	27	e0.40	e0.70	e0.70	e1.5	11	21	6.2	1.5	0.17	15	0.72
27	6.1	e0.40	e0.70	e0.70	e1.5	12	22	10	1.5	0.13	3.5	0.62
28	1.0	e0.40	e0.60	e0.70	e1.4	9.1	22	11	1.3	0.15	1.6	0.64
29	0.89	e0.50	e0.60	e0.80	---	8.1	23	4.1	1.5	0.75	7.4	0.66
30	0.73	e0.50	e0.60	e0.80	---	8.0	23	6.0	100	0.33	5.0	0.56
31	0.70	---	e0.70	e0.80	---	8.2	---	6.8	---	0.12	1.7	---
TOTAL	37.20	16.96	19.40	19.55	41.00	138.8	571.6	306.9	257.9	19.69	115.94	202.41
MEAN	1.20	0.57	0.63	0.63	1.46	4.48	19.1	9.90	8.60	0.64	3.74	6.75
MAX	27	0.83	0.80	0.80	2.3	12	23	22	100	3.8	41	96
MIN	0.00	0.40	0.50	0.50	0.80	1.0	8.6	3.3	1.3	0.11	0.00	0.56
AC-FT	74	34	38	39	81	275	1,130	609	512	39	230	401

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2003, BY WATER YEAR (WY)

MEAN	3.62	3.28	2.37	2.11	2.26	5.12	24.8	49.2	18.2	7.28	14.4	5.49
MAX	23.2	12.3	8.80	8.04	7.35	25.5	126	324	122	31.9	159	51.7
(WY)	(1961)	(1920)	(1920)	(1920)	(1987)	(1987)	(1924)	(1999)	(1979)	(1921)	(1991)	(1991)
MIN	0.000	0.000	0.13	0.029	0.14	0.33	1.94	0.38	0.18	0.003	0.31	0.000
(WY)	(1952)	(1952)	(1957)	(1957)	(1957)	(1955)	(1925)	(2002)	(1963)	(1964)	(1974)	(1951)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1916 - 2003	
ANNUAL TOTAL	887.34		1,747.35			
ANNUAL MEAN	2.43		4.79		11.7	
HIGHEST ANNUAL MEAN					40.9	1999
LOWEST ANNUAL MEAN					1.38	1974
HIGHEST DAILY MEAN	80	Sep 19	100	Jun 30	819	Jun 17, 1965
LOWEST DAILY MEAN	0.00	Jun 11	0.00	Oct 12	0.00	Jun 23, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 11	0.01	Oct 8	0.00	Jun 23, 1951
MAXIMUM PEAK FLOW			3,770	Jun 30	a5,630	Jun 17, 1965
MAXIMUM PEAK STAGE			6.65	Jun 30	11.13	Jun 17, 1965
INSTANTANEOUS LOW FLOW			0.00	Oct 12	0.00	Jun 23, 1951
ANNUAL RUNOFF (AC-FT)	1,760		3,470		8,440	
10 PERCENT EXCEEDS	3.5		16		27	
50 PERCENT EXCEEDS	0.60		1.1		3.0	
90 PERCENT EXCEEDS	0.03		0.13		0.40	

a From rating curve extended above 230 ft^3/s, on basis of slope-area measurement at gage heights 3.56 ft, 5.80 ft, 7.15 ft, and 11.13 ft.
e Estimated

07208500 RAYADO CREEK NEAR CIMARRON, NM

LOCATION.--Lat 36°22'20", long 104°58'10", Colfax County, Hydrologic Unit 11080002, in Maxwell Grant, on right bank 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 mi^2.

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" Abreús Ranch near Cimarron prior to October 1925 and as Rayado River at Sauble Ranch, near Cimarron, October 1925 to September 1952. From September 1952 to September 1997, published as "Rayado Creek at Sauble Ranch near Cimarron."

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

GAGE.--Water-stage recorder with satellite telemetry. 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.--Records fair except for those estimated, which are poor. No diversion upstream from station.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.5	e3.6	e2.4	3.0	e3.2	12	28	10	4.4	2.8	3.1
2	2.4	3.5	e2.5	e2.2	3.1	e3.2	16	27	9.5	4.2	2.8	2.8
3	2.3	3.5	e3.5	e2.1	e2.6	e3.0	17	26	8.8	3.8	2.6	4.5
4	2.2	3.3	e2.8	2.4	e1.6	e3.2	16	25	8.6	3.7	2.5	7.0
5	2.2	3.1	e1.5	2.5	e1.2	e2.8	15	24	8.4	3.7	2.6	5.9
6	2.2	2.6	e1.7	2.8	e1.0	e3.0	14	23	8.2	3.7	2.4	6.9
7	2.0	2.8	e1.9	3.4	e0.60	3.8	12	21	7.7	3.9	3.6	7.9
8	2.1	3.3	e1.7	3.3	e0.80	3.5	12	20	7.5	3.5	3.3	6.1
9	2.1	5.7	e1.8	e2.6	e1.0	3.9	12	19	6.9	3.1	3.7	5.2
10	2.1	e3.0	e1.9	e2.3	e1.3	4.4	13	18	6.4	2.9	3.4	7.8
11	2.0	e2.0	e2.2	e2.8	e1.8	5.0	16	18	6.3	3.3	2.3	6.9
12	1.9	e2.8	e2.0	e3.0	e2.2	5.8	18	17	6.1	2.9	2.4	5.9
13	2.0	e3.5	e1.8	e4.2	3.9	6.0	19	17	6.3	2.8	2.1	5.2
14	2.0	4.1	e1.7	e2.3	4.5	8.9	22	17	6.1	2.6	2.0	5.1
15	2.0	e2.0	e2.1	3.1	4.2	11	24	18	6.2	2.5	2.1	4.8
16	2.0	e1.2	2.6	e4.0	e2.9	11	22	19	7.0	2.6	2.1	4.4
17	2.0	3.7	2.6	e5.0	4.0	9.3	25	19	6.6	2.5	2.2	4.2
18	2.1	3.0	e3.1	e5.0	4.1	8.3	25	19	6.9	2.3	1.8	4.2
19	2.2	2.7	e2.5	e4.0	e2.8	6.8	25	19	8.0	2.3	1.9	4.0
20	2.2	3.0	e2.1	2.6	3.9	6.8	23	21	7.5	4.1	1.8	3.6
21	2.2	3.3	e1.6	2.7	3.3	7.7	23	19	6.7	4.1	1.8	3.5
22	2.2	3.2	e1.1	2.6	e3.6	7.3	24	17	5.8	3.2	2.2	3.4
23	2.7	3.5	e1.2	e2.7	e2.8	8.3	25	16	5.1	4.3	3.2	3.2
24	3.7	e1.3	e0.80	2.7	e2.0	9.9	23	15	4.9	5.8	2.6	3.1
25	3.4	e1.3	e1.1	e1.8	e1.8	11	24	15	4.7	4.3	2.5	3.1
26	3.2	e1.2	e1.6	e2.1	e2.3	12	25	14	4.7	3.7	2.8	2.9
27	5.0	e1.4	e1.6	2.9	e2.3	14	26	13	4.6	3.4	3.1	2.9
28	4.5	e1.4	e2.3	2.7	e3.1	10	27	12	4.2	3.3	2.7	2.9
29	3.9	e3.2	e3.5	3.0	---	11	28	14	4.2	3.3	3.0	2.8
30	3.7	e2.5	e3.1	2.9	---	12	29	11	4.5	3.2	4.0	2.7
31	3.5	---	e4.0	3.0	---	10	---	11	---	2.8	3.6	---
TOTAL	80.4	84.6	67.50	91.1	71.70	226.1	612	572	198.4	106.2	81.9	136.0
MEAN	2.59	2.82	2.18	2.94	2.56	7.29	20.4	18.5	6.61	3.43	2.64	4.53
MAX	5.0	5.7	4.0	5.0	4.5	14	29	28	10	5.8	4.0	7.9
MIN	1.9	1.2	0.80	1.8	0.60	2.8	12	11	4.2	2.3	1.8	2.7
AC-FT	159	168	134	181	142	448	1,210	1,130	394	211	162	270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2003, BY WATER YEAR (WY)

MEAN	5.78	5.03	3.97	3.64	4.05	7.83	30.3	51.5	22.3	10.2	11.3	7.14
MAX	30.4	20.0	12.4	8.01	8.68	23.7	144	287	231	54.7	71.5	33.0
(WY)	(1942)	(1942)	(1987)	(1942)	(1987)	(1939)	(1987)	(1941)	(1965)	(1969)	(1965)	(1991)
MIN	1.23	1.40	1.27	1.04	1.95	2.98	4.65	2.24	1.71	1.42	1.81	0.88
(WY)	(1957)	(1957)	(1957)	(2002)	(1951)	(1951)	(2002)	(2002)	(2002)	(1956)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1912 - 2003	
ANNUAL TOTAL	934.92		2,327.90			
ANNUAL MEAN	2.56		6.38		13.6	
HIGHEST ANNUAL MEAN					41.6	1965
LOWEST ANNUAL MEAN					2.53	2002
HIGHEST DAILY MEAN	9.3	Sep 19	29	Apr 30	2,000	Jun 18, 1965
LOWEST DAILY MEAN	0.62	Jan 31	0.60	Feb 7	0.40	Nov 16, 1956
ANNUAL SEVEN-DAY MINIMUM	0.87	Jan 1	1.1	Feb 4	0.67	Sep 15, 1956
MAXIMUM PEAK FLOW			29	Apr 29	a9,000	Jun 17, 1965
MAXIMUM PEAK STAGE			2.77	Apr 29	b11.50	Jun 17, 1965
INSTANTANEOUS LOW FLOW			0.42	Nov 16	c0.03	Dec 3, 1950
ANNUAL RUNOFF (AC-FT)	1,850		4,620		9,850	
10 PERCENT EXCEEDS	4.9		18		29	
50 PERCENT EXCEEDS	2.2		3.5		5.4	
90 PERCENT EXCEEDS	1.1		2.0		2.6	

a From rating curve extended above 70 ft^3/s, on basis of field estimate of peak flow.
b From floodmarks.
c Also may have been less during periods of ice effect.
e Estimated

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.--l,032 mi^2.

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," October 1952 to September 1965.

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

GAGE.--Water-stage recorder with satellite telemetry. 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 fair except for those estimated, which are poor. 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. No flow at times.

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 exceeded 10,000 ft^3/s, but probably were less than the 1965 flood.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.10	0.25	0.20	0.33	1.2	0.07	0.13	0.21	0.00	0.00	0.00
2	0.00	0.10	e0.21	0.19	0.35	1.9	0.03	0.17	1.5	0.00	0.00	0.00
3	0.00	0.15	e0.20	0.19	e0.35	1.9	0.12	0.96	1.4	0.00	0.00	0.03
4	0.00	0.15	e0.19	0.18	e0.32	1.7	0.23	5.2	0.84	0.00	0.00	0.01
5	0.00	0.15	e0.19	0.19	e0.30	1.4	0.96	5.7	0.84	0.00	0.00	0.00
6	0.00	0.14	e0.18	0.21	e0.28	1.4	2.2	5.9	0.88	0.00	0.00	0.00
7	0.00	0.15	e0.17	e0.19	e0.25	1.1	1.3	5.3	0.65	0.00	0.00	0.00
8	0.00	0.16	e0.16	e0.18	e0.27	0.98	0.61	4.5	0.63	0.00	0.00	0.00
9	0.00	0.21	e0.15	e0.18	e0.30	0.90	0.63	4.1	0.52	0.00	0.00	0.00
10	0.00	0.22	e0.14	e0.19	e0.32	0.80	0.42	4.0	0.46	0.00	0.00	0.00
11	0.00	0.22	e0.15	0.21	e0.33	0.76	0.58	3.9	0.45	0.00	0.00	0.00
12	0.00	0.23	0.16	0.20	e0.35	0.75	0.40	3.9	0.41	0.00	0.00	0.00
13	0.00	0.27	0.15	0.21	0.40	0.70	0.59	3.7	0.35	0.00	0.00	0.00
14	0.00	0.28	0.15	0.21	0.43	0.65	0.39	2.7	0.32	0.00	0.00	0.00
15	0.00	0.31	0.15	0.21	0.44	0.60	0.25	2.7	0.31	0.00	0.00	0.00
16	0.00	0.20	0.15	0.19	0.44	0.61	0.23	1.3	0.26	0.00	0.00	0.00
17	0.00	0.20	0.16	0.21	0.50	0.46	0.21	0.46	0.23	0.00	0.00	0.00
18	0.00	0.19	0.15	0.21	0.54	0.58	0.20	0.36	0.27	0.00	0.00	0.00
19	0.00	0.21	e0.16	0.21	0.58	0.64	0.31	0.27	0.18	0.00	0.00	0.00
20	0.00	0.20	e0.16	0.21	0.62	0.59	0.63	0.20	0.12	0.00	0.00	0.00
21	0.00	0.18	e0.16	0.21	0.85	1.0	0.74	0.16	0.08	0.00	0.00	0.00
22	0.00	0.19	e0.15	0.21	0.92	1.2	0.57	0.13	0.18	0.00	0.00	0.00
23	0.00	0.20	e0.16	0.21	0.90	1.0	0.51	0.10	0.32	0.00	0.00	0.00
24	0.00	0.22	e0.15	0.21	0.85	1.1	0.43	0.10	0.17	0.00	0.00	0.00
25	0.00	0.24	e0.16	0.21	0.88	0.61	0.25	0.38	0.05	0.00	0.00	0.00
26	0.10	0.24	e0.17	0.21	0.95	0.14	0.21	0.30	0.02	0.00	0.00	0.00
27	0.03	0.24	e0.17	0.21	1.1	0.13	0.20	0.37	0.02	0.00	0.00	0.00
28	0.01	0.23	e0.18	0.21	1.1	0.12	0.19	0.26	0.01	0.00	0.00	0.00
29	0.07	0.26	e0.19	0.21	---	0.12	0.18	0.19	0.01	0.00	0.04	0.00
30	0.09	0.25	0.20	0.30	---	0.12	0.16	0.10	0.01	0.00	0.03	0.00
31	0.09	---	0.19	0.31	---	0.14	---	0.11	---	0.00	0.01	---
TOTAL	0.39	6.09	5.26	6.47	15.25	25.30	13.80	57.65	11.70	0.00	0.08	0.04
MEAN	0.013	0.20	0.17	0.21	0.54	0.82	0.46	1.86	0.39	0.000	0.003	0.001
MAX	0.10	0.31	0.25	0.31	1.1	1.9	2.2	5.9	1.5	0.00	0.04	0.03
MIN	0.00	0.10	0.14	0.18	0.25	0.12	0.03	0.10	0.01	0.00	0.00	0.00
AC-FT	0.8	12	10	13	30	50	27	114	23	0.00	0.2	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2003, BY WATER YEAR (WY)

MEAN	8.54	8.48	7.68	7.85	8.13	10.7	32.2	88.4	42.4	11.4	16.8	12.2
MAX	98.0	68.3	59.0	62.3	63.8	242	506	928	699	146	154	118
(WY)	(1942)	(1942)	(1987)	(1987)	(1992)	(1987)	(1987)	(1941)	(1965)	(1965)	(1991)	(1942)
MIN	0.013	0.20	0.17	0.21	0.33	0.35	0.46	0.44	0.12	0.000	0.000	0.001
(WY)	(2003)	(2003)	(2003)	(2003)	(1957)	(1957)	(2003)	(2002)	(2002)	(2003)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1908 - 2003	
ANNUAL TOTAL	198.02		142.03			
ANNUAL MEAN	0.54		0.39		21.4	
HIGHEST ANNUAL MEAN					139	1994
LOWEST ANNUAL MEAN					0.39	2003
HIGHEST DAILY MEAN	2.3	Apr 8	5.9	May 6	10,500	Jun 18, 1965
LOWEST DAILY MEAN	0.00	Jul 1	0.00	Oct 1	0.00	Sep 2, 1954
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 30	0.00	Oct 1	0.00	Sep 16, 1954
MAXIMUM PEAK FLOW			6.1	May 5	a29,500	Jun 18, 1965
MAXIMUM PEAK STAGE			3.50	May 5	b19.96	Jun 18, 1965
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Sep 2, 1954
ANNUAL RUNOFF (AC-FT)	393		282		15,530	
10 PERCENT EXCEEDS	1.5		0.90		28	
50 PERCENT EXCEEDS	0.19		0.18		4.0	
90 PERCENT EXCEEDS	0.00		0.00		0.90	

a From rating curve extended 1,800 ft^3/s, on basis of contracted-opening measurement of peak flow.
b From floodmarks.
e Estimated

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, NM

LOCATION.--Lat 36°17'49", long 104°29'36", in NW $^1/_4$ SE $^1/_4$ sec.21, T.24 N., R.23 E., Colfax County, Hydrologic Unit 11080003, on left bank at head of gorge, 2.1 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 mi^2.

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 with satellite telemetry and crest-stage gage. 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 good except for those estimated, which are poor. Diversions for irrigation of about 30,000 acres upstream from station. Several observations of water temperature were made during the year. 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 ft^3/s in WSP 842 and 847.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.08	0.20	1.3	1.7	1.9	0.79	2.0	0.02	16	0.00	0.00
2	0.07	0.07	0.19	1.3	1.7	2.9	0.73	1.3	0.05	5.4	0.00	0.00
3	0.06	0.06	0.38	1.3	1.5	4.0	0.72	0.97	0.03	2.7	0.00	0.08
4	0.02	0.09	0.42	1.4	1.4	3.9	0.60	1.3	0.22	1.4	0.00	0.06
5	0.02	0.12	0.31	1.9	1.3	2.9	0.52	6.8	20	0.78	0.00	0.00
6	0.01	0.12	0.33	2.7	e1.0	2.9	0.54	7.9	36	0.45	0.00	0.00
7	0.02	0.18	0.29	1.9	e1.2	2.5	2.5	8.0	12	0.29	0.00	0.00
8	0.02	0.24	0.28	1.7	1.4	2.2	2.0	6.2	4.3	0.20	0.00	0.00
9	0.02	0.27	0.28	1.8	1.6	1.9	1.4	4.7	1.9	0.10	0.00	0.00
10	0.02	0.27	0.27	1.6	1.7	1.7	1.2	4.0	0.91	0.05	0.00	0.00
11	0.02	0.28	0.28	1.8	1.7	1.3	1.1	3.8	0.47	0.04	0.00	0.00
12	0.02	0.28	0.29	1.5	1.9	1.2	0.72	3.8	0.23	0.03	0.00	0.00
13	0.02	0.30	0.28	1.5	2.1	1.1	0.63	4.0	0.14	0.03	0.00	0.00
14	0.01	0.30	0.28	1.6	2.1	1.2	0.66	3.8	0.11	0.01	0.00	0.00
15	0.01	e0.28	0.28	1.7	2.1	1.1	0.44	2.4	0.08	0.01	0.00	0.00
16	0.02	e0.25	0.29	1.4	2.1	1.1	0.42	2.5	18	0.01	0.00	0.00
17	0.02	e0.28	0.30	1.3	2.1	1.3	0.49	1.4	5.4	0.01	0.00	0.00
18	0.03	0.29	0.29	1.3	1.9	1.3	0.46	0.69	16	0.01	0.00	0.00
19	0.07	0.25	0.30	1.3	1.8	1.7	0.59	0.55	206	0.01	0.00	0.00
20	0.06	0.20	0.32	1.6	1.9	1.7	0.52	0.27	27	0.01	0.00	0.00
21	0.05	0.22	0.52	1.8	2.0	1.9	0.80	0.18	175	0.01	0.00	0.00
22	0.05	0.22	0.54	1.8	1.9	3.4	0.81	0.22	44	0.01	0.00	0.00
23	0.06	0.22	e0.50	1.8	2.0	2.5	0.68	0.13	12	0.00	0.00	0.00
24	0.13	0.21	e0.46	1.9	1.5	1.7	62	0.08	5.7	0.00	0.00	0.00
25	0.10	0.21	e0.52	1.8	1.4	1.4	49	0.17	3.2	0.00	0.28	0.00
26	0.81	0.22	e0.48	1.6	1.7	1.4	18	0.09	2.0	0.00	0.08	0.00
27	5.5	0.22	0.55	1.6	2.0	1.3	9.1	0.06	1.3	0.00	0.00	0.00
28	0.63	0.22	e2.5	1.8	2.2	1.2	24	0.05	1.0	0.00	0.00	0.00
29	0.19	0.22	0.55	1.6	---	1.0	9.3	0.04	0.83	0.00	0.00	0.00
30	0.08	0.21	0.65	1.6	---	1.00	3.8	0.03	45	0.00	0.10	0.00
31	0.07	---	0.83	1.7	---	0.93	---	0.02	---	0.00	0.00	---
TOTAL	8.27	6.38	13.96	50.9	48.9	57.53	194.52	67.45	638.89	27.56	0.46	0.14
MEAN	0.27	0.21	0.45	1.64	1.75	1.86	6.48	2.18	21.3	0.89	0.015	0.005
MAX	5.5	0.30	2.5	2.7	2.2	4.0	62	8.0	206	16	0.28	0.08
MIN	0.01	0.06	0.19	1.3	1.0	0.93	0.42	0.02	0.02	0.00	0.00	0.00
AC-FT	16	13	28	101	97	114	386	134	1,270	55	0.9	0.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	36.5	23.0	20.6	21.5	24.8	28.4	119	235	136	86.1	114	73.8
MAX	451	192	105	121	186	337	2,853	2,174	2,313	509	563	1,354
(WY)	(1942)	(1942)	(1943)	(1943)	(1948)	(1987)	(1942)	(1941)	(1965)	(1947)	(1981)	(1942)
MIN	0.000	0.21	0.45	1.23	1.04	1.86	1.40	0.32	2.67	0.89	0.015	0.000
(WY)	(1957)	(2003)	(2003)	(1957)	(1957)	(2003)	(1954)	(2002)	(1964)	(2003)	(2003)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	3,383.72		1,114.96			
ANNUAL MEAN	9.27		3.05		77.4	
HIGHEST ANNUAL MEAN					564	1942
LOWEST ANNUAL MEAN					3.05	2003
HIGHEST DAILY MEAN	1,030	Jun 4	206	Jun 19	43,000	Jun 18, 1965
LOWEST DAILY MEAN	0.01	Oct 6	0.00	Jul 23	0.00	Jun 29, 1946
ANNUAL SEVEN-DAY MINIMUM	0.02	Oct 9	0.00	Jul 23	0.00	Jun 24, 1953
MAXIMUM PEAK FLOW			1,090	Jun 19	a162,000	Jun 18, 1965
MAXIMUM PEAK STAGE			6.96	Jun 19	b47.40	Jun 18, 1965
INSTANTANEOUS LOW FLOW			0.00	Jul 22	0.00	Jun 29, 1946
ANNUAL RUNOFF (AC-FT)	6,710		2,210		56,060	
10 PERCENT EXCEEDS	6.1		3.6		120	
50 PERCENT EXCEEDS	1.1		0.38		15	
90 PERCENT EXCEEDS	0.07		0.00		2.1	

a From rating curve extended above 7,000 ft^3/s, on basis of slope-area measurement of peak flow.
b From floodmarks.
e Estimated

07215500 MORA RIVER AT LA CUEVA, NM

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

DRAINAGE AREA.--173 mi^2.

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.--Records poor. 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. La Cueva Canal operated as a seasonal gage. Several observations of water temperature were made during the year. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, may have exceeded 20,000 ft^3/s; another major flood occurred June 11, 1913, but is believed to have been less than flood of 1904.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.94	4.1	e1.1	0.63	e0.66	0.54	0.98	0.97	2.5	13	8.7	7.1
2	0.92	4.2	e1.0	0.51	e0.67	0.48	0.95	1.4	2.4	12	10	6.3
3	0.86	4.0	e1.2	0.51	e0.68	0.49	0.96	1.1	2.4	12	9.6	6.9
4	1.0	4.2	e1.0	0.45	e0.65	0.46	0.93	1.2	3.2	12	9.0	10
5	1.6	4.0	e0.90	0.48	e0.81	0.44	0.69	2.1	3.4	11	7.6	10
6	2.2	4.0	e0.91	0.46	0.37	0.45	0.99	1.9	4.7	11	7.9	11
7	1.9	4.0	e0.91	0.48	0.47	0.49	0.75	1.9	4.8	11	9.7	11
8	1.0	4.0	e0.80	0.70	0.32	0.50	1.1	1.9	6.7	10	11	11
9	1.5	4.4	e0.67	e0.87	0.27	0.53	1.0	1.7	5.4	10	11	11
10	1.6	4.4	e0.65	e0.59	0.30	0.53	0.31	2.0	8.1	9.3	11	12
11	0.51	4.1	e0.65	e0.49	0.26	0.56	1.3	2.0	8.2	11	9.2	13
12	0.78	4.0	e0.67	0.43	0.47	0.60	1.2	2.0	10	12	7.8	12
13	1.6	4.0	e0.65	0.44	0.54	0.61	1.7	1.5	11	12	7.3	12
14	1.4	4.0	e0.66	0.44	0.46	0.58	0.94	1.2	11	11	7.0	12
15	1.1	4.3	e0.68	0.43	0.59	0.62	0.51	1.1	12	11	4.8	12
16	2.1	4.3	e0.69	0.42	0.56	0.65	0.87	1.1	14	11	4.5	11
17	1.9	4.3	e0.68	0.45	0.61	0.64	1.1	1.0	14	11	5.1	11
18	0.77	3.6	0.57	0.41	e0.66	0.51	1.1	1.1	16	11	5.1	11
19	0.73	1.6	0.79	0.46	e0.64	0.53	0.78	1.1	18	12	5.2	11
20	0.85	1.0	e0.90	e0.59	e0.70	0.51	0.89	1.1	17	15	4.4	11
21	0.96	1.0	e0.67	e0.58	e0.69	0.54	0.87	1.1	17	13	4.2	11
22	1.1	0.92	e0.68	e0.57	0.52	0.52	0.75	1.1	14	12	4.1	11
23	1.5	e1.3	e0.62	e0.58	0.60	0.50	1.1	1.1	13	12	3.8	11
24	1.1	e1.4	e0.70	e0.59	0.49	0.47	2.1	1.1	11	9.1	3.7	12
25	0.93	0.98	e0.92	e0.60	0.58	0.88	1.6	1.3	8.6	9.0	3.7	12
26	1.2	1.0	e0.94	e0.64	0.50	1.2	1.1	1.4	11	4.8	3.8	11
27	1.6	1.0	e0.92	e0.62	e0.65	1.2	1.3	1.6	11	2.6	5.1	11
28	1.5	1.1	e0.90	e0.65	e0.66	1.3	0.93	1.6	11	3.9	4.5	10
29	3.0	1.0	e0.88	e0.66	---	1.4	0.87	1.8	12	4.1	4.8	10
30	3.7	e1.1	e0.87	e0.65	---	1.3	0.86	1.5	13	4.5	5.4	10
31	3.7	---	e0.85	e0.64	---	1.2	---	1.8	---	6.5	5.6	---
TOTAL	45.55	87.30	25.03	17.02	15.38	21.23	30.53	44.77	296.4	309.8	204.6	321.3
MEAN	1.47	2.91	0.81	0.55	0.55	0.68	1.02	1.44	9.88	9.99	6.60	10.7
MAX	3.7	4.4	1.2	0.87	0.81	1.4	2.1	2.1	18	15	11	13
MIN	0.51	0.92	0.57	0.41	0.26	0.44	0.31	0.97	2.4	2.6	3.7	6.3
AC-FT	90	173	50	34	31	42	61	89	588	614	406	637
(+)	>6.9	a	a	a	a	>103	56	49	598	451	353	557

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2003, BY WATER YEAR (WY)

MEAN	16.9	10.9	8.38	7.88	7.61	10.7	32.4	77.5	65.0	34.0	43.7	27.9
MAX	87.6	60.7	39.4	21.9	25.5	51.2	244	555	314	142	182	111
(WY)	(1942)	(1942)	(1907)	(1907)	(1907)	(1987)	(1942)	(1941)	(1941)	(1911)	(1961)	(1991)
MIN	0.64	0.38	0.55	0.000	0.53	0.68	1.02	1.44	1.11	3.02	1.43	0.46
(WY)	(1957)	(1957)	(1957)	(1908)	(1957)	(2003)	(2003)	(2003)	(1956)	(1934)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1906 - 2003	
ANNUAL TOTAL	719.45		1,418.91			
ANNUAL MEAN	1.97		3.89		28.5	
HIGHEST ANNUAL MEAN					113	1941
LOWEST ANNUAL MEAN					2.27	2002
HIGHEST DAILY MEAN	6.0	Aug 4	18	Jun 19	1,060	Apr 23, 1942
LOWEST DAILY MEAN	0.06	Sep 6	0.26	Feb 11	0.00	Dec 22, 1907
ANNUAL SEVEN-DAY MINIMUM	0.11	Sep 1	0.35	Feb 6	0.00	Dec 22, 1907
MAXIMUM PEAK FLOW			22	Jun 18	1,530	Sep 23, 1941
MAXIMUM PEAK STAGE			2.00	Jun 18	7.58	Sep 23, 1941
INSTANTANEOUS LOW FLOW			0.19	Apr 10	0.00	Dec 22, 1907
ANNUAL RUNOFF (AC-FT)	1,430 (+) >999		2,810 (+) >2,171		20,680	
10 PERCENT EXCEEDS	4.0		11		72	
50 PERCENT EXCEEDS	1.6		1.3		12	
90 PERCENT EXCEEDS	0.65		0.51		1.5	

a Unknown.
(+) Diversion, in acre-feet, by La Cueva Canal.
> Greater than.
e Estimated

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 Golondrinas, 1.9 mi upstream from Coyote Creek, 4.7 mi downstream from Rito Cebo11a, and at mile 75.8.

DRAINAGE AREA.--267 mi^2.

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 with satellite telemetry. 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. 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 those estimated, 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. No flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 25,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.95	4.0	2.8	e2.2	e1.9	2.1	1.5	0.64	0.81	2.9	2.1	2.9
2	1.00	4.0	2.7	e2.3	e1.7	2.2	1.4	0.71	0.80	5.2	2.0	1.8
3	0.95	4.3	3.3	e2.3	e1.6	2.1	1.4	0.65	0.71	5.1	3.5	1.8
4	0.93	7.3	3.3	2.4	e1.7	2.1	1.5	0.59	0.68	4.8	2.9	2.6
5	1.5	7.3	3.0	2.4	e1.8	2.0	1.4	0.67	0.89	3.8	2.7	3.0
6	1.7	6.3	2.8	2.5	e1.9	1.9	1.3	0.66	0.94	2.1	2.9	2.4
7	1.1	5.8	e2.6	2.4	e1.5	2.0	1.3	0.66	0.77	3.7	2.8	2.0
8	1.3	5.7	e2.5	e2.2	e1.6	e1.8	1.4	0.63	0.79	4.6	3.0	2.2
9	1.2	6.1	2.6	e2.1	e1.7	e1.7	1.2	0.61	0.75	3.6	4.2	2.2
10	1.2	6.6	e2.4	e2.1	e1.9	e1.8	1.2	0.67	0.81	2.6	4.6	2.4
11	1.1	6.5	e2.5	e2.0	e2.0	1.9	1.4	0.74	0.86	4.1	4.3	3.0
12	1.2	6.4	e2.4	e2.1	e2.1	1.9	1.1	0.76	0.82	3.8	3.6	3.4
13	1.2	6.5	e2.5	e2.2	2.4	1.7	1.0	0.75	1.1	2.9	3.4	3.1
14	1.4	6.8	e2.4	e2.2	2.4	1.5	1.3	0.75	2.2	2.6	3.7	2.2
15	1.6	6.8	e2.5	e2.1	2.6	1.1	1.4	0.77	2.4	2.3	3.1	1.7
16	1.6	7.0	e2.6	e2.0	2.7	1.0	1.3	0.75	2.0	3.1	2.8	1.7
17	1.8	7.0	e2.7	e2.0	2.5	1.1	1.2	0.80	1.8	3.5	2.5	1.7
18	2.2	6.7	e2.3	e2.1	2.3	1.2	1.2	0.79	2.4	3.8	2.6	1.9
19	2.2	5.1	e2.0	e2.1	2.2	1.5	1.2	0.90	3.2	3.5	2.8	1.8
20	2.3	3.8	e2.5	e2.2	2.2	1.5	1.2	0.95	3.8	3.3	3.4	1.8
21	2.4	3.3	e2.6	e2.0	2.3	1.7	1.1	0.88	2.4	3.8	2.3	1.7
22	1.9	3.3	2.6	e2.0	2.1	1.5	1.1	0.84	2.8	6.0	2.1	1.7
23	2.4	3.2	2.5	e1.9	2.0	1.4	1.1	0.76	2.6	5.8	2.0	1.8
24	3.6	e3.0	2.3	e2.0	e1.9	1.4	0.86	0.84	2.4	6.1	2.4	2.5
25	2.8	e2.8	2.4	e2.1	e2.0	1.4	0.76	0.91	2.3	4.5	2.2	2.2
26	3.2	e2.9	2.4	2.1	2.3	1.3	0.67	0.91	2.4	3.7	2.8	1.7
27	4.0	2.9	2.5	2.2	2.1	1.3	0.65	0.81	2.4	3.4	2.7	1.5
28	2.6	2.9	2.4	2.3	2.2	1.3	0.64	0.72	2.2	2.8	2.4	1.5
29	2.4	3.0	2.5	e1.9	---	1.4	0.65	0.70	2.4	2.5	3.3	1.4
30	2.8	2.8	2.4	e2.0	---	1.4	0.59	0.66	2.8	2.3	2.5	1.3
31	3.8	---	2.5	e2.1	---	1.5	---	0.67	---	2.2	2.6	---
TOTAL	60.33	150.1	79.5	66.5	57.6	49.7	34.02	23.15	53.23	114.4	90.2	62.9
MEAN	1.95	5.00	2.56	2.15	2.06	1.60	1.13	0.75	1.77	3.69	2.91	2.10
MAX	4.0	7.3	3.3	2.5	2.7	2.2	1.5	0.95	3.8	6.1	4.6	3.4
MIN	0.93	2.8	2.0	1.9	1.5	1.0	0.59	0.59	0.68	2.1	2.0	1.3
AC-FT	120	298	158	132	114	99	67	46	106	227	179	125

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2003, BY WATER YEAR (WY)

MEAN	21.5	14.3	11.8	11.8	11.2	12.9	42.7	90.7	73.1	39.7	55.2	33.0
MAX	119	86.8	38.9	29.7	27.2	68.8	361	661	377	321	307	153
(WY)	(1942)	(1942)	(1942)	(1942)	(1919)	(1985)	(1942)	(1941)	(1941)	(1919)	(1961)	(1991)
MIN	0.21	0.40	0.52	0.65	0.55	0.58	0.25	0.75	0.030	1.45	0.000	0.27
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1955)	(2003)	(1934)	(2002)	(1934)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1915 - 2003	
ANNUAL TOTAL	908.15		841.63			
ANNUAL MEAN	2.49		2.31		34.1	
HIGHEST ANNUAL MEAN					144	1941
LOWEST ANNUAL MEAN					2.31	2003
HIGHEST DAILY MEAN	20	Jan 6	7.3	Nov 4	1,750	Apr 23, 1942
LOWEST DAILY MEAN	0.50	Sep 6	0.59	Apr 30	0.00	May 4, 1917
ANNUAL SEVEN-DAY MINIMUM	0.55	Sep 2	0.64	Apr 28	0.00	Aug 4, 1917
MAXIMUM PEAK FLOW			15	Jul 22	a14,000	Aug 22, 1952
MAXIMUM PEAK STAGE			1.37	Jul 22	b14.40	Aug 22, 1952
INSTANTANEOUS LOW FLOW					0.00	May 3, 1917
ANNUAL RUNOFF (AC-FT)	1,800		1,670		24,730	
10 PERCENT EXCEEDS	5.0		3.8		84	
50 PERCENT EXCEEDS	1.8		2.2		13	
90 PERCENT EXCEEDS	0.82		0.81		2.0	

a From rating curve extended above 660 ft^3/s, on basis of slope-area measurement of peak flow.
b Site and datum then in use.
e Estimated

07218000 COYOTE CREEK NEAR GOLONDRINAS, NM

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

DRAINAGE AREA.--215 mi^2.

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 with satellite telemetry and crest-stage gage. 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, June 7, 2000, at site 250 ft downstream at a 2.00-ft lower datum.

REMARKS.--Records fair except for those estimated, 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	3.1	e0.96	e1.5	1.3	1.4	0.60	0.67	0.63	0.40	1.1	1.5
2	1.3	3.0	e1.0	e1.5	1.4	1.7	0.57	0.70	0.62	0.36	1.0	1.5
3	1.3	2.7	e1.1	e1.4	1.4	1.5	0.61	0.59	0.55	0.31	1.0	1.7
4	1.1	2.9	e1.0	e1.3	1.6	1.3	0.66	0.47	0.52	0.30	1.3	2.0
5	1.1	2.8	e1.3	e1.4	e1.5	1.2	0.66	0.47	0.59	0.30	1.4	1.6
6	1.0	2.3	e1.2	e1.5	e1.4	e2.8	0.65	0.48	0.65	0.28	1.5	1.4
7	1.1	2.2	e1.3	e1.6	e1.5	e2.6	0.69	0.57	0.63	0.27	1.5	1.3
8	1.2	2.3	e1.1	e1.5	e1.5	e2.8	0.69	0.62	0.75	0.26	2.1	1.4
9	1.2	2.6	e1.2	e1.4	e1.6	e2.7	0.57	0.64	0.75	0.24	0.80	1.6
10	1.2	2.5	e1.5	e1.3	e1.4	e2.6	0.53	0.62	0.65	0.25	0.87	2.0
11	1.2	2.3	e1.4	e1.2	e1.3	e2.5	0.52	0.66	0.62	0.27	0.94	2.0
12	1.4	2.3	e1.4	e1.1	e1.2	e2.6	0.57	0.71	0.52	0.28	1.1	1.9
13	1.4	2.4	e1.3	e1.3	e1.5	e2.8	0.57	0.69	0.51	0.27	1.2	1.9
14	1.2	2.3	e1.2	e1.6	1.7	e2.5	0.60	0.54	0.71	0.24	0.88	1.8
15	1.1	2.8	e1.5	e1.4	2.2	e2.7	0.64	0.50	0.62	0.50	0.84	1.8
16	1.1	2.5	e1.6	e1.5	2.5	e2.8	0.59	0.45	0.66	0.63	0.90	1.7
17	1.2	2.3	e1.6	e1.3	2.0	e3.0	0.56	0.41	0.70	0.85	0.92	1.6
18	1.2	2.0	e1.5	e1.4	1.8	2.0	0.57	0.41	1.0	1.0	0.98	1.5
19	1.2	2.0	e1.3	e1.5	1.9	1.5	0.63	0.47	1.4	1.1	1.1	1.6
20	1.2	2.0	e1.4	e1.6	1.6	2.4	0.68	0.48	1.3	0.71	1.1	1.6
21	2.1	1.5	e1.3	e1.4	1.5	3.5	0.67	0.47	1.1	0.75	1.1	1.5
22	3.5	0.59	e1.5	e1.3	1.4	3.5	0.65	0.48	0.85	1.4	1.7	1.4
23	3.7	0.57	e1.2	e1.2	1.5	2.3	0.64	0.56	0.72	3.1	1.5	1.4
24	7.0	0.51	e1.4	e1.3	1.4	0.58	0.58	0.62	0.52	1.6	1.3	1.3
25	4.1	0.93	e1.6	e1.5	1.8	0.47	0.64	0.75	0.42	0.95	1.2	1.3
26	4.7	e0.94	e1.5	e1.6	1.4	0.47	0.68	0.74	0.45	0.83	1.3	1.2
27	7.6	e0.96	e1.6	e1.4	1.4	0.49	0.68	0.66	0.42	0.86	1.4	1.1
28	3.6	e0.95	e1.5	e1.5	1.4	1.8	0.69	0.64	0.40	1.1	1.9	1.1
29	3.0	e0.94	e1.4	e1.4	---	3.7	0.70	0.60	0.43	0.32	2.1	0.84
30	2.9	e0.93	e1.6	e1.5	---	4.3	0.67	0.60	0.44	0.35	2.0	1.2
31	2.9	---	e1.4	e1.4	---	2.8	---	0.61	---	1.1	1.7	---
TOTAL	69.1	58.12	41.86	43.8	44.1	69.31	18.76	17.88	20.13	21.18	39.73	45.74
MEAN	2.23	1.94	1.35	1.41	1.57	2.24	0.63	0.58	0.67	0.68	1.28	1.52
MAX	7.6	3.1	1.6	1.6	2.5	4.3	0.70	0.75	1.4	3.1	2.1	2.0
MIN	1.0	0.51	0.96	1.1	1.2	0.47	0.52	0.41	0.40	0.24	0.80	0.84
AC-FT	137	115	83	87	87	137	37	35	40	42	79	91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2003, BY WATER YEAR (WY)

MEAN	9.11	8.94	8.11	7.68	7.90	9.53	19.6	30.6	16.1	8.91	16.7	11.4
MAX	80.4	53.9	24.2	19.7	19.4	77.6	195	219	181	67.0	150	150
(WY)	(1942)	(1942)	(1942)	(1992)	(1985)	(1987)	(1987)	(1941)	(1995)	(1941)	(1991)	(1991)
MIN	0.72	1.71	1.35	1.41	1.12	1.02	0.32	0.53	0.23	0.68	0.75	0.65
(WY)	(1957)	(1935)	(2003)	(2003)	(1955)	(1967)	(1978)	(1967)	(1940)	(2003)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1930 - 2003	
ANNUAL TOTAL	711.53		489.71			
ANNUAL MEAN	1.95		1.34		12.9	
HIGHEST ANNUAL MEAN					52.9	1942
LOWEST ANNUAL MEAN					1.34	2003
HIGHEST DAILY MEAN	26	Jun 20	7.6	Oct 27	1,290	Sep 10, 1991
LOWEST DAILY MEAN	0.51	Nov 24	0.24	Jul 9	0.00	Aug 4, 1945
ANNUAL SEVEN-DAY MINIMUM	0.61	Jun 13	0.26	Jul 8	0.10	Jul 20, 1939
MAXIMUM PEAK FLOW			13	Oct 27	a4,050	Aug 17, 1961
MAXIMUM PEAK STAGE			2.64	Oct 27	b10.10	Aug 30, 1936
INSTANTANEOUS LOW FLOW			0.16	Jul 8	0.00	Aug 4, 1945
ANNUAL RUNOFF (AC-FT)	1,410		971		9,360	
10 PERCENT EXCEEDS	4.1		2.5		24	
50 PERCENT EXCEEDS	1.4		1.3		5.5	
90 PERCENT EXCEEDS	0.76		0.50		1.1	

a From rating curve extended above 250 ft^3/s, on basis of slope-area measurement at gage heights 5.54 ft, 7.74 ft, and 9.60 ft.
b Site and datum then in use.
e Estimated

07221500 CANADIAN RIVER NEAR SANCHEZ, NM

LOCATION.--Lat 35°39'08", long 104°22'39", in SW $^1/_4$ 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 mi^2, of which 303 mi^2 probably is noncontributing.

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 Sept. 1942, as published in WSP 1281, supersede those published in WSP 1311.

GAGE.--Water-stage recorder with satellite telemetry. 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 Nov. 1966.

REMARKS.--Records fair. Diversions for irrigation of about 56,000 acres upstream from station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 29 or 30, 1904, probably exceeded 100,000 ft^3/s, but is believed to have been less than the peak of June 18, 1965.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	17	2.9	4.8	5.2	5.1	3.9	0.10	0.03	6.9	0.00	0.00
2	5.0	14	2.8	4.6	5.3	5.0	3.2	0.06	0.08	5.2	0.00	0.00
3	4.7	11	3.3	4.7	5.0	5.1	2.8	0.02	0.36	3.4	0.00	0.00
4	4.1	10	4.3	4.6	5.2	4.9	2.4	0.00	0.31	2.0	0.00	0.00
5	3.3	8.7	4.1	4.6	5.2	4.6	2.1	2.2	5.8	1.3	0.00	0.00
6	2.8	7.6	4.2	4.7	4.4	4.5	1.8	6.5	11	2.2	0.00	0.00
7	2.3	6.8	3.9	4.8	4.4	4.3	1.6	5.3	5.2	1.7	0.00	0.00
8	2.7	6.2	3.7	4.9	4.7	4.2	1.7	4.4	3.5	2.8	0.00	0.00
9	2.7	5.5	3.5	4.7	4.6	4.1	2.2	3.4	2.3	1.7	0.00	0.00
10	2.5	4.8	3.5	4.6	4.5	4.1	1.9	2.5	1.3	1.00	0.00	0.00
11	2.3	4.5	3.3	4.8	4.5	4.1	1.8	2.0	0.87	0.70	0.00	0.00
12	2.1	4.2	3.3	4.8	4.4	3.9	1.8	1.3	0.61	0.55	0.00	0.00
13	1.9	4.2	3.5	5.3	4.5	3.5	1.6	1.2	0.41	0.32	0.00	0.00
14	1.9	4.2	3.7	5.9	4.8	3.4	1.2	1.0	0.31	0.14	0.00	0.00
15	1.7	3.7	3.8	5.6	4.9	3.1	0.95	0.76	0.32	0.03	0.00	0.00
16	1.6	3.6	3.7	5.2	5.0	3.0	0.87	0.61	0.14	0.00	0.00	0.00
17	1.6	3.5	3.5	5.2	5.2	3.0	1.0	0.63	0.05	0.00	0.00	0.00
18	1.6	3.4	3.5	5.1	5.5	3.5	0.88	0.39	0.09	0.00	0.00	0.00
19	1.6	3.3	3.3	4.9	5.6	4.2	0.91	0.21	4.1	0.00	0.00	0.00
20	1.5	3.2	3.4	5.0	6.1	4.4	1.0	0.08	24	0.00	0.00	0.00
21	1.4	3.1	3.3	4.5	6.5	5.1	1.0	0.04	14	0.00	0.00	0.00
22	1.5	3.0	3.3	4.7	6.1	4.7	1.0	0.01	11	0.00	0.00	0.00
23	1.5	3.0	3.7	4.6	5.7	4.5	0.91	0.00	61	0.00	0.00	0.00
24	1.9	2.9	4.2	4.9	5.4	4.2	0.93	0.00	74	0.00	0.00	0.00
25	2.3	2.8	4.1	4.9	5.6	4.0	1.0	0.00	41	0.00	0.00	0.00
26	10	2.9	3.8	4.7	5.5	3.9	0.87	0.00	27	0.00	0.00	0.00
27	36	2.9	4.3	4.6	5.5	3.4	0.80	0.00	18	0.00	0.00	0.00
28	28	2.9	4.7	4.4	5.3	3.5	0.57	0.00	14	0.00	0.00	0.00
29	29	2.8	4.8	4.5	---	4.1	0.33	0.00	12	0.00	0.00	0.00
30	28	2.8	5.4	4.9	---	4.5	0.19	0.00	8.5	0.00	0.00	0.00
31	21	---	5.0	5.0	---	3.8	---	0.00	---	0.00	0.00	---
TOTAL	214.9	158.5	117.8	150.5	144.6	127.7	43.21	32.71	341.28	29.94	0.00	0.00
MEAN	6.93	5.28	3.80	4.85	5.16	4.12	1.44	1.06	11.4	0.97	0.000	0.000
MAX	36	17	5.4	5.9	6.5	5.1	3.9	6.5	74	6.9	0.00	0.00
MIN	1.4	2.8	2.8	4.4	4.4	3.0	0.19	0.00	0.03	0.00	0.00	0.00
AC-FT	426	314	234	299	287	253	86	65	677	59	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2003, BY WATER YEAR (WY)

MEAN	104	59.4	50.4	52.9	62.9	61.5	206	410	374	221	305	230
MAX	870	506	252	183	363	737	5,573	4,721	4,260	1,129	1,173	4,079
(WY)	(1942)	(1942)	(1942)	(1943)	(1961)	(1987)	(1942)	(1941)	(1965)	(1914)	(1946)	(1942)
MIN	0.000	1.43	1.97	1.42	1.46	0.74	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1936)	(1967)	(1974)	(1964)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1913 - 2003	
ANNUAL TOTAL	5,902.65		1,361.14			
ANNUAL MEAN	16.2		3.73		180	
HIGHEST ANNUAL MEAN					1,191	1942
LOWEST ANNUAL MEAN					3.73	2003
HIGHEST DAILY MEAN	437	Jun 16	74	Jun 24	50,000	Jun 13, 1913
LOWEST DAILY MEAN	0.00	May 20	c0.00	May 4	0.00	Apr 1, 1936
ANNUAL SEVEN-DAY MINIMUM	0.00	May 29	0.00	May 23	0.00	Apr 1, 1936
MAXIMUM PEAK FLOW			115	Jun 23	a145,000	Jun 18, 1965
MAXIMUM PEAK STAGE			2.64	Jun 23	b36.60	Jun 18, 1965
INSTANTANEOUS LOW FLOW			c0.00	May 4	0.00	Mar 31, 1936
ANNUAL RUNOFF (AC-FT)	11,710		2,700		130,300	
10 PERCENT EXCEEDS	28		5.6		333	
50 PERCENT EXCEEDS	6.1		2.9		43	
90 PERCENT EXCEEDS	0.10		0.00		3.7	

a From rating curve extended above 91,000 ft^3/s, on basis of slope-area measurement of peak flow.
b From floodmarks, present site and datum.
c Many days.

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, 24.0 mi north of Newkirk, and at mile 746.0.

DRAINAGE AREA.--7,409 mi^2, of which 433 mi^2, probably is 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 with satellite telemetry. 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, 315,700 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, 91,060 acre-ft, Oct. 3, elevation, 4,164.35 ft; minimum, 71,850 acre-ft, Sept. 30, elevation, 4,158.56 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91,030	89,880	88,750	88,080	87,280	86,240	84,900	82,670	80,370	79,720	76,700	74,470
2	90,960	89,920	88,720	88,080	87,240	86,240	84,870	82,600	80,240	79,680	76,570	74,440
3	91,060	89,880	88,790	88,050	87,180	86,240	84,730	82,470	80,210	79,550	76,500	74,340
4	91,030	89,880	88,790	88,050	87,140	86,070	84,700	82,370	80,110	79,450	76,340	74,320
5	90,990	89,850	88,790	88,010	87,070	86,070	84,630	82,300	80,110	79,360	76,310	74,220
6	90,920	89,780	88,790	88,010	87,040	86,030	84,460	82,230	80,040	79,290	76,220	74,090
7	90,850	89,810	88,790	88,010	87,040	85,930	84,390	82,130	80,010	79,260	76,060	74,030
8	90,810	89,740	88,750	88,010	87,000	85,890	84,320	82,000	79,810	79,060	75,930	73,970
9	90,740	89,700	88,720	87,910	86,930	85,860	84,290	81,900	79,680	79,030	75,960	73,870
10	90,700	89,600	88,720	87,910	86,900	85,830	84,190	81,760	79,680	78,930	75,900	73,810
11	90,600	89,560	88,680	87,870	86,830	85,720	84,190	81,700	79,620	78,860	75,800	73,720
12	90,490	89,490	88,680	87,870	86,860	85,620	84,120	81,630	79,450	78,770	75,710	73,620
13	90,420	89,460	88,640	87,840	86,790	85,620	84,020	81,530	79,420	78,640	77,580	73,470
14	90,310	89,390	88,610	87,840	86,790	85,590	83,950	81,470	79,580	78,600	75,390	73,370
15	90,240	89,390	88,580	87,770	86,760	85,550	83,810	81,400	79,520	78,470	75,290	73,280
16	90,170	89,350	88,540	87,770	86,760	85,480	83,710	81,270	79,720	78,340	75,170	73,190
17	90,100	89,350	88,610	87,730	86,760	85,480	83,680	81,200	79,620	78,280	75,070	73,030
18	90,020	89,240	88,430	87,730	86,690	85,380	83,610	81,070	79,580	78,150	74,940	72,870
19	90,130	89,210	88,400	87,700	86,650	85,450	83,610	80,940	79,490	78,050	74,880	72,870
20	90,130	89,210	88,330	87,700	86,620	85,410	83,580	80,900	80,010	77,920	74,820	72,810
21	90,060	89,170	88,290	87,590	86,620	85,450	83,480	80,800	79,980	77,860	74,720	72,720
22	90,020	89,100	88,220	87,560	86,580	85,410	83,440	80,770	79,880	77,760	74,720	72,560
23	89,990	89,100	88,290	87,560	86,450	85,410	83,340	80,700	79,680	77,660	74,600	72,500
24	89,950	89,000	88,260	87,520	86,410	85,340	83,240	80,700	79,620	77,530	74,530	72,340
25	89,880	88,960	88,260	87,490	86,380	85,310	83,140	80,670	79,450	77,440	74,470	72,280
26	90,020	88,960	88,260	87,490	86,380	85,280	83,100	80,600	79,420	77,270	74,470	72,220
27	90,020	88,890	88,260	87,450	86,340	85,170	83,100	80,570	79,290	77,180	74,380	72,160
28	89,990	88,860	88,220	87,420	86,240	85,140	82,940	80,470	79,220	77,050	74,380	72,000
29	89,920	88,820	88,190	87,380	---	85,070	82,870	80,470	79,450	76,920	74,440	71,940
30	89,880	88,790	88,150	87,350	---	85,040	82,740	80,370	79,680	76,890	74,570	71,850
31	89,880	---	88,150	87,310	---	85,000	---	80,370	---	76,790	74,530	---
MAX	91,060	89,920	88,790	88,080	87,280	86,240	84,900	82,670	80,370	79,720	77,580	74,470
MIN	89,880	88,790	88,150	87,310	86,240	85,000	82,740	80,370	79,220	76,790	74,380	71,850
(+)	4,164.01	4,163.70	4,163.52	4,163.28	4,162.98	4,162.61	4,161.94	4,161.23	4,161.02	4,160.13	4,159.42	4,158.56
(++)	-1,040	-1,090	-640	-840	-1,070	-1,240	-2,260	-2,370	-690	-2,890	-2,260	-2,680

CAL YR 2002 MAX 104,190 MIN 79,320
WTR YR 2003 MAX 91,060 MIN 71,850

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

07226500 UTE CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°26'18", long 103°31'31", in NW ¼ SE ¼ sec.15, T.14 N., R.32 E., Harding County, Hydrologic Unit 11080007, on right bank l.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 mi^2, of which 617 mi^2 probably is 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 with satellite telemetry. 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. No flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1, 1914, reached a stage of 22.95 ft at site and datum then in use. Another major flood reached a stage of 16.0 ft, 1942 datum, sometime in 1941, from information furnished by Bureau of Reclamation; discharge, about 70,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e24	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e5.2	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.20	e0.60	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e52	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	160	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	424	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,120	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e113	0.00	6.6	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e27	31	18	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e7.5	66	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.9	0.59	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e2.0	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.20	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	6.0	0.00	6.4	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	193	0.00	48	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	11.35	0.00	0.00	0.00	0.00	0.00	0.00	2,156.80	127.39	79.00	0.31
MEAN	0.000	0.38	0.000	0.000	0.000	0.000	0.000	0.000	71.9	4.11	2.55	0.010
MAX	0.00	11	0.00	0.00	0.00	0.00	0.00	0.00	1,120	66	48	0.24
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	23	0.00	0.00	0.00	0.00	0.00	0.00	4,280	253	157	0.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	10.1	3.05	1.68	2.36	1.93	1.67	9.79	35.8	27.6	48.5	66.5	28.4
MAX	139	92.5	39.9	39.7	26.3	23.7	459	351	191	317	520	261
(WY)	(1955)	(1979)	(1943)	(1942)	(1942)	(1948)	(1942)	(1955)	(1965)	(1950)	(1981)	(1969)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.000
(WY)	(1945)	(1946)	(1946)	(1946)	(1946)	(1946)	(1943)	(1945)	(1953)	(1946)	(1983)	(1948)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	4,403.05		2,374.85			
ANNUAL MEAN	12.1		6.51		19.0	
HIGHEST ANNUAL MEAN					57.2	1958
LOWEST ANNUAL MEAN					0.084	1974
HIGHEST DAILY MEAN	645	Sep 10	1,120	Jun 21	7,420	May 28, 1946
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 17, 1942
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Mar 18, 1943
MAXIMUM PEAK FLOW			4,730	Jun 21	a24,500	May 28, 1946
MAXIMUM PEAK STAGE			5.41	Jun 21	b9.94	Aug 11, 1981
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Jul 17, 1942
ANNUAL RUNOFF (AC-FT)	8,730		4,710		13,740	
10 PERCENT EXCEEDS	4.6		0.00		14	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 7,700 ft^3/s, on basis of slope-area measurement at gage heights 5.2 ft and 7.2 ft.
b Site and datum then in use.
e Estimated

07226800 UTE RESERVOIR NEAR LOGAN, NM

LOCATION.--Lat 35°20'35", long 103°26'37", in NW $^1/_4$ 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.--11,110 mi^2, of which 1,110 mi^2 probably is noncontributing.

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

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is North American Vertical Datum of 1988 (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 from 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 Apr. 1984. Capacity, 229,710 acre-ft at elevation 3,788.86 ft, crest of labyrinth spillway, from capacity table dated Dec. 2002. Original capacity at elevation 3,787.0 ft was 272,770 acre-ft. Top of dam is at elevation 3,813.86 ft. Dead storage, 9,230 acre-ft at elevation 3,726.86 ft, sill of outlet intake tower; inactive pool of 25,070 acre-ft, between elevations 3,726.86 and 3,743.46 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 of 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 Sept. 1965, 31,320 acre-ft, June 6, 1984, elevation, 3,739.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 176,000 acre-ft, Oct. 1-11, elevation, 3,781.13 ft; minimum, 160,000 acre-ft, Sept. 24-30, elevation, 3,778.53 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176,000	174,000	173,000	173,000	173,000	172,000	171,000	168,000	165,000	171,000	166,000	165,000
2	176,000	174,000	173,000	173,000	173,000	171,000	171,000	168,000	165,000	171,000	166,000	165,000
3	175,000	174,000	173,000	173,000	172,000	172,000	171,000	168,000	164,000	171,000	166,000	164,000
4	176,000	174,000	173,000	173,000	172,000	172,000	170,000	168,000	165,000	171,000	166,000	164,000
5	176,000	174,000	173,000	173,000	173,000	171,000	171,000	168,000	165,000	171,000	166,000	164,000
6	175,000	174,000	174,000	173,000	172,000	171,000	170,000	168,000	165,000	171,000	166,000	164,000
7	176,000	174,000	174,000	173,000	172,000	172,000	170,000	168,000	165,000	170,000	166,000	164,000
8	175,000	174,000	174,000	173,000	172,000	171,000	170,000	167,000	165,000	170,000	165,000	164,000
9	175,000	173,000	174,000	173,000	172,000	171,000	170,000	167,000	165,000	170,000	165,000	163,000
10	175,000	174,000	173,000	173,000	172,000	171,000	170,000	167,000	165,000	170,000	165,000	164,000
11	175,000	173,000	173,000	173,000	172,000	171,000	170,000	167,000	165,000	170,000	166,000	163,000
12	175,000	173,000	173,000	173,000	172,000	171,000	170,000	167,000	164,000	170,000	165,000	163,000
13	175,000	173,000	173,000	173,000	172,000	171,000	171,000	167,000	164,000	169,000	165,000	163,000
14	175,000	173,000	173,000	173,000	172,000	171,000	171,000	167,000	164,000	169,000	165,000	163,000
15	175,000	174,000	173,000	173,000	172,000	171,000	170,000	167,000	164,000	169,000	165,000	163,000
16	174,000	174,000	173,000	173,000	172,000	171,000	170,000	166,000	164,000	169,000	165,000	163,000
17	175,000	174,000	173,000	173,000	172,000	171,000	170,000	166,000	164,000	169,000	165,000	163,000
18	175,000	174,000	173,000	173,000	172,000	171,000	170,000	166,000	165,000	169,000	165,000	162,000
19	174,000	174,000	173,000	173,000	172,000	171,000	170,000	165,000	165,000	168,000	165,000	161,000
20	174,000	174,000	173,000	173,000	172,000	171,000	170,000	166,000	167,000	168,000	164,000	162,000
21	174,000	174,000	173,000	173,000	172,000	171,000	169,000	166,000	170,000	168,000	164,000	162,000
22	174,000	174,000	173,000	172,000	172,000	171,000	169,000	165,000	170,000	168,000	164,000	161,000
23	174,000	174,000	173,000	173,000	172,000	171,000	169,000	165,000	170,000	168,000	164,000	161,000
24	174,000	173,000	173,000	173,000	172,000	171,000	169,000	165,000	170,000	168,000	164,000	161,000
25	174,000	173,000	173,000	173,000	172,000	171,000	169,000	165,000	170,000	168,000	164,000	161,000
26	174,000	173,000	173,000	173,000	172,000	171,000	169,000	165,000	170,000	167,000	164,000	161,000
27	174,000	174,000	173,000	172,000	171,000	171,000	169,000	165,000	170,000	167,000	164,000	161,000
28	174,000	173,000	173,000	172,000	172,000	171,000	169,000	165,000	170,000	167,000	163,000	160,000
29	174,000	174,000	173,000	172,000	---	171,000	168,000	165,000	170,000	167,000	164,000	161,000
30	174,000	173,000	173,000	173,000	---	171,000	168,000	165,000	170,000	167,000	164,000	160,000
31	174,000	---	173,000	172,000	---	171,000	---	165,000	---	167,000	165,000	---
MAX	176,000	174,000	174,000	173,000	173,000	172,000	171,000	168,000	170,000	171,000	166,000	165,000
MIN	174,000	173,000	173,000	172,000	171,000	171,000	168,000	165,000	164,000	167,000	163,000	160,000
(+)	3,780.83	3,780.73	3,780.71	3,780.55	3,780.42	3,780.33	3,779.91	3,779.33	3,780.31	3,779.63	3,779.33	3,778.58
(++)	-2,000	-1,000	0	-1,000	0	-1,000	-3,000	-3,000	+6,000	-4,000	-2,000	-5,000

CAL YR 2002 MAX 189,000 MIN 171,000 (++) +4,000
WTR YR 2003 MAX 176,000 MIN 160,000 (++) -16,000

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

07227000 CANADIAN RIVER AT LOGAN, NM

LOCATION.--Lat 35°21'25", long 103°25'03", in NE ¼ NE ¼ 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 mi^2, of which 1,110 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

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.--Water-discharge records poor. Flow regulated by Ute Reservoir, 2.0 mi upstream (station 07226800). Diversions for irrigation of about 90,000 acres upstream from station. No flow at times prior to completion of Ute Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 278,000 ft^3/s, Sept. 30, 1904, gage height, about 36.5 ft, site and datum used in 1909, from rating curve extended above 14,000 ft^3/s, from Ninth Biennial Report of New Mexico State Engineer.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	e4.4	4.1	e3.4	e3.7	e3.3	3.5	3.7	e3.6	5.6	e2.7	3.0
2	5.2	e4.4	4.1	e3.4	e3.6	e3.3	3.7	4.2	e4.0	5.3	e2.8	3.0
3	5.1	e3.8	4.3	e3.6	e3.4	e3.1	3.4	4.3	e3.8	4.7	e2.7	3.1
4	5.1	e3.6	4.1	e3.5	e3.4	e2.9	3.9	3.2	3.7	4.4	e2.5	2.8
5	5.1	e3.7	4.1	e3.4	e3.4	e3.0	4.4	5.1	4.2	4.1	e2.7	2.8
6	5.2	e3.8	3.7	e3.3	e3.4	e3.0	3.6	4.0	3.6	4.1	e2.7	3.3
7	5.1	e4.0	4.0	e3.4	e3.4	e3.2	3.8	4.1	3.5	3.7	e2.6	4.2
8	5.1	e3.8	4.1	e3.4	e3.6	e3.2	3.7	e3.6	3.1	3.5	e2.7	3.6
9	5.1	e3.2	4.1	e3.4	e3.6	e3.1	3.5	e3.7	3.0	3.6	e3.0	3.4
10	5.1	e4.1	4.1	e3.4	5.4	e3.3	3.4	e3.7	3.2	3.7	20	3.1
11	5.3	e4.3	4.0	e3.4	4.3	e3.3	3.5	e3.2	3.2	3.8	3.7	2.9
12	e5.1	e4.0	3.7	e3.6	3.8	e3.3	3.6	e3.5	3.2	3.6	e2.9	2.7
13	e5.3	e4.1	3.7	e3.6	3.5	e3.2	3.8	e3.6	3.2	4.0	e3.0	2.9
14	4.9	e4.3	3.5	e3.5	3.3	e3.2	3.6	2.9	3.2	3.5	e3.0	2.4
15	5.0	14	3.6	e3.3	3.3	e3.4	3.4	3.0	3.5	3.4	e2.9	2.5
16	e5.0	9.8	3.8	e3.2	3.1	e3.5	3.3	e2.9	3.2	3.3	e3.1	2.5
17	e4.7	e5.3	3.6	e3.4	3.2	e3.2	4.1	3.1	3.5	2.8	e3.1	2.2
18	e5.5	e4.5	3.4	e3.4	e3.2	e3.4	3.8	3.3	7.6	3.1	e2.9	2.0
19	e5.7	e4.2	3.4	e3.4	e3.5	3.3	4.5	3.4	7.9	3.0	e3.0	2.1
20	e5.5	e4.2	e3.6	e3.4	e3.4	e3.1	4.6	4.0	11	2.6	2.6	2.3
21	e4.7	4.3	e3.4	e3.5	e3.3	3.0	5.1	4.1	4.8	3.0	2.4	2.3
22	e4.1	4.1	e3.3	e3.4	e3.2	e3.1	7.0	4.6	3.6	2.6	2.5	2.3
23	e4.3	4.1	e3.1	e4.1	e3.0	e3.3	6.6	4.4	3.9	e3.2	2.4	2.2
24	e4.5	4.1	e3.2	e3.9	e2.9	3.2	5.5	4.5	3.6	e3.0	2.6	2.2
25	e4.3	4.1	e3.2	e3.4	e2.8	3.3	5.8	5.3	2.9	e2.9	2.5	2.3
26	e4.5	4.1	e3.4	e3.3	e3.5	3.4	6.2	5.1	19	e2.7	2.6	2.6
27	e4.5	4.1	e3.6	e3.6	e3.5	3.8	5.8	4.4	5.2	e2.6	2.8	2.4
28	e4.6	4.1	e3.4	e3.5	e3.3	3.6	5.2	3.8	7.0	e2.6	2.7	2.2
29	e4.3	4.1	e3.4	e3.4	---	3.5	4.0	3.3	7.9	e2.8	3.9	4.6
30	e4.4	4.0	e3.2	e3.7	---	3.6	3.2	3.2	7.8	e2.6	13	2.7
31	e4.5	---	e3.3	e3.7	---	3.7	---	2.8	---	e2.7	3.9	---
TOTAL	152.3	138.6	113.5	107.9	97.0	101.8	129.5	118.0	150.9	106.5	115.9	82.6
MEAN	4.91	4.62	3.66	3.48	3.46	3.28	4.32	3.81	5.03	3.44	3.74	2.75
MAX	5.7	14	4.3	4.1	5.4	3.8	7.0	5.3	19	5.6	20	4.6
MIN	4.1	3.2	3.1	3.2	2.8	2.9	3.2	2.8	2.9	2.6	2.4	2.0
AC-FT	302	275	225	214	192	202	257	234	299	211	230	164

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	26.8	22.6	6.41	6.92	14.8	10.1	16.1	48.4	60.8	79.0	101	94.0
MAX	325	287	84.1	62.7	254	282	239	767	575	608	720	838
(WY)	(1966)	(1983)	(1983)	(1992)	(2000)	(2000)	(1987)	(1987)	(1969)	(1982)	(1981)	(1969)
MIN	1.30	1.19	1.24	0.86	1.13	0.63	0.26	0.64	0.62	0.65	1.19	1.36
(WY)	(1964)	(1984)	(1984)	(1963)	(1987)	(1963)	(1963)	(1963)	(1963)	(1963)	(1963)	(1983)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	1,355.0		1,414.5			
ANNUAL MEAN	3.71		3.88		a40.6	
HIGHEST ANNUAL MEAN					145	1999
LOWEST ANNUAL MEAN					1.62	1964
HIGHEST DAILY MEAN	14	Nov 15	20	Aug 10	6,860	Jun 18, 1969
LOWEST DAILY MEAN	2.2	Jul 16	2.0	Sep 18	0.10	Jan 12, 1963
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 15	2.2	Sep 17	0.10	Apr 16, 1963
MAXIMUM PEAK FLOW			176	Jun 26	b219,000	Sep 22, 1941
MAXIMUM PEAK STAGE			2.98	Jun 26	c29.30	Sep 22, 1941
ANNUAL RUNOFF (AC-FT)	2,690		2,810		29,440	
10 PERCENT EXCEEDS	5.3		5.1		37	
50 PERCENT EXCEEDS	3.3		3.5		2.9	
90 PERCENT EXCEEDS	2.6		2.7		1.7	

a Average discharge for 15 years (water years 1909, 1912-13,) 392 ft^3/s, 284,000 acre-ft/yr, prior to completion of Conchas Dam, 24 years (water years 1939-62), 257 ft^3/s, 186,200 acre-ft/yr, prior to completion of Ute Dam.
b From rating curve extended above 75,000 ft^3/s.
c From floodmarks.
e Estimated

07227000 CANADIAN RIVER AT LOGAN, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-62, 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV													
04...	1330	5.9	690	10.3	104	7.8	7,990	11.0	10.0	--	--	--	--
MAR													
07...	1140	2.0	665	10.8	118	8.0	8,040	21.0	12.0	560	119	63.0	7.75
APR													
23...	1000	7.1	659	8.4	99	7.9	8,130	14.0	15.0	550	116	63.8	10.4
MAY													
30...	1000	3.7	666	6.6	90	7.9	8,170	34.0	22.5	620	129	73.4	10.8
JUN													
27...	0900	4.8	672	5.5	73	8.0	6,610	22.0	22.0	650	138	74.7	14.6
AUG													
07...	1330	1.6	675	8.4	128	8.0	7,650	40.0	29.5	530	104	65.2	9.00

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
NOV											
04...	--	--	--	--	--	--	--	--	--	26	19
MAR											
07...	28	1,540	2,250	1.12	10.3	498	4,660	350	<50	--	--
APR											
23...	30	1,610	2,250	1.01	10.3	486	4,730	380	<50	--	--
MAY											
30...	30	1,710	2,240	1.2	12.4	509	4,870	470	E23	--	--
JUN											
27...	33	1,940	1,750	0.9	10.3	401	4,500	430	E12	--	--
AUG											
07...	28	1,470	2,010	1.1	11.7	476	4,320	400	E25	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value

07227100 REVUELTO CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°20'29", long 103°23'37", in SW ¼ NW ¼ 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 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. 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.

EXTREMES OUTSIDE PERIOD OF RECORD (1941-47).--Maximum discharge determined, about 13,400 ft^3/s, Sept. 18, 1946, gage height, 9.04 ft, at site 180 ft downstream at different datum, from unpublished records collected by Bureau of Reclamation. A peak of 26,100 ft^3/s, date unknown, gage height, 12.9 ft, at former site and datum, was measured by slope-area method in May 1957.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	0.90	0.05	3.8	0.05	0.09	0.00	0.14	0.00	25	e0.03	60
2	0.26	0.60	0.05	1.3	0.02	0.08	0.00	0.28	0.00	6.4	0.00	e16
3	0.30	0.34	0.96	0.44	0.10	0.08	0.07	0.21	0.00	1.7	0.00	e2.2
4	0.11	0.30	4.1	0.26	0.14	0.03	0.08	0.03	5.1	0.91	0.00	e0.08
5	0.09	0.25	20	0.16	0.14	0.05	0.14	0.02	191	0.58	0.00	0.00
6	0.07	0.17	11	0.07	0.16	0.13	0.09	0.07	174	0.30	e0.23	0.00
7	0.09	0.14	6.3	0.05	0.13	0.24	0.10	0.12	82	0.08	e1.2	26
8	0.17	0.08	3.9	0.05	0.18	0.26	0.12	0.01	29	0.00	e0.30	e0.54
9	0.18	0.01	2.7	0.05	0.14	0.26	0.09	0.00	11	0.00	e0.05	0.00
10	0.13	0.00	1.9	0.02	0.41	0.23	0.04	0.00	3.5	0.00	2.9	0.00
11	0.09	0.00	1.7	0.02	0.22	0.22	0.13	0.00	0.76	0.00	0.13	0.00
12	0.00	0.00	1.4	0.00	0.14	0.20	0.09	0.02	0.09	0.00	0.08	0.00
13	0.00	0.00	1.3	0.01	0.18	0.17	0.08	0.02	0.01	0.00	0.00	0.00
14	0.02	0.00	1.0	0.00	0.22	0.15	0.05	0.01	0.00	0.00	0.00	0.00
15	0.00	89	1.0	0.02	25	0.16	0.08	0.12	0.00	0.00	0.00	0.00
16	0.02	98	0.85	0.03	13	0.14	0.10	0.02	35	0.00	0.00	0.00
17	0.02	58	0.48	0.07	4.1	0.11	0.20	0.03	8.3	0.00	0.00	0.00
18	0.04	14	0.48	0.18	1.6	0.19	0.11	0.00	47	0.00	0.00	0.00
19	0.17	5.6	0.56	0.28	0.30	28	0.46	0.01	98	0.00	0.00	0.00
20	0.11	3.1	0.44	0.26	0.15	99	0.29	0.00	458	0.00	0.00	0.00
21	0.05	1.8	0.43	0.20	0.20	43	0.20	0.00	362	0.00	0.00	0.00
22	0.06	1.1	0.38	0.24	0.13	89	0.73	0.03	166	0.00	0.00	0.00
23	0.00	0.64	7.9	0.38	0.05	12	5.1	0.01	39	0.00	0.00	0.00
24	0.37	0.47	7.6	0.38	0.21	e3.8	0.50	0.02	12	129	0.00	0.00
25	16	0.31	3.2	0.35	0.70	e1.8	0.44	0.64	2.7	e11	0.00	0.00
26	3.7	0.19	5.1	0.21	0.36	e1.2	0.37	0.55	70	e6.1	0.00	0.00
27	78	0.21	5.0	0.13	0.21	e0.70	0.28	0.23	17	e3.9	0.00	0.00
28	17	0.16	3.7	0.07	0.09	0.76	0.35	0.12	3.9	e1.5	0.00	0.00
29	7.2	0.14	36	0.05	---	e0.54	0.20	0.06	0.61	e0.54	0.00	0.00
30	1.8	0.08	56	0.06	---	0.17	0.08	0.00	111	e0.23	971	0.00
31	1.2	---	9.6	0.04	---	0.01	---	0.00	---	e0.08	277	---
TOTAL	127.62	275.59	195.08	9.18	48.33	282.77	10.57	2.77	1,926.97	187.32	1,252.92	104.82
MEAN	4.12	9.19	6.29	0.30	1.73	9.12	0.35	0.089	64.2	6.04	40.4	3.49
MAX	78	98	56	3.8	25	99	5.1	0.64	458	129	971	60
MIN	0.00	0.00	0.05	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	253	547	387	18	96	561	21	5.5	3,820	372	2,490	208

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	38.1	9.85	9.55	5.46	6.99	9.38	27.3	45.9	78.0	112	117	67.2
MAX	320	41.2	129	27.9	42.5	79.3	346	203	492	1,203	575	515
(WY)	(1961)	(1999)	(1960)	(1990)	(1983)	(2001)	(1970)	(1991)	(1960)	(1960)	(1981)	(1969)
MIN	0.000	0.056	0.001	0.000	0.000	0.003	0.32	0.085	0.89	0.42	0.93	1.72
(WY)	(1965)	(1978)	(1976)	(1965)	(1965)	(1980)	(1981)	(1976)	(1990)	(1983)	(1978)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1959 - 2003	
ANNUAL TOTAL	7,197.31		4,423.94			
ANNUAL MEAN	19.7		12.1		43.8	
HIGHEST ANNUAL MEAN					204	1960
LOWEST ANNUAL MEAN					4.72	1964
HIGHEST DAILY MEAN	1,450	Jun 15	971	Aug 30	13,800	Jul 9, 1960
LOWEST DAILY MEAN	0.00	Apr 16	0.00	Oct 12	0.00	Oct 20, 1959
ANNUAL SEVEN-DAY MINIMUM	0.01	Nov 8	0.00	Jul 8	0.00	Oct 20, 1959
MAXIMUM PEAK FLOW			4,130	Aug 30	a26,700	Jul 9, 1960
MAXIMUM PEAK STAGE			6.70	Aug 30	14.30	Jul 9, 1960
INSTANTANEOUS LOW FLOW			b0.00	Oct 4	0.00	Oct 20, 1959
ANNUAL RUNOFF (AC-FT)	14,280		8,770		31,720	
10 PERCENT EXCEEDS	27		13		63	
50 PERCENT EXCEEDS	0.53		0.14		5.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From slope-area measurement of peak flow.
b Many days.
e Estimated

07227100 REVUELTO CREEK NEAR LOGAN, NM—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV													
04...	1107	0.30	667	10.1	99	8.4	4,100	9.0	8.0	--	--	--	--
MAR													
07...	0930	0.38	665	11.7	112	8.3	6,040	15.0	6.5	290	54.8	38.0	3.85
APR													
23...	0800	17	657	8.9	97	8.6	2,550	11.0	12.0	140	26.1	19.2	4.60
JUN													
26...	1740	87	673	6.2	89	8.4	491	25.5	27.0	57	15.9	4.25	3.56
AUG													
06...	1430	E.23	675	5.9	97	8.5	2,610	39.0	35.0	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
NOV											
04...	--	--	--	--	--	--	--	--	--	79	29
MAR											
07...	30	1,170	1,590	1.10	9.2	287	3,360	600	<30	--	--
APR											
23...	17	470	522	0.47	6.0	232	1,520	340	<10	--	--
JUN											
26...	5	80.4	18.3	0.3	7.8	101		140	<8	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 35°23'35", long 103°02'30", in SW ¼ sec.32, T.14 N., R.37 E., Quay County, Hydrologic Unit 11080006, 0.1 mi upstream from New Mexico-Texas State line, 5.5 mi downstream from Rana Canyon, and 14.7 mi north of Glenrio.

PERIOD OF RECORD.--Water years 1969-73, 1975-86, 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
APR													
09...	0940	9.6	678	10.0	101	8.3	9,360	24.0	9.0	630	122	79.8	9.03
MAY													
29...	1220	4.0	675	8.2	129	8.3	8,440	39.0	31.0	670	120	90.4	12.2
JUN													
26...	1110	29	683	7.9	100	8.5	3,220	23.5	21.0	440	99.8	47.1	8.91

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
APR											
09...	31	1,800	--	--	2,770	0.60	10.5	481	5,430	370	<50
MAY											
29...	28	1,640	199	243	2,380	0.7	9.7	525	4,890	490	<40
JUN											
26...	11	555	--	--	777	0.5	10.6	183	1,840	370	<24

Remark codes used in this table:
< -- Less than

08251500 RIO GRANDE NEAR LOBATOS, CO

LOCATION.--Lat 37°04'43", long 105°45'23", in NE ¼ NW ¼ sec.27, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 5.7 mi north of Colorado-New Mexico State line, 8 mi downstream from Culebra Creek, 11 mi east of Lobatos, and 14 mi east of Antonito.
DRAINAGE AREA.--7,700 mi^2, approximately, including 2,940 mi^2 in closed basin in northern part of San Luis Valley, Colorado.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1899 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-4. Statistical summary computed for 1931 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=08251500
REVISED RECORDS.-- WSP 210: drainage area. WSP 1312: 1919 (monthly discharge and runoff). WDR CO-78-1: 1976.
GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,427.63 ft above NGVD of 1929. Prior to Nov. 8, 1910, nonrecording gages at same site and datum.
REMARKS.--Records good except for those estimated, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.
COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage of June 18, 1903, is greatest since at least 1828.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	23	e135	e105	e220	195	85	71	224	93	14	13
2	24	24	e140	e115	e210	187	85	79	244	90	12	12
3	20	30	e135	e125	e210	181	86	93	182	79	12	29
4	15	71	e155	e135	e190	181	85	76	151	80	16	31
5	13	130	e155	e145	e175	185	71	56	135	82	15	20
6	18	142	e155	e140	e140	206	64	58	139	72	15	16
7	19	137	e150	e140	e120	177	58	60	151	64	14	14
8	19	103	e120	e140	e180	183	52	66	157	58	15	14
9	19	91	e105	e145	e175	182	44	60	223	57	15	16
10	14	62	e110	e150	e175	183	44	59	279	53	15	28
11	15	47	e100	e160	e190	183	44	58	265	47	15	22
12	15	41	e110	e160	e205	185	39	61	218	42	15	21
13	15	42	e115	e165	e215	193	36	67	196	37	15	21
14	16	42	e120	e160	e240	187	35	73	184	38	14	25
15	16	37	e130	e160	e240	205	36	83	209	47	10	19
16	16	30	e140	e160	205	218	41	122	232	40	14	16
17	17	38	e115	e155	213	227	42	112	206	36	17	15
18	18	53	e130	e160	213	230	66	146	181	33	25	13
19	18	49	e115	e160	218	205	65	160	173	30	15	12
20	18	48	e110	e160	207	165	51	164	154	28	8.4	11
21	20	47	e105	e160	201	142	47	172	160	27	6.4	10
22	21	48	e140	e165	e185	117	46	158	160	28	5.8	10
23	23	43	e125	e170	e180	107	48	134	146	27	15	9.8
24	25	48	e100	e175	e180	109	52	210	128	27	9.3	11
25	24	122	e115	e175	e185	96	65	210	113	27	7.9	12
26	23	e125	e105	e185	e204	70	71	195	102	24	7.7	10
27	26	e135	e105	e185	209	71	69	146	103	21	8.4	10
28	26	e145	e100	e195	195	60	78	121	108	20	11	11
29	26	e125	e100	e200	---	80	83	143	97	20	14	11
30	28	e135	e100	e190	---	80	81	218	94	46	14	11
31	27	---	e105	e205	---	80	---	186	---	21	14	---
TOTAL	617	2,213	3,745	4,945	5,480	4,870	1,769	3,617	5,114	1,394	404.9	473.8
MEAN	19.9	73.8	121	160	196	157	59.0	117	170	45.0	13.1	15.8
MAX	28	145	155	205	240	230	86	218	279	93	25	31
MIN	13	23	100	105	120	60	35	56	94	20	5.8	9.8
AC-FT	1,220	4,390	7,430	9,810	10,870	9,660	3,510	7,170	10,140	2,760	803	940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2003, BY WATER YEAR (WY)

MEAN	184	309	282	263	314	413	505	1,082	1,199	427	167	133
MAX	1,401	1,199	763	521	595	884	2,326	4,958	4,470	2,754	1,281	938
(WY)	(1942)	(1942)	(1942)	(1986)	(1986)	(1987)	(1985)	(1987)	(1941)	(1995)	(1999)	(1999)
MIN	12.9	59.6	61.7	75.7	102	66.0	32.3	31.2	19.8	1.28	3.21	1.91
(WY)	(1957)	(1955)	(1964)	(1957)	(1957)	(1957)	(1935)	(2002)	(1977)	(1951)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1931 - 2003	
ANNUAL TOTAL	35,800.9		34,642.7			
ANNUAL MEAN	98.1		94.9		a440	
HIGHEST ANNUAL MEAN					1,264	1987
LOWEST ANNUAL MEAN					70.9	1964
HIGHEST DAILY MEAN	391	Mar 14	279	Jun 10	b9,110	Jun 22, 1949
LOWEST DAILY MEAN	4.3	Aug 1	5.8	Aug 22	c0.00	Jul 16, 1950
ANNUAL SEVEN-DAY MINIMUM	4.9	Jul 28	8.6	Aug 20	0.00	Jul 16, 1950
MAXIMUM PEAK FLOW			302	Jun 10	d11,600	May 8, 1952
MAXIMUM PEAK STAGE			f1.56	Jun 10	g8.76	May 8, 1952
ANNUAL RUNOFF (AC-FT)	71,010		68,710		318,700	
10 PERCENT EXCEEDS	275		195		951	
50 PERCENT EXCEEDS	37		81		240	
90 PERCENT EXCEEDS	8.4		14		38	

e Estimated.
a Average discharge for 31 years (water years 1900-30), 846 ft^3/s; 612,900 acre-ft/yr, includes period of extensive development for irrigation.
b Maximum daily discharge for period of record, 13,100 ft^3/s, June 8, 1905.
c No flow at times in 1950-51, 1956.
d Maximum discharge for period of record, 13,200 ft^3/s, June 8, 1905, gage height, 9.1 ft, from rating curve extended above 8,000 ft^3/s.
f Maximum gage height, 2.19 ft, Feb 1, backwater from ice.
g Maximum gage height for period of record, 10.0 ft, June 18, 1903.

08251500 RIO GRANDE NEAR LOBATOS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year. September 1969 to September 1993 under the National Stream-Quality Accounting Network (NASQAN). April 1993 to September 1996 under the Rio Grande National Water-Quality Assessment Program. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=08251500

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
OCT													
08...	1115	20	9.3	8.8	476	12.0	87	22.9	7.26	8.24	68.5	18.1	0.84
MAR													
26...	1030	67	9.1	7.9	319	8.0	90	27.6	5.23	4.08	30.9	8.57	0.45
MAY													
27...	1215	142	8.7	8.4	247	19.0	74	22.1	4.49	4.54	21.6	4.87	0.4
JUN													
11...	1030	266	7.7	8.2	182	16.0	58	17.2	3.55	3.34	16.0	3.55	0.3
JUL													
17...	1030	36	8.0	8.7	299	19.5	94	27.5	6.12	4.85	29.6	7.30	0.5
AUG													
20...	0930	8.1	8.0	9.0	411	16.0	68	16.8	6.26	6.19	59.6	17.1	0.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)
OCT													
08...	21.3	54.8	308	0.34	0.52	<0.04	<0.06	<0.008	<0.02	0.010	0.047	2	E.17
MAR													
26...	27.8	34.1	214	0.18	0.37	<0.04	<0.06	<0.008	0.02	0.025	0.067	--	--
MAY													
27...	23.1	20.5	152	0.40	0.70	<0.04	<0.06	<0.008	0.03	0.047	0.151	2	<0.30
JUN													
11...	19.3	15.2	124	0.30	0.73	<0.04	<0.06	<0.008	0.03	0.039	0.174	2	<0.30
JUL													
17...	20.7	23.4	196	E.25	E.54	<0.04	<0.06	<0.008	E.01	E.018	E.081	E1	<0.30
AUG													
20...	5.55	52.6	245	0.34	0.51	<0.04	<0.06	<0.008	<0.02	0.010	0.045	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)
OCT													
08...	6	51	<0.06	E.03	<0.8	0.46	1.2	E8	E.05	14.7	6.9	1.22	<3
MAR													
26...	--	--	--	--	--	--	--	18	--	102	--	--	--
MAY													
27...	3	34	<0.06	<0.04	<0.8	0.25	1.0	54	0.29	69.5	3.0	1.51	<3
JUN													
11...	E2	25	<0.06	E.02	<0.8	0.17	1.0	37	0.18	23.9	1.6	0.82	<3
JUL													
17...	4	34	<0.06	<0.04	<0.8	0.26	0.8	9	<0.08	34.7	4.5	1.23	<3
AUG													
20...	--	--	--	--	--	--	--	9	--	12.1	--	--	--

08251500 RIO GRANDE NEAR LOBATOS, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
OCT			
08...	<0.20	2	2.78
MAR			
26...	--	--	--
MAY			
27...	<0.20	2	0.89
JUN			
11...	<0.20	1	0.40
JUL			
17...	<0.20	M	1.19
AUG			
20...	--	--	--

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.
M -- Presence of material verified but not quantified.

08252500 COSTILLA CREEK ABOVE COSTILLA DAM, NM

LOCATION.--Lat 36°53'54", 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 mi^2.

PERIOD OF RECORD.--April 1937 to current year (seasonal records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Prior to October 1951, published as "above reservoir, near Costi11a."

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

GAGE.--Water-stage recorder with satellite telemetry. Concrete control since Sept. 17, 1965. Elevation of gage is 9,454 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).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 3,870 ft^3/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.--Maximum discharge during period of seasonal operation, 34 ft^3/s, Sept. 10, gage height, 2.57 ft; minimum daily discharge, 1.7 ft^3/s, Aug. 17 and 18.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	16	22	3.7	2.4	3.1
2	---	---	---	---	---	---	---	15	20	3.3	2.4	2.8
3	---	---	---	---	---	---	---	16	18	3.0	2.5	3.7
4	---	---	---	---	---	---	---	17	17	2.9	2.4	3.8
5	---	---	---	---	---	---	---	15	16	2.9	2.1	3.5
6	---	---	---	---	---	---	---	15	15	2.8	2.2	3.5
7	---	---	---	---	---	---	---	14	13	2.6	2.4	3.5
8	---	---	---	---	---	---	---	14	12	2.3	2.1	3.8
9	---	---	---	---	---	---	---	13	11	2.2	3.0	3.2
10	---	---	---	---	---	---	---	13	11	2.2	2.3	18
11	---	---	---	---	---	---	---	13	10	2.1	2.2	7.8
12	---	---	---	---	---	---	---	14	9.4	2.0	2.6	5.9
13	---	---	---	---	---	---	---	15	8.9	1.9	2.3	5.0
14	---	---	---	---	---	---	---	16	8.2	2.0	1.9	4.5
15	---	---	---	---	---	---	---	20	7.8	2.3	1.8	4.1
16	---	---	---	---	---	---	---	21	8.4	2.3	1.8	3.8
17	---	---	---	---	---	---	---	23	8.3	2.1	1.7	3.5
18	---	---	---	---	---	---	12	26	8.8	1.8	1.7	3.4
19	---	---	---	---	---	---	9.5	26	9.3	2.2	3.8	3.2
20	---	---	---	---	---	---	9.9	24	8.8	2.8	2.1	3.1
21	---	---	---	---	---	---	9.1	23	7.3	3.4	1.9	2.9
22	---	---	---	---	---	---	9.1	23	6.3	2.4	2.9	2.8
23	---	---	---	---	---	---	8.3	25	5.8	3.2	3.2	2.6
24	---	---	---	---	---	---	11	24	5.3	3.3	2.9	2.5
25	---	---	---	---	---	---	13	24	4.9	2.2	2.7	2.4
26	---	---	---	---	---	---	15	23	4.7	2.1	3.6	2.3
27	---	---	---	---	---	---	16	21	4.5	2.4	3.4	2.3
28	---	---	---	---	---	---	17	22	4.2	7.5	3.7	2.3
29	---	---	---	---	---	---	18	22	4.1	5.2	6.3	2.2
30	---	---	---	---	---	---	18	23	4.1	3.7	4.8	2.1
31	---	---	---	---	---	---	---	22	---	2.7	4.8	---
TOTAL	---	---	---	---	---	---	---	598	294.1	87.5	85.9	117.6
MEAN	---	---	---	---	---	---	---	19.3	9.80	2.82	2.77	3.92
MAX	---	---	---	---	---	---	---	26	22	7.5	6.3	18
MIN	---	---	---	---	---	---	---	13	4.1	1.8	1.7	2.1
AC-FT	---	---	---	---	---	---	---	1,190	583	174	170	233

08253000 CASIAS CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'49", long 105°15'37", 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 mi^2.

PERIOD OF RECORD.--April 1937 to current year (seasonal records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Records for Nov. l-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.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 9,437 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. Prior to March 25, 1999, water-stage recorder and concrete control 140 ft downstream at same gage datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft^3/s, July 20, 1971, gage height, 2.07 ft, from rating curve extended above 85 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 50 ft^3/s, Sept. 10, gage height, 3.88 ft; minimum daily discharge, 6.0 ft^3/s, Oct. 1, Apr. 19, and Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.0	---	---	---	---	---	---	12	42	15	10	7.5
2	---	---	---	---	---	---	---	11	41	15	10	7.2
3	---	---	---	---	---	---	---	12	40	14	9.9	10
4	---	---	---	---	---	---	---	12	40	14	9.1	8.5
5	---	---	---	---	---	---	---	12	40	14	8.8	8.8
6	---	---	---	---	---	---	---	11	39	13	8.8	8.3
7	---	---	---	---	---	---	---	11	37	13	8.4	9.3
8	---	---	---	---	---	---	---	10	34	12	8.1	8.4
9	---	---	---	---	---	---	---	10	31	12	9.5	9.7
10	---	---	---	---	---	---	---	9.9	30	11	8.6	30
11	---	---	---	---	---	---	---	9.8	29	11	7.9	17
12	---	---	---	---	---	---	---	10	29	11	8.4	16
13	---	---	---	---	---	---	---	11	28	10	7.6	15
14	---	---	---	---	---	---	---	12	26	10	7.1	15
15	---	---	---	---	---	---	---	14	25	10	6.9	14
16	---	---	---	---	---	---	---	16	27	10	6.6	13
17	---	---	---	---	---	---	e12	20	27	9.6	6.4	12
18	---	---	---	---	---	---	6.7	24	30	9.1	6.3	12
19	---	---	---	---	---	---	6.0	26	30	9.9	7.8	11
20	---	---	---	---	---	---	7.7	27	28	11	6.2	11
21	---	---	---	---	---	---	6.7	28	25	11	6.0	9.9
22	---	---	---	---	---	---	6.6	31	22	10	6.8	9.2
23	---	---	---	---	---	---	6.3	34	21	13	7.1	8.6
24	---	---	---	---	---	---	9.7	37	20	11	6.7	8.4
25	---	---	---	---	---	---	6.8	38	19	9.7	7.5	7.9
26	---	---	---	---	---	---	7.7	38	19	9.5	7.9	7.6
27	---	---	---	---	---	---	8.4	38	18	11	6.6	7.3
28	---	---	---	---	---	---	9.5	38	17	20	8.1	7.1
29	---	---	---	---	---	---	11	39	17	14	11	6.8
30	---	---	---	---	---	---	12	41	16	12	9.1	6.5
31	---	---	---	---	---	---	---	42	---	11	8.1	---
TOTAL	---	---	---	---	---	---	---	684.7	847	366.8	247.3	323.0
MEAN	---	---	---	---	---	---	---	22.1	28.2	11.8	7.98	10.8
MAX	---	---	---	---	---	---	---	42	42	20	11	30
MIN	---	---	---	---	---	---	---	9.8	16	9.1	6.0	6.5
AC-FT	---	---	---	---	---	---	---	1,360	1,680	728	491	641

e Estimated

08253500 SANTISTEVAN CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°53'03", long 105°16'52", 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 mi^2.

PERIOD OF RECORD.--April 1937 to current year (seasonal records). Monthly discharge only for some periods, published in WSP 1312 and 1732.

REVISED RECORDS.--WSP 1923: drainage area.

GAGE.--Water-stage recorder with satellite telemetry and Parsha11 flume. Elevation of gage is 9,520 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 fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20 ft^3/s, June 29, 1995; maximum gage height, 1.73 ft, Aug. 11, 1941; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 6.0 ft^3/s, June 16, gage height, 0.86 ft; minimum daily, 0.90 ft^3/s, Apr. 23.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1.4	5.3	2.8	1.6	1.1
2	---	---	---	---	---	---	---	1.4	5.4	2.7	1.6	1.1
3	---	---	---	---	---	---	---	1.4	5.4	2.6	1.6	1.4
4	---	---	---	---	---	---	---	1.4	5.5	2.5	1.5	1.3
5	---	---	---	---	---	---	---	1.3	5.6	2.5	1.5	1.2
6	---	---	---	---	---	---	---	1.3	5.6	2.4	1.4	1.2
7	---	---	---	---	---	---	---	1.3	5.4	2.3	1.4	1.3
8	---	---	---	---	---	---	---	1.3	5.3	2.3	1.4	1.2
9	---	---	---	---	---	---	---	1.3	5.2	2.2	1.5	1.4
10	---	---	---	---	---	---	---	1.3	5.1	2.2	1.4	2.1
11	---	---	---	---	---	---	---	1.3	4.9	2.2	1.4	1.4
12	---	---	---	---	---	---	---	1.4	4.8	2.1	1.4	1.4
13	---	---	---	---	---	---	---	1.4	4.6	2.1	1.3	1.3
14	---	---	---	---	---	---	---	1.5	4.5	2.0	1.3	1.3
15	---	---	---	---	---	---	---	1.7	4.3	2.0	1.2	1.3
16	---	---	---	---	---	---	---	1.8	4.5	2.0	1.2	1.2
17	---	---	---	---	---	---	e0.93	2.0	4.2	1.9	1.2	1.2
18	---	---	---	---	---	---	0.95	2.3	4.4	1.9	1.2	1.2
19	---	---	---	---	---	---	0.98	2.4	4.3	1.9	1.4	1.2
20	---	---	---	---	---	---	1.5	2.5	3.9	2.0	1.2	1.2
21	---	---	---	---	---	---	0.94	2.6	3.7	1.8	1.2	1.2
22	---	---	---	---	---	---	0.99	2.8	3.6	1.8	1.2	1.2
23	---	---	---	---	---	---	0.90	3.1	3.5	1.9	1.3	1.2
24	---	---	---	---	---	---	1.1	3.3	3.4	1.7	1.2	1.1
25	---	---	---	---	---	---	1.1	3.8	3.2	1.7	1.3	1.1
26	---	---	---	---	---	---	1.2	3.8	3.2	1.6	1.3	1.1
27	---	---	---	---	---	---	1.2	3.9	3.1	1.8	1.2	1.1
28	---	---	---	---	---	---	1.3	4.1	3.0	2.4	1.3	1.1
29	---	---	---	---	---	---	1.4	4.4	2.9	1.8	1.4	1.1
30	---	---	---	---	---	---	1.4	4.7	2.9	1.7	1.3	1.0
31	---	---	---	---	---	---	---	5.0	---	1.6	1.2	---
TOTAL	---	---	---	---	---	---	---	73.2	130.7	64.4	41.6	37.2
MEAN	---	---	---	---	---	---	---	2.36	4.36	2.08	1.34	1.24
MAX	---	---	---	---	---	---	---	5.0	5.6	2.8	1.6	2.1
MIN	---	---	---	---	---	---	---	1.3	2.9	1.6	1.2	1.0
AC-FT	---	---	---	---	---	---	---	145	259	128	83	74

e Estimated

08253900 COSTILLA RESERVOIR NEAR COSTILLA, NM

LOCATION.--Lat 36°52'31", long 105°16'47", 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 mi^2.

PERIOD OF RECORD.--May 1922 to September 1965 (monthend contents only), October 1965 to September 1983, April 1990 to current year. 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 telemetry. Elevation of gage is 9,473 above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. 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, 16,500 acre-ft June 1-4, 1994, June 19-22, 1995, gage height, 107.61 ft; no storage Oct. 1925 to Feb. 1926, Sept. 1956, Aug. 22 to Sept. 24, 1972, July 29 to Sept. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,360 acre-ft, June 1-3, 5, and 6, gage height, 73.42 ft; minimum, 953 acre-ft, Oct. 1, gage height, 42.77 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	953	1,480	1,890	2,210	2,560	2,880	3,440	4,510	5,360	5,250	3,640	2,690
2	983	1,490	1,900	2,230	2,570	2,890	3,480	4,560	5,360	5,220	3,630	2,670
3	1,000	1,510	1,920	2,230	2,580	2,900	3,500	4,630	5,360	5,200	3,630	2,670
4	1,020	1,520	1,930	2,250	2,590	2,910	3,520	4,670	5,350	5,190	3,620	2,650
5	1,040	1,540	1,940	2,260	2,600	2,920	3,540	4,720	5,360	5,180	3,610	2,640
6	1,050	1,550	1,960	2,270	2,610	2,930	3,560	4,780	5,360	5,160	3,580	2,630
7	1,070	1,570	1,970	2,280	2,620	2,940	3,570	4,820	5,350	5,110	3,550	2,620
8	1,100	1,590	1,980	2,300	2,630	2,950	3,590	4,870	5,340	5,060	3,520	2,600
9	1,120	1,610	1,990	2,310	2,640	2,970	3,620	4,920	5,320	5,020	3,490	2,590
10	1,140	1,620	2,000	2,320	2,650	2,980	3,640	4,960	5,320	4,960	3,450	2,660
11	1,150	1,640	2,010	2,330	2,650	3,000	3,680	5,000	5,310	4,910	3,400	2,660
12	1,170	1,650	2,020	2,340	2,660	3,030	3,710	5,050	5,300	4,860	3,350	2,660
13	1,190	1,660	2,030	2,350	2,680	3,050	3,740	5,100	5,290	4,790	3,300	2,650
14	1,200	1,680	2,040	2,360	2,700	3,080	3,780	5,150	5,280	4,670	3,280	2,640
15	1,220	1,690	2,040	2,370	2,710	3,110	3,810	5,190	5,280	4,540	3,260	2,640
16	1,230	1,700	2,060	2,380	2,720	3,130	3,860	5,190	5,300	4,410	3,240	2,630
17	1,250	1,720	2,070	2,390	2,730	3,150	3,900	5,200	5,310	4,300	3,200	2,630
18	1,270	1,730	2,080	2,400	2,750	3,160	3,950	5,210	5,340	4,210	3,130	2,630
19	1,280	1,740	2,090	2,410	2,760	3,180	3,980	5,220	5,350	4,120	3,060	2,630
20	1,290	1,750	2,100	2,420	2,770	3,200	4,020	5,220	5,350	4,050	2,990	2,620
21	1,310	1,770	2,110	2,430	2,780	3,220	4,060	5,230	5,340	3,990	2,930	2,620
22	1,320	1,780	2,110	2,440	2,790	3,230	4,090	5,240	5,330	3,930	2,890	2,620
23	1,340	1,800	2,120	2,450	2,810	3,250	4,120	5,250	5,330	3,880	2,850	2,620
24	1,350	1,810	2,130	2,470	2,820	3,270	4,150	5,270	5,320	3,810	2,820	2,620
25	1,370	1,820	2,140	2,480	2,830	3,290	4,190	5,290	5,320	3,760	2,800	2,620
26	1,380	1,830	2,160	2,490	2,840	3,320	4,240	5,300	5,320	3,690	2,780	2,620
27	1,400	1,840	2,160	2,500	2,850	3,340	4,290	5,300	5,320	3,650	2,750	2,620
28	1,410	1,860	2,180	2,510	2,870	3,350	4,340	5,300	5,320	3,660	2,730	2,620
29	1,430	1,870	2,180	2,520	---	3,360	4,390	5,310	5,300	3,650	2,730	2,630
30	1,440	1,880	2,190	2,530	---	3,380	4,460	5,330	5,280	3,650	2,720	2,640
31	1,460	---	2,210	2,540	---	3,410	---	5,340	---	3,650	2,710	---
MAX	1,460	1,880	2,210	2,540	2,870	3,410	4,460	5,340	5,360	5,250	3,640	2,690
MIN	953	1,480	1,890	2,210	2,560	2,880	3,440	4,510	5,280	3,650	2,710	2,590
(+)	50.16	53.96	56.43	58.64	60.69	63.81	69.22	73.29	73.00	65.11	59.72	59.27
(++)	+520	+420	+330	+330	+330	+540	+1,050	+880	-60	-1,630	-940	-70

CAL YR 2002 MAX 6,110 MIN 535 (++) -2,070
WTR YR 2003 MAX 5,360 MIN 953 (++) +1,700

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

08254000 COSTILLA CREEK BELOW COSTILLA DAM, NM

LOCATION.--Lat 36°52'23", long 105°17'02", 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 mi^2.

PERIOD OF RECORD.--April 1937 to current year (seasonal records 1937-44, 1947-49, 1988-02). 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 with satellite telemetry and concrete control. Elevation of gage is 9,300 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. Flow regulated by Costilla Reservoir (station 08253900). Diversions for irrigation of about 1,300 acres upstream from reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 366 ft^3/s, July 29, 1994, gage height, 3.57 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period of seasonal operation, 74 ft^3/s, July 14 and 15; minimum daily, 0.00 ft^3/s, Apr. 21 to May 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	---	---	---	---	---	---	0.00	60	37	20	23
2	---	---	---	---	---	---	---	0.00	61	33	22	24
3	---	---	---	---	---	---	---	0.00	61	30	22	24
4	---	---	---	---	---	---	---	0.00	59	26	21	23
5	---	---	---	---	---	---	---	0.00	63	24	25	21
6	---	---	---	---	---	---	---	0.00	63	30	29	22
7	---	---	---	---	---	---	---	0.00	65	40	31	23
8	---	---	---	---	---	---	---	0.00	64	39	32	25
9	---	---	---	---	---	---	---	0.00	60	39	33	24
10	---	---	---	---	---	---	---	0.00	59	39	37	23
11	---	---	---	---	---	---	---	0.00	50	39	39	25
12	---	---	---	---	---	---	---	0.00	44	39	38	25
13	---	---	---	---	---	---	---	0.49	41	47	34	25
14	---	---	---	---	---	---	---	0.93	38	74	23	25
15	---	---	---	---	---	---	---	16	36	74	22	22
16	---	---	---	---	---	---	---	33	34	73	22	20
17	---	---	---	---	---	---	e0.06	33	34	67	28	19
18	---	---	---	---	---	---	0.06	39	33	61	45	18
19	---	---	---	---	---	---	0.06	46	34	60	46	18
20	---	---	---	---	---	---	0.03	47	35	56	45	17
21	---	---	---	---	---	---	0.00	45	35	46	42	16
22	---	---	---	---	---	---	0.00	44	33	44	32	15
23	---	---	---	---	---	---	0.00	46	29	45	30	15
24	---	---	---	---	---	---	0.00	50	28	44	31	15
25	---	---	---	---	---	---	0.00	52	26	44	29	15
26	---	---	---	---	---	---	0.00	52	25	44	27	13
27	---	---	---	---	---	---	0.00	54	25	41	26	12
28	---	---	---	---	---	---	0.00	58	25	35	24	12
29	---	---	---	---	---	---	0.00	58	30	30	23	12
30	---	---	---	---	---	---	0.00	59	38	22	23	5.3
31	---	---	---	---	---	---	---	60	---	19	23	---
TOTAL	---	---	---	---	---	---	---	793.42	1,288	1,341	924	576.3
MEAN	---	---	---	---	---	---	---	25.6	42.9	43.3	29.8	19.2
MAX	---	---	---	---	---	---	---	60	65	74	46	25
MIN	---	---	---	---	---	---	---	0.00	25	19	20	5.3
AC-FT	---	---	---	---	---	---	---	1,570	2,550	2,660	1,830	1,140

e Estimated

08255500 COSTILLA CREEK NEAR COSTILLA, NM

LOCATION.--Lat 36°58'01", long 105°30'26", 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 mi^2.

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

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

GAGE.--Water-stage recorder with satellite telemetry. Concrete control since Oct. 13, 1952. Elevation of gage is 7,936 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 those estimated, 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.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.3	8.6	e6.1	e4.8	e9.1	e24	57	112	45	23	29
2	16	9.6	7.4	e5.6	e4.3	e8.4	e38	56	111	43	24	28
3	12	8.7	11	e5.6	e4.1	e9.2	45	55	104	36	23	30
4	11	9.4	9.0	e6.7	e3.5	e9.2	30	52	99	34	22	36
5	10	9.4	7.7	e6.7	e5.1	e7.5	24	45	94	29	23	31
6	9.7	7.6	6.9	e6.7	e4.8	e9.5	24	42	87	27	29	34
7	9.1	8.6	e7.2	e6.7	e3.7	14	21	40	84	37	30	34
8	8.7	11	e7.2	e7.2	e4.6	10	17	40	81	38	32	38
9	8.5	11	e6.8	e7.6	e3.8	7.1	20	37	75	38	32	38
10	8.0	12	e5.6	e6.9	e4.2	8.1	29	35	70	38	33	84
11	7.6	11	e6.1	e7.7	e7.5	10	37	32	70	37	38	50
12	7.6	9.9	e5.6	e5.5	e10	15	35	32	68	37	39	46
13	7.5	10	e5.6	e5.6	e11.5	21	38	31	65	38	39	41
14	7.6	11	e6.0	e6.5	e10	30	42	37	60	60	29	39
15	7.5	11	e6.7	e5.5	e9.5	33	47	48	59	71	24	37
16	7.3	8.7	e6.7	e5.1	e8.5	27	32	83	58	71	23	31
17	7.2	10	e7.2	e4.2	e7.5	19	46	86	61	69	23	30
18	7.1	9.7	e7.2	e5.1	e6.3	17	41	95	60	58	41	27
19	6.8	9.0	e6.1	e5.9	e7.4	13	36	113	61	56	53	27
20	6.6	10	e5.6	e7.8	e7.4	15	34	113	60	58	53	24
21	6.7	9.5	e6.7	e5.9	e7.3	15	33	116	54	53	50	22
22	6.7	9.2	e6.1	e5.9	e7.4	13	33	116	51	46	40	21
23	8.0	8.2	e6.1	e6.5	e8.3	14	37	111	47	46	38	20
24	7.8	8.2	e6.7	e5.9	e8.4	17	33	118	43	48	37	21
25	7.8	7.8	e6.1	e5.9	e9.6	18	36	127	40	47	39	20
26	7.8	6.9	e6.1	e4.5	e8.4	19	41	126	37	47	38	20
27	10	8.0	e5.0	e4.3	e8.4	19	47	119	36	49	36	17
28	9.4	10	e5.6	e3.8	e8.4	14	52	115	34	62	33	17
29	10	10	e6.1	e4.4	---	14	57	118	33	51	35	16
30	9.3	8.6	e6.7	e4.5	---	16	61	116	44	36	32	15
31	10	---	e6.1	e4.6	---	17	---	109	---	25	31	---
TOTAL	271.3	283.3	207.5	180.9	194.7	468.1	1,090	2,420	1,958	1,430	1,042	923
MEAN	8.75	9.44	6.69	5.84	6.95	15.1	36.3	78.1	65.3	46.1	33.6	30.8
MAX	16	12	11	7.8	12	33	61	127	112	71	53	84
MIN	6.6	6.9	5.0	3.8	3.5	7.1	17	31	33	25	22	15
AC-FT	538	562	412	359	386	928	2,160	4,800	3,880	2,840	2,070	1,830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	15.4	11.7	8.67	7.85	9.32	18.1	49.4	118	115	83.9	68.3	36.1
MAX	44.9	30.1	19.6	15.0	16.9	70.9	223	594	342	160	137	109
(WY)	(1962)	(1942)	(1942)	(1950)	(1942)	(1989)	(1942)	(1942)	(1983)	(1944)	(1973)	(1957)
MIN	4.85	4.11	3.71	3.44	3.38	6.92	13.1	30.8	27.3	23.8	15.5	7.93
(WY)	(1964)	(1965)	(1964)	(1964)	(1964)	(1964)	(1956)	(1967)	(2002)	(1946)	(2002)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	5,665.3		10,468.8			
ANNUAL MEAN	15.5		28.7		45.5	
HIGHEST ANNUAL MEAN					134	1942
LOWEST ANNUAL MEAN					15.5	2002
HIGHEST DAILY MEAN	72	May 29	127	May 25	1,000	May 11, 1942
LOWEST DAILY MEAN	3.4	Feb 4	3.5	Feb 4	1.0	Dec 1, 1958
ANNUAL SEVEN-DAY MINIMUM	3.6	Jan 31	4.2	Feb 3	2.5	Dec 5, 1964
MAXIMUM PEAK FLOW			137	May 25	1,150	May 11, 1942
MAXIMUM PEAK STAGE			3.00	May 25	a5.37	May 11, 1942
INSTANTANEOUS LOW FLOW			2.7	Nov 19	0.34	Mar 15, 1969
ANNUAL RUNOFF (AC-FT)	11,240		20,760		32,940	
10 PERCENT EXCEEDS	35		61		116	
50 PERCENT EXCEEDS	10		19		18	
90 PERCENT EXCEEDS	5.1		6.1		6.4	

a Site and datum then in use.
e Estimated

08261000 COSTILLA CREEK NEAR 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 mi^2, approximately.

PERIOD OF RECORD.--June 1944 to current year (seasonal records).

GAGE.--Water-stage recorder with satellite telemetry and concrete control since Oct. 9, 1956. Elevation of gage is 7,821 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 except for those estimated, which are poor. Flow partly regulated by Costilla Reservoir (station 08253900) 22 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 444 ft^3/s, June 1, 1983, gage height, 4.91 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 133 ft^3/s, Sept. 10, gage height, 3.63 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	9.6	8.5	0.93	0.00	0.00
2	e0.67	---	---	---	---	---	---	9.1	7.6	0.10	0.00	0.00
3	---	---	---	---	---	---	---	6.7	7.3	0.00	0.00	0.00
4	---	---	---	---	---	---	---	5.6	7.3	0.00	0.00	2.0
5	---	---	---	---	---	---	---	3.8	8.0	0.00	8.3	0.01
6	---	---	---	---	---	---	---	3.0	34	0.00	0.00	0.02
7	---	---	---	---	---	---	---	3.5	97	0.00	0.00	0.00
8	---	---	---	---	---	---	---	4.1	43	0.00	0.00	0.54
9	---	---	---	---	---	---	---	3.8	9.7	0.00	0.00	0.43
10	---	---	---	---	---	---	---	2.7	7.5	0.00	0.00	72
11	---	---	---	---	---	---	---	2.3	7.2	0.00	0.00	28
12	---	---	---	---	---	---	---	2.2	7.0	0.00	0.00	3.8
13	---	---	---	---	---	---	---	2.3	7.0	0.00	0.00	0.68
14	---	---	---	---	---	---	---	2.6	6.3	0.00	0.00	0.00
15	---	---	---	---	---	---	---	2.9	6.4	0.00	0.00	0.00
16	---	---	---	---	---	---	e0.09	14	6.4	0.00	0.00	0.00
17	---	---	---	---	---	---	3.8	16	9.5	0.00	0.00	0.00
18	---	---	---	---	---	---	5.0	7.7	8.4	0.00	0.00	0.00
19	---	---	---	---	---	---	4.4	10	8.8	0.00	0.00	0.00
20	---	---	---	---	---	---	4.1	5.6	8.3	0.00	0.00	0.00
21	---	---	---	---	---	---	3.8	8.0	7.2	0.00	0.00	0.00
22	---	---	---	---	---	---	3.7	9.4	6.4	0.00	0.00	0.00
23	---	---	---	---	---	---	11	7.0	5.7	0.00	0.00	0.00
24	---	---	---	---	---	---	31	12	3.9	0.00	0.00	0.00
25	---	---	---	---	---	---	35	14	2.6	0.00	0.52	0.00
26	---	---	---	---	---	---	28	10	1.4	0.00	1.1	0.00
27	---	---	---	---	---	---	10	8.9	1.5	0.00	0.80	0.00
28	---	---	---	---	---	---	9.7	8.1	0.78	2.7	0.00	0.00
29	---	---	---	---	---	---	10	8.4	0.67	0.76	0.00	0.00
30	---	---	---	---	---	---	12	8.3	1.1	0.00	0.00	0.00
31	---	---	---	---	---	---	---	8.4	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	220.0	336.45	4.49	10.72	107.48
MEAN	---	---	---	---	---	---	---	7.10	11.2	0.14	0.35	3.58
MAX	---	---	---	---	---	---	---	16	97	2.7	8.3	72
MIN	---	---	---	---	---	---	---	2.2	0.67	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	436	667	8.9	21	213

e Estimated

08263500 RIO GRANDE NEAR CERRO, NM

LOCATION.--Lat 36°44'24", long 105°41'01", in NW ¼ NE ¼ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Va11ey, Colorado.

PERIOD OF RECORD.--May 1948 to September 1994, October 1995 to current year.

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

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

REMARKS.--Records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 7,000 acres in New Mexico. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	64	196	146	248	225	129	127	217	127	67	51
2	64	62	185	146	266	222	129	119	255	123	56	50
3	62	59	194	152	258	224	125	119	266	123	53	49
4	60	61	205	170	243	215	127	131	213	113	50	48
5	56	87	225	180	229	210	133	118	185	113	49	65
6	53	179	203	187	212	200	120	104	170	113	50	63
7	51	195	204	184	173	221	112	97	173	111	51	56
8	54	187	191	184	133	214	107	100	183	103	51	53
9	57	152	160	185	209	220	105	99	186	96	51	52
10	57	137	144	191	200	217	94	99	247	91	50	59
11	56	114	146	196	199	218	89	97	303	89	52	64
12	52	96	132	204	224	220	91	101	274	84	52	62
13	52	84	149	202	238	223	87	99	239	79	53	58
14	51	77	157	208	249	229	81	107	220	74	51	56
15	52	82	165	204	278	221	79	113	211	69	50	55
16	53	78	173	204	271	241	77	121	234	77	50	59
17	54	71	182	203	240	254	80	163	255	81	48	55
18	54	63	154	197	243	265	84	157	229	72	47	51
19	55	67	174	204	247	269	100	182	209	68	52	50
20	56	82	150	203	247	242	122	204	200	65	59	49
21	56	83	145	205	235	207	105	203	184	64	53	48
22	57	83	138	205	228	188	94	213	187	62	48	48
23	59	87	182	207	212	161	89	199	188	61	47	48
24	61	88	164	212	198	147	85	176	174	62	45	47
25	61	78	135	219	209	147	94	245	157	61	47	47
26	62	107	154	217	217	144	107	245	144	62	50	47
27	62	128	142	229	237	115	116	228	136	62	50	48
28	62	170	143	228	237	109	114	186	133	64	57	48
29	63	175	139	238	---	97	121	163	139	60	48	47
30	64	172	144	242	---	121	127	179	130	58	48	47
31	63	---	143	231	---	131	---	246	---	66	49	---
TOTAL	1,781	3,168	5,118	6,183	6,380	6,117	3,123	4,740	6,041	2,553	1,584	1,580
MEAN	57.5	106	165	199	228	197	104	153	201	82.4	51.1	52.7
MAX	64	195	225	242	278	269	133	246	303	127	67	65
MIN	51	59	132	146	133	97	77	97	130	58	45	47
AC-FT	3,530	6,280	10,150	12,260	12,650	12,130	6,190	9,400	11,980	5,060	3,140	3,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	215	349	300	298	355	467	519	922	1,090	444	243	190
MAX	1,310	1,073	774	566	657	1,010	2,335	4,577	4,400	2,181	1,273	970
(WY)	(1998)	(1987)	(1987)	(1987)	(1987)	(1987)	(1987)	(1987)	(1949)	(1986)	(1999)	(1999)
MIN	52.7	88.1	100	116	140	110	104	75.5	58.1	49.4	44.5	44.8
(WY)	(1957)	(1957)	(1964)	(1957)	(1957)	(1957)	(2003)	(2002)	(1977)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003	
ANNUAL TOTAL	48,319		48,368			
ANNUAL MEAN	132		133		449	
HIGHEST ANNUAL MEAN					1,275	1987
LOWEST ANNUAL MEAN					112	1964
HIGHEST DAILY MEAN	425	Mar 13	303	Jun 11	9,440	Jun 22, 1949
LOWEST DAILY MEAN	43	Aug 2	45	Aug 24	40	Sep 10, 1977
ANNUAL SEVEN-DAY MINIMUM	43	Jul 31	47	Sep 24	42	Sep 5, 1977
MAXIMUM PEAK FLOW			330	Feb 15	9,740	Jun 22, 1949
MAXIMUM PEAK STAGE			3.38	Feb 15	15.78	Jun 22, 1949
INSTANTANEOUS LOW FLOW			45	Aug 24	40	Sep 10, 1977
ANNUAL RUNOFF (AC-FT)	95,840		95,940		325,400	
10 PERCENT EXCEEDS	298		229		967	
50 PERCENT EXCEEDS	78		122		270	
90 PERCENT EXCEEDS	46		51		78	

08265000 RED RIVER NEAR QUESTA, NM

LOCATION.--Lat 36°42'12", long 105°34'06", in NE ¼ SE ¼ 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 mi^2.

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 with satellite telemetry. 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 those estimated, which are poor. 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. Jan. 1966 to Dec. 1991, 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 the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	8.8	4.7	e7.8	9.3	15	73	116	41	21	18
2	17	12	10	e4.0	e8.4	9.6	15	69	111	39	20	16
3	15	12	8.2	e4.6	e7.6	10	16	68	109	37	19	18
4	15	13	7.1	e5.0	e6.8	10	16	70	106	36	17	23
5	14	12	6.1	e5.2	e5.2	9.6	16	64	102	35	16	23
6	14	9.8	e5.3	e5.5	e6.0	10	16	63	96	34	16	28
7	13	10	e5.0	e5.0	e5.2	10	16	57	89	33	17	25
8	13	11	e5.5	e4.8	e4.6	10	14	56	82	31	16	23
9	13	12	e5.0	e5.4	e5.2	10	15	53	78	29	19	24
10	13	14	e5.4	e5.8	e5.0	11	16	52	78	28	21	88
11	12	12	e5.0	e5.8	e6.0	11	18	48	76	27	20	63
12	12	10	e4.6	e5.0	e9.0	12	20	48	72	26	22	51
13	12	10	e4.4	e6.0	e9.8	12	23	49	68	25	19	44
14	12	11	e4.8	e5.0	e7.8	12	27	51	66	24	17	39
15	12	11	e4.6	e4.4	e8.2	13	32	59	65	24	17	35
16	11	9.0	e4.4	e4.6	e8.0	13	28	66	64	23	16	32
17	11	10	5.1	e4.4	e7.6	13	34	75	65	21	16	29
18	11	7.8	5.2	e4.8	e6.8	13	36	86	61	21	16	27
19	11	8.7	e4.0	e5.4	e5.8	13	35	95	61	21	16	25
20	11	8.5	e3.0	e5.8	e5.6	13	32	100	62	24	15	24
21	11	8.8	e3.5	e6.2	e5.2	14	33	99	58	22	15	23
22	11	9.1	e3.6	e5.6	e4.8	13	35	96	54	21	15	22
23	11	8.0	e4.0	e6.6	e5.4	13	38	102	52	19	15	21
24	12	6.9	e4.0	e5.2	e6.2	14	36	105	50	17	15	20
25	12	6.3	e3.0	e5.4	e7.0	14	38	108	48	16	17	19
26	12	6.3	e2.8	e5.2	e8.0	14	44	107	45	17	17	19
27	14	e7.0	e2.6	e6.0	9.5	15	54	108	42	17	16	19
28	13	e8.0	e3.4	e5.4	9.8	13	59	112	43	40	17	18
29	13	e8.0	e4.5	e6.4	---	12	69	120	44	29	19	18
30	12	9.7	4.6	e5.8	---	12	75	123	42	26	20	17
31	12	---	e4.5	e7.0	---	14	---	120	---	23	21	---
TOTAL	390	293.9	152.0	166.0	192.3	372.5	921	2,502	2,105	826	543	851
MEAN	12.6	9.80	4.90	5.35	6.87	12.0	30.7	80.7	70.2	26.6	17.5	28.4
MAX	17	14	10	7.0	9.8	15	75	123	116	41	22	88
MIN	11	6.3	2.6	4.0	4.6	9.3	14	48	42	16	15	16
AC-FT	774	583	301	329	381	739	1,830	4,960	4,180	1,640	1,080	1,690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2003, BY WATER YEAR (WY)

MEAN	22.3	16.5	11.7	12.0	12.5	15.6	35.9	113	132	60.2	38.1	28.1
MAX	38.1	32.8	25.3	25.2	22.8	40.0	84.1	267	405	172	70.6	62.2
(WY)	(1986)	(1987)	(1994)	(1994)	(1988)	(1989)	(1985)	(1979)	(1979)	(1979)	(1966)	(1991)
MIN	7.93	8.09	3.88	3.91	4.81	5.11	9.73	9.63	7.02	8.49	5.63	8.81
(WY)	(1973)	(1977)	(1975)	(1973)	(1977)	(1977)	(1971)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1966 - 2003	
ANNUAL TOTAL	3,457.3		9,314.7			
ANNUAL MEAN	9.47		25.5		a41.6	
HIGHEST ANNUAL MEAN					87.6	1979
LOWEST ANNUAL MEAN					10.2	2002
HIGHEST DAILY MEAN	42	Sep 18	123	May 30	557	Jun 9, 1979
LOWEST DAILY MEAN	2.6	Dec 27	2.6	Dec 27	2.5	Jan 6, 1971
ANNUAL SEVEN-DAY MINIMUM	3.3	Dec 22	3.3	Dec 22	3.1	Jan 2, 1973
MAXIMUM PEAK FLOW			128	May 30	b886	May 25, 1942
MAXIMUM PEAK STAGE			3.16	May 30	5.80	Jun 8, 1979
INSTANTANEOUS LOW FLOW			2.6	Dec 27	0.60	Jan 21, 1981
ANNUAL RUNOFF (AC-FT)	6,860		18,480		30,150	
10 PERCENT EXCEEDS	13		66		103	
50 PERCENT EXCEEDS	9.6		15		21	
90 PERCENT EXCEEDS	5.2		5.1		7.9	

a Average discharge for 52 years (water years 1913-25, 1927-65), 55.9 ft^3/s, 40,500 acre-ft/yr, prior to extensive upstream diversions by Molycorp.
b From rating curve extended above 450 ft^3/s.
e Estimated

08266820 RED RIVER BELOW FISH HATCHERY NEAR QUESTA, NM

LOCATION.--Lat 36°40'58", long 105°39'15", in NE ¼ NW ¼ NW ¼ sec.10, T.28 N., R.12 E., Taos County, Hydrologic Unit 13020101, on right bank at the State Fish Hatchery, 3.7 mi southwest of Questa, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--185 mi^2.

PERIOD OF RECORD.--August 1969 to July 1978 (discharge measurements only), August 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,105 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 5, 1999, at site about 0.25 mi downstream at datum 11.54 ft lower.

REMARKS.--Records good. Diversions for irrigation of about 3,000 acres upstream from station. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	35	35	28	31	32	39	86	128	59	48	44
2	34	35	34	27	31	33	39	89	127	58	46	42
3	36	34	35	27	30	e32	41	84	121	56	44	43
4	33	36	33	29	30	33	40	90	119	57	42	47
5	33	36	32	29	29	33	39	81	119	56	42	45
6	34	33	29	29	31	31	39	82	111	56	41	53
7	33	33	30	29	30	32	39	69	120	54	40	52
8	32	34	30	30	28	32	35	68	99	51	40	50
9	32	36	29	31	30	32	38	68	93	44	43	51
10	32	37	28	32	28	33	41	70	87	40	47	145
11	34	36	28	32	29	33	41	67	90	40	43	120
12	33	33	27	33	32	33	41	60	82	40	44	92
13	31	33	27	31	33	33	43	60	76	40	44	76
14	31	34	28	31	33	33	48	63	74	39	43	67
15	31	35	29	32	32	32	56	74	74	40	43	59
16	31	32	29	31	32	33	52	83	78	40	43	56
17	31	32	30	31	31	35	59	95	81	40	43	53
18	31	32	30	30	31	35	62	118	81	39	44	51
19	31	30	28	31	30	36	61	134	84	40	44	50
20	30	31	27	32	31	35	56	136	85	42	42	50
21	31	33	29	34	31	37	55	128	82	41	41	49
22	30	33	28	32	31	36	56	120	78	40	42	49
23	31	33	29	32	31	37	58	124	80	41	42	48
24	30	31	29	33	32	38	56	117	78	40	42	47
25	30	31	28	32	32	39	57	123	75	40	43	47
26	32	32	28	32	33	39	61	125	64	40	44	48
27	35	30	26	31	32	40	72	125	59	40	43	48
28	34	30	28	31	32	38	78	128	58	68	43	44
29	35	34	28	30	---	34	84	130	60	60	44	43
30	35	33	29	31	---	36	90	129	60	54	45	41
31	35	---	29	31	---	38	---	133	---	49	46	---
TOTAL	1,000	997	909	954	866	1,073	1,576	3,059	2,623	1,444	1,341	1,710
MEAN	32.3	33.2	29.3	30.8	30.9	34.6	52.5	98.7	87.4	46.6	43.3	57.0
MAX	36	37	35	34	33	40	90	136	128	68	48	145
MIN	29	30	26	27	28	31	35	60	58	39	40	41
AC-FT	1,980	1,980	1,800	1,890	1,720	2,130	3,130	6,070	5,200	2,860	2,660	3,390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

MEAN	51.8	46.7	42.2	42.9	43.3	46.6	73.8	182	195	96.5	66.7	58.2
MAX	71.0	59.2	51.0	55.3	57.9	72.0	144	374	520	227	95.3	86.9
(WY)	(1986)	(1992)	(1987)	(1992)	(1992)	(1989)	(1985)	(1994)	(1979)	(1995)	(1993)	(1986)
MIN	29.0	33.0	28.2	30.8	30.9	34.6	32.8	27.1	27.5	29.3	25.2	31.2
(WY)	(1979)	(1979)	(1979)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1978 - 2003	
ANNUAL TOTAL	11,761		17,552			
ANNUAL MEAN	32.2		48.1		79.0	
HIGHEST ANNUAL MEAN					129	1979
LOWEST ANNUAL MEAN					33.9	2002
HIGHEST DAILY MEAN	69	Sep 18	145	Sep 10	676	May 27, 1979
LOWEST DAILY MEAN	23	Jul 31	26	Dec 27	23	Jul 31, 2002
ANNUAL SEVEN-DAY MINIMUM	24	Jul 29	28	Dec 27	24	Jul 29, 2002
MAXIMUM PEAK FLOW			169	Sep 10	755	Jun 8, 1979
MAXIMUM PEAK STAGE			4.56	Sep 10	a5.30	Jun 8, 1979
INSTANTANEOUS LOW FLOW			19	Dec 27	18	Aug 18, 2002
ANNUAL RUNOFF (AC-FT)	23,330		34,810		57,240	
10 PERCENT EXCEEDS	40		84		152	
50 PERCENT EXCEEDS	31		39		52	
90 PERCENT EXCEEDS	25		30		36	

a Site and datum then in use.
e Estimated

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 mi^2.

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 those estimated, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	9.4	7.3	7.3	7.0	7.4	18	51	75	40	17	15
2	9.6	9.5	7.2	e7.2	7.0	e7.2	21	48	77	39	17	15
3	9.4	9.3	7.2	7.1	7.0	e7.4	21	50	76	37	18	17
4	9.4	9.1	7.1	7.3	e6.8	e7.4	20	50	76	34	18	17
5	9.4	8.6	7.0	7.4	e7.5	7.4	20	47	77	32	18	16
6	9.4	8.1	e6.7	7.5	e7.3	e7.6	19	44	78	30	17	16
7	9.5	8.3	e6.7	7.5	e6.7	e7.6	19	41	79	28	16	17
8	9.7	8.2	7.0	7.5	e7.2	e7.6	17	40	81	26	16	16
9	9.8	10	e6.8	7.5	e6.6	e7.8	18	40	81	24	17	17
10	9.6	11	e6.8	7.5	e6.9	8.9	19	40	80	22	17	56
11	9.6	9.1	e6.6	7.4	e7.5	9.3	22	39	79	21	17	40
12	9.6	7.9	e6.6	7.3	e7.7	9.8	23	40	76	20	16	31
13	9.6	7.5	e6.8	7.2	7.3	10	26	43	73	19	16	26
14	9.6	7.4	e7.0	7.3	7.7	12	28	47	67	19	16	23
15	9.5	7.3	7.0	7.3	7.5	12	32	58	66	18	16	21
16	9.5	6.8	6.9	e7.3	7.3	13	31	62	66	18	16	22
17	9.5	7.1	7.0	e7.0	7.3	12	32	73	62	18	16	24
18	9.5	7.3	7.4	e7.3	7.5	11	33	85	61	17	16	24
19	9.3	7.0	e6.9	e7.5	7.3	10	31	89	59	18	16	24
20	9.3	7.2	e7.3	e7.8	7.2	9.8	29	87	61	18	15	22
21	9.3	7.4	e6.9	7.0	e7.2	9.9	28	87	56	18	15	21
22	9.1	7.6	e7.3	7.0	e7.2	9.7	30	87	54	17	15	20
23	9.7	7.8	7.1	7.0	e7.4	11	33	82	51	17	15	19
24	9.9	7.7	6.9	7.0	7.5	13	31	79	49	17	15	18
25	9.7	7.4	e6.9	7.0	7.5	14	32	78	48	17	15	18
26	9.6	7.2	e6.3	7.0	7.6	15	37	80	47	17	15	18
27	10	6.7	e6.9	7.0	7.5	14	43	81	46	21	15	18
28	9.7	6.7	e6.9	7.0	7.4	13	45	81	45	27	15	17
29	9.6	7.0	7.3	7.0	---	20	52	82	44	18	16	17
30	9.0	7.2	7.3	7.0	---	19	53	77	42	18	16	17
31	9.2	---	7.1	7.0	---	17	---	72	---	17	16	---
TOTAL	294.2	238.8	216.2	224.2	203.6	340.8	863	1,960	1,932	702	499	642
MEAN	9.49	7.96	6.97	7.23	7.27	11.0	28.8	63.2	64.4	22.6	16.1	21.4
MAX	10	11	7.4	7.8	7.7	20	53	89	81	40	18	56
MIN	8.6	6.7	6.3	7.0	6.6	7.2	17	39	42	17	15	15
AC-FT	584	474	429	445	404	676	1,710	3,890	3,830	1,390	990	1,270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2003, BY WATER YEAR (WY)

MEAN	18.2	14.7	12.0	10.7	10.6	14.2	33.5	94.4	111	47.5	28.5	22.0
MAX	43.5	35.8	23.1	20.1	16.6	36.4	92.4	246	299	156	60.3	53.2
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1989)	(1937)	(1941)	(1979)	(1995)	(1957)	(1993)
MIN	9.49	7.96	6.97	6.03	6.08	7.60	11.1	12.7	8.44	7.61	6.39	8.13
(WY)	(2003)	(2003)	(2003)	(1935)	(1935)	(1964)	(1977)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1935 - 2003	
ANNUAL TOTAL	3,337.2		8,115.8			
ANNUAL MEAN	9.14		22.2		34.8	
HIGHEST ANNUAL MEAN					69.9	1942
LOWEST ANNUAL MEAN					9.99	2002
HIGHEST DAILY MEAN	14	May 19	89	May 19	416	May 13, 1941
LOWEST DAILY MEAN	5.5	Aug 27	6.3	Dec 26	3.0	Jan 21, 1935
ANNUAL SEVEN-DAY MINIMUM	5.7	Aug 22	6.7	Dec 6	4.2	Jan 18, 1935
MAXIMUM PEAK FLOW			93	May 20	541	May 13, 1941
MAXIMUM PEAK STAGE			2.13	May 20	a4.89	Feb 2, 1994
INSTANTANEOUS LOW FLOW					b1.0	Jan 27, 1942
ANNUAL RUNOFF (AC-FT)	6,620		16,100		25,240	
10 PERCENT EXCEEDS	12		58		84	
50 PERCENT EXCEEDS	9.3		15		17	
90 PERCENT EXCEEDS	6.7		7.0		9.5	

a Maximum gage height on Dec. 24, 1965, due to backwater from ice.
b Result of freeze up.
e Estimated

08267500 RIO HONDO NEAR VALDEZ, NM—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
NOV													
07...	0845	8.0	578	10.4	101	8.0	164	-2.0	2.5	--	--	--	--
APR													
16...	0845	30	575	10.2	98	8.2	156	2.0	2.0	<0.20	<0.20	0.02	0.04
JUL													
02...	0755	41	582	9.2	102	7.7	136	14.0	8.0	--	--	--	--
SEP													
26...	1125	18	578	9.2	95	7.3	150	17.5	5.0	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
NOV					
07...	--	--	--	--	--
APR					
16...	0.23	<0.010	<0.01	<0.02	<0.02
JUL					
02...	--	--	--	--	--
SEP					
26...	--	--	--	--	--

Remark codes used in this table:
< -- Less than

08268700 RIO GRANDE NEAR ARROYO HONDO, NM

LOCATION.--Lat 36°32'06", long 105°42'36", in NW $^1/_4$ 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 NM Highway 111, 2.2 mi west of Arroyo Hondo, 11 mi northwest of Taos, and at mile 1,677.4.

DRAINAGE AREA.--8,760 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

PERIOD OF RECORD.--February 1963 to October 1996, June 2002 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. Flow is partly regulated by storage reservoirs in Colorado. 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	177	305	251	361	351	243	295	530	261	196	164
2	183	177	297	252	383	343	243	288	534	254	179	161
3	177	172	304	251	382	348	244	282	556	253	171	171
4	173	176	315	270	370	340	241	294	507	246	164	170
5	166	180	334	284	338	337	243	286	459	240	160	173
6	164	259	319	291	334	319	237	269	423	239	159	197
7	160	297	316	293	310	342	226	249	406	239	160	188
8	160	309	303	288	248	341	216	248	410	230	162	181
9	165	271	277	292	301	345	215	244	392	220	178	179
10	166	260	256	297	316	344	211	244	439	208	171	271
11	167	234	246	305	309	344	204	237	507	206	166	260
12	162	211	233	312	337	344	204	240	497	201	169	233
13	158	197	255	316	353	342	204	231	442	195	167	217
14	158	190	259	314	378	350	203	240	417	190	167	205
15	159	191	278	317	394	348	209	251	396	187	162	197
16	159	190	285	313	400	357	208	267	413	187	161	196
17	160	183	297	312	361	381	210	299	450	194	162	195
18	162	175	282	307	375	392	222	360	434	188	161	184
19	162	174	275	310	364	405	225	381	398	183	163	179
20	161	192	272	314	374	380	254	419	394	183	170	175
21	162	192	258	315	362	346	243	435	366	181	168	173
22	162	194	265	316	353	316	230	436	351	175	160	170
23	166	197	262	318	333	289	227	460	358	175	158	169
24	169	198	288	327	326	274	221	431	338	173	158	168
25	168	194	253	333	316	269	224	499	319	175	156	166
26	172	196	253	333	341	274	240	526	287	176	162	166
27	180	243	251	340	360	256	263	513	275	179	163	167
28	175	248	249	346	370	233	267	474	265	198	169	165
29	177	282	247	357	---	225	278	456	273	193	166	162
30	178	286	252	361	---	221	296	453	266	187	165	160
31	176	---	250	348	---	244	---	537	---	176	166	---
TOTAL	5,178	6,445	8,536	9,583	9,749	10,000	6,951	10,844	12,102	6,292	5,139	5,562
MEAN	167	215	275	309	348	323	232	350	403	203	166	185
MAX	183	309	334	361	400	405	296	537	556	261	196	271
MIN	158	172	233	251	248	221	203	231	265	173	156	160
AC-FT	10,270	12,780	16,930	19,010	19,340	19,840	13,790	21,510	24,000	12,480	10,190	11,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	356	511	432	429	495	657	768	1,298	1,535	721	378	320
MAX	905	1,200	832	640	758	1,077	2,620	5,542	5,013	3,321	941	988
(WY)	(1970)	(1987)	(1987)	(1986)	(1987)	(1987)	(1985)	(1987)	(1985)	(1995)	(1968)	(1982)
MIN	155	215	210	260	292	323	220	203	168	152	140	158
(WY)	(1978)	(2003)	(1964)	(1977)	(1964)	(2003)	(1967)	(1977)	(1977)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	96,381			
ANNUAL MEAN	264		670	
HIGHEST ANNUAL MEAN			1,522	1987
LOWEST ANNUAL MEAN			233	1964
HIGHEST DAILY MEAN	556	Jun 3	7,290	May 19, 1987
LOWEST DAILY MEAN	156	Aug 25	138	Aug 2, 1963
ANNUAL SEVEN-DAY MINIMUM	160	Oct 12	138	Aug 13, 2002
MAXIMUM PEAK FLOW	574	May 31	7,550	May 19, 1987
MAXIMUM PEAK STAGE	2.08	May 31	8.52	May 19, 1987
INSTANTANEOUS LOW FLOW	152	Aug 24	133	Aug 18, 2002
ANNUAL RUNOFF (AC-FT)	191,200		485,500	
10 PERCENT EXCEEDS	387		1,290	
50 PERCENT EXCEEDS	249		441	
90 PERCENT EXCEEDS	165		213	

08269000 RIO PUEBLO DE TAOS NEAR TAOS, NM

LOCATION.--Lat 36°26'22", long 105°30'11", in SW ¼ SE ¼ 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 mi^2.

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 with satellite telemetry. 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 those estimated, which are poor. No diversions upstream from station. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	4.8	e4.6	e3.6	e4.1	e4.4	19	69	62	15	6.8	5.6
2	4.8	4.8	e4.4	e3.4	e4.1	4.7	25	63	57	15	6.6	5.1
3	4.6	4.7	e4.4	e4.1	e4.1	4.5	28	62	54	14	6.6	5.4
4	4.2	4.9	e4.3	4.0	e3.8	5.1	27	62	52	13	5.9	9.4
5	3.8	4.9	e3.9	4.0	e4.0	4.9	25	55	49	13	5.5	7.6
6	3.6	3.9	e3.6	4.0	e3.9	4.4	24	49	45	13	5.5	7.1
7	3.4	4.1	e3.6	3.6	e3.7	5.8	21	45	42	12	5.7	7.1
8	3.2	5.0	e3.7	4.0	e3.8	5.6	18	43	38	11	5.5	7.4
9	3.0	9.1	e3.4	4.3	e3.6	6.4	19	41	35	11	6.4	7.5
10	2.9	12	e3.4	4.3	e3.7	8.0	22	41	34	10	6.7	34
11	3.0	8.4	e3.4	4.2	e4.1	10	29	39	33	9.6	6.2	16
12	2.9	5.8	e3.2	4.2	e4.4	12	32	38	31	9.1	7.8	12
13	3.0	6.1	e3.6	3.8	e4.4	13	38	42	30	8.7	6.3	9.2
14	3.0	6.0	e3.9	e3.9	e4.8	16	48	46	28	8.4	5.6	8.1
15	3.0	6.2	e3.9	e4.1	e4.6	18	53	57	27	8.4	5.4	7.4
16	3.0	3.9	e4.2	e4.1	e4.4	19	48	60	26	8.2	5.4	6.9
17	3.0	4.6	4.3	e4.1	e4.4	17	49	66	26	7.8	5.1	6.5
18	3.0	4.5	e3.7	e4.2	e4.0	15	51	77	28	7.5	4.9	6.0
19	3.0	4.1	e3.2	e4.3	e4.0	14	48	82	26	7.2	5.4	5.9
20	3.0	4.4	e3.9	e4.3	e4.0	12	41	78	27	8.0	5.0	5.8
21	3.0	4.8	e3.8	e4.3	e4.0	14	39	71	23	8.5	4.8	5.7
22	3.1	e4.7	e3.9	4.1	e3.8	13	40	71	21	8.2	4.9	5.3
23	4.0	e4.3	e3.9	4.1	e4.0	16	44	75	20	7.3	6.5	5.2
24	5.1	e4.3	e3.8	4.1	e4.2	20	41	76	19	6.9	6.5	5.0
25	4.7	e4.6	e3.8	4.0	e4.0	22	42	76	19	7.6	6.3	5.0
26	4.4	e4.2	e3.1	3.8	e4.0	23	52	73	18	8.7	7.3	4.9
27	5.8	e3.8	e3.8	e4.0	e4.0	24	63	71	18	7.7	5.8	4.8
28	5.9	e3.6	4.4	4.0	e4.2	19	67	70	17	9.6	5.9	4.8
29	5.1	e4.0	4.5	3.9	---	16	74	73	16	7.8	7.4	4.8
30	5.0	e4.2	4.1	4.3	---	16	76	71	16	7.9	7.3	4.7
31	4.8	---	e3.8	e4.1	---	16	---	67	---	7.1	6.6	---
TOTAL	119.1	154.7	119.5	125.2	114.1	398.8	1,203	1,909	937	297.2	187.6	230.2
MEAN	3.84	5.16	3.85	4.04	4.08	12.9	40.1	61.6	31.2	9.59	6.05	7.67
MAX	5.9	12	4.6	4.3	4.8	24	76	82	62	15	7.8	34
MIN	2.9	3.6	3.1	3.4	3.6	4.4	18	38	16	6.9	4.8	4.7
AC-FT	236	307	237	248	226	791	2,390	3,790	1,860	589	372	457

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2003, BY WATER YEAR (WY)

MEAN	9.63	8.98	7.76	6.79	7.35	13.5	48.7	116	71.2	22.3	14.9	11.1
MAX	19.1	17.5	12.5	11.1	13.3	39.7	155	356	268	75.4	32.2	32.4
(WY)	(1942)	(1942)	(1992)	(1984)	(1995)	(1989)	(1942)	(1941)	(1979)	(1995)	(1991)	(1982)
MIN	3.84	4.80	3.85	3.39	3.64	5.58	11.3	4.71	2.74	2.69	1.80	3.17
(WY)	(2003)	(1982)	(2003)	(1964)	(1964)	(1964)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1913 - 2003	
ANNUAL TOTAL	1,775.9		5,795.4			
ANNUAL MEAN	4.87		15.9		28.9	
HIGHEST ANNUAL MEAN					72.3	1979
LOWEST ANNUAL MEAN					5.32	2002
HIGHEST DAILY MEAN	15	Apr 7	82	May 19	926	May 26, 1979
LOWEST DAILY MEAN	1.4	Aug 18	2.9	Oct 10	1.4	Aug 18, 2002
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 13	3.0	Oct 9	1.5	Aug 13, 2002
MAXIMUM PEAK FLOW			348	Sep 10	a1,050	May 26, 1979
MAXIMUM PEAK STAGE			2.54	Sep 10	b3.90	May 14, 1941
INSTANTANEOUS LOW FLOW			2.8	Oct 10	0.69	Feb 27, 1991
ANNUAL RUNOFF (AC-FT)	3,520		11,500		20,960	
10 PERCENT EXCEEDS	8.2		48		72	
50 PERCENT EXCEEDS	4.4		5.9		11	
90 PERCENT EXCEEDS	2.0		3.8		5.5	

a From rating extended above 370 ft^3/s.
b From floodmarks, site and datum then in use.
e Estimated

08271000 RIO LUCERO NEAR ARROYO SECO, NM

LOCATION.--Lat 36°30'30", long 105°31'51", 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 mi^2.

PERIOD OF RECORD.--April to December 1910 (discharge measurements and occasional gage heights); January 1911 to September 1915, March to December 1916 (fragmentary); water years 1911-15, 1934 to current year (annual maximum); water years 1952-62, October to November 1962 (monthly discharge only); January 1913 to September 1915, October 1934 to September 1951, December 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-l: 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.--Records good except for those estimated, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.7	e4.7	e3.4	e3.9	e3.8	9.5	34	80	25	11	9.0
2	5.4	4.8	e4.0	e3.4	e3.7	e3.9	12	32	77	24	11	8.7
3	5.1	4.7	e4.1	e3.7	e3.7	e4.2	12	32	78	22	10	10
4	5.1	4.8	e4.0	e3.7	e3.5	e3.9	12	32	73	21	10	10
5	5.1	4.5	e3.8	e3.7	e3.8	e3.7	11	29	71	20	9.7	9.3
6	5.0	4.4	e3.9	e3.7	e3.6	e4.0	11	26	64	19	9.7	10
7	4.9	4.6	e3.7	e3.9	e3.3	e4.0	9.9	23	59	18	9.4	11
8	4.9	4.7	e3.9	e4.2	e3.6	4.4	9.1	22	57	17	10	10
9	4.8	6.3	e3.7	e4.4	e3.3	4.8	9.2	21	54	16	10	11
10	4.7	5.8	e3.7	e4.4	e3.9	5.2	11	22	54	15	10	34
11	4.7	5.0	e3.6	e4.6	e3.8	5.8	14	21	52	15	11	28
12	4.7	4.6	e3.6	e4.1	e3.9	6.5	16	23	50	15	10	24
13	4.7	5.3	e3.7	e4.1	e4.0	7.2	19	27	49	14	9.8	21
14	4.7	5.0	e3.8	e4.3	e4.1	8.5	23	30	45	14	9.5	19
15	4.7	4.7	e3.8	e4.0	e3.9	9.6	25	38	44	13	9.4	17
16	4.7	5.2	e4.0	e4.0	e3.6	10	23	44	42	13	9.2	16
17	4.5	4.8	e4.0	e3.8	e3.4	9.0	23	55	40	13	8.9	15
18	4.6	4.5	e3.8	e4.0	e3.5	8.1	24	69	40	12	8.7	14
19	4.4	4.7	e3.6	e4.2	e3.4	7.2	22	75	39	13	9.0	13
20	4.4	4.8	e3.8	e4.6	e3.5	6.8	19	72	42	13	8.6	13
21	4.4	5.0	e3.7	e3.9	e3.7	7.2	19	67	38	13	8.6	12
22	4.4	e4.9	e3.7	e3.9	e3.7	7.3	19	76	36	e13	8.6	12
23	5.0	e4.5	e3.7	e4.1	e3.9	8.7	20	84	34	e11	8.6	11
24	5.1	e4.4	e3.6	e3.9	e3.9	11	19	84	33	e11	8.5	11
25	4.8	e4.6	e3.6	e3.9	e3.8	12	19	83	30	e11	8.8	11
26	4.8	e4.4	e3.4	e3.7	e3.6	12	24	78	29	e12	8.6	11
27	5.2	e4.2	e3.6	e3.7	e3.7	12	28	81	28	e12	8.2	10
28	4.9	e4.6	e3.6	e3.6	e3.6	9.7	31	84	26	e14	9.2	10
29	4.9	e5.2	e3.8	e3.8	---	9.0	36	91	26	e12	9.8	9.8
30	4.6	e5.0	e3.8	e3.9	---	8.3	37	90	25	12	10	9.6
31	4.7	---	e3.6	e3.9	---	8.1	---	87	---	11	9.8	---
TOTAL	149.0	144.7	117.3	122.5	103.3	225.9	566.7	1,632	1,415	464	293.6	410.4
MEAN	4.81	4.82	3.78	3.95	3.69	7.29	18.9	52.6	47.2	15.0	9.47	13.7
MAX	5.4	6.3	4.7	4.6	4.1	12	37	91	80	25	11	34
MIN	4.4	4.2	3.4	3.4	3.3	3.7	9.1	21	25	11	8.2	8.7
AC-FT	296	287	233	243	205	448	1,120	3,240	2,810	920	582	814

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2003, BY WATER YEAR (WY)

MEAN	11.3	8.91	7.13	5.96	5.96	9.12	21.8	58.0	69.1	29.5	18.0	13.5
MAX	27.8	22.0	14.8	10.0	9.92	21.2	47.5	156	178	101	37.5	34.5
(WY)	(1942)	(1942)	(1991)	(1942)	(1991)	(1989)	(1937)	(1941)	(1941)	(1995)	(1967)	(1982)
MIN	4.81	4.82	3.78	3.51	3.47	4.11	7.46	6.04	4.51	4.38	3.61	4.80
(WY)	(2003)	(2003)	(2003)	(1951)	(1964)	(1977)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1913 - 2003	
ANNUAL TOTAL	1,825.9		5,644.4			
ANNUAL MEAN	5.00		15.5		21.8	
HIGHEST ANNUAL MEAN					46.7	1941
LOWEST ANNUAL MEAN					5.34	2002
HIGHEST DAILY MEAN	8.3	Apr 2	91	May 29	246	Jun 4, 1942
LOWEST DAILY MEAN	3.1	Aug 27	3.3	Feb 7	2.0	Jan 28, 1981
ANNUAL SEVEN-DAY MINIMUM	3.2	Sep 1	3.5	Feb 3	2.7	Jan 22, 1981
MAXIMUM PEAK FLOW			93	May 29	310	Jun 8, 1979
MAXIMUM PEAK STAGE			2.66	May 29	3.17	Jun 20, 1995
INSTANTANEOUS LOW FLOW			2.7	Nov 12	1.4	Nov 2, 1951
ANNUAL RUNOFF (AC-FT)	3,620		11,200		15,780	
10 PERCENT EXCEEDS	6.7		38		53	
50 PERCENT EXCEEDS	4.8		8.8		11	
90 PERCENT EXCEEDS	3.6		3.7		5.3	

e Estimated

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 1.6 mi downstream from Rito de la Olla (loca11y known as Pot Creek), 3.2 mi south of Talpa, 4.1 mi upstream from Rio Chiquito, and at mile 6.7.

DRAINAGE AREA.--83 mi^2, 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 "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 poor. Minor diversions for irrigation above station. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.9	4.6	e1.8	e1.5	e1.8	3.4	11	51	69	7.8	e3.0	4.0
2	e2.0	4.5	e1.8	e1.5	e1.7	3.2	13	49	60	7.4	e2.9	3.5
3	e2.0	4.4	e1.7	e1.5	e1.6	3.1	15	51	53	6.9	e2.8	3.4
4	e2.1	4.6	e1.7	e1.5	e1.7	3.6	15	52	48	6.5	e2.7	3.8
5	e2.1	4.3	e1.6	e1.5	e1.8	3.7	15	48	44	6.2	e2.5	3.8
6	e2.2	4.0	e1.6	e1.5	e1.8	3.1	15	45	40	5.9	e2.5	3.7
7	2.2	3.7	e1.6	e1.5	e1.8	3.5	14	42	36	5.8	e2.6	3.9
8	2.3	3.6	e1.5	e1.5	e1.8	3.8	12	41	32	5.2	e2.7	3.8
9	2.1	4.7	e1.5	e1.6	e1.9	4.0	12	41	29	4.8	e2.8	4.0
10	2.1	4.9	e1.5	e1.6	e2.0	4.1	14	43	27	4.5	e3.0	8.1
11	2.0	4.4	e1.5	e1.6	e2.1	4.3	16	42	25	4.3	e3.1	8.5
12	1.9	4.1	e1.5	e1.6	2.9	4.7	18	41	23	4.1	e3.2	6.4
13	1.9	3.8	e1.4	e1.7	3.3	5.0	21	44	22	3.8	e3.0	5.1
14	1.8	3.6	e1.4	e1.7	3.1	5.5	25	51	21	3.5	e2.7	4.5
15	1.7	e3.2	e1.5	e1.7	3.2	5.7	28	63	19	e4.3	e2.6	4.3
16	1.8	e3.0	e1.5	e1.7	3.3	6.1	25	73	19	e3.6	e2.8	3.9
17	1.8	e3.0	e1.4	e1.7	3.2	6.6	26	81	18	e3.6	e2.9	3.6
18	1.8	e2.9	e1.4	e1.7	3.4	6.7	28	94	19	e3.5	e3.1	3.4
19	1.7	e2.8	e1.5	e1.8	3.2	6.6	30	102	22	e3.5	e2.9	3.4
20	1.7	e2.7	e1.5	e1.8	3.2	6.9	27	101	19	e3.4	e2.5	3.4
21	1.7	e2.6	e1.5	e1.8	3.3	8.2	26	95	17	e3.4	e2.4	3.4
22	e2.0	e2.4	e1.5	e1.8	3.0	8.1	28	89	15	e3.5	e2.6	3.4
23	e2.2	e2.3	e1.5	e1.8	3.0	9.7	32	90	14	e3.5	e2.9	3.3
24	e2.6	e2.2	e1.5	e1.8	3.2	11	30	92	12	e3.5	e3.1	3.0
25	e2.5	e2.2	e1.5	e1.8	3.4	12	29	96	12	e3.6	e3.3	2.9
26	e2.4	e2.2	e1.5	e1.8	3.6	12	33	96	11	e3.7	e3.7	2.9
27	e2.7	e2.1	e1.5	e1.8	3.5	13	39	87	10	e3.9	e3.2	2.8
28	e3.1	e2.0	e1.5	e1.8	3.5	12	41	82	9.4	e4.0	e3.2	2.8
29	e3.8	e1.9	e1.5	e1.8	---	9.8	46	79	8.7	e3.7	4.2	2.8
30	e4.2	e1.9	e1.5	e1.8	---	9.9	51	78	8.3	e3.3	4.4	2.7
31	e4.8	---	e1.5	e1.8	---	10	---	75	---	e3.2	4.4	---
TOTAL	71.1	98.6	47.4	52.0	75.3	209.3	735	2,114	762.4	137.9	93.7	118.5
MEAN	2.29	3.29	1.53	1.68	2.69	6.75	24.5	68.2	25.4	4.45	3.02	3.95
MAX	4.8	4.9	1.8	1.8	3.6	13	51	102	69	7.8	4.4	8.5
MIN	1.7	1.9	1.4	1.5	1.6	3.1	11	41	8.3	3.2	2.4	2.7
AC-FT	141	196	94	103	149	415	1,460	4,190	1,510	274	186	235

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	7.23	6.53	5.61	5.12	5.43	9.18	30.2	89.7	49.9	13.7	11.7	8.50
MAX	15.3	13.9	10.4	9.19	9.31	22.9	91.9	264	174	41.9	35.7	24.9
(WY)	(1999)	(1995)	(1958)	(1958)	(1989)	(1994)	(1962)	(1994)	(1995)	(1986)	(1957)	(1957)
MIN	2.12	2.95	1.53	1.68	2.65	4.55	6.64	3.76	1.73	1.67	0.88	1.44
(WY)	(1957)	(1957)	(2003)	(2003)	(1955)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003	
ANNUAL TOTAL	1,066.40		4,515.2			
ANNUAL MEAN	2.92		12.4		20.3	
HIGHEST ANNUAL MEAN					44.0	1994
LOWEST ANNUAL MEAN					3.23	2002
HIGHEST DAILY MEAN	10	Apr 7	102	May 19	590	May 22, 1991
LOWEST DAILY MEAN	0.58	Aug 19	1.4	Dec 13	0.58	Aug 19, 2002
ANNUAL SEVEN-DAY MINIMUM	0.64	Aug 14	1.4	Dec 12	0.64	Aug 14, 2002
MAXIMUM PEAK FLOW			106	May 20	644	May 22, 1991
MAXIMUM PEAK STAGE			5.70	May 20	5.70	May 20, 2003
INSTANTANEOUS LOW FLOW			1.4	Oct 30	0.20	Jan 5, 1955
ANNUAL RUNOFF (AC-FT)	2,120		8,960		14,710	
10 PERCENT EXCEEDS	5.0		41		46	
50 PERCENT EXCEEDS	2.5		3.5		7.7	
90 PERCENT EXCEEDS	1.0		1.6		3.7	

e Estimated

08276300 RIO PUEBLO DE TAOS BELOW LOS CORDOVAS, NM

LOCATION.--Lat 36°22'38", long 105°40'02", 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 mi^2.

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 with satellite telemetry. 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.--Records good except for those estimated, 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	4.1	8.4	0.84	e3.5	18	18	96	112	3.1	0.01	4.1
2	6.5	3.1	8.1	3.0	e3.6	17	16	87	103	4.0	0.01	4.0
3	5.4	4.8	8.4	3.4	e3.3	e16	24	82	80	2.6	0.01	2.3
4	5.6	8.7	9.3	3.2	e6.3	e16	25	81	74	2.9	0.01	5.3
5	4.1	11	8.2	3.2	e7.4	e15	22	71	66	2.9	0.01	7.5
6	5.1	11	7.5	1.7	e11	15	17	61	63	3.4	0.01	11
7	4.0	10	6.9	3.3	e11	13	15	51	50	3.1	0.06	19
8	4.7	11	6.5	5.0	e9.0	12	15	46	43	2.1	0.05	15
9	4.8	15	e9.0	4.4	e7.0	13	13	41	33	2.7	0.24	15
10	5.0	15	10	e4.2	e5.0	e14	14	37	27	2.9	0.66	78
11	4.7	13	8.9	e4.0	e6.0	15	22	34	23	2.4	3.1	44
12	5.0	11	6.8	e4.4	e6.0	17	23	32	18	2.9	13	33
13	5.0	9.6	7.6	e4.8	e5.0	17	29	36	14	2.0	4.9	27
14	5.1	9.4	7.2	e4.4	e6.0	19	40	41	16	2.3	2.6	24
15	5.4	9.3	5.6	e4.2	e7.0	21	61	61	15	e3.0	2.2	22
16	4.6	8.7	6.9	e5.2	e7.0	20	63	81	17	e3.0	2.9	19
17	3.3	8.6	5.4	7.6	e6.0	24	59	91	17	e2.8	2.0	18
18	4.2	9.9	e4.0	16	e7.0	23	61	107	18	1.7	3.8	18
19	3.9	9.7	e4.6	9.9	e11	25	57	123	17	1.3	11	17
20	3.1	9.9	5.2	13	e12	24	50	131	19	0.62	5.9	14
21	3.3	11	4.4	e10	12	36	47	128	18	1.3	1.8	12
22	3.3	9.0	5.0	9.7	11	31	45	122	13	0.48	1.6	9.5
23	5.2	8.9	1.9	9.0	e12	24	51	127	13	0.29	2.1	7.5
24	5.0	11	1.8	6.8	13	27	53	123	10	0.22	6.7	6.2
25	3.9	12	9.9	6.8	15	28	45	128	6.9	0.22	28	5.7
26	3.6	10	8.6	e9.0	18	25	46	134	6.9	1.6	9.2	3.0
27	11	10	9.2	7.5	e17	26	52	133	6.7	0.44	7.8	6.9
28	4.9	9.3	2.3	7.1	e17	27	62	125	5.3	0.44	8.0	6.2
29	5.0	8.2	2.7	e8.4	---	22	79	129	2.8	0.12	10	6.7
30	5.0	8.1	2.9	e6.4	---	22	96	125	2.4	0.08	7.6	4.6
31	4.7	---	2.7	4.2	---	20	---	117	---	0.02	3.2	---
TOTAL	150.5	290.3	195.9	190.64	255.1	642	1,220	2,781	910.0	56.93	138.47	465.5
MEAN	4.85	9.68	6.32	6.15	9.11	20.7	40.7	89.7	30.3	1.84	4.47	15.5
MAX	11	15	10	16	18	36	96	134	112	4.0	28	78
MIN	3.1	3.1	1.8	0.84	3.3	12	13	32	2.4	0.02	0.01	2.3
AC-FT	299	576	389	378	506	1,270	2,420	5,520	1,800	113	275	923

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2003, BY WATER YEAR (WY)

MEAN	25.6	31.9	32.8	31.8	36.7	47.5	107	240	132	28.4	23.5	22.1
MAX	74.9	71.9	56.8	48.4	60.3	113	440	1,063	708	169	97.9	67.5
(WY)	(1958)	(1958)	(1987)	(1995)	(1987)	(1995)	(1994)	(1994)	(1979)	(1995)	(1957)	(1993)
MIN	4.85	9.68	6.32	6.15	9.11	19.8	8.32	4.10	2.69	1.84	2.03	3.71
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(1972)	(2002)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1957 - 2003	
ANNUAL TOTAL	3,349.49		7,296.34			
ANNUAL MEAN	9.18		20.0		62.7	
HIGHEST ANNUAL MEAN					193	1994
LOWEST ANNUAL MEAN					11.1	2002
HIGHEST DAILY MEAN	33	Jan 15	134	May 26	1,940	May 20, 1994
LOWEST DAILY MEAN	0.99	Aug 18	0.01	Aug 1	0.01	Aug 1, 2003
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 17	0.01	Jul 31	0.01	Jul 31, 2003
MAXIMUM PEAK FLOW			489	Aug 25	a2,380	Aug 24, 1957
MAXIMUM PEAK STAGE			7.70	Aug 25	8.93	May 22, 1991
INSTANTANEOUS LOW FLOW			0.00	Jul 30	0.00	Jul 30, 2003
ANNUAL RUNOFF (AC-FT)	6,640		14,470		45,460	
10 PERCENT EXCEEDS	21		60		118	
50 PERCENT EXCEEDS	5.2		9.0		31	
90 PERCENT EXCEEDS	2.2		2.3		8.1	

a From rating curve extended above 900 ft^3/s.
e Estimated

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM

LOCATION.--Lat 36°19'12", long 105°45'14", in NW ¼ NE ¼ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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" 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 with satellite telemetry. Datum of gage is 6,050.3 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 14, 1934, at bridge 1.7 mi upstream at different datum.

REMARKS.--Water-discharge records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 30,000 acres in New Mexico.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1888, about 14,000 ft^3/s June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 ft^3/s occurred June 9, 1905, May 28, 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	205	325	288	384	387	286	398	675	286	215	190
2	213	205	339	287	405	365	282	387	646	280	209	189
3	210	202	333	286	413	382	292	372	653	277	199	192
4	206	206	348	302	394	370	291	378	616	273	190	201
5	200	207	366	319	375	364	289	375	552	265	184	192
6	197	254	357	329	365	346	285	347	509	264	185	216
7	194	322	349	335	354	349	269	322	472	264	183	218
8	192	337	351	327	290	371	258	308	470	257	184	211
9	196	312	323	332	291	363	249	303	447	247	189	203
10	198	293	291	330	352	367	248	298	464	236	209	332
11	200	273	278	338	339	367	247	292	535	230	189	316
12	199	248	275	344	353	370	244	291	553	228	200	271
13	191	231	276	352	381	373	249	284	482	221	194	252
14	193	222	289	347	400	382	255	292	458	216	194	235
15	193	220	305	356	415	387	275	315	432	211	190	227
16	193	221	310	347	436	383	291	351	439	210	187	220
17	193	215	322	346	402	415	277	378	480	217	187	223
18	195	208	325	344	402	426	290	462	482	215	187	212
19	197	202	297	339	393	443	291	489	437	210	189	206
20	195	213	309	350	401	428	310	558	433	207	194	199
21	195	223	293	350	391	407	307	586	410	208	198	197
22	196	226	293	355	378	374	291	562	383	202	187	193
23	200	227	284	351	364	338	289	597	389	199	184	192
24	203	228	329	359	350	320	289	580	371	199	192	191
25	204	227	291	361	351	317	281	604	352	200	227	188
26	203	218	276	367	366	322	292	685	322	199	190	188
27	213	270	288	369	378	312	316	673	306	205	191	190
28	205	278	278	372	397	289	336	625	292	216	191	189
29	204	310	282	377	---	277	356	603	295	225	198	187
30	206	318	286	389	---	263	391	594	294	214	190	184
31	205	---	285	378	---	287	---	645	---	203	195	---
TOTAL	6,189	7,321	9,553	10,626	10,520	11,144	8,626	13,954	13,649	7,084	6,001	6,404
MEAN	200	244	308	343	376	359	288	450	455	229	194	213
MAX	213	337	366	389	436	443	391	685	675	286	227	332
MIN	191	202	275	286	290	263	244	284	292	199	183	184
AC-FT	12,280	14,520	18,950	21,080	20,870	22,100	17,110	27,680	27,070	14,050	11,900	12,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2003, BY WATER YEAR (WY)

MEAN	418	525	494	482	548	664	845	1,734	1,747	722	415	382
MAX	1,675	1,532	1,018	764	865	1,195	3,020	6,055	6,007	3,445	1,537	2,086
(WY)	(1942)	(1942)	(1942)	(1986)	(1987)	(1987)	(1942)	(1987)	(1941)	(1995)	(1929)	(1927)
MIN	171	224	243	263	290	259	250	205	181	177	163	161
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1981)	(2002)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1926 - 2003	
ANNUAL TOTAL	101,281		111,071			
ANNUAL MEAN	277		304		748	
HIGHEST ANNUAL MEAN					1,840	1942
LOWEST ANNUAL MEAN					271	1964
HIGHEST DAILY MEAN	588	Mar 13	685	May 26	9,730	Jun 7, 1948
LOWEST DAILY MEAN	158	Aug 15	183	Aug 7	158	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	159	Aug 13	188	Aug 3	159	Sep 19, 1956
MAXIMUM PEAK FLOW			768	Aug 25	9,730	Jun 7, 1948
MAXIMUM PEAK STAGE			4.36	Aug 25	9.23	Jun 22, 1949
INSTANTANEOUS LOW FLOW			180	Aug 5	155	Sep 21, 1956
ANNUAL RUNOFF (AC-FT)	200,900		220,300		542,000	
10 PERCENT EXCEEDS	467		430		1,460	
50 PERCENT EXCEEDS	213		290		471	
90 PERCENT EXCEEDS	166		193		238	

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
07...	1130	322	21	24	614	10.2	111	8.4	309	13.0	9.5	96	26.6
APR													
16...	1210	291	12	8.0	612	10.4	119	8.6	343	17.0	11.5	120	33.8
JUL													
02...	1100	276	6.3	5.7	608	8.8	125	8.7	300	35.0	21.0	99	28.5
31...	1105	202	11	8.2	617	8.6	120	8.4	301	30.5	21.0	100	28.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
07...	7.10	3.61	1	27.8	93	111	--	8.57	0.73	26.9	37.8	194	--
APR													
16...	8.52	3.13	0.8	21.2	103	119	3	8.32	0.61	22.3	48.9	209	<0.20
JUL													
02...	6.73	3.31	1	23.1	97	107	2	6.66	0.7	21.2	38.0	183	--
31...	7.17	3.00	0.9	21.4	92	E98	7	6.52	0.7	24.1	42.7	190	<0.20

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)
NOV													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	0.30	<0.01	0.03	0.19	<0.010	<0.01	<0.02	0.04	--	--	--	--	--
JUL													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	0.40	<0.01	0.02	0.18	<0.010	<0.01	<0.02	0.03	18	<0.30	2	27	<0.06

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)
NOV													
07...	50	--	--	--	--	<10	--	--	<0.02	--	--	--	<3
APR													
16...	40	--	--	--	--	13	--	--	<0.02	--	--	--	<3
JUL													
02...	40	--	--	--	--	E5	--	--	<0.02	--	--	--	E2
31...	40	0.04	0.8	0.12	1.0	E5	<0.08	2.7	<0.02	12.4	1.50	<3	<3

08276500 RIO GRANDE BELOW TAOS JUNCTION BRIDGE, NEAR TAOS, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
NOV					
07...	--	--	--	95	49
APR					
16...	--	--	--	97	21
JUL					
02...	--	--	--	96	16
31...	<0.20	M	2.42	98	26

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08277470 RIO PUEBLO NEAR PENASCO, NM

LOCATION.--Lat 36°10'07", long 105°36'10", in SE ¼ NE ¼ sec.1, T.22 N., R.12 E., Taos County, Hydrologic Unit 13020101, on left bank, downstream side of bridge on private road, 0.5 mi upstream from junction of State Highways 518 and 75, 1.0 mi downstream from Osha Canyon, and 6.0 mi east of Penasco.

DRAINAGE AREA.--101 mi^2.

PERIOD OF RECORD.--December 1991 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are poor. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	9.9	e5.5	e4.1	e6.0	e7.0	23	167	95	8.8	3.2	9.6
2	7.0	11	e4.6	e4.1	e5.8	e8.1	31	155	90	8.3	3.3	7.9
3	6.7	11	e3.2	e4.9	e5.8	e8.8	35	156	80	6.0	3.7	7.3
4	6.5	11	e3.0	e4.9	e5.3	7.7	32	153	70	5.6	3.6	8.8
5	6.8	9.6	e2.8	e4.9	e5.8	6.9	29	134	64	5.7	3.2	7.7
6	7.7	9.5	e2.0	e4.9	e5.7	e9.3	28	122	58	6.6	3.4	8.8
7	7.5	11	e3.0	e5.1	e5.5	e9.3	24	112	50	6.6	4.3	7.5
8	7.4	9.3	e3.6	e5.2	e6.5	e9.3	20	109	43	6.1	5.3	7.2
9	7.5	17	e3.3	e5.6	e6.0	e10	22	105	40	5.7	6.0	7.2
10	6.7	17	e3.3	e5.6	e6.1	e10	28	105	36	5.2	7.4	21
11	6.3	13	e3.1	e5.1	e6.4	e10	36	99	30	5.4	9.4	17
12	6.0	10	e2.9	e4.8	e7.0	e11	40	99	27	5.5	8.1	11
13	6.1	13	e3.1	e4.8	e7.0	12	56	111	25	4.7	7.9	9.1
14	6.2	12	e3.3	e5.6	e6.7	15	76	131	24	2.8	5.8	8.4
15	6.2	9.5	e3.3	e5.3	e6.7	17	88	159	23	3.7	6.2	7.9
16	6.1	8.6	e3.6	e5.3	7.9	17	76	162	24	4.2	5.3	7.4
17	6.2	e8.6	e3.6	e5.1	7.8	16	83	166	24	3.9	5.2	7.0
18	7.1	e8.1	e3.4	e5.6	e6.3	14	95	173	29	3.3	5.5	6.7
19	7.0	e8.4	e3.2	e6.1	e7.0	12	93	168	30	4.1	6.2	6.6
20	6.7	e9.2	e3.5	e6.7	e7.0	13	77	158	25	5.7	5.5	6.6
21	7.1	e9.0	e3.4	e6.2	e7.0	14	74	143	22	5.3	5.6	6.4
22	7.1	e8.2	e3.7	e6.2	e7.0	12	85	138	20	7.6	6.5	6.5
23	9.3	e8.0	e3.7	e6.6	e7.8	15	101	138	17	3.7	7.4	5.7
24	13	e7.2	e3.6	e6.2	e7.8	21	91	131	12	3.1	7.6	5.4
25	11	e7.0	e3.6	e6.2	7.3	24	91	137	11	3.2	8.4	5.8
26	10	e7.0	e3.4	e6.0	e7.0	27	116	137	10	3.0	8.5	5.7
27	14	e6.2	e3.6	e6.0	e7.3	30	149	118	10	2.3	9.3	5.1
28	12	e6.0	e3.9	e5.7	6.5	23	158	114	9.4	2.8	8.2	5.9
29	11	e6.2	e3.9	e6.0	---	27	169	115	9.0	3.5	14	6.5
30	11	e6.0	e4.3	e6.0	---	26	180	112	9.1	4.1	13	5.9
31	10	---	e4.2	e6.0	---	19	---	104	---	4.1	14	---
TOTAL	249.7	287.5	108.6	170.8	186.0	461.4	2,206	4,131	1,016.5	150.6	211.0	239.6
MEAN	8.05	9.58	3.50	5.51	6.64	14.9	73.5	133	33.9	4.86	6.81	7.99
MAX	14	17	5.5	6.7	7.9	30	180	173	95	8.8	14	21
MIN	6.0	6.0	2.0	4.1	5.3	6.9	20	99	9.0	2.3	3.2	5.1
AC-FT	495	570	215	339	369	915	4,380	8,190	2,020	299	419	475

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

MEAN	13.2	14.0	11.0	9.58	10.8	22.6	92.9	250	125	44.0	22.2	15.7
MAX	19.0	24.9	17.2	14.6	16.8	39.3	242	924	608	290	52.4	33.3
(WY)	(1999)	(1999)	(1997)	(1992)	(1992)	(1997)	(1994)	(1994)	(1995)	(1995)	(1998)	(1993)
MIN	8.05	8.92	3.50	5.51	6.27	8.48	21.3	2.74	2.20	4.86	2.90	4.79
(WY)	(2003)	(2002)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	2,498.98		9,418.7			
ANNUAL MEAN	6.85		25.8		51.6	
HIGHEST ANNUAL MEAN					124	1994
LOWEST ANNUAL MEAN					7.29	2002
HIGHEST DAILY MEAN	36	Jul 10	180	Apr 30	1,720	May 20, 1994
LOWEST DAILY MEAN	0.98	Aug 13	2.0	Dec 6	0.98	Aug 13, 2002
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 10	3.0	Dec 3	1.1	Aug 10, 2002
MAXIMUM PEAK FLOW			192	Apr 29	2,200	May 19, 1994
MAXIMUM PEAK STAGE			4.00	Apr 29	6.00	May 19, 1994
INSTANTANEOUS LOW FLOW					0.91	Aug 13, 2002
ANNUAL RUNOFF (AC-FT)	4,960		18,680		37,360	
10 PERCENT EXCEEDS	11		99		113	
50 PERCENT EXCEEDS	5.6		7.5		14	
90 PERCENT EXCEEDS	2.0		3.7		6.2	

e Estimated

08278500 RIO SANTA BARBARA NEAR PENASCO, NM

LOCATION.--Lat 36°06'40", long 105°37'55", Taos County, Hydrologic Unit 13020101, in Santa Barbara Grant, on right bank at bridge on U.S. Forest Service Road 116, 1.4 mi below Santa Barbara Campground and 6.5 mi southeast of Penasco.

DRAINAGE AREA.--38 mi^2 (approximately).

PERIOD OF RECORD.--November 1991 to current year. October 1952 to December 1957, published as "near Llano, N. Mex."

GAGE.--Water-stage recorder. Elevation of gage is 8,640 ft above National Geodetic Vertical Datum, from topographic map.

REMARKS.--Records good except for those estimated, which are poor. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.6	e10	e8.0	e8.0	e6.9	e11	75	166	24	9.0	24
2	14	10	e8.5	e9.9	e5.8	e7.8	14	75	e160	23	9.2	21
3	12	9.9	e8.1	e9.9	e5.7	e7.7	14	81	e153	22	9.1	21
4	11	10	e7.8	e9.6	e8.8	e7.2	14	73	e134	21	8.6	21
5	11	9.0	e6.2	e9.6	e6.4	e6.6	14	63	e128	20	8.3	19
6	10	e9.2	e6.4	e9.3	e6.0	e7.8	13	55	e125	19	8.6	19
7	10	e9.5	e9.0	e9.2	e7.9	e7.8	e11	46	e114	18	8.8	18
8	10	9.1	e6.2	e9.4	e6.0	e7.8	e12	49	e96	17	8.8	17
9	10	13	e7.0	e9.3	e6.4	e7.1	e12	53	e87	16	12	19
10	9.8	12	e6.6	e9.3	e6.6	e7.2	14	55	e73	15	12	61
11	9.6	10	e6.6	e8.4	e7.2	e7.3	17	52	e66	15	11	41
12	9.4	e11	e7.1	e9.3	e7.1	e7.4	17	61	e68	14	9.7	30
13	9.4	e12	e8.4	e9.3	e6.2	e7.7	22	76	61	14	8.5	27
14	9.4	e12	e8.8	e8.1	e6.1	9.2	26	104	55	13	9.5	25
15	9.3	e11	e9.9	e7.1	e5.7	9.9	27	136	50	13	10	23
16	9.2	e11	e8.0	e8.0	e5.7	9.9	25	156	47	13	11	22
17	9.1	e10	e7.0	e8.8	e5.2	9.0	27	179	44	12	13	21
18	9.6	e10	e5.7	e9.9	e5.1	12	29	188	51	12	12	19
19	9.5	e11	e7.1	e9.8	e5.7	12	28	187	45	13	13	18
20	9.2	e12	e7.1	e9.8	e5.5	e9.3	25	189	42	12	12	17
21	9.0	e12	e9.9	e9.7	e5.3	e8.7	26	187	38	11	13	16
22	8.8	e12	e9.9	e9.4	e6.6	e7.7	29	186	35	11	21	15
23	9.9	e11	e8.0	e9.4	e7.2	e8.2	32	185	33	11	22	15
24	11	e10	e6.5	e8.8	e7.8	e9.2	29	185	32	10	19	14
25	10	e7.5	e6.9	e9.0	e7.7	11	31	191	30	10	18	13
26	10	e7.6	e6.9	e9.5	e7.7	12	39	168	29	10	17	13
27	12	e12	e8.5	e8.8	e7.1	12	45	167	28	10	15	13
28	11	e11	e9.7	e8.8	e6.4	11	50	173	27	9.9	19	12
29	10	e11	e7.9	e9.6	---	e10	68	180	26	9.6	30	12
30	9.6	e9.8	e10	e8.8	---	e12	79	179	25	10	41	12
31	9.8	---	e7.1	e8.8	---	e11	---	171	---	9.6	37	---
TOTAL	313.6	315.2	242.8	282.6	182.9	280.4	800	3,925	2,068	438.1	456.1	618
MEAN	10.1	10.5	7.83	9.12	6.53	9.05	26.7	127	68.9	14.1	14.7	20.6
MAX	14	13	10	9.9	8.8	12	79	191	166	24	41	61
MIN	8.8	7.5	5.7	7.1	5.1	6.6	11	46	25	9.6	8.3	12
AC-FT	622	625	482	561	363	556	1,590	7,790	4,100	869	905	1,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	13.6	11.0	8.41	7.22	6.95	10.6	33.7	103	102	32.9	34.0	22.5
MAX	17.9	17.1	13.6	9.88	9.93	17.6	75.3	199	211	62.1	129	66.5
(WY)	(1996)	(1992)	(1992)	(2002)	(2002)	(1997)	(1992)	(1994)	(1995)	(1957)	(1957)	(1957)
MIN	4.95	5.13	4.18	4.10	3.93	6.46	18.6	14.7	8.44	8.13	6.00	4.50
(WY)	(1957)	(1957)	(1957)	(1954)	(1957)	(1957)	(1956)	(2002)	(2002)	(1956)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003	
ANNUAL TOTAL	3,729.1		9,922.7			
ANNUAL MEAN	10.2		27.2		31.3	
HIGHEST ANNUAL MEAN					50.5	1957
LOWEST ANNUAL MEAN					10.3	2002
HIGHEST DAILY MEAN	24	Apr 15	191	May 25	499	Jun 2, 1994
LOWEST DAILY MEAN	5.0	Aug 24	5.1	Feb 18	3.0	Jan 31, 1957
ANNUAL SEVEN-DAY MINIMUM	5.2	Sep 1	5.5	Feb 15	3.1	Jan 30, 1957
MAXIMUM PEAK FLOW			208	May 25	838	Jun 18, 1995
MAXIMUM PEAK STAGE			4.63	May 25	6.21	Jun 18, 1995
INSTANTANEOUS LOW FLOW					2.4	Mar 2, 1996
ANNUAL RUNOFF (AC-FT)	7,400		19,680		22,690	
10 PERCENT EXCEEDS	16		67		79	
50 PERCENT EXCEEDS	9.6		11		14	
90 PERCENT EXCEEDS	6.3		7.1		6.2	

e Estimated

08279000 EMBUDO CREEK AT DIXON, NM

LOCATION.--Lat 36°12'39", long 105°54'47", in NE ¼ SE ¼ 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 mi^2.

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, and 1941 are unreliable and should not be used.

REVISED RECORDS.--WSP 1512: 1931-32, 1941, 1947(M). Also see PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. 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.--Records good except for those estimated, which are poor. Diversions upstream from station for irrigation of about 6,600 acres, a small part of which are downstream from gage.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	17	e18	25	e21	e20	47	201	282	18	5.2	20
2	3.1	16	e16	20	e21	e19	52	188	276	16	5.9	20
3	3.1	16	e18	21	e20	e19	62	204	239	16	6.0	20
4	3.2	19	e17	25	e16	e21	60	190	213	15	5.9	19
5	3.2	23	e16	25	e15	e21	53	167	196	15	4.4	17
6	3.2	22	e15	28	e21	e19	51	155	183	14	4.7	19
7	2.5	21	e15	e22	e18	e21	49	146	159	14	4.5	16
8	1.9	22	e16	e22	e18	e23	42	139	130	14	4.4	11
9	2.1	30	e15	27	e19	e24	39	126	108	14	4.5	10
10	2.6	35	e15	e24	e18	e24	40	125	102	14	4.5	32
11	2.9	31	e16	e23	e18	26	44	118	94	10	4.6	51
12	2.9	29	e16	28	e20	27	43	110	83	5.7	4.6	35
13	2.9	28	e16	e20	e30	29	52	115	73	5.3	4.3	30
14	3.0	30	e17	26	e30	32	71	148	65	e5.3	8.8	26
15	3.0	30	e18	26	e24	35	98	203	58	5.7	7.3	20
16	4.1	27	e19	e21	e23	34	103	241	55	5.1	8.0	16
17	4.3	26	e23	e20	e21	34	91	263	61	5.1	8.1	14
18	3.4	28	e22	e20	e21	35	99	286	67	4.8	7.7	14
19	3.6	25	20	e21	e20	32	110	297	87	4.8	12	13
20	3.8	26	16	e22	e20	35	105	290	79	4.9	9.1	12
21	3.8	e24	20	26	e20	51	89	276	76	5.6	8.3	12
22	3.8	e23	20	27	e19	52	91	271	62	5.1	7.5	11
23	4.9	e23	24	25	e18	53	115	275	53	5.2	5.5	11
24	12	e23	25	e24	e20	62	112	276	40	5.2	4.9	11
25	15	e20	21	25	e20	67	104	310	29	5.3	6.3	11
26	20	e17	18	24	e21	73	123	347	26	5.3	8.9	11
27	32	e14	19	e22	e20	81	147	301	23	5.2	14	9.7
28	28	e15	19	e22	e20	67	161	292	21	5.7	16	10
29	e24	e17	22	e21	---	53	190	309	21	5.8	20	11
30	21	e16	24	e21	---	52	207	310	19	6.3	19	10
31	20	---	21	e21	---	50	---	298	---	5.6	19	---
TOTAL	246.6	693	577	724	572	1,191	2,650	6,977	2,980	267.0	253.9	522.7
MEAN	7.95	23.1	18.6	23.4	20.4	38.4	88.3	225	99.3	8.61	8.19	17.4
MAX	32	35	25	28	30	81	207	347	282	18	20	51
MIN	1.9	14	15	20	15	19	39	110	19	4.8	4.3	9.7
AC-FT	489	1,370	1,140	1,440	1,130	2,360	5,260	13,840	5,910	530	504	1,040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2003, BY WATER YEAR (WY)

MEAN	37.3	36.1	31.4	28.9	30.5	46.6	140	308	196	49.5	49.0	40.4
MAX	116	95.5	54.3	42.2	72.7	129	505	1,231	813	204	222	190
(WY)	(1942)	(1942)	(1942)	(1985)	(1932)	(1989)	(1942)	(1941)	(1941)	(1937)	(1991)	(1929)
MIN	3.09	4.18	9.75	12.0	15.0	15.5	13.3	3.50	1.99	0.86	2.18	2.79
(WY)	(1951)	(1951)	(1951)	(1951)	(1951)	(1951)	(1972)	(2002)	(2002)	(1951)	(2002)	(1950)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1924 - 2003	
ANNUAL TOTAL	4,576.6		17,654.2			
ANNUAL MEAN	12.5		48.4		83.1	
HIGHEST ANNUAL MEAN					235	1941
LOWEST ANNUAL MEAN					12.8	1951
HIGHEST DAILY MEAN	36	Jan 16	347	May 26	2,590	May 14, 1941
LOWEST DAILY MEAN	1.0	Jul 19	1.9	Oct 8	0.20	Jun 27, 1950
ANNUAL SEVEN-DAY MINIMUM	1.1	Jul 19	2.5	Oct 7	0.60	Jul 16, 1951
MAXIMUM PEAK FLOW			395	May 25	a4,200	Aug 29, 1977
MAXIMUM PEAK STAGE			3.45	May 25	b7.10	Aug 29, 1977
INSTANTANEOUS LOW FLOW			1.7	Oct 7	0.06	Jun 26, 1950
ANNUAL RUNOFF (AC-FT)	9,080		35,020		60,230	
10 PERCENT EXCEEDS	28		142		208	
50 PERCENT EXCEEDS	8.0		21		35	
90 PERCENT EXCEEDS	1.6		5.0		12	

a From rating curve extended above 1,600 ft^3/s.
b Maximum gage height, 7.60 ft, Aug. 4, 1967.
e Estimated

08279500 RIO GRANDE AT EMBUDO, NM

LOCATION.--Lat 36°12'20", long 105°57'49", in SW $^1/_4$ SW $^1/_4$ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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: 1900-02. 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 with satellite telemetry. 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. Mar. 1889 to Dec. 1903, nonrecording gage 1,300 ft upstream at different datum. Sept. 1912 to June 1914, water-stage recorder on downstream end of bridge pier at site 200 ft upstream at present datum.

REMARKS.--Records good. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 40,000 acres in New Mexico. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	222	331	294	395	411	331	570	924	305	215	202
2	201	222	347	288	415	392	331	553	900	296	225	202
3	204	221	348	288	429	394	347	547	872	293	207	204
4	202	230	350	302	408	398	345	539	831	290	199	224
5	197	234	361	322	393	389	337	522	745	278	189	212
6	190	252	364	338	392	373	333	482	696	278	189	230
7	189	341	342	340	374	372	318	450	629	279	188	243
8	183	356	349	335	324	391	306	424	590	275	188	231
9	187	358	324	341	297	388	290	410	559	263	192	221
10	190	333	286	346	366	392	287	400	551	251	218	346
11	192	315	272	350	356	391	287	389	606	243	196	371
12	194	287	274	357	367	395	283	379	632	241	197	327
13	187	265	263	360	408	399	292	374	561	234	193	298
14	184	255	285	360	423	407	318	405	518	230	198	276
15	186	251	298	370	424	414	355	472	485	224	190	261
16	187	250	308	361	458	410	391	549	481	221	181	247
17	187	245	328	357	436	442	360	585	537	223	178	245
18	191	240	331	358	419	452	374	687	551	227	175	237
19	194	229	293	352	415	463	392	742	531	218	192	227
20	192	229	301	366	417	458	395	810	507	215	186	220
21	189	249	284	367	414	457	389	825	489	218	192	215
22	190	250	282	373	399	429	374	796	443	213	185	212
23	201	249	286	368	389	397	389	830	437	209	181	210
24	210	251	331	375	380	381	393	825	414	209	180	208
25	212	252	299	376	373	379	372	847	385	208	196	205
26	218	241	272	380	390	385	391	981	358	208	227	202
27	246	256	289	384	397	389	430	932	333	213	200	200
28	236	281	277	391	417	358	468	891	318	221	201	203
29	228	322	284	388	---	321	507	886	315	236	216	203
30	229	326	286	400	---	306	560	875	318	227	202	199
31	226	---	285	403	---	329	---	899	---	218	206	---
TOTAL	6,216	8,012	9,530	10,990	11,075	12,262	10,945	19,876	16,516	7,464	6,082	7,081
MEAN	201	267	307	355	396	396	365	641	551	241	196	236
MAX	246	358	364	403	458	463	560	981	924	305	227	371
MIN	183	221	263	288	297	306	283	374	315	208	175	199
AC-FT	12,330	15,890	18,900	21,800	21,970	24,320	21,710	39,420	32,760	14,800	12,060	14,050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2003, BY WATER YEAR (WY)

MEAN	428	550	520	509	577	708	981	2,003	1,922	762	451	386
MAX	1,795	1,611	1,052	799	888	1,290	3,544	7,228	6,837	3,540	1,699	1,178
(WY)	(1942)	(1942)	(1942)	(1942)	(1987)	(1989)	(1942)	(1941)	(1941)	(1995)	(1957)	(1999)
MIN	182	243	269	300	323	286	274	189	180	163	151	171
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1981)	(2002)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1931 - 2003	
ANNUAL TOTAL	101,391		126,049			
ANNUAL MEAN	278		345		a817	
HIGHEST ANNUAL MEAN					2,077	1942
LOWEST ANNUAL MEAN					301	2002
HIGHEST DAILY MEAN	619	Mar 14	981	May 26	11,700	May 16, 1941
LOWEST DAILY MEAN	145	Aug 15	175	Aug 18	145	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	147	Aug 13	184	Aug 16	147	Aug 13, 2002
MAXIMUM PEAK FLOW			1,050	May 26	b16,200	Jun 19, 1903
MAXIMUM PEAK STAGE			4.18	May 26	15.90	Jun 19, 1903
INSTANTANEOUS LOW FLOW			170	Aug 24	130	Jun 30, 1902
ANNUAL RUNOFF (AC-FT)	201,100		250,000		591,700	
10 PERCENT EXCEEDS	478		533		1,600	
50 PERCENT EXCEEDS	221		322		508	
90 PERCENT EXCEEDS	153		197		256	

a Average discharge for 41 years (water years 1890-1930), 1,238 ft^3/s, 896,900 acre-ft/yr.
b A flood of about 14,000 ft^3/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.

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 mi southwest of La Puente, 6.7 mi upstream from flow line of El Vado Reservoir, and at mile 91.4.

DRAINAGE AREA.--480 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 those estimated, which are poor. Diversions for irrigation of about 10,300 acres upstream from station (1962 determination).

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 9,000 ft^3/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 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	48	e40	e40	e46	e47	210	1,450	808	51	43	57
2	39	48	e38	e37	e45	e45	281	1,430	789	47	40	50
3	47	52	e34	e40	e44	e49	262	1,470	679	44	36	47
4	41	62	e35	e43	e40	e50	224	1,270	602	35	30	49
5	38	60	e33	e42	e37	62	208	933	530	30	26	62
6	36	52	e30	e41	e43	54	203	874	457	28	22	65
7	34	51	e32	e39	e42	61	187	862	386	27	22	68
8	32	56	e30	e36	e40	67	155	789	339	27	23	69
9	32	109	e25	e40	e37	74	177	769	311	26	23	84
10	31	129	e22	e44	e40	86	254	979	294	23	21	1,140
11	30	94	e25	e43	e44	102	354	883	272	23	24	415
12	29	76	e30	e41	e42	129	433	1,180	240	24	24	228
13	28	71	e31	e40	e45	166	478	1,400	213	24	26	170
14	27	75	e29	e36	e60	206	640	1,510	195	20	26	138
15	23	73	e27	e40	e54	225	807	1,870	177	19	23	118
16	22	58	e30	e38	e47	244	581	1,640	162	20	24	106
17	22	57	e35	e36	e48	228	654	1,930	158	19	28	95
18	25	59	e40	e37	e47	196	704	1,900	152	17	28	85
19	26	56	e33	e39	e45	172	592	1,650	162	19	28	78
20	28	57	e30	e41	e47	152	503	1,530	205	20	27	74
21	28	60	e35	e40	e45	171	579	1,470	172	23	26	68
22	28	61	e33	e37	e41	166	779	1,420	141	22	30	62
23	30	62	e30	e35	e37	188	811	1,360	120	21	39	60
24	34	62	e34	e38	e42	244	598	1,230	106	22	51	58
25	37	e45	e37	e41	e45	254	712	1,250	90	19	52	52
26	36	e35	e35	e40	e50	261	1,110	1,360	79	18	58	50
27	49	e30	e33	e36	e51	260	1,530	1,200	75	21	55	50
28	46	e35	e33	e35	e49	192	1,750	1,090	68	46	60	49
29	52	e33	e36	e37	---	157	1,800	1,070	60	68	87	46
30	50	e40	e40	e43	---	148	1,720	950	55	54	75	46
31	48	---	e42	e45	---	162	---	917	---	49	72	---
TOTAL	1,064	1,806	1,017	1,220	1,253	4,618	19,296	39,636	8,097	906	1,149	3,739
MEAN	34.3	60.2	32.8	39.4	44.8	149	643	1,279	270	29.2	37.1	125
MAX	52	129	42	45	60	261	1,800	1,930	808	68	87	1,140
MIN	22	30	22	35	37	45	155	769	55	17	21	46
AC-FT	2,110	3,580	2,020	2,420	2,490	9,160	38,270	78,620	16,060	1,800	2,280	7,420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2003, BY WATER YEAR (WY)

MEAN	88.8	83.1	59.9	55.3	68.5	184	818	1,776	726	127	95.3	77.7
MAX	562	422	131	103	174	523	1,846	4,195	3,200	571	352	320
(WY)	(1987)	(1987)	(1987)	(1987)	(1962)	(1995)	(1962)	(1985)	(1995)	(1957)	(1957)	(1982)
MIN	9.82	24.8	25.9	15.8	26.3	49.9	190	25.0	5.57	4.92	4.16	7.96
(WY)	(1957)	(1957)	(1964)	(1963)	(1964)	(1964)	(2002)	(2002)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1956 - 2003	
ANNUAL TOTAL	16,848.2		83,801			
ANNUAL MEAN	46.2		230		348	
HIGHEST ANNUAL MEAN					723	1985
LOWEST ANNUAL MEAN					46.2	2002
HIGHEST DAILY MEAN	337	Apr 12	1,930	May 17	7,720	May 10, 1985
LOWEST DAILY MEAN	2.4	Aug 25	17	Jul 18	2.4	Aug 25, 2002
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 22	19	Jul 14	2.6	Aug 22, 2002
MAXIMUM PEAK FLOW			2,520	May 18	a11,200	May 28, 1979
MAXIMUM PEAK STAGE			4.93	May 18	6.46	May 14, 1984
INSTANTANEOUS LOW FLOW			16	Jul 17	2.4	Aug 25, 2002
ANNUAL RUNOFF (AC-FT)	33,420		166,200		252,000	
10 PERCENT EXCEEDS	80		809		1,000	
50 PERCENT EXCEEDS	35		50		79	
90 PERCENT EXCEEDS	2.9		26		30	

a From rating curve extended above 5,400 ft^3/s.
e Estimated

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUN													
23...	1400	121	595	6.9	98	8.3	196	27.5	20.0	88	27.0	4.97	1.69
SEP													
30...	1145	46	593	9.0	110	8.3	238	23.0	13.0	100	30.5	6.39	1.81

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
JUN													
23...	0.3	7.08	83	101	1.66	<0.2	21.1	14.1	127	0.20	0.20	<0.01	0.02
SEP													
30...	0.4	8.46	--	--	2.66	<0.2	19.4	18.6	148	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
JUN									
23...	<0.02	<0.010	0.02	0.04	0.03	10	59	93	5
SEP									
30...	--	--	--	--	--	10	30	95	5

Remark codes used in this table:
< -- Less than

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 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 Bureau of Reclamation.

AVERAGE DISCHARGE.--33 years, 124 ft^3/s, 89,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft^3/s, May 17, 1978, gage height, 7.85 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 869 ft^3/s, May 29; no flow most days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	82	287	763	45	13	9.6
2	0.00	0.00	0.00	0.00	0.00	0.00	105	239	741	35	15	4.5
3	0.00	0.00	0.00	0.00	0.00	0.00	62	229	723	22	13	9.6
4	0.00	0.00	0.00	0.00	0.00	0.00	39	204	669	18	7.6	7.1
5	0.00	0.00	0.00	0.00	0.00	0.00	38	143	602	15	2.5	5.0
6	0.00	0.00	0.00	0.00	0.00	0.00	35	105	481	7.1	1.5	14
7	0.00	0.00	0.00	0.00	0.00	0.00	26	91	432	8.1	1.0	28
8	0.00	0.00	0.00	0.00	0.00	0.00	14	84	415	6.6	1.0	18
9	0.00	0.00	0.00	0.00	0.00	0.00	45	54	425	6.0	1.0	207
10	0.00	0.00	0.00	0.00	0.00	0.00	144	60	422	3.0	0.50	654
11	0.00	0.00	0.00	0.00	0.00	0.00	227	50	397	2.9	16	297
12	0.00	0.00	0.00	0.00	0.00	0.00	224	129	356	2.5	5.0	153
13	0.00	0.00	0.00	0.00	0.00	0.00	226	208	334	4.0	0.50	96
14	0.00	0.00	0.00	0.00	0.00	60	307	265	270	2.0	0.00	65
15	0.00	0.00	0.00	0.00	0.00	51	350	425	235	1.0	0.00	43
16	0.00	0.00	0.00	0.00	0.00	55	207	385	229	0.00	0.00	28
17	0.00	0.00	0.00	0.00	0.00	37	243	568	198	0.00	0.00	17
18	0.00	0.00	0.00	0.00	0.00	21	200	599	198	0.00	0.00	9.6
19	0.00	0.00	0.00	0.00	0.00	13	151	548	222	0.00	0.00	6.6
20	0.00	0.00	0.00	0.00	0.00	7.6	127	551	257	0.00	0.00	5.0
21	0.00	0.00	0.00	0.00	0.00	7.1	157	586	189	0.00	0.00	4.5
22	0.00	0.00	0.00	0.00	0.00	5.6	182	672	168	0.00	0.00	2.0
23	0.00	0.00	0.00	0.00	0.00	14	174	701	154	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	52	144	697	135	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	59	188	736	110	0.00	12	0.00
26	0.00	0.00	0.00	0.00	0.00	58	317	684	95	0.00	12	0.00
27	0.00	0.00	0.00	0.00	0.00	54	395	777	81	0.00	4.0	0.00
28	0.00	0.00	0.00	0.00	0.00	30	457	861	78	30	11	0.00
29	0.00	0.00	0.00	0.00	---	21	443	869	56	64	38	0.00
30	0.00	0.00	0.00	0.00	---	12	420	782	52	49	41	0.00
31	0.00	---	0.00	0.00	---	31	---	829	---	18	50	---
TOTAL	0.00	0.00	0.00	0.00	0.00	588.30	5,729	13,418	9,487	339.20	245.60	1,683.50
MEAN	0.000	0.000	0.000	0.000	0.000	19.0	191	433	316	10.9	7.92	56.1
MAX	0.00	0.00	0.00	0.00	0.00	60	457	869	763	64	50	654
MIN	0.00	0.00	0.00	0.00	0.00	0.00	14	50	52	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	1,170	11,360	26,610	18,820	673	487	3,340

CAL YR 2002 TOTAL 3,179.60 MEAN 8.71 MAX 140 MIN 0.00 AC-FT 6,310
WTR YR 2003 TOTAL 31,490.60 MEAN 86.3 MAX 869 MIN 0.00 AC-FT 62,460

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 mi^2.

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 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 Bureau of Reclamation.

AVERAGE DISCHARGE.--8 years (water years 1963-70), 10.5 ft^3/s, 7,610 acre-ft/yr, prior to completion of Azotea tunnel. 33 years (water years 1971-2003), 136 ft^3/s, 98,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft^3/s, Mar. 12, 1985, gage height, 6.65 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 872 ft^3/s, May 29; no flow most days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	99	282	731	33	11	16
2	0.00	0.00	0.00	0.00	0.00	0.00	157	259	711	41	9.6	6.0
3	0.00	0.00	0.00	0.00	0.00	0.00	100	258	678	22	8.6	3.5
4	0.00	0.00	0.00	0.00	0.00	0.00	57	233	688	19	6.6	5.0
5	0.00	0.00	0.00	0.00	0.00	0.00	55	172	596	17	5.0	5.0
6	0.00	0.00	0.00	0.00	0.00	0.00	51	121	488	10	4.5	67
7	0.00	0.00	0.00	0.00	0.00	0.00	41	108	428	7.1	4.5	61
8	0.00	0.00	0.00	0.00	0.00	0.00	26	75	437	6.6	4.0	24
9	0.00	0.00	0.00	0.00	0.00	0.00	42	69	424	4.5	4.0	200
10	0.00	0.00	0.00	0.00	0.00	0.00	165	68	424	1.5	4.0	624
11	0.00	0.00	0.00	0.00	0.00	0.00	281	55	409	1.5	10	243
12	0.00	0.00	0.00	0.00	0.00	0.00	294	112	372	1.0	3.0	178
13	0.00	0.00	0.00	0.00	0.00	0.00	277	210	330	2.0	2.0	109
14	0.00	0.00	0.00	0.00	0.00	192	345	204	275	2.0	0.00	74
15	0.00	0.00	0.00	0.00	0.00	195	368	335	262	1.0	0.00	46
16	0.00	0.00	0.00	0.00	0.00	182	253	458	257	0.00	0.00	28
17	0.00	0.00	0.00	0.00	0.00	150	277	553	201	0.00	0.00	16
18	0.00	0.00	0.00	0.00	0.00	103	247	601	192	0.00	0.00	11
19	0.00	0.00	0.00	0.00	0.00	64	184	531	238	0.00	0.00	5.6
20	0.00	0.00	0.00	0.00	0.00	37	147	570	251	0.00	0.00	3.0
21	0.00	0.00	0.00	0.00	0.00	68	183	554	197	0.00	0.00	2.0
22	0.00	0.00	0.00	0.00	0.00	48	190	651	164	0.00	0.00	2.0
23	0.00	0.00	0.00	0.00	0.00	60	212	684	145	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	80	171	672	144	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	98	204	738	95	0.00	6.0	0.00
26	0.00	0.00	0.00	0.00	0.00	77	308	672	97	0.00	7.1	0.00
27	0.00	0.00	0.00	0.00	0.00	74	389	746	82	0.00	8.1	0.00
28	0.00	0.00	0.00	0.00	0.00	54	444	807	77	14	7.6	0.00
29	0.00	0.00	0.00	0.00	---	40	428	872	60	55	33	0.00
30	0.00	0.00	0.00	0.00	---	23	406	726	53	70	45	0.00
31	0.00	---	0.00	0.00	---	35	---	821	---	15	53	---
TOTAL	0.00	0.00	0.00	0.00	0.00	1,580.00	6,401	13,217	9,506	323.20	236.60	1,729.10
MEAN	0.000	0.000	0.000	0.000	0.000	51.0	213	426	317	10.4	7.63	57.6
MAX	0.00	0.00	0.00	0.00	0.00	195	444	872	731	70	53	624
MIN	0.00	0.00	0.00	0.00	0.00	0.00	26	55	53	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	3,130	12,700	26,220	18,860	641	469	3,430

CAL YR 2002 TOTAL 2,794.50 MEAN 7.66 MAX 136 MIN 0.00 AC-FT 5,540
WTR YR 2003 TOTAL 32,992.90 MEAN 90.4 MAX 872 MIN 0.00 AC-FT 65,440

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 mi^2, approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year (seasonal 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 7,187.01 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to May 1, 2001, datum 1.84 ft higher. Prior to July 1, 1971, at site 1,100 ft upstream at higher datums.

REMARKS.--Records fair. Diversions upstream from station for irrigation of meadows and for off-channel stock tanks.

AVERAGE DISCHARGE.--11 years (water years 1963-73), 1.10 ft^3/s, 797 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft^3/s, July 30, 1968, gage height, 4.9 ft, site and datum then in use, from rating curve extended above 37 ft^3/s on basis of slope-area measurements at gage heights 3.20 ft and 4.9 ft; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 246 ft^3/s, Sept. 6, gage height, 6.12 ft; no flow during most of seasonal operation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00
4	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00
5	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00
6	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	27
7	0.00	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.83
8	---	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.01
9	---	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	45
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	8.1
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	0.25
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	0.02
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	5.3	0.00	e0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.42	0.00	e0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.01	0.00	e0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	e0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	e0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	5.73	0.00	0.00	0.00	81.21
MEAN	---	---	---	---	---	---	---	0.18	0.000	0.000	0.000	2.71
MAX	---	---	---	---	---	---	---	5.3	0.00	0.00	0.00	45
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	11	0.00	0.00	0.00	161

e Estimated

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 mi^2.

PERIOD OF RECORD.--October 1970 to current year. Published as "near Park View" prior to 1976.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by 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 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, 198,770 acre-ft, June 20, elevation, 7,144.87 ft; minimum, 137,250 acre-ft, Sept. 3 and 4, elevation, 7,127.24 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Bureau of Reclamation in 1986)

Elevation	Contents	Elevation	Contents
7,160	263,800	7,180	366,200
7,170	312,700	7,190	424,800

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167,560	164,590	162,440	160,720	159,740	159,770	157,370	161,620	185,630	189,690	156,390	137,520
2	167,460	164,520	162,340	160,690	159,700	159,700	157,130	162,100	186,680	188,690	155,350	137,280
3	167,320	164,450	162,300	160,650	159,670	159,700	156,890	162,540	188,010	187,630	154,320	137,250
4	167,140	164,410	162,240	160,620	159,600	159,700	156,620	162,920	189,310	186,650	153,290	137,250
5	167,030	164,310	162,100	160,590	159,530	159,700	156,320	163,200	190,460	185,590	152,210	137,280
6	166,930	164,200	161,990	160,550	159,500	159,530	156,050	163,370	191,380	184,530	151,090	138,010
7	166,820	164,140	161,920	160,520	159,430	159,330	155,750	163,550	192,110	183,440	149,980	138,010
8	166,750	164,140	161,820	160,480	159,400	159,090	155,460	163,650	192,840	182,360	148,980	137,280
9	166,610	164,480	161,750	160,450	159,360	158,820	155,120	163,680	193,570	181,280	147,940	137,950
10	166,510	164,410	161,680	160,450	159,330	158,620	155,090	163,760	194,580	180,170	146,880	139,960
11	166,400	164,340	161,580	160,450	159,290	158,440	155,120	163,820	195,090	179,060	145,760	140,420
12	166,260	164,240	161,450	160,450	159,260	158,240	155,250	164,000	195,710	177,960	144,780	140,580
13	166,160	164,140	161,380	160,380	159,360	158,310	155,350	164,270	196,300	176,860	143,800	140,610
14	166,090	164,030	161,270	160,350	159,500	158,440	155,620	164,690	196,770	175,690	142,980	140,510
15	165,980	163,960	161,200	160,320	159,530	158,680	155,960	165,420	197,240	174,600	142,200	140,480
16	165,810	163,820	161,170	160,250	159,530	158,950	156,090	166,090	197,670	173,550	141,420	140,330
17	165,740	163,720	161,240	160,210	159,530	159,190	156,390	166,960	198,060	172,470	140,950	140,170
18	165,630	163,580	161,240	160,180	159,600	159,330	156,560	168,270	198,340	171,400	139,920	139,920
19	165,530	163,510	161,200	160,180	159,600	159,330	156,660	169,260	198,650	170,290	139,520	139,740
20	165,420	163,440	161,200	160,110	159,530	159,120	156,690	170,320	198,770	168,900	139,340	139,580
21	165,280	163,440	161,170	160,110	159,500	158,920	156,860	171,360	198,220	167,630	139,120	139,400
22	165,210	163,300	161,140	160,070	159,460	158,680	156,960	172,690	197,630	166,580	139,000	139,180
23	165,210	163,200	161,030	160,040	159,360	158,480	157,100	173,910	196,920	165,390	138,750	139,000
24	165,110	163,100	161,030	160,010	159,430	158,280	157,260	174,640	196,100	164,450	138,690	138,840
25	165,040	162,960	161,000	159,940	159,600	158,140	157,600	175,470	195,240	163,550	138,540	138,630
26	165,040	162,920	160,900	159,940	159,630	157,910	158,140	176,130	194,390	162,440	138,470	138,440
27	165,000	162,780	160,860	159,900	159,770	157,700	158,890	177,300	193,460	161,480	138,510	138,260
28	164,900	162,680	160,830	159,870	159,770	157,630	159,740	178,470	192,460	160,650	138,720	138,040
29	164,900	162,580	160,830	159,770	---	157,670	160,550	180,170	191,610	159,360	138,600	137,830
30	164,860	162,510	160,790	159,770	---	157,670	161,240	182,060	190,680	158,410	138,260	137,620
31	164,760	---	160,760	159,770	---	157,600	---	183,710	---	157,330	137,920	---
MAX	167,560	164,590	162,440	160,720	159,770	159,770	161,240	183,710	198,770	189,690	156,390	140,610
MIN	164,760	162,510	160,760	159,770	159,260	157,600	155,090	161,620	185,630	157,330	137,920	137,250
(+)	7,135.70	7,135.07	7,134.53	7,134.25	7,134.25	7,133.61	7,134.68	7,140.95	7,142.78	7,133.53	7,127.49	7,127.39
(++)	-2,870	-2,250	-1,750	-990	0	-2,170	+3,640	+22,470	+6,970	-33,350	-19,410	-300

CAL YR 2002 MAX 291,070 MIN 160,760 (++) -130,660
WTR YR 2003 MAX 198,770 MIN 137,250 (++) -30,010

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

08284520 WILLOW CREEK BELOW HERON DAM, NM

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, in outlet conduits of Heron Dam, 0.2 mi upstream from Rio Chama, 5.1 mi northeast of El Vado Dam, and 8.7 mi southwest of Los Ojos.

DRAINAGE AREA.--193 mi^2.

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 Bureau of Reclamation.

AVERAGE DISCHARGE.--32 years, 132 ft^3/s, 95,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,780 ft^3/s, Dec. 18 and 19, 1982; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 520 ft^3/s, many days; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	40	40	15	15	15	251	47	0.00	520	520	250
2	40	40	40	15	15	15	200	0.00	0.00	520	520	89
3	40	40	40	15	15	15	200	0.00	0.00	520	520	0.00
4	40	40	40	15	15	15	200	0.00	0.00	520	520	0.00
5	40	40	40	15	15	15	200	0.00	0.00	520	520	40
6	40	40	40	15	15	67	200	0.00	0.00	520	520	80
7	40	40	40	15	15	145	200	0.00	0.00	520	520	80
8	40	40	40	15	15	165	200	0.00	0.00	520	520	80
9	40	40	40	15	15	165	200	0.00	0.00	520	520	80
10	40	40	40	15	15	165	200	0.00	0.00	520	520	80
11	40	40	40	15	15	165	200	0.00	0.00	520	520	80
12	40	40	40	15	15	165	200	0.00	0.00	520	520	80
13	40	40	40	15	15	165	200	0.00	0.00	520	439	80
14	40	40	40	15	15	117	200	0.00	0.00	520	370	80
15	40	40	40	15	15	75	200	0.00	0.00	520	370	80
16	40	40	27	15	15	75	148	0.00	0.00	520	370	80
17	40	40	15	15	15	75	100	0.00	0.00	520	370	80
18	40	40	15	15	15	75	100	0.00	51	520	370	80
19	40	40	15	15	15	114	100	0.00	50	520	241	80
20	40	40	15	15	15	177	100	0.00	188	520	90	80
21	40	40	15	15	15	200	100	0.00	470	520	90	80
22	40	40	15	15	15	200	100	0.00	470	520	90	80
23	40	40	15	15	15	200	100	150	470	520	90	80
24	40	40	15	15	15	200	46	400	500	520	90	80
25	40	40	15	15	15	200	0.00	400	520	520	37	80
26	40	40	15	15	15	200	0.00	400	520	520	0.00	80
27	40	40	15	15	15	200	0.00	143	520	520	0.00	80
28	40	40	15	15	15	88	0.00	0.00	520	520	0.00	80
29	40	40	15	15	---	0.00	0.00	0.00	520	520	94	80
30	40	40	15	15	---	0.00	53	0.00	520	520	250	37
31	40	---	15	15	---	102	---	0.00	---	520	250	---
TOTAL	1,240	1,200	852	465	420	3,575.00	3,998.00	1,540.00	5,319.00	16,120	9,851.00	2,336.00
MEAN	40.0	40.0	27.5	15.0	15.0	115	133	49.7	177	520	318	77.9
MAX	40	40	40	15	15	200	251	400	520	520	520	250
MIN	40	40	15	15	15	0.00	0.00	0.00	0.00	520	0.00	0.00
AC-FT	2,460	2,380	1,690	922	833	7,090	7,930	3,050	10,550	31,970	19,540	4,630

CAL YR	2002	TOTAL	64,557.00	MEAN	177	MAX	920	MIN	0.00	AC-FT	128,000
WTR YR	2003	TOTAL	46,916.00	MEAN	129	MAX	520	MIN	0.00	AC-FT	93,060

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 mi^2, of which about 100 mi^2 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 Oct. 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 Jan. 1935. Capacity 186,250 acre-ft from capacity table of 1987 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 Dec. 1972, for storage of contract water from San Juan-Chama Project. Rehabilitation of outlet works, completed in Dec. 1966, increased valve-controlled release from about 1,750 ft^3/s to about 6,000 ft^3/s.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 204,900 acre-ft, of which 7,400 acre-ft was uncontrolled storage, Sept. 29, 2000, gage height, 6,826.08 ft; no storage at times prior to Dec. 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 106,550 acre-ft, June 9, gage height, 6,873.01 ft; minimum, 7,900 acre-ft, Oct. 19-22, gage height, 6,796.79 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Bureau of Reclamation in 1987)

Gage height	Contents	Gage height	Contents	Gage height	Contents	Gage height	Contents	Gage height	Contents
6,820	25,620	6,830	42,400	6,850	63,730	6,885	135,900	6,901	183,040
6,825	30,720	6,840	48,980	6,865	89,870	6,895	164,400		
6,830	36,330	6,845	56,100	6,875	111,000	6,900	179,800		

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,950	8,110	10,420	11,220	12,740	15,800	22,340	45,840	101,770	97,020	61,070	38,170
2	7,940	8,150	10,460	11,220	12,850	15,900	22,540	48,270	103,060	96,240	59,540	37,820
3	7,950	8,190	10,530	11,220	12,940	16,000	22,640	50,700	104,040	95,400	58,020	37,290
4	7,960	8,260	10,590	11,230	13,020	16,100	22,600	52,860	104,910	94,540	56,500	36,660
5	7,980	8,330	10,640	11,250	13,130	16,210	22,480	54,030	105,660	93,740	54,940	36,200
6	7,980	8,380	10,660	11,270	13,190	16,260	22,340	55,040	105,990	92,890	53,060	36,320
7	7,980	8,420	10,690	11,290	13,280	16,310	22,290	55,980	106,350	92,140	51,430	36,150
8	7,980	8,500	10,720	11,310	13,340	16,360	22,330	56,670	106,530	91,420	49,810	36,100
9	7,980	8,810	10,760	11,330	13,400	16,420	22,450	57,140	106,550	90,730	48,220	36,350
10	7,980	9,040	10,770	11,350	13,470	16,500	22,650	58,020	106,480	89,950	46,510	38,560
11	7,960	9,160	10,800	11,380	13,530	16,610	22,900	58,710	106,350	89,020	46,040	39,380
12	7,960	9,270	10,810	11,400	13,610	16,770	23,280	59,880	106,150	87,960	44,740	39,790
13	7,950	9,360	10,840	11,420	13,760	17,060	23,730	61,430	105,860	86,930	44,160	40,080
14	7,940	9,440	10,860	11,440	13,940	17,370	24,420	63,350	105,550	85,920	43,700	40,170
15	7,920	9,530	10,890	11,480	14,120	17,660	25,420	65,670	105,020	84,910	43,250	40,170
16	7,910	9,600	10,940	11,530	14,260	18,010	25,980	67,970	104,210	83,730	42,790	40,140
17	7,910	9,650	11,020	11,580	14,380	18,360	26,550	70,860	103,210	82,320	42,360	40,040
18	7,910	9,700	11,040	11,640	14,530	18,610	27,220	73,690	102,480	80,870	41,870	39,990
19	7,900	9,750	11,040	11,690	14,640	18,860	27,650	76,220	102,010	79,450	41,470	39,980
20	7,900	9,830	11,030	11,740	14,740	19,150	27,900	78,670	101,730	78,190	40,940	39,960
21	7,900	9,880	11,030	11,800	14,840	19,490	28,300	80,990	101,710	76,790	40,430	39,950
22	7,900	9,950	11,040	11,870	14,960	19,840	29,080	83,360	101,620	75,400	39,960	39,930
23	7,910	10,010	11,060	11,980	15,020	20,220	29,920	85,540	101,410	73,960	39,430	39,870
24	7,920	10,070	11,090	12,010	15,140	20,720	30,380	87,400	101,240	72,550	38,990	39,860
25	7,930	10,140	11,120	12,100	15,290	21,310	30,920	89,970	100,920	71,090	38,850	39,760
26	7,960	10,190	11,130	12,180	15,420	21,730	32,260	91,560	100,430	69,570	38,700	39,610
27	8,010	10,230	11,140	12,280	15,570	22,240	33,850	93,320	99,860	68,090	38,630	39,460
28	8,040	10,270	11,140	12,370	15,700	22,490	37,180	95,740	99,180	66,690	38,580	39,300
29	8,070	10,310	11,150	12,460	---	22,490	40,860	97,450	98,450	65,300	38,440	39,090
30	8,080	10,360	11,180	12,540	---	22,460	43,220	99,000	97,680	63,880	38,440	38,690
31	8,090	---	11,200	12,650	---	22,340	---	100,470	---	62,500	38,340	---
MAX	8,090	10,360	11,200	12,650	15,700	22,490	43,220	100,470	106,550	97,020	61,070	40,170
MIN	7,900	8,110	10,420	11,220	12,740	15,800	22,290	45,840	97,680	62,500	38,340	36,100
(+)	6,797.12	6,800.88	6,802.19	6,804.35	6,808.54	6,816.51	6,835.65	6,870.21	6,868.88	6,849.22	6,831.70	6,831.99
(++)	+130	+2,270	+840	+1,450	+3,050	+6,640	+20,880	+57,250	-2,790	-35,180	-24,160	+350

CAL YR 2002 MAX 112,010 MIN 7,900 (++) -87,920
WTR YR 2003 MAX 106,550 MIN 7,900 (++) +30,730

(+) Gage height, in feet, at end of month.
(++) Change in contents, in acre-feet.

08285500 RIO CHAMA BELOW EL VADO DAM, NM

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, Hydrologic Unit 13020102, in Tierra Amarilla Grant, on left bank 1.5 mi downstream from El Vado Dam, 2.8 mi upstream from Rio Nutrias, 13 mi southwest of Tierra Amarilla, and at mile 76.2.

DRAINAGE AREA.--877 mi^2, of which about 100 mi^2 probably is 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 with satellite telemetry. Datum of gage is 6,696.12 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1935, at site 1.5 mi upstream at different datum. Oct. 1935 to Sept. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4 or 5, 1911, was greater than floods in Sept. 1904 and May 1920, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	70	60	47	16	22	350	110	107	875	1,300	327
2	83	62	60	49	17	22	351	111	108	871	1,340	297
3	72	62	61	49	17	22	349	112	108	870	1,330	295
4	71	62	59	49	17	22	377	113	107	868	1,330	340
5	71	62	59	49	17	22	396	226	126	866	1,320	276
6	70	62	59	49	18	74	395	295	189	866	1,310	234
7	70	63	59	49	18	161	341	323	212	864	1,310	233
8	69	63	58	49	18	177	283	367	213	862	1,320	196
9	69	70	57	49	18	176	262	421	265	836	1,310	214
10	68	64	57	49	19	176	284	438	297	896	1,290	165
11	68	64	57	49	19	176	361	438	296	979	1,170	108
12	68	64	57	49	19	176	394	438	296	1,030	1,020	103
13	69	63	57	49	20	176	395	481	296	1,030	720	104
14	69	63	57	49	20	162	439	472	296	1,030	591	151
15	68	65	57	37	20	151	479	414	384	1,030	588	193
16	62	65	39	27	21	152	404	330	527	1,120	588	193
17	61	65	36	27	21	153	410	293	584	1,260	588	193
18	64	65	47	27	21	153	444	294	539	1,280	586	166
19	64	65	47	27	21	154	445	239	413	1,180	438	147
20	64	65	47	27	21	154	447	155	443	1,180	344	147
21	65	64	47	27	21	155	451	113	596	1,230	343	147
22	65	64	47	28	21	155	450	106	592	1,270	343	147
23	65	63	47	28	21	155	449	240	590	1,270	344	147
24	65	64	47	21	21	155	393	506	589	1,270	344	148
25	65	63	47	14	22	156	343	509	650	1,280	209	177
26	66	62	47	16	23	156	344	512	761	1,290	106	197
27	65	62	47	16	22	156	346	271	806	1,290	105	197
28	65	62	47	15	23	157	270	105	804	1,290	111	196
29	74	62	47	15	---	157	188	105	853	1,290	262	217
30	80	60	47	16	---	157	128	105	881	1,290	324	272
31	79	---	47	16	---	267	---	105	---	1,280	328	---
TOTAL	2,143	1,910	1,607	1,068	552	4,307	10,968	8,747	12,928	33,843	22,612	5,927
MEAN	69.1	63.7	51.8	34.5	19.7	139	366	282	431	1,092	729	198
MAX	89	70	61	49	23	267	479	512	881	1,290	1,340	340
MIN	61	60	36	14	16	22	128	105	107	836	105	103
AC-FT	4,250	3,790	3,190	2,120	1,090	8,540	21,760	17,350	25,640	67,130	44,850	11,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	222	182	270	155	165	287	792	1,542	853	439	391	333
MAX	640	646	1,272	435	522	962	1,887	3,412	2,342	1,092	729	1,010
(WY)	(1998)	(1987)	(1976)	(1987)	(1986)	(1985)	(1986)	(1985)	(1995)	(2003)	(2003)	(1998)
MIN	36.7	43.9	51.8	23.9	17.1	27.8	33.2	262	186	126	54.4	50.6
(WY)	(1979)	(1977)	(2003)	(1978)	(1976)	(1973)	(1973)	(1972)	(1976)	(1985)	(1971)	(1972)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	124,521		106,612			
ANNUAL MEAN	341		292		a471	
HIGHEST ANNUAL MEAN					754	1985
LOWEST ANNUAL MEAN					194	1972
HIGHEST DAILY MEAN	1,030	Jun 18	1,340	Aug 2	b5,790	May 21, 1973
LOWEST DAILY MEAN	29	Sep 7	14	Jan 25	11	Oct 1, 1972
ANNUAL SEVEN-DAY MINIMUM	41	Sep 7	15	Jan 25	15	Jan 25, 2003
ANNUAL RUNOFF (AC-FT)	247,000		211,500		341,000	
10 PERCENT EXCEEDS	831		873		1,080	
50 PERCENT EXCEEDS	199		147		223	
90 PERCENT EXCEEDS	60		22		49	

a Average discharge for 5 years (water years 1914-15, 1921-23), 448 ft^3/s, 324,600 acre-ft/yr, prior to completion of El Vado Dam. 35 years (water years 1936-70), 373 ft^3/s, 270,200 acre-ft/yr, prior to release of transmountain water.
b Maximum discharge 9,000 ft^3/s, May 22, 1920, gage height, 12 ft, site and datum then in use, from rating curve extended above 3,500 ft^3/s; no flow Mar. 25, 26, 31, 1955. Maximum discharge since construction of El Vado Dam in 1935, 6,610 ft^3/s, May 7, 1985, gage height, 7.08 ft.

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, 9.0 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 mi^2, of which about 100 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1961 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Aug. 1961 to Oct. 1998, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--Records good except for those estimated, 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred on Sept. 29, 1904, Oct. 4 or 5, 1911, and May 22, 1920.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	72	55	e50	e12	e7.0	346	143	121	866	1,240	330
2	79	60	54	e52	e12	e8.0	351	141	116	864	1,290	331
3	67	52	58	e43	e12	e10	355	137	109	863	1,290	264
4	60	56	58	e42	e10	e11	365	142	104	861	1,280	361
5	59	55	57	e46	e8.0	e12	403	162	100	861	1,280	343
6	59	54	55	e48	e7.0	14	405	329	139	860	1,270	474
7	59	53	e53	e43	e6.0	66	392	332	211	860	1,270	281
8	59	54	e50	e40	e5.0	167	317	368	213	855	1,270	237
9	59	116	e47	e35	e6.0	173	267	417	222	801	1,270	229
10	59	117	e42	e32	e9.0	175	272	453	301	828	1,260	1,200
11	58	70	e40	e32	e12	173	335	465	300	908	1,200	209
12	59	64	e38	e46	e14	179	413	468	300	985	1,050	118
13	59	58	e38	e45	e18	180	410	489	298	984	798	101
14	59	56	e40	e53	21	180	422	526	296	983	604	96
15	59	56	e40	e35	21	154	499	482	322	982	588	176
16	59	55	e40	e31	15	150	486	424	460	1,020	596	186
17	53	54	e40	e28	15	159	397	350	572	1,170	581	184
18	56	54	e40	e24	16	165	470	358	570	1,260	577	182
19	57	54	e42	e21	19	170	476	354	488	1,150	529	137
20	55	54	e43	e20	15	156	473	258	368	1,140	354	134
21	55	54	e44	e20	14	159	469	173	590	1,170	351	134
22	56	54	e44	e20	12	156	471	152	593	1,220	353	133
23	58	55	e51	e22	13	152	482	147	596	1,220	372	134
24	60	54	e52	e23	11	155	467	488	597	1,220	363	134
25	57	54	e53	e20	e10	157	373	538	619	1,220	351	135
26	59	54	e53	e15	e10	154	373	556	718	1,260	216	184
27	83	54	e48	e13	e9.0	155	382	503	791	1,260	145	185
28	67	54	e46	e11	e8.0	154	374	149	791	1,270	e190	185
29	62	54	e45	e11	---	152	254	138	818	1,250	e398	183
30	75	54	e46	e11	---	150	192	131	870	1,240	406	231
31	74	---	e49	e11	---	164	---	124	---	1,240	397	---
TOTAL	1,916	1,805	1,461	943	340.0	4,017.0	11,691	9,897	12,593	32,671	23,139	7,211
MEAN	61.8	60.2	47.1	30.4	12.1	130	390	319	420	1,054	746	240
MAX	83	117	58	53	21	180	499	556	870	1,270	1,290	1,200
MIN	53	52	38	11	5.0	7.0	192	124	100	801	145	96
AC-FT	3,800	3,580	2,900	1,870	674	7,970	23,190	19,630	24,980	64,800	45,900	14,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	233	188	276	162	187	327	846	1,643	893	448	409	340
MAX	737	676	1,273	431	495	1,050	1,985	3,741	2,619	1,054	784	1,036
(WY)	(1998)	(1987)	(1976)	(1987)	(1987)	(1985)	(1985)	(1984)	(1995)	(2003)	(1998)	(1998)
MIN	40.1	48.4	47.1	29.1	12.1	44.1	106	259	185	132	86.1	77.9
(WY)	(1979)	(1977)	(2003)	(1978)	(2003)	(1977)	(1977)	(1972)	(1976)	(1985)	(1979)	(1972)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	121,981		107,684.0			
ANNUAL MEAN	334		295		a498	
HIGHEST ANNUAL MEAN					823	1980
LOWEST ANNUAL MEAN					204	1972
HIGHEST DAILY MEAN	1,030	Jul 23	1,290	Aug 2	6,480	May 18, 1984
LOWEST DAILY MEAN	26	Sep 9	5.0	Feb 8	5.0	Feb 8, 2003
ANNUAL SEVEN-DAY MINIMUM	39	Dec 11	7.3	Feb 4	7.3	Feb 4, 2003
MAXIMUM PEAK FLOW			2,100	Sep 10	6,680	May 8, 1985
MAXIMUM PEAK STAGE			8.53	Sep 10	9.08	Jul 22, 2002
INSTANTANEOUS LOW FLOW			5.0	Feb 8	5.0	Feb 8, 2003
ANNUAL RUNOFF (AC-FT)	241,900		213,600		360,400	
10 PERCENT EXCEEDS	860		865		1,130	
50 PERCENT EXCEEDS	212		147		233	
90 PERCENT EXCEEDS	54		17		61	

a Average discharge for 9 years (water years 1962-70), 358 ft^3/s, 259,400 acre-ft/yr, prior to release of transmountain water.
e Estimated

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to December 1974, April 2003 to September 2003.
WATER TEMPERATURE: October 1962 to December 1974, April 2003 to September 2003.

INSTRUMENTATION.--Specific conductance and thermistor since March 2003. Hourly data logged.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 microsiemens, Sept. 9, 2003; minimum, 149 microsiemens, during many summer months.
WATER TEMPERATURE: Maximum, 32.0 °C, Aug. 19, 1964; minimum, freezing point many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 microsiemens, Sept. 9; minimum, 149 microsiemens, during many summer months.
WATER TEMPERATURE: Maximum, 22.9 °C, Aug. 27; minimum, 4.8 °C, Apr. 8.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	321	319	320
2	---	---	---	---	---	---	400	394	397	333	321	327
3	---	---	---	---	---	---	399	393	396	332	328	330
4	---	---	---	---	---	---	396	387	391	329	319	323
5	---	---	---	---	---	---	395	384	387	320	311	315
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	389	378	383	---	---	---
9	---	---	---	---	---	---	388	380	384	---	---	---
10	---	---	---	---	---	---	383	378	381	---	---	---
11	---	---	---	---	---	---	378	372	375	---	---	---
12	---	---	---	---	---	---	373	358	362	---	---	---
13	---	---	---	---	---	---	364	344	356	---	---	---
14	---	---	---	---	---	---	346	339	342	---	---	---
15	---	---	---	---	---	---	344	337	340	---	---	---
16	---	---	---	---	---	---	344	332	337	---	---	---
17	---	---	---	---	---	---	334	328	332	---	---	---
18	---	---	---	---	---	---	328	322	324	---	---	---
19	---	---	---	---	---	---	322	292	305	---	---	---
20	---	---	---	---	---	---	297	291	294	---	---	---
21	---	---	---	---	---	---	292	288	291	---	---	---
22	---	---	---	---	---	---	288	252	272	---	---	---
23	---	---	---	---	---	---	266	260	263	---	---	---
24	---	---	---	---	---	---	264	260	262	---	---	---
25	---	---	---	---	---	---	273	264	269	---	---	---
26	---	---	---	---	---	---	290	271	277	---	---	---
27	---	---	---	---	---	---	302	290	297	---	---	---
28	---	---	---	---	---	---	306	300	303	---	---	---
29	---	---	---	---	---	---	314	304	308	294	263	290
30	---	---	---	---	---	---	320	311	315	298	285	291
31	---	---	---	---	---	---	---	---	---	298	286	290
MONTH	---	---	---	---	---	---	400	252	331	333	263	311

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	297	282	289	154	150	152	240	228	233	332	304	313
2	295	283	290	153	149	151	234	228	231	310	300	302
3	297	281	287	153	149	151	236	229	234	439	301	319
4	296	280	287	153	149	152	234	230	232	757	297	339
5	292	276	282	154	150	153	235	233	234	645	311	369
6	284	245	265	155	150	153	235	232	234	662	317	486
7	245	203	216	---	---	---	238	230	234	617	333	391
8	205	190	195	---	---	---	238	229	234	357	337	345
9	198	189	194	163	157	161	238	230	234	2,200	342	485
10	195	174	184	166	157	162	241	228	236	954	485	581
11	181	168	174	166	162	164	315	233	246	564	503	528
12	177	170	173	170	163	168	312	237	255	---	---	---
13	177	169	172	173	169	171	252	244	248	---	---	---
14	175	167	169	---	---	---	324	250	264	---	---	---
15	174	164	168	---	---	---	265	239	259	---	---	---
16	165	156	161	---	---	---	494	248	290	317	301	307
17	160	152	157	---	---	---	260	255	258	308	296	302
18	159	151	155	---	---	---	262	255	259	305	295	301
19	259	152	160	---	---	---	260	254	258	315	297	304
20	243	163	171	---	---	---	273	257	268	316	312	315
21	163	151	157	---	---	---	273	268	270	315	311	312
22	158	149	153	---	---	---	347	268	276	314	310	312
23	158	149	153	---	---	---	945	267	330	313	310	311
24	157	151	153	---	---	---	652	284	366	315	311	312
25	156	149	153	225	219	223	2,180	279	417	314	311	313
26	157	152	154	227	219	225	628	339	384	313	301	308
27	157	151	155	---	---	---	378	352	366	304	298	301
28	156	150	153	---	---	---	---	---	---	303	298	301
29	155	150	154	---	---	---	---	---	---	305	300	302
30	154	151	153	233	220	228	1,530	381	681	305	296	300
31	---	---	---	235	228	232	937	332	516	---	---	---
MONTH	297	149	190	235	149	176	2,180	228	295	2,200	295	348
YEAR	2,200	149	277									

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	14.9	7.8	11.3
2	---	---	---	---	---	---	11.0	7.6	9.0	16.2	9.0	12.5
3	---	---	---	---	---	---	10.4	6.5	8.1	15.6	10.8	12.9
4	---	---	---	---	---	---	10.7	6.0	8.2	14.3	9.3	11.7
5	---	---	---	---	---	---	10.4	6.8	8.3	12.8	8.1	10.8
6	---	---	---	---	---	---	10.4	---	---	11.4	8.4	10.0
7	---	---	---	---	---	---	8.4	6.3	---	12.6	7.6	9.8
8	---	---	---	---	---	---	11.5	4.8	7.8	12.8	9.0	10.6
9	---	---	---	---	---	---	14.3	6.3	9.8	13.1	8.4	10.7
10	---	---	---	---	---	---	14.9	7.2	10.7	11.9	8.6	10.1
11	---	---	---	---	---	---	13.1	8.1	10.2	13.1	8.2	10.6
12	---	---	---	---	---	---	11.9	8.1	9.7	13.2	9.6	11.3
13	---	---	---	---	---	---	12.5	8.1	10.1	11.9	9.9	10.9
14	---	---	---	---	---	---	12.2	9.0	10.5	12.3	9.3	11.0
15	---	---	---	---	---	---	10.6	6.6	8.8	12.2	10.6	11.7
16	---	---	---	---	---	---	12.2	5.9	8.8	15.2	9.3	12.2
17	---	---	---	---	---	---	12.9	8.7	10.5	16.7	11.7	14.1
18	---	---	---	---	---	---	10.7	7.7	9.2	15.1	11.8	13.1
19	---	---	---	---	---	---	9.9	8.7	9.2	15.2	11.0	13.1
20	---	---	---	---	---	---	12.6	7.7	9.8	17.1	11.3	13.8
21	---	---	---	---	---	---	12.1	9.0	10.4	19.4	10.8	14.9
22	---	---	---	---	---	---	12.6	9.3	10.5	20.5	12.7	16.5
23	---	---	---	---	---	---	10.2	7.4	8.8	18.9	14.1	16.7
24	---	---	---	---	---	---	12.4	7.3	9.5	16.6	13.3	14.5
25	---	---	---	---	---	---	14.2	8.8	11.4	13.7	11.5	12.5
26	---	---	---	---	---	---	14.7	10.2	12.2	15.1	9.9	12.6
27	---	---	---	---	---	---	14.2	10.5	12.3	15.0	11.8	13.8
28	---	---	---	---	---	---	13.4	10.1	11.7	20.6	12.8	16.6
29	---	---	---	---	---	---	15.6	9.2	11.8	21.3	14.9	18.3
30	---	---	---	---	---	---	15.4	9.0	11.9	22.5	15.0	18.4
31	---	---	---	---	---	---	---	---	---	20.8	14.9	17.8
MONTH	---	---	---	---	---	---	15.6	4.8	10.0	22.5	7.6	13.1

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, NM—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.8	15.3	17.9	16.4	11.8	14.4	17.3	14.2	16.0	21.1	16.1	18.3
2	21.8	13.9	18.0	16.2	11.0	13.9	16.9	14.3	15.8	21.5	16.7	18.8
3	21.1	15.2	18.2	16.4	11.1	14.0	18.3	14.2	16.3	20.4	16.9	18.5
4	21.6	14.2	18.0	16.5	11.1	14.2	18.5	14.1	16.6	20.2	16.4	17.8
5	21.2	14.6	17.8	15.6	11.3	13.9	18.8	13.8	16.4	20.4	15.7	17.6
6	20.9	13.6	17.3	15.5	11.4	13.9	17.5	14.3	16.1	18.4	14.6	16.7
7	19.3	13.2	16.2	16.6	11.9	14.6	18.5	14.5	16.3	20.0	15.6	17.4
8	20.1	12.9	16.4	16.9	11.5	14.6	18.8	14.5	16.7	20.0	14.9	17.3
9	20.5	13.7	16.8	16.8	11.8	14.8	17.9	14.7	16.6	17.8	15.1	16.4
10	19.0	13.7	16.1	17.4	11.9	15.0	18.4	14.7	16.6	16.1	13.6	14.9
11	19.0	13.0	15.7	17.2	12.4	15.1	18.0	14.7	16.5	18.1	12.9	15.4
12	19.0	12.5	15.5	16.2	12.2	14.6	18.5	14.9	16.9	19.1	12.7	15.8
13	17.2	13.2	15.1	16.6	12.1	14.7	19.1	14.8	17.2	19.9	13.1	16.5
14	17.6	11.6	14.6	16.1	12.1	14.4	18.7	16.4	17.8	19.9	12.9	16.5
15	20.3	13.4	16.3	16.7	12.6	14.9	18.2	15.8	17.2	19.2	13.6	16.3
16	17.3	13.9	15.1	16.0	12.9	14.7	17.5	15.9	16.5	19.1	13.1	16.0
17	14.1	11.5	13.0	17.6	12.4	15.1	17.9	15.1	16.5	18.5	13.6	15.9
18	12.7	10.6	11.8	17.7	12.8	15.5	18.9	15.2	17.1	18.1	13.0	15.3
19	14.2	11.8	12.9	18.0	13.5	16.0	20.0	16.5	18.2	18.0	11.4	14.6
20	15.6	12.0	13.7	16.8	13.4	15.3	21.2	17.0	18.4	17.7	12.0	14.8
21	15.5	11.1	13.6	17.4	13.4	15.6	19.5	16.2	17.9	17.9	11.7	14.7
22	15.7	11.6	13.8	17.8	13.4	15.8	20.2	17.1	18.2	18.1	11.2	14.6
23	15.8	11.6	13.9	17.0	13.9	15.6	19.2	13.9	16.9	18.5	12.3	15.3
24	15.8	11.6	13.9	18.1	13.3	15.7	19.5	16.2	17.5	18.7	12.7	15.7
25	15.8	11.8	13.9	17.9	13.9	16.1	21.3	16.6	18.4	19.8	13.6	16.6
26	15.2	10.3	13.2	17.1	13.9	15.8	21.4	17.4	19.1	19.5	13.6	16.3
27	15.6	10.2	13.3	16.6	13.8	15.4	22.9	17.3	19.9	18.8	12.8	15.7
28	15.7	10.4	13.4	17.8	14.1	15.9	20.5	17.9	---	19.0	12.7	15.8
29	14.9	10.8	13.3	17.4	14.1	15.7	21.8	16.2	---	18.6	13.0	15.7
30	16.2	10.8	13.7	18.2	14.3	16.2	19.8	16.2	17.8	18.0	12.6	15.1
31	---	---	---	17.9	14.0	16.2	19.2	14.2	16.7	---	---	---
MONTH	21.8	10.2	15.1	18.2	11.0	15.1	22.9	13.8	17.2	21.5	11.2	16.2
YEAR	22.9	4.8	14.5									

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 mi^2, of which about 100 mi^2 probably is 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. Army 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 1990 survey. No dead storage. Reservoir is used for flood control and, since Mar. 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 Dec. 1975. U.S. Army Corps of Engineers satellite telemetry 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, 73,060 acre-ft, Aug. 14, elevation, 6,186.70 ft; minimum, 41,250 acre-ft, Oct. 21, elevation, 6,171.17 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Army Corps of Engineers in 1997)

Elevation	Contents	Elevation	Contents
6,180	57,260	6,200	111,760
6,190	81,920	6,220	183,880

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46,860	41,780	43,080	43,760	43,830	43,270	43,050	46,070	46,960	43,580	59,270	66,510
2	46,540	41,840	43,140	43,790	43,790	43,260	43,050	45,880	46,910	43,730	60,130	66,510
3	46,280	41,890	43,220	43,780	43,760	43,240	43,060	45,780	46,870	43,860	61,270	66,610
4	45,970	41,920	43,300	43,780	43,710	43,220	43,110	45,620	46,800	43,990	62,460	66,830
5	45,660	41,920	43,350	43,810	43,660	43,190	43,180	45,300	46,560	44,140	63,420	66,980
6	45,330	41,960	43,390	43,840	43,630	43,140	43,220	45,280	46,380	44,290	64,180	67,050
7	45,080	41,950	43,400	43,880	43,580	43,140	43,290	45,370	46,180	44,470	65,010	67,120
8	44,690	42,140	43,420	43,860	43,530	43,190	43,270	45,350	45,690	44,670	65,780	66,980
9	44,220	42,260	43,470	43,890	43,480	43,450	43,260	45,200	45,180	44,740	67,120	68,210
10	43,910	42,390	43,500	43,920	43,450	43,740	43,260	45,180	44,670	44,840	68,960	69,670
11	43,550	42,500	43,520	43,920	43,420	43,940	43,430	45,260	44,040	44,890	70,650	69,940
12	43,240	42,550	43,530	43,960	43,390	44,070	43,700	45,200	43,270	45,180	71,880	69,740
13	42,930	42,570	43,580	44,010	43,430	43,990	43,960	44,520	42,850	45,470	72,880	69,520
14	42,610	42,580	43,610	44,040	43,430	43,840	44,120	43,340	42,600	45,730	73,060	69,310
15	42,250	42,600	43,630	44,060	43,420	43,650	44,310	42,580	42,120	46,000	72,680	69,260
16	41,900	42,630	43,710	44,060	43,420	43,470	44,540	42,610	41,860	46,310	72,320	69,210
17	41,570	42,660	43,740	44,060	43,400	43,430	44,540	42,760	41,810	46,750	71,980	69,090
18	41,420	42,690	43,740	44,020	43,400	43,610	44,510	43,050	42,010	47,300	71,750	68,840
19	41,340	42,710	43,760	44,020	43,390	43,810	44,540	43,210	42,250	47,870	71,540	68,460
20	41,260	42,720	43,730	44,010	43,370	43,940	44,560	43,480	42,260	48,430	71,260	68,060
21	41,250	42,770	43,700	43,990	43,320	44,070	44,720	43,610	42,470	49,090	71,010	67,640
22	41,280	42,790	43,680	43,970	43,290	44,160	44,980	43,660	42,840	49,830	70,680	67,220
23	41,310	42,790	43,700	43,990	43,270	44,240	45,200	43,730	43,110	50,640	70,300	66,880
24	41,340	42,790	43,700	43,990	43,240	44,220	45,330	44,370	43,220	51,490	69,920	66,510
25	41,370	42,890	43,730	43,990	43,240	44,090	45,450	45,230	43,220	52,120	69,390	66,100
26	41,450	42,950	43,760	43,970	43,260	43,910	45,560	46,070	43,190	52,990	68,510	65,810
27	41,510	42,980	43,740	43,960	43,270	43,650	45,800	46,720	43,220	54,090	67,570	65,590
28	41,570	43,000	43,740	43,920	43,270	43,500	46,020	46,940	43,320	55,390	66,980	65,370
29	41,640	43,030	43,760	43,910	---	43,450	46,180	46,980	43,080	56,510	66,780	65,180
30	41,700	43,060	43,740	43,880	---	43,420	46,180	47,000	43,270	57,450	66,680	65,040
31	41,730	---	43,740	43,880	---	43,140	---	47,000	---	58,350	66,610	---
MAX	46,860	43,060	43,760	44,060	43,830	44,240	46,180	47,000	46,960	58,350	73,060	69,940
MIN	41,250	41,780	43,080	43,760	43,240	43,140	43,050	42,580	41,810	43,580	59,270	65,040
(+)	6,171.48	6,172.32	6,172.74	6,172.82	6,172.45	6,172.37	6,174.18	6,174.65	6,172.45	6,180.53	6,184.14	6,183.49
(++)	-5,490	+1,330	+680	+140	-610	-130	+3,040	+820	-3,730	+15,080	+8,260	-1,570

CAL YR 2002 MAX 156,450 MIN 41,250 (++) -87,420
WTR YR 2003 MAX 73,060 MIN 41,250 (++) +17,820

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

08287000 RIO CHAMA BELOW ABIQUIU DAM, NM

LOCATION.--Lat 36°14'12", long 106°24'59", in SE ¼ SE ¼ 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 mi^2, of which about 100 mi^2 probably is noncontributing.

PERIOD OF RECORD.--October 1961 to current year (monthly discharge only, October 1961).

REVISED RECORDS.--WDR-NM-90: 1989.

GAGE.--Water-stage recorder with satellite telemetry. 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 except for those estimated, which are fair. Flow regulated by El Vado Reservoir (station 08285000) 46.4 mi upstream and Abiquiu Reservoir (station 08286900) 0.8 mi upstream since Feb. 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. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	52	49	49	37	37	393	238	168	864	787	349
2	260	52	49	49	37	37	392	232	150	844	790	310
3	206	52	48	49	37	37	392	236	144	829	793	340
4	205	52	48	49	37	37	392	258	144	855	797	366
5	253	52	49	49	37	37	393	326	201	894	837	366
6	252	52	49	49	37	37	393	327	283	873	907	364
7	253	52	49	49	37	55	363	327	333	806	918	361
8	285	52	49	49	37	69	341	384	403	806	916	360
9	304	51	49	49	37	69	316	442	476	828	685	312
10	279	50	49	49	37	69	302	478	547	851	424	288
11	239	50	49	49	37	69	340	475	656	892	446	308
12	240	50	49	49	37	101	340	522	726	912	423	277
13	239	50	49	49	37	e223	359	924	582	911	414	201
14	259	50	49	49	37	e292	476	1,210	481	916	614	200
15	269	50	49	49	37	303	474	963	567	909	831	198
16	268	49	49	49	37	303	457	396	612	926	860	234
17	268	49	49	44	37	123	516	287	601	971	866	258
18	223	49	49	37	37	83	534	288	495	937	771	290
19	162	49	49	37	37	83	510	262	424	912	696	336
20	101	49	49	37	37	83	511	160	420	916	582	347
21	63	49	49	37	37	114	446	136	417	881	521	346
22	45	49	49	37	37	176	406	137	474	859	541	321
23	71	49	49	37	37	175	407	138	519	835	620	306
24	65	49	49	37	37	187	392	140	569	818	658	327
25	51	49	49	37	37	242	346	139	651	823	656	345
26	52	49	49	37	37	289	345	142	759	823	631	316
27	52	49	49	37	37	289	344	144	792	827	611	292
28	52	49	49	37	37	253	280	143	787	799	609	292
29	52	49	49	37	---	193	243	143	848	783	577	292
30	52	49	49	37	---	193	243	142	897	783	530	289
31	52	---	49	37	---	287	---	141	---	785	466	---
TOTAL	5,463	1,502	1,517	1,346	1,036	4,545	11,646	10,280	15,126	26,668	20,777	9,191
MEAN	176	50.1	48.9	43.4	37.0	147	388	332	504	860	670	306
MAX	304	52	49	49	37	303	534	1,210	897	971	918	366
MIN	45	49	48	37	37	37	243	136	144	783	414	198
AC-FT	10,840	2,980	3,010	2,670	2,050	9,020	23,100	20,390	30,000	52,900	41,210	18,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	302	268	275	171	221	388	828	1,165	1,054	668	512	449
MAX	1,261	1,181	1,308	860	1,708	1,668	1,894	2,055	2,418	1,488	1,135	1,199
(WY)	(1988)	(1980)	(1976)	(1986)	(1987)	(1987)	(1985)	(1983)	(1984)	(1973)	(2000)	(1987)
MIN	44.9	42.2	43.8	35.7	27.1	50.6	111	170	184	201	98.4	64.4
(WY)	(1979)	(2002)	(2002)	(1978)	(2002)	(2001)	(1977)	(2001)	(1976)	(1972)	(1979)	(1972)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	166,312		109,097			
ANNUAL MEAN	456		299		a526	
HIGHEST ANNUAL MEAN					872	1987
LOWEST ANNUAL MEAN					213	1972
HIGHEST DAILY MEAN	1,540	May 13	1,210	May 14	2,660	May 15, 1985
LOWEST DAILY MEAN	25	Feb 7	37	Jan 18	10	Sep 19, 1972
ANNUAL SEVEN-DAY MINIMUM	25	Feb 7	37	Jan 18	21	Sep 30, 1972
ANNUAL RUNOFF (AC-FT)	329,900		216,400		381,000	
10 PERCENT EXCEEDS	1,060		820		1,500	
50 PERCENT EXCEEDS	267		238		305	
90 PERCENT EXCEEDS	34		37		52	

a Average discharge for 9 years (water years 1962-70), 384 ft^3/s, 278,200 acre-ft/yr, prior to release of transmountain water.
e Estimated

08289000 RIO OJO CALIENTE AT LA MADERA, NM

LOCATION.--Lat 36°20'59", long 106°02'37", in NW $^1/_4$ NE $^1/_4$ 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 mi^2.

PERIOD OF RECORD.--April 1932 to current year.

REVISED RECORDS.--WSP 1712: 1959.

GAGE.--Water-stage recorder with satellite telemetry. 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 except for those estimated, which are fair. Diversions upstream from station for irrigation of about 3,500 acres (1962 determination). Several observations of water temperature were made during the year.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	21	24	19	19	21	50	e346	42	5.8	3.5	6.5
2	5.2	20	20	18	20	21	66	e304	37	5.6	3.9	4.5
3	5.1	20	26	19	19	20	68	e262	30	5.6	3.3	3.8
4	4.9	24	26	19	16	24	64	e220	30	5.2	3.0	4.4
5	5.1	24	20	20	16	26	58	e178	26	4.9	3.3	6.1
6	5.4	23	19	21	17	20	53	147	20	4.9	2.6	9.5
7	5.4	21	18	20	18	23	44	133	17	4.4	2.5	7.4
8	6.4	20	20	20	16	25	38	123	14	4.3	3.5	5.0
9	6.1	38	19	20	16	26	40	108	12	4.2	3.4	8.0
10	5.4	68	17	22	16	29	49	118	12	4.3	2.6	134
11	5.8	48	18	21	17	34	76	102	11	4.3	2.6	62
12	6.9	37	18	20	18	49	106	108	10	4.2	2.7	35
13	7.4	32	17	19	24	62	158	112	10	4.2	2.5	26
14	7.5	31	17	20	40	86	233	111	10	4.3	2.2	20
15	8.2	31	19	20	43	93	317	133	9.9	4.3	2.3	17
16	8.2	26	18	19	34	90	209	127	13	4.1	2.1	15
17	9.2	25	22	18	25	67	241	132	13	3.8	2.1	13
18	9.9	26	20	18	27	56	276	129	13	3.7	2.1	12
19	9.9	24	17	18	24	48	222	107	15	3.6	9.9	11
20	10	24	15	20	21	43	166	98	18	3.7	2.4	9.6
21	12	26	18	20	21	48	208	96	16	3.7	1.8	8.4
22	13	26	18	20	19	47	318	86	12	3.3	1.9	8.1
23	12	25	21	19	19	50	299	81	10	3.5	2.4	8.6
24	14	25	21	19	18	58	198	76	10	3.7	4.2	8.3
25	13	25	18	19	23	62	212	73	9.8	3.3	4.5	8.2
26	13	20	17	19	25	60	335	77	9.1	2.9	8.2	8.3
27	16	17	17	17	25	70	438	77	8.7	3.2	7.1	7.4
28	22	18	17	18	25	55	441	65	7.8	11	5.8	6.0
29	23	23	17	17	---	44	413	58	7.0	5.6	12	6.0
30	22	20	18	17	---	43	e388	49	6.3	5.6	8.9	4.7
31	21	---	19	18	---	42	---	42	---	3.8	6.7	---
TOTAL	318.1	808	591	594	621	1,442	5,784	3,878	459.6	139.0	126.0	483.8
MEAN	10.3	26.9	19.1	19.2	22.2	46.5	193	125	15.3	4.48	4.06	16.1
MAX	23	68	26	22	43	93	441	346	42	11	12	134
MIN	4.9	17	15	17	16	20	38	42	6.3	2.9	1.8	3.8
AC-FT	631	1,600	1,170	1,180	1,230	2,860	11,470	7,690	912	276	250	960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2003, BY WATER YEAR (WY)

MEAN	14.6	18.2	17.8	18.5	22.9	58.0	274	315	50.0	9.83	14.0	10.7
MAX	57.5	49.2	36.0	33.5	55.5	211	979	1,256	298	33.1	68.1	29.8
(WY)	(1987)	(1987)	(1987)	(1952)	(1941)	(1995)	(1937)	(1941)	(1995)	(1949)	(1967)	(1936)
MIN	3.98	8.82	11.2	10.0	12.0	15.5	21.0	6.54	5.09	2.64	3.13	2.30
(WY)	(1957)	(1957)	(1957)	(1964)	(1955)	(1981)	(2002)	(2002)	(1954)	(1951)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1933 - 2003	
ANNUAL TOTAL	4,714.7		15,244.5			
ANNUAL MEAN	12.9		41.8		68.7	
HIGHEST ANNUAL MEAN					205	1941
LOWEST ANNUAL MEAN					11.3	2002
HIGHEST DAILY MEAN	68	Nov 10	441	Apr 28	2,180	Apr 23, 1942
LOWEST DAILY MEAN	1.8	Aug 16	1.8	Aug 21	0.60	Aug 18, 1956
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 16	2.3	Aug 12	1.1	Oct 1, 1956
MAXIMUM PEAK FLOW			629	Apr 28	3,640	Aug 14, 1994
MAXIMUM PEAK STAGE			5.16	Apr 28	8.27	Aug 14, 1994
INSTANTANEOUS LOW FLOW			1.4	Aug 21	0.20	Aug 17, 1956
ANNUAL RUNOFF (AC-FT)	9,350		30,240		49,800	
10 PERCENT EXCEEDS	23		107		164	
50 PERCENT EXCEEDS	12		19		17	
90 PERCENT EXCEEDS	4.4		4.2		5.3	

e Estimated

08290000 RIO CHAMA NEAR CHAMITA, NM

LOCATION.--Lat 36°04'26", long 106°06'40", in NE ¼ NE ¼ 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 mi^2, of which about 100 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River near Chamita" prior to 1928, and "Chama River at Chamita" 1929-30.

REVISED RECORDS.--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. 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.--Water-discharge records fair except for those estimated, 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 Jan. 1935 and Abiquiu Reservoir (station 08286900) 29.3 mi upstream since Feb. 1963. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 83.0 mi upstream. No flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 ft^3/s. Another major flood occurred in 1884, from newspaper accounts.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	64	e49	e84	69	71	400	454	106	797	710	334
2	277	67	e51	e73	69	68	426	406	151	762	714	235
3	214	66	e55	e76	69	65	433	409	128	755	713	234
4	165	64	e58	e77	67	66	420	363	98	744	704	291
5	202	63	e60	79	64	67	414	411	105	790	706	296
6	212	62	e50	e78	66	66	411	411	215	791	792	361
7	212	62	e51	e76	e63	67	393	392	272	707	827	359
8	213	62	e50	79	66	84	348	392	355	687	805	311
9	254	70	e53	79	66	97	342	456	392	704	805	307
10	259	90	59	e77	e64	98	292	508	485	736	363	684
11	212	97	57	e76	67	101	349	496	539	758	342	352
12	200	96	64	e77	67	114	368	509	653	802	320	340
13	197	85	68	78	74	195	417	761	597	800	297	224
14	210	77	68	78	80	364	597	1,250	415	803	360	182
15	231	76	69	78	94	385	761	1,210	447	804	706	e180
16	225	75	72	77	86	393	667	581	544	793	803	e176
17	223	74	71	78	79	335	667	340	532	871	831	180
18	230	71	64	75	76	158	793	323	502	861	778	191
19	170	69	e61	70	76	148	710	316	352	789	661	277
20	129	67	e61	70	71	139	663	243	371	798	598	300
21	92	66	e63	70	69	138	646	186	348	794	431	290
22	e68	66	e67	70	68	193	657	160	344	749	418	280
23	e53	66	e71	70	64	226	675	152	415	743	483	244
24	e76	67	e67	70	65	236	577	146	466	712	578	244
25	75	62	e62	69	68	264	500	128	539	715	574	291
26	68	60	e67	69	76	355	556	139	668	723	583	265
27	87	60	e65	68	76	359	692	146	746	726	557	230
28	66	57	e67	65	74	368	707	145	745	727	563	239
29	66	55	e75	68	---	257	584	138	756	693	547	249
30	67	e50	e80	67	---	234	525	140	823	702	496	254
31	65	---	e89	68	---	227	---	122	---	701	446	---
TOTAL	5,081	2,066	1,964	2,289	1,993	5,938	15,990	11,833	13,109	23,537	18,511	8,400
MEAN	164	68.9	63.4	73.8	71.2	192	533	382	437	759	597	280
MAX	277	97	89	84	94	393	793	1,250	823	871	831	684
MIN	53	50	49	65	63	65	292	122	98	687	297	176
AC-FT	10,080	4,100	3,900	4,540	3,950	11,780	31,720	23,470	26,000	46,690	36,720	16,660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	315	295	306	211	262	453	1,063	1,483	1,048	632	494	439
MAX	1,273	1,224	1,291	876	1,677	1,705	2,534	2,741	2,346	1,477	1,114	1,164
(WY)	(1988)	(1980)	(1976)	(1986)	(1987)	(1987)	(1985)	(1983)	(1984)	(1983)	(2000)	(1987)
MIN	37.3	51.4	63.4	63.5	56.1	85.1	120	204	117	170	95.5	83.1
(WY)	(1979)	(2002)	(2003)	(1975)	(2002)	(1977)	(1977)	(1972)	(1976)	(1972)	(1979)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	168,725		110,711			
ANNUAL MEAN	462		303		a584	
HIGHEST ANNUAL MEAN					923	1987
LOWEST ANNUAL MEAN					234	1972
HIGHEST DAILY MEAN	1,590	May 13	1,250	May 14	3,570	May 5, 1985
LOWEST DAILY MEAN	49	Dec 1	49	Dec 1	1.2	Sep 16, 1971
ANNUAL SEVEN-DAY MINIMUM	52	Feb 26	53	Nov 30	1.7	Sep 10, 1971
MAXIMUM PEAK FLOW			2,110	Sep 10	b15,000	May 22, 1920
MAXIMUM PEAK STAGE			6.01	Sep 10	c11.68	Sep 1, 1994
INSTANTANEOUS LOW FLOW			49	Dec 1	1.2	Sep 16, 1971
ANNUAL RUNOFF (AC-FT)	334,700		219,600		423,400	
10 PERCENT EXCEEDS	1,070		731		1,630	
50 PERCENT EXCEEDS	231		215		332	
90 PERCENT EXCEEDS	55		65		75	

a Average discharge for 58 years (water years 1913-70), 541 ft^3/s, 392,000 acre-ft/yr, prior to release of transmountain water.
b From rating curve extended above 2,000 ft^3/s.
c From floodmarks of slope-area measurement of peak flow.
e Estimated

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
10...	1115	268	30	29	624	6.9	81	8.2	457	18.0	13.5	--	--
NOV													
06...	1415	62	--	--	625	9.2	100	8.3	632	15.0	10.0	230	67.1
APR													
17...	0825	702	--	--	617	9.6	100	8.2	473	8.0	8.0	180	51.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
06...	15.1	3.34	1	49.8	171	204	2	20.0	0.41	17.7	125	401	--
APR													
17...	12.0	2.54	0.9	26.2	99	121	--	8.06	0.22	13.6	116	289	0.20

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
06...	--	--	--	--	--	--	--	--	140	100	--	--	--
APR													
17...	0.70	0.02	0.04	0.04	<0.010	<0.01	<0.02	0.40	<4	<3	2	E.17	E2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
06...	--	--	100	--	--	--	--	<10	--	--	<0.02	--	--
APR													
17...	80	<0.06	40	<0.04	<0.8	0.26	1.1	E7	<0.08	8.9	E.01	2.6	2.43

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT							
10...	--	--	--	--	--	--	76
NOV							
06...	--	<3	--	--	--	98	117
APR							
17...	<3	<3	<0.20	M	2.18	20	1,660

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08291000 SANTA CRUZ RIVER AT CUNDIYO, NM

LOCATION.--Lat 35°57'53", long 105°54'14", in SE ¼ NW ¼ 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 mi^2, approximately.

PERIOD OF RECORD.--July 1931 to current year. Monthly discharge only from some periods, published in WSP 1312. Prior to October 1953, published as" Rio Santa Cruz."

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. July 1, 1931, 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 fair except for those estimated, which are poor. Diversions for irrigation of about 1,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	13	13	3.3	e3.7	4.7	29	58	75	16	10	19
2	9.7	14	13	e3.8	3.8	5.8	36	55	74	16	9.9	18
3	7.8	14	11	3.6	3.5	6.7	39	56	70	16	10	18
4	6.9	14	10	3.3	e3.4	5.9	36	52	68	14	10	17
5	6.7	13	8.9	3.7	e3.5	5.3	33	49	68	13	9.6	16
6	7.6	11	e10	3.4	3.8	6.9	30	48	62	14	9.3	16
7	7.3	13	e11	e3.6	e3.2	7.0	26	44	57	14	8.8	15
8	7.0	15	12	e3.7	e3.1	7.2	23	42	54	14	10	14
9	6.5	18	e12	3.9	e3.4	8.6	23	42	49	14	11	14
10	6.2	19	e11	3.9	e3.5	10	24	44	48	13	13	36
11	6.1	17	e11	e3.6	e3.3	12	27	42	43	13	9.9	25
12	6.1	12	e11	3.4	e3.4	14	29	43	40	12	10	18
13	6.0	15	e10	e3.3	6.6	17	34	47	39	11	10	16
14	6.0	15	e10	e3.5	5.9	20	39	52	36	10	13	15
15	5.8	15	e9.4	e3.5	4.5	22	45	64	41	10	13	14
16	5.8	9.6	e9.0	e3.3	4.1	23	40	75	38	10	9.6	14
17	5.6	13	8.7	e3.2	4.0	22	42	90	36	11	9.5	14
18	6.7	12	7.9	e3.5	4.5	19	44	104	36	11	9.3	13
19	7.3	12	e7.7	e4.0	4.3	17	43	103	36	11	9.5	13
20	6.6	13	36	e3.7	4.3	17	36	71	33	11	8.3	13
21	6.4	13	50	e3.8	4.2	24	36	71	30	10	9.1	13
22	6.2	13	37	e3.5	5.3	32	39	71	27	11	9.3	11
23	13	13	15	e3.9	5.0	46	43	82	25	12	11	11
24	16	13	5.5	3.8	4.9	56	37	88	24	11	10	11
25	13	11	e5.8	e4.0	4.4	60	36	100	22	11	19	10
26	12	11	19	e3.6	4.6	58	43	90	22	12	18	9.9
27	19	e11	28	e3.8	4.5	52	48	74	21	14	16	10
28	16	e12	37	e3.5	4.7	41	50	76	19	13	20	10
29	14	12	24	e3.4	---	31	57	77	18	10	25	9.9
30	13	e12	3.4	e3.3	---	28	60	75	17	12	25	9.3
31	13	---	e3.6	e3.5	---	27	---	76	---	13	24	---
TOTAL	276.9	398.6	460.9	111.3	117.4	706.1	1,127	2,061	1,228	383	390.1	443.1
MEAN	8.93	13.3	14.9	3.59	4.19	22.8	37.6	66.5	40.9	12.4	12.6	14.8
MAX	19	19	50	4.0	6.6	60	60	104	75	16	25	36
MIN	5.6	9.6	3.4	3.2	3.1	4.7	23	42	17	10	8.3	9.3
AC-FT	549	791	914	221	233	1,400	2,240	4,090	2,440	760	774	879

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2003, BY WATER YEAR (WY)

MEAN	15.3	12.3	10.4	9.31	10.1	20.0	49.8	96.8	75.1	27.8	25.8	19.0
MAX	61.3	43.4	25.2	19.5	23.9	51.1	205	329	294	115	109	78.6
(WY)	(1942)	(1942)	(1987)	(1987)	(1995)	(1985)	(1942)	(1941)	(1979)	(1986)	(1991)	(1988)
MIN	3.88	4.69	3.82	3.59	4.19	6.97	13.2	7.42	5.55	5.64	4.57	2.47
(WY)	(1957)	(1957)	(1951)	(2003)	(2003)	(1981)	(1951)	(2002)	(2002)	(1956)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1933 - 2003	
ANNUAL TOTAL	3,580.7		7,703.4			
ANNUAL MEAN	9.81		21.1		31.0	
HIGHEST ANNUAL MEAN					75.2	1941
LOWEST ANNUAL MEAN					8.93	1950
HIGHEST DAILY MEAN	50	Dec 21	104	May 18	623	Jun 9, 1979
LOWEST DAILY MEAN	2.0	Aug 18	3.1	Feb 8	1.1	Dec 3, 1950
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 13	3.4	Jan 12	2.2	Sep 11, 1956
MAXIMUM PEAK FLOW			168	Sep 10	2,420	Sep 24, 1931
MAXIMUM PEAK STAGE			2.93	Sep 10	7.80	Sep 24, 1931
INSTANTANEOUS LOW FLOW			1.4	Mar 3	0.19	Mar 13, 1954
ANNUAL RUNOFF (AC-FT)	7,100		15,280		22,490	
10 PERCENT EXCEEDS	15		51		75	
50 PERCENT EXCEEDS	8.6		13		14	
90 PERCENT EXCEEDS	4.6		3.8		7.5	

e Estimated

08294195 RIO NAMBE ABOVE NAMBE FALLS DAM NEAR NAMBE, NM

LOCATION.--Lat 35°51'00", long 105°53'40", in NE $^1/_4$ SW $^1/_4$ sec.29, T.19 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, on Nambe Indian Reservation, 0.6 mi upstream from Nambe Falls, 3.4 mi upstream from Rio En Medio, 5.0 mi southeast of Nambe Pueblo, and 6.0 mi southeast of Nambe.

DRAINAGE AREA.--25 mi^2, approximately.

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,885 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.3	3.8	2.6	2.9	1.8	2.4	7.7	16	e38	7.9	6.7	e8.2
2	3.3	4.5	2.8	2.6	1.9	e2.9	8.6	15	e38	7.5	6.8	e7.5
3	3.1	4.3	2.1	2.9	1.8	e2.6	8.6	16	e38	7.0	6.7	7.7
4	3.1	4.2	2.0	2.8	e2.5	2.3	8.2	15	e38	6.6	6.0	7.7
5	3.1	3.8	2.5	2.5	2.7	2.5	7.8	14	e37	6.4	5.5	7.6
6	3.0	3.3	e2.8	2.3	e2.7	e2.4	7.9	14	e35	6.4	5.4	7.3
7	3.0	3.5	e2.7	2.1	e2.9	2.7	7.2	13	e31	6.4	5.4	7.0
8	3.0	3.6	2.1	e2.0	2.8	2.4	6.7	14	e28	6.0	5.9	6.6
9	2.9	5.3	e2.1	2.3	2.1	2.5	6.6	14	e25	5.4	8.7	6.7
10	2.9	5.3	2.1	2.3	3.2	2.7	7.0	14	e22	4.9	e14	12
11	2.9	4.4	e2.1	2.2	2.5	2.9	7.5	14	e19	4.7	e6.2	10
12	2.8	3.5	2.1	2.1	2.1	3.2	7.6	14	e17	4.4	e5.9	e9.5
13	2.8	4.3	2.5	e1.8	2.6	3.5	9.0	17	e17	4.5	e8.4	e7.4
14	2.9	3.7	2.3	2.0	2.5	3.8	10	20	e16	4.4	8.2	e6.2
15	2.9	3.5	2.1	2.0	2.1	4.1	11	24	e15	4.4	7.2	e5.5
16	2.9	4.2	1.8	2.7	1.8	4.2	11	28	e15	4.4	5.2	e5.6
17	2.9	4.2	1.7	e2.9	1.9	3.9	11	31	e14	4.8	4.5	e6.2
18	3.3	3.2	1.8	e2.5	2.0	3.5	11	34	16	4.6	4.3	5.8
19	3.4	3.6	e2.2	2.5	2.2	3.3	11	35	16	6.3	4.2	5.6
20	3.1	3.7	e3.0	2.2	e2.3	3.3	10	35	15	7.9	3.4	5.5
21	3.0	2.7	e2.9	2.1	2.1	3.7	10	36	14	6.4	3.6	5.2
22	2.9	2.6	e3.3	2.0	e2.5	4.0	11	38	13	6.7	4.0	5.0
23	4.0	2.6	3.5	2.0	e2.4	4.7	12	38	12	5.9	6.2	4.9
24	5.7	2.5	3.5	2.0	e2.5	7.2	11	41	12	5.3	4.2	4.8
25	4.3	3.3	e3.6	1.8	2.1	8.3	11	48	11	5.1	7.8	4.9
26	3.9	e3.4	e3.4	2.2	2.5	8.7	12	46	10	6.2	e5.4	4.9
27	5.5	e3.0	e3.4	1.9	2.5	9.5	13	47	9.8	8.0	e5.1	4.9
28	4.5	e3.2	e3.5	1.7	2.5	8.5	14	47	9.3	7.1	7.5	4.9
29	4.1	e2.8	e3.1	2.0	---	e7.8	16	e43	8.7	6.7	e8.2	4.8
30	3.9	2.8	3.2	1.9	---	e7.5	16	e37	8.3	8.5	e8.6	4.6
31	3.9	---	3.1	1.9	---	7.3	---	e40	---	8.4	e8.6	---
TOTAL	106.3	108.8	81.9	69.1	65.5	138.3	301.4	858	598.1	189.2	197.8	194.5
MEAN	3.43	3.63	2.64	2.23	2.34	4.46	10.0	27.7	19.9	6.10	6.38	6.48
MAX	5.7	5.3	3.6	2.9	3.2	9.5	16	48	38	8.5	14	12
MIN	2.8	2.5	1.7	1.7	1.8	2.3	6.6	13	8.3	4.4	3.4	4.6
AC-FT	211	216	162	137	130	274	598	1,700	1,190	375	392	386

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	3.57	3.81	3.23	2.45	2.10	3.92	7.18	15.3	10.5	4.36	4.46	4.95
MAX	3.71	4.00	3.82	2.67	2.34	4.46	10.0	27.7	19.9	6.10	6.38	6.48
(WY)	(2002)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	3.43	3.63	2.64	2.23	1.86	3.38	4.32	2.92	0.98	2.61	2.55	3.42
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	1,048.44		2,908.9			
ANNUAL MEAN	2.87		7.97		5.50	
HIGHEST ANNUAL MEAN					7.97	2003
LOWEST ANNUAL MEAN					3.03	2002
HIGHEST DAILY MEAN	6.8	Jul 21	48	May 25	48	May 25, 2003
LOWEST DAILY MEAN	0.00	Jun 19	1.7	Dec 17	0.00	Jun 19, 2002
ANNUAL SEVEN-DAY MINIMUM	0.18	Jun 24	1.9	Jan 28	0.18	Jun 24, 2002
MAXIMUM PEAK FLOW			a390	Aug 10	a390	Aug 10, 2003
MAXIMUM PEAK STAGE			4.30	Aug 10	4.30	Aug 10, 2003
INSTANTANEOUS LOW FLOW			1.5	Aug 24	0.00	Jun 18, 2002
ANNUAL RUNOFF (AC-FT)	2,080		5,770		3,980	
10 PERCENT EXCEEDS	4.3		16		10	
50 PERCENT EXCEEDS	2.9		4.6		3.5	
90 PERCENT EXCEEDS	1.6		2.1		1.9	

a From rating curve extended above 50 ft^3/s, on basis of slope-area measurement of peak flow.
e Estimated

08294200 NAMBE FALLS RESERVOIR NEAR NAMBE, NM

LOCATION.--Lat 35°50'46", long 105°54'17", in NE $^1/_4$ SW $^1/_4$, 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 mi^2.

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 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,060 acre-ft June 9, 1979, elevation, 6,827.24 ft; no storage prior to Feb. 23, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,030 acre-ft, June 5, elevation, 6,826.67 ft; minimum, 674 acre-ft, Nov. 24 and 25, elevation, 6,794.29 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	772	e696	814	925	1,020	1,290	1,220	1,870	1,690	849	967
2	751	774	e699	817	928	1,030	1,300	1,210	1,920	1,680	851	973
3	751	773	702	821	931	1,030	1,320	1,200	1,980	1,680	854	975
4	752	775	707	825	933	1,030	1,340	1,190	2,020	1,680	856	975
5	753	775	710	829	937	1,030	1,350	1,180	2,030	1,670	856	973
6	755	776	712	832	939	1,040	1,360	1,170	2,030	1,670	856	970
7	756	777	717	836	942	1,040	1,380	1,160	2,020	1,620	853	966
8	757	777	721	840	946	1,050	1,390	1,160	2,020	1,550	850	962
9	757	782	724	843	949	1,050	1,400	1,160	2,020	1,490	852	958
10	756	787	728	847	952	1,050	1,410	1,150	2,020	1,430	913	989
11	755	788	732	851	955	1,060	1,430	1,140	2,020	1,360	903	995
12	756	782	735	855	958	1,060	1,440	1,130	2,020	1,300	906	993
13	756	777	739	858	965	1,070	1,460	1,120	2,020	1,230	909	987
14	756	768	743	862	969	1,080	1,480	1,120	2,020	1,220	916	982
15	758	761	748	866	974	1,080	1,430	1,120	2,020	1,220	918	975
16	758	749	752	869	978	1,090	1,390	1,120	2,020	1,220	916	968
17	758	741	756	872	982	1,100	1,370	1,130	2,020	1,220	914	960
18	759	731	760	876	985	1,110	1,350	1,140	2,030	1,220	912	955
19	761	721	763	880	988	1,120	1,330	1,170	2,020	1,220	910	956
20	762	710	767	884	992	1,120	1,310	1,210	2,020	1,220	907	954
21	762	e701	771	887	995	1,130	1,290	1,240	2,020	1,170	903	953
22	761	e692	775	890	998	1,140	1,280	1,280	2,020	1,110	901	951
23	766	e683	779	894	1,000	1,150	1,270	1,320	1,980	1,080	910	950
24	771	e674	783	898	1,000	1,160	1,260	1,370	1,940	1,030	915	948
25	772	e674	787	901	1,010	1,180	1,250	1,430	1,890	962	934	944
26	773	e678	791	904	1,010	1,200	1,240	1,490	1,850	900	939	942
27	775	e682	794	908	1,020	1,210	1,240	1,540	1,800	847	944	939
28	775	e685	798	912	1,020	1,230	1,230	1,610	1,760	833	949	936
29	775	e688	802	915	---	1,250	1,230	1,680	1,710	837	956	933
30	774	e692	806	918	---	1,260	1,220	1,750	1,690	842	961	929
31	773	---	810	921	---	1,270	---	1,810	---	847	965	---
MAX	775	788	810	921	1,020	1,270	1,480	1,810	2,030	1,690	965	995
MIN	750	674	696	814	925	1,020	1,220	1,120	1,690	833	849	929
(+)	6,797.87	6,794.96	6,799.10	6,802.56	6,805.36	6,811.68	6,810.54	6,822.87	6,820.63	6,800.28	6,803.85	6,802.78
(++)	+21	-81	+118	+111	+99	+250	-50	+590	-120	-843	+118	-36

CAL YR 2002 MAX 1,630 MIN 674 (++) -300
WTR YR 2003 MAX 2,030 MIN 674 (++) +177

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.
e Estimated

08294210 RIO NAMBE BELOW NAMBE FALLS DAM, NEAR NAMBE, NM

LOCATION.--Lat 35°50'46", long 105°54'17", in NE ¼ SW ¼ 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.

DRAINAGE AREA.--34.1 mi^2.

PERIOD OF RECORD.--January 1979 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 6,840 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Flow regulated by Nambe Falls Reservoir (station 08294200). Outlet conduits are one 6-in.- and two 12-in.- diameter pipes.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.0	0.90	0.58	0.62	0.62	0.57	20	11	11	2.7	6.8
2	3.3	4.0	0.90	0.57	0.61	0.63	0.58	20	11	10	2.7	6.9
3	2.1	4.0	0.87	0.58	0.61	0.63	0.58	20	11	8.8	2.6	6.9
4	2.1	3.5	0.83	0.59	0.60	0.63	0.52	20	12	8.9	2.5	7.8
5	2.1	2.9	0.82	0.59	0.60	0.63	0.52	20	29	9.2	2.5	9.1
6	2.1	2.9	0.71	0.61	0.60	0.63	0.52	17	29	9.3	3.0	8.9
7	2.1	2.9	0.52	0.59	0.60	0.63	0.52	15	27	29	3.9	9.0
8	2.4	2.9	0.52	0.59	0.60	0.68	0.52	15	25	36	3.9	9.3
9	3.0	2.9	0.52	0.61	0.60	0.69	0.53	15	23	35	4.0	9.2
10	2.9	2.9	0.51	0.61	0.59	0.69	0.53	15	22	34	3.8	9.3
11	2.7	4.0	0.51	0.61	0.61	0.70	0.54	16	20	34	8.3	9.4
12	2.2	5.7	0.51	0.61	0.61	0.70	0.54	18	19	35	6.3	10
13	2.2	7.0	0.51	0.60	0.64	0.71	0.60	18	18	35	5.8	11
14	2.2	8.0	0.52	0.60	0.63	0.70	0.59	19	17	12	4.0	11
15	2.2	7.8	0.52	0.61	0.64	0.71	33	20	16	4.2	4.9	11
16	2.2	7.6	0.52	0.60	0.63	0.71	29	20	15	4.2	6.2	11
17	2.2	7.6	0.52	0.59	0.62	0.73	21	20	15	4.3	6.3	11
18	2.3	7.5	0.52	0.59	0.63	0.72	21	20	16	4.3	6.3	9.4
19	2.2	7.5	0.52	0.60	0.62	0.73	21	13	18	4.3	6.3	6.9
20	2.3	7.5	0.51	0.60	0.63	0.72	21	10	16	4.1	6.3	6.8
21	2.5	7.5	0.51	0.61	0.63	0.76	21	10	15	27	6.2	6.7
22	2.9	7.4	0.51	0.61	0.62	0.73	18	10	13	35	5.4	6.7
23	3.0	7.4	0.52	0.61	0.62	0.72	16	10	27	18	4.4	6.7
24	3.0	7.4	0.51	0.61	0.62	0.67	17	11	31	28	4.3	6.5
25	3.4	4.7	0.53	0.61	0.63	0.66	17	11	31	33	4.4	6.3
26	4.0	0.87	0.56	0.61	0.64	0.66	16	11	32	33	4.5	6.2
27	4.0	0.88	0.56	0.61	0.64	0.66	16	11	32	30	4.6	6.1
28	4.0	0.88	0.56	0.61	0.63	0.62	16	11	32	11	5.4	6.1
29	4.0	0.88	0.58	0.61	---	0.58	18	11	31	2.7	6.7	6.1
30	4.0	0.89	0.58	0.61	---	0.57	20	11	16	2.7	6.7	5.8
31	4.0	---	0.58	0.61	---	0.58	---	11	---	2.7	6.7	---
TOTAL	87.8	141.90	18.26	18.64	17.32	20.80	328.66	469	630	555.7	151.6	243.9
MEAN	2.83	4.73	0.59	0.60	0.62	0.67	11.0	15.1	21.0	17.9	4.89	8.13
MAX	4.2	8.0	0.90	0.61	0.64	0.76	33	20	32	36	8.3	11
MIN	2.1	0.87	0.51	0.57	0.59	0.57	0.52	10	11	2.7	2.5	5.8
AC-FT	174	281	36	37	34	41	652	930	1,250	1,100	301	484

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	6.98	4.15	2.19	2.03	2.79	5.49	15.4	36.6	43.3	21.4	15.5	11.6
MAX	19.5	11.9	8.70	5.29	7.68	17.4	42.3	85.4	125	48.4	51.9	45.4
(WY)	(1989)	(1987)	(1987)	(1992)	(1995)	(1985)	(1985)	(1985)	(1979)	(1983)	(1983)	(1988)
MIN	2.83	1.10	0.45	0.45	0.45	0.49	1.40	9.89	1.92	2.04	2.86	1.47
(WY)	(2003)	(1997)	(1980)	(1980)	(1980)	(1979)	(2002)	(1981)	(2002)	(2002)	(1989)	(1994)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL TOTAL	1,196.18		2,683.58			
ANNUAL MEAN	3.28		7.35		13.5	
HIGHEST ANNUAL MEAN					25.7	1985
LOWEST ANNUAL MEAN					3.46	2002
HIGHEST DAILY MEAN	21	May 14	36	Jul 8	a236	Jun 9, 1979
LOWEST DAILY MEAN	0.51	Dec 10	0.51	Dec 10	0.00	Dec 31, 1993
ANNUAL SEVEN-DAY MINIMUM	0.51	Dec 7	0.51	Dec 7	0.21	Nov 12, 1980
ANNUAL RUNOFF (AC-FT)	2,370		5,320		9,750	
10 PERCENT EXCEEDS	7.4		20		35	
50 PERCENT EXCEEDS	1.5		3.9		6.3	
90 PERCENT EXCEEDS	0.91		0.58		0.56	

a At site 1,100 ft downstream (maximum release and spill computed at Nambe Falls Dam, 250 ft^3/s, June 9, 1979).

08302500 TESUQUE CREEK ABOVE DIVERSIONS NEAR SANTA FE, NM

LOCATION.--Lat 35°44'25", long 105°53'51", in SW ¼ SE ¼ sec.32, T.18 N., R.10 E., Santa Fe County, Hydrologic Unit 13020101, in Santa Fe National Forest, on left bank 0.30 mi from boundary, 1.0 mi southwest of Bishops Lodge, 1.1 mi to State Highway 22, and 10 mi northeast of Santa Fe.

DRAINAGE AREA.--12 mi^2.

PERIOD OF RECORD.--March 1936 to January 1952, May to October 1919 in report of State Engineer. October 1997 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.18	0.47	0.28	0.35	0.21	0.57	e2.7	6.1	3.6	1.3	0.67	0.61
2	0.20	0.71	0.33	0.71	0.20	e0.58	2.9	6.3	3.4	1.4	0.64	0.56
3	0.19	0.66	0.25	e0.42	0.25	e0.57	2.8	4.8	3.1	1.3	0.67	0.58
4	0.19	0.63	0.23	e0.35	0.68	0.56	2.8	4.2	3.4	1.2	0.58	0.66
5	0.18	0.52	0.39	e0.40	0.29	0.58	2.8	3.2	3.0	1.2	0.55	0.75
6	0.18	0.43	e0.41	e0.36	0.32	e0.64	2.7	3.0	2.8	1.1	0.57	0.75
7	0.15	0.41	e0.38	e0.25	0.65	0.72	2.7	3.7	2.9	1.1	0.58	0.59
8	0.13	0.42	0.31	e0.22	e0.34	0.61	2.8	3.8	2.6	1.0	0.59	0.54
9	0.10	0.90	e0.36	e0.24	0.26	0.70	2.7	3.7	2.4	0.93	0.59	0.57
10	0.10	0.92	0.38	e0.20	0.29	0.81	2.9	3.8	2.2	0.90	0.63	1.0
11	0.10	0.66	0.31	e0.18	0.30	0.85	3.1	3.9	2.1	0.88	0.73	1.2
12	0.11	0.45	0.28	e0.20	0.34	0.94	2.9	3.9	2.1	0.81	0.71	0.73
13	0.11	0.59	0.25	e0.18	0.41	1.4	2.8	4.1	2.2	0.76	1.2	0.63
14	0.13	0.52	0.19	e0.19	0.42	1.4	2.7	4.5	2.2	0.76	1.2	0.60
15	0.13	0.49	0.19	e0.21	0.38	1.6	3.3	5.3	2.5	0.84	0.87	0.58
16	0.13	0.38	0.18	e0.23	0.37	1.5	3.0	5.6	3.1	0.80	0.88	0.54
17	0.14	0.47	0.18	e0.25	0.36	1.5	3.0	6.6	2.9	0.80	0.78	0.52
18	0.18	0.40	0.19	e0.28	0.39	1.4	2.9	7.5	3.9	0.85	0.77	0.51
19	0.20	0.46	0.20	e0.25	0.46	1.3	3.0	7.3	3.1	1.6	0.68	0.52
20	0.19	0.39	0.35	e0.36	0.40	1.3	2.9	6.8	2.7	1.1	0.62	0.52
21	0.19	0.36	0.38	e0.30	0.57	1.6	3.3	5.9	2.3	0.78	0.53	0.50
22	0.20	0.34	0.74	e0.25	e0.60	1.9	4.2	4.6	2.1	0.81	0.57	0.49
23	0.37	0.33	0.21	e0.28	e0.63	2.2	4.4	4.2	1.9	0.77	0.62	0.49
24	1.1	0.32	0.19	e0.32	0.62	2.9	3.2	3.4	1.8	0.70	0.91	0.48
25	0.50	0.32	0.18	e0.26	0.55	3.7	3.5	3.5	1.6	0.67	0.83	0.46
26	0.47	e0.32	0.25	e0.58	0.55	e4.7	4.0	3.2	1.5	0.67	0.82	0.46
27	0.92	e0.31	0.33	e0.41	0.55	e5.9	4.9	3.1	1.5	0.75	0.69	0.47
28	0.54	0.31	0.62	e0.35	0.55	e3.5	5.5	3.2	1.4	0.70	0.93	0.49
29	0.44	0.33	0.57	0.51	---	e3.1	7.6	3.7	1.3	0.66	1.1	0.50
30	0.47	0.29	0.26	0.20	---	e3.2	8.7	3.1	1.2	0.80	1.0	0.46
31	0.44	---	0.25	0.22	---	e2.9	---	3.7	---	0.71	0.79	---
TOTAL	8.66	14.11	9.62	9.51	11.94	55.13	106.7	139.7	72.8	28.65	23.30	17.76
MEAN	0.28	0.47	0.31	0.31	0.43	1.78	3.56	4.51	2.43	0.92	0.75	0.59
MAX	1.1	0.92	0.74	0.71	0.68	5.9	8.7	7.5	3.9	1.6	1.2	1.2
MIN	0.10	0.29	0.18	0.18	0.20	0.56	2.7	3.0	1.2	0.66	0.53	0.46
AC-FT	17	28	19	19	24	109	212	277	144	57	46	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2003, BY WATER YEAR (WY)

MEAN	1.69	1.33	0.98	0.92	1.00	2.03	5.56	9.46	5.85	2.12	1.93	1.37
MAX	10.3	6.60	2.65	2.02	1.98	4.32	26.4	37.0	27.0	7.68	7.34	4.43
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1940)	(1942)	(1941)	(1941)	(1941)	(1999)	(1941)
MIN	0.28	0.39	0.31	0.31	0.43	0.42	0.75	0.30	0.047	0.24	0.065	0.26
(WY)	(2003)	(1951)	(2003)	(2003)	(2003)	(1951)	(1951)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1936 - 2003	
ANNUAL TOTAL	149.66		497.88			
ANNUAL MEAN	0.41		1.36		2.88	
HIGHEST ANNUAL MEAN					8.14	1941
LOWEST ANNUAL MEAN					0.48	2002
HIGHEST DAILY MEAN	1.8	Mar 20	8.7	Apr 30	72	Apr 23, 1942
LOWEST DAILY MEAN	0.00	Jun 13	0.10	Oct 9	0.00	Aug 25, 1950
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 26	0.11	Oct 8	0.00	Jun 26, 2002
MAXIMUM PEAK FLOW			10	Apr 28	a425	Jul 19, 1938
MAXIMUM PEAK STAGE			4.47	Apr 28	5.05	Jul 10, 2002
INSTANTANEOUS LOW FLOW			0.01	Aug 4	0.00	Aug 25, 1950
ANNUAL RUNOFF (AC-FT)	297		988		2,080	
10 PERCENT EXCEEDS	0.88		3.5		7.1	
50 PERCENT EXCEEDS	0.34		0.64		1.2	
90 PERCENT EXCEEDS	0.00		0.20		0.57	

a Gage height 4.30 ft from floodmarks, from rating curve extended above 10 ft^3/s, on basis of slope-area measurement at gage height 4.0 ft, at different datum.
e Estimated

08305030 LITTLE TESUQUE CREEK AT BISHOPS LODGE NEAR SANTA FE, NM

LOCATION.--Lat 35°43'52", long 105°54'39", in NW $^1/_4$ SW $^1/_4$ sec. 5, T. 17 N., R. 10 E., Santa Fe County, Hydrologic Unit 13020101, on right bank 100 ft downstream from entrance to Bishops Lodge, and 9.0 mi northeast of Santa Fe.

DRAINAGE AREA.--7.61 mi^2, approximately.

PERIOD OF RECORD.--July 1999 to current year.

GAGE.--Water-stage recorder. Concrete low-flow control. Elevation of gage is 7,100 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for those estimated, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	3.4	1.9	0.07	0.00	0.00	0.00
2	0.00	0.0	0.00	0.00	0.00	0.00	2.5	1.6	0.07	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	2.2	1.4	0.07	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	2.3	1.3	0.07	0.00	0.00	0.00
5	0.00	0.00	0.0	0.00	0.00	0.00	2.5	1.1	0.07	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	1.3	1.00	0.08	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	e1.3	0.77	0.07	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	e1.3	0.66	0.06	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	e1.2	0.60	0.04	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	e1.2	0.56	0.03	0.00	0.00	0.01
11	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.49	0.03	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	1.6	0.42	0.02	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	1.7	0.36	0.01	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	3.0	0.33	0.01	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	3.0	0.30	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	3.2	0.28	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	3.3	0.25	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	3.9	0.23	0.22	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.02	3.0	0.20	0.05	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	2.7	0.22	0.01	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	2.7	0.17	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	e2.9	0.14	0.00	0.00	0.00	0.00
23	0.02	0.00	0.00	0.00	0.00	0.00	3.0	0.11	0.00	0.00	0.00	0.00
24	0.05	0.00	0.00	0.00	0.00	0.18	2.5	0.09	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	2.7	2.3	0.09	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	10	2.3	0.09	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	13	2.5	0.08	0.00	0.00	0.01	0.00
28	0.00	0.00	0.00	0.00	0.00	12	2.3	0.09	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	7.5	2.5	0.08	0.00	0.00	0.03	0.00
30	0.00	0.00	0.00	0.00	---	4.3	2.2	0.06	0.00	0.00	0.04	0.00
31	0.00	---	0.00	0.00	---	3.8	---	0.07	---	0.00	0.00	---
TOTAL	0.08	0.00	0.00	0.00	0.00	53.51	71.3	15.04	0.98	0.00	0.08	0.01
MEAN	0.003	0.000	0.000	0.000	0.000	1.73	2.38	0.49	0.033	0.000	0.003	0.000
MAX	0.05	0.00	0.00	0.00	0.00	13	3.9	1.9	0.22	0.00	0.04	0.01
MIN	0.00	0.00	0.00	0.00	0.00	0.00	1.2	0.06	0.00	0.00	0.00	0.00
AC-FT	0.2	0.00	0.00	0.00	0.00	106	141	30	1.9	0.00	0.2	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	0.12	0.20	0.036	0.000	0.035	1.12	1.28	0.43	0.031	0.014	0.48	0.041
MAX	0.48	0.79	0.14	0.000	0.14	2.74	2.73	1.23	0.084	0.035	2.26	0.18
(WY)	(2001)	(2001)	(2001)	(2000)	(2001)	(2001)	(2001)	(2001)	(2001)	(2002)	(1999)	(1999)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(2002)	(2002)	(2002)	(2000)	(2000)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	1.22		141.00			
ANNUAL MEAN	0.003		0.39		0.28	
HIGHEST ANNUAL MEAN					0.70	2001
LOWEST ANNUAL MEAN					0.003	2002
HIGHEST DAILY MEAN	0.61	Jul 20	13	Mar 27	17	Mar 25, 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 28, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 9, 1999
MAXIMUM PEAK FLOW			17	Mar 27	38	Mar 26, 2001
MAXIMUM PEAK STAGE			4.38	Mar 27	4.54	Mar 26, 2001
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Jul 28, 1999
ANNUAL RUNOFF (AC-FT)	2.4		280		200	
10 PERCENT EXCEEDS	0.00		1.3		0.66	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

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

LOCATION.--Lat 35°52'29", long 106°08'30", in SW ¼ SW ¼ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. 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 except for those estimated, which are poor. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeós file on floods.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	449	308	434	e406	500	512	721	1,120	1,190	1,060	921	566
2	469	308	452	e403	515	488	776	1,060	1,200	1,020	940	422
3	428	312	472	e407	534	476	819	1,020	1,110	1,020	937	382
4	380	329	495	e420	525	479	832	972	1,060	1,040	909	470
5	391	336	493	e440	508	473	804	1,010	946	1,090	875	491
6	406	327	490	e467	483	464	770	980	968	1,090	941	527
7	398	390	471	465	476	443	774	934	960	1,030	1,030	608
8	405	438	479	466	453	474	720	878	969	969	1,010	527
9	446	475	472	463	394	489	663	930	980	966	1,040	507
10	447	471	436	472	417	498	613	981	1,080	998	608	942
11	426	468	410	475	451	500	643	982	1,130	996	530	769
12	398	428	398	483	452	508	656	955	1,310	1,050	492	675
13	375	395	386	486	499	567	705	1,080	1,270	1,040	453	564
14	381	379	393	491	530	756	859	1,700	1,000	1,040	440	475
15	409	372	403	491	565	822	1,080	1,820	969	1,030	823	439
16	400	362	422	492	573	828	1,140	1,290	1,150	998	941	398
17	385	351	439	483	568	842	1,070	1,010	1,210	1,070	967	406
18	415	341	453	479	524	653	1,200	1,060	1,190	1,080	932	412
19	397	334	432	469	538	652	1,170	1,160	972	1,010	818	456
20	332	326	395	474	520	645	1,150	1,150	953	1,020	784	494
21	301	342	408	483	521	645	1,120	1,140	920	1,040	612	463
22	267	345	392	487	502	665	1,070	1,060	839	966	582	455
23	264	345	416	484	484	668	1,100	1,050	861	971	588	418
24	324	340	424	485	465	644	1,070	1,100	869	932	724	417
25	322	347	437	489	465	665	942	1,090	893	917	933	468
26	322	348	e385	491	478	742	952	1,440	980	918	830	450
27	416	334	e356	490	499	771	1,110	1,250	1,090	976	747	410
28	347	371	e371	496	508	769	1,250	1,210	1,030	970	732	417
29	330	387	e385	502	---	640	1,170	1,190	992	925	750	429
30	334	420	e397	510	---	577	1,150	1,180	1,080	943	753	418
31	324	---	e402	514	---	557	---	1,120	---	936	667	---
TOTAL	11,688	11,029	13,198	14,663	13,947	18,912	28,099	34,922	31,171	31,111	24,309	14,875
MEAN	377	368	426	473	498	610	937	1,127	1,039	1,004	784	496
MAX	469	475	495	514	573	842	1,250	1,820	1,310	1,090	1,040	942
MIN	264	308	356	403	394	443	613	878	839	917	440	382
AC-FT	23,180	21,880	26,180	29,080	27,660	37,510	55,730	69,270	61,830	61,710	48,220	29,500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	812	946	906	795	908	1,328	2,147	3,515	3,124	1,545	1,003	896
MAX	2,225	2,034	1,959	1,757	2,641	3,127	6,412	8,390	7,914	4,548	2,132	1,553
(WY)	(1998)	(1987)	(1976)	(1986)	(1987)	(1987)	(1985)	(1985)	(1979)	(1995)	(1999)	(1999)
MIN	361	368	426	436	498	610	489	433	470	394	391	263
(WY)	(1975)	(2003)	(2003)	(1977)	(2003)	(2003)	(1977)	(1972)	(1972)	(1972)	(1972)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	272,184		247,924			
ANNUAL MEAN	746		679		1,495	
HIGHEST ANNUAL MEAN					2,764	1987
LOWEST ANNUAL MEAN					602	1977
HIGHEST DAILY MEAN	1,710	May 13	1,820	May 15	12,000	May 11, 1985
LOWEST DAILY MEAN	264	Oct 23	264	Oct 23	195	Aug 4, 1977
ANNUAL SEVEN-DAY MINIMUM	305	Oct 20	305	Oct 20	229	Sep 11, 1971
MAXIMUM PEAK FLOW			4,510	Aug 25	24,400	May 23, 1920
MAXIMUM PEAK STAGE			6.42	Aug 25	14.50	Sep 29, 1904
INSTANTANEOUS LOW FLOW			242	Oct 23	195	Aug 4, 1977
ANNUAL RUNOFF (AC-FT)	539,900		491,800		1,083,000	
10 PERCENT EXCEEDS	1,200		1,090		3,430	
50 PERCENT EXCEEDS	611		527		985	
90 PERCENT EXCEEDS	367		381		486	

e Estimated

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
23...	1017	253	7.2	6.7	625	8.4	95	8.2	417	9.0	12.0	150	44.8
DEC													
18...	1140	451	11	13	616	11.4	106	8.5	371	5.5	3.5	140	41.8
JAN													
23...	1035	503	13	9.8	629	10.8	99	8.2	340	12.0	3.5	120	36.9
FEB													
14...	1105	544	21	18	617	9.8	100	8.1	343	13.0	7.0	120	36.7
MAR													
10...	1120	498	22	16	625	10.4	107	8.4	358	18.5	8.0	130	39.6
APR													
15...	1030	1,100	190	160	616	8.4	98	7.5	458	17.0	12.5	170	51.0
JUN													
03...	1035	1,120	46	34	623	8.2	105	8.4	291	27.0	17.5	120	37.8
JUL													
01...	1100	1,090	240	260	628	7.4	99	8.2	285	35.0	20.0	110	33.0
15...	1145	1,060	130	110	631	7.4	101	8.2	286	38.5	21.0	110	33.2
29...	1030	932	88	76	628	7.4	99	8.1	299	24.0	20.0	110	33.9
AUG													
14...	1125	447	56	51	632	8.0	107	8.1	329	27.0	20.0	130	39.0
28...	1020	743	130	100	627	7.7	104	8.1	316	24.5	20.0	130	41.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
OCT													
23...	8.86	3.31	1	30.5	136	163	--	8.81	0.59	19.8	62.3	259	<0.20
DEC													
18...	8.43	2.89	1	26.8	124	148	1	9.91	0.53	23.2	49.9	238	--
JAN													
23...	7.42	2.75	1	25.7	115	139	--	7.37	0.53	25.3	45.5	220	--
FEB													
14...	7.50	2.99	1	24.9	111	135	--	7.38	0.51	27.1	45.7	219	--
MAR													
10...	8.16	2.65	1	26.9	115	138	1	8.11	0.51	22.8	53.9	232	--
APR													
15...	11.2	2.90	0.9	27.2	110	133	--	8.43	0.31	14.9	103	285	--
JUN													
03...	6.72	2.61	0.7	16.9	96	113	2	6.07	0.4	14.4	36.9	179	--
JUL													
01...	6.28	2.14	0.6	14.0	82	100	--	4.31	0.2	14.1	45.1	168	--
15...	6.16	2.17	0.6	13.9	83	101	--	4.46	0.2	14.4	46.3	170	--
29...	6.64	2.08	0.6	14.8	90	109	--	3.93	0.3	15.8	47.6	179	--
AUG													
14...	7.19	2.63	0.7	18.2	105	128	--	4.85	0.4	17.9	48.5	201	--
28...	7.12	2.55	0.6	15.3	95	116	--	3.86	0.3	18.0	48.9	195	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)
OCT													
23...	0.20	<0.01	0.01	<0.02	<0.010	<0.01	<0.02	0.02	1.8	2.4	150	180	110
DEC													
18...	--	--	--	--	--	--	--	--	1.6	3.2	E16	E17	30
JAN													
23...	--	--	--	--	--	--	--	--	1.2	3.2	E8	E2	E12
FEB													
14...	--	--	--	--	--	--	--	--	1.5	--	<3	<3	E92
MAR													
10...	--	--	--	--	--	--	--	--	1.6	3.1	120	20	75
APR													
15...	--	--	--	--	--	--	--	--	3.6	8.8	E1300	530	1,500
JUN													
03...	--	--	--	--	--	--	--	--	3.4	7.3	380	100	<3
JUL													
01...	--	--	--	--	--	--	--	--	3.7	6.0	<1	79	330
15...	--	--	--	--	--	--	--	--	3.6	5.2	E17	220	130
29...	--	--	--	--	--	--	--	--	3.3	5.6	E77	190	340
AUG													
14...	--	--	--	--	--	--	--	--	2.8	4.8	E94	230	430
28...	--	--	--	--	--	--	--	--	2.9	4.7	E330	E280	900

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)
OCT													
23...	2	<0.30	E2	78	<0.06	50	E.03	E.4	0.14	1.5	<10	<0.08	10.0
DEC													
18...	E1	<0.30	2	60	<0.06	50	E.02	E.4	0.12	0.8	<10	0.10	8.0
JAN													
23...	2	<0.30	E2	51	<0.06	50	E.02	E.5	0.12	0.6	E8	E.05	7.7
FEB													
14...	2	<0.30	E1	50	<0.06	40	E.02	E.6	0.13	0.7	11	E.06	7.2
MAR													
10...	2	<0.30	E2	56	<0.06	40	<0.04	E.6	0.14	0.7	E8	0.09	5.7
APR													
15...	E1	E.17	E2	80	<0.06	40	E.02	<0.8	0.24	1.0	E6	0.17	11.6
JUN													
03...	7	<0.30	E2	51	<0.06	30	E.02	<0.8	0.16	1.4	10	E.05	1.4
JUL													
01...	2	E.21	2	72	<0.06	20	<0.04	<0.8	0.12	1.4	E8	<0.08	0.8
15...	2	E.20	E1	76	<0.06	20	<0.04	<0.8	0.12	1.4	E6	<0.08	0.9
29...	2	E.19	E2	73	<0.06	30	<0.04	<0.8	0.12	1.3	E5	0.14	0.5
AUG													
14...	3	E.17	E2	75	<0.06	40	<0.04	<0.8	0.18	1.2	<8	<0.08	1.8
28...	3	E.15	2	71	<0.06	30	E.02	<0.8	0.16	1.7	<8	<0.08	1.3

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Mercury water, unfltrd recover -able, ug/L (71900)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Ra-226 2-sigma water, fltrd, pCi/L (76001)	Ra-226, water, fltrd, radon method pCi/L (09511)	Uranium natural 2-sigma water, fltrd, ug/L (75990)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT													
23...	<0.02	9.0	1.68	<3	<3	<0.20	4	--	--	M	4.27	59	22
DEC													
18...	<0.02	5.8	1.29	<3	<3	<0.20	2	--	--	M	3.75	35	91
JAN													
23...	<0.02	6.5	1.77	<3	<3	<0.20	M	0.01	0.03	M	3.46	44	116
FEB													
14...	<0.02	6.3	1.73	<3	<3	<0.20	1	0.03	0.14	M	3.65	55	162
MAR													
10...	<0.02	6.1	2.24	<3	<3	<0.20	1	--	0.01	--	3.73	57	106
APR													
15...	E.01	5.5	2.43	<3	<3	<0.20	1	--	0.12	--	2.60	--	--
JUN													
03...	<0.02	4.6	1.02	<3	<3	<0.20	1	--	0.04	--	2.08	29	474
JUL													
01...	E.01	4.1	1.83	<3	<3	<0.20	M	--	0.10	--	1.43	49	568
15...	<0.02	3.7	1.35	<3	<3	<0.20	M	--	0.10	--	1.37	42	303
29...	<0.02	4.2	1.79	<3	<3	<0.20	1	--	--	--	1.47	45	229
AUG													
14...	--	5.4	1.94	<3	--	<0.20	M	--	--	--	1.69	74	108
28...	--	4.3	1.03	<3	--	<0.20	1	--	--	--	1.64	36	1,210

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08313268 RIO GRANDE NEAR WHITE ROCK, NM

LOCATION.--Lat 35°59'29", long 106°08'20", Santa Fe County, Hydrologic Unit 13020201, in Caja Del Rio Grant, on left bank 0.25 mi downstream from Water Canyon, 3.2 mi south of White Rock, and at mile 1,605.1.

PERIOD OF RECORD.--June 2000 to September 2003 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 5,390.0 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. 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 sine May 1971. Diversions upstream from station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e468	303	431	401	477	514	700	1,190	1,190	1,110	922	536
2	e484	303	443	393	493	488	783	1,120	1,200	1,030	950	389
3	e449	310	468	388	511	471	833	1,070	1,110	1,040	950	348
4	388	329	485	400	504	484	864	1,000	1,040	1,060	919	424
5	391	340	475	420	484	478	833	1,040	864	1,120	875	465
6	418	329	472	441	461	468	779	1,020	857	1,130	944	497
7	405	387	448	444	456	444	784	951	856	1,050	1,090	606
8	415	442	453	447	443	473	723	870	844	950	1,080	515
9	461	477	450	442	381	504	e652	938	891	942	1,100	495
10	464	470	413	452	390	505	603	998	1,010	993	673	1,020
11	445	465	384	453	437	510	627	1,020	1,080	995	510	866
12	401	418	375	459	436	512	650	987	1,280	1,090	482	673
13	375	e382	368	465	481	565	709	1,090	1,370	1,080	443	548
14	381	e356	370	466	514	771	887	1,680	1,120	1,090	426	438
15	408	351	385	465	544	857	1,170	1,730	1,020	1,080	824	404
16	400	344	404	466	554	867	1,250	1,420	1,230	1,020	1,060	367
17	380	336	423	455	550	887	1,160	1,130	1,200	1,100	1,130	369
18	410	323	440	450	509	638	1,260	1,050	1,230	1,140	1,080	386
19	411	321	432	440	520	628	1,230	1,230	992	1,050	883	e413
20	332	316	382	444	502	623	1,220	1,260	944	1,060	842	e470
21	e300	328	404	459	503	619	1,200	1,160	907	1,100	620	440
22	e267	340	386	462	490	643	1,120	1,060	816	990	580	433
23	286	343	403	462	472	655	1,170	1,010	827	1,000	649	406
24	e342	338	412	461	457	633	1,140	1,080	856	937	743	400
25	e328	341	430	466	454	645	977	1,140	880	923	821	461
26	315	348	380	468	473	737	958	1,410	994	908	947	452
27	e476	334	362	471	493	779	1,150	1,320	1,180	1,000	718	407
28	346	371	384	472	507	776	1,300	1,220	1,090	1,000	688	404
29	324	388	381	476	---	642	1,240	1,200	1,020	938	697	427
30	326	420	389	488	---	553	1,200	1,180	1,130	956	737	413
31	318	---	400	490	---	531	---	1,090	---	952	635	---
TOTAL	11,914	10,853	12,832	13,966	13,496	18,900	29,172	35,664	31,028	31,834	25,018	14,472
MEAN	384	362	414	451	482	610	972	1,150	1,034	1,027	807	482
MAX	484	477	485	490	554	887	1,300	1,730	1,370	1,140	1,130	1,020
MIN	267	303	362	388	381	444	603	870	816	908	426	348
AC-FT	23,630	21,530	25,450	27,700	26,770	37,490	57,860	70,740	61,540	63,140	49,620	28,710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	564	426	496	513	547	715	1,060	1,738	1,486	1,251	1,084	880
MAX	696	476	555	565	605	841	1,202	2,794	2,130	1,629	1,458	1,248
(WY)	(2002)	(2001)	(2002)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(2000)	(2000)	(2000)
MIN	384	362	414	451	482	610	972	1,150	1,034	977	807	482
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	276,159		249,149			
ANNUAL MEAN	757		683		867	
HIGHEST ANNUAL MEAN					1,118	2001
LOWEST ANNUAL MEAN					683	2003
HIGHEST DAILY MEAN	1,640	May 13	1,730	May 15	3,590	May 18, 2001
LOWEST DAILY MEAN	267	Oct 22	267	Oct 22	267	Oct 22, 2002
ANNUAL SEVEN-DAY MINIMUM	310	Oct 20	310	Oct 20	310	Oct 20, 2002
MAXIMUM PEAK FLOW			2,740	Aug 25	3,670	May 17, 2001
MAXIMUM PEAK STAGE			12.92	Aug 25	13.64	May 17, 2001
INSTANTANEOUS LOW FLOW			243	Oct 23	243	Oct 23, 2002
ANNUAL RUNOFF (AC-FT)	547,800		494,200		628,400	
10 PERCENT EXCEEDS	1,240		1,130		1,350	
50 PERCENT EXCEEDS	611		511		702	
90 PERCENT EXCEEDS	358		370		406	

e Estimated

08315480 SANTA FE RIVER ABOVE McCLURE RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'23", long 105°49'25", in NE ¼ SE ¼ SE ¼, sec.24, T.17 N., R.11 E., Santa Fe County, Hydrologic Unit 13020201, in Santa Fe National Forest, on right bank upstream from flow line of McClure Reservoir, 0.20 mi upstream from McClure Reservoir, 2.3 mi upstream from Nichols Reservoir, and 6.0 mi east of Santa Fe.

PERIOD OF RECORD.--July 1998 to current year.

GAGE.--Water-stage recorder with satellite telemetry and 1.5-ft and 8-ft Parshall flume. Elevation of gage is 7,920 ft above National Geodeotic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for those estimated, which are poor. Low flows in 1.5-ft Parshall flume computed under station 08315479.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.83	1.2	1.2	e0.70	e0.95	e1.1	7.6	11	26	2.7	1.2	3.5
2	0.85	1.5	e1.3	e0.75	e0.90	e1.3	8.7	10	23	2.6	1.2	3.2
3	0.77	1.6	e1.8	e0.70	e1.0	e1.1	9.8	11	22	2.2	1.3	3.1
4	0.74	1.5	1.1	e1.0	e0.90	e1.3	9.2	11	19	2.1	0.97	3.0
5	0.73	1.3	e1.2	e1.3	e0.85	e1.2	8.0	10	18	2.0	0.92	3.5
6	0.71	1.2	e1.2	e0.75	e0.75	e1.2	6.5	10	17	1.9	1.0	3.6
7	0.71	1.2	e1.3	e0.80	e0.80	e1.4	5.5	9.7	15	1.8	0.97	2.9
8	0.69	1.2	e1.2	e0.80	e0.85	e1.3	5.0	9.6	14	1.7	0.90	2.6
9	0.65	5.6	e1.2	e0.85	e0.75	1.4	4.2	9.5	13	1.6	0.98	2.6
10	0.63	5.9	e1.1	e0.90	e0.75	1.8	3.9	9.8	12	1.6	0.92	5.6
11	0.61	4.1	e1.3	e0.75	e0.85	2.2	4.2	10	11	1.5	1.4	6.9
12	0.59	3.4	1.2	e0.80	e1.1	2.8	4.1	10	11	1.4	1.4	4.6
13	0.59	2.9	1.2	e0.75	e1.8	3.3	5.8	11	12	1.3	1.5	3.9
14	0.60	2.6	e1.1	e0.70	e1.4	3.7	7.3	11	e10	1.3	2.0	3.5
15	0.59	2.3	e1.1	e0.70	e1.9	4.1	9.4	15	e8.3	1.3	1.5	3.2
16	0.59	1.9	1.2	e0.75	e1.1	4.2	10	18	e6.0	1.3	1.7	2.8
17	0.59	1.8	e1.3	e0.70	e1.3	4.0	9.9	21	e5.6	1.2	1.4	2.6
18	0.71	1.6	e0.90	e0.75	e1.4	3.7	10	26	7.0	1.1	1.2	2.4
19	0.74	1.5	e0.75	e0.70	e1.1	3.3	9.9	26	6.9	1.5	1.1	2.3
20	0.66	e1.5	e1.3	e0.80	e1.0	3.2	8.6	24	5.6	2.3	1.0	2.1
21	0.63	e1.5	e1.1	e0.85	e1.3	3.7	7.7	22	5.1	1.7	0.99	2.0
22	0.62	e1.4	e1.1	e0.75	e0.95	4.7	7.3	23	4.4	1.6	0.99	1.9
23	0.82	e1.4	e0.85	e0.80	e1.0	e7.4	7.5	25	4.1	1.4	1.1	1.8
24	1.9	e1.4	e0.70	e0.85	e1.2	9.8	6.8	26	3.8	1.2	1.6	1.7
25	1.4	e1.3	e0.75	e0.90	e1.4	11	6.7	26	3.6	1.2	1.7	1.6
26	1.3	e1.3	e0.85	e1.1	e1.4	11	7.7	24	e3.4	1.1	2.2	1.5
27	2.3	e1.2	e0.90	e1.2	e1.3	11	8.9	24	3.3	1.1	2.0	1.4
28	1.7	e1.2	e0.70	e1.0	e1.2	10	9.5	25	3.0	1.1	3.9	1.4
29	1.4	e1.3	e0.75	e1.2	---	8.2	10	28	2.8	1.0	5.4	1.4
30	1.3	1.3	e0.80	e1.1	---	8.5	11	26	2.7	1.6	6.6	1.3
31	1.3	---	e0.85	e1.0	---	7.3	---	28	---	1.7	4.4	---
TOTAL	28.25	59.1	33.30	26.70	31.20	140.2	230.7	550.6	298.6	49.1	55.44	83.9
MEAN	0.91	1.97	1.07	0.86	1.11	4.52	7.69	17.8	9.95	1.58	1.79	2.80
MAX	2.3	5.9	1.8	1.3	1.9	11	11	28	26	2.7	6.6	6.9
MIN	0.59	1.2	0.70	0.70	0.75	1.1	3.9	9.5	2.7	1.0	0.90	1.3
AC-FT	56	117	66	53	62	278	458	1,090	592	97	110	166

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	2.06	2.87	1.67	1.53	1.58	3.31	6.07	13.3	6.49	2.50	6.96	2.30
MAX	3.32	5.95	2.82	2.54	2.95	7.62	13.3	28.9	11.3	5.38	23.4	4.19
(WY)	(1999)	(1999)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(1999)	(1998)	(1999)	(1998)
MIN	0.89	0.92	0.85	0.86	0.84	0.90	1.84	1.00	0.45	0.90	0.72	0.72
(WY)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL TOTAL	372.79		1,587.09			
ANNUAL MEAN	1.02		4.35		4.10	
HIGHEST ANNUAL MEAN					6.72	2001
LOWEST ANNUAL MEAN					0.91	2002
HIGHEST DAILY MEAN	5.9	Nov 10	28	May 29	67	Aug 9, 1999
LOWEST DAILY MEAN	0.05	Sep 7	0.59	Oct 12	0.05	Sep 7, 2002
ANNUAL SEVEN-DAY MINIMUM	0.11	Sep 2	0.59	Oct 11	0.11	Sep 2, 2002
MAXIMUM PEAK FLOW			36	May 31	105	Aug 8, 1999
MAXIMUM PEAK STAGE			0.99	May 31	2.05	Aug 8, 1999
INSTANTANEOUS LOW FLOW			0.55	Oct 12	0.02	Sep 6, 2002
ANNUAL RUNOFF (AC-FT)	739		3,150		2,970	
10 PERCENT EXCEEDS	1.8		11		10	
50 PERCENT EXCEEDS	0.91		1.5		1.9	
90 PERCENT EXCEEDS	0.39		0.75		0.76	

e Estimated

08315500 MCCLURE RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'18", long 105°50'06", in NE ¼ SW ¼, 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 mi^2.

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 Oct. 1947 and May 1953, varying amounts of sandbag bulkheads were placed on crest of spillway to increase capacity. Between May 1953 and Dec. 1971, spillway was equipped with radial gates that opened automatically, thereby increasing capacity to more than 3,000 acre-ft. Radial gates were removed during 1972, capacity, 2,615 acre-ft. In 1995, modifications to the dam and spillway increased capacity to 3,257 acre-ft. Only the storage of Rio Grande water in excess of 1,061 acre-ft is subject to terms of the Rio Grande Compact. No dead storage.

COOPERATION.--Capacity table provided by Public Service Co. of New Mexico. Supplementary gage readings provided by City of Santa Fe.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,280 acre-ft, June 8, 1997, gage height, 86.03 ft; no contents Jan. 25 to May 8, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,790 acre-ft, June 21 and 22, elevation, 7,879.59 ft; minimum, 512 acre-ft, Oct. 1, elevation, 7,835.35 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	512	571	693	758	807	868	1,210	1,710	2,720	2,770	2,310	1,760
2	513	574	696	760	809	871	1,230	1,740	2,740	2,760	2,290	1,750
3	514	578	700	761	810	873	1,240	1,760	2,750	2,760	2,270	1,750
4	515	581	702	763	811	876	1,260	1,790	2,760	2,750	2,240	1,750
5	516	584	704	766	813	878	1,270	1,810	2,770	2,750	2,220	1,750
6	517	586	706	767	814	880	1,290	1,830	2,770	2,740	2,200	1,750
7	519	589	709	768	815	883	1,300	1,850	2,770	2,730	2,170	1,740
8	520	592	711	769	817	886	1,310	1,870	2,760	2,730	2,150	1,740
9	521	605	713	771	818	890	1,320	1,890	2,760	2,720	2,130	1,740
10	522	617	715	773	819	894	1,330	1,910	2,760	2,710	2,100	1,740
11	522	625	718	774	821	899	1,340	1,930	2,760	2,710	2,080	1,750
12	523	631	720	776	823	905	1,350	1,950	2,750	2,700	2,060	1,750
13	524	637	722	777	827	912	1,370	1,970	2,750	2,690	2,040	1,750
14	525	642	724	779	830	921	1,380	2,000	2,760	2,690	2,020	1,750
15	526	647	726	780	834	929	1,400	2,030	2,760	2,680	2,000	1,740
16	527	651	728	782	836	939	1,420	2,070	2,770	2,670	1,980	1,740
17	528	655	731	783	839	949	1,440	2,110	2,770	2,650	1,960	1,730
18	530	658	733	785	842	958	1,460	2,170	2,780	2,630	1,930	1,730
19	532	662	734	786	844	967	1,490	2,220	2,790	2,610	1,910	1,720
20	533	665	737	788	846	976	1,500	2,270	2,790	2,590	1,890	1,720
21	534	668	739	790	849	986	1,520	2,310	2,790	2,570	1,870	1,710
22	535	671	741	791	850	996	1,540	2,360	2,790	2,550	1,850	1,710
23	539	674	743	793	852	1,010	1,550	2,410	2,790	2,520	1,820	1,700
24	544	676	744	795	855	1,040	1,570	2,460	2,790	2,500	1,800	1,700
25	547	679	746	796	858	1,070	1,590	2,510	2,790	2,470	1,780	1,690
26	551	681	748	798	861	1,100	1,600	2,550	2,780	2,450	1,770	1,690
27	556	683	750	800	864	1,120	1,620	2,580	2,780	2,430	1,750	1,680
28	560	685	751	801	866	1,140	1,640	2,610	2,780	2,400	1,740	1,670
29	563	688	753	803	---	1,160	1,670	2,640	2,770	2,380	1,750	1,670
30	566	691	755	804	---	1,180	1,690	2,660	2,770	2,360	1,760	1,660
31	568	---	757	806	---	1,190	---	2,700	---	2,340	1,760	---
MAX	568	691	757	806	866	1,190	1,690	2,700	2,790	2,770	2,310	1,760
MIN	512	571	693	758	807	868	1,210	1,710	2,720	2,340	1,740	1,660
(+)	7,837.41	7,841.38	7,843.33	7,844.68	7,846.29	7,853.96	7,863.19	7,878.40	7,879.30	7,873.32	7,864.32	7,862.65
(++)	+58	+123	+66	+49	+60	+324	+500	+1,010	+70	-430	-580	-100

CAL YR	2002	MAX 894	MIN 377	(++)	-20
WTR YR	2003	MAX 2,790	MIN 512	(++)	+1,150

(+) Elevation, in feet, at end of month.
(++) Change, in contents, in acre-feet.

08316000 SANTA FE RIVER NEAR SANTA FE, NM

LOCATION.--Lat 35°41'12", long 105°50'35", in NE ¼ SE ¼ 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 mi^2.

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 with satellite telemetry 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 those estimated, which are poor. Flow regulated by McClure Reservoir (station 08315500), completed in 1926, raised in 1935, 1947, and again in 1989.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks that probably exceeded 1,000 ft^3/s occurred Aug. 19, 1872, and Sept. 29 or 30, 1904. Without regulation, the flood of Sept. 23, 1929, might have exceeded 1,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.05	0.04	e0.02	e0.09	e0.04	0.08	0.14	16	3.7	12	4.6
2	0.07	0.07	0.03	e0.02	e0.08	e0.04	0.07	0.14	16	3.6	12	4.5
3	0.07	0.04	0.03	e0.02	e0.06	e0.03	0.05	0.15	16	3.6	11	4.5
4	0.07	0.07	0.03	e0.02	e0.04	e0.02	0.06	0.16	17	3.5	11	4.6
5	0.07	0.04	0.02	e0.02	e0.03	e0.02	0.07	0.17	17	3.5	11	4.6
6	0.07	0.04	0.0	e0.02	e0.03	e0.01	0.07	0.18	17	3.6	11	4.5
7	0.06	0.04	0.02	e0.02	e0.02	e0.01	0.08	0.17	17	3.6	11	4.6
8	0.05	0.06	0.02	e0.01	e0.01	e0.02	0.08	0.17	16	3.6	11	4.5
9	0.04	0.19	0.01	e0.02	e0.02	e0.02	0.10	0.16	14	3.7	12	4.6
10	0.04	0.11	0.03	e0.01	e0.01	0.01	0.10	0.17	12	3.7	12	4.7
11	0.04	0.08	0.04	e0.02	e0.01	0.02	0.10	0.16	12	3.4	12	4.6
12	0.04	0.07	0.03	e0.02	e0.02	0.02	0.09	0.18	12	3.5	12	4.6
13	0.04	0.05	e0.03	e0.03	e0.04	0.02	0.09	0.18	7.9	3.5	12	4.6
14	0.03	0.05	e0.02	e0.05	e0.04	0.02	0.09	0.20	4.1	3.4	12	4.6
15	0.03	0.05	e0.02	e0.05	e0.04	0.02	0.18	0.20	4.1	3.4	12	4.6
16	0.02	0.04	e0.02	e0.04	e0.05	0.01	0.12	0.19	4.0	3.4	12	4.5
17	0.03	0.04	e0.03	e0.02	e0.06	0.02	0.11	0.17	3.9	7.3	12	4.5
18	0.07	0.03	e0.03	e0.02	e0.05	0.03	0.11	0.17	4.2	11	12	4.5
19	0.04	0.03	e0.03	e0.02	e0.05	0.01	0.19	0.18	4.1	11	12	4.4
20	0.03	0.04	e0.02	e0.03	e0.07	0.02	0.14	0.20	4.1	11	12	4.2
21	0.04	0.04	e0.02	e0.03	e0.06	0.11	0.13	0.20	4.1	11	12	4.2
22	0.04	0.04	e0.02	e0.04	e0.06	0.28	0.14	0.23	3.9	11	11	4.1
23	0.15	0.04	e0.02	e0.04	e0.05	0.43	0.16	0.27	3.8	11	11	4.1
24	0.24	0.03	e0.02	e0.05	e0.06	0.37	0.15	0.30	3.7	11	12	4.1
25	0.07	0.02	e0.02	e0.06	e0.05	0.34	0.15	0.33	3.7	11	11	4.1
26	0.20	0.01	e0.02	e0.05	e0.04	0.20	0.14	6.7	3.7	11	11	4.1
27	0.17	0.00	e0.02	e0.06	e0.05	0.16	0.15	10	3.7	11	11	4.1
28	0.07	0.0	e0.02	e0.06	e0.05	0.15	0.14	11	3.7	11	8.4	4.1
29	0.05	0.03	e0.02	e0.08	---	0.08	0.15	12	3.7	11	4.6	4.1
30	0.07	0.03	e0.02	e0.07	---	0.06	0.16	13	3.8	11	4.8	4.1
31	0.05	---	e0.02	e0.07	---	0.06	---	14	---	12	4.7	---
TOTAL	2.12	1.43	0.72	1.09	1.24	2.65	3.45	71.47	256.2	219.0	335.5	131.9
MEAN	0.068	0.048	0.023	0.035	0.044	0.085	0.12	2.31	8.54	7.06	10.8	4.40
MAX	0.24	0.19	0.04	0.08	0.09	0.43	0.19	14	17	12	12	4.7
MIN	0.02	0.00	0.00	0.01	0.01	0.01	0.05	0.14	3.7	3.4	4.6	4.1
AC-FT	4.2	2.8	1.4	2.2	2.5	5.3	6.8	142	508	434	665	262

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2003, BY WATER YEAR (WY)

MEAN	4.77	2.93	2.41	2.25	2.60	4.66	12.2	22.7	17.2	9.32	8.43	6.76
MAX	22.6	13.5	7.19	6.87	14.2	30.0	68.5	92.9	75.2	56.2	74.0	36.0
(WY)	(1942)	(1942)	(1959)	(1970)	(1916)	(1916)	(1915)	(1941)	(1921)	(1919)	(1921)	(1929)
MIN	0.068	0.048	0.023	0.035	0.044	0.085	0.016	0.53	0.70	0.25	0.033	0.047
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(1955)	(1955)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1913 - 2003	
ANNUAL TOTAL	361.50		1,026.77			
ANNUAL MEAN	0.99		2.81		8.01	
HIGHEST ANNUAL MEAN					26.2	1919
LOWEST ANNUAL MEAN					1.84	2002
HIGHEST DAILY MEAN	15	Mar 18	17	Jun 4	378	Sep 23, 1929
LOWEST DAILY MEAN	0.00	Apr 20	0.00	Nov 27	a0.00	Aug 2, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 27	0.02	Mar 4	0.00	Aug 2, 2000
MAXIMUM PEAK FLOW			18	Jun 4	b1,500	Aug 14, 1921
MAXIMUM PEAK STAGE			1.99	Jun 4	c5.17	Aug 14, 1921
INSTANTANEOUS LOW FLOW			0.00	Oct 16	0.00	Aug 2, 2000
ANNUAL RUNOFF (AC-FT)	717		2,040		5,800	
10 PERCENT EXCEEDS	5.4		11		18	
50 PERCENT EXCEEDS	0.04		0.11		4.0	
90 PERCENT EXCEEDS	0.00		0.02		0.90	

a Many days.
b From rating curve extended above 150 ft^3/s.
c Site and datum then in use.
e Estimated

08316500 NICHOLS RESERVOIR NEAR SANTA FE, NM

LOCATION.--Lat 35°41'24", long 105°52'46", in SE $^1/_4$ NE $^1/_4$ 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 mi^2.

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, 530 acre-ft, Aug. 28, gage height, 161.49 ft; minimum, 206 acre-ft, May 26, gage height, 145.31 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	301	302	304	305	310	e375	400	294	331	336	522
2	311	301	302	304	305	309	e376	399	314	322	344	518
3	311	301	303	304	305	310	e378	397	331	314	350	515
4	310	301	303	304	305	310	e380	393	346	306	356	512
5	310	301	304	305	305	310	e381	392	360	297	362	509
6	309	301	303	305	305	310	e382	391	373	288	368	504
7	308	301	304	305	305	310	e383	385	386	280	373	499
8	307	301	304	305	305	310	384	376	400	272	379	492
9	307	301	304	305	304	310	385	368	411	264	386	487
10	307	301	304	305	304	311	387	360	418	254	392	485
11	306	302	304	305	304	311	388	355	423	252	400	482
12	305	301	304	305	304	311	388	353	429	243	407	481
13	304	301	304	305	305	312	389	344	431	239	415	482
14	304	301	304	305	305	313	390	333	427	230	421	479
15	303	301	304	305	306	314	391	320	422	222	428	476
16	303	301	304	305	306	315	393	306	416	213	434	472
17	302	302	304	305	306	e315	393	293	412	209	440	468
18	303	302	304	305	307	e317	394	280	412	217	446	464
19	302	302	304	305	307	e319	396	272	407	225	452	460
20	301	302	304	305	307	e321	396	263	401	234	457	456
21	301	302	304	305	307	e324	397	253	394	241	463	451
22	301	302	304	305	307	e327	397	240	389	250	472	446
23	301	302	304	305	307	e333	398	227	387	257	482	441
24	302	302	305	305	308	e340	398	216	382	265	491	437
25	301	302	304	305	308	e346	399	207	375	272	501	432
26	302	302	304	305	309	e352	399	206	369	278	511	427
27	302	302	304	305	309	e356	399	213	361	286	524	422
28	302	302	304	305	309	e362	399	225	353	296	530	417
29	301	302	304	305	---	e365	400	240	346	306	529	412
30	301	302	305	305	---	e369	400	255	338	317	528	407
31	301	---	304	305	---	e373	---	273	---	326	526	---
MAX	312	302	305	305	309	373	400	400	431	331	530	522
MIN	301	301	302	304	304	309	375	206	294	209	336	407
(+)	151.14	151.20	151.32	151.35	151.57	e154.86	156.07	149.60	153.08	152.43	161.32	156.38
(++)	-12	+1	+2	+1	+4	+64	+27	-127	+65	-12	+200	-119

CAL YR 2002 MAX 506 MIN 241 (++) -151
WTR YR 2003 MAX 530 MIN 206 (++) +94

(+) Gage height, in feet, at end of month.
(++) Change in contents, in acre-feet.
e Estimated

08317050 ARROYO HONDO NEAR SANTA FE, NM

LOCATION.--Lat 35°37'19", long 105°55'06", in NE 1/4 NW 1/4 SW 1/4 sec 18, T.16 N., R.9 E., Santa Fe County, Hydrologic Unit 13020201, on left bank 150 ft upstream from U.S. Highway 85, and approximately 7 mi east of Santa Fe.

PERIOD OF RECORD.--October 2000 to September 2003 (discontinued).

GAGE.--Water-stage recorder.

REMARKS.--Records good except for those estimated, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21 ft^3/s, July 1, 2000, gage height, 3.65 ft; minimum, no flow many days.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge, 6.9 ft^3/s, Mar. 24, gage height, 2.04 ft; minimum, no flow most days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.63	e0.02	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.55	e0.02	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.56	e0.02	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.41	e0.02	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.36	e0.02	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.28	e0.02	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.23	e0.02	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.17	e0.02	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.18	e0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.17	e0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.16	e0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.14	e0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.11	e0.01	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.07	e0.01	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.11	e0.02	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.17	e0.01	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.11	e0.01	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.08	e0.01	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.11	e0.01	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.16	e0.01	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.09	e0.01	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	2.8	0.03	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	6.4	0.03	0.00	0.00	0.00	0.00	0.00
26	0.04	0.00	0.00	0.00	0.00	5.1	0.03	e0.01	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	3.6	0.03	e0.01	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	2.4	0.03	e0.01	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	1.4	0.03	e0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	1.0	e0.03	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.84	---	0.00	---	0.00	0.00	---
TOTAL	0.04	0.00	0.00	0.00	0.00	23.54	5.18	0.34	0.00	0.00	0.00	0.00
MEAN	0.001	0.000	0.000	0.000	0.000	0.76	0.17	0.011	0.000	0.000	0.000	0.000
MAX	0.04	0.00	0.00	0.00	0.00	6.4	0.63	0.02	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
AC-FT	0.08	0.00	0.00	0.00	0.00	47	10	0.7	0.00	0.00	0.00	0.00

CAL YR	2002	TOTAL	0.10	MEAN	0.000	MAX	0.04	MIN	0.00	AC-FT	0.2
WTR YR	2003	TOTAL	29.10	MEAN	0.080	MAX	6.4	MIN	0.00	AC-FT	58

e Estimated

08317300 COCHITI LAKE NEAR COCHITI PUEBLO, NM

LOCATION.--Lat 35°37'01", long 106°18'58", in NW ¼ SW ¼ 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 mi^2 approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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

GAGE.--Water-stage recorder with satellite telemetry. 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, 1999, 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.

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, 51,980 acre-ft, Apr. 29, elevation, 5,342.28 ft; minimum, 48,260 acre-ft, Sept. 30, elevation, 5,339.23 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Army Corps of Engineers in 1998)

Elevation	Contents	Elevation	Contents
5,338	46,900	5,340	49,140
5,339	48,000	5,350	63,850

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49,020	48,740	49,020	48,840	50,120	50,880	50,730	51,290	50,610	49,970	49,220	49,160
2	49,110	48,740	49,050	48,890	50,110	50,860	50,850	50,790	50,780	49,970	49,180	48,910
3	49,160	48,740	49,190	48,900	50,130	50,860	51,000	50,490	50,740	49,940	49,140	48,520
4	49,050	48,800	49,280	48,930	50,120	50,910	51,240	50,500	50,660	49,900	49,100	48,300
5	48,830	48,880	49,280	49,000	50,060	50,960	51,440	50,550	50,520	49,920	48,980	48,360
6	48,700	48,840	49,230	49,060	50,010	50,860	51,550	50,680	50,270	50,040	48,880	48,510
7	48,630	48,720	49,170	49,110	50,070	50,640	51,670	50,640	50,050	50,060	48,980	48,700
8	48,610	48,760	49,100	49,120	50,140	50,430	51,750	50,540	49,770	49,920	49,100	48,720
9	48,700	48,880	49,110	49,060	50,110	50,290	51,680	50,530	49,590	49,740	49,200	48,670
10	48,780	49,030	49,160	49,090	50,130	50,160	51,530	50,550	49,490	49,610	49,380	48,990
11	48,770	49,160	49,190	49,170	50,280	50,060	51,330	50,580	49,450	49,480	49,340	49,290
12	48,740	49,090	49,190	49,260	50,430	49,940	51,190	50,600	49,710	49,450	49,350	49,130
13	48,640	48,850	49,200	49,290	50,500	49,860	51,090	50,760	50,110	49,470	49,250	48,880
14	48,610	48,770	49,180	49,280	50,540	50,050	51,140	50,850	50,100	49,470	49,110	48,560
15	48,610	48,740	49,200	49,280	50,640	50,480	51,580	50,930	49,800	49,480	48,830	48,440
16	48,640	48,710	49,250	49,280	50,740	50,950	51,840	51,360	49,780	49,420	48,840	48,350
17	48,680	48,700	49,320	49,310	50,890	51,440	51,460	51,180	49,850	49,390	49,020	48,290
18	48,880	48,700	49,310	49,390	50,860	51,700	51,410	51,100	50,340	49,490	49,280	48,290
19	49,050	48,740	49,200	49,470	50,730	51,790	51,420	51,240	50,430	49,500	49,420	48,290
20	49,100	48,780	49,120	49,540	50,640	51,850	51,350	51,380	50,290	49,450	49,550	48,390
21	49,050	48,820	49,170	49,620	50,610	51,800	51,360	51,500	50,220	49,510	49,410	48,440
22	48,940	48,880	49,180	49,720	50,550	51,660	51,350	51,370	50,080	49,560	49,100	48,450
23	48,860	48,920	49,120	49,800	50,450	51,580	51,410	51,200	49,860	49,530	48,770	48,410
24	48,930	48,970	49,060	49,860	50,520	51,530	51,400	51,180	49,710	49,490	48,710	48,300
25	48,960	48,940	49,060	49,890	50,690	51,530	51,350	51,170	49,490	49,420	48,660	48,300
26	49,030	48,930	48,930	49,920	50,790	51,580	51,240	51,720	49,390	49,350	49,040	48,390
27	49,310	48,890	48,800	49,960	50,880	51,590	51,400	51,960	49,530	49,320	48,990	48,380
28	49,290	48,860	48,770	49,990	50,880	51,580	51,760	51,550	49,670	49,310	48,940	48,320
29	49,160	48,890	48,770	50,040	---	51,500	51,980	50,980	49,670	49,310	48,930	48,300
30	49,000	48,940	48,770	50,080	---	51,190	51,660	50,680	49,790	49,290	49,030	48,260
31	48,850	---	48,800	50,120	---	50,880	---	50,450	---	49,260	49,090	---
MAX	49,310	49,160	49,320	50,120	50,890	51,850	51,980	51,960	50,780	50,060	49,550	49,290
MIN	48,610	48,700	48,770	48,840	50,010	49,860	50,730	50,450	49,390	49,260	48,660	48,260
(+)	5,339.75	5,339.83	5,339.71	5,340.81	5,341.42	5,341.42	5,342.03	5,341.08	5,340.54	5,340.10	5,339.95	5,339.23
(++)	-80	+90	-140	+1,320	+760	0	+780	-1,210	-660	-530	-170	-830

CAL YR 2002 MAX 53,720 MIN 47,900 (++) -1,360
WTR YR 2003 MAX 51,980 MIN 48,260 (++) -670

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

08317400 RIO GRANDE BELOW COCHITI DAM, NM

LOCATION.--Lat 35°37'05", long 106°19'24", in SW ¼ NE ¼ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 15, 1941, reached a discharge of 23,400 ft^3/s at a nearby site upstream from mouth of Santa Fe River. The flood of May 23, 1920, probably exceeded 23,400 ft^3/s, and is likely the highest since 1905.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	303	384	390	486	392	536	1,100	897	743	704	423
2	293	266	414	385	490	391	536	1,000	896	755	714	421
3	291	251	433	385	485	358	536	946	907	773	718	420
4	307	279	433	387	505	343	533	873	847	772	719	363
5	379	295	474	387	517	343	535	753	792	766	718	311
6	393	338	497	407	490	397	534	731	792	767	717	300
7	375	392	481	420	436	437	532	730	794	768	721	343
8	357	393	480	447	421	435	535	730	794	769	722	385
9	356	399	455	468	422	434	539	728	794	768	721	378
10	355	396	414	437	365	434	542	721	795	764	599	445
11	356	396	379	419	361	434	540	716	824	764	483	520
12	355	454	378	420	379	435	540	718	845	766	470	589
13	354	432	378	452	452	434	541	716	850	770	467	561
14	303	398	379	468	496	447	562	1,160	853	768	465	467
15	273	368	380	469	490	468	616	1,430	835	767	636	364
16	241	346	381	466	490	467	850	1,140	826	765	748	304
17	208	347	382	448	489	471	1,030	926	801	779	748	268
18	194	324	441	416	531	473	962	864	776	804	677	266
19	190	297	472	416	539	471	975	818	763	793	584	274
20	268	298	421	419	497	491	982	822	746	792	558	290
21	272	298	382	420	482	544	917	867	722	773	557	304
22	271	308	382	420	487	573	861	922	709	735	586	304
23	271	316	417	420	482	572	839	864	702	724	604	322
24	271	316	436	435	346	513	895	845	696	723	606	325
25	272	337	436	453	271	478	812	867	720	720	608	319
26	266	348	451	452	316	501	754	992	743	717	606	363
27	266	349	424	454	344	581	753	1,230	748	719	605	363
28	308	349	400	454	365	592	819	1,340	747	718	608	294
29	334	364	401	452	---	565	899	1,380	742	714	576	280
30	334	381	401	453	---	567	1,060	1,200	741	711	547	280
31	336	---	392	467	---	550	---	1,070	---	707	482	---
TOTAL	9,348	10,338	12,978	13,386	12,434	14,591	21,565	29,199	23,697	23,374	19,274	10,846
MEAN	302	345	419	432	444	471	719	942	790	754	622	362
MAX	393	454	497	469	539	592	1,060	1,430	907	804	748	589
MIN	190	251	378	385	271	343	532	716	696	707	465	266
AC-FT	18,540	20,510	25,740	26,550	24,660	28,940	42,770	57,920	47,000	46,360	38,230	21,510
(+)	3,370	226	0	0	732	4,960	4,900	4,550	4,840	4,670	4,040	4,130
(++)	1,300	106	0	0	789	2,610	3,830	3,380	3,920	3,650	2,340	2,500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	594	855	880	818	949	1,183	1,895	3,049	2,867	1,609	907	719
MAX	2,045	1,878	1,787	2,245	3,639	2,868	6,320	6,101	6,205	5,643	3,683	1,635
(WY)	(1998)	(1987)	(1987)	(1986)	(1986)	(1986)	(1985)	(1984)	(1983)	(1979)	(1986)	(1986)
MIN	214	331	419	428	444	438	281	353	392	293	254	121
(WY)	(1975)	(1990)	(2003)	(1977)	(2003)	(1977)	(1977)	(1972)	(1972)	(1972)	(1972)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	229,042		201,030			
ANNUAL MEAN	628		551		1,361	
HIGHEST ANNUAL MEAN					2,355	1986
LOWEST ANNUAL MEAN					452	1977
HIGHEST DAILY MEAN	1,650	May 14	1,430	May 15	8,290	May 7, 1985
LOWEST DAILY MEAN	190	Oct 19	190	Oct 19	0.51	Aug 4, 1977
ANNUAL SEVEN-DAY MINIMUM	235	Oct 16	235	Oct 16	39	Sep 16, 1977
MAXIMUM PEAK FLOW			1,810	May 23	a10,300	Jul 26, 1971
MAXIMUM PEAK STAGE			3.35	May 23	b7.90	Jul 26, 1971
INSTANTANEOUS LOW FLOW			117	Feb 10	c0.51	Aug 4, 1977
ANNUAL RUNOFF (AC-FT)	454,300		398,700		986,100	
10 PERCENT EXCEEDS	962		845		3,440	
50 PERCENT EXCEEDS	609		480		859	
90 PERCENT EXCEEDS	316		304		379	

a From rating curve extended above 2,600 ft^3/s.
b Site and datum then in use.
c Aug. 3-5, Aug. 27 and 28, 1978, result of regulation.
(+) Diversion, in acre-feet, by Cochiti Eastside Main Canal at Head.
(++)Diversion,in acre-feet, by Sili Main Canal at Head.

08317900 GALISTEO RESERVOIR NEAR CERRILLOS, NM

LOCATION.--Lat 35°27'44", long 106°12'30", in NW $^1/_4$ 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 mi^2.

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 Jan. 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 telemetry 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)

Elevation	Contents	Elevation	Contents
5,500	0	5,504	41
5,501	2	5,505	69
5,502	9	5,506	109
5,503	21	5,508	244

08317950 GALISTEO CREEK BELOW GALISTEO DAM, NM

LOCATION.--Lat 35°27'53", long 106°12'49", in NE ¼ NE ¼ 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 mi^2.

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 poor. Flow regulated by Galisteo Reservoir 0.4 mi upstream. Diversions for irrigation of about 50 acres upstream from station. No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e6.0	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e11	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.1
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.1
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.1	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.00	2.6	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00
26	1.1	0.00	0.00	0.00	0.00	0.00	0.00	e11	0.00	0.00	0.00	0.00
27	1.6	0.00	0.00	0.00	0.00	0.00	0.00	e1.0	0.00	0.00	43	0.00
28	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.6	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	3.36	0.00	0.00	0.00	0.00	0.00	0.00	12.00	65.60	17.00	51.80	22.20
MEAN	0.11	0.000	0.000	0.000	0.000	0.000	0.000	0.39	2.19	0.55	1.67	0.74
MAX	1.6	0.00	0.00	0.00	0.00	0.00	0.00	11	24	17	43	14
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	6.7	0.00	0.00	0.00	0.00	0.00	0.00	24	130	34	103	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	4.41	1.53	1.31	1.34	1.82	2.59	2.48	2.76	6.62	18.4	17.0	8.73
MAX	28.9	7.70	6.55	6.25	11.6	19.8	23.8	31.7	33.8	110	70.0	52.4
(WY)	(1982)	(1995)	(1987)	(1993)	(1993)	(1993)	(1973)	(1985)	(1996)	(1971)	(1999)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1980)	(1980)	(1980)	(1981)	(1981)	(1981)	(1981)	(1971)	(1971)	(1987)	(2002)	(1979)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	44.29		171.96			
ANNUAL MEAN	0.12		0.47		5.67	
HIGHEST ANNUAL MEAN					12.8	1972
LOWEST ANNUAL MEAN					0.11	2002
HIGHEST DAILY MEAN	28	Sep 10	43	Aug 27	1,190	Aug 9, 1999
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	May 15, 1970
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	May 30, 1970
MAXIMUM PEAK FLOW			59	Sep 10	3,460	Aug 24, 1997
MAXIMUM PEAK STAGE			2.18	Sep 10	5.57	Aug 24, 1997
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	May 15, 1970
ANNUAL RUNOFF (AC-FT)	88		341		4,110	
10 PERCENT EXCEEDS	0.00		0.00		6.3	
50 PERCENT EXCEEDS	0.00		0.00		0.21	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08319000 RIO GRANDE AT SAN FELIPE, NM

LOCATION.--Lat 35°26'47", long 106°26'24", in SW $^1/_4$ NW $^1/_4$ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. Datum of gage is 5,l15.73 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 May 16, 1945, to Sept. 30, 1946, when it was 5.94 ft lower than present datum.

REMARKS.--Water-discharge records fair. Flow completely regulated since Nov. 1973 by Cochiti Dam (station 08317300) 17 mi upstream. Prior to Nov. 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 are irrigated downstream by Cochiti Eastside Main Canal and San Felipe eastside acequia, which bypass station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in 1874, 1884, and 1904.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	409	448	445	533	471	618	1,190	1,050	745	747	560
2	395	367	462	442	534	469	621	1,150	914	755	743	556
3	386	343	507	442	532	455	623	1,070	972	792	749	554
4	390	363	503	441	544	433	623	1,050	897	807	756	541
5	449	367	519	441	565	421	614	888	832	809	743	478
6	485	374	562	448	556	449	625	846	829	809	740	452
7	468	459	545	471	499	518	627	838	825	810	743	458
8	434	463	543	485	471	522	625	830	822	806	745	528
9	434	472	531	522	471	521	626	827	812	808	749	523
10	432	479	490	505	437	522	625	822	816	804	720	569
11	432	476	450	472	411	516	619	823	823	793	540	648
12	436	498	448	471	416	510	615	820	861	805	502	692
13	435	526	447	487	473	508	618	814	872	815	489	726
14	414	464	446	518	533	517	627	1,070	871	793	485	656
15	385	450	445	520	532	543	680	1,520	857	801	488	564
16	376	417	444	519	532	549	870	1,400	840	796	672	488
17	326	416	446	515	532	558	1,090	1,110	806	803	701	431
18	315	412	476	472	550	553	1,100	1,090	777	847	679	418
19	294	370	538	471	603	555	1,060	1,010	822	851	608	418
20	328	368	516	470	595	559	1,120	1,010	775	854	572	428
21	357	368	450	471	554	608	1,030	1,030	731	855	580	441
22	357	372	446	469	558	657	999	1,130	719	803	592	440
23	365	383	459	470	557	660	951	1,090	702	771	619	444
24	377	382	494	475	498	621	997	1,030	699	777	621	466
25	346	395	494	502	393	574	958	1,060	711	770	623	454
26	351	416	501	503	385	577	834	1,270	740	766	619	475
27	384	417	502	503	423	656	846	1,190	732	765	613	486
28	374	417	459	503	431	714	892	1,230	735	761	759	464
29	419	421	458	502	---	660	972	1,290	745	763	685	432
30	420	447	457	504	---	659	1,110	1,200	746	764	731	432
31	420	---	452	507	---	644	---	1,090	---	756	680	---
TOTAL	12,198	12,511	14,938	14,966	14,118	17,179	24,215	32,788	24,333	24,654	20,293	15,222
MEAN	393	417	482	483	504	554	807	1,058	811	795	655	507
MAX	485	526	562	522	603	714	1,120	1,520	1,050	855	759	726
MIN	294	343	444	441	385	421	614	814	699	745	485	418
AC-FT	24,190	24,820	29,630	29,690	28,000	34,070	48,030	65,040	48,260	48,900	40,250	30,190
(+)	3,370	226	0	0	732	4,960	4,900	4,550	4,840	4,670	4,040	4,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2003, BY WATER YEAR (WY)

MEAN	723	891	943	873	1,004	1,291	2,044	3,185	3,070	1,800	1,070	859
MAX	2,164	2,072	1,969	2,163	3,695	3,054	6,126	6,160	6,534	5,979	3,667	1,781
(WY)	(1998)	(1987)	(1987)	(1986)	(1986)	(1986)	(1985)	(1985)	(1983)	(1979)	(1986)	(1986)
MIN	289	389	482	462	504	546	378	521	746	565	596	206
(WY)	(1975)	(1990)	(2003)	(1977)	(2003)	(1977)	(1977)	(1977)	(1989)	(1974)	(1978)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1974 - 2003	
ANNUAL TOTAL	263,944		227,415			
ANNUAL MEAN	723		623		a1,480	
HIGHEST ANNUAL MEAN					2,493	1987
LOWEST ANNUAL MEAN					547	1977
HIGHEST DAILY MEAN	1,680	May 14	1,520	May 15	8,100	May 7, 1985
LOWEST DAILY MEAN	294	Oct 19	294	Oct 19	67	Aug 28, 1978
ANNUAL SEVEN-DAY MINIMUM	335	Oct 17	335	Oct 17	135	Aug 23, 1978
MAXIMUM PEAK FLOW			2,820	May 26	b27,300	Jun 26, 1937
MAXIMUM PEAK STAGE			5.99	May 26	c11.13	Jun 26, 1937
INSTANTANEOUS LOW FLOW			277	Oct 19	32	Jul 7, 1934
ANNUAL RUNOFF (AC-FT)	523,500		451,100		1,072,000	
10 PERCENT EXCEEDS	1,090		904		3,600	
50 PERCENT EXCEEDS	697		545		976	
90 PERCENT EXCEEDS	410		415		475	

a Average discharge for 48 years (water years 1926-73), 1,374 ft^3/s, 995,500 acre-ft/yr, prior to closure of Cochiti.
b From rating curve extended above 15,000 ft^3/s.
c Site and datum then in use.
(+)Monthly diversion, in acre-feet, of Cochiti Eastside Canal; record furnished by Middle Rio Grande Conservancy District.

08319000 RIO GRANDE AT SAN FELIPE, NM—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
31...	0925	431	11	12	633	8.8	96	8.1	420	10.0	11.0	160	48.4
NOV													
19...	1325	375	7.8	7.6	640	10.2	105	7.4	438	12.5	9.0	--	--
DEC													
18...	1205	457	4.0	3.1	625	10.6	101	8.3	422	--	5.0	--	--
30...	1005	457	4.1	3.9	632	10.6	95	8.2	401	6.0	3.0	140	43.8
FEB													
19...	1502	576	8.8	8.4	650	12.3	122	8.1	401	12.0	8.0	--	--
MAR													
05...	1110	431	6.6	5.2	626	11.2	110	8.2	378	8.0	6.0	140	41.4
APR													
07...	1410	627	--	4.6	628	10.2	111	7.8	399	20.5	10.5	--	--
MAY													
02...	1110	1,240	--	18	631	9.0	110	8.3	431	--	15.8	--	--
JUN													
17...	0945	839	--	25	635	8.0	102	8.2	380	24.5	18.0	--	--
JUL													
09...	0930	824	--	28	635	7.6	100	7.8	355	33.0	19.7	--	--
18...	1000	883	39	34	640	7.4	99	7.8	338	27.0	21.0	120	37.5
AUG													
15...	0945	448	--	18	640	7.2	95	7.9	328	25.0	20.0	--	--
SEP													
09...	1200	501	--	8.7	634	6.3	85	7.7	348	24.5	20.5	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
OCT													
31...	8.95	2.86	0.9	26.1	128	154	5.77	0.43	18.3	77.0	264	--	--
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	8.46	2.79	1	27.0	135	164	7.88	0.46	19.8	61.5	252	<0.20	0.40
FEB													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	8.07	2.92	1	27.0	111	134	8.14	0.50	23.6	52.6	230	<0.20	0.20
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	6.86	2.71	0.7	17.4	106	129	5.48	0.3	15.2	52.2	201	--	--
AUG													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

08319000 RIO GRANDE AT SAN FELIPE, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
OCT													
31...	--	--	--	--	--	--	--	--	--	--	--	--	40
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<0.01	0.02	<0.02	<0.010	<0.01	<0.02	<0.02	<2	E.15	E1	98	<0.06	50
FEB													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	0.02	0.02	0.05	<0.010	<0.01	<0.02	<0.02	M	<0.30	E1	82	<0.06	40
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	30
AUG													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recover-able, ug/L (71900)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)
OCT													
31...	--	--	--	--	<10	--	--	<0.02	--	--	--	<3	--
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	E.02	E.5	0.17	0.8	<10	<0.08	16.5	<0.02	5.6	1.78	<3	<3	<0.20
FEB													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	E.03	<0.8	0.25	0.7	<10	<0.08	30.6	<0.02	5.8	2.30	<3	<3	<0.20
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	<8	--	--	<0.02	--	--	--	<3	--
AUG													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

08319000 RIO GRANDE AT SAN FELIPE, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT				
31...	--	--	48	234
NOV				
19...	--	--	--	--
DEC				
18...	--	--	--	--
30...	1	3.67	80	8
FEB				
19...	--	--	--	--
MAR				
05...	M	3.77	81	13
APR				
07...	--	--	--	--
MAY				
02...	--	--	--	118
JUN				
17...	--	--	--	--
JUL				
09...	--	--	--	65
18...	--	--	68	60
AUG				
15...	--	--	--	183
SEP				
09...	--	--	--	532

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08324000 JEMEZ RIVER NEAR JEMEZ, NM

LOCATION.--Lat 35°39'42", long 106°44'37", 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 mi^2.

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 with satellite telemetry. Concrete control since Dec. 6, 1965. Datum of gage is 5,622 ft above National Geodetic Vertical Datum of 1929, from plane-table survey by Topographic Division, U.S. Geological Survey, 1952. June 22, 1936, to Mar. 11, 1937, at site 60 ft upstream at datum 0.50 ft higher. Mar. 12, 1937, to July 8, 1938, at present site at datum 0.7 ft higher. July 9, 1938, to May 6, 1941, at site 60 ft upstream at datum 0.70 ft higher.

REMARKS.--Water-discharge records good. Diversion for irrigation of about 300 acres upstream from station. Several observations of water temperature were made during the year.

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 ft^3/s), from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	27	33	22	31	24	44	174	91	11	16	23
2	18	30	29	19	33	21	55	153	67	11	16	20
3	17	31	36	19	31	20	52	170	46	11	18	12
4	16	36	32	21	24	28	44	159	36	11	17	29
5	15	39	28	21	24	25	40	132	29	10	16	32
6	7.1	41	25	22	23	17	39	121	25	11	8.5	33
7	11	39	27	22	21	23	36	104	23	10	9.9	29
8	16	41	28	22	21	27	30	104	23	12	16	35
9	15	54	24	23	24	29	34	108	20	11	16	27
10	15	78	23	23	19	46	41	118	17	10	21	93
11	14	52	22	22	20	56	57	118	18	14	20	95
12	13	38	22	22	22	88	74	126	17	14	23	51
13	7.3	36	22	20	30	142	90	135	17	14	13	36
14	9.8	35	22	22	73	189	108	152	15	14	13	31
15	15	32	23	21	97	147	130	182	15	13	18	28
16	13	27	23	20	46	115	122	167	16	8.5	17	27
17	14	29	25	19	36	74	114	176	19	8.1	16	21
18	15	32	21	19	36	48	119	185	24	13	16	20
19	15	28	12	20	27	38	113	168	22	13	16	22
20	11	30	12	20	27	33	100	147	25	14	9.2	20
21	12	31	18	21	23	42	95	140	24	16	12	19
22	14	31	19	22	24	45	110	134	20	21	17	20
23	18	33	22	22	22	66	123	136	18	12	17	21
24	19	32	23	24	23	98	106	138	16	13	18	17
25	18	32	20	25	27	85	108	182	14	18	23	18
26	43	32	17	26	27	75	123	207	13	21	20	21
27	37	27	19	26	26	68	155	156	15	19	11	20
28	31	29	21	27	25	46	182	163	14	18	18	20
29	28	33	22	31	---	36	190	162	14	18	39	20
30	27	30	23	32	---	32	200	124	13	9.6	36	19
31	25	---	22	32	---	38	---	93	---	12	28	---
TOTAL	546.2	1,065	715	707	862	1,821	2,834	4,534	726	411.2	554.6	879
MEAN	17.6	35.5	23.1	22.8	30.8	58.7	94.5	146	24.2	13.3	17.9	29.3
MAX	43	78	36	32	97	189	200	207	91	21	39	95
MIN	7.1	27	12	19	19	17	30	93	13	8.1	8.5	12
AC-FT	1,080	2,110	1,420	1,400	1,710	3,610	5,620	8,990	1,440	816	1,100	1,740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)

MEAN	35.1	37.7	29.1	28.7	35.5	89.2	257	230	65.0	32.0	45.5	33.6
MAX	109	128	58.2	50.6	77.1	301	961	1,118	274	78.5	128	95.8
(WY)	(1987)	(1987)	(1987)	(1995)	(1995)	(1995)	(1958)	(1973)	(1979)	(1986)	(1999)	(1991)
MIN	14.5	18.4	17.0	16.6	19.9	26.0	24.8	13.5	10.5	13.3	15.8	11.1
(WY)	(1957)	(1957)	(1957)	(1977)	(1955)	(1996)	(2002)	(1996)	(1996)	(2003)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL	8,322.8		15,655.0			
ANNUAL MEAN	22.8		42.9		76.6	
HIGHEST ANNUAL MEAN					189	1973
LOWEST ANNUAL MEAN					22.1	2002
HIGHEST DAILY MEAN	160	Jun 22	207	May 26	3,160	Apr 21, 1958
LOWEST DAILY MEAN	6.5	Aug 18	7.1	Oct 6	2.1	Jul 25, 1981
ANNUAL SEVEN-DAY MINIMUM	12	Jun 13	11	Jul 1	6.0	Jul 23, 1981
MAXIMUM PEAK FLOW			362	May 25	a5,900	Apr 21, 1958
MAXIMUM PEAK STAGE			5.18	May 25	b10.10	Jul 15, 1985
INSTANTANEOUS LOW FLOW			4.5	Jul 16	1.2	Jul 25, 1981
ANNUAL RUNOFF (AC-FT)	16,510		31,050		55,470	
10 PERCENT EXCEEDS	35		120		173	
50 PERCENT EXCEEDS	20		24		33	
90 PERCENT EXCEEDS	12		13		18	

a From rating curve extended above 2,200 ft^3/s, on basis of contracted opening measurement of peak flow.
b Present datum.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV													
01...	0910	26	623	9.7	98	8.3	573	10.0	7.0	130	42.6	4.62	9.90
JUN													
05...	0940	33	640	8.0	95	8.3	434	23.5	15.0	130	45.8	4.47	6.51

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
01...	3	66.4	151	181	1	82.3	1.10	46.8	9.6	354	--	--	--
JUN													
05...	2	41.5	137	167	--	47.0	0.6	25.8	7.4	262	0.30	0.40	<0.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
NOV													
01...	--	--	--	--	--	--	--	--	--	--	--	710	--
JUN													
05...	0.03	<0.02	<0.010	0.01	<0.02	0.03	9	<0.30	36	81	<0.06	440	<0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
NOV													
01...	--	--	--	31	--	--	--	--	--	--	--	--	29
JUN													
05...	<0.8	0.18	1.3	36	E.06	15.1	2.3	0.67	<3	<0.20	1	1.50	86

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspended sediment concentration mg/L (80154)
NOV	
01...	129
JUN	
05...	17

Remark codes used in this table:
< -- Less than
E -- Estimated value

08328500 JEMEZ CANYON RESERVOIR NEAR BERNALILLO, NM

LOCATION.--Lat 35°23'40", long 106°32'50", in SW $^1/_4$ SW $^1/_4$ 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 6.0 mi north of Bernalillo.

DRAINAGE AREA.--l,034 mi^2.

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 Oct. 19, 1953. Capacity, 172,800 acre-ft, from capacity table adapted Jan. 1, 1999, between elevations 5,125.0 ft, sill of outlet gates, and 5,252.3 ft, operating deck of spillway. Maximum controlled capacity, 102,700 acre-ft at elevation 5,232.0 ft (floor of spillway, which is located about 0.8 mi south of dam). Capacity by original survey was 189,100 acre-ft. Original plan for reservoir operation was to desilt all flow above 30 ft^3/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 telemetry 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 Mar. 1979 and Oct. 27, 2001, to present.

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 1998)

Elevation	Contents	Elevation	Contents
5,180	8,650	5,190	17,360
5,185	12,800	5,195	23,220

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM

LOCATION.--Lat 35°23'25", long 106°32'06", in NE $^1/_4$ 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 6.0 mi north of Bernalillo.

DRAINAGE AREA.--1,038 mi^2.

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 with satellite telemetry. 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 Jan. 1953.

REMARKS.--Records poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (station 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1900 was probably less than 16,000 ft^3/s but highest observed outside period of record.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.3	17	31	22	30	39	155	40	0.97	0.10	e180
2	9.4	9.1	22	37	23	27	42	121	50	0.93	0.09	e54
3	9.0	e5.9	27	34	22	29	47	116	38	0.76	0.12	e0.30
4	8.6	e11	32	29	24	26	45	113	32	0.81	0.12	e0.50
5	8.4	15	23	30	20	29	39	109	28	0.55	0.10	e350
6	7.9	15	15	45	18	26	36	93	21	0.69	0.11	e159
7	7.4	15	15	50	14	24	38	74	14	0.63	0.13	e75
8	6.6	16	18	43	13	27	40	52	7.3	0.19	0.10	e23
9	6.6	18	22	50	10	27	37	58	6.0	0.30	0.10	e13
10	6.3	32	26	62	9.0	28	38	52	11	0.26	0.11	e5.0
11	6.0	32	27	27	10	37	43	56	3.8	0.30	0.12	e10
12	5.9	21	26	e26	12	59	58	56	2.8	0.31	0.10	e5.0
13	5.6	24	24	e27	22	114	67	52	2.9	0.29	0.09	e3.2
14	5.3	21	27	e26	25	200	113	61	2.6	0.27	0.08	e2.3
15	4.9	19	39	e25	58	123	141	81	1.2	0.17	0.09	e2.2
16	4.6	21	30	e24	39	107	163	102	1.4	0.14	0.09	e0.13
17	4.4	21	25	25	31	89	163	90	2.7	0.16	0.10	e0.08
18	4.3	21	35	33	31	75	186	101	2.3	0.18	0.13	e0.20
19	4.0	23	35	22	31	68	216	107	1.6	0.17	0.07	e0.20
20	3.8	22	12	27	28	56	234	86	2.4	0.12	e0.08	e0.18
21	3.4	24	35	21	27	58	211	73	1.5	0.18	e0.07	e0.17
22	3.1	24	39	22	29	55	253	61	1.2	0.18	e0.06	e0.16
23	3.1	25	33	21	28	59	299	58	1.2	0.14	e0.07	e0.15
24	9.4	23	31	21	28	68	317	54	1.2	0.13	e0.09	e0.15
25	e9.2	21	88	22	29	73	291	65	1.1	0.15	e0.10	e0.12
26	e9.8	21	22	22	32	66	257	142	1.1	0.13	e0.11	e0.12
27	102	23	28	23	32	58	316	106	1.3	0.10	e0.09	e0.09
28	28	21	55	28	31	52	405	151	0.90	0.14	e0.03	e0.11
29	e4.2	20	69	25	---	44	435	100	1.3	0.08	e0.03	e0.15
30	e4.0	18	29	24	---	40	168	76	0.78	0.08	e0.28	0.22
31	6.9	---	34	21	---	36	---	49	---	0.12	e450	---
TOTAL	312.1	589.3	960	923	698.0	1,810	4,737	2,670	282.58	9.63	452.96	884.73
MEAN	10.1	19.6	31.0	29.8	24.9	58.4	158	86.1	9.42	0.31	14.6	29.5
MAX	102	32	88	62	58	200	435	155	50	0.97	450	350
MIN	3.1	5.9	12	21	9.0	24	36	49	0.78	0.08	0.03	0.08
AC-FT	619	1,170	1,900	1,830	1,380	3,590	9,400	5,300	560	19	898	1,750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2003, BY WATER YEAR (WY)

MEAN	28.2	28.9	21.4	24.0	27.7	64.7	180	182	72.9	24.8	43.1	23.6
MAX	193	179	74.4	67.9	75.1	288	772	968	988	358	247	157
(WY)	(1987)	(1958)	(1987)	(1999)	(1987)	(1995)	(1985)	(1973)	(1958)	(1987)	(1991)	(1988)
MIN	0.000	2.22	0.20	0.25	0.34	7.77	0.96	0.000	0.000	0.000	0.13	0.000
(WY)	(1956)	(1997)	(1985)	(1985)	(1985)	(2002)	(1996)	(1972)	(1946)	(1947)	(1950)	(1945)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1943 - 2003	
ANNUAL TOTAL	5,018.64		14,329.30			
ANNUAL MEAN	13.7		39.3		60.6	
HIGHEST ANNUAL MEAN					178	1973
LOWEST ANNUAL MEAN					10.6	1953
HIGHEST DAILY MEAN	621	Sep 13	450	Aug 31	3,640	Jun 19, 1958
LOWEST DAILY MEAN	0.09	May 3	0.03	Aug 28	0.00	May 24, 1943
ANNUAL SEVEN-DAY MINIMUM	0.13	Jul 26	0.07	Aug 23	0.00	May 24, 1943
MAXIMUM PEAK FLOW			1,470	Aug 31	a16,300	Aug 29, 1943
MAXIMUM PEAK STAGE			c9.80	Aug 31	b9.80	Aug 31, 2003
INSTANTANEOUS LOW FLOW			0.02	Jul 20	0.00	May 23, 1943
ANNUAL RUNOFF (AC-FT)	9,950		28,420		43,900	
10 PERCENT EXCEEDS	30		101		149	
50 PERCENT EXCEEDS	4.0		22		18	
90 PERCENT EXCEEDS	0.31		0.12		0.00	

a From rating curve extended above 3,000 ft^3/s.
b Site and datum then in use.
c From floodmarks.
e Estimated

08329700 CAMPUS WASH AT ALBUQUERQUE, NM

LOCATION.--Lat 35°05'38", long 106°37'25", in SE $^1/_4$ sec.16, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 100 ft west of southwest corner of University of New Mexico North Golf Course, 200 ft downstream from Barelas Stormwater Pumping Station outfall, 600 ft downstream from Tucker Road bridge, and 1,500 ft northeast of intersection of Lomas and University Boulevards, in Albuquerque.

DRAINAGE AREA.--3.80 mi^2.

PERIOD OF RECORD.--April 1982 to September 1996 (seasonal records). October 1996 to current year.

GAGE.--Water-stage and rainfall recorder and concrete-lined channel. Elevation of gage is 5,143 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are poor. Recording rain gage at station. Prior to water year 1997, some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow monitoring equipment. See tabulation below for monthly precipitation, in inches.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.56	0.47	0.39	0.57	0.04	0.69	0.23	0.35	3.9	0.24	0.25	0.28
2	0.57	0.43	0.46	e0.30	0.03	0.33	0.40	0.44	0.26	0.28	0.13	0.36
3	0.56	0.35	4.8	e0.40	0.09	0.27	0.45	0.44	0.16	0.20	0.42	0.55
4	0.51	1.2	0.78	0.40	e0.10	0.32	0.42	0.43	0.21	0.09	0.39	0.64
5	0.43	0.42	0.19	0.25	0.16	0.31	0.36	0.37	0.17	0.11	0.15	0.75
6	0.49	0.47	0.30	0.71	e0.10	0.34	0.32	0.32	0.19	0.10	0.23	0.30
7	0.58	0.39	0.33	1.1	e0.10	0.40	0.40	0.35	0.15	0.18	0.13	0.35
8	0.65	0.39	0.11	e1.0	e0.30	0.36	0.50	0.25	0.09	0.27	0.20	0.53
9	0.62	5.0	0.35	0.75	1.0	0.40	0.50	0.21	0.36	0.10	0.40	0.78
10	0.51	2.7	0.54	0.77	e0.10	0.30	0.48	0.18	0.25	0.25	0.30	1.3
11	0.42	0.37	0.54	0.84	e0.10	0.13	0.58	0.15	0.25	0.25	1.2	0.63
12	0.42	0.53	0.71	0.53	0.26	0.16	0.47	0.21	0.20	0.18	0.48	0.71
13	0.46	0.58	0.40	0.37	5.9	0.08	0.45	0.26	0.18	0.16	0.48	0.31
14	0.60	0.47	0.34	0.44	0.78	0.07	0.47	0.25	0.04	0.30	0.27	0.25
15	0.52	0.34	0.30	0.38	0.28	0.05	0.45	0.37	0.12	0.11	0.67	0.40
16	0.51	0.31	0.35	0.45	0.29	0.44	0.43	0.25	0.37	0.05	0.25	0.49
17	0.61	0.25	0.36	0.44	0.37	0.93	0.53	0.15	0.27	0.21	0.30	0.40
18	0.54	0.27	0.37	e0.50	0.40	9.8	0.43	0.26	0.22	0.26	2.4	0.58
19	0.46	0.28	0.76	0.67	0.32	5.2	0.57	0.41	1.5	0.20	1.1	0.59
20	0.45	0.39	e0.60	0.42	2.3	13	0.54	0.36	0.29	0.65	0.35	0.41
21	0.50	0.46	0.62	0.34	0.30	7.1	0.50	0.43	0.13	0.37	0.28	0.31
22	1.8	0.35	0.26	0.37	0.24	0.07	0.37	0.30	0.09	1.1	0.13	0.40
23	4.4	0.31	0.17	0.37	1.4	0.04	0.32	0.28	0.05	0.35	0.15	0.41
24	1.8	0.30	0.70	0.38	2.1	0.11	0.38	0.13	0.22	0.31	0.36	0.46
25	0.59	0.29	e0.30	0.38	0.41	0.23	0.41	0.21	0.14	0.10	1.8	0.37
26	1.1	0.19	0.21	0.37	1.1	0.10	0.34	0.74	0.15	0.05	0.34	0.37
27	1.1	e0.30	0.25	0.35	0.43	0.19	0.37	0.47	0.19	0.08	0.34	0.35
28	0.51	e0.40	e0.20	0.38	2.0	0.08	0.39	0.30	0.06	0.28	0.57	0.54
29	0.47	0.53	0.21	0.13	---	0.09	0.46	0.36	0.05	0.12	0.56	1.2
30	0.42	0.21	0.20	0.07	---	0.05	0.42	0.27	0.25	0.41	3.1	0.43
31	0.46	---	e0.20	0.09	---	0.08	---	0.28	---	0.26	0.50	---
TOTAL	23.62	18.95	16.30	14.52	21.00	41.72	12.94	9.78	10.51	7.62	18.23	15.45
MEAN	0.76	0.63	0.53	0.47	0.75	1.35	0.43	0.32	0.35	0.25	0.59	0.52
MAX	4.4	5.0	4.8	1.1	5.9	13	0.58	0.74	3.9	1.1	3.1	1.3
MIN	0.42	0.19	0.11	0.07	0.03	0.04	0.23	0.13	0.04	0.05	0.13	0.25
AC-FT	47	38	32	29	42	83	26	19	21	15	36	31
(+)	0.40	0.38	0.16	0.0	0.78	1.26	0.04	0.08	0.47	0.04	0.47	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	1.21	0.60	0.39	0.36	0.47	0.96	0.75	0.64	0.92	1.36	1.48	1.07
MAX	2.39	0.76	0.58	0.52	0.75	1.97	1.32	1.06	1.65	2.43	2.49	2.44
(WY)	(2001)	(2001)	(2002)	(2002)	(2003)	(1998)	(1997)	(1998)	(2000)	(1997)	(1999)	(1997)
MIN	0.54	0.46	0.096	0.15	0.15	0.26	0.43	0.32	0.35	0.25	0.59	0.51
(WY)	(1998)	(1999)	(1997)	(1998)	(1997)	(1997)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	268.68		210.64			
ANNUAL MEAN	0.74		0.58		0.86	
HIGHEST ANNUAL MEAN					1.09	1997
LOWEST ANNUAL MEAN					0.58	2003
HIGHEST DAILY MEAN	17	Jun 14	13	Mar 20	39	Mar 15, 1998
LOWEST DAILY MEAN	0.01	May 12	0.03	Feb 2	0.00	Nov 28, 1996
ANNUAL SEVEN-DAY MINIMUM	0.22	Dec 25	0.08	Jan 29	0.05	Jan 6, 1997
MAXIMUM PEAK FLOW			302	Mar 20	1,230	Jul 14, 1990
MAXIMUM PEAK STAGE			1.97	Mar 20	4.50	Jul 14, 1990
ANNUAL RUNOFF (AC-FT)	533		418		620	
10 PERCENT EXCEEDS	0.86		0.78		1.1	
50 PERCENT EXCEEDS	0.52		0.37		0.48	
90 PERCENT EXCEEDS	0.28		0.11		0.15	

(+) Total precipitation accumulation, in inches.
e Estimated

08329720 EMBUDO ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°06'08", long 106°29'33", in NW $^1/_4$ NE $^1/_4$ sec.14, T.10 N., R.4 E., Bernalillo County, Hydrologic Unit 13020203, on left bank of concrete-lined channel, approximately 90 ft upstream from Monte Largo bridge over Embudo Arroyo, between Indian School Rd to the south and Rover St to the north in Albuquerque.

DRAINAGE AREA.--3.8 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete weir control. Elevation of gage is 5,925 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Recording rain gage located in drainage basin, approximately 1 mi upstream. Site used for gathering water-quality data for undeveloped upper drainage basin, which represents undeveloped foothill east of Albuquerque.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.2	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.005	0.000
MAX	0.010	0.002	0.000	0.000	0.000	0.004	0.000	0.000	0.002	0.004	0.014	0.001
(WY)	(2001)	(2001)	(1999)	(1999)	(1999)	(2003)	(1999)	(1999)	(2000)	(2000)	(1999)	(2001)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(2002)	(2002)	(1999)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	0.00		0.11			
ANNUAL MEAN	0.000		0.000		0.001	
HIGHEST ANNUAL MEAN					0.002	2001
LOWEST ANNUAL MEAN					0.000	2002
HIGHEST DAILY MEAN	0.00	Jan 1	0.09	Mar 21	0.29	Aug 3, 1999
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1998
MAXIMUM PEAK FLOW			1.6	Mar 20	12	Aug 14, 2001
MAXIMUM PEAK STAGE			1.66	Mar 20	3.24	Aug 14, 2001
ANNUAL RUNOFF (AC-FT)	0.00		0.2		0.7	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08329835 NORTH FLOODWAY CHANNEL AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'03", long 106°36'42", in SE $^1/_4$ 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 Boulevard NE, and 3,000 ft downstream from confluence of Campus Wash and Embudo Arroyo in Albuquerque.

DRAINAGE AREA.--40.0 mi^2.

PERIOD OF RECORD.--May 1982 to September 1999 (seasonal records). October 1999 to current year.

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment, and concrete lined channel. Elevation of gage is 5,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are poor. Prior to water year 2001, some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow monitoring equipment. See tabulation below for monthly precipitation, in inches.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.0	2.4	1.2	1.1	0.34	7.4	0.58	4.5	30	0.88	0.85	3.1
2	e1.0	6.9	1.5	e1.0	0.15	1.2	0.97	4.3	1.6	0.62	3.5	0.70
3	e1.0	0.90	22	e1.0	0.03	1.0	1.0	7.6	0.62	0.41	1.5	1.7
4	2.0	7.4	2.1	e1.0	0.29	0.97	0.94	8.0	0.87	0.56	1.1	2.1
5	0.82	1.4	1.2	e1.0	0.91	1.0	0.36	4.9	0.60	0.43	0.47	2.3
6	0.67	2.3	1.5	0.91	0.68	1.0	0.26	4.8	0.59	0.74	1.4	2.7
7	0.99	1.7	1.5	1.1	0.92	1.5	0.71	4.5	0.38	3.4	2.2	35
8	1.1	1.1	1.2	1.0	2.1	1.1	1.1	4.5	0.50	2.7	0.70	0.96
9	0.96	26	e1.0	0.99	6.2	1.00	1.1	4.3	6.8	1.0	1.0	2.7
10	0.91	23	e1.0	0.96	1.1	0.88	1.3	8.1	3.2	1.3	6.3	10
11	0.69	1.00	e1.0	1.5	0.73	0.86	4.3	7.9	0.51	1.3	1.7	1.7
12	0.68	0.88	1.5	0.87	0.72	0.78	6.8	4.6	0.37	1.3	6.1	1.2
13	0.46	1.1	1.2	0.88	58	0.85	6.6	4.5	0.72	1.5	2.3	1.2
14	1.1	0.75	1.1	0.96	2.1	0.84	3.7	4.1	0.39	1.4	2.5	1.6
15	1.2	0.74	0.69	0.86	0.52	0.80	5.5	0.79	0.24	0.82	2.8	0.97
16	1.0	0.81	1.1	0.90	0.29	4.4	3.9	4.4	0.42	0.74	1.9	0.95
17	2.1	0.57	0.90	1.1	0.33	7.3	3.6	7.3	2.0	0.74	2.0	1.1
18	2.6	0.62	0.83	0.98	0.86	68	3.7	7.4	1.3	0.73	3.4	1.0
19	1.4	0.78	1.1	0.84	0.50	53	7.1	4.7	6.1	2.2	12	0.47
20	0.74	1.1	2.5	0.77	13	82	6.9	0.68	1.3	2.2	1.2	1.1
21	0.78	1.0	1.6	0.82	0.51	119	3.9	0.79	0.60	5.2	1.1	1.3
22	13	1.3	3.0	0.97	0.29	0.92	4.0	0.67	0.81	2.6	0.55	1.2
23	46	0.92	0.75	0.88	0.72	1.1	4.0	0.59	1.1	1.1	1.0	0.97
24	8.7	0.65	e1.0	0.89	15	0.73	4.0	0.60	1.2	0.69	4.1	1.0
25	0.90	0.91	e1.0	0.94	1.7	0.84	4.2	3.1	0.76	0.46	5.3	0.78
26	15	0.83	e1.0	0.81	11	0.52	7.3	2.4	2.9	0.48	1.1	0.72
27	9.9	e1.0	e1.0	0.75	2.0	1.2	7.4	1.8	1.6	0.79	0.87	1.1
28	1.8	1.2	e1.0	0.86	15	0.64	4.1	1.9	2.6	0.59	2.5	1.5
29	1.1	1.8	1.1	1.1	---	0.70	4.2	4.7	0.46	0.41	2.5	1.5
30	0.98	1.4	0.83	0.38	---	0.44	4.2	0.59	0.31	0.61	25	0.96
31	1.7	---	1.0	0.40	---	0.33	---	0.63	---	0.80	2.1	---
TOTAL	122.28	92.46	59.40	28.52	135.99	362.30	107.72	119.64	70.85	38.70	101.04	83.58
MEAN	3.94	3.08	1.92	0.92	4.86	11.7	3.59	3.86	2.36	1.25	3.26	2.79
MAX	46	26	22	1.5	58	119	7.4	8.1	30	5.2	25	35
MIN	0.46	0.57	0.69	0.38	0.03	0.33	0.26	0.59	0.24	0.41	0.47	0.47
AC-FT	243	183	118	57	270	719	214	237	141	77	200	166
(+)	0.58	0.34	0.34	0.0	0.88	1.84	0.06	0.18	0.17	0.04	0.51	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	9.34	4.91	2.63	2.57	3.57	7.62	3.70	2.78	4.45	5.75	8.73	5.12
MAX	26.2	8.68	3.25	3.88	4.86	12.5	5.27	4.07	7.95	9.51	11.7	10.0
(WY)	(2001)	(2001)	(2001)	(2001)	(2003)	(2000)	(2001)	(2001)	(2000)	(2001)	(2001)	(2002)
MIN	2.25	2.94	1.92	0.92	0.93	0.75	1.83	1.06	2.36	1.25	3.26	2.79
(WY)	(2002)	(2000)	(2003)	(2003)	(2002)	(2002)	(2000)	(2002)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	1,443.16		1,322.48			
ANNUAL MEAN	3.95		3.62		5.12	
HIGHEST ANNUAL MEAN					7.61	2001
LOWEST ANNUAL MEAN					3.62	2003
HIGHEST DAILY MEAN	110	Sep 10	119	Mar 21	206	Oct 23, 2000
LOWEST DAILY MEAN	0.10	May 13	0.03	Feb 3	0.03	Feb 3, 2003
ANNUAL SEVEN-DAY MINIMUM	0.41	Jun 24	0.36	Jan 30	0.36	Jan 30, 2003
MAXIMUM PEAK FLOW			3,240	Mar 21	8,180	Jul 9, 1988
MAXIMUM PEAK STAGE			7.50	Mar 21	12.10	Jul 9, 1988
ANNUAL RUNOFF (AC-FT)	2,860		2,620		3,710	
10 PERCENT EXCEEDS	4.5		6.8		6.9	
50 PERCENT EXCEEDS	1.1		1.1		2.1	
90 PERCENT EXCEEDS	0.57		0.57		0.75	

(+) Total precipitation accumulation, in inches.
e Estimated

08329838 SOUTH FORK HAHN ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'16", long 106°34'04", in NE ¼ SE ¼ sec.1, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank 300 ft above Louisiana Boulevard, 900 ft south of Comanche Rd, and 1,700 ft north of Candelaria Rd, in Albuquerque.

DRAINAGE AREA.--2.03 mi^2.

PERIOD OF RECORD.--June 1978 to December 1983, June 1992 to September 1996 (seasonal records), October 1996 to July 2003 (discontinued).

REVISED RECORD.--WDR NM-99-1: 1992-98(M) (mean daily values).

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment, and concrete-lined channel. Elevation of gage is 5,298 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1983, at site 300 ft downstream on Louisiana Boulevard bridge, at different datum.

REMARKS.--Records good. Some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow-monitoring equipment. See tabulation below for monthly precipitation, in inches.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 248 ft^3/s, Mar. 21, gage height, 2.69 ft; no flow most of the time.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.03	0.00	0.02	0.00	0.41	0.02	0.00	0.00	0.00	---	---
2	0.03	0.00	0.02	0.02	0.00	0.01	0.02	0.00	0.00	0.02	---	---
3	0.04	0.00	0.78	0.02	0.04	0.04	0.02	0.00	0.00	0.00	---	---
4	0.03	0.32	0.03	0.00	0.04	0.02	0.02	0.00	0.00	0.01	---	---
5	0.00	0.03	0.03	0.00	0.02	0.02	0.00	0.00	0.00	0.00	---	---
6	0.0	0.03	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.02	---	---
7	0.0	0.04	0.00	0.02	0.03	0.02	0.02	0.02	0.00	0.00	---	---
8	0.00	0.03	0.0	0.01	0.31	0.00	0.01	0.00	0.01	0.00	---	---
9	0.00	0.59	0.02	0.00	0.26	0.00	0.02	0.00	0.00	0.46	---	---
10	0.00	0.47	0.02	0.05	0.03	0.02	0.02	0.00	0.00	0.03	---	---
11	0.00	0.06	0.02	0.00	0.03	0.02	0.02	0.00	0.00	---	---	---
12	0.00	0.03	0.03	0.00	0.03	0.02	0.00	0.00	0.00	---	---	---
13	0.00	0.03	0.02	0.02	3.3	0.02	0.02	0.01	0.00	---	---	---
14	0.00	0.02	0.00	0.02	0.17	0.03	0.02	0.00	0.00	---	---	---
15	0.00	0.03	0.00	0.04	0.00	0.00	0.01	0.01	0.00	---	---	---
16	0.01	0.00	0.02	0.02	0.00	0.27	0.02	0.00	0.00	---	---	---
17	0.00	0.00	0.03	0.02	0.02	0.37	0.02	0.00	0.00	---	---	---
18	0.00	0.03	0.04	0.00	0.08	2.4	0.02	0.02	0.00	---	---	---
19	0.00	0.03	0.03	0.00	0.02	1.6	0.00	0.00	0.41	---	---	---
20	0.00	0.03	0.02	0.01	0.58	5.0	0.00	0.00	0.00	---	---	---
21	0.00	0.03	0.00	0.03	0.03	4.6	0.01	0.00	0.00	---	---	---
22	0.21	0.03	0.00	0.02	0.00	0.00	0.01	0.00	0.00	---	---	---
23	1.4	0.00	0.02	0.03	0.00	0.01	0.00	0.05	0.00	---	---	---
24	0.47	0.00	0.03	0.02	0.50	0.02	0.00	0.00	0.00	---	---	---
25	0.03	0.03	0.03	0.00	0.06	0.04	0.00	0.02	0.00	---	---	---
26	0.58	0.03	0.02	0.00	0.76	0.02	0.00	0.00	0.00	---	---	---
27	0.10	0.03	0.02	0.01	0.06	0.02	0.03	0.00	0.00	---	---	---
28	0.03	0.02	0.00	0.06	0.69	0.02	0.02	0.01	0.00	---	---	---
29	0.03	0.03	0.00	0.03	---	0.00	0.02	0.02	0.00	---	---	---
30	0.03	0.0	0.02	0.03	---	0.00	0.00	0.04	0.01	---	---	---
31	0.03	---	0.02	0.04	---	0.02	---	0.02	---	---	---	---
TOTAL	3.05	2.00	1.30	0.57	7.09	15.04	0.37	0.22	0.43	---	---	---
MEAN	0.098	0.067	0.042	0.018	0.25	0.49	0.012	0.007	0.014	---	---	---
MAX	1.4	0.59	0.78	0.06	3.3	5.0	0.03	0.05	0.41	---	---	---
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
AC-FT	6.0	4.0	2.6	1.1	14	30	0.7	0.4	0.9	---	---	---
(+)	0.79	0.32	0.30	0.05	0.89	2.21	0.04	0.04	0.19	0.01	0.45	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	0.37	0.17	0.12	0.11	0.15	0.34	0.24	0.17	0.31	0.79	0.83	0.27
MAX	0.84	0.30	0.38	0.22	0.28	0.68	0.59	0.47	1.23	2.34	1.23	0.55
(WY)	(2001)	(1997)	(1998)	(1997)	(1998)	(1998)	(1997)	(1999)	(1999)	(1997)	(1997)	(2002)
MIN	0.076	0.066	0.023	0.018	0.027	0.053	0.012	0.007	0.014	0.14	0.50	0.064
(WY)	(2002)	(2000)	(2000)	(2003)	(2002)	(2002)	(2003)	(2003)	(2003)	(2000)	(1998)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	WATER YEARS 1997 - 2003	
ANNUAL TOTAL	97.02		
ANNUAL MEAN	0.27	0.34	
HIGHEST ANNUAL MEAN		0.57	1997
LOWEST ANNUAL MEAN		0.16	2000
HIGHEST DAILY MEAN	11 Jul 10	31	Jul 28, 1997
LOWEST DAILY MEAN	0.00 Feb 6	0.00	Dec 8, 1996
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 3	0.00	Jun 3, 2002
MAXIMUM PEAK FLOW		1,300	Jun 16, 1999
MAXIMUM PEAK STAGE		4.72	Jun 16, 1999
ANNUAL RUNOFF (AC-FT)	92	245	
10 PERCENT EXCEEDS	0.22	0.43	
50 PERCENT EXCEEDS	0.03	0.07	
90 PERCENT EXCEEDS	0.00	0.00	

(+) Total precipitation accumulation, in inches.

08329839 NORTH FORK HAHN ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'37", long 106°34'04", in NE ¼ SE ¼ sec.1, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on right bank 200 ft above Louisiana Boulevard, 1,150 ft north of Comanche Rd, and 1,450 ft south of Montgomery Boulevard, in Albuquerque.

DRAINAGE AREA.--1.51 mi^2.

PERIOD OF RECORD.--May 1979 to December 1983, June 1992 to September 1996 (seasonal records), October 1996 to July 2003 (discontinued).

REVISED RECORD.--WDR NM-99-1: 1992-98(M) (mean daily values).

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment, and concrete-lined channel. Elevation of gage is 5,290 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1983, at site 200 ft downstream on Louisiana Boulevard bridge, at different datum.

REMARKS.--Records good. Some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow-monitoring equipment. See tabulation below for monthly precipitation, in inches.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of operation, 32 ft^3/s, Oct. 22, gage height 1.26 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
9	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
13	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	---	---	---
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
18	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	---	---	---
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
20	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	---	---	---
21	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	---	---	---
22	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
23	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
24	0.43	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	---	---	---
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	---	---
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	---	---
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	---	---	---
TOTAL	0.95	0.09	0.00	0.00	0.15	1.15	0.00	0.00	0.00	---	---	---
MEAN	0.031	0.003	0.000	0.000	0.005	0.037	0.000	0.000	0.000	---	---	---
MAX	0.43	0.09	0.00	0.00	0.13	0.77	0.00	0.00	0.00	---	---	---
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
AC-FT	1.9	0.2	0.00	0.00	0.3	2.3	0.00	0.00	0.00	---	---	---
(+)	0.71	0.33	0.28	0.01	0.90	2.04	0.04	0.02	0.12	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	0.040	0.022	0.025	0.034	0.010	0.015	0.025	0.019	0.029	0.059	0.071	0.026
MAX	0.11	0.12	0.16	0.19	0.062	0.047	0.15	0.063	0.079	0.21	0.10	0.096
(WY)	(2001)	(1998)	(1998)	(1998)	(1998)	(1998)	(1997)	(2001)	(1997)	(1997)	(2000)	(2002)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000
(WY)	(2000)	(1997)	(1999)	(1999)	(1999)	(1997)	(2000)	(1998)	(1998)	(2000)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	WATER YEARS 1997 - 2003	
ANNUAL TOTAL	8.88		
ANNUAL MEAN	0.024	0.033	
HIGHEST ANNUAL MEAN		0.060	1997
LOWEST ANNUAL MEAN		0.014	2000
HIGHEST DAILY MEAN	1.1 Aug 3	2.3	Oct 4, 1996
LOWEST DAILY MEAN	0.00 Jan 1	0.00	Oct 1, 1996
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00	Oct 6, 1996
MAXIMUM PEAK FLOW		439	Aug 14, 1980
MAXIMUM PEAK STAGE		1.94	Aug 14, 1980
ANNUAL RUNOFF (AC-FT)	18	24	
10 PERCENT EXCEEDS	0.00	0.00	
50 PERCENT EXCEEDS	0.00	0.00	
90 PERCENT EXCEEDS	0.00	0.00	

(+) Total precipitation accumulation, in inches.

08329840 HAHN ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°07'33", long 106°35'23", in SE ¼ NE ¼ sec.2, T.10 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, 860 ft below San Mateo Boulevard bridge on right bank, 750 ft north of Comanche Road, and 2,050 ft south of Montgomery Boulevard in Albuquerque.

DRAINAGE AREA.--4.23 mi^2.

PERIOD OF RECORD.--June 1978 to September 1996 (seasonal records), October 1996 to current year.

REVISED RECORD.--WDR NM-99-1: 1992-98(M) (mean daily values).

GAGE.--Water-stage and recording tipping-bucket rain gage with 0.01-in. increment and concrete-lined channel. Elevation of gage is 5,190 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1992, at site on downstream side of San Mateo Boulevard bridge, at different datum.

REMARKS.--Records good except for those estimated, which are poor. Some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow-monitoring equipment. 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.94	0.37	0.26	0.69	0.46	7.4	0.52	1.6	2.6	0.79	2.8	1.5
2	0.87	0.14	0.33	0.99	0.18	0.82	0.55	1.8	e2.0	0.61	15	1.4
3	1.1	0.01	11	1.1	0.52	1.8	0.51	0.18	e2.0	0.29	2.3	1.0
4	0.57	6.3	1.8	0.70	0.50	1.2	0.53	0.51	e2.0	1.7	2.6	0.92
5	0.10	0.80	0.91	0.32	0.47	1.1	0.04	1.9	e2.0	0.17	1.8	0.88
6	0.40	0.93	0.77	0.56	0.72	1.0	0.12	2.2	e2.0	0.06	2.0	0.10
7	0.87	0.49	0.37	0.14	0.77	0.77	0.48	1.2	e2.0	1.0	3.7	6.5
8	0.77	0.60	0.39	0.27	1.2	0.19	1.1	1.0	e1.0	1.7	2.8	2.3
9	0.86	4.1	0.72	0.57	2.1	0.67	0.74	1.8	e1.0	4.9	0.66	3.9
10	0.95	5.1	1.5	1.1	0.69	0.55	0.96	0.08	e1.0	1.7	5.4	9.9
11	0.60	1.0	0.92	0.49	0.74	0.96	1.4	0.88	e1.0	0.56	4.2	2.3
12	0.28	0.65	1.1	0.45	0.93	1.1	0.53	1.4	e1.0	0.61	2.0	0.82
13	0.09	0.73	0.90	0.45	12	0.55	1.4	1.4	e1.0	0.44	0.95	0.19
14	0.74	0.72	0.28	0.57	4.3	1.4	1.6	0.75	e1.0	1.7	2.2	0.84
15	0.97	0.83	0.78	0.71	0.78	0.27	1.8	1.4	0.26	1.2	1.0	0.80
16	1.6	0.24	1.5	0.39	0.47	2.9	1.4	1.6	1.5	0.50	0.01	0.86
17	1.5	0.42	0.81	0.36	0.74	4.9	2.0	0.23	1.2	0.54	0.11	0.75
18	2.6	0.57	0.65	0.41	1.6	13	1.2	0.71	1.1	0.61	1.3	0.75
19	0.37	0.49	0.44	0.53	0.80	16	0.32	1.1	4.7	0.11	1.6	0.73
20	0.15	0.46	0.79	0.36	6.8	14	0.47	1.3	1.3	6.9	1.0	0.92
21	0.73	0.43	0.72	0.90	1.5	17	1.4	1.7	0.43	2.6	1.1	1.3
22	5.9	0.41	0.12	0.65	0.37	0.49	1.5	0.99	0.44	2.1	0.96	0.94
23	7.5	0.05	0.35	0.52	0.24	0.87	1.4	1.1	1.0	2.1	0.62	0.82
24	7.2	0.18	0.61	0.87	5.5	0.89	1.3	0.32	0.85	1.3	1.8	0.82
25	0.77	0.49	0.71	0.37	2.7	2.0	2.8	0.40	0.86	1.1	3.9	1.0
26	3.7	0.44	1.5	0.12	9.7	1.2	0.32	1.4	1.1	1.4	1.0	0.81
27	1.4	0.43	2.3	0.47	2.7	1.0	1.4	1.7	1.1	2.7	1.3	0.10
28	0.43	0.41	1.4	0.98	5.5	0.86	1.8	2.3	0.07	3.3	1.1	0.41
29	0.35	1.1	0.19	0.74	---	0.24	1.4	1.8	0.33	1.2	1.1	1.3
30	0.31	0.63	0.37	0.53	---	0.58	1.6	1.9	1.1	2.9	12	0.91
31	0.30	---	1.0	0.62	---	0.50	---	0.41	---	2.0	2.4	---
TOTAL	44.92	29.52	35.49	17.93	64.98	96.21	32.59	37.06	38.94	48.79	80.71	45.77
MEAN	1.45	0.98	1.14	0.58	2.32	3.10	1.09	1.20	1.30	1.57	2.60	1.53
MAX	7.5	6.3	11	1.1	12	17	2.8	2.3	4.7	6.9	15	9.9
MIN	0.09	0.01	0.12	0.12	0.18	0.19	0.04	0.08	0.07	0.06	0.01	0.10
AC-FT	89	59	70	36	129	191	65	74	77	97	160	91
(+)	0.96	0.34	0.40	0.0	1.11	1.98	0.01	0.07	0.25	0.03	0.64	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	2.17	1.36	1.32	1.51	1.57	2.40	1.81	1.28	2.38	2.92	3.41	1.73
MAX	5.26	2.32	2.59	3.76	3.52	4.02	2.39	2.90	6.94	4.95	5.37	3.09
(WY)	(2001)	(2002)	(1998)	(2002)	(2001)	(2001)	(1999)	(2001)	(1999)	(1997)	(2001)	(2002)
MIN	0.82	0.21	0.082	0.58	0.43	1.00	1.09	0.73	0.68	1.44	2.01	0.63
(WY)	(1998)	(2000)	(2000)	(2003)	(1997)	(1997)	(2003)	(1998)	(1998)	(2000)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	719.01		572.61			
ANNUAL MEAN	1.97		1.57		1.99	
HIGHEST ANNUAL MEAN					3.37	2001
LOWEST ANNUAL MEAN					1.24	2000
HIGHEST DAILY MEAN	23	Apr 7	17	Mar 21	170	Jun 16, 1999
LOWEST DAILY MEAN	0.00	Aug 25	0.01	Nov 3	0.00	Dec 15, 1996
ANNUAL SEVEN-DAY MINIMUM	0.27	Oct 28	0.27	Oct 28	0.00	Nov 23, 1999
MAXIMUM PEAK FLOW			258	Sep 7	6,120	Jun 16, 1999
MAXIMUM PEAK STAGE			1.75	Sep 7	5.98	Jun 16, 1999
ANNUAL RUNOFF (AC-FT)	1,430		1,140		1,440	
10 PERCENT EXCEEDS	3.7		2.8		4.2	
50 PERCENT EXCEEDS	1.0		0.92		0.90	
90 PERCENT EXCEEDS	0.32		0.29		0.12	

(+) Total precipitation accumulation, in inches.
e Estimated

08329880 ACADEMY ACRES DRAIN AT ALBUQUERQUE, NM

LOCATION.--Lat 35°09'04", long 106°34'23", in NE $^1/_4$ SE $^1/_4$ sec.25, T.11 N., R.3 E., Bernalillo County, Hydrologic Unit 13020203, on left bank of concrete-lined channel, 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 mi^2.

PERIOD OF RECORD.--June 1976 to current year (seasonal records). Surface-water gage discontinued July 1, 2003. Rain gage continues.

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment; control for site is a V-notch weir. Elevation of gage is 5,305 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. The basin is primarily urban residential. Some minor streamflow may exist on days when daily mean discharges have been recorded as zero due to the short duration of peak flows. See tabulation below for monthly precipitation, in inches. No flow most of time.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88 ft^3/s, Aug. 3, 1978, gage height, 4.09 ft, from rating curve extended above 24 ft^3/s on basis of slope-area measurement of peak flow and theoretical computations for weir flow; no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 10 ft^3/s, Oct. 24, gage height, 2.41 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
2	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.03	---	---	0.00	0.00	0.00	0.00	0.00	---	---
4	0.00	0.01	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
5	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
6	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
7	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
8	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---
9	0.00	0.05	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
10	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
11	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
12	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
13	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
14	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
15	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	---	---
16	0.00	0.00	---	---	---	0.04	0.00	0.00	0.02	---	---	---
17	0.00	0.00	---	---	---	0.01	0.00	0.00	0.00	---	---	---
18	0.00	0.00	---	---	---	0.13	0.00	0.00	0.00	---	---	---
19	0.00	0.00	---	---	---	0.09	0.00	0.00	0.06	---	---	---
20	0.00	0.00	---	---	---	0.47	0.00	0.00	0.00	---	---	---
21	0.00	0.00	---	---	---	0.15	0.00	0.00	0.00	---	---	---
22	0.08	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
23	0.13	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
24	0.16	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
25	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
26	0.00	0.00	---	---	0.03	0.00	0.00	0.00	0.00	---	---	---
27	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	---	---
28	0.00	0.00	---	---	0.09	0.00	0.00	0.00	0.00	---	---	---
29	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
30	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
31	0.00	---	---	---	---	0.00	---	0.00	---	---	---	---
TOTAL	0.37	0.06	---	---	---	0.89	0.00	0.00	0.08	---	---	---
MEAN	0.012	0.002	---	---	---	0.029	0.000	0.000	0.003	---	---	---
MAX	0.16	0.05	---	---	---	0.47	0.00	0.00	0.06	---	---	---
MIN	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	---
AC-FT	0.7	0.1	---	---	---	1.8	0.00	0.00	0.2	---	---	---
(+)	0.94	0.31	0.42	0.0	1.07	2.77	0.02	0.08	0.43	0.02	0.64	0.60

(+) Total precipitation accumulation, in inches.

08329882 PINO ARROYO AT JEFFERSON STREET AT ALBUQUERQUE, NM

LOCATION.--Lat 35°09'34", long 106°35'57", Bernalillo County, Hydrologic Unit 13020203, in the Elena Gallegos Grant, on the right bank 1,200 ft downstream from the Jefferson Street culvert over Pino Arroyo; approximately 1,200 ft north of the intersection of Jefferson St. and Osuna Road in northeast Albuquerque.

DRAINAGE AREA.--8.3 mi^2 (but is controlled by detention pond upstream).

PERIOD OF RECORD.--May 18, 2000, to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete-lined channel. Elevation of gage is 5,119 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-stage records good except for those estimated, which are fair. Since installation of the large static tube around the orifice on Aug. 22, 2001, only flows over about 0.03 ft deep (1.03 on recorder) will cover the orifice sufficiently to record true water depths. This channel often shows trickle flows not related to rainfall.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.24
3	0.00	0.00	1.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4	0.11
4	0.00	0.48	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.14
5	0.00	0.00	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.13	0.17
6	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.08	0.18
7	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.40
8	0.00	0.00	0.00	0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.68	0.05
9	0.00	0.51	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.48	0.95
10	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	2.3
11	0.00	0.00	e0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.18	0.45
12	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
13	0.00	0.00	0.00	0.00	1.7	0.00	0.00	0.00	0.02	0.00	0.05	0.05
14	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.03	1.7	0.32
15	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.58
16	0.00	0.00	0.01	0.04	0.00	0.49	0.00	0.00	0.49	0.00	0.00	0.29
17	0.04	0.00	0.00	e0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.26
18	0.17	0.00	0.01	0.00	0.00	1.8	0.00	0.00	0.00	0.00	0.07	0.11
19	0.00	0.00	0.00	0.00	0.00	2.2	0.00	0.00	0.90	0.00	0.04	0.20
20	0.00	0.00	0.00	0.00	0.69	7.0	0.00	0.00	0.00	0.00	0.00	0.22
21	0.00	0.00	0.00	0.02	0.00	5.2	0.00	0.01	0.00	0.00	0.00	0.10
22	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
23	1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.07
24	3.6	0.00	0.00	0.00	0.59	0.00	0.00	0.02	0.00	0.01	0.25	0.01
25	0.00	0.00	0.00	0.00	0.08	0.09	0.00	0.03	0.00	0.00	0.64	0.12
26	0.00	0.00	0.06	0.00	0.61	0.00	0.00	0.18	0.00	0.00	0.01	0.35
27	0.14	e0.00	0.13	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.27
28	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.02	0.00	0.00	0.10	0.18
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.02	0.00	0.00	0.07	0.30
30	0.00	0.00	0.05	0.00	---	0.00	0.00	0.02	0.00	0.00	4.7	0.36
31	0.00	---	0.08	0.00	---	0.00	---	0.00	---	0.00	0.48	---
TOTAL	5.95	1.23	2.25	0.21	5.08	17.25	0.02	0.32	1.41	0.04	14.43	9.09
MEAN	0.19	0.041	0.073	0.007	0.18	0.56	0.001	0.010	0.047	0.001	0.47	0.30
MAX	3.6	0.51	1.9	0.10	1.7	7.0	0.02	0.18	0.90	0.03	4.7	2.3
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
AC-FT	12	2.4	4.5	0.4	10	34	0.04	0.6	2.8	0.08	29	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	0.64	0.35	0.21	0.30	0.30	0.40	0.27	0.30	0.50	0.50	1.09	0.58
MAX	1.72	0.94	0.48	0.80	0.70	0.65	0.73	0.89	1.18	1.09	1.99	0.93
(WY)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2000)
MIN	0.000	0.041	0.064	0.007	0.000	0.000	0.001	0.002	0.047	0.001	0.37	0.30
(WY)	(2002)	(2003)	(2002)	(2003)	(2002)	(2002)	(2003)	(2002)	(2003)	(2003)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	52.97		57.28			
ANNUAL MEAN	0.15		0.16		0.42	
HIGHEST ANNUAL MEAN					0.97	2001
LOWEST ANNUAL MEAN					0.13	2002
HIGHEST DAILY MEAN	13	Sep 10	7.0	Mar 20	16	Aug 14, 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 23, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Aug 31, 2001
MAXIMUM PEAK FLOW			212	Mar 21	541	Sep 14, 2001
MAXIMUM PEAK STAGE			2.40	Mar 21	3.21	Sep 14, 2001
ANNUAL RUNOFF (AC-FT)	105		114		303	
10 PERCENT EXCEEDS	0.16		0.35		1.0	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08329888 LA CUEVA ARROYO TRIBUTARY AT ALBUQUERQUE, NM

LOCATION.--Lat 35°11'22", long 106°29'43", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on the left bank of concrete-lined arroyo, approximately 100 ft upstream from a box culvert passing under Tramway Blvd., in the extreme northeast corner of Albuquerque city limits. This site is located approximately 0.2 mi south of the old gage site La Cueva Arroyo Tributary at Tramway Blvd. (08329890).

DRAINAGE AREA.--0.5103 mi^2.

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Water-stage recorder. A tipping-bucket rain gage recording in 0.01-inch increments is located approximately 0.25 mi north of gage. Elevation of gage is 6,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.05	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
MEAN	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.03	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.1	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.001
MAX	0.004	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.002	0.004	0.012	0.003
(WY)	(2001)	(2001)	(2000)	(2000)	(2003)	(2000)	(2002)	(2001)	(2001)	(2001)	(2001)	(2002)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(2002)	(2000)	(2000)	(2000)	(2000)	(2001)	(2000)	(2000)	(2000)	(2003)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	0.35		0.08			
ANNUAL MEAN	0.001		0.000		0.001	
HIGHEST ANNUAL MEAN					0.002	2001
LOWEST ANNUAL MEAN					0.000	2003
HIGHEST DAILY MEAN	0.07	Sep 10	0.03	Oct 24	0.14	Aug 14, 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1999
MAXIMUM PEAK FLOW			11	Oct 24	12	Aug 14, 2001
MAXIMUM PEAK STAGE			1.54	Oct 24	1.56	Aug 14, 2001
ANNUAL RUNOFF (AC-FT)	0.7		0.2		0.7	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08329900 NORTH FLOODWAY CHANNEL NEAR ALAMEDA, NM

LOCATION.--Lat 35°11'53", long 106°35'59", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on left bank 0.5 mi upstream from Edith Boulevard, 1.1 mi upstream from mouth, and 1.2 mi northeast of Alameda.

DRAINAGE AREA.--87.9 mi^2.

PERIOD OF RECORD.--July 1968 to September 1989 (seasonal records). October 1989 to current year.

GAGE.--Water-stage recorder with satellite telemetry, recording rain gage, 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. Recording tipping-bucket rain gage, recording in 0.01-in. increments since Dec. 8, 2001.

REMARKS.--Water-discharge records good except for those estimated, which are poor. For water years 1997-99, low-flow values of 15 ft^3/s or less were obtained from gaging station (08329914), 1,000 ft downstream. Prior to water year 1997, any discharges below 15 ft^3/s were reported as "zero flow" in the mean daily values tables. 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. See tabulation below for monthly precipitation, in inches.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.15	4.4	1.1	e0.50	0.93	28	0.00	5.6	34	0.00	0.05	4.2
2	0.42	15	1.5	e0.50	0.81	2.6	0.59	4.6	4.2	0.42	11	0.31
3	0.10	9.6	44	e0.50	0.71	0.86	e0.50	7.7	0.12	0.07	12	0.48
4	1.1	20	3.2	e0.40	0.60	0.37	e0.50	11	0.01	0.09	0.93	0.76
5	0.35	e2.0	0.59	e0.30	0.51	0.13	0.27	9.0	0.37	0.14	0.08	1.1
6	0.24	e5.0	0.12	0.23	0.97	0.22	0.00	5.7	0.54	0.17	0.53	0.44
7	0.47	0.95	0.15	e0.30	0.57	0.39	0.00	5.2	0.49	2.7	2.3	46
8	0.38	0.10	0.09	e0.40	1.4	0.60	0.03	5.3	0.37	5.6	1.3	3.6
9	0.40	12	0.77	e0.70	8.9	0.02	0.00	7.0	7.6	2.3	0.12	6.8
10	0.30	62	0.39	e0.80	e1.5	0.02	0.00	9.7	4.1	1.7	6.5	32
11	0.58	0.06	0.45	e0.90	1.7	0.07	2.8	14	0.00	0.82	4.0	e9.0
12	0.17	0.45	0.44	e1.0	1.1	0.61	5.8	10	0.00	1.0	4.0	e2.0
13	0.34	0.50	e0.40	e1.0	84	0.81	8.4	8.5	0.00	1.2	9.3	1.5
14	0.10	0.31	e0.30	e1.0	5.9	0.86	5.9	7.6	0.00	1.6	11	2.3
15	0.14	0.04	e0.10	1.2	0.65	0.62	6.8	2.3	0.00	0.80	6.2	2.0
16	0.14	0.05	0.03	1.0	0.02	6.9	5.3	8.4	0.73	0.04	3.6	1.6
17	0.60	0.12	0.03	1.1	0.00	15	5.1	9.7	0.06	0.10	1.4	1.7
18	1.7	0.01	0.17	1.4	0.00	85	4.8	12	0.86	0.01	2.1	2.9
19	0.07	0.01	0.12	1.2	0.51	104	4.9	8.2	13	1.0	23	2.2
20	0.00	0.12	e0.20	1.1	24	78	4.1	e1.0	2.2	1.6	1.1	2.3
21	0.00	0.02	0.89	1.3	2.2	266	3.1	e0.80	1.3	6.2	1.5	3.0
22	33	0.08	3.7	1.1	0.15	2.8	5.5	0.45	0.50	4.9	0.85	1.7
23	90	0.02	1.3	1.0	0.19	1.2	3.0	0.03	1.5	e2.7	1.0	0.95
24	46	0.02	0.98	1.0	22	0.60	2.2	0.14	1.1	0.09	1.2	1.8
25	1.9	0.63	e0.50	0.87	5.2	0.65	4.0	1.9	0.15	0.05	18	1.6
26	22	e0.60	e0.50	0.72	19	0.01	8.5	3.5	2.5	0.00	e2.0	1.7
27	16	0.57	e0.50	0.76	5.9	0.09	12	4.4	0.87	0.00	1.6	2.0
28	6.5	0.73	e0.50	0.75	19	0.13	8.4	1.5	1.8	0.63	2.6	2.2
29	2.0	1.9	e0.50	1.0	---	0.00	6.8	8.5	0.00	0.30	5.7	2.9
30	1.4	1.1	0.50	1.5	---	0.00	6.0	1.1	0.00	0.00	64	2.3
31	2.3	---	0.51	1.6	---	0.00	---	0.34	---	0.14	3.9	---
TOTAL	228.85	138.39	64.53	27.13	208.42	596.56	115.29	175.16	78.37	36.37	202.86	143.34
MEAN	7.38	4.61	2.08	0.88	7.44	19.2	3.84	5.65	2.61	1.17	6.54	4.78
MAX	90	62	44	1.6	84	266	12	14	34	6.2	64	46
MIN	0.00	0.01	0.03	0.23	0.00	0.00	0.00	0.03	0.00	0.00	0.05	0.31
AC-FT	454	274	128	54	413	1,180	229	347	155	72	402	284
(+)	1.31	0.21	0.28	0.0	0.69	1.68	0.0	0.01	0.05	0.30	0.68	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

MEAN	11.1	6.62	2.68	3.34	3.68	8.64	7.82	7.59	8.63	22.0	28.7	14.8
MAX	38.3	16.9	8.32	14.2	16.3	21.3	42.9	30.5	25.0	67.9	45.7	34.5
(WY)	(2001)	(1995)	(1994)	(1995)	(1993)	(2000)	(1997)	(1994)	(1996)	(1997)	(1994)	(1991)
MIN	2.16	0.000	0.000	0.000	0.000	0.55	0.78	0.92	1.42	1.17	6.54	2.15
(WY)	(1996)	(1990)	(1990)	(1990)	(1991)	(1991)	(2000)	(1998)	(1998)	(2003)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003	
ANNUAL TOTAL	2,333.06		2,015.27			
ANNUAL MEAN	6.39		5.52		10.5	
HIGHEST ANNUAL MEAN					20.2	1997
LOWEST ANNUAL MEAN					5.52	2003
HIGHEST DAILY MEAN	251	Sep 10	266	Mar 21	961	Jul 14, 1990
LOWEST DAILY MEAN	0.00	Apr 22	0.00	Oct 20	0.00	Oct 1, 1989
ANNUAL SEVEN-DAY MINIMUM	0.04	Nov 18	0.03	Mar 26	0.00	Oct 5, 1989
MAXIMUM PEAK FLOW			4,650	Mar 21	12,300	Aug 14, 1980
MAXIMUM PEAK STAGE			6.30	Mar 21	10.40	Aug 14, 1980
ANNUAL RUNOFF (AC-FT)	4,630		4,000		7,630	
10 PERCENT EXCEEDS	9.6		9.8		15	
50 PERCENT EXCEEDS	1.1		1.0		1.8	
90 PERCENT EXCEEDS	0.17		0.03		0.05	

(+) Total precipitation accumulation, in inches.
e Estimated

08329911 NORTH CAMINO ARROYO AT SUNSET HILLS IN ALBUQUERQUE, NM

LOCATION.--Lat 35°11'40", long 106°31'57", Bernalillo County, Hydrologic Unit 13020203, in Elena Gallegos Grant, on right bank of concrete-lined arroyo, 10 ft above Holbrook Ave. bridge over North Camino Arroyo. This is located approximately 100 ft north of intersection of Holbrook Ave. and Elena Drive, and 1.3 mi north of Paseo del Norte, on the northern edge of Albuquerque.

DRAINAGE AREA.--2.06 mi^2.

PERIOD OF RECORD.--August 1997 to current year (seasonal records).

GAGE.--Water-stage recorder. Elevation of gage is 5,645 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39 ft^3/s, at 1955 hours, July 23, 2001, gage height, 1.38 ft, from step-forward analysis of concrete-lined stream channel; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 9.3 ft^3/s, Oct. 23, gage height, 1.19 ft; no flow most of time.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
2	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
3	0.00	0.00	0.19	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.04	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.04	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.06
10	0.00	0.02	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.13
11	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04	0.00
15	0.00	0.00	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	---	---	---	0.07	0.00	0.00	0.00	0.00	0.00	0.00
17	0.01	0.00	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00	0.00
18	0.01	0.00	---	---	---	0.16	0.00	0.00	0.00	0.00	0.01	0.00
19	0.00	0.00	---	---	---	0.26	0.00	0.00	0.03	0.00	0.00	0.00
20	0.00	0.00	---	---	---	0.32	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	---	0.46	0.00	0.00	0.00	0.00	0.00	0.00
22	0.02	0.00	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.29	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.11	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	---	---	---	0.03	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.01	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.04	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
31	0.00	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.49	0.10	---	---	---	---	0.01	0.00	0.05	0.01	0.09	0.19
MEAN	0.016	0.003	---	---	---	---	0.000	0.000	0.002	0.000	0.003	0.006
MAX	0.29	0.04	---	---	---	---	0.01	0.00	0.03	0.01	0.04	0.13
MIN	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	1.0	0.2	---	---	---	---	0.02	0.00	0.1	0.02	0.2	0.4

08329935 ARROYO 19A AT ALBUQUERQUE, NM

LOCATION.--Lat 35°09'24", long 106°43'50", in NE $^1/_4$ NE $^1/_4$ 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 at Albuquerque.

DRAINAGE AREA.--1.50 mi^2.

PERIOD OF RECORD.--June 1977 to current year (seasonal records).

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment. The control at the site is a Parshall flume. Elevation of gage is 5,341 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 good. 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. No flow most of time.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 234 ft^3/s, Aug. 2, 1999, gage height, 2.93 ft, on basis of 2 slope-area measurements of peak flow needed to extend rating beyond flume capacity. No flow most of time.

EXTREMES FOR CURRENT YEAR.--No flow this year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
(+)	1.07	0.35	0.51	0.0	0.51	1.26	0.04	0.07	0.20	0.16	0.55	0.30

(+) Total precipitation accumulation, in inches.

083299375 MARIPOSA DIVERSION OF SAN ANTONIO ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°08'24", long 106°42'17", in SE ¼ NE ¼ of sec.35, T.11 N., R.2 E., Bernalillo County, Hydrologic Unit 13020203, 1,500 ft upstream from the San Antonio underpass at Coors Blvd. on Albuquerqués west side, 1.1 mi north of Interstate 25 and Coors Blvd. intersection.

DRAINAGE AREA.--30.5 mi^2.

PERIOD OF RECORD.--Summer 1993 to October 1999, only recorded flow events during water-quality sampling. October 1999 to current year, continuous record.

GAGE.--Water-stage recorder and crest-stage gage referenced to outside staff gage. Elevation of gage is 5,100 ft above the National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. No flows will occur unless significant precipitation falls in the watershed.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
11	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.08	0.00	1.1	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	2.2	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	4.3	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00
23	5.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	3.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.3	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.55	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	9.52	1.09	0.88	0.08	0.05	8.65	0.00	0.00	0.00	0.00	3.85	0.34
MEAN	0.31	0.036	0.028	0.003	0.002	0.28	0.000	0.000	0.000	0.000	0.12	0.011
MAX	5.7	1.0	0.69	0.08	0.05	4.3	0.00	0.00	0.00	0.00	3.3	0.18
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	19	2.2	1.7	0.2	0.1	17	0.00	0.00	0.00	0.00	7.6	0.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	0.22	0.071	0.010	0.007	0.001	0.14	0.006	0.002	0.075	0.068	0.18	0.11
MAX	0.55	0.25	0.028	0.027	0.002	0.28	0.016	0.008	0.30	0.14	0.36	0.42
(WY)	(2001)	(2001)	(2003)	(2001)	(2001)	(2003)	(2001)	(2001)	(2000)	(2000)	(2002)	(2002)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060	0.000
(WY)	(2002)	(2000)	(2002)	(2000)	(2000)	(2002)	(2002)	(2000)	(2001)	(2002)	(2001)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	35.27		24.46			
ANNUAL MEAN	0.097		0.067		0.074	
HIGHEST ANNUAL MEAN					0.092	2001
LOWEST ANNUAL MEAN					0.065	2002
HIGHEST DAILY MEAN	8.8	Aug 3	5.7	Oct 23	8.8	Aug 3, 2002
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1999
MAXIMUM PEAK FLOW			50	Oct 23	251	Aug 2, 1999
MAXIMUM PEAK STAGE			2.65	Oct 23	4.80	Aug 2, 1999
ANNUAL RUNOFF (AC-FT)	70		49		54	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08329938 LADERA ARROYO AT ALBUQUERQUE, NM

LOCATION.--Lat 35°06'56", long 106°44'48", 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 98th Street, and 2.3 mi west of North Coors Road in Albuquerque.

DRAINAGE AREA.--0.34 mi^2.

PERIOD OF RECORD.--May 1981 to current year (seasonal records).

GAGE.--Water-stage recorder and recording tipping-bucket rain gage with 0.01-in. increment. Elevation of gage is 5,312 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 195 ft^3/s, Aug. 2, 1999, gage height, 4.12 ft, from slope-area indirect measurement; no flow most of time.

EXTREMES FOR CURRENT YEAR.--No flow this water year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

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 Avenue Bridge in Albuquerque, and at mi 1,540.0.

DRAINAGE AREA.--17,440 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. 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 regulated since Nov. 1973 by Cochiti Dam (station 08317300), 50 mi upstream. Some 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.

COOPERATION.--Records for Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals provided by Middle Rio Grande Conservancy District. Data were not provided by time of printing.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	324	383	406	475	421	425	857	732	412	406	332
2	180	299	390	401	489	414	411	879	669	405	412	221
3	169	268	471	402	497	404	403	802	611	420	435	198
4	160	275	491	399	504	362	399	771	608	442	434	167
5	151	344	463	400	522	323	349	708	530	445	428	176
6	201	327	475	401	536	299	331	589	495	444	396	208
7	234	331	498	407	512	319	338	559	479	454	385	130
8	225	377	487	432	470	360	354	527	462	448	402	208
9	181	377	493	450	451	378	367	531	458	440	405	205
10	173	446	478	468	442	384	379	533	469	437	388	291
11	169	400	439	448	398	347	388	521	468	436	358	324
12	181	396	405	437	384	330	416	534	496	438	285	367
13	180	428	413	432	428	343	436	537	534	437	247	372
14	192	421	413	463	547	368	447	539	547	438	229	344
15	220	401	401	486	539	416	468	968	539	434	267	287
16	209	393	410	487	564	416	574	1,260	513	452	346	202
17	195	370	417	487	533	432	736	878	507	447	466	168
18	172	381	429	468	504	407	884	727	502	452	473	157
19	154	362	472	434	454	563	775	693	494	470	391	147
20	139	331	482	432	549	442	799	634	490	459	314	117
21	115	327	442	438	550	811	784	604	458	448	269	153
22	127	327	401	437	496	488	726	612	423	442	263	139
23	156	334	417	435	494	474	668	660	405	413	280	134
24	383	343	434	439	501	465	673	619	366	398	306	145
25	239	344	453	446	443	445	711	615	364	407	315	159
26	200	355	457	463	369	405	624	667	396	406	314	146
27	353	364	460	468	397	394	555	1,170	417	403	294	141
28	321	365	447	469	385	485	587	932	412	399	335	148
29	309	357	421	469	---	503	649	1,040	408	389	443	132
30	322	357	426	472	---	469	708	1,040	428	397	361	168
31	323	---	417	469	---	466	---	833	---	402	516	---
TOTAL	6,533	10,724	13,685	13,745	13,433	13,133	16,364	22,839	14,680	13,314	11,163	6,086
MEAN	211	357	441	443	480	424	545	737	489	429	360	203
MAX	383	446	498	487	564	811	884	1,260	732	470	516	372
MIN	115	268	383	399	369	299	331	521	364	389	229	117
AC-FT	12,960	21,270	27,140	27,260	26,640	26,050	32,460	45,300	29,120	26,410	22,140	12,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2003, BY WATER YEAR (WY)

MEAN	481	921	985	918	1,023	1,224	1,922	3,042	2,734	1,444	800	597
MAX	1,802	2,302	2,276	2,159	3,562	2,790	6,343	6,203	6,113	5,439	3,452	1,554
(WY)	(1998)	(1987)	(1987)	(1986)	(1986)	(1986)	(1985)	(1980)	(1983)	(1979)	(1986)	(1986)
MIN	38.4	145	441	443	480	424	137	148	336	287	278	51.4
(WY)	(1978)	(1990)	(2003)	(2003)	(2003)	(2003)	(1977)	(1977)	(1989)	(1974)	(1978)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1974 - 2003	
ANNUAL TOTAL	177,010		155,699			
ANNUAL MEAN	485		427		a1,341	
HIGHEST ANNUAL MEAN					2,486	1987
LOWEST ANNUAL MEAN					356	1977
HIGHEST DAILY MEAN	1,240	May 15	1,260	May 16	8,650	Apr 24, 1985
LOWEST DAILY MEAN	115	Oct 21	115	Oct 21	0.00	May 30, 1977
ANNUAL SEVEN-DAY MINIMUM	151	Oct 17	142	Sep 18	0.00	May 30, 1977
MAXIMUM PEAK FLOW			1,880	Mar 21	b25,000	Apr 24, 1942
MAXIMUM PEAK STAGE			4.04	Mar 21	7.82	Aug 10, 1967
INSTANTANEOUS LOW FLOW			94	Oct 21	94	Oct 21, 2002
ANNUAL RUNOFF (AC-FT)	351,100		308,800		971,600	
10 PERCENT EXCEEDS	670		611		3,420	
50 PERCENT EXCEEDS	487		420		814	
90 PERCENT EXCEEDS	240		200		315	

a Average discharge for 33 years (water years 1942-74), 1,440 ft^3/s, 1,043,000 acre-ft, prior to closure of Cochiti Dam.
b From rating curve extended above 13,900 ft^3/s.

08330000 RIO GRANDE AT ALBUQUERQUE, NM—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT													
08...	1128	230	--	--	--	--	--	--	--	--	--	--	170
08...	1136	230	89	76	641	9.3	113	7.7	438	21.5	16.0	--	--
NOV													
19...	1004	403	--	--	--	--	--	--	--	--	10.5	91	149
19...	1103	371	100	93	649	9.6	101	7.8	489	13.0	10.5	--	--
DEC													
27...	1158	479	58	56	--	--	--	--	--	--	--	100	632
27...	1159	479	--	--	652	11.2	100	7.9	457	8.0	4.0	--	--
JAN													
14...	1302	479	100	84	649	--		7.9	487	16.0	7.0	--	--
14...	1303	479	--	--	--	--	--	--	--	--	--	--	195
FEB													
11...	1144	378	37	36	644	12.2	118	7.9	426	16.0	6.5	--	--
11...	1145	378	--	--	--	--	--	--	--	--	--	--	729
MAR													
31...	1152	479	--	--	--	--	--	--	--	--	--	--	288
31...	1153	479	210	180	647	12.4	131	7.7	433	18.0	10.5	--	--
APR													
30...	1100	684	--	760	633	8.3	101	8.3	434	--	15.5	--	771
JUN													
17...	1115	522	--	66	640	7.9	108	8.4	374	26.5	22.0	--	173
JUL													
15...	1000	439	--	54	640	7.1	99	8.2	362	35.5	23.0	--	--
15...	1215	420	--	--	--	--	--	--	--	--	29.5	--	131
AUG													
13...	1245	252	--	26	640	6.5	101	8.3	355	31.0	28.5	--	66
SEP													
09...	1045	195	--	1,200	638	7.8	99	7.9	363	22.5	18.0	--	804

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.002mm (70337)	Suspnd. sediment, falldia dst wat percent <.004mm (70338)	Suspnd. sediment, falldia dst wat percent <.008mm (70339)	Suspnd. sediment, falldia dst wat percent <.016mm (70340)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)
OCT													
08...	1044	1.0	230	1.38	231	16.0	--	--	--	--	94	94	100
NOV													
19...	1004	1.3	403	1.55	263	10.5	--	--	--	--	--	--	--
DEC													
27...	1235	1.5	485	1.78	263	4.0	--	--	--	--	78	78	93
JAN													
14...	1026	1.5	448	1.66	263	7.0	--	--	--	--	85	85	94
FEB													
11...	1244	1.3	377	1.56	262	6.5	--	--	--	--	76	79	97
MAR													
14...	1115	1.2	408	1.61	263	12.0	54	67	75	80	98	98	99
APR													
30...	1200	1.3	729	2.02	276	12.5	50	60	66	77	89	90	93
MAY													
30...	0900	1.7	1,040	2.08	288	21.0	40	47	51	58	87	92	96
JUN													
24...	1150	1.4	385	1.70	161	21.5	--	--	--	--	75	75	84
JUL													
15...	1215	0.85	420	1.69	292	29.5	--	--	--	--	87	90	97
AUG													
15...	1205	1.1	293	1.65	164	24.0	--	--	--	--	88	92	97

08330000 RIO GRANDE AT ALBUQUERQUE, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sedi-ment, falldia dst wat percent <.5 mm (70345)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Suspnd. sedi-ment, sieve diametr percent <.125mm (70332)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT				
08...	--	--	--	115
NOV				
19...	--	91	100	149
DEC				
27...	100	--	--	146
JAN				
14...	100	--	--	166
FEB				
11...	100	--	--	71
MAR				
14...	100	--	--	976
APR				
30...	100	--	--	781
MAY				
30...	100	--	--	741
JUN				
24...	100	--	--	169
JUL				
15...	100	--	--	131
AUG				
15...	100	--	--	74

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instan-taneous dis-charge, cfs (00061)	Stream veloc-ity, ft/s (00055)	Stream width, feet (00004)	Temper-ature, water, deg C (00010)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)	Bed sedi-ment, dry svd sve dia percent <.125mm (80165)	Bed sedi-ment, dry svd sve dia percent <.25mm (80166)	Bed sedi-ment, dry svd sve dia percent <.5 mm (80167)	Bed sedi-ment, dry svd sve dia percent <1 mm (80168)	Bed sedi-ment, dry svd sve dia percent <2 mm (80169)	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)
OCT													
08...	1044	1.0	230	1.38	231	16.0	0.0	1	7	48	84	94	98
NOV													
19...	1004	1.3	403	1.55	263	10.5	--	0.0	6	40	66	75	79
DEC													
27...	1235	1.5	485	1.78	263	4.0	--	0.0	5	39	58	62	63
JAN													
14...	1025	1.5	448	1.66	263	7.0	0.0	1	8	50	80	87	88
FEB													
11...	1244	1.3	377	1.56	262	6.5	--	0.0	8	50	85	96	99
MAR													
14...	1115	1.2	408	1.61	263	12.0	0.0	1	6	49	80	88	91
APR													
30...	1201	1.3	729	2.02	276	12.5	--	0.0	7	63	91	97	99
MAY													
30...	0915	1.7	1,040	2.08	288	21.0	--	0.0	9	57	90	97	99
JUN													
24...	1155	1.4	385	1.70	161	21.5	--	0.0	4	45	87	98	100
JUL													
15...	1220	0.85	420	1.69	292	29.5	0.0	1	13	54	80	88	90
AUG													
15...	1210	1.1	293	1.65	164	24.0	--	0.0	10	60	91	98	100

08330000 RIO GRANDE AT ALBUQUERQUE, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)	Bed sediment, dry svd sve dia percent <32 mm (80173)	Bed sediment, dry svd sve dia percent <64 mm (80174)
OCT				
08...	99	100	--	--
NOV				
19...	80	83	100	--
DEC				
27...	64	65	68	100
JAN				
14...	89	93	100	--
FEB				
11...	100	--	--	--
MAR				
14...	92	96	100	--
APR				
30...	100	--	--	--
MAY				
30...	100	--	--	--
JUN				
24...	--	--	--	--
JUL				
15...	91	100	--	--
AUG				
15...	--	--	--	--

08330540 TRAMWAY FLOODWAY CHANNEL AT ALBUQUERQUE, NM

LOCATION.--Lat 35°04'42", long 106°29'49", Bernalillo County, Hydrologic Unit 13020203, on right bank 300 ft downstream from Copper Boulevard Bridge, near corner of Tramway and Copper Boulevards NE in Albuquerque.

DRAINAGE AREA.--1.60 mi^2.

PERIOD OF RECORD.--July 1987 to November 2000 (seasonal record), March 2001 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete-lined channel. Recording rain gage at this site since May 2001. Elevation of gage is 5,740 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are poor. Prior to water year 1998, some minor streamflow may have existed on days when daily mean discharges have been recorded as zero due to the sensitivity limits of the streamflow-monitoring equipment. Since 1998, all flows above zero are recorded. See tabulation below for monthly precipitation, in inches.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.00	0.00	0.00	0.00	0.44	0.00	0.07	0.78	0.13	0.16	0.13
2	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.10	1.1	0.15
3	0.03	0.00	1.3	0.00	0.01	0.00	0.00	0.00	0.08	0.17	0.21	0.14
4	0.02	0.26	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.13	0.17	0.15
5	0.20	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.09	0.12	0.16	0.15
6	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.09	0.13	0.48
7	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.27	0.08	1.8
8	0.21	0.00	0.01	0.00	0.51	0.00	0.00	0.06	0.07	0.41	0.08	0.18
9	0.12	1.1	e0.00	0.00	1.3	0.00	0.00	0.07	1.2	0.33	0.13	0.36
10	0.05	0.63	0.07	0.00	e0.00	0.00	0.00	0.00	0.13	0.22	0.71	1.1
11	0.01	0.06	e0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.25	0.17	0.11
12	0.04	0.02	0.00	0.00	0.00	0.00	0.02	0.06	0.07	0.22	0.22	0.04
13	0.03	0.00	0.00	0.00	2.3	0.00	0.00	0.06	0.05	0.26	0.19	0.03
14	0.01	0.00	0.00	0.00	0.37	0.00	0.00	0.09	0.06	0.32	0.36	0.02
15	0.03	0.00	0.00	0.01	0.03	0.01	0.05	0.08	0.04	0.22	0.16	0.03
16	0.03	0.00	0.00	0.00	0.00	0.30	0.00	0.06	0.08	0.20	0.63	0.05
17	0.02	0.00	0.00	0.00	0.01	0.40	0.00	0.00	0.31	0.18	0.39	0.06
18	0.05	0.00	0.00	0.00	0.18	1.7	0.00	0.00	0.11	0.29	0.29	0.04
19	0.04	0.00	0.00	0.00	0.00	2.0	0.12	0.00	0.22	0.05	0.20	0.04
20	0.00	0.00	0.00	0.00	0.40	2.3	0.00	0.00	0.08	0.21	0.20	0.07
21	0.00	0.00	0.00	0.00	0.00	2.3	0.00	0.00	0.07	1.1	0.21	0.03
22	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.03	0.24	0.18	0.02
23	0.96	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.06	0.13	0.05	0.01
24	0.60	0.00	0.00	0.00	0.58	0.00	0.00	0.02	0.10	0.12	0.10	0.03
25	0.01	0.00	0.00	0.00	0.05	0.02	0.01	0.46	0.07	0.09	0.27	0.04
26	0.61	0.00	0.00	0.00	1.9	0.00	0.00	0.11	0.09	0.11	0.12	0.04
27	0.83	0.00	0.01	0.00	0.16	0.00	0.01	0.11	0.14	0.05	0.40	0.00
28	0.05	0.00	e0.00	0.00	1.0	0.00	0.00	0.07	0.11	0.07	0.43	0.00
29	0.00	0.00	0.00	0.03	---	0.00	0.01	0.08	0.05	0.07	0.15	0.02
30	0.00	0.00	0.02	0.00	---	0.00	0.05	0.03	0.09	0.10	0.91	0.02
31	0.00	---	e0.00	0.00	---	0.00	---	0.23	---	0.13	0.07	---
TOTAL	4.27	2.07	1.41	0.04	8.82	9.47	0.29	1.86	4.53	6.38	8.63	5.34
MEAN	0.14	0.069	0.045	0.001	0.32	0.31	0.010	0.060	0.15	0.21	0.28	0.18
MAX	0.96	1.1	1.3	0.03	2.3	2.3	0.12	0.46	1.2	1.1	1.1	1.8
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.00
AC-FT	8.5	4.1	2.8	0.08	17	19	0.6	3.7	9.0	13	17	11
(+)	0.64	0.43	0.24	0.0	1.26	1.77	0.04	0.09	0.59	0.26	0.58	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

MEAN	0.24	0.088	0.097	0.15	0.20	0.32	0.11	0.12	0.12	0.35	0.49	0.23
MAX	1.03	0.38	0.17	0.29	0.31	1.17	0.38	0.38	0.41	0.95	1.44	0.93
(WY)	(1990)	(2002)	(2002)	(2002)	(2003)	(1990)	(2002)	(1998)	(2001)	(1998)	(2001)	(1991)
MIN	0.000	0.000	0.000	0.001	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1991)	(1990)	(1990)	(2003)	(2002)	(1991)	(1991)	(1995)	(1990)	(1994)	(1994)	(1990)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003	
ANNUAL TOTAL	72.74		53.11			
ANNUAL MEAN	0.20		0.15		0.23	
HIGHEST ANNUAL MEAN					0.59	2001
LOWEST ANNUAL MEAN					0.000	1995
HIGHEST DAILY MEAN	5.4	Apr 7	2.3	Feb 13	32	Oct 4, 1989
LOWEST DAILY MEAN	0.00	Jan 3	0.00	Oct 20	0.00	Oct 1, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 6	0.00	Nov 13	0.00	Oct 5, 1989
MAXIMUM PEAK FLOW			132	Sep 7	3,190	Jul 9, 1988
MAXIMUM PEAK STAGE			2.12	Sep 7	8.62	Jul 9, 1988
ANNUAL RUNOFF (AC-FT)	144		105		166	
10 PERCENT EXCEEDS	0.49		0.36		0.46	
50 PERCENT EXCEEDS	0.07		0.02		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(+) Total precipitation accumulation, in inches.
e Estimated

08330600 TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'10", long 106°38'53", in SW $^1/_4$ SW $^1/_4$ 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 mi^2.

PERIOD OF RECORD.--October 1951 to September 1968 (annual maximum only), August 1974 to September 1998 (seasonal records), October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,999 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 good except those for Mar. 21, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.6
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
9	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	6.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	4.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.7	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	1.4	0.00	0.00	8.4	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	10	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.37	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	e26	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	2.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	6.6	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	1.9	---
TOTAL	2.95	6.39	0.00	0.00	6.10	37.54	0.00	0.00	15.10	0.37	8.68	4.67
MEAN	0.095	0.21	0.000	0.000	0.22	1.21	0.000	0.000	0.50	0.012	0.28	0.16
MAX	2.4	6.0	0.00	0.00	4.1	26	0.00	0.00	8.4	0.37	6.6	4.6
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	5.9	13	0.00	0.00	12	74	0.00	0.00	30	0.7	17	9.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	0.52	0.087	0.000	0.000	0.043	0.25	0.014	0.006	0.19	0.25	1.37	0.090
MAX	2.20	0.21	0.000	0.000	0.22	1.21	0.065	0.032	0.50	0.80	4.35	0.16
(WY)	(2001)	(2003)	(1999)	(1999)	(2003)	(2003)	(1999)	(2001)	(2003)	(2002)	(1999)	(2003)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.012	0.28	0.026
(WY)	(2000)	(1999)	(1999)	(1999)	(1999)	(2001)	(2000)	(1999)	(2002)	(2003)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	88.78		81.80			
ANNUAL MEAN	0.24		0.22		0.24	
HIGHEST ANNUAL MEAN					0.43	1999
LOWEST ANNUAL MEAN					0.063	2000
HIGHEST DAILY MEAN	17	Jul 10	26	Mar 21	47	Aug 3, 1999
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1998
MAXIMUM PEAK FLOW			331	Mar 21	a2,930	Jul 9, 1988
MAXIMUM PEAK STAGE			4.64	Mar 21	b9.60	Jul 9, 1988
ANNUAL RUNOFF (AC-FT)	176		162		173	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 10 ft^3/s, on basis of step-backwater analysis, and slope-area measurement.
b From floodmarks.
e Estimated

08330775 SOUTH DIVERSION CHANNEL ABOVE TIJERAS ARROYO NEAR ALBUQUERQUE, NM

LOCATION.--Lat 35°00'10", long 106°39'26", Bernalillo County, Hydrologic Unit 13020203, on right bank 600 ft upstream from confluence with Tijeras Arroyo, and 2.5 mi south of Albuquerque.

DRAINAGE AREA.--11.0 mi^2.

PERIOD OF RECORD.--June 1988 to current year.

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

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	1.6	0.00	0.00	3.8	0.00	0.00	0.38
2	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.84	0.00	0.00	0.16
3	0.00	0.00	3.2	0.00	0.00	0.10	0.00	0.00	0.01	0.00	0.00	0.00
4	0.00	0.00	1.1	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.03	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
6	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
8	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.1
9	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.14
10	0.00	4.4	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.26
12	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.38
13	0.00	0.00	0.00	0.00	6.7	0.00	0.00	0.00	0.00	0.00	0.00	0.14
14	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.15
15	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.38
16	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.26
17	0.00	0.00	0.00	0.00	0.19	1.0	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.01	3.4	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	15	0.00	0.00	0.10	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	2.7	2.3	0.00	0.00	0.04	0.64	0.08	0.00
21	0.00	0.00	0.00	0.00	0.47	24	0.00	0.00	0.00	1.4	0.00	0.00
22	0.00	0.00	0.00	0.00	0.03	0.49	0.00	0.00	0.00	0.11	0.00	0.28
23	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.45	0.66	0.00	0.17
24	0.00	0.00	0.00	0.00	0.32	0.06	0.00	0.00	0.06	0.13	0.00	0.00
25	0.24	0.00	0.00	0.00	1.5	0.00	0.00	0.00	0.00	0.00	0.10	0.00
26	0.02	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.74	0.00
27	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.12	0.00
28	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.11
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.53	0.21
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	1.4	---
TOTAL	0.26	5.40	4.51	0.00	14.97	48.24	0.00	0.00	5.30	2.94	3.42	4.13
MEAN	0.008	0.18	0.15	0.000	0.53	1.56	0.000	0.000	0.18	0.095	0.11	0.14
MAX	0.24	4.4	3.2	0.00	6.7	24	0.00	0.00	3.8	1.4	1.4	1.1
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.5	11	8.9	0.00	30	96	0.00	0.00	11	5.8	6.8	8.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	0.89	0.74	0.070	0.060	0.12	0.35	0.12	0.23	0.46	0.70	1.41	0.82
MAX	2.88	4.50	0.39	0.18	0.53	1.56	0.57	1.83	3.14	2.09	4.65	2.79
(WY)	(1995)	(1995)	(1995)	(1995)	(2003)	(2003)	(1997)	(1994)	(1996)	(1997)	(1994)	(1997)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.044	0.11	0.000
(WY)	(2002)	(1996)	(1994)	(1994)	(1996)	(1996)	(1994)	(1995)	(1995)	(2002)	(2003)	(1998)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	58.18		89.17			
ANNUAL MEAN	0.16		0.24		0.50	
HIGHEST ANNUAL MEAN					0.94	1995
LOWEST ANNUAL MEAN					0.15	2002
HIGHEST DAILY MEAN	13	Sep 11	24	Mar 21	133	Aug 15, 1994
LOWEST DAILY MEAN	0.00	Jan 2	0.00	Oct 1	0.00	Oct 1, 1993
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 2	0.00	Oct 1	0.00	Oct 9, 1993
MAXIMUM PEAK FLOW			199	Mar 21	a1,960	Jul 14, 1990
MAXIMUM PEAK STAGE			3.05	Mar 21	b6.30	Jul 14, 1990
ANNUAL RUNOFF (AC-FT)	115		177		362	
10 PERCENT EXCEEDS	0.03		0.25		0.15	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 30 ft^3/s, on basis of step-backwater analysis.
b From floodmarks.

08330875 RIO GRANDE AT ISLETA LAKES NEAR ISLETA, NM

LOCATION.--Lat 34°56'49", long 106°40'45", Bernalillo County, Hydrologic Unit 13020203, in Isleta Pueblo Grant, on left bank 0.2 mi downstream from Interstate Highway 25 Bridge, and 2.7 mi north of Isleta.

DRAINAGE AREA.--18,000 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

PERIOD OF RECORD.--October 2000 to September 2002 (stage only), October 2002 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,870 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for those estimated, which are poor. Flow regulated since Nov. 1973 by Cochiti Dam (station 08317300), 54 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 of which are downstream from station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft^3/s, May 17, gage height, 5.06 ft; minimum, 70 ft^3/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	e300	e370	e398	e470	406	e420	893	e700	e400	294	401
2	149	e260	e376	e393	e480	424	404	976	e550	e350	295	196
3	147	e240	e410	e394	e490	422	398	877	e540	e320	302	169
4	143	e250	e475	e392	499	398	405	769	e530	e350	302	145
5	137	e290	e454	e392	526	343	374	736	e450	372	302	143
6	164	e310	e465	e394	549	307	344	529	e420	375	292	211
7	211	e290	e486	e396	527	303	338	473	e410	381	290	139
8	211	e325	e478	e412	451	370	347	426	e400	394	285	167
9	179	e360	e483	e430	423	394	342	410	e400	385	284	192
10	155	e420	e445	e452	422	407	356	385	e410	383	280	223
11	158	e380	e410	e440	393	e400	353	374	e410	389	275	241
12	157	e380	378	e432	365	e360	384	402	e450	382	215	293
13	165	e410	391	e422	411	e330	395	414	e470	389	199	277
14	181	e400	398	e440	560	e340	399	424	482	392	184	274
15	e210	e380	400	e470	516	e380	405	761	478	368	193	225
16	e200	e370	402	e484	564	e410	488	1,430	457	380	214	168
17	e185	e350	398	e485	526	e420	665	1,170	441	382	350	126
18	e160	e360	404	e466	502	e400	954	757	443	371	370	111
19	e145	e340	424	e434	418	e510	933	e700	420	386	344	113
20	e130	e310	466	e428	548	e420	876	e650	439	377	264	e100
21	e110	e305	438	e434	568	e780	923	e600	394	377	222	109
22	e105	e305	372	e433	483	e460	764	e550	361	357	207	124
23	e140	e310	375	e430	484	e415	698	e500	e354	333	209	102
24	e360	e320	390	e434	508	e405	682	e550	e330	310	232	117
25	e275	e325	418	e440	488	e395	729	e500	e315	317	249	125
26	e190	e330	422	e450	364	e380	641	e550	e330	301	250	125
27	e275	e340	e430	e460	366	e375	473	e1,000	e360	292	230	113
28	e320	e340	e425	e466	385	e460	494	e1,050	e350	287	235	119
29	e290	e335	e410	e468	---	e480	567	e900	e330	276	322	119
30	e305	e335	e415	e469	---	e460	685	e970	e340	273	310	109
31	e310	---	e405	e468	---	e440	---	e850	---	284	346	---
TOTAL	6,054	9,970	13,013	13,506	13,286	12,794	16,236	21,576	12,764	10,933	8,346	5,076
MEAN	195	332	420	436	474	413	541	696	425	353	269	169
MAX	360	420	486	485	568	780	954	1,430	700	400	370	401
MIN	105	240	370	392	364	303	338	374	315	273	184	100
AC-FT	12,010	19,780	25,810	26,790	26,350	25,380	32,200	42,800	25,320	21,690	16,550	10,070

WTR YR 2003 TOTAL 143,554 MEAN 393 MAX 1,430 MIN 100 AC-FT 284,700

e Estimated

08331000 RIO GRANDE AT ISLETA, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 34°55'14", long 106°40'44", in NE ¼ SE ¼ SW ¼ sec.13, T.8 N., R.2 E., Bernalillo County, Hydrologic Unit 13020203, in Isleta Pueblo Grant, on right bank 0.5 mi upstream from Isleta Diversion Dam, 1.0 mi west from State Highway 47, 1.2 mi from Isleta Pueblo, and at mile 1527.7.

DRAINAGE AREA.--18,100 mi^2 (estimated), including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

PERIOD OF RECORD.--Water years 1972 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
15...	1115	210	--	--	--	--	--	--	--	--	--	--	--
15...	1151	210	37	37	645	8.3	105	7.7	547	22.5	18.5	--	--
NOV													
13...	1100	463	290	400	641	10.2	103	8.1	522	5.0	8.0	160	51.3
14...	1150	415	350	--	644	10.9	115	8.0	515	--	10.0	--	--
DEC													
12...	1142	408	--	--	--	--	--	--	--	--	--	--	--
12...	1143	408	120	91	645	11.8	109	7.7	542	9.5	5.0	--	--
31...	1135	400	240	180	640	10.2	95	8.5	525	14.0	5.0	150	47.4
JAN													
29...	0951	471	--	58	646	11.1	105	7.7	513	8.0	6.0	--	--
29...	0952	471	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	1203	393	110	89	637	9.7	100	7.8	538	6.5	8.5	--	--
MAR													
11...	1150	317	51	41	637	9.4	107	8.0	493	22.0	13.0	150	47.1
APR													
01...	1210	408	--	--	--	--	--	--	--	--	--	--	--
01...	1211	408	140	120	642	10.6	117	7.7	510	24.0	12.0	--	--
MAY													
19...	1330	676	--	340	640	7.4	99	8.1	465	--	21.0	--	--
JUN													
06...	1050	496	130	120	640	7.6	96	8.2	470	22.5	18.0	150	44.9
16...	1230	496	--	72	640	7.5	106	8.3	432	31.0	23.5	--	--
JUL													
15...	0815	439	--	67	642	5.7	92	8.0	473	31.5	31.0	--	--
AUG													
14...	1145	241	--	23	645	7.3	100	8.2	515	26.0	22.5	--	--
SEP													
09...	0915	215	--	2,900	638	7.9	100	7.6	526	22.0	18.0	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
OCT													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
13...	8.52	5.16	2	46.0	126	152	27.5	0.58	25.8	84.4	329	0.30	0.90
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	8.30	5.32	2	48.9	143	172	31.0	0.64	25.2	77.0	332	0.20	0.70
JAN													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
11...	8.00	5.54	2	44.9	138	166	27.5	0.63	25.1	66.8	312	0.30	0.40
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	8.22	5.23	1	37.2	122	149	21.6	0.5	22.0	68.3	286	0.30	0.50
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

08331000 RIO GRANDE AT ISLETA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)
OCT													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
13...	0.02	0.04	0.95	<0.010	0.23	0.24	0.60	E210	650	E1	E.19	3	94
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	0.05	0.08	0.66	<0.010	0.18	0.17	0.32	1,000	670	M	E.21	4	95
JAN													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
11...	0.04	0.06	0.80	0.010	0.30	0.32	0.39	E130	58	<2	E.19	5	88
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	0.02	0.03	0.90	<0.010	0.10	0.10	0.24	E440	820	2	E.20	4	84
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recover -able, ug/L (71900)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)
OCT													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
13...	<0.06	120	E.03	<0.8	0.30	1.7	11	E.06	11.3	E.01	5.4	2.21	<5
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<0.06	160	E.03	<0.8	0.28	0.9	E6	E.06	18.1	--	6.0	2.28	<3
JAN													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
11...	<0.06	110	E.02	<0.8	0.28	0.8	E8	0.09	18.8	<0.02	6.3	2.80	<3
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<0.06	100	E.02	<0.8	0.30	1.1	E4	E.05	7.2	<0.02	5.6	2.19	<3
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--

08331000 RIO GRANDE AT ISLETA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT						
15...	--	--	--	--	--	64
15...	--	--	--	--	--	--
NOV						
13...	<3	<0.20	10	2.88	71	733
14...	--	--	--	--	--	--
DEC						
12...	--	--	--	--	--	278
12...	--	--	--	--	--	--
31...	<3	<0.20	4	3.19	79	335
JAN						
29...	--	--	--	--	--	--
29...	--	--	--	--	--	229
FEB						
28...	--	--	--	--	--	--
MAR						
11...	<3	<0.20	3	3.71	97	70
APR						
01...	--	--	--	--	--	254
01...	--	--	--	--	--	--
MAY						
19...	--	--	--	--	--	404
JUN						
06...	<3	<0.20	3	2.92	85	238
16...	--	--	--	--	--	137
JUL						
15...	--	--	--	--	--	125
AUG						
14...	--	--	--	--	--	71
SEP						
09...	--	--	--	--	--	1,630

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
DEC													
31...	1135	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
MAR													
11...	1150	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
JUN													
06...	1050	<0.006	<0.006	<0.006	<0.004	<0.005	E.002	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
DEC													
31...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
MAR													
11...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
JUN													
06...	<0.006	<0.018	<0.003	<0.004	0.011	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

08331000 RIO GRANDE AT ISLETA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
DEC													
31...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
MAR													
11...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
JUN													
06...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
DEC													
31...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	0.014	<0.02	<0.034	<0.02	<0.005	<0.002
MAR													
11...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
JUN													
06...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
DEC	
31...	<0.009
MAR	
11...	<0.009
JUN	
06...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value

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 Oct. 1964, 0.2 mi upstream at various datums.

REMARKS.--Records fair except for those estimated, which are poor. 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 ft^3/s. For combined monthly flow, in acre-feet, 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. No flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	9.3	8.7	8.6	7.8	28	60	68	67	48	23	59
2	29	e9.3	8.7	8.6	7.8	28	60	73	64	42	21	57
3	26	e9.3	8.9	e7.8	7.8	31	64	74	59	42	16	46
4	26	e9.4	8.5	e7.7	7.8	39	62	87	63	36	31	29
5	25	e9.4	8.1	e8.1	7.9	38	51	83	66	34	30	35
6	24	e9.3	8.1	8.1	7.8	38	63	69	64	33	32	37
7	24	e9.4	8.4	8.2	7.6	37	e63	72	62	35	24	39
8	22	e9.3	8.5	8.5	8.0	40	e65	75	60	43	34	46
9	26	e9.3	8.4	8.6	8.3	45	e65	76	58	45	44	37
10	24	e9.2	8.5	8.4	8.1	41	e63	77	45	43	30	53
11	23	e9.2	8.5	8.5	8.1	40	e63	82	52	37	19	71
12	21	e8.8	8.6	8.0	8.1	32	e66	81	44	32	33	74
13	22	e8.6	8.7	7.9	8.1	28	e66	65	50	33	30	86
14	24	8.7	8.7	7.9	8.1	25	e65	61	e52	25	20	80
15	24	9.1	8.7	8.0	8.1	29	e65	65	e52	33	40	77
16	24	9.3	8.7	8.1	8.3	33	e68	69	e53	52	42	62
17	25	9.3	8.7	8.1	8.7	40	e68	69	e53	58	55	54
18	27	9.2	8.7	8.1	8.9	43	e67	62	e52	57	64	37
19	31	8.7	8.4	8.1	8.9	45	e67	62	e52	57	70	35
20	31	8.7	8.1	8.2	8.9	48	e70	64	e51	51	73	34
21	27	8.7	8.1	8.1	8.9	42	e70	67	e51	52	74	33
22	24	8.7	8.4	8.1	9.1	42	e75	76	e53	58	45	38
23	22	8.8	8.6	8.1	8.9	50	e72	80	e53	46	41	37
24	20	8.5	8.7	8.2	8.9	54	64	67	e52	44	40	37
25	20	8.6	8.7	8.3	9.3	53	82	67	e52	42	42	30
26	22	8.7	8.5	8.3	9.6	50	86	78	61	34	38	23
27	21	8.7	8.4	8.6	9.7	47	78	82	47	33	38	e13
28	20	9.2	8.4	8.5	14	51	88	77	38	32	31	e10
29	20	8.9	8.4	7.9	---	42	59	77	44	34	28	e9.3
30	16	8.7	8.7	7.7	---	62	58	70	44	27	34	e8.7
31	9.3	---	8.6	8.0	---	75	---	70	---	23	56	---
TOTAL	727.3	270.3	264.1	253.3	241.5	1,296	2,013	2,245	1,614	1,261	1,198	1,287.0
MEAN	23.5	9.01	8.52	8.17	8.62	41.8	67.1	72.4	53.8	40.7	38.6	42.9
MAX	31	9.4	8.9	8.6	14	75	88	87	67	58	74	86
MIN	9.3	8.5	8.1	7.7	7.6	25	51	61	38	23	16	8.7
AC-FT	1,440	536	524	502	479	2,570	3,990	4,450	3,200	2,500	2,380	2,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	79.1	263	236	216	215	182	189	191	164	90.5	80.9	63.9
MAX	682	1,395	1,579	1,417	1,006	1,028	1,354	1,259	1,664	1,690	890	570
(WY)	(1970)	(1971)	(1974)	(1974)	(1970)	(1966)	(1966)	(1973)	(1973)	(1973)	(1973)	(1973)
MIN	0.000	1.54	2.62	2.42	2.55	3.93	2.92	0.64	0.000	0.000	0.013	0.000
(WY)	(1964)	(1978)	(1995)	(1995)	(1995)	(1977)	(1977)	(1977)	(1972)	(1964)	(1977)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	10,947.5		12,670.5			
ANNUAL MEAN	30.0		34.7		164	
HIGHEST ANNUAL MEAN					1,017	1973
LOWEST ANNUAL MEAN					2.25	1977
HIGHEST DAILY MEAN	64	May 17	88	Apr 28	2,050	Aug 2, 1973
LOWEST DAILY MEAN	8.1	Dec 5	7.6	Feb 7	0.00	Oct 1, 1963
ANNUAL SEVEN-DAY MINIMUM	8.4	Dec 4	7.8	Feb 1	0.00	Oct 1, 1963
MAXIMUM PEAK FLOW			100	Apr 28	2,220	Aug 22, 1958
MAXIMUM PEAK STAGE			3.92	Apr 28		
INSTANTANEOUS LOW FLOW			6.5	Jan 29	0.00	Oct 1, 1963
ANNUAL RUNOFF (AC-FT)	21,710		25,130		118,700	
10 PERCENT EXCEEDS	51		69		736	
50 PERCENT EXCEEDS	33		32		9.0	
90 PERCENT EXCEEDS	8.7		8.2		0.90	

e Estimated

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, 2.0 mi east of Bernardo, 5.0 mi downstream from heading of conveyance channel, and at mile 1,487.2.

DRAINAGE AREA.--19,230 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. Datum of gage is 4,722.55 ft above National Geodetic Vertical Datum of 1929. Prior to May 7, 1996, gage at datum 3.00 ft higher.

REMARKS.--Water-discharge records good except for those estimated, which are poor. Since Nov. 1973, flow regulated by Cochiti Dam (station 08317300) 100 mi upstream. Floodway is 1 of 4 channels (stations 08331990, 08332030, 08332050) carrying flow in valley cross section. For combined monthly flow, in acre-feet, of floodway, conveyance channel, Bernardo Interior Drain (discontinued September 2003), 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 ft^3/s, 815,100 acre-ft/yr. Includes flow of floodway, conveyance channel, and Bernardo Interior Drain. 15 years (water years 1959-73), 898 ft^3/s, Riverside Drain, prior to closure of Cochiti Dam. 30 years (water years 1974-2003), 1,360 ft^3/s, 985,320 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 ft^3/s, Apr. 25, 1942, gage height, 6.90 ft; no flow some years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	440	393	461	446	246	198	86	630	e0.10	e0.00	e0.00
2	58	406	401	459	441	239	83	133	451	e0.00	e0.00	e0.00
3	e31	391	432	453	436	256	60	277	337	e0.00	e0.00	e0.00
4	e29	388	445	453	435	e232	40	315	186	e0.00	e0.00	e0.00
5	e34	360	490	454	436	e109	e29	217	138	e0.00	e0.00	e0.00
6	e25	389	494	456	433	82	e27	212	81	e0.00	e0.00	e0.00
7	e18	427	475	454	436	64	e26	132	36	e0.00	e0.00	e0.65
8	e23	299	491	454	440	53	17	82	22	e0.00	e0.00	e2.0
9	e38	237	508	460	429	50	12	e76	14	e0.00	e0.00	e7.5
10	e40	227	501	472	411	81	13	e80	27	e0.00	e0.00	e30
11	e22	451	510	482	399	81	15	e80	20	e0.00	e0.00	e52
12	e6.0	505	496	492	386	69	13	e72	7.7	e0.00	e0.00	e116
13	e1.6	474	464	485	370	45	9.1	e60	5.3	e0.00	e0.00	218
14	e0.80	e502	e496	478	366	47	6.4	45	3.1	e0.00	e0.00	159
15	e0.85	e550	e451	479	388	69	6.6	40	3.0	e0.00	e0.00	23
16	e2.5	473	441	489	405	71	9.3	39	25	e0.00	e0.00	12
17	e10	e470	441	500	407	63	35	e279	49	e0.00	e0.00	2.1
18	e3.0	e470	440	502	419	69	34	e564	15	e0.00	e0.00	0.93
19	e2.9	e439	436	502	384	94	78	e496	9.8	e0.00	e0.00	0.95
20	e5.0	407	441	499	360	255	210	e258	17	e0.00	e0.00	0.87
21	e4.7	396	469	488	377	440	209	211	8.6	e0.00	e0.00	0.90
22	e2.3	378	490	495	406	460	237	171	8.1	e0.00	e0.00	0.88
23	e4.0	374	464	e483	382	466	147	99	3.3	e0.00	e0.00	1.1
24	e22	368	438	e470	356	302	131	e94	0.67	e0.00	e0.00	1.2
25	e58	370	433	e470	335	222	159	e107	0.36	e0.00	e0.00	1.1
26	241	376	445	e476	322	172	160	e105	0.28	e0.00	e0.00	0.87
27	206	375	451	e476	297	127	148	114	0.27	e0.00	e0.00	0.87
28	242	384	461	470	268	98	102	188	e0.22	e0.00	e0.00	0.87
29	415	392	472	464	---	86	68	583	e0.20	e0.00	e0.00	0.80
30	346	395	462	455	---	161	58	546	e0.16	e0.00	e0.00	0.78
31	342	---	456	451	---	253	---	622	---	e0.00	e0.00	---
TOTAL	2,287.65	12,113	14,287	14,682	10,970	5,062	2,340.4	6,383	2,099.06	0.10	0.00	634.37
MEAN	73.8	404	461	474	392	163	78.0	206	70.0	0.003	0.000	21.1
MAX	415	550	510	502	446	466	237	622	630	0.10	0.00	218
MIN	0.80	227	393	451	268	45	6.4	39	0.16	0.00	0.00	0.00
AC-FT	4,540	24,030	28,340	29,120	21,760	10,040	4,640	12,660	4,160	0.2	0.00	1,260
(+)	19,110	29,680	33,640	34,860	26,920	25,780	21,530	30,760	18,320	9,060	7,900	11,260

CAL YR 2002 TOTAL 84,795.57 MEAN 232 MAX 1,700 MIN 0.00 AC-FT 168,200 (+) MEAN 446 AC-FT 323,240
WTR YR 2003 TOTAL 70,858.58 MEAN 194 MAX 630 MIN 0.00 AC-FT 140,500 (+) MEAN 371 AC-FT 268,770

(+) Combined flow in acre-feet and mean in cubic feet per second of floodway, conveyance channel, Bernardo Interior Drain, and Lower San Juan Riverside drain.
e Estimated

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC												
10...	1330	529	89	81	643	13.0	124	8.3	560	--	6.0	219
FEB												
27...	1330	292	--	--	--	--	--	--	--	--	10.5	523
27...	1356	311	500	440	638	9.4	101	7.6	528	12.5	10.5	--
APR												
16...	1359	8.2	17	10	644	8.0	108	8.7	583	21.0	22.0	44
MAY												
20...	1000	275	--	370	650	8.5	97	8.3	511	--	14.0	--
JUN												
16...	1020	0.76	--	62	644	7.8	107	8.6	613	26.5	22.5	116

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspnd. sediment, sieve diametr percent <.125mm (70332)
OCT													
17...	1302	0.90	11	0.67	17.5	13.5	--	--	--	--	--	91	100
NOV													
22...	1330	1.4	379	1.92	146	--	14	15	28	73	96	--	--
DEC													
10...	1245	1.1	523	1.49	331	6.0	43	46	72	100	--	--	--
JAN													
24...	1420	1.2	470	1.77	216	11.5	97	97	100	--	--	--	--
FEB													
27...	1330	1.4	292	1.76	120	10.5	88	89	100	--	--	--	--
MAR													
17...	1332	1.0	61	1.26	48.0	13.5	--	--	--	--	--	98	100
APR													
07...	1512	0.85	26	0.73	41.0	16.5	--	--	--	--	--	98	100
MAY													
13...	1515	0.70	54	1.17	67.0	25.0	96	97	100	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sediment, sieve diametr percent <2 mm (70336)	Suspended sediment concentration mg/L (80154)
OCT		
17...	--	23
NOV		
22...	100	926
DEC		
10...	--	216
JAN		
24...	--	2,060
FEB		
27...	--	523
MAR		
17...	--	307
APR		
07...	--	54
MAY		
13...	--	191

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)
OCT													
17...	1305	0.90	11	0.67	17.5	13.5	0.0	2	38	90	99	100	--
NOV													
22...	1345	1.4	379	1.92	146	--	0.0	20	81	98	100	--	--
DEC													
10...	1245	1.1	523	1.49	331	6.0	--	0.0	15	70	94	99	99
JAN													
24...	1345	1.2	470	1.77	216	11.5	1	4	42	85	96	99	100
FEB													
27...	1340	1.4	292	1.76	120	10.5	0.0	1	29	81	96	99	100
APR													
07...	1516	0.85	26	0.73	41.0	16.5	0.0	1	17	79	97	99	100
MAY													
13...	1520	0.70	54	1.17	67.0	25.0	--	0.0	7	64	89	97	99

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, dry svd sve dia percent <8 mm (80171)
OCT	
17...	--
NOV	
22...	--
DEC	
10...	100
JAN	
24...	--
FEB	
27...	--
APR	
07...	--
MAY	
13...	100

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-feet 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 poor. This drain is 1 of 4 channels (stations 08331990, 08332010, and 08332030) carrying flow in valley cross section. For combined monthly flow, in acre-feet, 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. Prior to 1952, drain was subject to overflow from floodway.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	20	43	41	e46	68	107	103	102	77	37	81
2	89	31	36	41	e45	65	107	125	93	63	36	81
3	84	32	29	41	e45	71	111	131	86	62	35	66
4	84	33	29	41	45	89	122	136	93	53	43	41
5	80	34	29	42	45	90	89	143	99	50	38	43
6	78	32	33	42	45	90	121	120	97	47	40	46
7	79	32	45	43	37	87	114	121	98	47	37	50
8	74	32	43	42	45	94	99	130	101	53	41	61
9	81	34	43	26	46	104	94	122	99	58	55	52
10	76	46	34	26	46	99	83	124	64	59	38	64
11	73	47	29	27	44	97	99	127	70	51	35	86
12	67	41	43	29	43	83	102	129	65	45	39	93
13	66	34	42	40	44	78	83	105	77	45	37	106
14	65	35	42	50	44	65	83	93	85	40	35	99
15	64	35	41	50	44	69	89	99	93	50	44	92
16	63	33	41	50	45	81	97	99	92	76	46	76
17	63	34	41	e50	46	102	92	99	92	83	61	62
18	67	35	40	e50	47	111	106	96	89	82	76	43
19	72	35	40	e50	42	104	132	92	80	84	87	39
20	73	35	40	e50	34	118	128	105	91	75	93	39
21	65	31	40	e50	34	111	138	104	91	72	96	38
22	56	27	40	e49	34	107	143	116	107	70	59	39
23	52	35	40	e49	34	122	127	117	102	60	48	39
24	45	36	40	e48	36	133	116	102	77	60	48	36
25	45	30	40	e48	39	131	133	92	74	49	49	33
26	43	31	36	e48	70	123	127	111	102	43	52	32
27	41	34	32	e48	106	110	108	130	81	40	49	31
28	39	38	33	e47	92	113	126	115	60	39	42	30
29	33	40	41	e47	---	98	94	121	66	41	42	30
30	31	43	42	e46	---	106	93	108	67	39	48	30
31	33	---	41	e46	---	110	---	101	---	38	75	---
TOTAL	1,966	1,035	1,188	1,357	1,323	3,029	3,263	3,516	2,593	1,751	1,561	1,658
MEAN	63.4	34.5	38.3	43.8	47.2	97.7	109	113	86.4	56.5	50.4	55.3
MAX	89	47	45	50	106	133	143	143	107	84	96	106
MIN	31	20	29	26	34	65	83	92	60	38	35	30
AC-FT	3,900	2,050	2,360	2,690	2,620	6,010	6,470	6,970	5,140	3,470	3,100	3,290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)

MEAN	77.7	31.8	29.0	28.1	28.0	51.4	63.7	68.7	63.1	65.2	73.5	77.0
MAX	168	87.9	79.5	87.7	78.9	97.7	138	141	134	146	146	164
(WY)	(1996)	(1987)	(2001)	(1990)	(2002)	(2003)	(2001)	(2001)	(1992)	(1992)	(1992)	(1995)
MIN	0.11	1.37	3.50	3.30	3.90	5.61	4.81	4.84	1.64	0.18	0.006	0.010
(WY)	(1957)	(1957)	(1955)	(1957)	(1957)	(1954)	(1955)	(1954)	(1954)	(1956)	(1954)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL	31,966		24,240			
ANNUAL MEAN	87.6		66.4		55.8	
HIGHEST ANNUAL MEAN					107	2001
LOWEST ANNUAL MEAN					4.29	1955
HIGHEST DAILY MEAN	161	Jul 24	143	Apr 22	208	May 5, 1983
LOWEST DAILY MEAN	20	Nov 1	20	Nov 1	0.00	Jul 31, 1954
ANNUAL SEVEN-DAY MINIMUM	30	Oct 29	30	Oct 29	0.00	Jul 31, 1954
MAXIMUM PEAK FLOW			157	Apr 22	208	May 5, 1983
MAXIMUM PEAK STAGE			6.61	Apr 22	6.61	Apr 22, 2003
INSTANTANEOUS LOW FLOW			19	Nov 1	0.00	Jul 31, 1954
ANNUAL RUNOFF (AC-FT)	63,400		48,080		40,390	
10 PERCENT EXCEEDS	129		111		120	
50 PERCENT EXCEEDS	87		53		45	
90 PERCENT EXCEEDS	36		34		6.9	

e Estimated

08334000 RIO PUERCO ABOVE ARROYO CHICO NEAR GUADALUPE, NM

LOCATION.--Lat 35°36'04", long 107°09'56" (revised), in SW 1/4 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 mi^2, approximately.

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 fair except for those estimated, which are 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. No flow many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1943, probably exceeded 5,000 ft^3/s based on records for stations upstream and downstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.00	0.00	0.00	0.00	0.00	0.08	27	24	0.00	0.00	2.9
2	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	22	23	0.00	0.00	e0.00
3	0.00	e0.00	0.00	0.00	0.00	0.47	0.00	18	14	0.00	0.00	0.14
4	0.00	e0.00	0.00	0.00	0.00	1.0	0.00	20	7.8	0.00	0.00	0.03
5	0.00	e0.00	0.00	0.00	0.00	1.4	0.00	17	e3.5	0.00	0.00	404
6	0.00	0.00	0.00	0.00	0.00	1.6	0.00	13	e2.0	0.00	0.00	152
7	0.00	0.00	0.00	0.00	0.00	0.34	0.00	11	e1.0	0.00	0.00	143
8	0.00	0.00	0.00	0.00	0.00	0.11	0.00	9.3	e0.50	0.00	0.00	4.9
9	0.00	0.04	0.00	0.00	0.00	0.00	0.00	9.9	e0.50	0.00	0.00	232
10	0.00	2.5	0.00	0.00	0.00	0.00	0.00	11	e0.10	0.00	0.00	1,010
11	0.00	5.8	0.00	0.00	0.00	0.00	0.00	15	e0.00	0.00	29	537
12	0.00	3.6	0.00	0.00	0.00	0.21	0.00	12	e0.00	0.00	e20	32
13	0.00	1.7	0.00	0.00	0.00	0.25	0.00	16	0.00	0.00	e1.5	7.0
14	0.00	1.8	0.00	0.00	0.00	0.43	0.00	18	0.00	0.00	e0.50	2.0
15	0.00	0.79	0.00	0.00	0.00	0.62	0.00	22	0.00	0.00	e0.10	0.79
16	0.00	0.66	0.00	0.00	0.00	0.69	0.00	25	0.00	0.00	e0.00	0.32
17	0.00	0.37	0.00	0.00	0.00	0.93	0.00	15	0.00	0.00	e0.00	0.11
18	0.00	e0.10	0.00	0.00	0.00	0.89	0.00	16	0.00	0.00	e0.00	0.00
19	0.00	e0.00	0.00	0.00	0.00	0.78	0.00	18	0.00	0.00	8.5	0.00
20	0.00	e0.00	0.00	0.00	0.00	1.1	0.12	16	0.00	0.00	5.2	0.00
21	0.00	e0.00	0.00	0.00	0.00	3.0	2.5	16	0.00	0.00	1.3	0.00
22	0.00	e0.00	0.00	0.00	0.00	4.5	1.1	16	0.00	0.00	0.10	0.00
23	6.4	e0.00	0.00	0.00	0.00	3.5	0.98	17	0.00	0.00	0.00	0.00
24	7.8	e0.00	0.00	0.00	0.00	1.7	7.1	19	0.00	0.00	0.00	0.00
25	10	e0.00	0.00	0.00	0.00	0.83	8.9	151	0.00	0.00	0.00	0.00
26	e2.0	0.00	0.00	0.00	0.00	0.50	4.5	318	0.00	7.7	0.00	0.00
27	e1.0	0.00	0.00	0.00	0.00	0.49	1.1	53	0.00	e1.2	0.00	0.00
28	e1.0	0.00	0.00	0.00	0.00	0.42	9.6	40	0.00	e0.50	0.00	0.00
29	e0.50	0.00	0.00	0.00	---	0.35	22	46	0.00	e0.10	13	0.00
30	e0.10	0.00	0.00	0.00	---	0.27	27	41	0.00	e0.00	67	0.00
31	e0.00	---	0.00	0.00	---	0.17	---	28	---	0.00	81	---
TOTAL	28.80	17.36	0.00	0.00	0.00	26.55	84.98	1,076.2	76.40	9.50	227.20	2,528.19
MEAN	0.93	0.58	0.000	0.000	0.000	0.86	2.83	34.7	2.55	0.31	7.33	84.3
MAX	10	5.8	0.00	0.00	0.00	4.5	27	318	24	7.7	81	1,010
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.3	0.00	0.00	0.00	0.00
AC-FT	57	34	0.00	0.00	0.00	53	169	2,130	152	19	451	5,010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

MEAN	7.73	2.84	1.28	2.68	11.2	15.8	18.6	39.4	15.2	16.2	24.0	13.4
MAX	129	28.2	15.9	48.2	79.2	161	99.3	236	113	83.0	101	90.3
(WY)	(1958)	(1987)	(1987)	(1993)	(1979)	(1960)	(1958)	(1973)	(1995)	(1996)	(1957)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1953)	(1953)	(1953)	(1953)	(1953)	(1953)	(1964)	(1964)	(1953)	(1959)	(1962)	(1952)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	1,463.35		4,075.18			
ANNUAL MEAN	4.01		11.2		14.1	
HIGHEST ANNUAL MEAN					48.6	1973
LOWEST ANNUAL MEAN					1.11	1974
HIGHEST DAILY MEAN	487	Aug 5	1,010	Sep 10	2,000	Oct 20, 1957
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1951
MAXIMUM PEAK FLOW			1,750	Sep 10	a6,940	Jul 29, 1967
MAXIMUM PEAK STAGE			9.07	Sep 10	13.53	Jul 29, 1967
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1951
ANNUAL RUNOFF (AC-FT)	2,900		8,080		10,190	
10 PERCENT EXCEEDS	0.13		16		38	
50 PERCENT EXCEEDS	0.00		0.00		0.10	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 1,300 ft^3/s, on basis of slope-area measurement at gage heights 7.75 ft and 10.60 ft.
e Estimated

08341400 BLUEWATER LAKE NEAR BLUEWATER, NM

LOCATION.--Lat 35°17'31", long 108°06'40", in SE $^1/_4$ sec.9, T.12 N., R.12 W., Cibola County, Hydrologic Unit 13020207, at right end of Bluewater Dam on Bluewater Creek, and 9.5 mi west of Bluewater.

DRAINAGE AREA.--201 mi^2.

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 with satellite telemetry. Datum of gage is 7,345.57 ft above National Geodetic Vertical Datum of 1929. July 1958 to Jan. 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 ft^3/s occurred at station 8 mi downstream; no storage at times prior to 1947.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,840 acre-ft, Apr. 15-19 and 23, elevation, 7,371.95 ft; minimum, 1,580 acre-ft, Feb. 6, 7, and 9-13, elevation, 7,358.18 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,750	1,700	1,650	1,630	1,600	1,720	5,620	5,770	5,410	5,020	4,710	e4,560
2	1,750	1,690	1,660	1,630	1,600	1,720	5,670	5,760	5,390	5,010	4,700	e4,560
3	1,740	1,690	1,660	1,630	1,590	1,730	5,710	5,740	5,390	5,000	4,690	4,560
4	1,740	1,690	1,660	1,630	1,590	1,730	5,740	5,730	5,370	4,980	4,680	4,550
5	1,730	1,690	1,660	1,630	1,590	1,740	5,770	5,720	5,360	4,980	4,660	4,550
6	1,730	1,680	1,660	1,630	1,580	1,740	5,780	5,710	5,340	4,970	4,660	4,540
7	1,730	1,680	1,660	1,620	1,580	1,750	5,790	5,700	5,340	4,950	4,660	4,530
8	1,720	1,690	1,660	1,620	1,590	1,760	5,810	5,690	5,320	4,940	4,650	4,520
9	1,720	1,700	1,660	1,620	1,580	1,800	5,820	5,670	5,310	4,930	4,650	4,540
10	1,720	1,690	1,650	1,620	1,580	1,890	5,830	5,660	5,300	4,920	4,630	4,570
11	1,720	1,690	1,650	1,620	1,580	2,030	5,830	5,650	5,270	4,900	4,630	4,580
12	1,710	1,690	1,650	1,620	1,580	2,210	5,820	5,630	5,260	4,900	4,620	4,580
13	1,710	1,690	1,650	1,620	1,580	2,400	5,820	5,620	5,250	4,890	e4,610	4,570
14	1,710	1,690	1,650	1,620	1,590	2,600	5,820	5,610	5,250	4,870	e4,610	4,570
15	1,700	1,680	1,650	1,620	1,600	2,770	5,840	5,600	5,220	4,860	e4,610	4,560
16	1,700	1,680	1,650	1,620	1,600	2,910	5,840	5,590	5,210	4,850	e4,600	4,550
17	1,710	1,680	1,650	1,610	1,610	3,110	5,840	5,570	5,200	4,830	e4,600	4,540
18	1,710	1,680	1,660	1,620	1,620	3,270	5,840	5,560	5,200	4,830	e4,600	4,530
19	1,700	1,680	1,650	1,610	1,630	3,420	5,840	5,560	5,180	4,810	e4,590	4,520
20	1,700	1,670	1,650	1,610	1,640	3,550	5,830	5,550	5,170	4,810	e4,590	4,510
21	1,700	1,670	1,650	1,610	1,650	3,790	5,830	5,530	5,150	4,790	e4,590	4,500
22	1,700	1,670	1,650	1,610	1,660	4,000	5,820	e5,520	5,140	4,780	e4,580	4,490
23	1,700	1,670	1,650	1,610	1,660	4,290	5,840	5,510	5,120	4,770	e4,580	e4,490
24	1,710	1,670	1,640	1,610	1,670	4,620	5,820	5,490	5,100	4,760	e4,570	e4,490
25	1,710	1,660	1,640	1,610	1,670	4,880	5,820	5,480	5,090	e4,720	e4,570	e4,490
26	1,700	1,660	1,640	1,600	1,690	5,090	5,820	5,480	5,080	e4,700	e4,570	e4,480
27	1,700	1,660	1,640	1,600	1,700	5,270	5,810	5,470	5,060	e4,690	e4,570	e4,480
28	1,700	1,660	1,640	1,600	1,710	5,390	5,800	5,440	5,050	4,720	e4,570	e4,480
29	1,700	1,660	1,640	1,600	---	5,460	5,790	5,430	5,040	4,720	e4,560	e4,470
30	1,700	1,660	1,630	1,600	---	5,520	5,780	5,410	5,030	4,720	e4,560	e4,480
31	1,690	---	1,630	1,590	---	5,580	---	5,400	---	4,720	e4,560	---
MAX	1,750	1,700	1,660	1,630	1,710	5,580	5,840	5,770	5,410	5,020	4,710	4,580
MIN	1,690	1,660	1,630	1,590	1,580	1,720	5,620	5,400	5,030	4,690	4,560	4,470
(+)	7,358.77	7,358.59	7,358.47	7,358.27	7,358.85	7,371.34	7,371.78	7,370.96	7,370.08	7,369.30	e7,368.89	e7,368.68
(++)	-60	-30	-30	-40	+110	+3,880	+300	-380	-270	-310	-160	-80

CAL YR 2002 MAX 2,840 MIN 1,630 (++) -1,210
WTR YR 2003 MAX 5,840 MIN 1,580 (++) +2,730

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.
e Estimated

08343000 RIO SAN JOSE AT GRANTS, NM

LOCATION.--Lat 35°09'16", long 107°52'11", in SW $^1/_4$ NW $^1/_4$ sec.26, T.11 N., R.10 W., Cibola County, Hydrologic Unit 13020207, on right bank 1,500 ft upstream from El Morro St., 0.2 mi south of Santa Fe Ave. in Grants, and at mile 67.8.

DRAINAGE AREA.--l,020 mi^2, 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. Prior to 1992, at site on right bank at bridge at El Morro St., at same datum.

REMARKS.--Records fair. 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. 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2003, BY WATER YEAR (WY)

MEAN	0.21	0.018	0.000	0.008	0.000	0.19	4.82	1.54	0.013	0.11	0.44	0.28
MAX	2.51	0.57	0.000	0.29	0.000	6.30	87.0	22.5	0.33	1.20	7.79	5.49
(WY)	(1970)	(1999)	(1969)	(1998)	(1969)	(1985)	(1980)	(1983)	(1999)	(1981)	(1993)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1969)	(1969)	(1969)	(1969)	(1969)	(1969)	(1969)	(1969)	(1968)	(1968)	(1969)	(1968)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1968 - 2003	
ANNUAL TOTAL	19.84		0.02			
ANNUAL MEAN	0.054		0.000		0.63	
HIGHEST ANNUAL MEAN					8.10	1980
LOWEST ANNUAL MEAN					0.000	1978
HIGHEST DAILY MEAN	6.2	Sep 13	0.02	Jul 21	355	Apr 21, 1980
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jun 1, 1968
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jun 1, 1968
MAXIMUM PEAK FLOW			1.0	Jul 21	a1,760	Aug 28, 1952
MAXIMUM PEAK STAGE			2.01	Jul 21	5.35	Aug 28, 1952
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Jun 1, 1968
ANNUAL RUNOFF (AC-FT)	39		0.04		460	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 300 ft^3/s, on basis of velocity area studies.

08343500 RIO SAN JOSE NEAR GRANTS, NM

LOCATION.--Lat 35°04'27", long 107°45'01", in SE ¼ SE ¼ 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 mi^2, approximately, of which 1,130 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as "San Jose River."

REVISED RECORDS.--WSP 898: 1936-39(M). WSP 1512: 1943. WSP 1712: drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 6,269.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. 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.

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, Aug. and Sept. 1929, and Aug. 1935.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.5	2.8	2.3	3.5	3.4	2.9	3.0	3.3	4.9	4.0	2.7
2	4.1	3.5	2.9	2.4	3.6	3.4	2.7	3.0	3.4	5.2	4.3	2.7
3	4.0	3.4	2.9	2.5	3.5	3.3	2.7	2.9	3.5	5.2	4.4	2.9
4	3.6	3.4	2.8	2.5	3.3	3.1	2.7	2.7	3.5	5.1	4.6	3.0
5	3.5	3.3	4.1	2.6	3.3	3.1	2.7	2.6	3.3	5.0	5.4	3.1
6	3.4	3.4	3.1	2.7	3.2	3.1	2.7	2.6	3.6	5.1	5.3	3.0
7	3.6	3.7	2.9	2.7	3.2	3.2	2.7	2.7	3.4	5.1	5.6	2.9
8	3.8	3.6	3.0	2.9	3.2	3.2	2.8	2.6	3.5	5.1	5.7	2.9
9	5.7	3.5	2.9	2.8	3.2	3.2	2.8	2.6	3.5	5.4	6.0	2.9
10	3.9	3.4	3.1	2.9	3.2	3.2	2.7	2.6	3.6	5.7	11	2.8
11	3.4	6.7	3.4	2.9	3.2	3.2	2.7	2.6	3.7	6.0	6.2	2.8
12	3.4	4.4	3.4	2.9	3.2	3.2	2.7	2.5	3.6	6.0	5.2	2.8
13	3.2	3.8	3.6	2.9	3.2	3.2	2.6	2.5	3.7	6.1	5.0	2.8
14	3.5	3.6	3.6	2.9	3.2	3.2	2.6	2.4	3.4	6.1	4.7	2.8
15	3.4	3.3	3.7	2.9	3.3	3.2	2.5	2.3	3.4	6.0	4.7	2.9
16	3.4	3.3	3.8	2.9	3.7	3.2	2.6	2.3	3.3	6.2	4.7	2.9
17	3.4	3.4	3.8	2.9	3.5	3.2	2.6	2.3	3.3	6.2	4.6	2.8
18	3.4	3.3	4.1	2.9	3.4	3.1	2.6	2.3	3.2	6.1	4.1	2.8
19	3.7	3.2	4.1	3.0	3.4	3.1	2.6	2.4	3.5	6.0	3.4	2.6
20	3.5	3.2	4.1	3.0	3.4	3.1	2.8	2.5	3.5	6.1	3.0	2.6
21	3.6	3.2	4.3	3.1	3.2	3.0	2.8	2.5	3.4	6.4	2.7	2.6
22	3.6	3.1	3.9	3.2	3.1	2.9	2.8	2.5	3.5	6.3	2.8	2.6
23	3.5	3.0	3.7	3.2	3.1	3.0	2.8	2.5	3.7	5.7	2.8	2.6
24	3.2	3.1	3.2	3.2	3.2	3.1	2.7	2.4	4.2	4.5	2.8	2.6
25	3.5	3.2	3.0	3.2	3.2	3.0	2.8	2.5	4.1	3.9	2.8	2.7
26	3.5	3.1	2.8	3.2	3.2	3.0	2.8	2.5	4.3	3.7	2.8	2.8
27	3.5	2.9	2.5	3.2	3.2	2.9	2.9	2.6	4.4	3.5	2.8	2.9
28	3.5	2.9	2.5	3.2	3.2	2.9	2.9	2.8	4.5	3.3	2.8	3.0
29	3.4	2.9	2.4	3.2	---	2.9	3.0	3.0	4.6	3.2	2.6	3.0
30	3.4	2.9	2.2	3.3	---	2.9	2.9	3.0	4.9	3.4	2.6	3.0
31	3.5	---	2.3	3.4	---	2.9	---	3.0	---	3.7	2.6	---
TOTAL	112.1	103.2	100.9	90.9	92.1	96.4	82.1	80.7	110.8	160.2	132.0	84.5
MEAN	3.62	3.44	3.25	2.93	3.29	3.11	2.74	2.60	3.69	5.17	4.26	2.82
MAX	5.7	6.7	4.3	3.4	3.7	3.4	3.0	3.0	4.9	6.4	11	3.1
MIN	3.2	2.9	2.2	2.3	3.1	2.9	2.5	2.3	3.2	3.2	2.6	2.6
AC-FT	222	205	200	180	183	191	163	160	220	318	262	168

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	5.45	5.18	5.04	5.34	5.48	5.43	7.78	7.62	5.34	6.56	8.76	6.39
MAX	16.6	9.76	7.82	10.5	11.6	11.4	91.3	128	10.2	24.0	53.2	24.6
(WY)	(1973)	(1980)	(1978)	(1945)	(1944)	(1985)	(1980)	(1941)	(1941)	(1957)	(1957)	(1975)
MIN	2.43	3.01	2.51	2.84	2.39	3.11	2.74	2.49	3.11	3.14	3.16	2.82
(WY)	(1990)	(1994)	(1994)	(1994)	(2000)	(2003)	(2003)	(1996)	(2002)	(2002)	(1994)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1937 - 2003	
ANNUAL TOTAL	1,420.4		1,245.9			
ANNUAL MEAN	3.89		3.41		6.20	
HIGHEST ANNUAL MEAN					19.3	1941
LOWEST ANNUAL MEAN					3.41	2003
HIGHEST DAILY MEAN	90	Sep 11	11	Aug 10	538	Aug 30, 1957
LOWEST DAILY MEAN	1.4	Sep 6	2.2	Dec 30	1.4	Sep 6, 2002
ANNUAL SEVEN-DAY MINIMUM	1.6	Sep 2	2.4	May 13	1.6	Sep 2, 2002
MAXIMUM PEAK FLOW			56	Aug 10	a1,400	Sep 20, 1963
MAXIMUM PEAK STAGE			2.10	Aug 10	4.87	Sep 20, 1963
INSTANTANEOUS LOW FLOW			2.2	Dec 30	1.3	Sep 5, 2002
ANNUAL RUNOFF (AC-FT)	2,820		2,470		4,490	
10 PERCENT EXCEEDS	3.9		4.7		7.0	
50 PERCENT EXCEEDS	3.4		3.2		5.0	
90 PERCENT EXCEEDS	2.8		2.6		3.7	

a From rating curve extended above 450 ft^3/s, on basis of slope-area measurements at gage heights 3.19 ft and 4.87 ft.

08353000 RIO PUERCO NEAR BERNARDO, NM

LOCATION.--Lat 34°24'33", long 106°51'09", in SE $^1/_4$ sec.8, T.2 N., R.1 E., Socorro County, Hydrologic Unit 13020204, on left bank 300 ft upstream from bridge on former U.S. Highway 85, 0.2 mi upstream from Interstate Highway 25, 1.2 mi southwest of Bernardo, 3.0 mi upstream from mouth, and 18.0 mi south of Belen.

DRAINAGE AREA.--7,350 mi^2, approximately, of which at least 1,130 mi^2 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 with satellite telemetry. 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 good except for those estimated, which are poor. Diversions for irrigation of about 11,500 acres upstream from station (includes 3,700 acres irrigated wholly or partly from wells). No flow much of the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 ft^3/s, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge, 30,600 ft^3/s, by slope-area measurement, from reports of New Mexico State Engineer).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.07	14	1.0	0.10	2.5	3.3	1.1	0.16	5.2	0.00	0.49	147
2	0.09	6.9	1.8	0.22	2.5	3.5	0.93	0.12	8.3	0.00	0.05	421
3	0.11	3.4	3.0	0.46	2.0	3.3	0.86	0.08	4.9	0.00	0.00	324
4	0.17	2.0	3.0	0.48	1.6	3.3	0.77	0.07	3.0	0.00	0.00	39
5	0.19	2.1	3.8	0.63	1.7	3.1	0.60	0.07	1.7	0.00	0.00	12
6	0.17	2.4	3.4	3.6	2.2	3.0	0.35	0.14	0.61	0.00	0.00	4.1
7	0.13	1.8	4.3	5.8	2.6	3.0	0.23	0.33	0.18	0.00	0.00	108
8	0.14	2.3	3.4	0.91	2.2	2.9	0.54	0.18	0.06	0.00	0.00	182
9	0.09	2.2	2.4	2.5	2.2	2.6	0.71	0.11	0.05	0.00	0.00	335
10	0.10	4.9	1.6	e2.5	3.3	2.4	0.78	0.12	0.04	0.00	0.00	125
11	0.12	2.1	1.4	e1.5	2.2	2.4	0.75	0.12	0.02	0.00	0.00	271
12	0.10	2.2	1.6	e2.0	2.7	2.3	0.34	0.13	0.01	0.00	0.00	456
13	0.00	3.6	1.7	e2.5	4.3	2.1	0.25	0.12	0.01	0.00	0.00	528
14	0.20	6.3	1.9	e2.3	3.2	1.8	0.24	0.12	0.01	0.00	0.00	2,220
15	0.24	4.8	1.7	e2.5	e3.9	1.8	0.22	0.12	0.00	0.00	0.00	314
16	0.24	2.3	1.9	e2	3.4	1.5	0.25	0.11	0.00	0.00	5.8	31
17	0.22	1.9	3.8	e1.6	3.6	1.6	0.27	0.11	0.00	0.00	7.2	15
18	0.25	2.4	3.2	1.3	3.2	1.6	0.19	0.11	0.01	0.00	5.6	7.0
19	0.25	1.9	1.4	1.0	e2.7	1.9	0.24	0.09	0.05	0.00	3.1	3.0
20	0.25	1.6	2.3	2.3	e2.6	2.1	0.26	0.07	0.04	0.00	0.74	0.82
21	0.25	1.3	1.2	5.3	e2.5	2.4	0.24	0.11	0.00	0.00	0.02	0.65
22	0.25	1.5	0.20	3.2	e2.6	2.1	0.22	0.09	0.00	0.00	0.00	0.23
23	0.33	1.4	0.47	2.0	e2.7	2.3	0.22	0.09	0.00	0.00	0.00	0.10
24	0.37	1.3	2.3	2.4	e2.8	2.2	0.21	0.09	0.00	0.00	0.00	0.03
25	0.27	1.1	2.2	2.0	e2.8	2.1	0.25	0.09	0.00	0.00	0.00	0.00
26	0.25	1.3	0.73	1.8	e2.9	1.2	0.32	4.7	0.00	0.00	0.00	0.00
27	66	1.2	0.47	1.5	e3.0	1.1	0.20	67	0.00	0.00	0.00	0.00
28	96	1.1	0.16	2.3	3.1	1.2	0.40	267	0.00	18	45	0.00
29	57	1.0	0.19	2.6	---	1.2	0.23	48	0.00	100	66	0.00
30	39	1.8	0.19	2.3	---	1.2	0.19	18	0.00	24	30	0.00
31	21	---	0.17	2.4	---	1.1	---	7.5	---	3.6	137	---
TOTAL	283.85	84.1	56.88	64.00	77.0	67.6	12.36	415.15	24.19	145.60	301.00	5,543.93
MEAN	9.16	2.80	1.83	2.06	2.75	2.18	0.41	13.4	0.81	4.70	9.71	185
MAX	96	14	4.3	5.8	4.3	3.5	1.1	267	8.3	100	137	2,220
MIN	0.00	1.0	0.16	0.10	1.6	1.1	0.19	0.07	0.00	0.00	0.00	0.00
AC-FT	563	167	113	127	153	134	25	823	48	289	597	11,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	47.2	6.87	1.20	2.41	14.4	17.5	14.2	39.8	18.7	60.9	177	84.7
MAX	586	100	26.6	70.0	142	208	179	885	203	362	922	584
(WY)	(1942)	(1987)	(1985)	(1993)	(1979)	(1960)	(1973)	(1941)	(1941)	(1955)	(1957)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1952)	(1940)	(1940)	(1940)	(1942)	(1942)	(1944)	(1950)	(1945)	(1942)	(2000)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	3,250.87		7,075.66			
ANNUAL MEAN	8.91		19.4		40.5	
HIGHEST ANNUAL MEAN					171	1941
LOWEST ANNUAL MEAN					4.80	2000
HIGHEST DAILY MEAN	424	Sep 14	2,220	Sep 14	5,980	May 5, 1941
LOWEST DAILY MEAN	0.00	Jan 4	0.00	Oct 13	0.00	Nov 1, 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 4	0.00	Jun 21	0.00	Nov 1, 1939
MAXIMUM PEAK FLOW			2,740	Sep 14	a18,800	Sep 23, 1941
MAXIMUM PEAK STAGE			15.56	Sep 14	b16.90	Aug 12, 1955
INSTANTANEOUS LOW FLOW			0.00	Oct 13	0.00	Nov 1, 1939
ANNUAL RUNOFF (AC-FT)	6,450		14,030		29,320	
10 PERCENT EXCEEDS	8.1		7.1		61	
50 PERCENT EXCEEDS	0.11		1.0		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 7,800 ft^3/s.
b Maximum gage height, 16.9 ft, present datum, Aug. 12, 1955.
e Estimated

08353000 RIO PUERCO NEAR BERNARDO, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
30...	1205	32	--	--	642	9.8	102	8.1	1,180	18.0	9.5	350	108
NOV													
21...	1112	4.3	580	550	654	11.5	114	8.5	2,920	13.0	8.0	--	--
21...	1113	4.3	--	--	--	--	--	--	--	--	--	--	--
DEC													
06...	1256	3.7	--	--	--	--	--	--	--	--	--	--	--
06...	1257	3.7	650	540	651	12.7	118	8.3	2,920	10.0	5.0	--	--
17...	1330	1.7	1,200	850	632	10.0	102	8.4	2,930	9.0	7.5	650	144
JAN													
17...	1000	8.9	660	590	653	12.8	103	8.3	2,960	3.0	0.0	--	--
17...	1001	8.9	--	--	--	--	--	--	--	--	--	--	--
FEB													
06...	1125	1.9	--	--	--	--	--	--	--	--	--	--	--
06...	1126	1.9	1,300	1,200	648	11.8	103	8.2	3,360	14.5	2.5	--	--
MAR													
24...	1220	1.7	340	290	639	9.7	122	7.9	3,420	25.0	17.0	740	145
MAY													
29...	1030	55	--	120,000	647	6.4	84	7.7	1,660	32.0	20.0	--	--
JUL													
30...	0945	25	110,000	40,000	645	4.3	60	7.4	1,890	31.5	23.0	710	222
AUG													
19...	1045	7.3	--	270,000	645	5.3	74	7.8	2,020	31.0	23.0	--	--
SEP													
08...	0915	111	--	160,000	642	6.1	77	7.6	1,410	24.5	18.0	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Aluminum, water, fltrd, ug/L (01106)
OCT													
30...	19.4	5.22	3	129	67	81	--	34.4	0.58	6.3	464	806	--
NOV													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	71.1	11.3	7	421	219	261	3	306	0.85	14.4	925	2,030	<3
JAN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
24...	91.3	12.4	9	551	196	235	--	399	0.93	15.3	1,130	2,460	--
MAY													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
30...	38.8	11.5	2	124	87	106	--	17.9	0.6	12.6	947	1,430	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

08353000 RIO PUERCO NEAR BERNARDO, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)
OCT													
30...	--	--	--	--	120	--	--	--	--	<10	--	--	--
NOV													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<0.60	4	49	<0.12	670	<0.07	<0.8	0.37	3.5	<30	E.09	12.9	3.7
JAN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
24...	--	--	--	--	890	--	--	--	--	<30	--	--	--
MAY													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
30...	--	--	--	--	110	--	--	--	--	12	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT							
30...	--	--	--	--	--	100	33,000
NOV							
21...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	588
DEC							
06...	--	--	--	--	--	--	542
06...	--	--	--	--	--	--	--
17...	4.14	<3	<0.40	4	6.65	97	514
JAN							
17...	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	639
FEB							
06...	--	--	--	--	--	--	1,220
06...	--	--	--	--	--	--	--
MAR							
24...	--	--	--	--	--	98	312
MAY							
29...	--	--	--	--	--	--	82,800
JUL							
30...	--	--	--	--	--	100	108,000
AUG							
19...	--	--	--	--	--	--	114,000
SEP							
08...	--	--	--	--	--	--	86,500

Remark codes used in this table:
< -- Less than
E -- Estimated value

08354500 SOCORRO MAIN CANAL NORTH AT SAN ACACIA, NM

LOCATION.--Lat 34°15'17", long 106°53'43", in SE ¼ NW ¼ sec.1, T.1 S., R.1 W., Socorro County, Hydrologic Unit 13020203, on right bank at San Acacia, and 0.1 mi downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to September 2003 (discontinued).

REVISED RECORDS.--WSP 1242: 1951.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft above National Geodetic Vertical Datum of 1929 (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 fair except for those estimated, which are poor. This canal is 1 of 3 channels (stations 08354800, 08354900) carrying flow in valley cross section. For combined monthly flow, in acre-feet, 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 8,600 acres. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	e10	0.00	0.00	0.00	e123	e157	e176	e238	e163	e85	e235
2	168	0.00	0.00	0.00	0.00	e122	e147	e199	e227	e127	e80	e232
3	162	0.00	0.00	0.00	0.00	e124	e150	e208	e233	e130	e81	e217
4	162	0.00	0.00	0.00	0.00	e144	e166	e219	e225	e126	e88	e196
5	149	0.00	0.00	0.00	0.00	e146	e133	e221	e188	e117	e93	e175
6	121	0.00	0.00	0.00	0.00	e138	e153	e213	e167	e114	e89	e180
7	128	0.00	0.00	0.00	0.00	e134	e151	e192	e143	e118	e92	e212
8	119	0.00	0.00	0.00	0.00	e145	e149	e205	e161	e107	e88	e206
9	113	0.00	0.00	0.00	0.00	e149	e139	e207	e156	e114	e108	e203
10	111	0.00	0.00	0.00	0.00	e153	e120	e207	e118	e112	e107	e209
11	111	0.00	0.00	0.00	0.00	e151	e130	e214	e120	e98	e104	e190
12	103	0.00	0.00	0.00	0.00	e134	e141	e213	e106	e102	e102	e161
13	101	0.00	0.00	0.00	0.00	e132	e120	e188	e122	e93	e102	e173
14	102	0.00	0.00	0.00	0.00	e119	e112	e157	e133	e96	e85	e179
15	104	0.00	0.00	0.00	0.00	e127	e118	e176	e145	e86	e107	e162
16	102	0.00	0.00	0.00	0.00	e144	e125	e176	e151	e131	e123	e165
17	104	0.00	0.00	0.00	0.00	e154	e131	e180	e186	e154	e173	e177
18	110	0.00	0.00	0.00	0.00	e173	e129	e173	e202	e160	e182	e171
19	118	0.00	0.00	0.00	0.00	e176	e156	e173	e185	e155	e189	e165
20	122	0.00	0.00	0.00	e69	e176	e169	e181	e207	e150	e184	e131
21	119	0.00	0.00	0.00	e101	e183	e175	e177	e196	e132	e189	e134
22	103	0.00	0.00	0.00	e98	e174	e188	e179	e194	e127	e162	e133
23	100	0.00	0.00	0.00	e92	e175	e185	e179	e187	e125	e120	e164
24	93	0.00	0.00	0.00	e95	e179	e190	e162	e142	e120	e108	e133
25	93	0.00	0.00	0.00	e71	e193	e192	e150	e154	e106	e104	e125
26	90	0.00	0.00	0.00	e81	e184	e203	e159	e165	e101	e106	e119
27	90	0.00	0.00	0.00	e100	e176	e194	e186	e160	e96	e95	e119
28	89	0.00	0.00	0.00	e124	e172	e203	e178	e127	e103	e97	e146
29	87	0.00	0.00	0.00	---	e159	e180	e180	e135	e138	e149	e143
30	83	0.00	0.00	0.00	---	e156	e164	e197	e147	e125	e163	e112
31	79	---	0.00	0.00	---	e169	---	e232	---	e92	e203	---
TOTAL	3,502	10.00	0.00	0.00	831.00	4,784	4,670	5,857	5,020	3,718	3,758	5,067
MEAN	113	0.33	0.000	0.000	29.7	154	156	189	167	120	121	169
MAX	168	10	0.00	0.00	124	193	203	232	238	163	203	235
MIN	79	0.00	0.00	0.00	0.00	119	112	150	106	86	80	112
AC-FT	6,950	20	0.00	0.00	1,650	9,490	9,260	11,620	9,960	7,370	7,450	10,050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	137	7.88	6.43	5.88	5.07	155	200	203	199	179	156	141
MAX	260	86.0	79.0	56.7	52.4	234	254	279	298	291	277	253
(WY)	(2000)	(1989)	(1976)	(1976)	(1979)	(1995)	(1998)	(1997)	(1994)	(1995)	(1995)	(1999)
MIN	17.1	0.000	0.000	0.000	0.000	39.4	121	81.0	49.9	43.8	56.2	12.6
(WY)	(1964)	(1967)	(1964)	(1964)	(1964)	(1983)	(1967)	(1977)	(1977)	(1964)	(1964)	(1975)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	38,150.00		37,217.00			
ANNUAL MEAN	105		102		117	
HIGHEST ANNUAL MEAN					170	1995
LOWEST ANNUAL MEAN					63.7	1964
HIGHEST DAILY MEAN	255	Jun 6	238	Jun 1	325	Aug 5, 1995
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Nov 2	0.00	Oct 18, 1963
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 2	0.00	Nov 2, 1963
ANNUAL RUNOFF (AC-FT)	75,670		73,820		84,710	
10 PERCENT EXCEEDS	192		190		245	
50 PERCENT EXCEEDS	131		119		127	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, NM

LOCATION.--Lat 34°14'54", long 106°54'04", in SW $^1/_4$ 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 January 1994, October 1994 to current year. Daily records for 1958-64 are available in files at District Office.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,652.50 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Water-discharge records fair. The conveyance channel, constructed in 1958, is 1 of 3 channels (stations 08354500, 08354900) carrying flow in valley cross section. For combined monthly flow, in acre-feet, of this channel, floodway, and Socorro Main Canal North, see tabulation below daily table for station 08354900. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	112	514	523	424	430	346	323	457	345	169	150	109
MAX	765	1,644	1,823	1,513	1,255	1,240	1,506	1,663	1,580	1,522	829	633
(WY)	(1985)	(1966)	(1966)	(1974)	(1962)	(1966)	(1979)	(1979)	(1980)	(1979)	(1967)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1988)	(1988)	(1986)	(1988)	(1987)	(1991)	(1991)	(1995)	(1986)	(1987)	(1987)	(1987)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1959 - 2003	
ANNUAL TOTAL	631.19		0.00			
ANNUAL MEAN	1.73		0.000		324	
HIGHEST ANNUAL MEAN					1,033	1973
LOWEST ANNUAL MEAN					0.000	2003
HIGHEST DAILY MEAN	72	Sep 14	0.00	Oct 1	1,950	May 12, 1966
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 22, 1959
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jul 20, 1963
ANNUAL RUNOFF (AC-FT)	1,250		0.00		235,000	
10 PERCENT EXCEEDS	0.00		0.00		1,190	
50 PERCENT EXCEEDS	0.00		0.00		5.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM

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, 2.0 mi downstream from Rio Salado, and at mile 1,472.6.

DRAINAGE AREA.--26,770 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. 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; on April 26, 1996, 1,000 ft was added to gage datum. Floodway is bypassed by Socorro Main Canal North and since Oct. 1958 by conveyance channel.

REMARKS.--Water-discharge records fair except for those estimated, which are poor. Floodway is 1 of 3 channels (stations 08354500, 08354800) carrying flow in valley cross section. For combined monthly flow, in acre-feet, of floodway, conveyance channel, and Socorro Main Canal North, see tabulation below. Diversions upstream from station for irrigation of about 760,000 acres; this includes Socorro Main Canal North, which bypasses station and irrigates about 8,600 acres. No flow at times.

AVERAGE DISCHARGE.--22 years (water years 1937-58), 1,192 ft^3/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 ft^3/s, 660,000 acre-ft/yr, combined flow of floodway, conveyance channel and Socorro Main Canal North, prior to closure of Cochiti Dam. 30 years (water years 1974-2003), 1,354 ft^3/s, 980,970 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 ft^3/s, Aug. 5, 1936, gage height, 10.75 ft, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,160 ft^3/s, Sept. 14; minimum daily, 0.35 ft^3/s, Sept. 23 and 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	541	e590	557	593	334	322	205	796	40	e5.4	e4.4
2	189	546	e590	543	586	355	238	286	669	33	e4.8	e5.0
3	143	564	e700	518	563	445	199	505	406	28	e4.2	e6.0
4	117	560	e640	514	574	380	169	749	315	27	e3.8	e7.0
5	129	536	598	526	616	345	188	587	265	26	e3.8	e5.0
6	177	525	669	525	621	312	196	359	254	25	e3.7	e4.8
7	181	544	636	514	639	275	160	336	204	25	e3.8	70
8	165	535	657	517	692	232	150	248	161	24	e4.2	74
9	221	531	654	520	702	233	152	174	155	22	e4.3	180
10	285	587	616	561	583	256	144	182	122	21	e4.2	162
11	298	593	570	580	516	277	136	178	117	20	e4.1	383
12	203	605	501	643	492	269	144	193	99	20	e3.9	561
13	165	629	515	644	458	206	145	149	74	20	e4.1	786
14	170	630	e485	646	446	177	126	148	69	19	e4.4	2,160
15	107	620	e500	688	500	187	113	147	80	18	e4.3	992
16	136	672	e515	696	697	204	105	141	61	16	e4.3	164
17	140	545	e560	770	700	196	128	223	91	15	e4.3	e100
18	192	551	556	716	838	187	190	662	65	14	e4.3	e50
19	187	569	546	689	735	200	230	755	70	13	e4.3	e19
20	209	540	533	657	582	272	425	562	98	13	e4.3	21
21	199	541	583	596	501	692	506	283	94	12	e4.3	e0.70
22	149	516	696	548	697	589	541	280	77	12	e4.3	e0.40
23	169	547	639	520	686	1,300	454	228	72	11	e4.1	e0.35
24	202	513	508	503	554	525	339	219	64	11	e4.0	e0.35
25	244	525	508	508	530	440	378	237	60	10	e3.7	e0.40
26	416	538	513	506	473	320	413	230	49	9.8	e4.1	e0.42
27	507	515	545	513	423	243	445	238	46	9.4	e3.9	e0.70
28	460	482	564	561	311	235	310	633	41	8.9	e3.5	e1.4
29	673	502	607	577	---	219	247	569	41	11	e3.6	e1.9
30	641	566	608	577	---	e245	237	702	43	e6.8	e5.6	e2.2
31	485	---	535	588	---	365	---	621	---	e6.1	e4.0	---
TOTAL	7,719	16,668	17,937	18,021	16,308	10,515	7,530	11,029	4,758	547.0	129.6	5,763.02
MEAN	249	556	579	581	582	339	251	356	159	17.6	4.18	192
MAX	673	672	700	770	838	1,300	541	755	796	40	5.6	2,160
MIN	107	482	485	503	311	177	105	141	41	6.1	3.5	0.35
AC-FT	15,310	33,060	35,580	35,740	32,350	20,860	14,940	21,880	9,440	1,080	257	11,430
(+)	22,260	33,080	35,580	35,740	34,000	30,350	24,200	33,500	19,400	8,450	7,710	21,480

CAL YR	2002	TOTAL	130,942	MEAN	359	MAX	1,920	MIN	28	AC-FT	259,700	(+) MEAN 466	AC-FT 336,620
WTR YR	2003	TOTAL	116,924.62	MEAN	320	MAX	2,160	MIN	0.35	AC-FT	231,900	(+) MEAN 422	AC-FT 305,720

(+) Combined flow, in acre-feet, and mean, in cubic feet per second, of Floodway, Conveyance Channel, and Socorro Main Canal North.
e Estimated

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937-56, 1959 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
14...	1150	602	440	640	644	10.9	109	8.2	658	14.0	8.0	200	61.5
26...	1145	463	300	290	650	10.6	100	8.0	671	10.5	6.1	--	--
DEC													
19...	1315	544	170	140	648	14.0	130	8.1	673	6.2	5.1	--	--
JAN													
31...	1216	520	190	140	650	10.1	103	8.2	657	--	9.0	--	--
MAR													
12...	1345	287	210	230	643	8.7	104	8.2	653	--	15.5	--	--
25...	1120	351	270	260	646	8.0	94	7.4	594	20.0	15.0	170	53.4
APR													
28...	1310	256	--	--	643	7.8	101	8.1	634	29.0	19.5	190	59.7
MAY													
20...	1205	447	--	310	652	8.0	97	8.4	535	--	17.0	--	--
JUN													
12...	1230	117	--	380	640	7.4	104	8.5	758	--	23.0	--	--
JUL													
14...	1245	21	--	130	645	7.7	118	8.4	811	38.0	28.5	--	--
17...	1025	14	--	--	650	7.1	102	8.4	872	29.0	25.0	240	70.7
AUG													
12...	1400	12	--	140	646	7.5	110	8.3	768	32.5	26.0	--	--
SEP													
08...	1300	138	--	42,000	644	6.8	93	7.7	1,430	29.0	22.0	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
14...	11.0	5.19	2	63.2	147	177	--	39.6	0.55	25.7	114	410	0.20
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	9.39	5.45	2	53.4	151	183	--	36.7	0.58	23.9	94.1	371	0.30
APR													
28...	10.8	6.26	2	55.3	158	192	--	34.7	0.56	25.5	103	393	<0.20
MAY													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	14.3	6.96	2	86.2	190	224	4	67.0	0.6	26.9	142	529	0.30
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)
NOV													
14...	1.0	0.03	0.04	0.48	<0.010	0.14	0.16	0.64	E370	560	E1	E.17	4
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	0.90	0.03	0.04	0.68	<0.010	0.17	0.17	0.17	<6	<10	E1	E.16	5
APR													
28...	0.80	0.01	0.02	0.65	<0.010	0.15	0.14	0.35	620	460	E1	E.17	7
MAY													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	E53	E3000	--	--	--
17...	0.70	<0.01	0.02	<0.02	<0.010	0.05	0.06	0.16	--	--	E2	E.19	8
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recover -able, ug/L (71900)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
NOV													
14...	108	<0.06	160	0.04	<0.8	0.54	1.6	<10	<0.08	27.4	0.02	5.8	2.72
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	89	<0.06	140	E.04	<0.8	0.44	1.1	<10	<0.08	3.9	E.01	6.7	2.39
APR													
28...	101	<0.06	140	E.02	<0.8	0.46	1.2	<10	<0.08	3.1	E.01	6.3	2.92
MAY													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	107	<0.06	170	0.04	<0.8	0.58	3.3	<8	<0.08	83.4	<0.02	8.5	2.32
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
NOV							
14...	<3	<3	<0.20	4	2.90	45	1,410
26...	--	--	--	--	--	--	1,160
DEC							
19...	--	--	--	--	--	--	559
JAN							
31...	--	--	--	--	--	--	9,150
MAR							
12...	--	--	--	--	--	--	391
25...	<3	<3	<0.20	2	3.27	68	455
APR							
28...	<3	<3	<0.20	2	3.37	85	281
MAY							
20...	--	--	--	--	--	--	473
JUN							
12...	--	--	--	--	--	--	393
JUL							
14...	--	--	--	--	--	--	144
17...	<3	<3	<0.20	1	3.55	96	99
AUG							
12...	--	--	--	--	--	--	190
SEP							
08...	--	--	--	--	--	--	47,200

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.002mm (70337)	Suspnd. sediment, falldia dst wat percent <.004mm (70338)	Suspnd. sediment, falldia dst wat percent <.008mm (70339)	Suspnd. sediment, falldia dst wat percent <.016mm (70340)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)
OCT													
16...	1150	1.2	139	1.82	61.0	14.0	--	--	--	--	49	56	84
NOV													
26...	1205	1.0	520	2.89	155	10.6	--	--	--	--	41	51	99
DEC													
17...	1310	1.5	552	2.16	170	8.5	--	--	--	--	6	12	45
JAN													
29...	1553	2.0	573	1.87	154	10.0	--	--	--	--	58	66	94
MAR													
06...	1336	1.2	315	2.19	119	10.5	--	--	--	--	5	10	19
APR													
03...	1427	1.0	232	1.60	142	15.5	--	--	--	--	88	89	95
MAY													
12...	1615	0.99	215	1.58	137	23.0	--	--	--	--	95	96	99
JUN													
06...	1050	1.3	241	1.70	107	18.0	76	89	91	95	95	96	98
JUL													
11...	1115	0.52	20	1.17	33.5	25.5	--	--	--	--	96	96	99
AUG													
04...	1230	0.29	3.6	1.02	12.0	23.0	--	--	--	--	--	--	--

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sedi-ment, falldia dst wat percent <.5 mm (70345)	Suspnd. sedi-ment, falldia dst wat percent <1 mm (70346)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Suspnd. sedi-ment, sieve diametr percent <2 mm (70336)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT 16...	98	100	--	--	194
NOV 26...	100	--	--	--	997
DEC 17...	93	98	--	100	4,570
JAN 29...	100	--	--	--	659
MAR 06...	89	99	--	100	1,840
APR 03...	100	--	--	--	289
MAY 12...	100	--	--	--	260
JUN 06...	100	--	--	--	573
JUL 11...	100	--	--	--	148
AUG 04...	--	--	100	--	214

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instan-taneous dis-charge, cfs (00061)	Stream veloc-ity, ft/s (00055)	Stream width, feet (00004)	Temper-ature, water, deg C (00010)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)	Bed sedi-ment, dry svd sve dia percent <.125mm (80165)	Bed sedi-ment, dry svd sve dia percent <.25mm (80166)	Bed sedi-ment, dry svd sve dia percent <.5 mm (80167)	Bed sedi-ment, dry svd sve dia percent <1 mm (80168)	Bed sedi-ment, dry svd sve dia percent <2 mm (80169)	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)
OCT 16...	1150	1.2	139	1.82	61.0	14.0	1	11	38	92	98	99	100
NOV 26...	1215	1.0	520	2.89	155	10.6	0.0	8	68	96	99	99	100
DEC 17...	1315	1.5	552	2.16	170	8.5	--	0.0	14	71	92	97	99
JAN 29...	1623	2.0	573	1.87	154	10.0	--	0.0	18	87	98	99	100
MAR 06...	1326	1.2	315	2.19	119	10.5	0.0	1	19	74	85	88	89
APR 03...	1418	1.0	232	1.60	142	15.5	0.0	1	9	61	84	92	96
MAY 12...	1616	0.99	215	1.58	137	23.0	0.0	1	28	87	99	100	--
JUN 06...	1100	1.3	241	1.70	107	18.0	0.0	2	9	71	93	98	100
JUL 11...	1120	0.52	20	1.17	33.5	25.5	0.0	2	21	79	95	99	100
AUG 04...	1235	0.29	3.6	1.02	12.0	23.0	0.0	1	11	50	69	80	89

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sedi-ment, dry svd sve dia percent <8 mm (80171)	Bed sedi-ment, dry svd sve dia percent <16 mm (80172)	Bed sedi-ment, dry svd sve dia percent <32 mm (80173)
OCT 16...	--	--	--
NOV 26...	--	--	--
DEC 17...	100	--	--
JAN 29...	--	--	--
MAR 06...	90	95	100
APR 03...	99	100	--
MAY 12...	--	--	--
JUN 06...	--	--	--
JUL 11...	--	--	--
AUG 04...	98	100	--

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, NM

LOCATION.--Lat 33°41'15", long 106°59'40", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 34, on right bank at San Marcial, 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.

PERIOD OF RECORD.--October 1958 to September 1959, October 1964 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 with satellite telemetry. Datum of gage is 4,454.00 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft higher.

REMARKS.--Records good except for those estimated, which are poor. Conveyance channel is 1 of 2 channels (station 08358400) carrying flow in valley cross section. For combined monthly flow, in acre-feet, of this channel and floodway, see tabulation below daily table for station 08358400. Flow from the river has been diverted since 1965.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	167	166	169	199	251	157	135	112	28	3.8	0.00
2	147	118	167	177	196	266	134	145	120	43	3.2	0.00
3	147	98	171	186	188	286	119	158	131	31	0.02	0.00
4	95	98	171	183	190	277	107	156	121	21	0.00	31
5	86	102	166	184	183	304	99	150	167	21	0.00	23
6	77	87	165	182	184	287	103	170	161	24	0.00	9.2
7	76	86	180	178	182	255	88	165	151	29	0.00	28
8	103	94	184	168	181	257	103	142	116	20	0.00	56
9	81	103	185	165	180	253	117	142	94	19	0.00	95
10	61	128	190	161	179	295	114	147	89	27	0.00	101
11	71	118	185	157	182	284	116	134	70	28	0.00	108
12	81	102	178	159	184	257	99	194	30	23	0.00	127
13	88	112	178	163	186	244	103	169	26	21	0.00	133
14	84	112	179	168	185	182	98	118	31	17	0.00	93
15	87	122	181	180	181	181	110	127	17	14	0.00	117
16	84	131	159	178	176	156	125	88	20	12	0.00	88
17	70	138	159	179	181	164	83	92	20	15	0.00	89
18	69	144	174	178	177	171	71	112	47	17	0.00	84
19	78	156	177	179	177	205	77	140	41	14	0.00	67
20	87	172	181	179	187	194	86	171	40	13	0.00	82
21	100	171	185	180	202	187	117	135	50	14	0.00	60
22	104	168	183	180	242	203	120	150	43	20	0.00	68
23	93	179	188	178	254	237	131	125	55	15	0.00	56
24	95	174	184	179	266	250	146	87	65	14	0.00	70
25	116	169	187	177	250	194	134	68	94	12	0.00	48
26	110	157	183	177	246	186	135	57	76	7.5	0.00	44
27	108	147	174	176	249	190	128	63	66	5.2	0.00	41
28	e130	160	174	178	252	215	139	67	51	3.3	0.00	37
29	e146	171	174	185	---	222	181	109	41	3.5	0.00	e12
30	e150	165	179	199	---	167	168	90	47	3.1	0.00	e13
31	146	---	163	203	---	147	---	97	---	3.9	0.00	---
TOTAL	3,106	4,049	5,470	5,485	5,639	6,967	3,508	3,903	2,192	538.5	7.02	1,780.20
MEAN	100	135	176	177	201	225	117	126	73.1	17.4	0.23	59.3
MAX	150	179	190	203	266	304	181	194	167	43	3.8	133
MIN	61	86	159	157	176	147	71	57	17	3.1	0.00	0.00
AC-FT	6,160	8,030	10,850	10,880	11,180	13,820	6,960	7,740	4,350	1,070	14	3,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	261	477	469	397	392	410	431	500	437	318	271	245
MAX	759	1,729	1,880	1,558	1,112	1,394	1,679	1,782	1,652	1,690	986	730
(WY)	(1985)	(1970)	(1966)	(1974)	(1985)	(1966)	(1966)	(1969)	(1973)	(1973)	(1973)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1969)	(1977)	(1975)	(1975)	(1975)	(1977)	(1976)	(1976)	(1976)	(1976)	(1976)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	51,625		42,644.72			
ANNUAL MEAN	141		117		384	
HIGHEST ANNUAL MEAN					1,137	1973
LOWEST ANNUAL MEAN					0.000	1977
HIGHEST DAILY MEAN	331	Mar 9	304	Mar 5	2,200	May 14, 1966
LOWEST DAILY MEAN	39	Sep 8	0.00	Aug 4	0.00	Sep 7, 1968
ANNUAL SEVEN-DAY MINIMUM	43	Sep 3	0.00	Aug 4	0.00	Sep 7, 1968
ANNUAL RUNOFF (AC-FT)	102,400		84,590		278,100	
10 PERCENT EXCEEDS	216		190		975	
50 PERCENT EXCEEDS	143		121		262	
90 PERCENT EXCEEDS	63		3.7		0.33	

e Estimated

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM

LOCATION.--Lat 33°40'45", long 106°59'42", Socorro County, Hydrologic Unit 13020203, in Pedro Armendaris Grant No. 33, 500 ft downstream from southern pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, on right bank 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. Datum of gage is 4,455.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except for those estimated, which are poor. Floodway is 1 of 2 channels (station 08358300) carrying flow in valley cross section. Prior to 1950, all flow was in floodway channel. Combined monthly discharge in acre-feet 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).

AVERAGE DISCHARGE.--39 years (water years 1965-2003), 765 ft^3/s, 554,260 acre-ft/yr. Total flow of river, 108 years (water years 1895-2003), 1,244 ft^3/s, 901,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, since Jan. 1895, about 50,000 ft^3/s, Oct. 11, 1904; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,380 ft^3/s, Sept. 5; minimum daily discharge, 16 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	215	282	e330	336	e224	e152	118	e296	38	21	29
2	34	252	278	e320	e345	e217	e131	92	e347	33	22	33
3	40	242	284	e320	e345	e207	114	109	e345	26	25	59
4	46	244	299	e315	e340	e224	93	178	e228	30	38	249
5	49	231	305	e310	e360	e215	61	279	e117	27	32	129
6	51	217	319	e309	e375	e160	55	270	65	28	27	50
7	50	226	345	309	e377	e130	69	166	57	27	24	54
8	49	237	345	307	e385	e93	64	127	60	27	25	62
9	50	246	344	307	e400	e73	40	105	44	27	25	121
10	46	247	359	297	e393	e55	40	77	47	32	22	228
11	48	271	350	313	e370	e48	41	68	33	32	20	226
12	57	289	346	329	351	e110	31	59	48	30	23	e316
13	63	326	345	344	338	e89	29	98	41	27	22	e418
14	58	350	327	350	326	e69	30	102	42	23	24	e381
15	56	344	314	342	311	e54	e31	58	50	23	19	e1,030
16	56	322	311	332	317	e48	e28	53	42	19	23	e378
17	55	346	318	334	375	e43	e31	61	35	17	23	96
18	53	337	317	361	383	e50	e29	52	40	21	21	61
19	55	337	327	375	412	e46	e59	173	33	20	e32	49
20	56	315	308	381	432	e61	e73	316	38	18	e33	44
21	55	305	305	375	407	e97	e110	308	40	17	e27	40
22	61	298	326	352	335	e266	e231	157	40	20	e27	39
23	60	278	359	331	379	e267	e249	88	38	18	28	39
24	52	271	355	331	392	e429	237	83	37	16	35	39
25	53	269	321	326	357	e306	165	97	32	17	31	38
26	55	257	e319	324	340	e255	155	88	34	18	37	38
27	75	257	e310	323	e298	e199	191	102	31	25	31	49
28	163	266	e322	323	e285	e115	210	74	29	21	24	45
29	186	266	e341	345	---	e104	163	240	29	20	24	38
30	268	279	e341	353	---	e95	107	e274	34	21	23	34
31	249	---	e356	350	---	e86	---	e322	---	22	19	---
TOTAL	2,282	8,340	10,078	10,318	10,064	4,435	3,019	4,394	2,352	740	807	4,412
MEAN	73.6	278	325	333	359	143	101	142	78.4	23.9	26.0	147
MAX	268	350	359	381	432	429	249	322	347	38	38	1,030
MIN	33	215	278	297	285	43	28	52	29	16	19	29
AC-FT	4,530	16,540	19,990	20,470	19,960	8,800	5,990	8,720	4,670	1,470	1,600	8,750
(+)	10,690	24,570	30,840	31,350	31,140	22,620	12,950	16,460	9,020	2,540	1,610	14,280

CAL YR 2002 TOTAL 69,825.7 MEAN 191 MAX 1,150 MIN 3.2 AC-FT 138,500 (+) MEAN 332 AC-FT 240,900
WTR YR 2003 TOTAL 61,241 MEAN 168 MAX 1,030 MIN 16 AC-FT 121,500 (+) MEAN 285 AC-FT 206,090

(+) Combined flow, in acre-feet, and mean, in cubic feet per second, of floodway and conveyance channel.
e Estimated

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1905-07, 1946 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
OCT													
30...	1410	280	--	2,400	648	9.2	100	7.8	965	--	11.5	--	--
DEC													
02...	1330	267	660	700	648	10.4	105	8.4	653	13.0	8.5	190	60.4
JAN													
07...	1316	317	--	--	--	--	--	--	--	--	--	--	--
07...	1335	317	750	810	656	10.6	--	8.3	--	12.0	7.5	--	--
FEB													
12...	0933	353	920	950	654	10.6	--	8.4	--	11.0	5.0	--	--
12...	1308	353	1,200	--	649	10.4	103	8.4	650	13.0	8.0	--	--
APR													
03...	0927	111	550	520	648	9.4	102	8.2	728	16.0	11.5	--	--
24...	1200	220	960	1,000	645	8.8	104	8.2	655	23.5	15.0	190	57.8
MAY													
21...	1105	289	--	1,900	653	8.0	98	8.3	555	--	17.5	--	--
JUN													
04...	1030	247	3,100	4,700	645	7.4	102	8.4	622	30.5	22.5	200	59.9
12...	1045	239	--	420	645	7.9	106	8.5	1,080	--	21.0	--	--
JUL													
16...	1035	23	44	--	653	7.4	106	8.3	1,410	34.0	25.0	290	83.8
AUG													
12...	1200	25	--	36	650	7.0	108	8.3	1,400	31.5	29.0	--	--
SEP													
08...	1115	50	--	3,000	648	7.7	102	8.1	1,060	26.5	21.0	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
OCT													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	10.6	5.59	2	65.0	146	174	2	37.9	0.60	23.6	108	400	0.30
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	10.7	6.00	2	60.0	162	194	--	37.5	0.60	23.7	107	401	<0.20
MAY													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
04...	11.3	6.33	2	61.0	146	178	--	33.7	0.6	21.4	109	393	0.20
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
16...	18.6	8.25	5	181	225	258	--	168	0.6	28.4	227	843	--
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)
OCT													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	1.4	<0.01	0.01	0.23	<0.010	0.15	0.16	0.84	E200	E550	M	E.23	5
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	1.5	<0.01	0.03	0.33	<0.010	0.12	0.11	0.64	E130	E71	E1	E.21	6
MAY													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
04...	2.6	0.01	0.06	0.53	<0.010	0.09	0.09	1.20	E270	>6000	3	E.19	5
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
16...	--	--	--	--	--	--	--	--	>60	>67	12	<0.30	8
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recover -able, ug/L (71900)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
OCT													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	84	<0.06	150	0.04	<0.8	0.43	1.3	<10	E.04	1.0	0.04	6.2	3.15
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	90	<0.06	140	E.03	<0.8	0.46	1.5	<10	<0.08	0.8	0.02	6.6	3.03
MAY													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
04...	73	<0.06	140	E.03	<0.8	0.44	2.3	<8	<0.08	0.2	0.09	6.5	1.65
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
16...	111	<0.06	260	0.12	<0.8	0.38	1.8	10	E.07	4.7	<0.02	7.7	2.08
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Ra-226, water, fltrd, radon method pCi/L (09511)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT								
30...	--	--	--	--	--	--	--	22,800
DEC								
02...	<3	<3	<0.20	5	--	2.79	93	1,390
JAN								
07...	--	--	--	--	--	--	100	1,030
07...	--	--	--	--	--	--	--	--
FEB								
12...	--	--	--	--	--	--	--	1,170
12...	--	--	--	--	--	--	--	--
APR								
03...	--	--	--	--	--	--	--	473
24...	<3	<3	<0.20	2	0.06	3.39	96	828
MAY								
21...	--	--	--	--	--	--	--	1,450
JUN								
04...	<3	<3	<0.20	1	--	3.32	98	2,450
12...	--	--	--	--	--	--	--	344
JUL								
16...	<3	<3	<0.20	1	--	1.57	96	105
AUG								
12...	--	--	--	--	--	--	--	103
SEP								
08...	--	--	--	--	--	--	--	2,500

Remark codes used in this table:
< -- Less than
> -- Greater than
E -- Estimated value
M -- Presence verified, not quantified

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
APR													
24...	1200	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
JUL													
16...	1035	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
APR													
24...	<0.006	<0.018	<0.003	<0.004	0.006	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
JUL													
16...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
APR													
24...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
JUL													
16...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	E.002	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
APR													
24...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.006	E.02	<0.034	<0.02	<0.005	<0.002
JUL													
16...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
APR	
24...	<0.009
JUL	
16...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.002mm (70337)	Suspnd. sediment, falldia dst wat percent <.004mm (70338)	Suspnd. sediment, falldia dst wat percent <.008mm (70339)	Suspnd. sediment, falldia dst wat percent <.016mm (70340)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)
OCT													
15...	1425	0.60	55	1.14	81.0	20.5	--	--	--	--	--	--	--
NOV													
07...	1444	1.9	244	1.78	74.0	11.5	55	70	80	90	95	95	100
DEC													
02...	1248	1.5	273	1.99	90.0	8.5	55	62	69	82	91	93	98
JAN													
06...	1615	1.9	309	1.98	80.0	7.0	47	53	62	77	92	93	98
MAR													
07...	1314	0.92	136	1.58	93.0	9.5	69	78	85	89	97	98	99
APR													
02...	1515	1.6	130	1.60	52.0	--	56	72	77	86	95	96	100
MAY													
13...	1142	0.83	84	1.25	81.5	19.0	65	72	83	89	97	98	100
JUN													
05...	1445	1.0	118	1.42	82.0	25.0	76	93	95	98	100	--	--
JUL													
10...	1255	0.55	36	1.06	62.0	31.5	--	--	--	--	--	--	--
AUG													
04...	1220	0.70	44	1.42	44.0	29.0	--	--	--	--	98	98	99

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspnd. sediment, sieve diametr percent <.125mm (70332)	Suspended sediment concentration mg/L (80154)
OCT 15...	--	98	100	95
NOV 07...	--	--	--	1,860
DEC 02...	100	--	--	1,260
JAN 06...	100	--	--	909
MAR 07...	100	--	--	591
APR 02...	--	--	--	606
MAY 13...	--	--	--	503
JUN 05...	--	--	--	2,210
JUL 10...	--	98	100	178
AUG 04...	100	--	--	340

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Mean stream depth, feet (00064)	Instantaneous discharge, cfs (00061)	Stream velocity, ft/s (00055)	Stream width, feet (00004)	Temperature, water, deg C (00010)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)
OCT 15...	1430	0.60	55	1.14	81.0	20.5	0.0	7	69	99	100	--	--
NOV 07...	1430	1.9	244	1.78	74.0	11.5	0.0	6	73	99	100	--	--
DEC 02...	1305	1.5	273	1.99	90.0	8.5	0.0	4	53	99	100	--	--
JAN 06...	1625	1.9	309	1.98	80.0	7.0	0.0	3	71	100	--	--	--
MAR 07...	1302	0.92	136	1.58	93.0	9.5	0.0	2	35	98	100	--	--
APR 02...	1520	1.6	130	1.60	52.0	--	2	13	70	95	95	96	97
MAY 13...	1145	0.83	84	1.25	81.5	19.0	1	7	64	99	100	--	--
JUN 05...	1450	1.0	118	1.42	82.0	25.0	1	3	46	99	100	--	--
JUL 10...	1300	0.55	36	1.06	62.0	31.5	1	5	62	99	100	--	--
AUG 04...	1225	0.70	44	1.42	44.0	29.0	1	3	43	99	100	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)
OCT 15...	--	--
NOV 07...	--	--
DEC 02...	--	--
JAN 06...	--	--
MAR 07...	--	--
APR 02...	97	100
MAY 13...	--	--
JUN 05...	--	--
JUL 10...	--	--
AUG 04...	--	--

08360500 ELEPHANT BUTTE RESERVOIR AT ELEPHANT BUTTE, NM

LOCATION.--Lat 33°09'15", long 107°11'28", in NW $^1/_4$ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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. Prior to Sept. 1930, and Oct. 16, 1939, to May 2, 1940, nonrecording gages.

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,023,000 acre-ft, survey of 1999 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 Bureau of Reclamation. A 50,000-acre-ft permanent pool is authorized for recreational purposes.

COOPERATION.--Records provided by 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, 405,310 acre-ft, Feb. 26 and 27, gage height, 4,331.92 ft; minimum contents, 147,950 acre-ft, Sept. 30, gage height, 4,303.27 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302,300	290,300	316,700	351,160	385,300	405,070	395,230	368,470	338,440	266,310	215,560	157,460
2	299,500	291,100	317,800	352,440	386,430	404,840	394,550	367,600	336,560	264,280	213,410	156,390
3	297,300	292,200	319,000	353,520	387,320	404,380	393,870	366,290	334,670	262,070	210,870	155,190
4	295,200	292,800	319,800	354,590	388,220	404,380	392,960	365,630	333,000	259,970	208,600	153,860
5	292,800	293,600	320,800	355,660	389,350	404,150	392,280	365,410	331,130	257,880	206,260	152,930
6	290,900	294,400	321,800	356,960	390,700	404,150	391,150	365,410	328,440	255,890	204,020	152,010
7	288,500	295,200	322,900	357,820	391,380	403,690	390,480	365,630	326,160	253,740	201,720	151,090
8	285,600	296,000	324,500	358,900	392,960	403,690	389,350	365,630	324,100	251,590	199,450	150,170
9	282,700	296,700	325,300	359,980	393,870	403,460	388,670	365,410	321,640	249,460	197,190	149,710
10	280,600	297,700	326,600	361,070	395,010	403,000	387,770	365,410	319,390	247,690	194,720	149,190
11	281,000	298,500	327,800	361,930	396,370	402,540	386,870	365,410	317,150	245,400	192,430	148,920
12	282,000	299,100	328,900	363,020	397,510	402,540	385,980	365,410	314,720	243,310	190,140	148,600
13	281,600	300,100	330,100	364,330	398,650	402,540	385,080	365,410	312,490	241,400	187,800	148,270
14	281,800	301,100	331,300	365,200	400,020	402,540	384,190	365,630	310,070	240,190	185,470	147,950
15	282,300	302,100	332,400	366,510	400,940	402,540	383,290	365,200	307,460	238,980	183,220	148,210
16	282,700	302,700	333,600	367,600	402,310	402,310	381,950	365,200	305,060	237,780	180,990	149,510
17	282,900	303,900	334,700	368,690	403,230	402,080	380,840	364,980	302,280	237,780	178,350	150,820
18	283,500	304,700	335,500	369,570	403,690	401,630	379,730	364,980	299,700	235,550	176,080	151,280
19	283,900	305,500	336,600	370,670	403,690	401,400	378,840	365,200	297,530	234,700	173,400	151,610
20	284,300	306,500	337,600	371,990	404,840	400,940	377,730	363,020	294,380	233,680	170,880	151,940
21	284,700	307,500	338,900	373,090	404,840	400,480	376,400	361,280	292,030	232,500	170,460	152,210
22	285,000	308,500	339,700	374,190	405,070	400,020	375,520	359,550	289,310	231,660	169,210	152,670
23	285,600	309,500	341,400	375,290	405,070	399,340	374,630	357,600	286,590	230,650	167,960	152,930
24	286,200	310,300	342,200	376,620	405,070	399,110	373,750	355,450	284,080	229,310	166,720	153,270
25	286,400	311,300	343,300	377,730	405,070	398,880	373,310	353,520	281,390	228,470	165,540	153,270
26	287,000	311,900	344,600	378,320	405,310	398,420	372,430	351,370	278,710	227,140	164,930	153,460
27	287,600	312,900	345,600	379,730	405,310	398,650	371,770	349,020	275,670	225,980	164,310	153,660
28	287,800	313,700	346,700	380,840	405,070	397,740	370,890	347,110	273,590	223,830	162,060	153,930
29	288,500	314,700	348,000	381,950	---	396,830	370,010	344,560	271,340	222,110	160,900	154,130
30	288,700	315,700	349,000	383,070	---	396,370	369,350	342,440	268,910	219,910	159,750	154,330
31	289,500	---	350,100	384,190	---	395,690	---	340,760	---	217,730	158,610	---
MAX	302,300	315,700	350,100	384,190	405,310	405,070	395,230	368,470	338,440	266,310	215,560	157,460
MIN	280,600	290,300	316,700	351,160	385,300	395,690	369,350	340,760	268,910	217,730	158,610	147,950
(+)	4,321.00	4,323.64	4,326.94	4,330.06	4,331.90	4,331.08	4,328.72	4,326.06	4,318.84	4,312.95	4,304.88	4,304.24
(++)	-15,800	+26,000	+34,400	+34,090	+20,880	-9,380	-26,340	-28,590	-71,850	-51,180	-59,120	-4,280

CAL YR 2002 MAX 916,700 MIN 280,600 (++) -547,500
WTR YR 2003 MAX 405,310 MIN 147,950 (++) -150,970

(+) Elevation in feet, at end of month.
(++) Change in contents, in acre-feet.

08361000 RIO GRANDE BELOW ELEPHANT BUTTE DAM, NM

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, Hydrologic Unit 13030101, in Pedro Armendaris Grant, on left bank 1.0 mi downstream from dam, 1.5 mi upstream from Cuchillo Negro River, and at mile 1,382.2.

DRAINAGE AREA.--29,450 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 with satellite telemetry. Datum of gage is 4,241.09 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 24, 1980, at datum 1.0 ft higher. See WSP 1732 for history of changes prior to Apr. 24, 1942.

REMARKS.--Records good. Flow regulated by Elephant Butte Reservoir (station 08360500). Diversion for irrigation of about 800,000 acres upstream from station. No flow at times prior to 1929, Mar. 2-4, 1979.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,730	14	7.8	2.5	7.2	596	685	659	1,370	1,620	1,090	682
2	1,220	14	8.0	2.5	7.1	597	680	655	1,380	1,320	1,090	777
3	1,240	13	7.7	7.2	6.4	598	684	658	1,390	1,160	1,090	799
4	1,250	13	7.6	8.6	5.7	601	694	659	1,390	1,170	1,090	678
5	1,240	13	7.6	8.6	6.1	601	697	416	1,400	1,180	1,110	680
6	1,250	13	7.2	8.2	7.0	603	697	284	1,400	1,190	1,130	682
7	1,250	13	7.5	8.9	6.7	602	703	280	1,410	1,200	1,150	680
8	1,540	12	7.1	8.3	7.2	601	708	273	1,420	1,210	1,170	566
9	1,730	12	7.2	9.9	6.9	601	709	270	1,420	1,220	1,190	404
10	1,190	12	7.2	9.6	6.4	601	714	265	1,430	1,240	1,200	384
11	20	11	7.3	9.4	6.5	602	719	262	1,370	1,250	1,220	443
12	18	11	7.2	9.2	6.4	483	723	258	1,420	1,260	1,240	357
13	17	11	6.5	8.9	6.8	417	726	252	1,430	1,260	1,250	349
14	17	10	6.5	5.0	7.5	417	729	244	1,440	802	1,270	345
15	18	9.8	6.6	4.1	7.7	418	735	240	1,450	546	1,290	137
16	19	10	6.5	7.2	7.7	420	736	235	1,470	552	1,310	13
17	19	9.9	7.4	2.9	7.7	421	734	232	1,490	559	1,320	13
18	19	9.4	6.6	3.0	356	422	730	231	1,490	571	1,340	14
19	19	9.0	6.3	2.8	583	423	723	230	1,510	581	1,370	e14
20	20	8.7	6.6	2.8	596	424	720	916	1,520	588	1,400	14
21	19	8.8	6.3	5.1	590	575	715	1,290	1,540	597	952	14
22	20	8.8	6.2	8.1	592	664	714	1,290	1,550	599	694	14
23	18	8.8	6.3	8.0	592	667	710	1,290	1,560	604	698	13
24	17	8.7	6.0	7.9	593	669	705	1,290	1,570	645	698	13
25	17	8.6	6.0	7.7	596	670	694	1,290	1,590	666	645	14
26	16	8.6	6.5	7.7	596	673	690	1,300	1,580	678	695	14
27	16	8.2	6.0	7.6	597	674	685	1,310	1,600	684	699	14
28	16	8.1	6.1	7.4	596	676	679	1,320	1,460	871	722	14
29	15	8.1	5.7	7.3	---	681	676	1,340	1,600	1,080	687	15
30	16	8.2	5.7	6.3	---	682	669	1,350	1,610	1,080	685	14
31	15	---	4.2	7.2	---	683	---	1,360	---	1,080	683	---
TOTAL	14,011	313.7	207.4	209.9	6,404.0	17,762	21,183	21,949	44,260	29,063	32,178	8,170
MEAN	452	10.5	6.69	6.77	229	573	706	708	1,475	938	1,038	272
MAX	1,730	14	8.0	9.9	597	683	736	1,360	1,610	1,620	1,400	799
MIN	15	8.1	4.2	2.5	5.7	417	669	230	1,370	546	645	13
AC-FT	27,790	622	411	416	12,700	35,230	42,020	43,540	87,790	57,650	63,830	16,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2003, BY WATER YEAR (WY)

MEAN	337	250	298	325	750	1,192	1,521	1,593	1,825	1,730	1,409	798
MAX	2,040	2,662	2,110	1,944	3,026	2,297	2,717	7,601	6,098	4,032	2,623	2,169
(WY)	(1987)	(1942)	(1987)	(1987)	(1986)	(1989)	(1942)	(1942)	(1942)	(1995)	(1924)	(1939)
MIN	2.41	1.25	1.38	0.000	3.38	16.6	188	8.32	284	673	155	2.73
(WY)	(1986)	(1972)	(1994)	(1918)	(1955)	(1983)	(1977)	(1957)	(1964)	(1964)	(1954)	(1954)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1917 - 2003	
ANNUAL TOTAL	417,498.1		195,711.0			
ANNUAL MEAN	1,144		536		1,003	
HIGHEST ANNUAL MEAN					2,665	1942
LOWEST ANNUAL MEAN					253	1964
HIGHEST DAILY MEAN	2,450	Jul 10	1,730	Oct 1	8,220	May 22, 1942
LOWEST DAILY MEAN	4.2	Dec 31	2.5	Jan 1	0.00	Nov 2, 1916
ANNUAL SEVEN-DAY MINIMUM	5.7	Dec 25	4.0	Jan 14	0.00	Nov 2, 1916
ANNUAL RUNOFF (AC-FT)	828,100		388,200		726,600	
10 PERCENT EXCEEDS	2,040		1,360		2,090	
50 PERCENT EXCEEDS	1,470		575		1,010	
90 PERCENT EXCEEDS	8.6		6.9		5.6	

e Estimated

08362000 CABALLO RESERVOIR NEAR ARREY, NM

LOCATION.--Lat 32°53'47", long 107°17'30", in SE $^1/_4$ SW $^1/_4$ sec.19, T.16 S., R.4 W., Sierra County, Hydrologic Unit 13030101, in control tower of Caballo Dam on Rio Grande, 0.5 mi downstream from mouth of Apache Canyon, 0.9 mi upstream from Bojarquez Bridge, 2 mi upstream from Percha diversion dam, 3.5 mi northeast of Arrey, 5.2 mi south of Caballo, and at mile 1,356.6.

DRAINAGE AREA.--30,700 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 1999 survey, 326,700 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 Bureau of Reclamation.

COOPERATION.--Records provided by 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, 67,660 acre-ft, May 14, gage height, 4,150.10 ft; minimum contents, 4,430 acre-ft, Sept. 20, gage height, 4,126.76 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28,490	33,760	35,480	37,580	39,240	52,210	57,210	60,590	58,880	51,470	45,250	12,150
2	29,350	33,880	35,600	37,580	39,310	53,200	56,510	61,780	58,970	51,310	44,150	11,180
3	29,620	34,060	35,790	37,580	39,380	54,040	55,650	62,800	58,970	51,470	43,140	10,910
4	30,120	34,120	35,850	37,650	39,380	55,310	54,880	63,830	58,440	51,150	42,280	11,320
5	30,280	34,180	35,920	37,650	39,380	56,510	54,120	64,770	57,820	50,990	41,090	11,390
6	30,510	34,240	35,980	37,910	39,440	57,300	53,450	65,340	57,030	50,660	40,050	11,450
7	30,510	34,300	36,040	37,980	39,510	58,350	52,780	65,530	56,510	50,990	38,770	11,450
8	30,670	34,300	36,360	38,040	39,580	59,330	52,210	65,820	55,990	51,880	38,180	11,450
9	31,180	34,420	36,300	38,110	39,650	60,410	52,040	66,010	55,560	53,030	37,320	11,180
10	31,750	34,550	36,300	38,180	39,680	61,140	51,630	66,400	55,310	54,370	36,620	10,740
11	31,520	34,670	36,300	38,240	39,710	62,340	51,390	66,690	55,390	55,730	36,110	10,450
12	31,640	34,670	36,360	38,310	39,780	63,260	50,820	66,980	55,820	56,860	35,660	10,150
13	31,750	34,670	36,360	38,370	39,850	63,730	50,260	67,360	55,990	58,000	35,440	9,860
14	31,870	34,730	36,420	38,440	39,990	64,680	49,230	67,660	55,990	58,800	35,230	9,500
15	32,040	34,920	36,420	38,570	39,990	65,150	48,680	67,360	55,910	58,800	34,300	9,190
16	32,160	34,790	36,490	38,570	40,050	65,720	48,140	65,340	55,560	58,530	33,570	8,290
17	32,270	34,790	36,490	38,570	40,120	66,300	47,360	63,730	55,050	58,260	32,680	6,990
18	32,390	34,920	36,550	38,570	40,330	66,600	47,600	61,970	55,390	58,000	31,920	5,620
19	32,510	34,850	36,620	38,570	41,160	67,170	47,980	60,140	55,560	57,650	31,350	4,630
20	32,570	34,920	36,620	38,640	42,710	67,270	48,290	58,170	55,650	57,300	30,670	4,430
21	32,680	34,920	36,740	38,710	43,790	66,880	48,990	58,090	55,730	56,950	28,280	4,470
22	32,800	34,920	36,870	38,840	44,740	66,010	50,020	58,090	55,910	56,420	26,350	4,520
23	32,980	34,920	37,070	38,840	45,700	65,150	51,390	58,350	55,910	56,170	24,500	4,580
24	33,160	35,040	37,070	38,910	46,830	64,390	52,620	58,710	55,910	55,730	22,820	4,700
25	33,280	35,100	37,130	38,970	47,980	63,550	53,780	58,970	55,990	54,630	21,200	4,790
26	33,340	35,230	37,130	39,040	49,070	62,240	54,970	58,970	55,480	53,200	20,130	4,860
27	33,510	35,230	37,190	39,040	50,100	60,960	56,170	59,150	54,880	51,470	19,090	4,930
28	33,510	35,230	37,260	39,040	51,070	60,140	57,300	58,970	53,620	49,700	18,050	4,970
29	33,570	35,290	37,320	39,110	---	59,420	58,440	58,800	52,370	48,600	16,390	5,310
30	33,630	35,350	37,520	39,170	---	58,710	59,510	58,620	52,040	47,750	14,850	5,380
31	33,690	---	37,450	39,240	---	58,000	---	58,710	---	46,380	13,400	---
MAX	33,690	35,350	37,520	39,240	51,070	67,270	59,510	67,660	58,970	58,800	45,250	12,150
MIN	28,490	33,760	35,480	37,580	39,240	52,210	47,360	58,090	52,040	46,380	13,400	4,430
(+)	4,144.44	4,141.98	4,142.64	4,143.18	4,146.38	4,148.02	4,148.36	4,148.18	4,146.62	4,145.18	4,132.78	4,127.58
(++)	+6,510	+1,660	+2,100	+1,790	+11,830	+6,930	+1,510	-800	-6,670	-5,660	-32,980	-8,020

CAL YR	2002	MAX	90,760	MIN	24,700	(++) -11,960
WTR YR	2003	MAX	67,660	MIN	4,430	(++) -21,800

(+) Elevation, at end of month.
(++) Change in contents, in acre-feet.

08362500 RIO GRANDE BELOW CABALLO DAM, NM

LOCATION.--Lat 32°53'05", long 107°17'31", in NE ¼ SW ¼ 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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. Bureau of Reclamation satellite telemetry at station.

COOPERATION.--Records provided by Bureau of Reclamation.

AVERAGE DISCHARGE.--65 years, 935 ft^3/s, 677,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft^3/s, May 20, 1942; minimum daily, 0.1 ft^3/s, Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955, Feb. 15-29, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,880 ft^3/s, June 28; minimum daily, 0.50 ft^3/s, Oct. 29-Nov. 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,110	0.50	0.90	2.9	4.2	2.6	1,080	12	1,170	1,600	1,780	1,260
2	1,140	0.50	0.90	2.9	4.2	2.6	1,210	12	1,200	1,350	1,740	1,120
3	1,200	0.50	0.90	2.9	4.2	2.6	1,300	12	1,300	1,170	1,730	969
4	1,200	0.50	0.90	4.3	4.2	2.6	1,190	12	1,530	1,130	1,730	530
5	1,210	0.50	0.90	5.6	4.2	2.6	996	12	1,670	1,170	1,760	568
6	1,210	0.50	0.60	5.6	4.2	2.6	984	12	1,560	1,140	1,810	620
7	1,260	0.50	0.20	5.6	4.2	2.6	981	12	1,540	894	1,760	623
8	1,420	0.50	0.20	5.6	4.2	2.6	858	12	1,540	653	1,630	623
9	1,280	0.50	0.20	5.6	4.2	2.6	774	12	1,500	586	1,580	623
10	800	0.80	0.20	5.6	4.2	2.6	802	12	1,390	429	1,570	621
11	550	1.1	0.20	5.6	4.2	2.6	848	12	1,180	438	1,570	507
12	23	1.1	0.20	5.6	4.2	2.6	901	12	1,060	483	1,490	526
13	1.7	1.1	0.20	5.6	4.2	2.6	888	12	1,210	485	1,390	506
14	1.7	1.4	0.20	5.6	3.8	2.6	878	12	1,350	494	1,450	493
15	1.7	1.7	0.20	5.6	3.4	2.6	796	143	1,350	524	1,680	470
16	1.7	1.7	0.20	5.6	3.4	2.6	694	707	1,470	596	1,790	537
17	1.7	1.7	0.20	5.6	3.4	97	588	1,020	1,520	604	1,780	663
18	1.7	1.7	0.20	5.6	3.4	164	423	1,020	1,310	655	1,670	657
19	1.7	1.7	0.20	5.6	3.4	164	397	1,220	1,200	720	1,630	444
20	1.7	1.7	0.20	5.6	3.0	164	402	1,360	1,210	722	1,710	7.3
21	1.4	1.7	0.20	5.3	2.6	737	255	1,330	1,210	724	1,600	1.5
22	1.1	1.7	0.20	4.9	2.6	1,020	12	1,170	1,220	722	1,540	1.5
23	1.1	1.7	0.20	4.9	2.6	1,030	12	1,100	1,220	720	1,610	1.5
24	1.1	1.7	0.20	4.9	2.6	1,020	12	1,100	1,320	720	1,590	1.5
25	1.1	1.7	0.20	4.9	2.6	1,040	12	1,100	1,310	1,100	1,660	1.5
26	1.1	1.7	0.20	4.9	2.6	1,240	12	1,100	1,500	1,340	1,720	1.5
27	1.1	1.7	0.20	4.6	2.6	1,270	12	1,240	1,840	1,340	1,790	1.5
28	0.80	1.7	0.20	4.2	2.6	974	12	1,380	1,880	1,510	1,800	1.5
29	0.50	1.7	1.6	4.2	---	940	12	1,350	1,850	1,700	1,640	1.5
30	0.50	1.3	2.9	4.2	---	940	12	1,310	1,730	1,780	1,450	1.5
31	0.50	---	2.9	4.2	---	981	---	1,220	---	1,850	1,350	---
TOTAL	12,426.90	36.80	16.90	153.8	99.2	11,822.6	17,353	19,038	42,340	29,349	51,000	12,382.3
MEAN	401	1.23	0.55	4.96	3.54	381	578	614	1,411	947	1,645	413
MAX	1,420	1.7	2.9	5.6	4.2	1,270	1,300	1,380	1,880	1,850	1,810	1,260
MIN	0.50	0.50	0.20	2.9	2.6	2.6	12	12	1,060	429	1,350	1.5
AC-FT	24,650	73	34	305	197	23,450	34,420	37,760	83,980	58,210	101,200	24,560
(+)	73	30	0	0	95	152	139	246	137	154	152	135

CAL YR	2002	TOTAL	403,791.80	MEAN	1,106	MAX	2,600	MIN	0.20	AC-FT	800,900
WTR YR	2003	TOTAL	196,018.50	MEAN	537	MAX	1,880	MIN	0.20	AC-FT	388,800

(+) Diversion, in acre-feet, by Bonita Ditch; diverts directly from Caballo Dam, and this diversion is not included in the river records.

08364000 RIO GRANDE AT EL PASO, TX

(National Water-Quality Assessment Program Station)

WATER-QUALITY RECORDS

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, Hydrologic Unit 13030102, 0.1 mi upstream from Courchesne Bridge at El Paso, 1.8 mi upstream from American Dam, 5.7 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 mi^2, approximately, including 2,940 mi^2 in closed basin in San Luis Valley, Colorado.

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 2002 TO SEPTEMBER 2003

Date	Time	Ending time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt Gran, field, mg/L as CaCO3 (29802)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT													
29...	0750	--	269	663	9.1	103	8.2	1,760	17.0	14.2	240	242	291
OCT													
29-29	0800	0930	269	--	--	--	--	--	--	--	--	--	--
DEC													
03...	0930	--	166	665	8.2	90	8.4	1,710	14.0	13.0	--	195	232
26...	1340	--	107	672	10.9	106	8.6	1,960	8.0	8.5	--	247	295
FEB													
25...	0825	--	87	664	10.5	95	8.3	2,220	3.0	5.0	--	251	302
MAR													
13...	0930	--	63	670	8.1	90	8.2	2,570	19.0	14.0	--	253	303
APR													
02...	0840	--	334	665	8.0	94	8.0	1,280	21.0	16.5	--	180	216
MAY													
01...	1230	--	39	666	7.9	103	8.1	2,980	26.0	21.0	--	294	359
JUN													
12...	1100	--	706	664	6.4	84	8.4	1,120	30.0	21.5	--	167	192
JUL													
23...	0930	--	477	670	7.0	98	8.3	1,080	33.5	25.5	--	159	190
AUG													
21...	0900	--	752	668	6.4	92	8.2	1,020	30.5	26.5	--	151	184

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)
OCT													
29...	--	194	371	0.53	0.09	0.80	0.022	0.07	0.147	--	--	--	--
OCT													
29-29	--	--	--	--	--	--	--	--	--	39.300	540	584.1	19
DEC													
03...	2	202	345	0.84	0.26	1.11	0.078	0.13	0.21	--	--	--	--
26...	3	249	405	1.0	0.50	1.37	0.063	0.15	0.20	--	--	--	--
FEB													
25...	--	292	447	1.3	0.50	0.51	0.052	0.14	0.23	--	--	--	--
MAR													
13...	3	367	521	1.8	1.07	0.20	0.055	0.37	0.49	--	--	--	--
APR													
02...	--	156	217	0.92	0.15	0.47	0.023	0.06	0.23	--	--	--	--
MAY													
01...	--	399	618	2.6	1.44	0.30	0.093	0.27	0.40	--	--	--	--
JUN													
12...	6	116	190	1.2	0.10	0.42	0.010	0.06	0.37	--	--	--	--
JUL													
23...	--	115	191	1.3	0.08	0.31	0.010	0.07	0.37	--	--	--	--
AUG													
21...	2	108	178	1.5	0.05	0.19	E.007	0.05	0.40	--	--	--	--

08364000 RIO GRANDE AT EL PASO, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	Suspended sediment concentration mg/L (80154)
OCT 29...	--	182
OCT 29-29	86.7	--
DEC 03...	--	35
26...	--	76
FEB 25...	--	42
MAR 13...	--	23
APR 02...	--	94
MAY 01...	--	150
JUN 12...	--	833
JUL 23...	--	213
AUG 21...	--	362

Remark codes used in this table:
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
OCT 29...	0750	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.010
DEC 03...	0930	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	E.004	<0.020	<0.005
FEB 25...	0825	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
MAR 13...	0930	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
APR 02...	0840	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
MAY 01...	1230	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
JUN 12...	1100	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
JUL 23...	0930	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
AUG 21...	0900	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	0.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
OCT 29...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
DEC 03...	<0.006	<0.018	0.003	<0.004	E.019	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
FEB 25...	<0.006	<0.018	<0.003	<0.004	E.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
MAR 13...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
APR 02...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
MAY 01...	<0.006	<0.018	<0.003	<0.004	E.004	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
JUN 12...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
JUL 23...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
AUG 21...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

08364000 RIO GRANDE AT EL PASO, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
OCT													
29...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	E.006	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
DEC													
03...	<0.007	<0.003	<0.004	<0.035	E.009	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
FEB													
25...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
MAR													
13...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
APR													
02...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
MAY													
01...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
JUN													
12...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
JUL													
23...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
AUG													
21...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	E.006	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
OCT													
29...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
DEC													
03...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
FEB													
25...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
MAR													
13...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
APR													
02...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	E.01	<0.034	<0.02	<0.005	<0.002
MAY													
01...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
JUN													
12...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
JUL													
23...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
AUG													
21...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
OCT	
29...	<0.009
DEC	
03...	<0.009
FEB	
25...	<0.009
MAR	
13...	<0.009
APR	
02...	<0.009
MAY	
01...	<0.009
JUN	
12...	<0.009
JUL	
23...	<0.009
AUG	
21...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value

08377900 RIO MORA NEAR TERRERO, NM

LOCATION.--Lat 35°46'38", long 105°39'27", in SW ¼ NE ¼ 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 mi^2.

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.--Records fair except for those estimated, 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.

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).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.7	e12	e7.3	e4.5	e5.0	13	88	64	15	8.5	20
2	11	10	e7.9	e7.4	e4.4	e5.8	16	84	60	15	7.8	18
3	10	10	e7.2	e7.3	e4.2	e5.8	18	85	53	12	7.9	19
4	9.9	10	e6.3	e7.0	e4.1	e5.4	18	81	49	12	6.9	21
5	9.9	9.6	e5.3	e6.1	e5.4	e5.5	18	73	46	12	6.5	19
6	9.5	10	e5.9	e5.6	e4.4	e6.2	17	71	41	11	7.8	18
7	9.5	10	e6.3	e5.5	e4.1	e6.0	16	67	37	11	8.8	17
8	9.5	9.1	e7.0	e6.3	e3.9	e5.9	15	67	35	10	8.3	15
9	9.5	14	e6.6	e6.5	e3.4	e6.2	16	67	32	9.8	9.8	15
10	9.4	15	e6.0	e6.2	e3.1	e6.4	20	68	30	9.8	12	20
11	9.1	11	e6.1	e7.0	e4.0	e7.0	23	66	27	10	12	18
12	9.1	9.4	e5.8	e7.1	e5.0	e7.5	25	68	26	9.8	13	15
13	9.1	10	e5.5	e7.5	e5.6	e7.7	31	74	25	9.4	13	14
14	9.0	10	e5.6	e7.3	e5.8	e8.0	40	86	23	9.1	10	13
15	8.8	9.7	e6.0	e6.3	e5.0	e8.1	47	96	23	9.1	11	12
16	8.8	11	e5.9	e5.5	e4.5	e8.0	41	100	25	9.1	10	12
17	8.7	11	e5.7	e4.8	e4.6	e7.9	44	106	24	9.0	9.9	11
18	9.1	8.6	e5.9	e4.6	e5.0	e7.8	49	109	29	8.7	9.5	10
19	9.1	9.1	e5.6	e5.3	e5.8	e7.6	51	109	32	8.9	9.1	10
20	8.8	9.9	e5.2	e5.8	e5.6	e7.7	44	105	30	9.5	9.2	10
21	8.7	9.7	e5.5	e5.7	e6.4	e8.3	47	95	25	9.6	11	10
22	8.4	9.0	e5.4	e5.4	e7.0	9.0	50	90	22	11	11	9.9
23	9.0	9.1	e5.5	e4.9	e6.0	9.9	57	87	20	9.3	10	9.9
24	11	11	e5.7	e5.0	e5.1	11	50	83	19	9.1	14	9.9
25	10	e7.7	e5.6	e5.6	e5.2	13	52	91	18	8.8	14	9.5
26	9.9	e8.2	e6.0	e5.9	e5.4	13	68	89	17	8.6	15	9.5
27	11	e9.2	e6.8	e5.7	e5.2	13	81	84	17	8.1	16	9.2
28	11	e8.8	e7.0	e5.4	e5.1	9.4	82	83	15	8.0	17	9.1
29	10	e9.0	e7.1	e5.9	---	11	92	77	15	7.7	22	8.9
30	9.8	e14	e7.1	e5.7	---	13	93	72	14	8.8	26	8.5
31	9.9	---	e7.0	e4.7	---	12	---	68	---	9.3	23	---
TOTAL	296.5	302.8	196.5	186.3	137.8	258.1	1,234	2,589	893	308.5	370.0	401.4
MEAN	9.56	10.1	6.34	6.01	4.92	8.33	41.1	83.5	29.8	9.95	11.9	13.4
MAX	11	15	12	7.5	7.0	13	93	109	64	15	26	21
MIN	8.4	7.7	5.2	4.6	3.1	5.0	13	66	14	7.7	6.5	8.5
AC-FT	588	601	390	370	273	512	2,450	5,140	1,770	612	734	796

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	14.1	10.6	6.97	5.97	6.39	12.2	36.3	126	83.6	28.8	43.0	26.1
MAX	25.2	36.8	13.3	9.82	13.2	41.3	88.4	319	263	73.1	159	84.5
(WY)	(1986)	(1999)	(1985)	(1986)	(1995)	(1989)	(1985)	(1973)	(1997)	(1988)	(1991)	(1988)
MIN	5.73	3.72	2.55	1.72	1.77	3.40	11.2	10.0	4.73	8.43	8.62	6.93
(WY)	(1965)	(1990)	(2002)	(1964)	(2002)	(1964)	(1971)	(2002)	(2002)	(1989)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	3,046.4		7,173.9			
ANNUAL MEAN	8.35		19.7		33.5	
HIGHEST ANNUAL MEAN					65.3	1973
LOWEST ANNUAL MEAN					7.37	2002
HIGHEST DAILY MEAN	36	Jul 25	109	May 18	755	Jun 8, 1997
LOWEST DAILY MEAN	1.5	Mar 3	3.1	Feb 10	0.90	Jan 12, 1964
ANNUAL SEVEN-DAY MINIMUM	1.6	Feb 27	4.0	Feb 6	0.97	Jan 10, 1964
MAXIMUM PEAK FLOW			115	May 17	937	May 22, 1991
MAXIMUM PEAK STAGE			2.21	May 17	4.15	Jun 8, 1979
INSTANTANEOUS LOW FLOW					0.90	Jan 12, 1964
ANNUAL RUNOFF (AC-FT)	6,040		14,230		24,270	
10 PERCENT EXCEEDS	16		65		81	
50 PERCENT EXCEEDS	7.5		9.8		13	
90 PERCENT EXCEEDS	1.9		5.5		5.0	

e Estimated

08378500 PECOS RIVER NEAR PECOS, NM

LOCATION.--Lat 35°42'30", long 105°40'55", in NE ¼ NE ¼ 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 mi^2.

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 with satellite telemetry. 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 those estimated, which are poor. Diversions for irrigation of about 75 acres, 1959 determinations, upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	26	30	e18	e19	38	232	288	58	22	54
2	27	30	29	e24	e19	24	47	222	280	59	20	48
3	25	30	29	e23	e18	e25	e45	231	255	54	21	48
4	24	30	26	31	e17	23	e43	217	238	52	18	53
5	23	27	e23	27	e19	21	49	191	224	51	17	46
6	23	24	e25	24	e20	29	e45	187	206	50	19	47
7	23	26	e23	23	e17	25	e37	171	186	48	e26	41
8	23	29	26	29	e17	24	e35	173	172	45	e28	39
9	23	59	e24	32	e16	25	43	176	157	43	32	38
10	22	60	e22	26	e13	27	51	184	148	42	40	65
11	22	43	24	35	18	29	62	177	136	43	35	67
12	21	30	23	28	21	33	65	187	126	41	43	51
13	21	34	22	36	24	36	80	210	118	39	40	45
14	21	32	23	31	25	40	101	245	108	37	e38	41
15	21	30	24	29	24	43	121	278	102	37	e35	39
16	21	27	29	e25	e19	45	106	286	109	36	e36	37
17	21	31	23	e22	e18	41	113	308	101	36	e34	35
18	22	28	25	e19	e16	37	121	327	122	34	e31	34
19	23	29	e26	e21	e18	e31	123	328	142	37	30	33
20	23	30	22	e25	22	31	105	311	124	42	29	32
21	22	28	e24	e24	e20	e32	108	290	101	36	31	31
22	21	27	e26	e23	e18	35	113	292	88	30	34	31
23	24	27	e23	e21	e17	41	134	297	81	24	35	30
24	33	28	e25	20	e19	51	115	297	76	23	44	29
25	30	26	e24	23	e20	55	121	327	72	22	44	28
26	28	26	e25	24	22	55	161	327	69	21	54	28
27	34	29	e28	26	21	56	197	316	67	21	46	27
28	32	34	e28	22	22	48	201	318	64	20	51	27
29	29	26	e29	24	---	e35	233	320	61	20	68	27
30	28	37	e30	26	---	e25	246	310	59	23	77	26
31	29	---	e29	e20	---	e32	---	300	---	26	69	---
TOTAL	765	945	785	793	538	1,073	3,059	8,035	4,080	1,150	1,147	1,177
MEAN	24.7	31.5	25.3	25.6	19.2	34.6	102	259	136	37.1	37.0	39.2
MAX	34	60	30	36	25	56	246	328	288	59	77	67
MIN	21	24	22	19	13	19	35	171	59	20	17	26
AC-FT	1,520	1,870	1,560	1,570	1,070	2,130	6,070	15,940	8,090	2,280	2,280	2,330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2003, BY WATER YEAR (WY)

MEAN	51.3	38.5	29.5	26.5	26.9	41.3	130	337	250	96.6	108	73.8
MAX	217	138	61.9	49.7	45.6	100	366	1,158	950	299	402	284
(WY)	(1942)	(1942)	(1942)	(1942)	(1995)	(1997)	(1942)	(1941)	(1979)	(1941)	(1957)	(1931)
MIN	11.9	11.6	9.52	11.2	14.8	18.1	40.1	26.4	17.4	20.5	20.0	10.8
(WY)	(1957)	(1957)	(1957)	(1957)	(1951)	(1951)	(1951)	(2002)	(2002)	(1956)	(1956)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1920 - 2003	
ANNUAL TOTAL	9,503		23,547			
ANNUAL MEAN	26.0		64.5		101	
HIGHEST ANNUAL MEAN					267	1941
LOWEST ANNUAL MEAN					25.2	2002
HIGHEST DAILY MEAN	71	Jul 25	328	May 19	1,980	May 22, 1991
LOWEST DAILY MEAN	12	Mar 3	13	Feb 10	6.0	Dec 22, 1956
ANNUAL SEVEN-DAY MINIMUM	14	Jun 14	17	Feb 4	6.7	Dec 19, 1956
MAXIMUM PEAK FLOW			420	May 25	4,500	Sep 21, 1929
MAXIMUM PEAK STAGE			2.95	May 25	6.20	Sep 21, 1929
INSTANTANEOUS LOW FLOW			9.3	Feb 9	2.0	Mar 19, 1971
ANNUAL RUNOFF (AC-FT)	18,850		46,710		73,360	
10 PERCENT EXCEEDS	41		186		248	
50 PERCENT EXCEEDS	24		31		47	
90 PERCENT EXCEEDS	16		21		21	

e Estimated

08379500 PECOS RIVER NEAR ANTON CHICO, NM

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant, on right bank 2.1 mi upstream from Canon Blanco, 2.3 mi southeast of Anton Chico, 9.7 mi downstream from Tecolote Creek, and at mile 808.0.

DRAINAGE AREA.--1,050 mi^2, approximately (contributing area).

PERIOD OF RECORD.--April 1910 to May 1916, October 1916 to September 1924, August to December 1925, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1342: 1951(M), 1952-53. WSP 1512: 1912-14, 1931, 1933(M), 1935-36(M), 1938(P), 1939-40, 1941-42(P), 1945(M), 1946(P). WSP 1712: 1942(P).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,130 ft above National Geodetic Vertical Datum of 1929, from river-profile map. See WSP 1732 for history of changes prior to June 21, 1951.

REMARKS.--Records good except for those estimated, which are poor. Diversions upstream from station for irrigation of about 4,900 acres, 1959 determinations, upstream and downstream from station. Acequia del Bodo Juan Paiz (no measurements made during the water year) diverts water 8 mi upstream from gage and bypasses this station on left bank; ditch flow not included in record measurements made at point opposite regular gage. A portion of this flow may be returned to the river about 5.0 mi downstream. Several observations of water temperature were made during the year. No flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since 1879 occurred Sept. 29, 1904, discharge about 73,000 ft^3/s, from information by a local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.8	5.0	2.2	1.8	6.8	9.1	189	225	9.4	1.1	34
2	0.82	3.6	4.6	2.3	1.7	5.6	7.9	173	208	12	0.95	16
3	0.69	3.7	5.4	3.1	1.4	2.8	9.1	163	188	19	0.94	10
4	0.61	2.6	4.8	3.3	1.5	2.6	23	173	179	16	0.84	188
5	0.65	2.5	6.1	4.1	1.3	2.0	37	156	183	16	0.74	770
6	0.35	3.9	7.4	1.8	1.4	1.6	38	130	171	12	0.83	71
7	0.37	2.8	5.6	1.6	1.2	1.6	30	130	160	8.2	0.70	40
8	0.48	8.5	3.5	2.7	1.3	1.3	29	101	142	9.0	0.65	33
9	0.37	13	3.0	6.3	1.2	2.2	28	94	112	e9.0	0.64	11
10	0.30	4.7	4.9	15	1.5	2.3	24	95	84	e6.2	0.67	8.8
11	0.26	27	5.2	17	1.7	2.0	16	111	61	e6.0	1.7	10
12	0.17	43	2.5	15	1.1	1.5	16	108	51	e5.7	e1.1	13
13	0.21	33	2.1	9.4	1.4	1.9	31	96	44	e5.5	e0.90	16
14	0.23	31	2.1	7.8	3.8	1.7	45	104	55	e5.1	e0.70	11
15	0.25	27	3.1	7.1	8.2	3.8	66	132	51	e5.0	2.6	9.2
16	0.58	17	4.7	10	14	9.4	102	181	41	e5.0	2.4	6.1
17	0.42	6.0	3.5	16	3.2	8.1	100	197	31	e4.7	2.1	6.0
18	0.50	4.2	2.1	14	3.2	6.7	91	223	50	2.5	2.1	5.5
19	0.79	4.6	2.0	10	1.4	16	110	249	324	2.0	2.2	5.5
20	0.62	4.8	1.8	7.2	2.4	19	107	275	268	1.8	2.1	8.2
21	0.68	2.1	1.4	8.3	5.3	20	89	287	113	1.9	1.6	9.0
22	0.83	2.7	1.3	18	2.0	19	80	240	77	2.1	1.4	3.5
23	1.2	4.9	2.0	20	3.7	17	74	224	56	1.9	1.4	3.4
24	0.83	6.8	1.6	15	1.5	15	92	243	40	2.1	1.3	3.5
25	0.78	8.3	1.9	3.3	3.0	8.9	83	449	26	2.0	1.4	7.0
26	2.1	8.5	1.7	2.5	2.4	12	77	305	16	1.8	1.5	5.1
27	7.6	7.4	1.7	2.7	3.6	23	94	280	11	1.5	2.3	5.3
28	3.1	5.2	1.4	2.0	4.1	24	134	266	7.5	1.4	3.8	3.9
29	2.5	2.9	1.1	1.8	---	27	134	268	10	1.3	11	4.0
30	1.8	3.3	1.2	1.9	---	e15	182	249	26	1.2	4.1	4.1
31	2.0	---	1.9	1.6	---	9.8	---	235	---	1.2	80	---
TOTAL	33.09	297.8	96.6	233.0	80.3	289.6	1,958.1	6,126	3,010.5	178.5	135.76	1,321.1
MEAN	1.07	9.93	3.12	7.52	2.87	9.34	65.3	198	100	5.76	4.38	44.0
MAX	7.6	43	7.4	20	14	27	182	449	324	19	80	770
MIN	0.17	2.1	1.1	1.6	1.1	1.3	7.9	94	7.5	1.2	0.64	3.4
AC-FT	66	591	192	462	159	574	3,880	12,150	5,970	354	269	2,620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	60.0	40.2	27.5	24.9	24.7	60.9	172	363	258	127	192	116
MAX	500	279	103	78.3	78.5	249	854	2,031	1,150	507	928	679
(WY)	(1942)	(1942)	(1942)	(1942)	(1987)	(1985)	(1942)	(1941)	(1941)	(1941)	(1991)	(1941)
MIN	0.000	0.000	0.000	1.82	0.92	0.29	1.54	0.86	0.083	3.81	4.38	0.000
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1971)	(1981)	(2002)	(2002)	(1934)	(2003)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL TOTAL	3,011.30		13,760.35			
ANNUAL MEAN	8.25		37.7		123	
HIGHEST ANNUAL MEAN					489	1941
LOWEST ANNUAL MEAN					8.54	2002
HIGHEST DAILY MEAN	242	Jul 16	770	Sep 5	10,000	Jun 2, 1937
LOWEST DAILY MEAN	0.00	Jun 11	0.17	Oct 12	0.00	Jun 16, 1934
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 11	0.26	Oct 9	0.00	Jun 16, 1934
MAXIMUM PEAK FLOW			3,820	Sep 5	40,300	Jun 1, 1937
MAXIMUM PEAK STAGE			7.98	Sep 5	20.34	Jun 1, 1937
INSTANTANEOUS LOW FLOW					0.00	Jun 16, 1934
ANNUAL RUNOFF (AC-FT)	5,970		27,290		88,890	
10 PERCENT EXCEEDS	21		133		336	
50 PERCENT EXCEEDS	2.5		5.3		37	
90 PERCENT EXCEEDS	0.13		1.1		4.5	

e Estimated

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 mi^2, 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 with satellite telemetry. 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 those estimated, which are poor. Diversions for irrigation of about 80 acres, 1959 determination, upstream from station.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.7	e4.3	e3.2	e3.5	e4.1	12	29	7.9	3.0	2.2	4.5
2	3.6	4.8	e3.8	e2.2	e2.8	e3.7	13	26	6.8	3.2	2.0	3.8
3	3.5	5.3	e3.3	e2.6	e2.3	e4.2	14	25	5.6	3.2	2.1	3.9
4	3.5	5.4	e3.5	e3.5	e1.8	e4.1	13	24	4.8	3.3	2.2	7.9
5	3.5	5.2	e3.7	e3.6	e2.3	e3.2	12	20	3.7	3.6	1.9	11
6	3.6	4.7	e3.8	e3.0	e1.6	e4.0	12	19	3.8	3.5	1.9	11
7	3.5	4.5	e3.2	e2.7	e1.8	e4.8	11	17	4.0	3.5	2.0	8.1
8	3.6	4.4	e3.0	e3.1	e2.5	5.1	9.7	17	3.9	3.6	2.3	6.5
9	3.5	10	e3.6	e3.5	e2.0	5.1	9.3	17	3.6	3.0	2.0	6.4
10	3.4	23	e3.8	e3.2	e2.4	5.4	10	15	3.7	2.6	2.5	7.5
11	3.3	14	e2.9	e2.3	e2.6	5.8	13	14	3.7	2.5	3.4	7.3
12	3.3	10	e3.4	e2.6	e2.4	6.8	14	14	3.4	2.7	2.9	6.2
13	3.3	8.7	e3.9	e2.9	e2.8	8.2	16	12	3.8	2.3	3.2	5.6
14	3.3	8.0	e4.3	e3.2	e3.0	10	20	13	4.1	2.2	2.9	5.3
15	3.3	7.4	e4.0	e3.0	e2.6	12	25	16	4.0	2.1	2.5	5.2
16	3.3	6.8	e3.7	e2.3	e3.4	13	26	18	4.8	1.8	2.6	4.4
17	3.3	6.8	e3.3	e2.1	e3.3	12	24	17	4.9	1.7	2.6	4.4
18	3.3	6.3	e2.5	e2.5	e2.9	11	24	17	6.8	1.7	2.4	4.3
19	3.5	5.6	e2.4	e2.9	e3.2	11	25	19	9.1	1.6	2.4	4.2
20	3.4	5.6	e3.6	e3.2	e3.4	9.9	22	20	11	1.8	2.3	4.1
21	3.4	5.5	e3.2	e2.7	e2.7	11	21	18	7.6	2.2	2.2	3.9
22	3.3	5.4	e2.3	e2.8	e2.9	10	21	14	5.6	2.1	2.2	3.8
23	3.5	5.4	e2.2	e3.1	e3.7	11	21	13	4.9	2.0	2.1	3.7
24	4.8	5.4	e2.5	e2.8	e3.0	14	19	13	4.2	2.0	1.9	3.5
25	4.6	5.2	e2.9	e3.1	e2.1	16	19	12	3.9	1.7	1.9	3.4
26	5.0	4.9	e3.3	e2.9	e2.3	15	21	13	3.8	1.7	2.2	3.3
27	7.1	6.2	e3.7	e3.0	e3.0	14	26	11	3.7	1.6	2.2	3.1
28	6.2	6.0	e3.5	e2.5	e3.1	12	27	12	3.5	1.6	2.4	3.1
29	5.3	5.7	e2.6	e2.4	---	9.1	29	9.9	3.3	1.6	2.9	3.1
30	5.1	4.8	e3.0	e3.2	---	10	31	8.7	3.2	1.8	3.9	3.0
31	4.9	---	e3.3	e2.9	---	12	---	8.3	---	2.4	4.2	---
TOTAL	122.0	205.7	102.5	89.0	75.4	277.5	560.0	501.9	147.1	73.6	76.4	155.5
MEAN	3.94	6.86	3.31	2.87	2.69	8.95	18.7	16.2	4.90	2.37	2.46	5.18
MAX	7.1	23	4.3	3.6	3.7	16	31	29	11	3.6	4.2	11
MIN	3.3	4.4	2.2	2.1	1.6	3.2	9.3	8.3	3.2	1.6	1.9	3.0
AC-FT	242	408	203	177	150	550	1,110	996	292	146	152	308

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2003, BY WATER YEAR (WY)

MEAN	12.4	10.0	6.72	5.60	5.89	12.8	34.9	54.2	22.4	16.2	31.8	20.4
MAX	108	57.5	21.3	13.7	20.5	64.7	184	380	118	105	225	185
(WY)	(1942)	(1942)	(1958)	(1989)	(1987)	(1987)	(1958)	(1941)	(1979)	(1991)	(1991)	(1991)
MIN	0.38	0.49	0.80	1.83	1.49	2.36	3.11	1.96	0.74	1.24	1.08	0.40
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1955)	(1967)	(1967)	(1956)	(1956)	(1934)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1926 - 2003	
ANNUAL TOTAL	1,610.9		2,386.6			
ANNUAL MEAN	4.41		6.54		19.5	
HIGHEST ANNUAL MEAN					80.7	1941
LOWEST ANNUAL MEAN					2.53	1956
HIGHEST DAILY MEAN	41	Jul 23	31	Apr 30	1,580	Sep 10, 1991
LOWEST DAILY MEAN	1.2	Jun 12	1.6	Feb 6	0.20	Sep 21, 1956
ANNUAL SEVEN-DAY MINIMUM	1.2	Jun 12	1.7	Jul 24	0.21	Oct 8, 1956
MAXIMUM PEAK FLOW			34	Apr 30	a7,120	Aug 2, 1966
MAXIMUM PEAK STAGE			1.76	Apr 30	b9.70	Aug 2, 1966
INSTANTANEOUS LOW FLOW					c0.20	Sep 21, 1956
ANNUAL RUNOFF (AC-FT)	3,200		4,730		14,150	
10 PERCENT EXCEEDS	7.1		15		44	
50 PERCENT EXCEEDS	3.6		3.7		7.7	
90 PERCENT EXCEEDS	1.9		2.2		2.7	

a From rating curve extended above 500 ft^3/s, on basis of slope-area measurements at gage heights 5.25, 8.25, and 9.7 ft.
b From floodmarks.
c Also occurred Oct. 6-9, 1922, Sept. 21 and Oct. 9-14, 1956, and Dec. 13, 1964.
e Estimated

08382500 GALLINAS RIVER NEAR COLONIAS, NM

LOCATION.--Lat 35°10'55", long 104°53'59", Guadalupe County, Hydrologic Unit 13060001, in Anton Chico Grant 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 mi^2, 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 fair except for those estimated, 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. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about June 1, 1937, reached a stage of about 27.2 ft; discharge determined as 26,700 ft^3/s by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29 and 30, 1904.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	2.8	1.5	1.4	0.69	1.0	0.31	0.00	0.00	0.00	0.00	1.1
2	e0.00	2.7	1.3	1.2	0.76	0.84	0.23	0.00	0.00	0.00	0.00	0.74
3	e0.00	2.2	1.5	1.1	0.56	0.76	0.08	0.00	0.00	0.00	0.00	0.43
4	0.00	2.0	1.8	1.1	0.63	0.73	0.01	0.00	0.00	0.00	0.00	0.14
5	0.00	2.1	2.2	1.4	0.52	0.61	0.00	0.00	0.00	0.00	0.00	0.03
6	0.00	2.4	2.2	1.2	0.47	0.53	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	2.5	2.5	1.4	0.48	0.43	0.00	0.00	0.00	0.00	0.00	e0.05
8	0.00	2.1	2.7	1.3	0.78	0.44	0.00	0.00	0.00	0.00	0.00	e22
9	0.00	2.0	2.2	1.2	0.80	0.35	0.00	0.00	0.00	0.00	0.00	8.1
10	0.00	1.6	2.0	0.93	0.59	0.33	0.00	0.00	0.00	0.00	0.00	4.6
11	0.00	1.4	1.8	0.88	0.93	0.25	0.00	0.00	0.00	0.00	0.00	2.4
12	0.00	1.3	1.7	0.87	1.0	0.20	0.00	0.00	0.00	0.00	0.00	1.4
13	0.00	1.00	1.6	1.00	1.1	0.15	0.00	0.00	0.00	0.00	0.00	0.99
14	0.00	0.85	1.8	1.0	1.2	0.07	0.00	0.00	0.00	0.00	0.00	0.53
15	0.00	0.72	1.9	1.00	2.3	0.04	0.00	0.00	0.00	0.00	0.00	0.28
16	0.00	0.50	1.9	0.77	2.3	0.01	0.00	0.00	0.00	0.00	0.00	0.07
17	0.00	0.38	1.9	0.82	2.2	0.00	0.00	0.00	0.00	0.00	0.00	0.01
18	0.00	0.21	1.7	0.84	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.08	1.6	0.85	3.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.02	1.3	0.84	2.4	0.29	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	1.2	0.87	1.8	0.21	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.28	1.1	0.77	1.7	0.06	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	1.6	1.3	0.74	1.5	0.01	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	1.6	1.7	0.78	0.91	0.85	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	1.4	1.7	0.93	1.0	0.97	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	1.3	1.2	0.91	1.2	1.2	0.00	0.00	0.00	0.00	0.00	0.00
27	2.9	1.3	0.95	0.93	1.1	0.92	0.00	0.00	0.00	0.00	0.00	0.00
28	12	1.3	0.86	0.85	1.1	0.47	0.00	0.00	0.00	0.00	127	0.00
29	11	1.5	0.82	0.71	---	0.39	0.00	0.00	0.00	0.00	12	0.00
30	5.9	1.5	1.3	0.73	---	0.31	0.00	0.00	0.00	0.00	29	0.00
31	3.7	---	1.5	0.70	---	0.34	---	0.00	---	0.00	2.9	---
TOTAL	35.50	40.64	50.73	30.02	35.32	12.76	0.63	0.00	0.00	0.00	170.90	42.87
MEAN	1.15	1.35	1.64	0.97	1.26	0.41	0.021	0.000	0.000	0.000	5.51	1.43
MAX	12	2.8	2.7	1.4	3.2	1.2	0.31	0.00	0.00	0.00	127	22
MIN	0.00	0.00	0.82	0.70	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	70	81	101	60	70	25	1.2	0.00	0.00	0.00	339	85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	12.7	6.13	3.93	3.39	4.40	5.94	15.7	17.2	17.5	38.5	58.7	22.2
MAX	166	50.0	18.3	18.9	58.9	48.2	269	261	91.4	222	268	178
(WY)	(1958)	(1987)	(1987)	(1992)	(1987)	(1958)	(1958)	(1973)	(1986)	(1988)	(1991)	(1972)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000
(WY)	(1953)	(1952)	(1952)	(1951)	(1951)	(1951)	(1951)	(1952)	(1951)	(1964)	(2001)	(1951)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	971.82		419.37			
ANNUAL MEAN	2.66		1.15		17.5	
HIGHEST ANNUAL MEAN					66.6	1958
LOWEST ANNUAL MEAN					0.85	1978
HIGHEST DAILY MEAN	150	Jul 5	127	Aug 28	2,640	Aug 11, 1981
LOWEST DAILY MEAN	0.00	Apr 11	0.00	Oct 1	0.00	Jan 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 11	0.00	Oct 1	0.00	Jan 1, 1951
MAXIMUM PEAK FLOW			689	Aug 28	a13,700	Jul 11, 1982
MAXIMUM PEAK STAGE			5.79	Aug 28	19.67	Jul 11, 1982
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Jan 1, 1951
ANNUAL RUNOFF (AC-FT)	1,930		832		12,650	
10 PERCENT EXCEEDS	3.5		1.9		26	
50 PERCENT EXCEEDS	0.54		0.00		1.3	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 1,900 ft^3/s, by slope-area measurements at gage heights 8.64 ft, 12.74 ft, 16.65 ft, and 27.20 ft.
e Estimated

08382600 PECOS RIVER ABOVE CANON DEL UTA NEAR COLONIAS, NM

LOCATION.--Lat 35°05'29", long 104°48'00", in sec.20, 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 mi^2, approximately.

PERIOD OF RECORD.--January 1976 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 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. No flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57	e100	0.00	0.00	29
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67	e83	0.00	0.00	0.02
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e70	e68	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e74	e63	0.00	0.00	78
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e84	e60	0.00	0.00	748
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75	e56	0.00	0.00	197
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56	e40	0.00	0.00	71
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61	e20	0.00	0.00	48
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27	e9.0	0.00	0.00	40
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	e0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41	0.00	0.00	5.8	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99	3.3	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117	542	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137	161	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	143	116	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128	81	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120	0.59	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	131	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	654	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	286	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	219	0.00	0.00	54	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	205	0.00	0.00	39	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	175	0.00	0.00	61	0.00
31	0.00	---	0.00	0.00	---	0.00	---	e120	---	0.00	3.5	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,448.3	1,402.89	0.00	163.30	1,211.02
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	111	46.8	0.000	5.27	40.4
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	654	542	0.00	61	748
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,840	2,780	0.00	324	2,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	24.0	24.5	7.50	4.02	5.31	35.8	95.7	302	253	98.6	164	78.5
MAX	139	160	42.0	19.0	73.4	192	382	736	1,057	418	1,062	660
(WY)	(1986)	(1999)	(1987)	(1987)	(1987)	(1985)	(1987)	(1979)	(1995)	(1991)	(1991)	(1991)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.080	0.000	0.74	0.000
(WY)	(1978)	(1977)	(1977)	(1976)	(1976)	(1976)	(1976)	(2002)	(2002)	(2003)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	1,529.01		6,225.51			
ANNUAL MEAN	4.19		17.1		93.8	
HIGHEST ANNUAL MEAN					245	1991
LOWEST ANNUAL MEAN					4.27	2002
HIGHEST DAILY MEAN	584	Jul 30	748	Sep 5	2,960	Aug 11, 1981
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jan 1, 1976
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jan 1, 1976
MAXIMUM PEAK FLOW			2,050	May 26	a12,400	Jun 20, 1982
MAXIMUM PEAK STAGE			7.82	May 26	11.53	Jul 11, 1996
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Jan 1, 1976
ANNUAL RUNOFF (AC-FT)	3,030		12,350		67,930	
10 PERCENT EXCEEDS	0.07		56		295	
50 PERCENT EXCEEDS	0.00		0.00		6.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 1,200 ft^3/s, on basis of step-backwater analysis of channel.
e Estimated

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM

LOCATION.--Lat 35°03'35", long 104°45'41", in NE ¼ SE ¼ SE ¼ sec.25, T.10 N., R.20 E., Guadalupe County, Hydrologic Unit 13060001, at south boundary of 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 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to current year. Prior to October 1979, published as "above Los Esteros Reservoir."

REVISED RECORD.--WDR NM-99-1: 1999 (M) (mean daily values).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,760 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records fair except for those estimated, 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	9.5	6.4	6.1	3.9	5.2	3.0	125	166	e3.8	2.7	4.6
2	6.2	9.0	6.1	6.4	3.8	5.5	3.5	124	160	e3.7	2.4	e3.0
3	6.8	8.5	6.6	6.1	3.8	5.1	3.4	106	134	e3.8	2.3	e2.8
4	6.9	9.4	5.8	5.9	4.0	4.7	3.3	101	98	e3.9	2.3	58
5	7.3	9.0	5.5	5.8	4.2	5.0	3.6	102	101	e4.0	3.0	1,100
6	7.2	9.0	5.4	5.5	4.6	4.9	3.1	86	101	e3.9	3.7	189
7	7.5	8.8	5.3	5.5	5.5	4.9	3.6	58	90	e3.8	3.7	23
8	7.5	8.1	5.4	5.3	5.2	4.6	3.5	58	74	e3.8	3.4	10
9	7.6	8.0	5.5	5.0	5.0	4.3	3.4	30	56	e3.7	3.5	14
10	7.7	8.1	5.2	5.2	5.1	4.5	3.5	26	27	e3.9	3.6	8.0
11	7.9	8.3	5.2	5.0	5.0	4.7	3.1	27	e9.0	e4.1	4.0	7.2
12	8.1	8.3	5.4	4.8	4.8	4.3	3.1	35	e10	e4.4	6.2	7.7
13	8.0	8.2	5.1	4.6	4.5	4.2	2.9	30	8.6	e4.2	5.8	7.3
14	8.0	8.0	5.3	4.6	4.9	4.1	3.0	28	8.6	e4.1	3.0	7.0
15	8.1	7.8	5.0	4.4	5.7	4.2	3.1	33	8.5	e4.0	3.3	7.3
16	8.3	7.5	5.0	4.7	5.0	4.5	2.9	51	9.2	e4.2	2.8	7.4
17	8.5	7.3	5.5	5.4	4.4	4.2	3.3	96	9.1	e7.5	2.8	7.0
18	8.1	7.5	5.7	5.5	4.4	4.7	4.4	125	9.0	e6.5	2.8	7.6
19	8.5	7.4	6.0	5.4	4.5	5.3	13	143	9.2	e4.1	3.4	7.3
20	8.5	7.5	6.0	5.0	5.5	4.5	25	175	639	e3.8	2.2	7.6
21	8.2	7.3	5.7	4.8	4.9	4.8	29	214	119	e4.2	e2.1	7.9
22	8.2	7.1	5.5	4.9	5.0	4.3	22	205	52	e4.6	2.4	7.9
23	8.5	7.1	6.3	5.2	4.9	4.0	17	167	e16	6.9	2.7	7.5
24	8.5	7.2	5.9	5.2	5.4	4.0	16	169	e5.0	4.1	2.8	7.4
25	8.5	7.5	5.9	5.0	5.5	4.0	24	214	e3.7	4.2	2.9	7.0
26	9.6	7.5	5.7	4.7	5.5	3.9	24	804	e3.6	3.5	2.8	6.7
27	9.1	7.1	5.5	4.5	5.3	3.6	19	276	e3.7	3.4	e2.3	6.6
28	8.5	6.9	5.5	4.4	5.1	3.9	26	227	e3.6	3.2	44	6.6
29	8.4	6.5	5.5	4.4	---	4.0	44	220	e3.7	2.9	18	6.6
30	8.5	6.5	5.9	3.9	---	4.1	65	205	e3.7	3.7	29	6.8
31	8.7	---	6.0	3.8	---	3.6	---	183	---	3.2	5.7	---
TOTAL	247.6	235.9	174.8	157.0	135.4	137.6	383.7	4,443	1,941.2	129.1	181.6	1,556.8
MEAN	7.99	7.86	5.64	5.06	4.84	4.44	12.8	143	64.7	4.16	5.86	51.9
MAX	9.6	9.5	6.6	6.4	5.7	5.5	65	804	639	7.5	44	1,100
MIN	6.2	6.5	5.0	3.8	3.8	3.6	2.9	26	3.6	2.9	2.1	2.8
AC-FT	491	468	347	311	269	273	761	8,810	3,850	256	360	3,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	46.1	45.4	25.2	22.2	23.5	52.7	111	322	272	129	219	109
MAX	147	237	68.7	46.1	106	207	415	768	945	440	1,077	683
(WY)	(1986)	(1999)	(1987)	(1987)	(1987)	(1985)	(1987)	(1985)	(1979)	(1991)	(1991)	(1991)
MIN	6.50	7.86	5.64	5.06	4.84	4.44	4.99	7.93	8.74	4.16	5.86	6.12
(WY)	(1979)	(2003)	(2003)	(2003)	(2003)	(2003)	(1978)	(1981)	(2002)	(2003)	(2003)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	6,129.9		9,723.7			
ANNUAL MEAN	16.8		26.6		118	
HIGHEST ANNUAL MEAN					265	1991
LOWEST ANNUAL MEAN					19.1	2002
HIGHEST DAILY MEAN	754	Jul 30	1,100	Sep 5	4,310	Jul 10, 1996
LOWEST DAILY MEAN	5.0	Dec 15	2.1	Aug 21	2.1	Aug 21, 2003
ANNUAL SEVEN-DAY MINIMUM	5.2	Dec 10	2.6	Aug 20	2.6	Aug 20, 2003
MAXIMUM PEAK FLOW			2,620	Sep 5	a16,000	Jul 11, 1996
MAXIMUM PEAK STAGE			8.93	Sep 5	19.06	Jul 11, 1996
INSTANTANEOUS LOW FLOW			0.90	Aug 2	0.90	Aug 2, 2003
ANNUAL RUNOFF (AC-FT)	12,160		19,290		85,360	
10 PERCENT EXCEEDS	19		58		332	
50 PERCENT EXCEEDS	9.4		5.7		30	
90 PERCENT EXCEEDS	6.3		3.4		8.7	

a From rating curve extended above 1,500 ft^3/s, on basis of slope-area measurement of peak flow.
e Estimated

08382650 PECOS RIVER ABOVE SANTA ROSA LAKE, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1981-97, 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
APR													
22...	1350	22	160	160	636	8.0	106	8.1	550	24.0	20.0	280	95.4
MAY													
28...	1550	230	750	1,000	647	6.2	92	7.8	222	31.0	27.0	110	38.2
JUN													
25...	1430	E3.5	22	18	642	6.2	95	8.1	1,290	35.0	28.0	720	244
AUG													
05...	1430	2.7	3.7	1.5	645	6.5	105	8.0	1,510	39.0	31.0	930	318

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
APR													
22...	9.55	1.25	0.1	4.96	110	134	3.35	0.23	8.1	166	354	--	--
MAY													
28...	3.53	1.45	0.1	2.52	76	93	1.44	<0.2	7.3	26.3	126	--	--
JUN													
25...	26.1	2.03	0.2	11.9	147	179	6.56	0.3	12.7	585	977	<0.20	<0.20
AUG													
05...	32.2	1.72	0.2	13.1	135	164	7.03	0.4	13.5	753	1,220	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
APR													
22...	--	--	--	4	<0.30	<2	99	<0.06	20	<0.04	<0.8	0.30	1.3
MAY													
28...	--	--	--	--	--	--	--	--	20	--	--	--	--
JUN													
25...	0.04	<0.02	0.03	3	<0.30	<2	200	<0.06	40	<0.04	<0.8	0.80	5.1
AUG													
05...	--	--	--	--	--	--	--	--	70	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
APR													
22...	<10	<0.08	35.4	<0.02	0.9	3.59	<3	<3	<0.20	2	1.15	98	146
MAY													
28...	E5	--	--	0.03	--	--	--	<3	--	--	--	92	1,010
JUN													
25...	11	0.09	291	<0.02	1.8	7.90	<3	<3	<0.20	2	2.00	100	54
AUG													
05...	16	--	--	<0.02	--	--	--	<3	--	--	--	94	25

Remark codes used in this table:
< -- Less than
E -- Estimated value

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 mi^2, approximately.

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

GAGE.--Water-stage recorder with satellite telemetry. Datum 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, 439,900 acre-ft, from capacity table effective Oct. 1997, between elevations 4,630.0 ft, invert of outlet structure, and 4,797.0 ft, crest of spillway. Capacity by original survey was 447,100 acre-ft. No dead storage. Lake was created primarily for flood, irrigation, and sediment control. U.S. Army Corps of Engineers satellite telemetry 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, 21,480 acre-ft, June 10, elevation, 4,712.99 ft; minimum, 2,970 acre-ft, June 26 and 27, elevation, 4,684.02 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,010	12,230	12,390	12,680	12,900	13,060	13,090	13,510	20,190	3,010	3,030	3,150
2	12,020	12,240	12,390	12,690	12,890	13,060	13,100	13,690	20,430	3,010	3,030	3,150
3	12,030	12,240	12,450	12,700	12,880	13,060	13,080	13,870	20,630	3,020	3,030	3,150
4	12,030	12,260	12,480	12,700	12,890	13,060	13,070	14,010	20,830	3,010	3,020	3,150
5	12,040	12,260	12,480	12,730	12,890	13,060	13,060	14,170	20,950	3,020	3,020	3,940
6	12,030	12,260	12,480	12,720	12,890	13,050	13,040	14,320	21,120	3,020	3,020	4,480
7	12,040	12,270	12,500	12,730	12,910	13,040	13,020	14,440	21,240	3,020	3,020	4,580
8	12,050	12,270	12,500	12,730	12,920	13,050	13,020	14,530	21,340	3,040	3,020	4,570
9	12,050	12,280	12,520	12,740	12,920	13,040	13,020	14,600	21,420	3,030	3,010	4,600
10	12,040	12,280	12,520	12,770	12,910	13,050	13,020	14,620	21,480	3,030	3,010	4,610
11	12,030	12,280	12,520	12,780	12,920	13,060	13,020	14,680	21,460	3,040	3,010	4,610
12	12,040	12,280	12,530	12,780	12,930	13,060	13,020	14,760	21,440	3,050	3,010	4,350
13	12,040	12,300	12,550	12,780	12,930	13,060	13,010	14,820	21,410	3,050	3,010	3,720
14	12,050	12,310	12,560	12,790	13,010	13,060	13,000	14,860	21,400	3,050	3,010	3,720
15	12,040	12,290	12,560	12,790	13,030	13,060	12,980	14,880	21,400	3,050	3,010	3,720
16	12,040	12,290	12,550	12,810	13,030	13,060	12,980	14,940	21,400	3,040	3,010	3,720
17	12,050	12,290	12,560	12,810	13,020	13,050	12,960	15,080	21,400	3,040	3,010	3,710
18	12,070	12,290	12,560	12,820	13,020	13,080	12,960	15,260	20,720	3,040	3,010	3,720
19	12,100	12,300	12,560	12,820	13,030	13,100	12,970	15,500	18,200	3,040	3,010	3,720
20	12,110	12,330	12,570	12,820	13,050	13,110	13,020	15,730	15,900	3,040	3,010	3,720
21	12,120	12,320	12,570	12,830	13,040	13,130	13,060	16,060	13,280	3,040	3,010	3,730
22	12,120	12,330	12,590	12,850	13,040	13,140	13,110	16,390	10,500	3,040	3,010	3,730
23	12,120	12,340	12,610	12,850	13,040	13,120	13,100	16,660	7,580	3,050	3,010	3,730
24	12,150	12,340	12,620	12,850	13,050	13,140	13,100	16,900	5,160	3,040	3,010	3,740
25	12,140	12,360	12,630	12,860	13,050	13,140	13,150	17,340	3,510	3,040	3,010	3,730
26	12,200	12,350	12,640	12,870	13,050	13,120	13,200	18,270	2,970	3,030	3,010	3,730
27	12,210	12,360	12,650	12,870	13,060	13,120	13,200	18,680	2,970	3,030	3,000	3,730
28	12,190	12,360	12,650	12,870	13,050	13,110	13,210	19,020	2,980	3,030	3,020	3,730
29	12,200	12,370	12,660	12,880	---	13,100	13,300	19,350	2,990	3,030	3,100	3,730
30	12,200	12,360	12,660	12,890	---	13,110	13,350	19,680	3,000	3,040	3,120	3,730
31	12,210	---	12,680	12,890	---	13,100	---	19,940	---	3,040	3,150	---
MAX	12,210	12,370	12,680	12,890	13,060	13,140	13,350	19,940	21,480	3,050	3,150	4,610
MIN	12,010	12,230	12,390	12,680	12,880	13,040	12,960	13,510	2,970	3,010	3,000	3,150
(+)	4,703.65	4,703.84	4,704.23	4,704.49	4,704.68	4,704.75	4,705.05	4,711.71	4,684.18	4,684.32	4,684.79	4,687.04
(++)	+290	+150	+320	+210	+160	+50	+250	+6,590	-16,940	+40	+110	+580

CAL YR 2002 MAX 17,160 MIN 3,260 (++) -3,300
WTR YR 2003 MAX 21,480 MIN 2,970 (++) -8,190

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

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 mi^2, approximately.

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

GAGE.--Water-stage recorder with satellite telemetry. 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 those below 1.0 ft^3/s, which are fair. 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 temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00
2	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
3	0.02	0.02	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
4	0.01	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
5	0.01	0.03	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
6	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
7	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
8	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
9	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
10	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
11	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
12	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	143
13	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	326
14	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.23
15	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.48
16	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.05
17	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01
18	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	330	0.00	0.00	0.00
19	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.00	1,230	0.00	0.00	0.00
20	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.00	1,470	0.00	0.00	0.00
21	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.00	1,360	0.08	0.00	0.00
22	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.00	1,320	0.10	0.00	0.00
23	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.00	1,280	0.02	0.00	0.00
24	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.00	1,110	0.01	0.00	0.00
25	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.04	754	0.00	0.00	0.00
26	0.06	0.01	0.02	0.01	1.6	0.01	0.01	0.01	238	0.00	0.00	0.00
27	0.08	0.01	0.01	0.01	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00
28	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00
29	0.01	0.01	0.01	0.01	---	0.01	0.01	0.00	0.01	0.00	0.00	0.00
30	0.01	0.01	0.01	0.01	---	0.00	0.01	0.00	0.01	0.00	0.00	0.00
31	0.01	---	0.01	0.01	---	0.01	---	0.00	---	0.00	0.00	---
TOTAL	0.60	0.60	0.42	0.35	1.91	0.31	0.30	0.23	9,092.04	0.22	0.00	469.77
MEAN	0.019	0.020	0.014	0.011	0.068	0.010	0.010	0.007	303	0.007	0.000	15.7
MAX	0.10	0.03	0.04	0.02	1.6	0.02	0.01	0.04	1,470	0.10	0.00	326
MIN	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
AC-FT	1.2	1.2	0.8	0.7	3.8	0.6	0.6	0.5	18,030	0.4	0.00	932

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2003, BY WATER YEAR (WY)

MEAN	11.9	9.04	7.67	14.5	32.2	54.5	82.2	257	261	192	205	125
MAX	112	145	59.0	188	249	277	655	672	1,026	561	619	649
(WY)	(1993)	(1987)	(1987)	(1996)	(1995)	(1998)	(1989)	(1989)	(1995)	(1983)	(1994)	(1988)
MIN	0.018	0.020	0.013	0.011	0.010	0.010	0.010	0.007	0.012	0.007	0.000	0.014
(WY)	(1990)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)	(2003)	(2001)	(2003)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	8,510.54		9,566.75			
ANNUAL MEAN	23.3		26.2		107	
HIGHEST ANNUAL MEAN					215	1995
LOWEST ANNUAL MEAN					23.3	2002
HIGHEST DAILY MEAN	1,160	Mar 6	1,470	Jun 20	2,100	Jun 12, 1997
LOWEST DAILY MEAN	0.00	May 29	0.00	Mar 30	0.00	Jul 31, 1982
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 23	0.00	May 27	0.00	Mar 5, 1983
MAXIMUM PEAK FLOW			1,720	Jun 19	2,100	Jun 12, 1997
MAXIMUM PEAK STAGE			7.03	Jun 19	7.92	Jun 12, 1997
ANNUAL RUNOFF (AC-FT)	16,880		18,980		77,770	
10 PERCENT EXCEEDS	3.1		0.02		449	
50 PERCENT EXCEEDS	0.01		0.01		0.37	
90 PERCENT EXCEEDS	0.00		0.00		0.01	

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM

LOCATION.--Lat 34°43'48", long 104°31'28", in NE ¼ SE ¼ NW ¼ sec.20, T.6 N., R.23 E., Guadalupe County, Hydrologic Unit 13060001, on left bank 9.0 mi southeast of Puerto de Luna, 17.5 mi upstream from Sumner Dam, and at mile 719.5.

DRAINAGE AREA.--3,970 mi^2, approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to current year.

REVISED RECORDS.--WSP 1512: 1939.

GAGE.--Water-stage recorder with satellite telemetry 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 those greater than 1,000 ft^3/s, which are fair. Flow regulated by Santa Rosa Lake (station 08382810) 37.7 mi upstream since Apr. 1980. Diversions for irrigation of about 10,280 acres, 1970 determination, upstream from station. Spring discharge from Blue Hole and Agua Negra upstream from station contributes a substantial inflow. Discharge represents inflow to Lake Sumner. Several observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 ft^3/s, and peak inflow to Lake Sumner was about 75,000 ft^3/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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	89	85	81	82	79	74	67	72	84	62	73
2	95	85	86	80	83	80	72	66	70	75	63	71
3	98	85	98	81	83	79	70	65	67	71	62	69
4	83	86	98	81	84	78	69	65	68	66	62	70
5	83	85	90	81	84	77	68	66	70	64	78	70
6	81	83	88	78	84	78	67	67	75	68	73	71
7	79	83	87	78	84	78	66	68	71	70	59	69
8	84	82	87	78	84	78	69	67	70	68	60	69
9	85	82	87	78	84	76	70	68	71	67	60	70
10	80	83	85	78	81	76	68	67	71	66	227	72
11	76	83	85	79	82	76	65	68	71	65	85	73
12	78	83	86	78	82	76	66	68	69	77	71	73
13	80	85	86	77	83	76	66	70	70	68	67	221
14	82	85	86	77	82	75	65	70	72	67	65	327
15	81	85	86	78	110	76	65	67	73	69	63	89
16	81	85	84	77	92	77	68	68	72	70	62	73
17	81	85	85	78	86	77	70	67	78	69	62	69
18	83	85	85	78	84	76	66	67	75	67	63	67
19	84	85	84	79	83	83	65	67	567	65	62	67
20	85	86	83	79	83	89	65	68	1,530	64	163	496
21	83	85	84	78	84	83	65	70	1,430	68	69	138
22	81	86	84	79	82	80	66	69	1,440	64	68	69
23	81	84	89	80	80	77	65	71	1,500	65	66	68
24	86	83	86	81	80	76	67	70	1,530	77	67	66
25	88	83	84	82	97	77	66	83	1,180	67	67	64
26	137	84	85	82	82	77	68	190	877	65	68	64
27	115	85	83	82	82	75	68	80	262	63	68	64
28	96	84	84	81	81	75	69	74	140	62	71	63
29	92	84	83	81	---	75	68	71	113	62	74	62
30	89	84	82	81	---	75	68	70	104	69	80	62
31	89	---	81	81	---	75	---	79	---	73	75	---
TOTAL	2,692	2,532	2,666	2,462	2,368	2,405	2,024	2,273	11,958	2,115	2,342	2,979
MEAN	86.8	84.4	86.0	79.4	84.6	77.6	67.5	73.3	399	68.2	75.5	99.3
MAX	137	89	98	82	110	89	74	190	1,530	84	227	496
MIN	76	82	81	77	80	75	65	65	67	62	59	62
AC-FT	5,340	5,020	5,290	4,880	4,700	4,770	4,010	4,510	23,720	4,200	4,650	5,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2003, BY WATER YEAR (WY)

MEAN	104	93.8	94.5	98.8	113	138	159	328	356	299	315	247
MAX	225	232	147	252	306	373	685	744	1,211	725	706	948
(WY)	(1986)	(1987)	(1987)	(1996)	(1994)	(1998)	(1989)	(1989)	(1995)	(1983)	(1994)	(1988)
MIN	73.1	76.3	73.5	79.4	76.7	73.5	67.5	64.0	66.1	68.2	65.2	66.4
(WY)	(1988)	(2000)	(1991)	(2003)	(1984)	(1989)	(2003)	(1982)	(1991)	(2003)	(2001)	(1990)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	37,774		38,816			
ANNUAL MEAN	103		106		a196	
HIGHEST ANNUAL MEAN					318	1995
LOWEST ANNUAL MEAN					103	2002
HIGHEST DAILY MEAN	1,390	Mar 8	1,530	Jun 20	3,510	Oct 17, 1985
LOWEST DAILY MEAN	58	Jun 11	59	Aug 7	39	Aug 4, 1987
ANNUAL SEVEN-DAY MINIMUM	61	Aug 13	63	Aug 13	43	Jul 29, 1987
MAXIMUM PEAK FLOW			2,970	Sep 20	b48,600	Sep 1, 1942
MAXIMUM PEAK STAGE			5.14	Sep 20	17.00	Sep 1, 1942
INSTANTANEOUS LOW FLOW			55	Aug 7	11	Jan 31, 1951
ANNUAL RUNOFF (AC-FT)	74,920		76,990		141,900	
10 PERCENT EXCEEDS	99		89		546	
50 PERCENT EXCEEDS	82		78		85	
90 PERCENT EXCEEDS	65		65		67	

a Average discharge for 41 years (water years 1939-79), 209 ft^3/s, 151,400 acre-ft/yr, prior to completion of Santa Rosa Dam.
b From rating curve extended above 7,400 ft^3/s, on basis of flow "at Santa Rosa."

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC													
10...	1330	87	650	10.7	107	8.0	2,900	14.5	8.0	1,700	572	68.8	2.08
MAR													
06...	1410	79	645	9.9	115	8.0	2,890	17.0	14.0	1,800	599	71.0	1.90
APR													
23...	1450	66	644	7.9	104	7.9	3,030	18.0	20.0	1,800	596	74.2	2.79
AUG													
06...	0900	63	655	6.7	92	7.9	2,800	27.0	23.0	1,600	530	66.2	2.26

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
DEC													
10...	1	99.7	123	149	138	0.73	12.8	1,540	2,510	--	--	--	--
MAR													
06...	1	99.0	122	146	138	0.69	12.1	1,540	2,530	0.20	0.20	<0.01	<0.01
APR													
23...	1	108	113	138	138	0.68	12.6	1,610	2,610	<0.20	<0.20	0.01	0.02
AUG													
06...	1	100	89	109	135	0.6	13.8	1,450	2,350	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
DEC													
10...	--	--	--	--	--	--	--	--	--	--	110	--	--
MAR													
06...	<0.02	<0.010	<0.01	<0.02	<0.02	<3	<0.60	<2	16	<0.12	100	<0.07	E.8
APR													
23...	<0.02	<0.010	<0.01	<0.02	0.03	<3	<0.60	E1	19	<0.12	120	<0.07	<0.8
AUG													
06...	--	--	--	--	--	--	--	--	--	--	120	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
DEC													
10...	--	--	<30	--	--	<0.02	--	--	--	<3	--	--	--
MAR													
06...	1.12	3.4	<30	E.10	9.7	<0.02	3.2	26.6	<3	<3	<0.40	2	2.06
APR													
23...	1.11	5.1	<30	<0.16	9.6	<0.02	2.9	20.0	<3	<3	<0.40	4	1.99
AUG													
06...	--	--	<24	--	--	<0.02	--	--	--	<3	--	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
DEC		
10...	92	21
MAR		
06...	96	35
APR		
23...	96	96
AUG		
06...	99	240

Remark codes used in this table:
< -- Less than
E -- Estimated value

08384000 LAKE SUMNER NEAR FORT SUMNER, NM

LOCATION.--Lat 34°36'30", long 104°23'04", in SE ¼ SW ¼ 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 mi^2, 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 with satellite telemetry. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Apr. 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 Aug. 1937. Capacity, 128,657 acre-ft, from capacity table dated Nov. 2001 (1988 NGVD) between elevation 4,201.89 ft and elevation 4,283.89 ft, top of flood pool, sill of outlet gate, and elevation 4,275.0 ft, normal operating level. Capacity by original survey was 132,200 acre-ft. Dead storage 2,500 acre-ft. Reservoir is used to store water for irrigation.

COOPERATION.--Records provided by 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, 14,720 acre-ft, Feb. 17, elevation, 4,248.89 ft; minimum, 1,620 acre-ft, Sept. 13, elevation 4,228.54 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,880	4,180	7,100	10,370	13,170	14,440	13,600	12,520	10,400	3,740	2,540	2,000
2	3,830	4,340	7,200	10,460	13,260	14,430	13,500	12,500	10,380	3,780	2,500	1,960
3	3,790	4,490	7,310	10,540	13,360	14,400	13,450	12,450	10,290	3,770	2,450	1,920
4	3,770	4,630	7,500	10,650	13,420	14,360	13,400	12,380	10,200	3,730	2,400	1,880
5	3,730	4,770	7,630	10,730	13,590	14,340	13,350	12,340	10,010	3,690	2,340	1,850
6	3,680	4,910	7,760	10,830	13,690	14,310	13,270	12,240	9,970	3,640	2,270	1,820
7	3,630	5,040	7,650	10,900	13,750	14,270	13,220	12,180	9,890	3,590	2,260	1,820
8	3,590	5,150	7,960	11,010	13,840	14,240	13,160	12,090	9,750	3,540	2,190	1,790
9	3,560	5,230	8,020	11,090	13,970	14,220	13,170	11,950	9,660	3,490	2,130	1,770
10	3,540	5,290	8,170	11,170	14,060	14,190	13,160	11,850	9,530	3,440	2,090	1,730
11	3,510	5,360	8,280	11,240	14,140	14,150	13,160	11,750	9,420	3,380	2,210	1,670
12	3,460	5,430	8,400	11,340	14,230	14,130	13,110	11,660	9,290	3,330	2,270	1,640
13	3,420	5,500	8,510	11,430	14,310	14,090	13,020	11,580	9,120	3,290	2,250	1,620
14	3,380	5,580	8,620	11,530	14,420	14,050	13,010	11,490	8,990	3,240	2,230	1,650
15	3,360	5,650	8,760	11,610	14,550	14,000	12,980	11,420	8,880	3,190	2,210	2,110
16	3,320	5,740	8,850	11,700	14,610	14,000	12,950	11,310	8,770	3,150	2,190	2,170
17	3,290	5,830	8,960	11,790	14,720	13,960	12,900	11,220	8,690	3,110	2,170	2,160
18	3,260	5,890	9,080	11,900	14,710	13,910	12,810	11,140	8,680	3,070	2,160	2,140
19	3,230	5,970	9,150	12,000	14,700	13,880	12,800	11,050	7,570	3,040	2,140	2,120
20	3,210	6,070	9,240	12,080	14,660	13,880	12,780	10,970	5,580	2,990	2,120	2,110
21	3,190	6,180	9,340	12,170	14,660	13,880	12,750	10,830	5,510	2,890	2,210	2,580
22	3,160	6,280	9,410	12,260	14,640	13,880	12,710	10,760	5,580	2,910	2,190	3,070
23	3,140	6,370	9,510	12,340	14,670	13,870	12,740	10,680	5,670	2,860	2,120	3,050
24	3,120	6,460	9,640	12,440	14,560	13,830	12,750	10,610	5,740	2,810	2,160	3,040
25	3,120	6,460	9,740	12,530	14,510	13,790	12,710	10,560	5,730	2,780	2,140	2,990
26	3,100	6,640	9,840	12,630	14,500	13,770	12,670	10,490	5,360	2,740	2,110	2,960
27	3,380	6,720	9,900	12,640	14,500	13,740	12,620	10,660	4,890	2,700	2,030	2,940
28	3,530	6,820	10,010	12,830	14,480	13,710	12,590	10,600	4,270	2,650	2,070	2,900
29	3,720	6,910	10,130	12,920	---	13,640	12,590	10,570	3,870	2,620	2,060	2,860
30	3,890	7,010	10,240	13,010	---	13,610	12,570	10,500	3,590	2,580	2,050	2,830
31	4,060	---	10,290	13,100	---	13,590	---	10,420	---	2,540	2,030	---
MAX	4,060	7,010	10,290	13,100	14,720	14,440	13,600	12,520	10,400	3,780	2,540	3,070
MIN	3,100	4,180	7,100	10,370	13,170	13,590	12,570	10,420	3,590	2,540	2,030	1,620
(+)	4,235.43	4,240.90	4,245.06	4,247.63	4,248.71	4,248.02	4,247.19	4,245.19	4,234.36	4,231.62	4,230.03	4,232.45
(++)	+120	+2,950	+3,280	+2,810	+1,380	-890	-1,020	-2,150	-6,830	-1,050	-510	+800

CAL YR 2002 MAX 14,230 MIN e0.00 (++) +1,820
WTR YR 2003 MAX 14,720 MIN 1,620 (++) -1,110

e Estimated

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

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 mi^2, 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 with satellite telemetry 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 (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 those estimated, which are fair. 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 and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	0.12	29	29	24	84	87	67	93	85	71	84
2	95	0.12	29	28	24	84	87	67	96	85	76	84
3	96	0.07	29	28	24	84	88	68	98	85	81	82
4	95	3.2	29	28	24	84	88	67	109	85	82	75
5	96	1.3	30	28	24	84	89	85	114	85	82	70
6	95	10	29	28	24	84	90	93	114	85	81	67
7	92	12	29	28	24	84	91	94	114	85	81	70
8	89	33	29	28	24	84	85	94	114	84	81	64
9	89	38	23	28	24	84	82	94	114	84	78	81
10	89	38	18	28	24	84	83	94	113	84	77	93
11	89	38	19	28	24	84	84	94	117	84	75	78
12	89	38	19	28	24	84	86	94	127	84	72	73
13	89	38	19	25	24	84	87	94	119	83	71	75
14	89	38	19	23	24	84	88	94	111	79	71	e69
15	90	38	18	22	24	84	90	94	111	75	69	e69
16	90	38	18	22	52	84	91	94	101	74	67	e69
17	90	38	18	22	84	84	92	94	94	74	67	e69
18	90	33	18	22	84	84	93	94	478	75	67	69
19	90	29	18	22	84	84	94	94	1,390	75	67	67
20	90	29	22	23	84	84	95	95	1,350	75	73	64
21	90	27	30	23	84	85	86	95	1,340	75	79	84
22	90	29	30	23	84	85	58	95	1,340	75	76	97
23	90	29	30	23	84	85	23	94	1,350	75	73	88
24	90	29	29	23	84	85	65	94	1,340	75	72	81
25	91	29	29	23	84	85	67	94	1,310	75	72	80
26	38	29	29	23	84	85	67	94	1,110	75	70	80
27	0.21	29	29	23	84	85	67	95	570	75	67	80
28	0.07	29	29	23	84	86	67	95	346	72	67	80
29	0.01	29	29	23	---	86	67	95	214	71	71	80
30	0.00	29	29	23	---	86	67	94	129	71	80	80
31	0.08	---	29	24	---	86	---	94	---	71	84	---
TOTAL	2,317.37	780.81	784	772	1,420	2,619	2,404	2,803	14,126	2,435	2,300	2,302
MEAN	74.8	26.0	25.3	24.9	50.7	84.5	80.1	90.4	471	78.5	74.2	76.7
MAX	96	38	30	29	84	86	95	95	1,390	85	84	97
MIN	0.00	0.07	18	22	24	84	23	67	93	71	67	64
AC-FT	4,600	1,550	1,560	1,530	2,820	5,190	4,770	5,560	28,020	4,830	4,560	4,570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	129	35.3	14.5	20.5	34.0	230	260	341	435	315	291	261
MAX	1,184	910	170	143	398	605	1,317	1,404	2,905	970	967	2,789
(WY)	(1942)	(1943)	(1942)	(1942)	(2000)	(1944)	(1942)	(1973)	(1937)	(1983)	(1994)	(1941)
MIN	29.7	0.21	0.086	0.18	0.22	2.05	45.6	61.5	58.2	47.4	50.9	36.7
(WY)	(1975)	(1989)	(1989)	(1994)	(1954)	(1948)	(1957)	(1956)	(2002)	(1991)	(1991)	(1972)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1937 - 2003	
ANNUAL TOTAL	35,080.56		35,063.18			
ANNUAL MEAN	96.1		96.1		a198	
HIGHEST ANNUAL MEAN					710	1941
LOWEST ANNUAL MEAN					91.9	1954
HIGHEST DAILY MEAN	1,370	Mar 6	1,390	Jun 19	b26,400	Sep 1, 1942
LOWEST DAILY MEAN	0.00	Oct 30	0.00	Oct 30	0.00	Sep 1, 1937
ANNUAL SEVEN-DAY MINIMUM	0.07	Oct 28	0.07	Oct 28	0.00	Feb 18, 1952
MAXIMUM PEAK FLOW			1,500	Jun 19		
INSTANTANEOUS LOW FLOW			0.00	Oct 29		
ANNUAL RUNOFF (AC-FT)	69,580		69,550		143,300	
10 PERCENT EXCEEDS	96		95		764	
50 PERCENT EXCEEDS	74		79		84	
90 PERCENT EXCEEDS	19		23		0.51	

a Average discharge for 23 years (water years 1913-25, 1927-36), 236 ft^3/s, 171,000 acre-ft/yr, prior to completion of Sumner Dam.
b Maximum discharge for period of record, 42,800 ft^3/s, Sept. 1, 1942, by computation of flow over spillway and through outlet gates of Sumner Dam by Bureau of Reclamation; maximum gage height, 13.58 ft, Sept. 22, 1941.
e Estimated

08385000 FORT SUMNER MAIN CANAL NEAR FORT SUMNER, NM

LOCATION.--Lat 34°30'30", long 104°16'40", in SE ¼ SW ¼ SW ¼ 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, 3.25 mi northwest of Fort Sumner, and at Pecos River mile 685.8.

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 with satellite telemetry. Elevation of gage is 4,034.7 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Mar. 1954, at site 2.4 mi downstream at different datum. Apr. 1954 to Mar. 1965, at site 1.1 mi downstream at datum 1.7 ft lower.

REMARKS.--Records good. 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. No flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	0.00	0.00	0.00	0.00	81	82	56	89	69	63	79
2	90	0.00	0.00	0.00	0.00	80	81	56	88	63	63	81
3	90	0.00	0.00	0.00	0.00	81	81	56	89	70	72	81
4	88	0.00	0.00	0.00	0.00	80	82	55	89	70	76	78
5	88	0.00	0.00	0.00	0.00	79	81	56	91	68	77	70
6	88	0.00	0.00	0.00	0.00	79	82	79	91	65	76	61
7	88	0.00	0.00	0.00	0.00	79	82	82	90	58	76	58
8	85	0.00	0.00	0.00	0.00	78	82	82	90	58	77	61
9	85	0.00	0.00	0.00	0.00	80	69	82	90	58	77	53
10	85	0.00	0.00	0.00	0.00	81	65	82	89	57	75	77
11	84	0.00	0.00	0.00	0.00	80	66	82	91	64	76	77
12	83	0.00	0.00	0.00	0.00	80	66	82	95	89	72	69
13	83	0.00	0.00	0.00	0.00	78	68	81	95	83	70	70
14	83	0.00	0.00	0.00	4.4	77	69	81	94	81	68	65
15	83	0.00	0.00	0.00	12	77	69	81	94	79	68	63
16	83	0.00	0.00	0.00	12	77	84	81	94	72	65	62
17	83	0.00	0.00	0.00	62	77	86	81	92	69	61	61
18	83	0.00	0.00	0.00	83	77	75	81	94	69	60	60
19	81	0.00	0.00	0.00	83	79	71	81	102	70	60	61
20	80	0.00	0.00	0.00	83	80	70	81	87	69	58	57
21	80	0.00	0.00	0.00	83	81	69	79	85	70	71	63
22	80	0.00	0.00	0.00	82	80	56	86	83	70	74	74
23	79	0.00	0.00	0.00	83	80	48	89	78	69	64	86
24	80	0.00	0.00	0.00	83	79	31	89	77	70	62	82
25	83	0.00	0.00	0.00	83	80	66	89	76	70	62	80
26	36	0.00	0.00	0.00	83	82	57	89	77	69	61	80
27	0.00	0.00	0.00	0.00	83	82	56	88	115	69	58	79
28	0.00	0.00	0.00	0.00	81	89	57	88	110	69	53	79
29	0.00	0.00	0.00	0.00	---	85	57	88	100	65	59	79
30	0.00	0.00	0.00	0.00	---	83	56	88	76	64	62	78
31	0.00	---	0.00	0.00	---	82	---	88	---	64	74	---
TOTAL	2,141.00	0.00	0.00	0.00	1,000.40	2,483	2,064	2,459	2,711	2,130	2,090	2,124
MEAN	69.1	0.000	0.000	0.000	35.7	80.1	68.8	79.3	90.4	68.7	67.4	70.8
MAX	90	0.00	0.00	0.00	83	89	86	89	115	89	77	86
MIN	0.00	0.00	0.00	0.00	0.00	77	31	55	76	57	53	53
AC-FT	4,250	0.00	0.00	0.00	1,980	4,930	4,090	4,880	5,380	4,220	4,150	4,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	69.0	0.78	0.37	6.74	8.01	57.4	76.1	78.7	84.6	81.2	78.8	74.1
MAX	98.0	3.57	19.6	43.5	56.4	95.8	98.6	105	108	108	99.9	101
(WY)	(1974)	(1983)	(1940)	(1967)	(2000)	(1988)	(1987)	(1989)	(1973)	(1942)	(1955)	(1955)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	35.4	0.000	46.8	29.6	31.3	1.33
(WY)	(1942)	(1942)	(1941)	(1940)	(1940)	(1942)	(1942)	(1942)	(1941)	(1972)	(1990)	(1942)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	18,466.49		19,202.40			
ANNUAL MEAN	50.6		52.6		51.9	
HIGHEST ANNUAL MEAN					62.9	2000
LOWEST ANNUAL MEAN					25.3	1942
HIGHEST DAILY MEAN	105	Mar 15	115	Jun 27	174	Jul 22, 1941
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 27	0.00	Apr 5, 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 27	0.00	Nov 5, 1939
MAXIMUM PEAK FLOW			126	Jun 26	174	Jul 22, 1941
MAXIMUM PEAK STAGE			5.77	Jun 26	5.77	Jun 26, 2003
INSTANTANEOUS LOW FLOW			0.00	Oct 26	0.00	Apr 5, 1939
ANNUAL RUNOFF (AC-FT)	36,630		38,090		37,580	
10 PERCENT EXCEEDS	89		88		97	
50 PERCENT EXCEEDS	69		69		73	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08385500 PECOS RIVER NEAR FORT SUMNER, NM

LOCATION.--Lat 34°28'42", long 104°16'18", in SE ¼ SW ¼ sec.13 T.3 N., R.25 E., DeBaca County, Hydrologic Unit 13060003, on right bank 100 ft upstream from Atchison, Topeka, and Santa Fe Railway Bridge, 0.8 mi upstream from U.S. Highway 60, and 2.5 mi downstream from Fort Sumner diversion dam.

DRAINAGE AREA.--5,300 mi^2, approximately.

PERIOD OF RECORD.--June to July 1904, July 1904 to June 1905 (gage heights and discharge measurements only). Daily discharges July 18 to August 11, 1904, are unreliable and should not be used, July 1905 to February 1910, September 1912 to December 1913, July 1994 to September 2003 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,020 above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 5, 1905, staff gage at site 2.5 mi upstream at different datum. July 5, 1905, to Dec. 31, 1913, staff gage at site 1.5 mi upstream at different datum.

REMARKS.--Records fair except for those estimated, which are poor. Diversions upstream from station for irrigation of about 6,100 acres (1961 determination), part of which is downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, probably exceeded 53,000 ft^3/s, Sept. 30, 1904, gage height, 17.95 ft, from floodmarks, site and datum then in use; minimum daily discharge, 0.03 ft^3/s, Sept. 16-21 and 25-30, 2003.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.4	e4.0	28	28	25	e0.96	e1.7	e0.80	e3.0	e6.0	0.29	0.20
2	e3.4	e3.5	28	28	25	e0.96	e1.8	e0.80	e4.0	e10	0.19	0.20
3	e3.4	e3.2	32	29	25	e0.94	e1.8	e0.80	e8.0	e6.0	0.20	0.19
4	e3.4	e3.2	30	29	25	e0.94	e1.8	e0.80	e14	e6.0	0.97	0.19
5	e3.4	e3.1	29	29	25	e0.94	e1.9	e2.0	18	e7.0	2.5	0.25
6	e3.4	e3.1	29	28	25	e0.92	e1.9	e8.0	18	e8.0	4.5	0.24
7	e3.4	e3.1	28	29	26	e0.92	e1.9	e10	17	e12	3.6	0.26
8	e3.4	e3.3	28	29	26	e0.92	e2.0	e10	16	e12	3.0	0.28
9	e3.4	26	28	29	26	e0.90	e5.0	e10	15	e11	2.8	0.29
10	e3.4	31	24	29	25	e0.90	e2.0	e10	15	e13	1.4	5.9
11	e3.4	32	21	29	25	e0.90	e10	e10	e16	e11	0.78	6.9
12	e3.4	33	21	29	25	e0.88	e11	e10	e25	e6.0	0.46	0.05
13	e3.4	33	20	29	25	e0.88	e11	e10	e18	e3.0	0.27	e0.04
14	e3.4	33	20	27	22	e0.88	e11	e10	e11	e2.0	0.20	e0.04
15	e3.4	34	20	26	19	e0.86	e12	e10	e11	e1.4	0.18	e0.04
16	e3.4	34	20	25	23	e0.86	e5.0	e10	e6.0	1.1	0.17	e0.03
17	e3.4	34	20	25	e26	e0.86	e5.0	e10	e1.0	0.93	0.17	e0.03
18	e3.4	34	20	25	e1.2	e0.86	e8.0	e10	e380	0.84	0.16	e0.03
19	e3.4	29	20	25	e1.1	e0.86	e10	e10	e1,280	0.76	0.16	e0.03
20	e3.4	28	20	25	e1.1	e0.90	e15	e10	e1,250	0.66	0.15	e0.03
21	e3.4	28	24	25	e1.0	e0.92	e10	e10	e1,240	0.55	0.14	e0.03
22	e3.4	27	28	25	e1.0	e0.94	e7.0	e8.0	e1,240	0.51	0.15	16
23	e3.4	28	30	25	e1.0	e0.96	e18	e4.0	e1,250	0.48	0.14	8.8
24	e3.4	28	29	25	e0.98	e1.0	e20	e4.0	e1,240	0.50	0.16	e0.06
25	e3.4	28	29	25	e0.98	e1.0	e4.0	e4.0	e1,220	0.55	0.19	e0.03
26	e46	28	29	25	e0.98	e1.1	e1.0	e4.0	e1,000	0.43	0.18	e0.03
27	23	28	28	25	e0.98	e1.2	e1.0	e4.0	e440	0.39	0.18	e0.03
28	15	28	29	25	e0.96	e1.3	e1.0	e4.0	e220	0.37	0.18	e0.03
29	e10	28	29	25	---	e1.4	e1.0	e4.0	e100	0.35	0.19	e0.03
30	e7.0	28	29	25	---	e1.5	e1.0	e4.0	e40	0.39	0.20	e0.03
31	e5.0	---	29	25	---	e1.6	---	e4.0	---	0.42	0.20	---
TOTAL	191.0	686.5	799	827	429.28	30.96	183.8	207.20	11,116.0	123.63	24.06	40.29
MEAN	6.16	22.9	25.8	26.7	15.3	1.00	6.13	6.68	371	3.99	0.78	1.34
MAX	46	34	32	29	26	1.6	20	10	1,280	13	4.5	16
MIN	3.4	3.1	20	25	0.96	0.86	1.0	0.80	1.0	0.35	0.14	0.03
AC-FT	379	1,360	1,580	1,640	851	61	365	411	22,050	245	48	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	66.1	45.2	17.3	23.7	75.9	141	12.7	214	356	183	219	103
MAX	272	321	48.5	53.6	318	411	51.4	577	888	537	572	530
(WY)	(2000)	(1998)	(1996)	(1996)	(2000)	(1998)	(1999)	(2001)	(1995)	(1998)	(1997)	(1998)
MIN	5.36	3.83	0.85	1.57	2.79	1.00	1.72	1.19	2.24	3.99	0.78	1.34
(WY)	(1997)	(1997)	(1997)	(1997)	(1997)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	14,162.58		14,658.72			
ANNUAL MEAN	38.8		40.2		122	
HIGHEST ANNUAL MEAN					216	1998
LOWEST ANNUAL MEAN					39.3	2002
HIGHEST DAILY MEAN	1,010	Mar 8	1,280	Jun 19	5,050	May 1, 1999
LOWEST DAILY MEAN	0.32	Jun 20	0.03	Sep 16	0.03	Sep 16, 2003
ANNUAL SEVEN-DAY MINIMUM	0.34	Jun 15	0.03	Sep 15	0.03	Sep 15, 2003
MAXIMUM PEAK FLOW			1,310	Jun 19	5,300	Apr 30, 1999
MAXIMUM PEAK STAGE			7.21	Jun 19	10.85	Apr 30, 1999
INSTANTANEOUS LOW FLOW			0.03	Sep 16	0.03	Sep 16, 2003
ANNUAL RUNOFF (AC-FT)	28,090		29,080		88,080	
10 PERCENT EXCEEDS	34		29		632	
50 PERCENT EXCEEDS	4.2		4.5		12	
90 PERCENT EXCEEDS	0.60		0.20		1.1	

e Estimated

08385522 PECOS RIVER BELOW TAIBAN CREEK NEAR FORT SUMNER, NM

LOCATION.--Lat 34°19'56", long 104°10'48", NW ¼ NE ¼ sec.11, T.1 N., R.26 E., DeBaca County, Hydrologic Unit 13060003, on left bank 0.6 mi downstream from Taiban Creek, 11.0 mi southeast of Fort Sumner, and at mile 665.7.

PERIOD OF RECORD.--August 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Flow partly regulated by Sumner Dam (station 08384000) 23 mi upstream. Diversion for irrigation of about 19,100 acres (1959 determination) upstream from station. Discharge in general represents return flow from irrigated areas in Fort Sumner Irrigation Project.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	36	42	46	37	26	30	23	28	122	20	20
2	41	33	43	45	35	36	30	23	29	83	19	20
3	39	32	48	46	35	45	29	24	22	70	20	19
4	40	29	48	46	36	30	23	24	23	57	25	24
5	56	27	45	45	38	28	28	24	24	45	23	20
6	64	26	44	45	38	35	28	20	38	42	25	17
7	78	27	44	45	38	36	27	19	37	41	27	20
8	76	27	45	45	38	36	39	24	44	42	29	17
9	66	28	44	45	38	29	29	25	49	40	30	19
10	55	39	44	44	38	31	25	30	39	46	30	28
11	70	42	40	45	38	25	25	29	32	48	40	33
12	73	43	39	45	37	21	26	25	35	42	28	32
13	77	43	38	45	37	16	21	33	50	41	28	29
14	80	45	38	45	36	19	21	25	46	31	30	26
15	79	44	38	42	28	19	25	24	36	30	31	23
16	72	44	37	41	29	20	48	23	39	29	33	27
17	66	46	37	40	41	22	51	25	89	28	32	27
18	68	47	36	40	56	24	26	21	47	26	31	30
19	80	47	36	40	38	33	22	25	818	27	31	36
20	82	44	36	40	31	43	20	27	1,310	29	31	32
21	65	43	36	39	28	27	21	28	1,320	27	32	27
22	70	42	41	39	26	38	23	25	1,340	26	35	31
23	75	41	47	39	27	28	22	25	1,350	25	33	37
24	99	41	47	39	27	25	26	28	1,320	28	30	36
25	93	41	46	40	28	25	21	23	1,330	26	25	28
26	105	42	46	40	25	25	23	23	1,350	25	24	30
27	98	43	46	39	29	28	25	26	773	25	25	30
28	57	43	45	39	22	41	24	25	456	25	24	29
29	51	43	45	39	---	40	23	21	323	22	23	31
30	44	42	45	38	---	26	23	26	369	25	80	32
31	39	---	45	37	---	26	---	25	---	21	23	---
TOTAL	2,100	1,170	1,311	1,303	954	903	804	768	12,766	1,194	917	810
MEAN	67.7	39.0	42.3	42.0	34.1	29.1	26.8	24.8	426	38.5	29.6	27.0
MAX	105	47	48	46	56	45	51	33	1,350	122	80	37
MIN	39	26	36	37	22	16	20	19	22	21	19	17
AC-FT	4,170	2,320	2,600	2,580	1,890	1,790	1,590	1,520	25,320	2,370	1,820	1,610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

MEAN	169	66.0	33.6	34.4	94.1	177	93.7	239	394	258	314	159
MAX	370	353	58.9	62.6	355	457	497	655	971	680	884	582
(WY)	(1994)	(1998)	(1996)	(1996)	(2000)	(1998)	(1993)	(2001)	(1995)	(1993)	(1994)	(1998)
MIN	53.4	24.5	18.7	14.7	15.1	29.1	26.8	17.3	21.2	31.2	23.1	27.0
(WY)	(2002)	(1997)	(1997)	(1997)	(1993)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	25,912.7		25,000			
ANNUAL MEAN	71.0		68.5		169	
HIGHEST ANNUAL MEAN					253	1995
LOWEST ANNUAL MEAN					68.5	2003
HIGHEST DAILY MEAN	1,160	Mar 9	1,350	Jun 23	2,130	May 1, 1999
LOWEST DAILY MEAN	8.2	Jun 19	16	Mar 13	8.2	Jun 19, 2002
ANNUAL SEVEN-DAY MINIMUM	9.7	Jun 10	19	Sep 3	9.7	Jun 10, 2002
MAXIMUM PEAK FLOW			1,430	Jun 26	4,580	May 1, 1999
MAXIMUM PEAK STAGE			5.70	Jun 26	8.35	May 1, 1999
INSTANTANEOUS LOW FLOW			15	Mar 13	6.9	Jan 4, 1997
ANNUAL RUNOFF (AC-FT)	51,400		49,590		122,400	
10 PERCENT EXCEEDS	81		65		785	
50 PERCENT EXCEEDS	40		35		49	
90 PERCENT EXCEEDS	16		23		20	

08385630 PECOS RIVER NEAR DUNLAP, NM

LOCATION.--Lat 34°03'52", long 104°18'22", in SE ¼ NW ¼ sec.10, T.3 S., R.25 E., DeBaca County, Hydrologic Unit 13060003, on left bank 1.2 mi south of Van Eaton Ranch, 2.5 mi upstream from Arroyo de la Mora, 2.7 mi downstream from Blanco Canyon, 15 mi east of Dunlap, and at mile 638.1

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,760 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Records fair. Flow partly regulated by Lake Sumner (station 08384000). Diversion for irrigation of about 19,100 acres (1959 determination) upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	41	43	40	35	19	21	14	33	345	14	24
2	39	38	43	38	35	16	25	13	21	156	13	17
3	33	35	62	40	34	25	23	13	18	110	11	14
4	29	31	61	41	34	47	23	13	17	89	10	12
5	31	29	53	42	35	31	17	13	13	76	11	12
6	43	27	48	40	36	22	19	13	23	66	16	12
7	60	25	44	40	35	24	20	14	24	60	13	10
8	82	23	47	42	43	32	22	11	26	56	11	10
9	85	23	43	42	44	32	30	11	32	53	12	9.2
10	70	21	42	41	36	29	31	13	40	48	14	8.9
11	52	31	41	41	37	24	20	16	41	47	15	16
12	67	42	36	43	35	24	19	21	27	46	21	22
13	74	45	32	43	35	17	20	19	27	41	19	21
14	84	48	31	43	34	13	17	19	53	39	16	19
15	88	51	29	42	37	12	15	23	48	32	14	19
16	86	52	27	38	31	13	13	15	37	28	16	17
17	77	55	26	37	22	13	37	15	276	25	17	15
18	80	56	24	38	35	12	61	15	127	25	16	17
19	72	55	25	37	67	19	30	14	62	24	15	17
20	89	54	23	36	45	31	19	13	1,100	23	13	22
21	96	50	25	35	e34	45	17	16	1,450	24	13	23
22	74	47	26	35	e26	36	13	22	1,550	23	13	22
23	78	45	37	33	19	35	13	17	1,630	21	14	20
24	154	44	47	35	20	28	13	18	1,560	20	17	26
25	152	42	46	37	19	19	14	26	1,600	19	15	26
26	114	43	45	38	e28	19	15	49	1,590	19	12	22
27	148	42	43	36	31	17	13	27	1,420	17	12	20
28	112	43	43	35	25	20	16	20	607	17	9.3	20
29	66	44	43	35	---	31	16	18	463	16	9.1	19
30	52	43	43	36	---	48	13	15	414	15	12	20
31	45	---	41	34	---	30	---	31	---	15	48	---
TOTAL	2,377	1,225	1,219	1,193	947	783	625	557	14,329	1,595	461.4	532.1
MEAN	76.7	40.8	39.3	38.5	33.8	25.3	20.8	18.0	478	51.5	14.9	17.7
MAX	154	56	62	43	67	48	61	49	1,630	345	48	26
MIN	29	21	23	33	19	12	13	11	13	15	9.1	8.9
AC-FT	4,710	2,430	2,420	2,370	1,880	1,550	1,240	1,100	28,420	3,160	915	1,060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

MEAN	155	69.6	33.4	35.2	89.5	175	53.2	236	391	218	309	150
MAX	369	305	49.5	62.6	315	403	120	728	918	514	837	550
(WY)	(1994)	(1998)	(1996)	(1996)	(2000)	(2002)	(1999)	(2001)	(1995)	(1998)	(1994)	(1998)
MIN	43.6	28.0	13.8	14.3	13.3	25.3	20.8	12.8	50.0	51.5	14.9	17.7
(WY)	(2002)	(1996)	(1997)	(1994)	(1997)	(2003)	(2003)	(2002)	(2001)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	28,315.33		25,843.5			
ANNUAL MEAN	77.6		70.8		160	
HIGHEST ANNUAL MEAN					243	1995
LOWEST ANNUAL MEAN					70.8	2003
HIGHEST DAILY MEAN	1,220	Mar 13	1,630	Jun 23	1,770	Apr 30, 1999
LOWEST DAILY MEAN	0.19	Jun 19	8.9	Sep 10	0.19	Jun 19, 2002
ANNUAL SEVEN-DAY MINIMUM	2.8	Jun 7	11	Sep 4	2.8	Jun 7, 2002
MAXIMUM PEAK FLOW			1,760	Jun 23	6,470	Jun 20, 2002
MAXIMUM PEAK STAGE			3.37	Jun 23	4.80	Sep 9, 1995
INSTANTANEOUS LOW FLOW			8.0	Sep 9	0.00	Jun 20, 2002
ANNUAL RUNOFF (AC-FT)	56,160		51,260		116,200	
10 PERCENT EXCEEDS	107		71		672	
50 PERCENT EXCEEDS	39		30		48	
90 PERCENT EXCEEDS	9.8		13		17	

e Estimated

08385643 PECOS RIVER BELOW SIXMILE DRAW NEAR ROSWELL, NM

LOCATION.--Lat 33°51'11", long 104°17'29", in SW ¼ SW ¼ sec.23, T.5 S., R.25 E., Chaves County, Hydrologic Unit 13060003, on right bank 1.1 mi downstream from confluence of Sixmile Draw, 35 mi northeast of Roswell, and at mi 626.

PERIOD OF RECORD.--October 2001 to May 2003 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft^3/s, June 14, 2002, gage height, 9.11 ft; minimum, 0.00 ft^3/s, no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 242 ft^3/s, Oct. 2, gage height, 4.56 ft; minimum, 5.1 ft^3/s, May 10 and 11.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	60	e55	45	32	26	35	12	---	---	---	---
2	105	54	e56	43	33	24	27	11	---	---	---	---
3	100	51	68	43	32	22	26	12	---	---	---	---
4	64	55	75	43	31	26	26	11	---	---	---	---
5	35	44	69	43	31	35	27	11	---	---	---	---
6	36	47	64	42	31	32	24	11	---	---	---	---
7	46	43	61	41	30	26	24	e10	---	---	---	---
8	71	36	61	41	30	25	24	e8.0	---	---	---	---
9	87	25	64	42	32	30	24	e7.0	---	---	---	---
10	87	27	58	40	34	32	25	e7.0	---	---	---	---
11	68	28	56	41	31	28	29	e9.0	---	---	---	---
12	61	37	55	42	33	25	24	e10	---	---	---	---
13	75	58	52	43	40	26	22	e10	---	---	---	---
14	85	57	50	42	47	21	21	e12	---	---	---	---
15	95	61	47	42	55	20	20	e11	---	---	---	---
16	90	62	45	41	52	17	18	e10	---	---	---	---
17	91	62	43	39	46	19	15	e10	---	---	---	---
18	86	61	40	39	39	17	21	e10	---	---	---	---
19	91	61	38	38	32	20	34	e9.0	---	---	---	---
20	79	60	38	38	60	26	26	e9.0	---	---	---	---
21	91	60	37	37	59	30	20	e8.0	---	---	---	---
22	96	56	36	37	42	37	18	e9.0	---	---	---	---
23	96	55	40	34	31	34	16	e11	---	---	---	---
24	119	e55	44	33	24	32	14	e11	---	---	---	---
25	145	e54	48	34	26	32	14	e11	---	---	---	---
26	132	e53	47	36	25	31	14	e62	---	---	---	---
27	125	e52	47	35	29	32	15	e65	---	---	---	---
28	141	e52	46	33	32	36	13	e40	---	---	---	---
29	107	e53	45	33	---	36	14	e26	---	---	---	---
30	76	e54	45	33	---	31	14	e24	---	---	---	---
31	65	---	45	33	---	43	---	e20	---	---	---	---
TOTAL	2,711	1,533	1,575	1,206	1,019	871	644	487.0	---	---	---	---
MEAN	87.5	51.1	50.8	38.9	36.4	28.1	21.5	15.7	---	---	---	---
MAX	145	62	75	45	60	43	35	65	---	---	---	---
MIN	35	25	36	33	24	17	13	7.0	---	---	---	---
AC-FT	5,380	3,040	3,120	2,390	2,020	1,730	1,280	966	---	---	---	---

CAL YR 2002 TOTAL 33,499.45 MEAN 91.8 MAX 1,530 MIN 0.00 AC-FT 66,450

e Estimated

08386000 PECOS RIVER NEAR ACME, NM

LOCATION.--Lat 33°32'10", long 104°22'34", in SW $^1/_4$ NW $^1/_4$ 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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--September 1921 to June 1923, July 1937 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder with satellite telemetry. 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.--Records fair except for those estimated, which are poor. Flow regulated by Lake Sumner (station 08384000) 117 mi upstream since August 1937 and Santa Rosa Lake (station 08382810) 172 mi upstream since April 1980. Diversions for irrigation of about 20,000 acres, 1959 determination, upstream from station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 28, 1937, reached a discharge of 53,000 ft^3/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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e31	41	35	39	33	34	28	6.3	e25	289	0.00	9.2
2	e27	36	35	37	33	30	30	6.2	e16	382	0.00	11
3	e25	33	47	37	32	28	21	5.7	e6.7	182	0.00	11
4	e22	29	52	37	32	24	16	5.0	e3.8	114	0.00	5.4
5	e19	25	53	37	33	21	17	4.2	e3.0	111	0.00	3.2
6	e18	23	51	37	34	29	15	3.9	e0.93	109	0.00	1.5
7	16	22	47	37	34	35	15	3.3	0.78	108	0.00	0.90
8	18	23	46	37	34	30	13	2.7	0.61	109	0.00	0.79
9	39	22	49	37	34	e29	14	2.0	0.52	111	0.00	0.77
10	54	23	46	36	32	28	15	1.4	0.52	61	0.00	0.73
11	50	23	42	36	37	31	16	1.0	0.56	26	0.00	0.66
12	40	23	39	36	35	31	22	0.90	0.67	20	0.00	0.58
13	26	25	38	36	35	27	18	0.82	0.79	16	0.00	0.51
14	33	27	36	37	36	26	15	0.76	0.91	11	0.00	0.45
15	40	33	34	37	37	26	14	0.82	0.88	8.2	0.00	0.39
16	48	35	32	37	38	23	11	0.86	3.3	5.5	0.00	0.32
17	48	38	30	37	35	18	10	0.84	29	1.7	0.00	0.26
18	47	38	28	36	34	16	10	0.79	69	0.82	0.00	0.19
19	43	39	26	36	29	16	8.9	0.75	95	0.60	0.00	0.13
20	40	39	24	35	32	20	28	0.62	80	0.45	0.00	0.06
21	35	40	24	35	50	24	32	e0.58	710	0.37	0.00	0.01
22	42	40	24	35	48	30	23	e0.56	892	0.33	0.00	0.00
23	47	39	30	33	40	33	16	e0.54	967	0.21	0.00	0.00
24	48	37	34	30	33	37	13	e0.52	943	0.13	0.00	0.00
25	64	35	36	31	27	29	10	e0.50	915	0.07	0.00	0.00
26	108	33	41	33	28	30	8.3	e50	949	0.01	0.01	0.00
27	112	32	41	34	27	24	7.5	e90	932	0.00	0.08	0.00
28	97	32	41	35	28	20	7.4	e75	657	0.00	0.19	0.00
29	110	33	42	34	---	17	7.9	e60	483	0.00	0.29	0.00
30	74	34	42	33	---	17	7.3	e45	386	0.00	91	0.00
31	48	---	40	32	---	18	---	e35	---	0.00	19	---
TOTAL	1,469	952	1,185	1,099	960	801	469.3	406.56	8,171.97	1,667.39	110.57	48.05
MEAN	47.4	31.7	38.2	35.5	34.3	25.8	15.6	13.1	272	53.8	3.57	1.60
MAX	112	41	53	39	50	37	32	90	967	382	91	11
MIN	16	22	24	30	27	16	7.3	0.50	0.52	0.00	0.00	0.00
AC-FT	2,910	1,890	2,350	2,180	1,900	1,590	931	806	16,210	3,310	219	95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	147	59.6	27.2	26.5	34.6	167	195	279	310	309	261	282
MAX	2,200	858	236	190	375	595	1,217	2,680	2,186	1,611	813	3,527
(WY)	(1942)	(1943)	(1942)	(1942)	(2000)	(1941)	(1942)	(1941)	(1941)	(1960)	(1997)	(1941)
MIN	0.000	0.000	0.000	0.000	0.000	0.16	3.58	1.81	0.000	0.19	0.90	0.000
(WY)	(1948)	(1948)	(1948)	(1948)	(1953)	(1954)	(1967)	(1946)	(1947)	(1954)	(1947)	(1947)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	26,244.47		17,339.84			
ANNUAL MEAN	71.9		47.5		175	
HIGHEST ANNUAL MEAN					964	1941
LOWEST ANNUAL MEAN					47.5	2003
HIGHEST DAILY MEAN	1,830	Jun 21	967	Jun 23	29,500	Sep 23, 1941
LOWEST DAILY MEAN	0.00	May 21	0.00	Jul 27	0.00	May 23, 1938
ANNUAL SEVEN-DAY MINIMUM	0.00	May 21	0.00	Jul 27	0.00	May 23, 1938
MAXIMUM PEAK FLOW			1,020	Jun 24	a45,000	Sep 23, 1941
MAXIMUM PEAK STAGE			5.81	Jun 26	13.71	Sep 23, 1941
INSTANTANEOUS LOW FLOW			0.00	Jul 26	0.00	Jul 26, 2003
ANNUAL RUNOFF (AC-FT)	52,060		34,390		127,100	
10 PERCENT EXCEEDS	110		51		669	
50 PERCENT EXCEEDS	30		26		25	
90 PERCENT EXCEEDS	0.00		0.00		1.0	

a From rating curve extended above 27,000 ft^3/s.
e Estimated

08386505 RIO RUIDOSO AT RUIDOSO, NM

LOCATION.--Lat 33°20'12", long 105°43'34", in SW ¼ SW ¼ NW ¼, sec.19, T.11 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, on right bank at Village of Ruidoso, 2.6 mi to State Road 48, and 6.2 mi west of U.S. Highway 70.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.6	1.6	2.0	3.9	2.8	12	18	3.9	2.0	1.6	1.4
2	2.3	1.5	1.7	2.1	3.9	2.6	15	16	3.6	1.6	1.5	1.4
3	2.2	1.4	2.9	2.1	3.8	2.7	18	15	3.2	1.6	1.6	1.3
4	2.0	1.5	2.4	2.1	3.6	2.9	19	15	2.9	1.5	e1.4	1.2
5	2.0	1.6	2.1	2.3	3.8	2.6	17	14	3.0	1.4	e1.4	2.9
6	2.0	1.4	1.9	2.4	2.8	2.6	16	13	3.1	1.5	e1.5	5.2
7	2.0	1.4	2.0	2.4	2.6	2.8	15	12	2.7	2.0	e3.3	2.0
8	1.9	1.2	1.9	2.7	2.9	3.2	14	11	2.5	3.3	e2.7	1.8
9	2.0	1.1	1.9	3.6	2.6	3.8	14	11	2.4	1.8	2.4	1.5
10	1.8	2.7	2.2	3.5	2.6	5.2	15	10	2.6	1.9	2.2	1.4
11	1.5	1.8	2.7	3.6	2.7	6.9	15	9.3	2.1	10	1.8	1.6
12	1.5	1.5	2.7	3.5	2.6	8.3	16	8.7	1.9	7.4	1.5	1.4
13	1.6	1.4	3.1	3.4	2.9	9.6	18	8.4	1.8	4.4	1.9	1.3
14	1.8	1.4	3.0	3.5	3.6	11	20	8.5	1.8	3.3	1.6	1.3
15	1.6	1.4	2.4	3.5	3.1	14	31	8.4	1.8	2.6	1.6	1.2
16	1.6	1.2	1.7	3.5	2.8	16	29	8.1	2.4	2.2	1.9	1.2
17	1.6	1.3	1.6	3.6	2.6	16	25	7.8	3.7	2.2	1.8	1.2
18	2.1	1.3	1.5	3.7	2.7	12	22	7.4	3.7	2.2	2.0	1.1
19	1.7	1.2	1.8	3.7	2.6	11	21	7.0	2.9	2.1	1.6	1.1
20	1.6	1.3	2.6	3.7	3.2	9.5	18	6.9	2.5	1.9	1.7	1.2
21	1.6	1.3	2.9	4.1	3.1	8.2	17	6.3	2.1	1.7	1.5	1.2
22	1.6	1.3	2.5	4.0	2.9	7.7	16	5.3	1.8	1.7	1.3	1.1
23	2.0	1.3	2.4	3.8	2.9	7.8	17	4.7	1.8	1.6	1.2	0.94
24	2.3	1.3	2.3	3.9	2.9	9.1	17	4.3	1.6	1.7	1.2	0.94
25	1.8	1.3	2.1	3.9	3.0	12	17	4.9	1.4	1.5	1.9	1.2
26	2.2	1.3	1.8	3.8	2.5	13	18	8.1	1.4	1.4	1.8	1.3
27	4.2	1.5	1.3	3.8	3.2	14	19	7.3	1.4	1.3	2.0	0.99
28	2.4	1.7	1.4	4.0	3.0	14	19	5.4	1.4	1.1	1.9	0.91
29	2.1	1.6	2.3	3.9	---	13	19	4.8	1.6	1.0	3.4	0.86
30	1.8	1.5	2.1	3.9	---	12	19	4.3	2.5	1.1	1.9	0.82
31	1.6	---	2.0	3.8	---	11	---	4.0	---	2.1	1.6	---
TOTAL	60.8	43.3	66.8	103.8	84.8	267.3	548	274.9	71.5	73.1	56.7	42.96
MEAN	1.96	1.44	2.15	3.35	3.03	8.62	18.3	8.87	2.38	2.36	1.83	1.43
MAX	4.2	2.7	3.1	4.1	3.9	16	31	18	3.9	10	3.4	5.2
MIN	1.5	1.1	1.3	2.0	2.5	2.6	12	4.0	1.4	1.0	1.2	0.82
AC-FT	121	86	132	206	168	530	1,090	545	142	145	112	85

CAL YR	2002	TOTAL	1,380.52	MEAN	3.78	MAX	34	MIN	0.62	AC-FT	2,740
WTR YR	2003	TOTAL	1,693.96	MEAN	4.64	MAX	31	MIN	0.82	AC-FT	3,360

e Estimated

08387000 RIO RUIDOSO AT HOLLYWOOD, NM

LOCATION.--Lat 33°19'36", long 105°37'38", in SE ¼ SE ¼ NE ¼ sec.25, T.11 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, on center pier on downstream side of bridge on Frieden Bloom Street in Hollywood, 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 mi^2, approximately.

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.--Records good, except for those estimated, which are poor. Village of Ruidoso diverts from right bank 7.0 mi upstream for municipal use and returns a portion of this water as effluent from sewage disposal plant downstream from the gage.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	6.7	5.4	7.4	6.6	8.1	13	36	7.3	7.5	5.8	4.5
2	7.4	6.1	6.1	7.1	6.6	7.9	12	28	7.0	6.5	4.8	4.5
3	7.5	6.1	13	7.5	6.6	7.8	15	27	6.8	6.4	4.1	4.4
4	7.5	6.3	7.2	7.5	7.4	8.3	16	25	6.4	6.1	3.9	4.3
5	7.4	6.3	6.3	7.7	8.3	7.9	16	24	6.8	5.9	3.9	5.3
6	6.9	6.4	5.8	7.9	7.7	7.2	15	22	6.7	5.5	4.0	7.7
7	7.2	6.3	5.7	7.7	7.5	7.6	14	20	6.3	5.7	6.2	5.7
8	7.7	6.3	6.2	7.9	7.9	7.9	13	20	6.2	7.2	4.9	5.8
9	7.8	5.7	6.0	8.7	7.8	8.3	13	20	5.8	6.2	4.4	5.5
10	7.5	9.9	5.7	8.7	7.5	8.9	14	17	5.9	5.9	4.5	5.4
11	7.4	7.7	5.6	9.0	7.7	8.5	13	12	5.3	8.8	4.7	4.6
12	7.1	6.7	5.6	8.9	7.7	8.3	14	11	5.0	12	6.9	4.6
13	7.3	6.2	5.5	8.3	7.8	8.3	16	10	5.1	8.1	6.6	4.5
14	7.3	6.1	5.8	9.1	8.4	8.6	17	10	5.0	7.1	5.9	4.5
15	7.1	6.3	5.8	8.7	8.4	12	42	9.9	5.6	6.7	8.7	4.4
16	6.9	5.9	5.7	7.6	7.9	15	48	9.2	7.6	6.3	6.7	4.3
17	6.7	6.0	5.8	7.8	7.7	17	40	9.6	11	6.3	6.4	4.1
18	7.4	6.1	6.0	7.7	7.8	10	32	9.3	12	6.2	8.1	3.9
19	7.3	5.8	6.1	8.4	7.5	8.6	29	8.9	15	6.1	6.4	3.8
20	6.8	5.6	6.8	8.2	9.2	7.9	25	8.8	28	5.8	6.1	3.7
21	6.6	5.9	7.1	8.6	8.4	8.0	28	9.0	29	5.7	5.8	3.7
22	6.6	5.9	7.4	8.0	7.6	9.0	36	8.2	26	5.2	5.6	3.7
23	7.0	5.3	7.3	8.1	8.5	12	38	8.0	19	4.7	5.9	3.6
24	8.5	5.2	7.4	8.5	8.6	11	37	9.7	8.5	4.2	6.1	3.6
25	7.0	5.4	7.3	8.2	8.1	11	36	9.6	e6.7	4.2	9.2	4.4
26	7.6	5.3	7.2	7.9	9.4	13	36	9.4	e5.9	4.2	5.5	4.4
27	12	4.9	7.3	7.6	8.2	14	41	8.8	5.9	4.2	4.5	3.9
28	8.2	5.2	7.3	7.4	8.6	13	41	8.3	5.9	4.2	6.2	3.7
29	7.4	5.5	7.3	8.1	---	15	42	8.1	6.1	4.5	7.7	3.5
30	7.1	5.4	7.3	7.7	---	16	41	8.0	9.8	4.3	5.6	3.3
31	6.9	---	7.1	7.2	---	15	---	7.8	---	5.3	4.7	---
TOTAL	230.5	182.5	206.1	249.1	221.4	321.1	793	432.6	287.6	187.0	179.8	133.3
MEAN	7.44	6.08	6.65	8.04	7.91	10.4	26.4	14.0	9.59	6.03	5.80	4.44
MAX	12	9.9	13	9.1	9.4	17	48	36	29	12	9.2	7.7
MIN	6.6	4.9	5.4	7.1	6.6	7.2	12	7.8	5.0	4.2	3.9	3.3
AC-FT	457	362	409	494	439	637	1,570	858	570	371	357	264

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2003, BY WATER YEAR (WY)

MEAN	18.8	15.6	19.5	15.5	18.8	29.3	38.0	32.6	17.7	17.5	33.7	22.9
MAX	80.8	69.0	130	61.5	58.6	91.2	104	101	52.3	49.9	162	63.4
(WY)	(1987)	(1987)	(1985)	(1985)	(1985)	(1985)	(1992)	(1992)	(1986)	(1986)	(1984)	(1988)
MIN	5.76	5.74	6.09	6.31	5.81	5.80	5.81	4.20	3.12	5.56	5.80	4.44
(WY)	(2002)	(2002)	(2002)	(2002)	(2000)	(2002)	(2002)	(2002)	(2002)	(2001)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1982 - 2003	
ANNUAL TOTAL	2,282.0		3,424.0			
ANNUAL MEAN	6.25		9.38		23.4	
HIGHEST ANNUAL MEAN					49.7	1987
LOWEST ANNUAL MEAN					6.03	2002
HIGHEST DAILY MEAN	27	Aug 10	48	Apr 16	1,130	Dec 20, 1984
LOWEST DAILY MEAN	2.6	Jun 19	3.3	Sep 30	1.9	Aug 27, 1994
ANNUAL SEVEN-DAY MINIMUM	2.8	Jun 16	3.7	Sep 18	2.4	Aug 24, 1994
MAXIMUM PEAK FLOW			64	Jun 17	2,120	Aug 11, 1984
MAXIMUM PEAK STAGE			2.24	Jun 17	10.05	Jun 17, 1965
INSTANTANEOUS LOW FLOW			3.3	Aug 6	0.30	Jan 1, 1962
ANNUAL RUNOFF (AC-FT)	4,530		6,790		16,920	
10 PERCENT EXCEEDS	7.8		15		49	
50 PERCENT EXCEEDS	6.0		7.4		14	
90 PERCENT EXCEEDS	3.7		4.6		6.8	

e Estimated

08387600 EAGLE CREEK BELOW SOUTH FORK, NEAR ALTO, NM

LOCATION.--Lat 33°23'57", long 105°43'11", in SW ¼ SW ¼ sec.31, T.10 S., R.13 E., Lincoln County, Hydrologic Unit 13060008, in Lincoln National Forest on right bank 300 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 mi 11.3.

DRAINAGE AREA.--8.14 mi^2.

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. Aug. 26, 1969, to Dec. 31, 1980, at site 360 ft downstream at datum 6.0 ft higher.

REMARKS.--Records poor. No diversions for irrigation upstream from station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	0.03	0.02	0.14	0.13	0.53	0.48	0.88	0.00	0.00	0.00	0.00
2	0.17	0.03	0.03	0.13	0.18	0.40	0.42	0.85	0.00	0.00	0.00	0.00
3	0.12	0.03	0.56	0.13	0.16	0.39	0.39	0.85	0.00	0.00	0.00	0.00
4	0.09	0.03	0.27	0.14	0.18	0.39	0.35	0.90	0.00	0.00	0.00	0.00
5	0.07	0.03	0.13	0.16	0.17	0.30	0.35	0.92	0.00	0.00	0.00	0.84
6	0.06	0.03	0.08	0.15	0.14	0.26	0.36	0.92	0.00	0.00	0.00	0.19
7	0.05	0.02	0.06	0.15	0.18	0.25	0.34	0.89	0.00	0.00	0.00	0.03
8	0.04	0.01	0.06	0.18	0.23	0.26	0.34	0.76	0.00	0.00	0.00	0.02
9	0.04	0.00	0.06	0.31	0.26	0.26	0.31	0.56	0.00	0.00	0.00	0.02
10	0.03	1.7	0.06	0.27	0.39	0.26	0.29	0.41	0.00	0.00	0.00	0.01
11	0.03	0.47	0.05	0.22	0.16	0.26	0.28	0.34	0.00	0.00	0.00	0.01
12	0.03	0.13	0.04	0.21	0.16	0.28	0.28	0.28	0.00	0.00	0.00	0.01
13	0.03	0.03	0.03	0.21	0.25	0.34	0.32	0.21	0.00	0.00	0.00	0.01
14	0.03	0.03	0.03	0.19	0.44	0.46	0.38	0.13	0.00	0.00	0.00	0.00
15	0.03	0.03	0.03	0.17	0.39	0.54	1.5	0.10	0.00	0.00	0.00	0.00
16	0.01	0.03	0.03	0.15	0.31	0.57	1.0	0.09	0.00	0.00	0.00	0.00
17	0.00	0.03	0.03	0.15	0.27	1.9	0.76	0.08	0.00	0.00	0.00	0.00
18	0.01	0.02	0.03	0.17	0.27	0.98	1.2	0.06	0.00	0.00	0.00	0.00
19	0.00	0.02	0.03	0.15	0.24	0.81	3.5	0.05	0.00	0.00	0.00	0.00
20	0.00	0.02	0.03	0.13	0.32	0.69	3.3	0.02	0.00	0.00	0.00	0.00
21	0.00	0.02	0.03	0.17	0.43	0.61	3.1	0.00	0.00	0.00	0.00	0.00
22	0.00	0.02	0.11	0.17	0.38	0.49	2.9	0.00	0.00	0.00	0.00	0.00
23	0.00	0.02	2.6	0.15	0.30	0.41	2.7	0.00	0.00	0.00	0.00	0.00
24	0.03	0.02	1.7	0.16	0.25	0.37	2.6	0.00	0.00	0.00	0.00	0.00
25	0.03	0.02	0.11	0.15	0.26	0.38	2.3	0.00	0.00	0.00	0.00	0.00
26	0.30	0.02	0.11	0.13	0.32	0.44	2.0	0.00	0.00	0.00	0.00	0.00
27	0.80	0.02	0.12	0.14	0.41	0.52	1.6	0.00	0.00	0.00	0.00	0.00
28	0.15	0.02	0.16	0.16	0.60	0.76	1.3	0.00	0.00	0.00	0.00	0.00
29	0.06	0.02	0.19	0.14	---	0.74	1.1	0.00	0.00	0.00	0.00	0.00
30	0.04	0.02	0.14	0.13	---	0.68	0.98	0.00	0.00	0.00	0.00	0.00
31	0.03	---	0.13	0.13	---	0.58	---	0.00	---	0.00	0.00	---
TOTAL	2.55	2.92	7.06	5.14	7.78	16.11	36.73	9.30	0.00	0.00	0.00	1.14
MEAN	0.082	0.097	0.23	0.17	0.28	0.52	1.22	0.30	0.000	0.000	0.000	0.038
MAX	0.80	1.7	2.6	0.31	0.60	1.9	3.5	0.92	0.00	0.00	0.00	0.84
MIN	0.00	0.00	0.02	0.13	0.13	0.25	0.28	0.00	0.00	0.00	0.00	0.00
AC-FT	5.1	5.8	14	10	15	32	73	18	0.00	0.00	0.00	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	2.02	1.63	1.71	1.33	1.85	3.33	4.32	3.48	1.20	1.74	3.40	3.09
MAX	14.4	17.3	19.5	7.89	8.19	10.6	14.0	15.8	5.94	5.50	16.3	9.26
(WY)	(1975)	(1979)	(1979)	(1979)	(1979)	(1979)	(1973)	(1973)	(1979)	(1990)	(1988)	(1974)
MIN	0.028	0.027	0.063	0.052	0.074	0.077	0.037	0.000	0.000	0.000	0.000	0.038
(WY)	(2002)	(2002)	(2002)	(2002)	(2000)	(2000)	(2002)	(1996)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	58.53		88.73			
ANNUAL MEAN	0.16		0.24		2.38	
HIGHEST ANNUAL MEAN					8.48	1979
LOWEST ANNUAL MEAN					0.14	2002
HIGHEST DAILY MEAN	4.1	Jul 23	3.5	Apr 19	170	Dec 19, 1978
LOWEST DAILY MEAN	0.00	Apr 15	0.00	Oct 17	0.00	Jul 9, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 15	0.00	May 21	0.00	Jun 17, 1990
MAXIMUM PEAK FLOW			11	Sep 5	a206	Dec 19, 1978
MAXIMUM PEAK STAGE			5.94	Sep 5	6.87	Jul 30, 1997
INSTANTANEOUS LOW FLOW			0.00	Oct 16	0.00	Jul 9, 1989
ANNUAL RUNOFF (AC-FT)	116		176		1,720	
10 PERCENT EXCEEDS	0.35		0.64		6.3	
50 PERCENT EXCEEDS	0.04		0.03		0.90	
90 PERCENT EXCEEDS	0.00		0.00		0.09	

a From rating curve extended above 40 ft^3/s.

08390500 RIO HONDO AT DIAMOND A RANCH, NEAR ROSWELL, NM

LOCATION.--33°20'57", long 104°51'05", in NE ¼ NE ¼ 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 mi^2 (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 with satellite telemetry 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. Diversions and ground-water withdrawals upstream from station for irrigation above and below of about 6,500 acres, 1959 determination. No flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on June 1, 1937, reached a discharge of 24,900 ft^3/s at Riverside, about 13 mi upstream. Other major floods occurred Oct. 31, 1901, Sept. 29 and 30, 1904, and July 25, 1905.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.38	0.00	0.18	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.33	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.06	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	2.09	0.26	3.98	0.00	0.18	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.067	0.008	0.14	0.000	0.006	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.66	0.26	1.3	0.00	0.18	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	4.1	0.5	7.9	0.00	0.4	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	23.6	15.7	18.4	15.8	11.9	12.5	24.4	27.1	23.3	24.4	36.0	47.5
MAX	458	199	222	160	97.5	153	199	519	334	163	241	1,090
(WY)	(1942)	(1942)	(1979)	(1985)	(1987)	(1987)	(1987)	(1941)	(1986)	(1955)	(1984)	(1941)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1941)	(1949)	(1940)	(1952)	(1940)	(1950)	(1946)	(1951)	(1951)	(1975)	(1960)	(1943)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	246.28		6.51			
ANNUAL MEAN	0.67		0.018		23.4	
HIGHEST ANNUAL MEAN					181	1941
LOWEST ANNUAL MEAN					0.018	2003
HIGHEST DAILY MEAN	113	Jun 14	1.3	Feb 12	8,380	Sep 22, 1941
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1939
MAXIMUM PEAK FLOW			6.3	Dec 26	a54,800	Jun 18, 1965
MAXIMUM PEAK STAGE			5.16	Dec 26	b28.78	Sep 22, 1941
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1939
ANNUAL RUNOFF (AC-FT)	488		13		16,970	
10 PERCENT EXCEEDS	0.00		0.00		57	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 3,100 ft^3/s, on basis of slope-area measurement of peak flow.
b Maximum gage height, 28.78 ft, Sept. 22, 1941.

08390600 TWO RIVERS RESERVOIR NEAR ROSWELL, NM

LOCATION.--08390610 Rio Hondo Reservoir: Lat 33°17'55", long 104°43'20", in SW ¼ SE ¼ NE ¼ 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 NW ¼ SE ¼ NE ¼ 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 mi^2; Rio Hondo, 963 mi^2; Rocky Arroyo, 64 mi^2.

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 with satellite telemetry. 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 Jan. 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.

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, no storage during year; Rocky Arroyo Reservoir, no storage during year.

08390800 RIO HONDO BELOW DIAMOND A DAM, NEAR ROSWELL, NM

LOCATION.--Lat 33°18'05", long 104°43'12", in NE ¼ SE ¼ NE ¼ 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 mi^2 (contributing area).

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

GAGE.--Water-stage recorder with satellite telemetry 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 fair except for those estimated, 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).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	12.0	10.3	13.4	14.1	12.1	12.6	18.2	14.4	7.94	6.66	22.2	22.1
MAX	151	122	118	128	82.9	122	176	127	74.7	52.3	137	116
(WY)	(1986)	(1987)	(1985)	(1985)	(1987)	(1987)	(1987)	(1987)	(1992)	(1986)	(1984)	(1988)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1967)	(1971)	(1974)	(1975)	(1973)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	82.18		0.74			
ANNUAL MEAN	0.23		0.002		13.8	
HIGHEST ANNUAL MEAN					85.6	1987
LOWEST ANNUAL MEAN					0.001	2000
HIGHEST DAILY MEAN	31	Jun 15	0.72	May 25	459	Sep 8, 1965
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1963
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1963
MAXIMUM PEAK FLOW			9.4	May 25	659	Jul 29, 1965
MAXIMUM PEAK STAGE			1.66	May 25	4.91	Jul 29, 1965
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1963
ANNUAL RUNOFF (AC-FT)	163		1.5		10,020	
10 PERCENT EXCEEDS	0.00		0.00		48	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08393610 RIO HONDO NEAR ROSWELL, NM

LOCATION.--Lat 33°24'30", long 104°28'18", in NE ¼ NE ¼ NM ¼ sec.35, T.10 S., R.24 E., Chaves County, Hydrologic Unit 13060008, on right bank 0.25 mi upstream from Red Bridge Road, 0.60 mi upstream from Berrendo Creek, and 1.1 mi north on State Road 265 (intersection of Red Bridge Road and U.S. Highway 380), at Pecos River mile 588.

DRAINAGE.--2,900 mi^2, approximately (contributing area).

PERIOD OF RECORD.--June 1997 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,500 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except for those estimated, which are poor. Flow regulated by Two Rivers Reservoir (08390600) 25.0 mi upstream. Diversions and ground-water withdrawals for irrigation upstream from station. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	2.9	3.7	5.1	3.8	3.3	4.3	4.0	3.0	e3.6	3.7	3.8
2	3.0	3.0	3.7	5.3	3.8	3.7	4.2	4.0	2.7	e3.6	3.7	3.9
3	2.9	3.1	6.5	5.2	3.9	3.5	4.2	4.1	2.3	e3.6	3.9	4.0
4	2.8	3.0	3.4	5.5	4.0	3.5	4.1	4.2	0.88	e3.6	4.0	4.1
5	2.7	3.0	3.2	5.4	4.1	3.5	4.2	4.1	1.7	e3.6	4.0	4.2
6	2.6	3.2	3.1	5.5	4.3	3.8	4.1	4.3	2.7	e3.6	4.2	4.2
7	2.6	3.2	3.1	5.0	4.4	3.9	4.2	4.6	2.8	e3.6	4.3	4.3
8	2.5	3.1	4.3	4.9	4.4	3.4	4.2	4.7	3.9	e3.6	4.4	4.4
9	2.5	3.2	3.2	5.1	4.4	3.4	4.2	4.9	4.1	e3.6	6.1	4.3
10	2.5	3.3	3.0	5.4	4.1	4.1	4.3	5.2	4.8	3.6	13	4.5
11	2.5	3.3	2.9	5.9	4.3	4.1	4.2	5.3	4.5	3.6	7.4	4.7
12	2.4	3.4	3.9	5.9	4.1	3.5	4.2	5.4	5.2	3.7	6.2	4.8
13	2.6	3.4	4.1	6.0	3.9	3.6	4.1	5.6	5.3	3.8	6.3	5.0
14	2.6	3.5	4.1	5.9	3.8	3.9	4.2	5.7	5.6	3.8	5.5	4.9
15	2.6	3.4	4.2	5.9	3.8	3.8	4.1	5.7	5.7	4.0	5.1	4.9
16	2.7	3.4	4.1	6.0	3.7	3.8	4.0	5.9	6.0	3.9	5.0	4.9
17	2.6	3.4	4.1	6.1	3.7	3.8	3.9	6.2	6.4	4.0	4.7	4.6
18	2.5	3.4	4.3	6.2	4.0	4.5	3.9	6.1	6.7	4.0	e3.9	4.5
19	2.6	3.4	4.3	6.1	3.8	4.8	3.9	6.3	7.0	4.0	e3.6	e4.5
20	2.6	3.4	4.3	6.3	6.1	4.6	3.9	6.3	6.6	4.1	e3.4	e4.6
21	2.6	3.5	4.3	6.1	3.5	4.5	3.7	6.3	6.9	4.0	e3.2	4.7
22	2.7	3.6	4.3	5.6	3.5	4.4	3.7	6.2	6.6	4.1	e3.1	4.7
23	2.8	3.6	5.1	5.2	3.5	4.3	3.7	6.0	7.1	7.4	e3.0	4.5
24	2.9	3.7	4.6	5.1	3.5	4.3	3.7	6.0	6.0	10	e2.7	4.4
25	2.8	3.6	4.2	5.3	3.5	4.3	3.8	25	5.8	3.3	e3.3	4.6
26	7.9	3.6	4.3	5.3	3.5	4.2	3.6	15	6.2	3.3	3.8	4.6
27	6.5	3.6	4.8	5.5	3.4	4.3	3.7	1.2	6.4	3.2	3.8	4.7
28	2.9	3.6	5.1	5.4	3.4	4.2	3.9	1.2	6.6	3.4	3.7	4.8
29	2.8	3.6	5.1	4.2	---	4.2	3.9	2.1	6.9	3.4	3.8	4.1
30	2.8	3.6	5.2	3.8	---	4.3	4.1	2.7	3.2	3.6	3.9	4.4
31	3.0	---	5.1	3.8	---	4.2	---	3.4	---	3.6	3.9	---
TOTAL	93.2	101.0	129.6	168.0	110.2	123.7	120.2	177.7	149.58	124.2	140.6	134.6
MEAN	3.01	3.37	4.18	5.42	3.94	3.99	4.01	5.73	4.99	4.01	4.54	4.49
MAX	7.9	3.7	6.5	6.3	6.1	4.8	4.3	25	7.1	10	13	5.0
MIN	2.4	2.9	2.9	3.8	3.4	3.3	3.6	1.2	0.88	3.2	2.7	3.8
AC-FT	185	200	257	333	219	245	238	352	297	246	279	267

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	8.03	8.00	7.91	9.09	6.12	6.54	5.87	8.83	8.44	6.53	7.46	5.24
MAX	13.7	12.2	10.5	10.7	9.52	11.2	7.94	28.0	16.5	13.8	23.1	7.49
(WY)	(1999)	(2001)	(2002)	(2002)	(2001)	(2001)	(1998)	(1999)	(1997)	(1999)	(1997)	(2002)
MIN	3.01	3.37	4.18	5.42	3.94	3.99	4.01	3.58	4.99	4.01	3.24	3.70
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(1999)	(1998)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	2,097.7		1,572.58			
ANNUAL MEAN	5.75		4.31		7.09	
HIGHEST ANNUAL MEAN					9.58	1999
LOWEST ANNUAL MEAN					4.31	2003
HIGHEST DAILY MEAN	89	Jun 28	25	May 25	516	May 1, 1999
LOWEST DAILY MEAN	2.4	Oct 12	0.88	Jun 4	0.88	Jun 4, 2003
ANNUAL SEVEN-DAY MINIMUM	2.5	Oct 6	2.3	Jun 1	1.7	Aug 26, 1999
MAXIMUM PEAK FLOW			197	May 25	6,390	May 1, 1999
MAXIMUM PEAK STAGE			8.82	May 25	15.96	May 1, 1999
INSTANTANEOUS LOW FLOW			0.42	Jun 3	0.42	Jun 3, 2003
ANNUAL RUNOFF (AC-FT)	4,160		3,120		5,140	
10 PERCENT EXCEEDS	9.9		6.0		11	
50 PERCENT EXCEEDS	4.2		4.0		5.0	
90 PERCENT EXCEEDS	2.9		2.9		3.1	

e Estimated

08395500 PECOS RIVER NEAR LAKE ARTHUR, NM

LOCATION.--Lat 32°59'21", long 104°19'17", in SW ¼ NE ¼ sec.27, T.15 S., R.26 E., Chaves County, Hydrologic Unit 13060007, on right bank 750 ft upstream from bridge on Yuma Road, 3.5 mi east of Lake Arthur, 7 mi upstream from Cottonwood Creek, 15 mi northeast of Artesia, and at mile 522.0.

DRAINAGE AREA.--14,760 mi^2, approximately (contributing area).

PERIOD OF RECORD.--August 1938 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,327.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except for those estimated, which are fair. Flow regulated by Lake Sumner (station 08384000), 180 mi upstream, since Aug. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1937, reached a stage of 21.77 ft, discharge, 51,500 ft^3/s, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	111	70	89	88	82	49	32	38	755	15	66
2	46	91	71	86	89	77	49	32	31	361	15	52
3	50	84	77	84	88	73	50	30	28	335	15	37
4	49	78	82	84	87	74	53	29	e26	242	16	30
5	48	73	98	85	87	70	51	28	e22	e170	15	29
6	45	68	93	86	89	68	47	27	e22	e165	15	27
7	77	63	89	88	89	66	45	27	e23	e140	16	25
8	50	60	89	88	91	64	46	26	e19	e130	16	24
9	46	57	88	88	96	67	46	26	e16	e120	16	23
10	46	54	97	86	95	68	46	25	e15	e105	15	22
11	56	50	96	86	94	64	46	23	e16	e90	14	21
12	76	50	90	87	91	61	43	23	e16	e80	15	21
13	80	50	86	88	90	62	44	25	e18	e75	16	23
14	76	50	82	90	92	63	44	25	e16	e70	17	22
15	67	58	80	92	91	61	48	25	e15	e65	17	23
16	62	53	78	93	89	58	44	25	e12	e60	17	23
17	71	64	77	95	88	57	44	23	e12	e50	16	23
18	78	67	72	98	89	55	43	22	e17	e40	16	23
19	84	71	72	96	89	53	44	22	e16	e40	17	23
20	81	75	69	94	90	53	43	23	e15	e30	18	23
21	80	76	70	91	91	54	42	23	e56	e28	18	20
22	78	76	69	90	100	55	41	23	e797	e26	18	17
23	74	76	71	88	102	56	47	24	872	e26	18	16
24	81	76	73	88	101	58	49	23	938	336	18	17
25	92	76	80	86	92	58	45	24	967	129	17	16
26	100	74	82	86	88	59	42	29	986	35	18	16
27	150	72	82	87	84	59	39	44	1,150	22	19	16
28	213	71	84	89	82	54	37	66	1,230	19	19	15
29	176	71	87	89	---	51	35	47	921	18	20	15
30	150	70	88	89	---	50	34	58	755	16	20	15
31	142	---	88	88	---	49	---	47	---	15	23	---
TOTAL	2,573	2,065	2,530	2,754	2,542	1,899	1,336	926	9,065	3,793	525	723
MEAN	83.0	68.8	81.6	88.8	90.8	61.3	44.5	29.9	302	122	16.9	24.1
MAX	213	111	98	98	102	82	53	66	1,230	755	23	66
MIN	45	50	69	84	82	49	34	22	12	15	14	15
AC-FT	5,100	4,100	5,020	5,460	5,040	3,770	2,650	1,840	17,980	7,520	1,040	1,430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	239	125	95.1	94.4	90.4	183	213	310	326	328	272	350
MAX	3,701	983	546	451	446	682	1,308	3,673	2,436	1,521	913	5,407
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1941)	(1942)	(1941)	(1941)	(1960)	(1941)	(1941)
MIN	3.89	32.0	29.9	34.5	26.6	16.6	7.35	11.9	4.78	1.02	0.42	1.30
(WY)	(1965)	(1968)	(1967)	(1965)	(1965)	(1967)	(1967)	(1975)	(1977)	(1954)	(1964)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	41,039.0		30,731			
ANNUAL MEAN	112		84.2		219	
HIGHEST ANNUAL MEAN					1,314	1941
LOWEST ANNUAL MEAN					62.2	1964
HIGHEST DAILY MEAN	2,110	Sep 13	1,230	Jun 28	39,800	Sep 24, 1941
LOWEST DAILY MEAN	8.3	Aug 20	12	Jun 16	0.00	Aug 21, 1947
ANNUAL SEVEN-DAY MINIMUM	9.6	Aug 14	15	Jun 14	0.10	Jul 26, 1954
MAXIMUM PEAK FLOW			1,250	Jun 28	a49,600	Sep 24, 1941
MAXIMUM PEAK STAGE			8.15	Jun 28	21.90	Sep 24, 1941
INSTANTANEOUS LOW FLOW			14	Aug 2	b0.00	Oct 1, 1946
ANNUAL RUNOFF (AC-FT)	81,400		60,950		158,800	
10 PERCENT EXCEEDS	170		96		655	
50 PERCENT EXCEEDS	76		58		73	
90 PERCENT EXCEEDS	17		17		16	

a From rating curve extended above 16,000 ft^3/s, on basis of slope-area measurement at gage height 21.77 ft.
b Also occurred in 1947, 1954, 1962, and 1964.
e Estimated

08396500 PECOS RIVER NEAR ARTESIA, NM

LOCATION.--Lat 32°50'27", long 104°19'23", in NW $^1/_4$ NW $^1/_4$ sec.18, T.17 S., R.27 E., Eddy County, Hydrologic Unit 13060007, on left bank 250 ft upstream from bridge on U.S. Highway 82, 4.3 mi east of Artesia, 7.0 mi upstream from Rio Penasco, and at mile 503.9.

DRAINAGE AREA.--15,300 mi^2, approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1905 to June 1909, August 1909 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1712. Records for August 22-31, 1934, and October 1936 to April 1937, published in WSP 763 and 828, respectively, are not reliable and should not be used. Prior to February 1936, published as "near Dayton."

REVISED RECORDS.--WSP 1312 and 1512: 1913, 1915, 1917-18(M), 1920, 1923, 1931-36. WSP 1712: 1906(M), 1908-11(M), 1919, 1921-23(M), 1929, 1931-32(M), 1935-36(M), 1937, 1939(M), 1941(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,291.92 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). See WSP 1923 or 2123 for history of changes prior to Apr. 5, 1941. Apr. 5, 1941, to Apr. 2, 1981, water-stage recorder at site 250 ft downstream at same datum.

REMARKS.--Water-discharge records good except for those estimated, which are fair. Considerable flow regulation by Lake Sumner (station 08384000) since Aug. 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 154,000 acres, 1959 determination, upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1893 occurred Oct. 2, 1904, discharge not determined; the peak inflow to Lake McMillan, which includes Rio Penasco and Fourmile Draw, was estimated at 82,000 ft^3/s. The second highest flood occurred July 25, 1905, discharge downstream from Rio Penasco, 50,300 ft^3/s, based on gain in storage and spill from Lake McMillan. The floods in Aug. 1893 and Oct. 1904 damaged McMillan Dam and washed out Avalon Dam.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	101	73	91	98	85	48	31	e35	517	16	25
2	47	89	75	90	98	82	48	30	35	275	15	50
3	48	82	81	89	97	76	48	30	27	232	14	35
4	47	79	82	88	97	75	49	29	24	236	14	25
5	47	76	91	88	95	73	53	28	21	145	14	20
6	46	72	94	88	98	70	48	27	21	120	13	18
7	58	68	91	91	99	68	45	26	22	127	13	17
8	58	65	92	93	101	68	43	26	18	115	12	14
9	46	62	91	93	104	66	46	24	15	84	12	13
10	44	59	92	91	107	71	44	23	14	73	10	13
11	45	56	97	92	107	e67	45	21	15	64	9.5	11
12	54	54	93	93	103	64	43	19	15	56	8.2	10
13	62	54	90	93	99	63	41	19	17	47	8.4	12
14	61	53	86	95	100	66	41	22	15	41	8.6	15
15	59	56	84	98	98	e66	42	22	14	38	8.6	15
16	54	58	83	100	95	e62	44	21	11	34	8.3	16
17	56	60	81	99	95	e59	41	21	11	31	7.6	17
18	60	67	78	104	95	58	41	18	16	30	6.4	18
19	64	69	75	104	95	57	40	16	15	28	7.6	18
20	63	73	74	104	96	57	38	16	14	26	10	18
21	64	74	73	103	99	58	37	19	37	25	9.9	18
22	63	75	72	101	99	58	37	19	258	23	9.7	15
23	61	76	74	100	103	58	36	19	682	20	10	11
24	62	76	76	97	104	60	43	19	875	23	10	11
25	67	76	78	96	97	60	44	18	904	191	9.2	12
26	73	75	86	95	94	60	39	20	897	65	8.3	12
27	81	74	85	95	90	61	36	26	961	31	8.4	11
28	121	74	85	98	86	58	35	51	995	22	8.7	11
29	127	74	89	99	---	54	33	51	838	19	9.0	12
30	113	73	91	99	---	51	32	42	464	18	9.2	11
31	111	---	91	100	---	49	---	e36	---	17	8.9	---
TOTAL	2,010	2,100	2,603	2,967	2,749	1,980	1,260	789	7,286	2,773	317.5	504
MEAN	64.8	70.0	84.0	95.7	98.2	63.9	42.0	25.5	243	89.5	10.2	16.8
MAX	127	101	97	104	107	85	53	51	995	517	16	50
MIN	44	53	72	88	86	49	32	16	11	17	6.4	10
AC-FT	3,990	4,170	5,160	5,890	5,450	3,930	2,500	1,560	14,450	5,500	630	1,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	242	133	105	105	100	187	212	347	370	324	261	348
MAX	4,203	1,240	614	499	504	768	1,292	3,834	3,495	1,453	880	5,704
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1941)	(1942)	(1941)	(1937)	(1960)	(1941)	(1941)
MIN	2.26	31.5	33.6	34.6	28.5	21.7	10.7	15.8	5.42	0.77	0.065	0.27
(WY)	(1965)	(1968)	(1967)	(1965)	(1972)	(1981)	(1967)	(1975)	(1977)	(1954)	(1964)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1937 - 2003	
ANNUAL TOTAL	37,850.1		27,338.5			
ANNUAL MEAN	104		74.9		229	
HIGHEST ANNUAL MEAN					1,378	1941
LOWEST ANNUAL MEAN					64.8	1964
HIGHEST DAILY MEAN	1,620	Sep 13	995	Jun 28	44,300	Sep 25, 1941
LOWEST DAILY MEAN	8.8	Aug 19	6.4	Aug 18	0.00	Aug 14, 1946
ANNUAL SEVEN-DAY MINIMUM	9.0	Sep 5	7.9	Aug 13	0.00	Aug 14, 1946
MAXIMUM PEAK FLOW			1,000	Jun 28	a51,500	May 30, 1937
MAXIMUM PEAK STAGE			7.70	Jun 28	14.70	May 30, 1937
INSTANTANEOUS LOW FLOW			5.9	Aug 18	0.00	Oct 1, 1934
ANNUAL RUNOFF (AC-FT)	75,080		54,230		165,600	
10 PERCENT EXCEEDS	155		100		650	
50 PERCENT EXCEEDS	73		57		78	
90 PERCENT EXCEEDS	11		12		17	

a From a slope-area measurement made at a site 15 mi upstream.
e Estimated

08396500 PECOS RIVER NEAR ARTESIA, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1937 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC													
11...	0930	97	673	10.3	95	8.1	7,060	6.0	5.5	2,000	556	152	5.92
APR													
10...	0820	44	677	7.9	88	8.2	10,800	9.0	13.0	2,800	746	236	9.27
JUN													
13...	0840	18	675	7.2	94	8.0	14,100	24.5	20.0	3,300	827	309	15.8
AUG													
19...	1340	9.8	679	8.8	135	8.1	13,700	37.0	29.0	3,800	951	353	18.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
DEC													
11...	9	926	148	178	1,580	0.88	12.6	1,630	4,950	--	--	--	--
APR													
10...	13	1,550	120	144	2,560	1.11	6.9	2,280	7,460	0.40	0.70	0.01	0.03
JUN													
13...	16	2,190	106	129	3,510	1.3	7.8	2,520	9,450	--	--	--	--
AUG													
19...	15	2,100	88	107	3,400	1.1	9.8	2,600	9,480	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
DEC													
11...	--	--	--	--	--	<30	<83	--	--	--	--	--	310
APR													
10...	<0.02	<0.010	<0.01	<0.02	0.04	E270	E330	<8	<1.50	<4	31	<0.30	550
JUN													
13...	--	--	--	--	--	200	100	--	--	--	--	--	740
AUG													
19...	--	--	--	--	--	E12	E17	--	--	--	--	--	900

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)
DEC													
11...	--	--	--	--	<50	--	--	<0.02	--	--	--	<3	--
APR													
10...	<0.18	<1.6	1.71	8.5	<100	<0.40	35.9	<0.02	5.7	34.8	<5	<5	<1
JUN													
13...	--	--	--	--	<80	--	--	<0.02	--	--	--	<5	--
AUG													
19...	--	--	--	--	<120	--	--	<0.02	--	--	--	<5	--

08396500 PECOS RIVER NEAR ARTESIA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Zinc, water, fltrd, ug/L (01090)	Ra-226, water, fltrd, radon method pCi/L (09511)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
DEC					
11...	--	--	--	78	98
APR					
10...	6	0.04	6.59	85	33
JUN					
13...	--	--	--	89	21
AUG					
19...	--	--	--	50	10

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)
AUG													
19...	1340	<0.006	E.005	<0.006	<0.004	<0.005	E.006	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
AUG													
19...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)
AUG													
19...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)
AUG													
19...	<0.022	<0.011	M	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

08396500 PECOS RIVER NEAR ARTESIA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
AUG	
19...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08397600 RIO PENASCO NEAR DUNKEN, NM

LOCATION.--Lat 32°52'55", long 105°10'40", in SE ¼ NE ¼ sec.35, T.16 S., R.17 E., Chaves County, Hydrologic Unit 13060010, located on downstream left end of bridge abutment on U.S. Highway 24, 0.1 mi south of U.S. Highway 82, and 5 mi north of Dunken.

DRAINAGE AREA.--583 mi^2, approximately.

PERIOD OF RECORD.--October 1952 to September 1999 (annual maximum only). February 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,290 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,900 ft^3/s, June 30, 2000, gage height, 13.50 ft; minimum, 1.0 ft^3/s, July 24, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,930 ft^3/s, Aug. 17, gage height, 12.06 ft; minimum, 0.61 ft^3/s, Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	23	28	17	12	2.1	2.9	14	1.8	1.0	13
2	15	24	25	29	17	13	1.1	2.4	11	1.3	0.94	12
3	16	23	31	29	17	12	1.1	2.2	4.5	0.82	0.78	12
4	17	23	29	26	18	13	1.1	2.2	4.4	1.4	0.86	12
5	16	23	27	29	18	11	1.1	3.6	5.6	1.3	1.4	12
6	17	21	24	29	18	6.1	1.1	4.2	3.6	1.3	1.6	15
7	18	22	17	29	19	4.2	1.1	4.4	3.3	1.2	1.7	15
8	17	21	17	29	20	3.6	1.1	4.3	4.2	0.62	1.6	14
9	18	19	17	28	21	4.0	1.1	3.7	4.9	1.3	1.3	14
10	19	20	17	28	20	6.5	1.1	3.6	4.3	2.1	2.8	14
11	17	21	16	29	16	10	1.3	5.2	4.6	1.6	2.4	14
12	18	21	16	29	17	10	1.8	5.1	6.0	1.4	1.9	13
13	18	20	20	29	17	8.0	1.8	2.7	4.9	1.5	2.8	12
14	20	19	22	29	17	6.8	2.4	2.7	6.5	2.0	1.8	13
15	19	19	20	29	19	4.8	2.2	3.1	4.4	1.1	41	12
16	19	24	21	22	17	5.6	2.6	2.4	1.9	0.80	71	8.9
17	19	23	21	22	15	4.4	3.2	3.3	1.7	0.79	315	7.3
18	20	23	23	20	15	7.5	3.8	3.6	1.9	1.5	63	5.5
19	19	22	24	21	15	6.7	3.6	3.6	13	1.1	28	6.4
20	21	22	24	22	16	1.0	3.9	3.4	24	1.4	20	7.1
21	21	23	24	23	15	1.0	4.2	2.0	6.2	2.3	8.9	7.1
22	21	22	25	24	13	7.0	3.5	1.9	6.2	1.9	5.9	7.1
23	21	23	27	20	14	8.6	3.8	2.8	4.7	1.3	4.7	7.0
24	21	23	26	20	13	2.6	4.2	12	5.8	3.0	5.8	7.3
25	20	24	25	19	13	7.9	4.0	13	7.5	1.5	4.2	6.4
26	24	25	26	20	12	8.1	3.4	16	8.1	1.9	4.0	5.7
27	26	26	27	20	12	6.6	4.9	15	13	1.6	5.3	5.7
28	21	26	27	18	12	5.1	6.5	14	13	1.7	29	4.9
29	23	26	27	18	---	7.6	7.5	14	7.7	2.3	63	4.9
30	25	25	26	17	---	9.9	4.0	16	5.1	2.5	37	4.1
31	24	---	28	17	---	8.4	---	18	---	1.2	23	---
TOTAL	606	677	722	752	453	223.0	84.6	193.3	206.0	47.53	751.68	292.4
MEAN	19.5	22.6	23.3	24.3	16.2	7.19	2.82	6.24	6.87	1.53	24.2	9.75
MAX	26	26	31	29	21	13	7.5	18	24	3.0	315	15
MIN	15	19	16	17	12	1.0	1.1	1.9	1.7	0.62	0.78	4.1
AC-FT	1,200	1,340	1,430	1,490	899	442	168	383	409	94	1,490	580

CAL YR	2002	TOTAL	6,853.1	MEAN	18.8	MAX	393	MIN	2.4	AC-FT	13,590
WTR YR	2003	TOTAL	5,008.51	MEAN	13.7	MAX	315	MIN	0.62	AC-FT	9,930

08397620 RIO PENASCO NEAR HOPE, NM

LOCATION.--Lat 32°50'12", long 105°03'59", in SE ¼ NE ¼ NW ¼ sec.11, T.17 S., R.18 E., Chaves County, Hydrologic Unit 13060010, located 3.0 mi southwest of the intersection of U.S. Highway 13 and Highway 82, on Scharbauer Ranch, and 11 mi above the Hope Retard Dam, near Hope.

DRAINAGE AREA.--675 mi^2, approximately.

PERIOD OF RECORD.--February 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,931 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except for those estimated, which are fair. Small diversions for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,730 ft^3/s, June 30, 2000, gage height, 12.86 ft; mimimum, no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,660 ft^3/s, Aug. 17, gage height, 10.96 ft; minimum, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	12	12	9.4	4.1	3.5	0.00	0.00	0.00	0.00	0.00	7.6
2	6.7	12	12	9.6	4.0	3.4	0.00	0.00	0.00	0.00	0.00	5.2
3	6.5	12	15	9.8	4.1	3.7	0.00	0.00	0.00	0.00	0.00	4.1
4	7.1	12	14	9.0	4.5	3.3	0.00	0.00	e0.00	0.00	0.00	3.1
5	7.3	12	12	9.2	4.5	3.4	0.00	0.00	e0.00	0.00	0.00	3.0
6	6.9	12	11	9.3	4.6	0.75	0.00	0.00	e0.00	0.00	0.00	4.0
7	7.5	12	7.3	9.4	5.0	0.00	0.00	0.00	e0.00	0.00	0.00	4.5
8	7.0	12	7.1	9.1	5.7	0.00	0.00	0.00	e0.00	0.00	0.00	3.6
9	7.1	10	7.5	8.7	5.4	0.00	0.00	0.00	e0.00	0.00	0.00	3.6
10	7.1	11	7.1	8.1	5.6	0.00	0.00	0.00	0.00	0.00	0.00	3.7
11	6.7	12	6.7	8.3	4.8	0.00	0.00	0.00	0.00	0.00	0.00	3.6
12	6.5	12	6.6	8.6	4.8	0.30	0.00	0.00	0.00	0.00	0.00	3.9
13	7.3	11	7.1	8.2	4.9	0.43	0.00	0.00	0.00	0.00	0.00	3.6
14	8.1	10	8.6	8.3	4.9	0.00	0.00	0.00	0.00	0.00	0.00	3.7
15	7.3	11	8.0	8.4	5.2	0.00	0.00	0.00	0.00	0.00	0.00	3.8
16	7.2	13	7.9	6.5	5.1	0.00	0.00	0.00	0.00	0.00	181	2.4
17	7.2	14	7.5	6.3	4.4	0.00	0.00	0.00	0.00	0.00	589	1.8
18	7.8	13	8.5	5.9	3.9	0.00	0.00	0.00	0.00	0.00	98	0.69
19	8.0	13	9.0	6.0	3.9	0.00	0.00	0.00	0.00	0.00	32	0.00
20	8.4	13	9.2	6.0	5.0	0.00	0.00	0.00	0.00	0.00	12	0.00
21	8.8	13	9.2	6.1	4.5	0.00	0.00	0.00	0.00	0.00	5.3	0.00
22	8.7	12	9.4	6.7	3.8	0.00	0.00	0.00	0.00	0.00	2.5	0.00
23	9.1	12	11	5.1	3.4	0.00	0.00	0.00	0.00	0.00	0.65	0.00
24	9.8	12	9.8	5.1	4.4	0.00	0.00	0.00	0.00	21	0.00	0.00
25	9.4	12	9.5	5.1	4.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	11	13	9.5	4.9	3.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	13	13	9.3	5.2	3.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	10	13	9.3	4.7	3.3	0.00	0.00	0.00	0.00	0.00	7.3	0.00
29	10	12	8.9	4.4	---	0.00	0.00	0.00	0.00	0.00	153	0.00
30	12	12	8.9	4.3	---	0.00	0.00	0.00	0.00	0.00	36	0.00
31	12	---	9.1	4.1	---	0.00	---	0.00	---	0.00	12	---
TOTAL	259.1	363	288.0	219.8	125.2	18.78	0.00	0.00	0.00	21.00	1,128.75	65.89
MEAN	8.36	12.1	9.29	7.09	4.47	0.61	0.000	0.000	0.000	0.68	36.4	2.20
MAX	13	14	15	9.8	5.7	3.7	0.00	0.00	0.00	21	589	7.6
MIN	6.5	10	6.6	4.1	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	514	720	571	436	248	37	0.00	0.00	0.00	42	2,240	131

CAL YR	2002	TOTAL	3,109.95	MEAN	8.52	MAX	691	MIN 0.00	AC-FT	6,170
WTR YR	2003	TOTAL	2,489.52	MEAN	6.82	MAX	589	MIN 0.00	AC-FT	4,940

e Estimated

08398500 RIO PENASCO AT DAYTON, NM

LOCATION.--Lat 32°44'36", long 104°24'49", in NE ¼ SE ¼ SE ¼ 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 mi^2, approximately.

PERIOD OF RECORD.--April 1951 to February 2000, May 2000 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. 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 ft^3/s, determined in 1956, from rating curve extended above a slope-area measurement of 36,000 ft^3/s, for peak of Oct. 6 or 7, 1954.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.86	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.64	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	4.69	1.40	0.000	0.000	0.000	0.000	0.031	1.17	11.4	8.24	14.6	9.93
MAX	201	72.8	0.016	0.000	0.000	0.000	0.77	41.0	528	221	328	372
(WY)	(1955)	(1984)	(1975)	(1952)	(1952)	(1952)	(1999)	(1965)	(1986)	(1968)	(1966)	(1974)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1951)	(1952)	(1951)	(1954)	(1951)	(1951)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	290.97		19.86			
ANNUAL MEAN	0.80		0.054		4.46	
HIGHEST ANNUAL MEAN					43.4	1986
LOWEST ANNUAL MEAN					0.000	1959
HIGHEST DAILY MEAN	126	Jul 6	18	Aug 19	9,490	Aug 23, 1966
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Apr 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Apr 1, 1951
MAXIMUM PEAK FLOW			37	Aug 19	29,800	Aug 23, 1966
MAXIMUM PEAK STAGE			1.74	Aug 19	16.40	Aug 23, 1966
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1993
ANNUAL RUNOFF (AC-FT)	577		39		3,230	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08399500 PECOS RIVER (KAISER CHANNEL) NEAR LAKEWOOD, NM

LOCATION.--Lat 32°41'22", long 104°17'53", in NW 1/4 SE 1/4 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 mi 492.1.

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1954, published as "Kaiser Lake-McMillan Channel."

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,268.53 ft above National Geodetic Vertical Datum of 1929 (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 good, except for those estimated, which are poor. Considerable flow regulation by Lake Sumner (station 08384000) since Aug. 1937, and by Two Rivers Reservoir (station 08390600) since July 1963. Diversions and ground-water withdrawals for irrigation of about 170,000 acres, 1959 determination, upstream from station. Above about 1,500 ft^3/s, flow will begin bypassing station and depending on the magnitude and duration of flow, may reach Brantley Lake (station 08401450). Several observations of water temperature were made during the year. Instantaneous peaks are not published because flood channel is seperate from Kaiser Channel and is not gaged.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	124	67	87	81	73	49	29	45	601	9.5	e6.9
2	61	107	68	86	81	72	51	27	35	400	8.1	57
3	55	91	75	84	79	68	49	27	27	327	7.7	46
4	56	85	78	81	79	66	49	24	23	323	7.0	28
5	54	79	83	82	78	66	53	22	20	216	7.3	18
6	52	72	96	81	77	64	53	21	19	141	7.6	14
7	63	68	91	84	79	63	46	20	20	128	6.7	15
8	83	63	90	86	79	63	43	21	19	111	6.2	12
9	54	60	92	88	81	61	45	20	17	90	5.5	10
10	44	57	89	88	84	66	45	19	15	65	5.8	9.6
11	42	53	99	87	84	67	45	19	14	67	e5.6	7.8
12	52	50	95	88	82	62	44	17	15	57	e5.6	e6.7
13	72	51	91	88	79	60	40	16	17	49	e5.6	e5.6
14	76	50	84	89	80	63	41	17	18	40	e5.8	e7.6
15	71	50	81	90	81	65	39	18	16	34	e6.3	9.9
16	63	56	78	92	79	63	41	17	15	30	6.1	10
17	60	52	77	91	78	59	43	17	14	26	6.1	11
18	69	64	72	94	78	57	e40	17	16	24	e5.9	e12
19	76	66	70	96	77	57	e40	11	18	22	e3.6	13
20	77	68	68	94	79	56	e39	10	17	19	e5.1	14
21	76	71	67	93	83	57	38	13	20	17	e7.9	13
22	75	71	66	90	82	58	39	17	161	15	e7.2	13
23	74	73	68	88	89	59	38	16	703	15	e7.2	8.3
24	70	74	72	86	89	60	39	17	839	66	e8.1	7.0
25	77	72	72	84	89	62	49	17	900	206	e7.9	6.6
26	89	72	79	82	83	63	43	16	911	91	e7.0	8.4
27	99	71	82	81	78	63	39	20	909	37	e5.8	7.0
28	148	68	81	82	74	64	35	31	980	18	e6.1	6.4
29	168	69	86	82	---	58	33	63	926	13	e6.7	6.4
30	143	68	88	83	---	53	31	44	526	11	e6.0	6.3
31	133	---	88	83	---	51	---	54	---	11	e7.2	---
TOTAL	2,392	2,075	2,493	2,690	2,262	1,919	1,279	697	7,275	3,270	204.2	396.5
MEAN	77.2	69.2	80.4	86.8	80.8	61.9	42.6	22.5	242	105	6.59	13.2
MAX	168	124	99	96	89	73	53	63	980	601	9.5	57
MIN	42	50	66	81	74	51	31	10	14	11	3.6	5.6
AC-FT	4,740	4,120	4,940	5,340	4,490	3,810	2,540	1,380	14,430	6,490	405	786

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	137	90.5	78.8	80.7	80.6	158	145	245	246	266	241	190
MAX	695	339	272	307	332	417	489	1,220	748	886	698	800
(WY)	(1955)	(1998)	(1987)	(1987)	(2000)	(1987)	(1987)	(1973)	(1995)	(1960)	(1994)	(1988)
MIN	0.000	26.1	29.2	31.4	25.3	19.2	8.12	15.3	1.86	0.041	0.000	0.000
(WY)	(1965)	(1968)	(1965)	(1965)	(1972)	(1971)	(1967)	(1964)	(1977)	(1990)	(1964)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	39,249.52		26,952.7			
ANNUAL MEAN	108		73.8		163	
HIGHEST ANNUAL MEAN					353	1987
LOWEST ANNUAL MEAN					64.1	1964
HIGHEST DAILY MEAN	1,190	Sep 14	980	Jun 28	2,920	Jul 12, 1960
LOWEST DAILY MEAN	0.00	Sep 6	3.6	Aug 19	0.00	Aug 21, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 5	5.6	Aug 14	0.00	Jun 29, 1953
MAXIMUM PEAK FLOW			1,060	Jun 25	1,460	May 5, 1999
MAXIMUM PEAK STAGE			7.12	Jun 25	11.08	May 5, 1999
INSTANTANEOUS LOW FLOW			4.2	Aug 9	0.00	Sep 6, 2002
ANNUAL RUNOFF (AC-FT)	77,850		53,460		118,400	
10 PERCENT EXCEEDS	183		91		571	
50 PERCENT EXCEEDS	72		58		62	
90 PERCENT EXCEEDS	5.7		7.8		11	

e Estimated

08400000 FOURMILE DRAW NEAR LAKEWOOD, NM

LOCATION.--Lat 32°40'20", long 104°22'07", in SW ¼ NW ¼ SE ¼ sec.10, T.19 S., R.26 E., Eddy County, Hydrologic Unit 13060011, in left side of channel 360 ft downstream from ford on Lake Road, 1.9 mi downstream from U.S. Highway 285, 2.8 mi north of Lakewood, 3.8 mi upstream from mouth, and 11.5 mi south of Artesia. Mouth at Pecos River mile 490.6.

DRAINAGE AREA.--265 mi^2, approximately.

PERIOD OF RECORD.--October 1951 to February 2000, May 2000 to current year.

REVISED RECORDS.--WDR NM-68-1: 1967.

GAGE.--Water-stage recorder. Elevation of gage is 3,299.14 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1951, to June 19, 1962, at site 1.8 mi upstream at datum 30.61 ft higher. June 19, 1962, to Oct. 12, 1966, at site 410 ft upstream at datum 6.08 ft higher.

REMARKS.--Records good. No surface diversions upstream from station. No flow most of the time.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	3.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	13.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

MEAN	1.58	0.000	0.000	0.000	0.000	0.000	0.006	1.08	8.48	2.62	14.7	9.17
MAX	73.0	0.003	0.000	0.000	0.000	0.000	0.27	35.2	403	78.0	488	424
(WY)	(1955)	(1959)	(1952)	(1952)	(1952)	(1952)	(1999)	(1979)	(1986)	(1968)	(1966)	(1974)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1953)	(1954)	(1952)	(1952)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	607.48		13.91			
ANNUAL MEAN	1.66		0.038		3.26	
HIGHEST ANNUAL MEAN					41.6	1966
LOWEST ANNUAL MEAN					0.000	1969
HIGHEST DAILY MEAN	236	Sep 16	10	Oct 7	13,000	Aug 23, 1966
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 8	0.00	Oct 1, 1951
MAXIMUM PEAK FLOW			93	Oct 7	29,300	Aug 23, 1966
MAXIMUM PEAK STAGE			2.60	Oct 7	19.90	Aug 23, 1966
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1951
ANNUAL RUNOFF (AC-FT)	1,200		28		2,360	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08401200 SOUTH SEVEN RIVERS NEAR LAKEWOOD, NM

LOCATION.--Lat 32°35'19", long 104°25'17", in SE ¼ SE ¼ NW ¼ 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 mi^2, approximately.

PERIOD OF RECORD.--October 1963 to April 1997, May 1999 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. Prior to May 20, 1999, at datum 2.19 ft higher.

REMARKS.--Records fair, except for those estimated, which are poor. No surface diversions upstream from station; ground-water withdrawals for 240 acres, upstream from station. No flow most of time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1941, about 30,000 ft^3/s, gage height, 22.8 ft, from old debris on left bank, former site and datum, from rating curve extended above 5,700 ft^3/s on basis of slope-area measurement at gage height 21.8 ft. Probable date of flood, Oct. 7, 1954.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
6	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.16	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.32	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.04	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.32	0.00
MEAN	0.001	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.010	0.000
MAX	0.04	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.32	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.08	0.00	0.00	0.00	0.3	0.00	0.00	0.00	0.00	0.00	0.6	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	0.81	0.070	0.000	0.000	0.000	0.003	0.005	2.58	8.78	1.66	17.1	10.6
MAX	15.9	2.05	0.000	0.000	0.006	0.11	0.17	83.9	275	28.3	369	237
(WY)	(1984)	(1984)	(1964)	(1964)	(2003)	(2002)	(1966)	(1965)	(1986)	(1968)	(1966)	(1974)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1966)	(1964)	(1965)	(1964)	(1965)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	241.74		0.52			
ANNUAL MEAN	0.66		0.001		3.56	
HIGHEST ANNUAL MEAN					31.5	1966
LOWEST ANNUAL MEAN					0.000	1989
HIGHEST DAILY MEAN	128	Sep 15	0.32	Aug 29	9,300	Aug 23, 1966
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1963
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 7	0.00	Oct 1, 1963
MAXIMUM PEAK FLOW			20	Aug 29	25,500	May 30, 1965
MAXIMUM PEAK STAGE			4.36	Aug 29	20.00	May 30, 1965
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1963
ANNUAL RUNOFF (AC-FT)	479		1.0		2,580	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08401450 BRANTLEY LAKE NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'48", long 104°22'43", in NE ¼ SE ¼ NE ¼ 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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--August 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,202.5 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Sept. 1, 2001, elevations referenced to the North American Vertical Datum of 1988 (NAVD). Elevation of gage as of Sept. 1, 2001, is 3,204.19 ft above NAVD 1988.

REMARKS.--Lake is formed by a concrete and earthfill dam on Pecos River. Storage began Aug. 31, 1988. Capacity, 348,540 acre-ft, from capacity table dated June 2001, between elevations 3,205.0 ft and 3,305.19 ft. Dead storage 2,010 acre-ft. Lake was created primarily for irrigation storage and flood control.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 49,270 acre-ft, Sept. 22-24, 1991, elevation, 3,257.60 ft; minimum, 2,040 acre-ft, May 26, 1990, elevation, 3,224.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 20,840 acre-ft, Mar. 26, elevation, 3,247.57 ft; minimum, 2,800 acre-ft, Sept. 30, elevation, 3,229.53 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 0700 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,000	12,590	14,220	12,270	16,620	19,870	20,160	10,410	6,290	12,900	10,450	6,030
2	12,010	12,720	14,300	12,340	16,720	19,980	19,940	10,440	6,360	13,580	10,380	6,020
3	12,030	12,780	13,600	12,480	16,880	20,060	19,500	10,450	6,380	13,900	10,340	6,060
4	12,010	12,860	13,710	12,620	16,950	20,160	18,980	10,470	6,410	14,140	10,280	6,120
5	12,010	12,990	12,910	12,810	17,100	20,210	18,450	10,440	6,410	14,450	10,250	6,110
6	12,030	13,000	12,330	12,960	17,180	20,280	18,190	10,450	6,490	14,540	10,160	6,080
7	12,170	13,070	11,840	13,060	17,290	20,320	17,500	10,440	6,470	14,550	10,100	6,090
8	12,200	13,080	11,220	13,170	17,400	20,410	16,990	10,430	6,460	14,540	10,030	6,060
9	12,290	13,150	10,750	13,370	17,600	20,440	16,470	10,410	6,440	14,170	9,980	5,900
10	12,290	13,170	10,250	13,530	17,660	20,500	16,070	10,380	6,440	13,830	9,870	5,360
11	11,810	13,200	9,710	13,670	17,810	20,550	15,690	10,370	6,420	13,490	9,850	4,880
12	11,490	13,230	9,180	13,780	17,940	20,660	15,300	10,160	6,400	13,160	9,230	4,460
13	11,130	13,250	9,500	13,950	18,060	20,700	15,000	9,770	6,020	12,820	8,600	4,200
14	10,950	13,290	9,770	14,060	18,210	20,720	14,750	9,380	5,710	12,440	8,010	3,940
15	10,900	13,320	9,350	14,220	18,330	20,720	14,450	8,980	5,460	12,130	7,630	4,030
16	10,970	13,330	9,580	14,370	18,410	20,790	14,200	8,610	5,220	11,730	7,280	4,110
17	11,040	13,360	9,790	14,510	18,480	20,790	13,940	8,230	4,830	11,330	6,760	4,160
18	11,110	13,400	9,970	14,640	18,600	20,770	13,570	7,950	4,360	10,930	6,440	4,200
19	11,220	13,440	10,160	14,810	18,670	20,740	13,240	7,680	3,930	10,550	6,090	4,230
20	11,260	13,530	10,280	14,970	18,890	20,740	12,960	7,370	3,520	10,280	6,110	4,240
21	11,310	13,600	10,460	15,130	19,080	20,740	12,820	7,000	3,200	10,280	6,190	4,270
22	11,390	13,640	10,630	15,270	19,180	20,810	12,630	6,720	3,060	10,260	6,200	4,290
23	11,470	13,710	10,820	15,390	19,300	20,830	12,300	6,510	3,430	10,240	6,210	4,290
24	11,480	13,790	10,970	15,510	19,390	20,830	11,910	6,210	4,700	10,300	6,210	4,290
25	11,550	13,840	11,110	15,690	19,460	20,830	11,500	5,950	6,060	10,300	6,200	4,290
26	11,670	13,910	11,240	15,820	19,550	20,840	11,120	5,820	7,410	10,520	6,180	4,280
27	11,790	13,970	11,390	16,130	19,690	20,630	10,730	5,920	8,680	10,730	6,140	3,920
28	11,950	14,040	11,530	16,090	19,780	20,390	10,510	5,990	10,000	10,680	6,120	3,370
29	12,160	14,090	11,730	16,190	---	20,350	10,320	6,060	11,310	10,630	6,110	3,070
30	12,340	14,160	11,850	16,340	---	20,420	10,390	6,150	12,350	10,570	6,130	2,800
31	12,440	---	12,020	16,500	---	20,440	---	6,230	---	10,520	6,080	---
MAX	12,440	14,160	14,300	16,500	19,780	20,840	20,160	10,470	12,350	14,550	10,450	6,120
MIN	10,900	12,590	9,180	12,270	16,620	19,870	10,320	5,820	3,060	10,240	6,080	2,800
(+)	3,242.12	3,243.42	3,241.78	3,245.01	3,246.98	3,247.35	3,240.36	3,235.67	3,242.50	3,240.48	3,235.46	3,229.53
(++)	+480	+1,720	-2,140	+4,480	+3,280	+660	-10,050	-4,160	+6,120	-1,830	-4,440	-3,280

CAL YR 2002 MAX 30,080 MIN 6,240 (++) +3,550
WTR YR 2003 MAX 20,840 MIN 2,800 (++) -9,160

(+) Elevation in feet, at end of month.
(++) Change in contents, in acre-feet.

08401500 PECOS RIVER BELOW BRANTLEY DAM NEAR CARLSBAD, NM

LOCATION.--Lat 32°32'38", long 104°22'00", in NE ¼ NW ¼ SE ¼ 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 mi^2, approximately (contributing area).

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 with satellite telemetry. Elevation of gage is 3,191.15 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation reference point). Prior to Oct. 1971, at site 1.3 mi upstream at different datum. Oct. 1971 to June 4, 1985, at site 0.8 mi upstream at datum 7.29 ft higher. Prior to Oct. 1988, at site 0.2 mi downstream at same datum.

REMARKS.--Records fair. Flow completely regulated by Brantley Lake (station 08401450), 0.8 mi upstream, since Aug. 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	28	0.78	11	16	150	23	19	21	39	15
2	26	23	308	5.8	1.2	17	211	23	19	19	41	16
3	26	22	200	13	0.68	17	282	23	20	19	42	18
4	25	23	302	1.9	0.55	16	302	22	21	20	39	19
5	24	23	464	6.0	4.1	16	301	20	22	21	36	19
6	24	22	465	13	8.7	16	300	21	22	21	29	22
7	24	22	466	2.0	1.1	17	299	21	23	23	24	23
8	23	24	467	0.86	0.54	17	315	21	23	135	23	58
9	23	24	467	5.3	0.18	17	289	21	21	209	31	208
10	173	25	485	4.1	4.5	17	267	21	16	209	41	277
11	241	25	493	1.1	9.6	17	255	77	14	208	217	258
12	225	25	199	0.84	0.88	17	235	177	103	209	336	228
13	209	26	23	8.2	4.8	17	199	224	161	209	340	166
14	159	26	150	17	14	18	181	232	160	208	282	70
15	67	26	200	2.7	15	18	179	228	158	235	271	20
16	23	26	20	1.2	15	18	178	229	199	250	285	20
17	22	26	13	7.0	15	17	220	204	252	250	262	21
18	23	26	1.5	17	15	16	232	185	278	250	245	22
19	23	26	6.0	2.8	15	17	193	202	278	229	110	21
20	23	26	13	1.2	16	18	153	203	250	112	25	20
21	24	26	1.3	0.90	16	18	140	203	182	39	25	20
22	23	27	3.4	7.4	15	19	193	200	135	34	24	20
23	23	27	13	15	15	19	241	196	66	25	22	21
24	23	27	1.7	2.3	16	19	253	170	15	22	22	20
25	23	27	5.1	1.1	16	19	268	139	16	19	21	21
26	23	27	14	0.90	15	85	275	62	18	17	22	122
27	23	27	1.6	5.8	15	146	227	15	20	31	19	269
28	22	28	0.60	12	16	74	167	15	21	44	17	248
29	22	28	4.7	1.8	---	21	73	15	23	43	16	204
30	22	28	13	0.80	---	21	22	15	24	43	15	201
31	23	---	1.7	6.0	---	97	---	18	---	41	15	---
TOTAL	1,660	761	4,830.60	165.78	276.83	877	6,600	3,225	2,579	3,215	2,936	2,667
MEAN	53.5	25.4	156	5.35	9.89	28.3	220	104	86.0	104	94.7	88.9
MAX	241	28	493	17	16	146	315	232	278	250	340	277
MIN	22	22	0.60	0.78	0.18	16	22	15	14	17	15	15
AC-FT	3,290	1,510	9,580	329	549	1,740	13,090	6,400	5,120	6,380	5,820	5,290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2003, BY WATER YEAR (WY)

MEAN	171	68.2	52.3	40.4	51.3	73.0	231	213	217	236	195	166
MAX	412	431	460	297	300	149	313	1,058	641	527	311	500
(WY)	(1995)	(1998)	(1992)	(1987)	(1987)	(1994)	(1998)	(1973)	(1992)	(1995)	(1999)	(1991)
MIN	22.6	5.92	1.22	3.49	9.89	19.1	134	79.9	66.5	11.3	18.4	50.9
(WY)	(1979)	(1989)	(1995)	(1995)	(2003)	(1990)	(2002)	(1976)	(1977)	(1976)	(1981)	(1976)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1972 - 2003	
ANNUAL TOTAL	32,354.60		29,793.21			
ANNUAL MEAN	88.6		81.6		148	
HIGHEST ANNUAL MEAN					282	1992
LOWEST ANNUAL MEAN					69.5	1977
HIGHEST DAILY MEAN	493	Dec 11	493	Dec 11	2,050	Sep 3, 1972
LOWEST DAILY MEAN	0.60	Dec 28	0.18	Feb 9	0.18	Feb 9, 2003
ANNUAL SEVEN-DAY MINIMUM	5.6	Dec 22	2.3	Feb 3	0.33	Nov 22, 1988
MAXIMUM PEAK FLOW					2,050	Sep 3, 1972
MAXIMUM PEAK STAGE					6.82	Dec 11, 2002
INSTANTANEOUS LOW FLOW			0.00	Feb 9	0.00	Feb 9, 2003
ANNUAL RUNOFF (AC-FT)	64,180		59,090		107,600	
10 PERCENT EXCEEDS	239		250		348	
50 PERCENT EXCEEDS	34		23		70	
90 PERCENT EXCEEDS	23		5.2		20	

08401900 ROCKY ARROYO AT HIGHWAY BRIDGE, NEAR CARLSBAD, NM

LOCATION.--Lat 32°30'23", long 104°22'28", in SE ¼ SE ¼ sec.3, T.21 S., R.25 E., Eddy County, Hydrologic Unit 13060011, at downstream end of bridge pier nearest left bank on U.S. Highway 285, 2.1 mi upstream from mouth, and 10 mi northwest of Carlsbad. Mouth at Pecos River mile 475.2.

DRAINAGE AREA.--285 mi^2, approximately.

PERIOD OF RECORD.--November 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 Feb. 1985, at site 60 ft downstream at same datum.

REMARKS.--Records good. Diversions for irrigation of 220 acres, upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Since about 1941 the maximum discharge probably occurred Oct. 7, 1954, discharge, 63,600 ft^3/s, gage height, 19.2 ft, from floodmarks, on downstream end of bridge pier, by slope-area measurement at site 5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	3.8	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	127.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	4.12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	253	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	8.09	0.47	0.014	0.000	0.000	0.000	0.052	1.96	14.8	4.08	21.2	18.8
MAX	185	10.1	0.56	0.002	0.000	0.000	1.50	37.6	468	73.4	616	335
(WY)	(1975)	(2001)	(1975)	(1975)	(1964)	(1964)	(1965)	(1979)	(1986)	(2002)	(1966)	(1974)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1965)	(1964)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	4,569.42		127.80			
ANNUAL MEAN	12.5		0.35		5.80	
HIGHEST ANNUAL MEAN					53.9	1966
LOWEST ANNUAL MEAN					0.000	1973
HIGHEST DAILY MEAN	1,960	Sep 15	80	Oct 27	13,900	Aug 23, 1966
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1963
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1963
MAXIMUM PEAK FLOW			667	Oct 27	a31,600	Aug 23, 1966
MAXIMUM PEAK STAGE			7.26	Oct 27	15.35	Aug 23, 1966
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1997
ANNUAL RUNOFF (AC-FT)	9,060		253		4,200	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 8,500 ft^3/s, on basis of slope-area measurement of peak flow.

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 mi^2, 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 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 those for Dec. 12-Jan. 13, which are poor. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peaks that probably exceeded 40,000 ft^3/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 ft^3/s. Floods of 1893 and 1904 originated upstream from McMillan Dam and contributed to the two failures of Avalon Dam.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	25	2.0	11	16	154	18	17	21	21	28
2	20	22	246	1.4	6.4	16	203	18	16	21	22	28
3	20	22	510	6.9	3.3	16	285	18	17	22	22	28
4	20	22	606	4.8	2.1	15	315	17	17	22	22	28
5	20	22	449	2.7	1.3	15	314	17	23	22	22	28
6	23	22	445	8.2	8.1	16	312	18	22	22	23	28
7	24	23	441	4.7	5.8	15	312	18	17	22	23	29
8	21	22	438	3.0	3.2	16	325	17	17	101	23	48
9	21	21	434	1.9	2.0	15	305	17	17	204	23	193
10	137	21	444	3.0	1.4	15	276	17	17	203	24	297
11	250	22	502	3.3	9.6	15	265	56	16	202	166	280
12	225	22	262	2.4	5.9	15	242	168	83	198	342	247
13	205	22	25	2.3	3.0	14	207	233	178	194	350	190
14	153	23	80	13	12	15	183	245	178	192	294	100
15	80	23	225	8.2	19	15	181	242	177	214	264	24
16	22	23	21	4.0	18	15	181	241	212	235	280	22
17	21	23	17	2.8	18	14	217	220	277	234	257	22
18	22	24	5.3	8.7	17	13	239	200	320	232	236	21
19	21	24	3.2	9.3	17	14	204	212	315	213	140	21
20	21	23	9.1	4.3	20	15	160	223	286	119	29	21
21	22	23	3.5	3.0	20	15	140	220	215	21	28	21
22	20	23	1.7	2.2	17	15	183	218	152	19	28	20
23	21	24	3.6	11	17	15	239	216	92	19	28	20
24	28	24	3.3	8.0	17	14	255	196	19	21	28	20
25	21	24	1.7	4.0	17	15	269	165	18	20	28	20
26	21	24	5.0	2.7	17	59	280	92	19	20	28	92
27	111	24	3.6	2.0	17	150	237	18	19	20	28	260
28	88	24	1.9	9.5	17	96	172	17	20	21	28	265
29	22	24	1.2	6.7	---	17	93	16	20	21	28	205
30	22	24	4.1	3.5	---	15	19	16	21	22	28	201
31	22	---	3.7	2.4	---	71	---	16	---	22	28	---
TOTAL	1,746	687	5,220.9	151.9	323.1	782	6,767	3,405	2,817	2,919	2,891	2,807
MEAN	56.3	22.9	168	4.90	11.5	25.2	226	110	93.9	94.2	93.3	93.6
MAX	250	24	606	13	20	150	325	245	320	235	350	297
MIN	20	21	1.2	1.4	1.3	13	19	16	16	19	21	20
AC-FT	3,460	1,360	10,360	301	641	1,550	13,420	6,750	5,590	5,790	5,730	5,570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	198	82.0	71.2	58.3	64.1	83.5	249	195	224	251	256	206
MAX	2,609	464	421	284	293	382	345	1,055	1,892	794	2,267	1,156
(WY)	(1955)	(1987)	(1992)	(1987)	(1987)	(1987)	(1945)	(1973)	(1986)	(1960)	(1966)	(1974)
MIN	9.91	5.71	1.04	1.98	11.5	17.7	127	46.4	18.6	10.8	21.5	12.3
(WY)	(1965)	(1989)	(1995)	(1995)	(2003)	(1965)	(2002)	(1946)	(1946)	(1976)	(1947)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	32,990.9		30,516.9			
ANNUAL MEAN	90.4		83.6		162	
HIGHEST ANNUAL MEAN					395	1955
LOWEST ANNUAL MEAN					66.8	1977
HIGHEST DAILY MEAN	958	Sep 15	606	Dec 4	39,000	Aug 23, 1966
LOWEST DAILY MEAN	1.2	Dec 29	1.2	Dec 29	0.00	Dec 21, 1988
ANNUAL SEVEN-DAY MINIMUM	2.9	Dec 23	2.6	Dec 27	0.46	Dec 15, 1988
MAXIMUM PEAK FLOW			1,240	Dec 4	a69,000	Aug 23, 1966
MAXIMUM PEAK STAGE			4.51	Dec 4	b21.32	Aug 23, 1966
INSTANTANEOUS LOW FLOW			0.00	Jan 18	0.00	Dec 21, 1988
ANNUAL RUNOFF (AC-FT)	65,440		60,530		117,300	
10 PERCENT EXCEEDS	246		252		344	
50 PERCENT EXCEEDS	29		22		91	
90 PERCENT EXCEEDS	22		4.2		22	

a From rating curve extended above 25,000 ft^3/s, on basis of slope-area measurement at gage height 19.53 ft.
b From floodmarks at present datum.

08403500 CARLSBAD MAIN CANAL AT HEAD, NEAR CARLSBAD, NM

LOCATION.--Lat 32°29'25", long 104°15'08", in NW $^1/_4$ SW $^1/_4$ SW $^1/_4$ 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, and at 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 with satellite telemetry and concrete control. Elevation of gage is 3,156.50 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Mar. 1951, at site 20 ft upstream at datum 0.9 ft higher.

REMARKS.--Records good, except for those estimated, 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 temperature were made during the year. No flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	166	0.00	e0.00	0.00	e0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	245	0.00	e0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.77	2.6	0.00	278	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	272	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	1.8	0.00	256	0.00	0.25	0.00	0.00	0.00
6	0.00	0.00	0.00	4.6	2.6	0.00	254	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.95	0.00	289	0.00	0.00	0.00	0.00	e100
8	92	0.00	0.00	2.7	0.00	0.00	269	0.00	0.00	95	0.00	250
9	178	0.00	0.00	4.4	0.00	0.00	241	0.00	0.00	200	0.00	272
10	235	0.00	0.00	1.6	0.00	0.00	256	0.00	0.00	185	103	268
11	204	0.00	0.00	0.00	0.00	0.00	241	87	69	173	268	259
12	193	0.00	0.00	0.00	0.00	0.00	190	180	150	194	293	175
13	153	0.00	0.00	0.00	0.00	0.00	149	221	167	179	267	127
14	112	e0.00	0.00	0.00	0.00	0.00	194	214	159	162	198	13
15	76	e0.00	0.00	0.00	0.00	0.00	176	229	172	204	214	0.00
16	0.13	0.00	0.00	0.00	0.00	0.00	171	210	231	210	185	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	231	170	301	173	185	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	211	176	303	182	159	0.00
19	e0.00	0.00	0.00	e0.00	0.00	0.00	163	208	283	161	45	0.00
20	0.00	0.00	0.00	e0.62	0.00	0.00	121	213	238	64	7.1	0.00
21	0.00	0.00	0.00	e2.0	0.00	0.00	e200	196	175	0.01	3.2	0.00
22	0.00	0.00	0.00	e0.36	0.00	0.00	219	177	107	0.00	0.00	0.00
23	0.00	0.00	0.00	e0.00	0.00	0.00	243	189	79	0.00	0.00	0.00
24	0.36	e0.00	0.00	e0.00	0.00	0.00	241	146	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	219	83	0.00	0.00	0.00	134
26	e0.00	0.00	0.00	e0.00	0.00	0.00	198	0.04	0.00	0.00	0.00	e150
27	e0.65	0.00	0.00	e1.5	0.00	0.00	153	0.00	0.00	0.00	0.00	e270
28	e0.11	0.00	0.00	0.28	0.00	0.00	109	0.00	0.00	0.00	0.00	e210
29	0.00	0.00	0.00	4.5	---	0.00	86	e0.00	0.00	0.00	0.00	e190
30	0.00	0.00	0.00	1.1	---	0.00	45	e0.00	0.00	0.00	0.00	e210
31	0.00	---	0.00	2.0	---	82	---	e0.00	---	0.00	0.00	---
TOTAL	1,244.25	0.00	0.00	26.43	7.95	82.00	6,086	2,699.04	2,434.25	2,182.01	1,927.30	2,628.00
MEAN	40.1	0.000	0.000	0.85	0.28	2.65	203	87.1	81.1	70.4	62.2	87.6
MAX	235	0.00	0.00	4.6	2.6	82	289	229	303	210	293	272
MIN	0.00	0.00	0.00	0.00	0.00	0.00	45	0.00	0.00	0.00	0.00	0.00
AC-FT	2,470	0.00	0.00	52	16	163	12,070	5,350	4,830	4,330	3,820	5,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	85.1	3.93	6.98	10.5	21.1	72.1	243	136	162	199	199	141
MAX	218	112	172	120	208	227	386	274	297	391	463	298
(WY)	(2000)	(1955)	(1947)	(1956)	(1950)	(1940)	(1943)	(2000)	(1942)	(1940)	(1943)	(1939)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	140	6.58	0.000	0.000	2.81	0.000
(WY)	(1953)	(1942)	(1941)	(1942)	(1941)	(1948)	(2002)	(1953)	(1953)	(1976)	(1981)	(1964)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	20,935.65		19,317.23			
ANNUAL MEAN	57.4		52.9		106	
HIGHEST ANNUAL MEAN					174	1940
LOWEST ANNUAL MEAN					51.8	1964
HIGHEST DAILY MEAN	291	Apr 11	303	Jun 18	526	Sep 15, 1946
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 1, 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 16, 1939
MAXIMUM PEAK FLOW			332	Aug 12	451	Jul 5, 1999
MAXIMUM PEAK STAGE			3.15	Aug 12	3.65	Jul 5, 1999
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 13, 1997
ANNUAL RUNOFF (AC-FT)	41,530		38,320		76,650	
10 PERCENT EXCEEDS	217		210		290	
50 PERCENT EXCEEDS	0.00		0.00		61	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08403800 LAKE AVALON NEAR CARLSBAD, NM

LOCATION.--Lat 32°29'27", long 104°15'05", in NW ¼ SW ¼ 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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend gage heights and contents), October 1965 to current year. Monthend gage heights January 1919 to December 1938 in files of Pecos River Commission.

REVISED RECORDS.--WSP 898: 1939.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,157.0 ft above National Geodetic Vertical Datum of 1929 (levels by 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 (based on Feb. 1996 survey) 4,470 acre-ft between gage heights 0.0 (sill of outlet gates) and 20.4 ft (crest of spillway 2). No dead storage. No storage allocated to flood control. New capacity table put into use Jan. 1, 1997. Figures given herein represent usable contents. Water is used by Carlsbad Irrigation District.

COOPERATION.--Records provided by Carlsbad Irrigation District.

EXTREMES OUTSIDE 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, 3,510 acre-ft, Dec. 4, gage height, 19.30 ft; minimum, 3.0 acre-ft, Jan. 12-15, gage height, 11.00 ft.

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,400	2,200	2,570	21	18	324	1,150	1,270	1,590	1,270	1,460	1,860
2	1,400	2,200	2,570	21	21	324	966	1,270	1,590	1,270	1,460	1,860
3	1,400	2,200	3,270	21	25	366	848	1,270	1,590	1,330	1,460	1,860
4	1,460	2,280	3,510	21	5.0	366	907	1,270	1,590	1,330	1,460	1,860
5	1,460	2,280	3,180	25	5.0	366	907	1,330	1,590	1,330	1,460	1,920
6	1,460	2,280	3,030	25	5.0	410	1,030	1,330	1,720	1,330	1,460	1,920
7	1,660	2,280	2,950	4.0	10	410	1,090	1,330	1,720	1,330	1,460	1,920
8	1,660	2,280	2,790	25	15	410	1,030	1,330	1,720	1,330	1,460	1,590
9	1,460	2,280	2,640	25	18	410	1,150	1,330	1,720	1,270	1,460	1,270
10	1,090	2,350	2,490	18	84	456	1,150	1,330	1,720	1,210	1,460	1,210
11	1,030	2,350	2,350	4.0	69	456	1,210	1,330	1,720	1,210	1,090	1,270
12	1,030	2,350	2,420	3.0	56	456	1,210	1,210	1,520	1,210	1,030	1,270
13	1,090	2,350	1,790	3.0	45	456	1,270	1,150	1,400	1,150	1,090	1,400
14	1,210	2,350	1,030	3.0	36	509	1,330	1,150	1,330	1,150	1,210	1,460
15	1,210	2,420	790	3.0	69	509	1,270	1,150	1,330	1,090	1,330	1,590
16	1,210	2,420	410	18	120	509	1,210	1,090	1,150	1,090	1,400	1,590
17	1,270	2,420	36	15	164	509	1,210	1,150	1,150	1,090	1,520	1,590
18	1,330	2,420	36	18	164	563	1,150	1,150	1,030	1,150	1,590	1,590
19	1,330	2,420	29	21	190	563	1,210	1,150	1,030	1,210	1,720	1,660
20	1,330	2,420	25	21	190	563	1,270	1,150	1,090	1,270	1,790	1,660
21	1,400	2,490	25	21	251	563	1,270	1,090	1,150	1,330	1,790	1,660
22	1,400	2,490	21	15	251	563	1,150	1,090	1,150	1,330	1,860	1,660
23	1,460	2,490	21	12	286	619	1,090	1,150	1,210	1,330	1,860	1,660
24	1,520	2,490	21	12	286	619	1,030	1,150	1,210	1,330	1,860	1,660
25	1,520	2,490	21	15	286	619	1,030	1,210	1,210	1,400	1,860	1,660
26	1,590	2,490	21	18	286	675	1,090	1,400	1,210	1,400	1,860	1,400
27	1,860	2,570	21	21	324	790	1,210	1,520	1,210	1,400	1,860	1,210
28	2,060	2,570	21	5.0	324	1,030	1,330	1,520	1,210	1,400	1,860	1,210
29	2,060	2,570	21	18	---	1,150	1,400	1,590	1,270	1,400	1,860	1,210
30	2,130	2,570	21	3.0	---	1,210	1,330	1,590	1,270	1,400	1,860	1,150
31	2,130	---	21	15	---	1,210	---	1,590	---	1,400	1,860	---
MAX	2,130	2,570	3,510	25	324	1,210	1,400	1,590	1,720	1,400	1,860	1,920
MIN	1,030	2,200	21	3.0	5.0	324	848	1,090	1,030	1,090	1,030	1,150
(+)	3,174.50	3,175.10	3,169.90	3,169.70	3,171.50	3,173.10	3,173.30	3,173.70	3,173.20	3,173.40	3,174.10	3,173.00
(++)	+860	+440	-2,549	-6.0	+309	+886	+120	+260	-320	+130	+460	-710

CAL YR	2002	MAX 3,680	MIN 21	(++)	-1,500
WTR YR	2003	MAX 3,510	MIN 3.0	(++)	-120

(+) Elevation in feet, at end of month.
(++) Change in contents, in acre-feet.

08404000 PECOS RIVER BELOW AVALON DAM, NM

LOCATION.--Lat 32°28'55", long 104°15'47", in SW ¼ SW ¼ NE ¼ 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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1907 (published as "at Avalon"), June 1951 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 1906 to Mar. 1907, nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.--Records good except for those estimated, which are fair. 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. 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 ft^3/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 ft^3/s, at site 6.5 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	7.1	4.8	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	7.3	3.2	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	8.0	0.79	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	287	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	488	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	485	0.93	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	479	1.0	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	477	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	472	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	469	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	471	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
12	0.00	0.00	461	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
13	0.00	0.00	389	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
14	0.00	0.00	302	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
15	0.00	0.00	278	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
16	0.00	2.9	186	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
17	0.00	6.5	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
18	0.00	6.6	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
19	0.00	6.7	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
20	0.00	6.7	4.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
21	0.00	6.7	6.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
22	0.00	6.9	3.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
23	0.00	6.9	5.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	7.1	4.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	6.8	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	6.6	3.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.60	6.4	3.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	1.6	6.5	4.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.02	6.7	3.5	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	6.8	4.7	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	3.4	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	2.22	96.80	5,378.5	11.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.072	3.23	174	0.37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	1.6	7.1	488	4.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	4.4	192	10,670	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	100	37.4	25.5	8.99	10.2	4.18	1.16	36.4	51.4	36.3	52.4	47.0
MAX	2,365	445	435	237	255	188	59.6	739	1,832	595	2,034	1,113
(WY)	(1955)	(1987)	(1992)	(1987)	(1987)	(1987)	(1987)	(1973)	(1986)	(1960)	(1966)	(1974)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1952)	(1951)	(1951)	(1951)	(1951)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	6,632.67		5,489.11			
ANNUAL MEAN	18.2		15.0		34.7	
HIGHEST ANNUAL MEAN					206	1955
LOWEST ANNUAL MEAN					0.000	1953
HIGHEST DAILY MEAN	488	Dec 5	488	Dec 5	33,600	Aug 23, 1966
LOWEST DAILY MEAN	0.00	Jan 3	0.00	Oct 1	0.00	Jun 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 3	0.00	Oct 1	0.00	Jun 1, 1951
MAXIMUM PEAK FLOW			491	Dec 4	a55,500	Aug 23, 1966
MAXIMUM PEAK STAGE			5.71	Dec 4	b26.40	Aug 23, 1966
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1999
ANNUAL RUNOFF (AC-FT)	13,160		10,890		25,150	
10 PERCENT EXCEEDS	6.4		4.7		1.4	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 33,000 ft^3/s, on basis of computation of peak flow over Tansill Dam, 5.8 mi upstream.
b From floodmarks.
e Estimated

08405105 DARK CANYON DRAW NEAR WHITES CITY, NM

LOCATION.--Lat 32°17'42", long 104°21'02", in SW $^1/_4$ SW $^1/_4$ NE $^1/_4$ sec.24, T.23 S., R.25 E., Eddy County, Hydrologic Unit 13060011, on left bank 0.25 mi upstream from mouth of canyon, and approximately 11.0 mi upstream from Dark Canyon Draw at Carlsbad.

DRAINAGE AREA.--327 mi^2, approximately.

PERIOD OF RECORD.--February 2002 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,544 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a discharge of 66,000 ft^3/s, as determined by slope-area measurement at site 9 mi downstream and 1 mi upstream from Dark Canyon Draw at Carlsbad station. A flood of approximately the same magnitude occurred Sept. 20, 1941. Other major peaks occurred July 17, 1906, July 24, 1908, Apr. 18, 1915, Aug. 8, 1916, Sept. 15, 1919, Aug. 4, 1925, and May 23, 1941.

EXTREMES FOR WATER YEAR 2002.--Maximum discharge, 1,520 ft^3/s, Sept. 15, 2002, gage height 10.24 ft; minimum daily, no flow most of the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 64.0 ft^3/s Oct. 27, 2002, gage height 6.66 ft; minimum daily, no flow most of the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	6.6	0.00
3	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	236
16	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.6
17	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	6.60	237.60
MEAN	---	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.21	7.92
MAX	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	6.6	236
MIN	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	13	471

08405105 DARK CANYON DRAW NEAR WHITES CITY, NM

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	9.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	9.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WTR YR 2003 TOTAL 9.90 MEAN 0.027 MAX 9.9 MIN 0.00 AC-FT 20

e Estimated

08405150 DARK CANYON DRAW AT CARLSBAD, NM

LOCATION.--Lat 32°24'12", long 104°13'46", in NE ¼ SE ¼ SW ¼ sec.7, T.22 S., R.27 E., Eddy County, Hydrologic Unit 13060011, on right bank and upstream from San Jose Street, and 1.0 mi upstream from mouth. Mouth at Pecos River mile 459.2.

DRAINAGE AREA.--450 mi^2, approximately.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,129 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. A Natural Resources 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. No flow during water year.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 23, 1966, reached a discharge of 66,000 ft^3/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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2003, BY WATER YEAR (WY)

MEAN	6.58	0.66	0.000	0.000	0.000	0.000	0.000	0.36	12.7	1.45	5.44	21.6
MAX	196	19.7	0.000	0.000	0.000	0.000	0.000	8.81	386	32.4	162	331
(WY)	(1975)	(1979)	(1974)	(1973)	(1973)	(1973)	(1973)	(1979)	(1986)	(2002)	(1984)	(1980)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1974)	(1974)	(1974)	(1973)	(1973)	(1973)	(1973)	(1973)	(1973)	(1973)	(1973)	(1973)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1973 - 2003	
ANNUAL TOTAL	1,004.61		0.00			
ANNUAL MEAN	2.75		0.000		4.16	
HIGHEST ANNUAL MEAN					31.7	1986
LOWEST ANNUAL MEAN					0.000	1976
HIGHEST DAILY MEAN	554	Jul 4	0.00	Oct 1	8,750	Sep 26, 1980
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jan 1, 1973
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jan 1, 1973
MAXIMUM PEAK FLOW					27,000	Sep 26, 1980
MAXIMUM PEAK STAGE					12.53	Jun 24, 1986
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 1993
ANNUAL RUNOFF (AC-FT)	1,990		0.00		3,020	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM

LOCATION.--Lat 32°24'37", long 104°12'58", in NE $^1/_4$ SW $^1/_4$ NW $^1/_4$ 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 mi^2, approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 3,075.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except for those estimated, which are poor. Flow regulated by Lake Avalon (station 08403800) 8.1 mi upstream and by several other reservoirs and up to Nov. 1982 at low stages by power plant. Power plant discontinued operation Nov. 1982. Diversions and ground-water withdrawals upstream from station for irrigation of about 198,000 acres; supplemental ground-water withdrawals irrigate about 23,000 acres downstream, 1959 determination.

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.)

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	11	21	18	40	29	1.6	0.00	0.42	0.00	0.00	0.00
2	5.9	10	22	15	38	29	1.2	0.00	0.47	0.00	0.00	0.00
3	5.9	10	26	16	30	29	2.6	0.00	0.45	0.00	0.00	0.00
4	4.4	11	158	16	26	29	0.70	0.00	0.41	0.00	0.00	0.00
5	5.5	12	471	16	29	29	0.38	0.01	0.94	0.00	0.00	0.00
6	6.6	12	467	16	31	28	0.45	0.00	1.1	0.00	0.00	0.00
7	8.5	12	454	e15	31	28	0.49	0.00	0.53	0.00	0.00	0.00
8	7.6	12	450	14	32	28	0.37	0.00	0.44	0.00	0.00	0.00
9	9.0	13	446	14	32	28	0.39	0.00	0.61	0.00	0.00	0.00
10	11	11	440	12	e29	26	0.31	0.00	0.76	0.00	0.00	0.00
11	9.5	12	434	13	27	25	0.00	0.00	0.43	0.00	0.00	0.00
12	7.1	12	443	14	25	25	0.16	0.00	0.41	0.00	0.00	0.00
13	5.5	12	399	24	31	25	0.21	0.00	0.34	0.00	0.00	0.00
14	7.4	13	352	42	34	e25	0.23	0.00	0.31	0.00	0.00	0.00
15	8.1	15	320	40	33	e24	2.3	0.08	0.22	0.00	0.00	0.00
16	8.4	13	289	39	32	e24	0.76	0.11	0.00	0.00	0.00	0.00
17	8.1	14	75	38	38	e25	0.00	0.11	0.00	0.00	0.00	0.00
18	17	14	32	37	39	25	0.00	0.17	0.00	0.00	0.00	0.00
19	10	13	24	37	36	24	0.00	0.06	0.00	0.00	0.00	0.00
20	9.1	13	22	35	43	25	0.00	0.00	0.00	0.00	0.00	0.00
21	15	12	18	41	37	24	0.00	0.00	0.00	0.00	0.00	0.00
22	12	14	19	48	28	23	0.00	0.00	0.00	0.00	0.00	0.00
23	11	15	20	45	27	24	0.00	0.00	0.00	0.00	0.00	0.00
24	15	17	18	43	34	24	0.00	0.00	0.00	0.00	0.00	0.00
25	11	15	18	41	32	23	0.00	1.0	0.00	0.00	0.00	0.00
26	13	16	18	40	28	24	0.00	4.2	0.00	0.00	0.00	0.00
27	28	17	17	32	28	24	0.00	1.7	0.00	0.00	0.00	0.00
28	16	18	17	27	29	21	0.00	0.85	0.00	0.00	0.00	0.00
29	13	20	18	28	---	22	0.00	0.59	0.00	0.00	0.00	0.00
30	11	19	18	37	---	23	0.00	0.47	0.00	0.00	0.00	0.00
31	10	---	17	41	---	9.8	---	0.38	---	0.00	0.00	---
TOTAL	314.9	408	5,543	894	899	771.8	12.15	9.73	7.84	0.00	0.00	0.00
MEAN	10.2	13.6	179	28.8	32.1	24.9	0.41	0.31	0.26	0.000	0.000	0.000
MAX	28	20	471	48	43	29	2.6	4.2	1.1	0.00	0.00	0.00
MIN	4.4	10	17	12	25	9.8	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	625	809	10,990	1,770	1,780	1,530	24	19	16	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	83.0	73.3	49.7	35.9	37.7	28.8	19.4	52.5	100	55.4	33.9	99.7
MAX	727	527	367	319	305	249	103	702	2,041	345	674	1,250
(WY)	(1975)	(1987)	(1992)	(1987)	(1987)	(1987)	(1987)	(1973)	(1986)	(1986)	(1984)	(1974)
MIN	9.11	8.07	6.27	9.80	10.5	6.02	0.087	0.31	0.26	0.000	0.000	0.000
(WY)	(1978)	(1978)	(1991)	(1978)	(1978)	(1978)	(1972)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	10,681.29		8,860.42			
ANNUAL MEAN	29.3		24.3		56.3	
HIGHEST ANNUAL MEAN					242	1987
LOWEST ANNUAL MEAN					10.9	1977
HIGHEST DAILY MEAN	686	Jul 4	471	Dec 5	22,800	Jun 24, 1986
LOWEST DAILY MEAN	0.57	Sep 1	0.00	Apr 11	0.00	Jun 16, 1971
ANNUAL SEVEN-DAY MINIMUM	0.89	Sep 6	0.00	Apr 17	0.00	Apr 16, 1972
MAXIMUM PEAK FLOW			473	Dec 5	a26,300	Aug 10, 1984
MAXIMUM PEAK STAGE			3.30	Dec 5	b15.22	Aug 10, 1984
INSTANTANEOUS LOW FLOW			0.00	Apr 17	0.00	Apr 17, 2003
ANNUAL RUNOFF (AC-FT)	21,190		17,570		40,810	
10 PERCENT EXCEEDS	18		34		47	
50 PERCENT EXCEEDS	11		4.2		18	
90 PERCENT EXCEEDS	2.9		0.00		3.6	

a From rating curve extended above 12,000 ft^3/s, on basis of slope-area measurement of peak flow.
b From floodmarks.
e Estimated

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to April 2003 (discontinued).

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
29...	0900	12	680	8.9	107	--	3,270	18.0	18.0	1,100	289	93.3	4.58
DEC													
03...	0900	29	685	7.1	81	7.6	3,510	8.0	16.0	1,200	322	107	4.38
12...	0920	428	683	10.4	100	8.1	4,630	6.0	8.0	1,500	411	113	5.87
FEB													
18...	1000	40	683	10.0	112	8.1	4,320	20.0	15.0	1,600	409	139	25.1
APR													
11...	0820	E.10	678	9.5	108	7.9	4,500	18.0	15.0	1,600	396	146	5.22

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
OCT													
29...	4	319	--	--	547	0.62	15.5	892	--	--	--	--	--
DEC													
03...	4	325	--	--	603	0.65	16.2	967	2,450	--	--	--	--
12...	7	649	93	112	1,070	0.71	9.1	1,230	3,540	0.40	0.70	0.01	0.03
FEB													
18...	5	427	--	--	749	0.76	18.4	1,260	3,130	--	--	--	--
APR													
11...	5	448	163	197	788	0.73	7.5	1,290	3,180	0.20	0.30	0.05	0.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
OCT													
29...	--	--	--	--	--	--	--	--	--	--	--	--	200
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	230
12...	0.23	<0.010	<0.01	<0.02	<0.02	52	200	<2	0.41	E2	83	<0.06	280
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	280
APR													
11...	0.17	<0.010	<0.01	<0.02	<0.02	8,000	6,000	<3	<0.60	<2	21	<0.12	280

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)
OCT													
29...	--	--	--	--	<30	--	--	--	--	--	--	--	--
DEC													
03...	--	--	--	--	<30	--	--	--	--	--	--	--	--
12...	E.02	<0.8	1.01	4.3	<30	0.57	12.1	<0.02	4.7	20.0	<3	<3	<0.20
FEB													
18...	--	--	--	--	<30	--	--	--	--	--	--	--	--
APR													
11...	<0.07	<0.8	1.12	5.4	<30	<0.16	33.5	<0.02	3.3	16.4	<3	<3	<0.40

08405200 PECOS RIVER BELOW DARK CANYON DRAW, AT CARLSBAD, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Zinc, water, fltrd, ug/L (01090)	Ra-226, water, fltrd, radon method pCi/L (09511)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
29...	--	--	--	--	--
DEC					
03...	--	--	--	--	--
12...	5	--	5.13	71	41
FEB					
18...	--	--	--	--	--
APR					
11...	9	0.04	5.89	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)
APR													
11...	0820	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
APR													
11...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)
APR													
11...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)
APR													
11...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
APR	
11...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value

08405450 BLUE SPRINGS ABOVE DIVERSIONS NEAR WHITES CITY, NM

LOCATION.--Lat 32°11'07", long 104°16'50", in SW ¼ NE ¼ SW ¼ sec.27, T.24 S., R.26 E., Eddy County, Hydrologic Unit 13060011, upstream from all diversions, and 5.5 mi east of Whites City.

PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Station located above all known diversions. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 21 ft^3/s, Mar. 30, 2002; minimum daily discharge, 6.4 ft^3/s, Sept. 6, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 17 ft^3/s, Mar. 02; minimum daily discharge, 6.4 ft^3/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	10	12	11	11	16	12	10	10	9.6	8.6	7.1
2	9.4	9.7	12	11	11	17	12	10	10	9.7	8.6	6.8
3	9.5	9.1	13	11	11	17	12	10	9.9	9.8	8.4	6.8
4	9.4	9.2	12	11	11	17	12	10	10	9.8	8.4	6.8
5	9.2	9.2	12	11	12	17	12	10	9.9	9.9	8.4	6.8
6	9.1	9.4	12	11	12	15	11	10	9.8	10	8.2	6.7
7	9.1	10	12	11	12	12	11	10	9.8	10	8.2	6.8
8	9.1	10	12	11	12	12	11	10	9.7	10	8.1	6.8
9	9.1	10	12	11	12	12	11	10	9.6	10	7.9	6.8
10	9.1	10	12	11	12	12	11	10	9.1	10	8.1	6.8
11	9.1	10	12	11	12	12	11	10	8.9	10	7.9	6.8
12	9.1	10	12	11	12	12	11	11	8.9	10	7.8	6.8
13	9.1	10	12	11	13	11	11	11	8.8	10	7.8	6.8
14	9.0	11	12	11	13	14	11	11	8.7	10	7.6	6.9
15	8.9	11	12	11	12	11	11	11	8.8	10	7.7	6.9
16	8.9	11	12	11	12	11	11	11	8.9	10	7.7	6.9
17	8.9	11	13	11	13	11	10	11	8.9	10	7.5	6.9
18	9.0	11	12	11	13	11	10	11	9.2	9.9	7.4	6.9
19	8.9	11	12	11	13	10	10	11	9.5	9.8	7.4	6.9
20	8.9	11	12	11	14	10	10	11	9.1	9.6	7.2	6.9
21	8.9	12	12	11	14	10	9.9	11	9.2	9.6	7.2	7.0
22	8.9	12	12	11	15	10	10	11	9.0	9.5	7.2	6.9
23	8.9	12	12	11	16	10	10	11	9.1	9.3	7.4	6.9
24	8.9	12	12	11	16	10	10	11	9.3	9.7	7.1	6.8
25	8.9	12	12	11	16	10	9.9	11	9.4	9.3	7.1	7.0
26	9.5	12	12	11	16	10	9.9	11	9.3	9.1	7.2	6.9
27	11	12	12	11	16	10	9.8	11	9.6	9.1	7.2	6.8
28	10	12	12	11	16	10	9.8	11	9.5	9.0	7.0	6.8
29	10	12	12	11	---	9.7	10	11	9.6	8.9	6.9	6.8
30	10	12	12	11	---	11	10	11	9.7	8.9	7.0	6.7
31	10	---	11	11	---	12	---	11	---	8.6	7.0	---
TOTAL	287.3	323.6	373	341	368	372.7	320.3	330	281.2	299.1	237.2	205.5
MEAN	9.27	10.8	12.0	11.0	13.1	12.0	10.7	10.6	9.37	9.65	7.65	6.85
MAX	11	12	13	11	16	17	12	11	10	10	8.6	7.1
MIN	8.9	9.1	11	11	11	9.7	9.8	10	8.7	8.6	6.9	6.7
AC-FT	570	642	740	676	730	739	635	655	558	593	470	408

CAL YR	2002	TOTAL	3,862.9	MEAN	10.6	MAX	21	MIN	7.5	AC-FT	7,660
WTR YR	2003	TOTAL	3,738.9	MEAN	10.2	MAX	17	MIN	6.7	AC-FT	7,420

08405500 BLACK RIVER ABOVE MALAGA, NM

LOCATION.--Lat 32°13'44", long 104°09'02", in SW ¼ NW ¼ SW ¼ 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, 4.8 mi west of Malaga, and 7.1 mi upstream from mouth. Mouth at Pecos River mile 436.3.

DRAINAGE AREA.--343 mi^2.

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

REVISED RECORDS.--WSP 1632: 1948, 1949-50(P).

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 3,070 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. to Dec. 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.

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 ft^3/s, from rating curve extended above 1,400 ft^3/s on basis of slope-area measurements at gage heights 8.41 ft and 12.60 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.1	6.5	7.4	7.3	7.6	5.7	5.2	4.2	5.3	3.1	3.0
2	5.2	6.2	6.5	7.3	8.6	7.6	6.1	5.2	4.9	3.7	3.0	3.2
3	5.1	6.2	7.4	7.3	7.8	7.6	5.7	5.2	5.1	3.5	3.0	3.4
4	5.0	6.2	7.4	7.4	7.3	7.4	5.9	5.9	4.1	3.6	2.8	3.1
5	5.0	6.1	6.9	7.6	7.3	7.1	6.0	5.0	3.0	3.6	2.8	3.0
6	5.1	6.0	6.7	7.6	7.3	7.0	5.9	4.6	3.7	3.4	2.8	3.0
7	5.4	6.0	6.7	7.6	7.3	7.2	5.9	4.9	3.9	3.5	2.8	2.9
8	5.6	6.0	6.8	7.9	7.3	6.8	6.0	5.0	3.8	3.7	2.8	3.2
9	5.4	5.9	6.8	7.9	7.5	5.8	6.3	5.0	4.0	3.8	2.7	3.1
10	7.3	5.8	6.7	7.7	7.3	4.7	6.2	4.9	3.9	3.6	3.2	3.1
11	7.6	5.8	6.9	7.6	7.3	3.4	6.5	4.7	3.9	3.6	2.8	3.1
12	6.7	6.0	7.0	7.8	7.3	4.7	6.6	4.4	3.8	3.5	2.8	3.0
13	5.9	6.1	7.0	7.9	7.3	4.7	7.5	5.0	3.7	3.3	2.7	3.0
14	5.7	6.2	7.0	7.7	7.4	57	6.3	4.8	3.4	3.1	2.8	2.8
15	5.7	6.7	7.0	7.6	7.3	75	6.0	5.8	5.0	3.3	2.8	3.0
16	5.7	8.9	7.0	7.6	7.3	11	5.8	5.3	4.8	3.2	3.0	3.0
17	5.7	7.9	7.0	7.5	7.3	7.9	6.1	5.3	3.9	3.3	3.0	3.0
18	6.6	7.0	6.8	7.4	7.4	6.1	6.2	5.0	3.9	3.5	3.0	2.9
19	5.7	6.5	6.7	7.6	7.3	5.2	6.2	4.2	3.9	3.5	2.9	2.8
20	5.7	6.5	6.8	7.6	8.2	5.2	6.3	4.4	2.8	3.3	2.8	2.8
21	5.7	6.1	7.0	7.6	7.9	5.4	7.3	4.7	3.4	3.2	2.8	3.0
22	5.7	6.1	7.2	7.6	7.9	4.6	6.0	4.9	3.6	3.2	3.0	3.0
23	5.7	6.2	7.3	7.5	7.5	5.1	6.5	4.8	3.6	3.1	4.0	3.0
24	7.7	6.2	7.3	7.4	7.2	5.6	5.9	4.8	5.8	4.3	3.9	3.0
25	6.1	6.0	7.5	7.3	7.2	3.5	5.8	45	5.6	4.3	3.5	3.2
26	7.0	6.1	7.5	7.3	7.3	4.7	7.3	56	4.0	3.6	3.1	3.2
27	13	6.2	7.3	7.3	7.5	5.0	8.0	7.5	3.8	3.2	3.0	3.2
28	8.7	6.2	7.3	7.3	7.6	4.9	5.5	5.2	3.8	3.1	3.0	3.1
29	6.7	6.2	7.3	7.3	---	5.0	3.6	4.7	31	3.2	2.9	3.0
30	6.0	6.4	7.5	7.3	---	5.1	3.9	4.4	13	3.2	2.9	3.0
31	5.9	---	7.3	7.3	---	5.2	---	4.2	---	3.2	3.0	---
TOTAL	193.7	189.8	218.1	233.2	209.2	303.1	183.0	246.0	157.3	108.9	92.7	91.1
MEAN	6.25	6.33	7.04	7.52	7.47	9.78	6.10	7.94	5.24	3.51	2.99	3.04
MAX	13	8.9	7.5	7.9	8.6	75	8.0	56	31	5.3	4.0	3.4
MIN	5.0	5.8	6.5	7.3	7.2	3.4	3.6	4.2	2.8	3.1	2.7	2.8
AC-FT	384	376	433	463	415	601	363	488	312	216	184	181

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	12.8	9.42	9.63	10.5	10.3	7.21	10.4	12.3	14.9	14.4	22.9	19.3
MAX	80.4	33.0	17.5	18.7	19.7	15.0	55.5	106	87.8	111	553	121
(WY)	(1955)	(1966)	(1989)	(1987)	(1987)	(1993)	(1954)	(1965)	(1986)	(1960)	(1966)	(1955)
MIN	2.54	1.15	3.79	2.82	4.11	2.01	4.67	4.27	2.82	3.06	2.99	3.04
(WY)	(1980)	(1978)	(1964)	(1964)	(1960)	(1978)	(1978)	(1974)	(1974)	(1974)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	2,995.6		2,226.1			
ANNUAL MEAN	8.21		6.10		12.8	
HIGHEST ANNUAL MEAN					58.3	1966
LOWEST ANNUAL MEAN					6.10	2003
HIGHEST DAILY MEAN	454	Sep 15	75	Mar 15	12,000	Aug 23, 1966
LOWEST DAILY MEAN	3.0	Jan 21	2.7	Aug 9	0.01	Sep 30, 1998
ANNUAL SEVEN-DAY MINIMUM	3.2	Jan 16	2.8	Aug 3	1.0	Nov 9, 1977
MAXIMUM PEAK FLOW			762	Mar 14	a74,600	Aug 23, 1966
MAXIMUM PEAK STAGE			3.83	Mar 14	b21.70	Aug 23, 1966
INSTANTANEOUS LOW FLOW			2.7	Aug 9	0.00	Sep 30, 1998
ANNUAL RUNOFF (AC-FT)	5,940		4,420		9,300	
10 PERCENT EXCEEDS	7.4		7.6		14	
50 PERCENT EXCEEDS	5.7		5.7		8.1	
90 PERCENT EXCEEDS	3.7		3.0		4.2	

a From rating curve extended above 5,900 ft^3/s, on basis of slope-area measurement at gage heights 12.60 ft and 21.7 ft
b From floodmarks

08406000 BLACK RIVER AT MALAGA, NM

LOCATION.--Lat 32°14'58", long 104°03'53", in SW ¼ NW ¼ SE ¼ sec.2, T.24 S., R.28 E., Eddy County, Hydrologic Unit 13060011, on left bank of Black River, about 1.3 mi upstream from the mouth of Pecos River.

DRAINAGE AREA.--350 mi^2, approximately.

PERIOD OF RECORD.--February 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft^3/s, July 9, 2000, gage height, 15.43 ft, from floodmarks; minimum, 1.3 ft^3/s, Aug. 8, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 151 ft^3/s, Mar. 15, gage height, 6.50 ft; minimum daily, 1.3 ft^3/s, Aug. 8, 2003.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	8.5	9.0	8.5	4.1	3.1	2.9	2.8	1.7	4.2	1.5	1.7
2	4.4	8.3	9.3	8.3	4.0	2.9	3.1	2.5	1.6	2.4	1.4	1.7
3	4.3	8.4	10	8.2	4.1	4.4	2.9	2.4	1.6	2.0	1.4	1.7
4	4.2	8.4	11	5.3	4.9	4.7	2.8	2.3	1.6	1.9	1.4	1.6
5	4.4	8.2	10	4.3	5.1	3.6	2.8	2.2	2.3	1.9	1.4	1.6
6	4.6	7.8	10	7.6	4.5	4.4	3.0	2.2	2.9	1.9	1.4	1.6
7	4.9	7.8	10	5.2	4.5	3.8	4.2	2.1	1.8	1.9	1.4	3.8
8	7.9	7.8	9.6	4.7	6.7	3.5	5.1	2.1	1.7	1.9	1.3	2.3
9	8.3	7.7	9.9	5.0	5.3	3.1	9.9	2.1	1.8	1.8	1.4	1.7
10	7.9	7.6	9.7	4.8	8.3	3.0	5.9	1.9	1.8	1.8	1.5	1.8
11	13	7.7	9.8	3.7	5.4	2.9	4.0	1.9	1.7	1.7	1.4	1.8
12	7.9	7.8	9.7	3.8	4.3	2.7	3.7	1.9	1.7	2.2	1.4	1.6
13	8.1	7.9	9.6	4.3	3.8	2.6	3.6	2.1	1.7	2.0	1.4	1.5
14	14	8.0	9.6	4.5	4.5	2.5	3.7	1.9	1.8	1.9	1.5	2.6
15	12	8.2	9.6	3.6	5.3	53	3.8	1.9	1.8	1.8	1.6	2.0
16	9.9	9.6	9.3	3.6	4.3	13	3.6	1.9	1.8	1.9	1.7	1.8
17	9.1	10	9.3	3.4	3.9	5.4	3.6	1.9	2.0	2.0	1.4	1.7
18	9.3	9.5	9.1	3.3	5.0	3.4	3.7	1.8	1.8	2.0	1.5	1.7
19	8.1	8.8	8.9	3.6	5.3	4.0	3.6	1.8	1.8	2.1	1.5	1.6
20	7.3	8.6	8.8	3.7	5.1	3.4	5.6	1.9	1.8	1.9	1.5	1.6
21	8.4	8.2	9.0	4.0	12	3.2	7.1	2.6	2.0	1.7	1.6	1.6
22	8.2	8.6	9.1	5.3	11	3.0	5.2	3.3	2.0	1.8	1.6	1.6
23	8.2	8.6	9.5	5.4	5.7	2.9	3.8	2.9	4.4	1.8	1.7	1.7
24	11	8.6	9.5	4.9	4.8	2.8	3.3	2.3	3.4	2.0	1.8	2.2
25	9.2	8.5	9.1	4.1	3.7	2.8	7.2	2.3	2.2	1.8	1.7	4.1
26	9.2	8.5	9.0	3.9	3.8	2.8	6.5	37	2.0	1.7	1.6	2.1
27	17	8.5	8.9	7.2	3.4	2.8	4.1	6.5	2.0	1.7	1.6	1.9
28	14	8.8	8.8	5.2	3.1	2.9	9.5	2.9	2.0	1.7	1.6	1.9
29	10	8.9	8.9	4.1	---	3.1	5.3	2.1	1.9	1.7	2.0	1.9
30	8.8	9.1	8.9	4.0	---	2.9	3.3	1.9	8.8	1.7	2.0	1.9
31	8.5	---	8.7	3.9	---	2.7	---	1.8	---	1.7	1.7	---
TOTAL	266.6	252.9	291.6	151.4	145.9	161.3	136.8	107.2	67.4	60.5	47.9	58.3
MEAN	8.60	8.43	9.41	4.88	5.21	5.20	4.56	3.46	2.25	1.95	1.55	1.94
MAX	17	10	11	8.5	12	53	9.9	37	8.8	4.2	2.0	4.1
MIN	4.2	7.6	8.7	3.3	3.1	2.5	2.8	1.8	1.6	1.7	1.3	1.5
AC-FT	529	502	578	300	289	320	271	213	134	120	95	116

CAL YR	2002	TOTAL	2,634.6	MEAN	7.22	MAX	238	MIN	2.0	AC-FT	5,230
WTR YR	2003	TOTAL	1,747.8	MEAN	4.79	MAX	53	MIN	1.3	AC-FT	3,470

08406500 PECOS RIVER NEAR MALAGA, NM

LOCATION.--Lat 32°12'30", long 104°01'20", in SW ¼ NW ¼ NE ¼ 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 mi^2, 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 with satellite telemetry. 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 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. Harroun canal bypasses gage on left bank and irrigates approximately 1,000 acres adjacent to and downstream from gage. This bypass is not gaged.

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 ft^3/s, at Carlsbad, 27 mi upstream. Flood in Sept. 1919 reached a stage of 29.4 ft, present datum, discharge, 40,400 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	40	42	42	60	50	39	14	17	18	7.4	7.4
2	21	40	43	42	66	49	37	13	15	11	6.7	7.1
3	22	42	48	42	66	50	30	13	14	8.8	6.4	7.0
4	21	42	49	40	63	51	26	12	13	8.0	6.3	6.9
5	20	42	110	37	58	49	20	12	13	7.8	6.3	6.6
6	21	41	469	39	53	49	19	12	17	7.5	6.4	6.4
7	21	41	478	40	53	46	19	12	14	7.7	6.4	6.5
8	24	40	467	38	55	46	21	12	12	8.3	6.3	13
9	30	40	469	37	59	46	22	13	13	7.9	6.4	7.0
10	34	40	465	37	60	46	25	14	15	7.5	6.6	6.6
11	34	40	462	35	59	46	19	13	13	7.1	6.4	6.4
12	34	38	457	35	55	45	17	13	12	6.9	6.3	6.4
13	31	38	471	36	50	42	16	13	12	7.1	6.3	6.4
14	34	40	398	37	49	41	15	13	12	6.6	6.3	6.7
15	38	40	350	41	55	77	13	12	12	6.3	6.9	8.0
16	32	43	333	58	56	59	12	12	11	6.3	7.6	7.1
17	32	45	291	59	55	50	12	11	11	6.7	7.5	6.4
18	33	44	154	58	56	41	12	10	11	7.1	7.1	6.4
19	35	40	86	59	62	41	12	9.8	11	7.2	6.9	6.3
20	34	41	63	59	67	42	13	10	11	7.6	6.5	6.3
21	40	41	54	59	80	37	19	10	10	7.5	6.4	6.6
22	37	40	52	60	83	41	17	12	11	7.5	6.3	6.5
23	36	40	49	66	64	42	14	13	12	7.6	6.3	6.3
24	44	41	47	73	53	41	11	11	18	9.3	7.6	7.5
25	44	41	48	71	48	41	14	12	12	12	7.4	20
26	42	41	46	70	53	40	20	33	11	13	8.2	13
27	57	40	45	71	55	38	17	74	10	11	8.1	13
28	60	40	44	70	51	41	18	43	9.2	9.8	7.5	11
29	58	41	44	60	---	38	24	30	8.4	9.0	8.6	10
30	49	42	41	53	---	38	16	24	11	8.5	11	9.3
31	43	---	39	53	---	39	---	20	---	8.2	7.8	---
TOTAL	1,080	1,224	6,214	1,577	1,644	1,402	569	525.8	371.6	264.8	218.2	244.1
MEAN	34.8	40.8	200	50.9	58.7	45.2	19.0	17.0	12.4	8.54	7.04	8.14
MAX	60	45	478	73	83	77	39	74	18	18	11	20
MIN	19	38	39	35	48	37	11	9.8	8.4	6.3	6.3	6.3
AC-FT	2,140	2,430	12,330	3,130	3,260	2,780	1,130	1,040	737	525	433	484

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	257	150	119	105	91.3	64.5	55.3	200	161	106	141	255
MAX	5,302	1,338	822	738	557	290	697	6,887	2,984	1,171	4,200	6,975
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1987)	(1942)	(1941)	(1941)	(1941)	(1966)	(1941)
MIN	8.49	7.82	7.87	10.5	11.9	9.41	8.80	7.85	8.93	6.70	6.20	8.14
(WY)	(1978)	(1978)	(1978)	(1978)	(1965)	(1978)	(1965)	(1978)	(1977)	(1977)	(1977)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	19,555		15,334.5			
ANNUAL MEAN	53.6		42.0		a142	
HIGHEST ANNUAL MEAN					1,652	1941
LOWEST ANNUAL MEAN					16.8	1977
HIGHEST DAILY MEAN	478	Dec 7	478	Dec 7	68,000	Aug 23, 1966
LOWEST DAILY MEAN	12	Jul 3	6.3	Jul 15	3.7	May 20, 1991
ANNUAL SEVEN-DAY MINIMUM	14	Jun 27	6.4	Aug 3	4.5	May 18, 1991
MAXIMUM PEAK FLOW			541	Dec 13	b120,000	Aug 23, 1966
MAXIMUM PEAK STAGE			6.06	Dec 13	c42.10	Aug 23, 1966
INSTANTANEOUS LOW FLOW			6.3	Aug 22	3.7	Oct 20, 1976
ANNUAL RUNOFF (AC-FT)	38,790		30,420		103,100	
10 PERCENT EXCEEDS	59		60		192	
50 PERCENT EXCEEDS	38		25		53	
90 PERCENT EXCEEDS	18		6.8		15	

a Average discharge, 16 years (water years 1921-36), 274 ft^3/s, 198,500 acre-ft/yr, prior to completion of Lake Sumner.
b From rating curve extended above 36,000 ft^3/s, on basis of slope-area measurement of peak flow.
c From floodmarks.

08406500 PECOS RIVER NEAR MALAGA, NM—Continued

WATER-QUALITY RECORDS

LOCATION.--Once-daily samples collected 2.5 mi upstream from discharge station.

PERIOD OF RECORD.--Water years 1937 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1937 to June 1986, March 2003 to September 2003.
WATER TEMPERATURE: February 1959 to June 1986, March 2003 to September 2003.

INSTRUMENTATION.--Specific conductance and thermistor since March 2003. Hourly data logged.

REMARKS.--Specific conductance records good March 15 to April 15; records poor April 16 to Sept. 30. Temperature records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 28,100 microsiemens, June 7, 1966; minimum daily, 402 microsiemens, Aug. 12, 1984.
WATER TEMPERATURE: Maximum daily, 34.0 °C, Aug. 4, 2003; minimum daily, 2.0 °C, Dec. 25 and 26, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 10,700 microsiemens, Aug. 30; minimum daily, 3,870 microsiemens, Mar. 16.
WATER TEMPERATURE: Maximum daily, 34.0 °C, Aug. 4; minimum daily, 12.0 °C, Mar. 29.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
29...	1045	59	686	8.2	101	7.5	6,150	22.0	19.0	2,000	502	192	8.67
DEC													
03...	1130	42	690	8.2	88	7.5	5,540	11.0	13.0	1,900	468	166	8.56
FEB													
18...	1145	55	688	8.1	97	8.2	5,450	24.0	18.0	1,900	466	167	7.60
APR													
28...	1230	17	687	7.9	117	7.0	7,520	33.0	29.0	2,200	560	200	17.5
28...	1238	17	687	--	--	--	--	--	29.0	--	--	--	--
MAY													
20...	1112	11	699	--	--	--	7,360	--	20.1	--	--	--	--
JUN													
30...	1010	9.1	--	--	--	--	8,960	30.0	26.5	--	--	--	--
JUL													
28...	1000	10	--	--	--	--	9,760	30.0	27.3	--	--	--	--
AUG													
28...	1010	7.6	--	--	--	--	10,600	30.0	27.7	--	--	--	--
SEP													
29...	1130	11	--	--	--	--	8,120	30.0	24.6	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
OCT										
29...	7	692	1,210	0.76	12.6	1,560	--	4,380	360	<50
DEC										
03...	6	602	1,110	0.73	12.6	1,440	--	4,050	--	--
FEB										
18...	6	614	1,070	0.74	10.5	1,450	3,900	4,060	320	<30
APR										
28...	8	904	1,570	0.96	9.8	1,860	5,220	5,550	470	<40
28...	--	--	--	--	--	--	--	5,710	--	--
MAY										
20...	--	--	--	--	--	--	--	6,760	--	--
JUN										
30...	--	--	--	--	--	--	--	6,810	--	--
JUL										
28...	--	--	--	--	--	--	--	8,020	--	--
AUG										
28...	--	--	--	--	--	--	--	8,000	--	--
SEP										
29...	--	--	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than

08406500 PECOS RIVER NEAR MALAGA, NM—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	6,090	6,000	6,060	7,530	7,190	7,370
2	---	---	---	---	---	---	6,060	6,000	6,020	7,410	7,110	7,260
3	---	---	---	---	---	---	6,070	6,010	6,040	7,800	7,160	7,520
4	---	---	---	---	---	---	6,190	6,040	6,130	7,700	7,200	7,520
5	---	---	---	---	---	---	6,420	6,190	6,310	8,460	7,620	8,060
6	---	---	---	---	---	---	6,590	6,420	6,520	8,630	8,440	8,530
7	---	---	---	---	---	---	6,760	6,590	6,690	8,700	8,360	8,560
8	---	---	---	---	---	---	6,900	6,760	6,830	8,730	8,360	8,580
9	---	---	---	---	---	---	6,930	6,890	6,910	8,600	8,100	8,390
10	---	---	---	---	---	---	6,980	6,930	6,950	8,480	8,050	8,300
11	---	---	---	---	---	---	6,970	6,880	6,940	8,630	8,260	8,450
12	---	---	---	---	---	---	6,880	6,660	6,820	8,500	7,800	8,210
13	---	---	---	---	---	---	6,670	6,540	6,600	8,200	7,840	8,080
14	---	---	---	---	---	---	6,550	6,470	6,510	8,350	7,870	8,220
15	---	---	---	5,840	5,210	5,710	---	---	---	8,310	7,590	7,840
16	---	---	---	5,210	3,870	4,200	---	---	---	8,400	7,860	8,230
17	---	---	---	5,190	4,340	4,930	---	---	---	8,520	8,120	8,340
18	---	---	---	5,670	5,140	5,360	---	---	---	8,410	8,120	8,270
19	---	---	---	5,770	5,670	5,710	---	---	---	8,350	7,800	8,170
20	---	---	---	5,830	5,690	5,770	---	---	---	---	---	---
21	---	---	---	5,710	5,610	5,660	---	---	---	---	---	---
22	---	---	---	5,870	5,670	5,790	7,480	7,010	7,300	7,990	6,560	7,420
23	---	---	---	5,860	5,770	5,810	---	---	---	8,340	6,800	7,550
24	---	---	---	5,880	5,780	5,850	---	---	---	8,750	6,810	7,820
25	---	---	---	5,900	5,860	5,890	7,640	7,330	7,540	9,030	7,880	8,250
26	---	---	---	6,040	5,870	5,920	7,800	7,060	7,540	8,860	8,040	8,540
27	---	---	---	5,980	5,810	5,900	---	---	---	8,930	8,140	8,650
28	---	---	---	6,110	5,870	6,030	---	---	---	9,000	8,040	8,720
29	---	---	---	6,120	6,020	6,040	7,420	6,990	7,270	9,240	8,220	8,580
30	---	---	---	6,090	6,020	6,060	7,570	7,290	7,440	8,960	8,370	8,740
31	---	---	---	6,120	6,050	6,090	---	---	---	9,360	8,620	8,820
MONTH	---	---	---	6,120	3,870	5,690	7,800	6,000	6,760	9,360	6,560	8,170
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9,620	8,900	9,080	9,090	7,490	8,530	9,630	8,710	9,060	10,500	10,200	10,400
2	9,820	8,950	9,570	9,070	7,080	8,420	9,530	8,940	9,170	10,300	10,000	10,200
3	9,770	8,970	9,370	8,720	7,030	7,860	9,510	8,900	9,150	10,100	9,870	10,000
4	10,300	9,130	9,540	8,270	7,200	7,830	9,480	8,880	9,110	10,100	9,830	9,930
5	10,600	9,500	10,100	7,990	7,370	7,790	9,280	8,880	9,060	10,100	9,740	9,910
6	10,200	8,770	9,550	7,700	7,370	7,510	9,240	8,910	9,080	10,500	10,100	10,300
7	---	---	---	8,060	7,540	7,920	9,490	8,990	9,230	10,500	9,740	10,200
8	9,740	8,960	9,410	8,190	7,740	7,960	9,690	9,100	9,360	9,740	9,220	9,550
9	---	---	---	8,160	7,470	7,880	9,740	9,250	9,440	9,420	9,040	9,170
10	---	---	---	8,000	7,540	7,820	---	---	---	9,320	9,020	9,140
11	---	---	---	9,320	7,940	8,430	---	---	---	9,300	9,040	9,160
12	---	---	---	9,150	8,320	8,610	---	---	---	9,310	9,040	9,200
13	---	---	---	9,020	7,480	8,680	---	---	---	9,510	9,240	9,380
14	---	---	---	10,200	7,670	8,870	---	---	---	9,380	9,260	9,310
15	---	---	---	9,540	8,780	9,140	---	---	---	9,540	9,240	9,370
16	---	---	---	---	---	---	---	---	---	9,790	9,420	9,580
17	---	---	---	---	---	---	---	---	---	10,100	9,700	9,890
18	---	---	---	---	---	---	---	---	---	10,600	10,100	10,300
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	9,640	9,210	9,450	---	---	---	---	---	---
30	---	---	---	9,210	8,900	9,080	10,700	10,100	10,500	9,940	7,860	9,230
31	---	---	---	9,200	8,770	8,950	10,600	10,500	10,500	---	---	---
MONTH	10,600	8,770	9,520	10,200	7,030	8,370	10,700	8,710	9,420	10,600	7,860	9,700
YEAR	10,700	3,870	8,060									

08406500 PECOS RIVER NEAR MALAGA, NM—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	19.1	14.4	16.8	25.9	19.6	22.4
2	---	---	---	---	---	---	19.6	16.2	18.0	26.3	20.1	22.6
3	---	---	---	---	---	---	21.2	17.2	18.9	25.2	20.9	22.9
4	---	---	---	---	---	---	20.9	17.0	18.9	22.3	19.7	21.1
5	---	---	---	---	---	---	20.2	16.9	18.5	23.3	18.3	20.6
6	---	---	---	---	---	---	20.2	16.6	18.2	24.0	18.8	21.3
7	---	---	---	---	---	---	20.3	15.8	17.9	24.7	19.4	21.9
8	---	---	---	---	---	---	19.9	16.0	17.8	22.6	19.8	21.3
9	---	---	---	---	---	---	19.6	15.6	17.5	24.4	18.5	21.1
10	---	---	---	---	---	---	18.9	15.6	17.2	24.2	19.1	21.4
11	---	---	---	---	---	---	21.3	16.2	18.5	23.4	18.9	21.2
12	---	---	---	---	---	---	21.7	17.3	19.5	25.7	19.7	22.5
13	---	---	---	---	---	---	22.4	18.8	20.4	28.8	22.0	25.0
14	---	---	---	---	---	---	23.7	19.0	21.2	28.4	23.8	25.8
15	---	---	---	19.5	17.3	18.4	22.0	16.2	20.2	26.7	21.5	24.5
16	---	---	---	19.3	17.4	18.3	21.4	14.9	18.2	27.3	20.7	23.5
17	---	---	---	18.3	15.8	17.5	22.1	17.9	19.5	28.2	22.1	24.8
18	---	---	---	16.4	13.6	15.2	22.4	17.7	19.8	27.8	22.8	25.2
19	---	---	---	14.4	12.8	13.5	21.2	17.3	18.9	29.8	22.7	25.5
20	---	---	---	16.3	12.6	14.3	21.7	16.3	19.1	24.2	19.9	21.4
21	---	---	---	15.5	14.2	14.9	19.8	17.5	18.6	24.2	19.0	20.9
22	---	---	---	17.4	13.9	15.6	23.4	17.7	20.0	25.1	19.6	21.6
23	---	---	---	18.8	14.8	16.7	21.4	15.2	19.3	26.3	21.1	23.5
24	---	---	---	19.2	15.5	17.4	20.9	15.4	18.1	27.8	22.9	25.0
25	---	---	---	19.3	16.6	17.8	23.5	16.8	19.8	26.4	23.1	24.5
26	---	---	---	19.3	15.8	17.5	23.4	18.8	20.8	24.6	22.4	23.4
27	---	---	---	18.6	15.9	17.3	24.6	19.4	21.6	24.2	21.9	23.0
28	---	---	---	15.9	13.5	14.6	25.1	20.2	22.5	27.4	22.4	24.4
29	---	---	---	15.8	12.0	13.9	24.1	21.3	22.6	29.0	23.7	26.0
30	---	---	---	17.0	12.1	14.5	24.3	20.9	22.3	29.2	24.7	26.5
31	---	---	---	17.8	13.4	15.6	---	---	---	31.4	24.8	27.2
MONTH	---	---	---	19.5	12.0	16.1	25.1	14.4	19.4	31.4	18.3	23.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	29.8	24.9	27.0	31.5	26.4	28.6	33.3	26.6	29.1	28.4	23.0	25.0
2	31.7	25.1	27.5	31.6	25.9	28.4	32.7	26.6	29.3	29.3	23.7	26.2
3	30.1	25.3	27.4	30.7	26.0	28.4	33.4	27.1	30.1	29.4	23.8	26.2
4	30.4	24.8	26.9	33.0	26.4	29.1	34.0	27.6	30.4	28.8	24.1	26.4
5	29.7	24.6	26.4	31.2	26.6	28.9	32.0	27.7	29.7	30.0	24.8	27.0
6	29.5	23.4	25.8	30.7	27.0	28.6	30.0	27.7	28.9	28.3	24.5	26.1
7	---	---	---	28.8	26.8	27.7	31.6	26.9	29.1	30.0	24.4	26.9
8	28.2	23.5	25.4	30.1	26.1	27.5	32.0	26.5	29.1	30.4	25.1	27.5
9	---	---	---	31.6	25.7	28.0	31.6	26.6	28.7	30.1	25.3	27.1
10	---	---	---	31.1	26.6	28.6	---	---	---	29.8	25.0	27.3
11	---	---	---	32.2	27.6	29.8	---	---	---	27.7	25.2	26.4
12	---	---	---	32.1	27.6	29.6	---	---	---	28.4	23.7	25.9
13	---	---	---	31.8	26.6	28.9	---	---	---	26.7	22.8	24.8
14	---	---	---	31.0	25.8	27.6	---	---	---	24.1	22.3	22.9
15	---	---	---	30.6	25.0	27.4	---	---	---	27.1	21.8	23.8
16	---	---	---	---	---	---	---	---	---	28.1	22.1	24.3
17	---	---	---	---	---	---	---	---	---	27.8	22.1	24.3
18	---	---	---	---	---	---	---	---	---	26.0	22.7	24.1
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	31.1	26.1	28.3	28.5	25.8	27.1	---	---	---
30	---	---	---	30.0	26.4	28.2	27.9	25.6	26.4	27.6	21.6	24.2
31	---	---	---	30.5	27.1	28.5	25.9	23.9	24.6	---	---	---
MONTH	31.7	23.4	26.6	33.0	25.0	28.4	34.0	23.9	28.5	30.4	21.6	25.6
YEAR	34.0	12.0	23.2									

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM

LOCATION.--Lat 32°11'19", long 103°58'43", in SW ¼ SW ¼ NW ¼ 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 mi^2, 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 Bureau of Reclamation). July 1938 to Sept. 1941, at datum 1.19 ft higher.

REMARKS.--Water-discharge records good except those above 450 ft^3/s, 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	43	42	44	57	54	47	16	18	13	11	12
2	22	41	43	48	63	53	47	13	17	16	11	11
3	24	42	49	46	64	54	42	12	16	13	10	11
4	24	43	51	45	63	55	34	12	15	11	10	11
5	23	43	52	42	60	56	29	11	14	9.7	9.4	11
6	23	42	402	41	54	57	26	10	15	9.4	9.4	11
7	24	41	607	44	52	55	25	10	16	9.6	9.1	11
8	24	41	568	41	53	54	25	10	14	9.5	9.1	11
9	27	40	571	39	58	54	25	10	14	9.5	9.7	15
10	33	39	566	38	59	54	27	11	14	9.5	12	14
11	33	40	547	37	62	54	27	11	15	9.0	11	12
12	36	39	529	36	57	54	23	11	14	8.2	9.9	11
13	34	38	596	36	53	51	21	12	13	7.6	9.4	11
14	35	39	429	37	50	48	20	11	14	7.6	9.1	10
15	39	41	377	38	52	61	19	11	14	7.8	9.4	10
16	35	42	341	56	57	80	16	10	14	7.7	10	11
17	33	45	330	64	57	64	15	9.6	14	8.0	11	11
18	33	46	203	64	57	52	16	9.5	14	8.2	12	11
19	35	42	111	64	60	44	15	9.1	14	8.3	11	9.9
20	34	40	80	65	68	55	13	8.7	13	8.4	11	9.7
21	37	41	69	64	73	51	14	8.8	13	8.9	10	10
22	40	41	62	64	82	50	18	9.5	13	9.0	9.7	9.9
23	36	41	60	66	74	52	20	11	19	8.8	9.7	10
24	40	41	57	73	61	52	16	11	20	11	11	11
25	47	41	56	72	54	51	13	31	17	11	11	33
26	43	41	55	70	54	51	16	51	14	13	11	21
27	58	41	53	69	61	49	19	59	13	14	12	16
28	62	41	52	72	57	49	18	55	12	13	12	15
29	65	41	50	64	---	49	20	32	11	12	13	15
30	56	42	48	55	---	47	20	24	11	11	14	14
31	48	---	43	52	---	47	---	20	---	11	14	---
TOTAL	1,123	1,238	7,099	1,646	1,672	1,657	686	530.2	435	313.7	331.9	379.5
MEAN	36.2	41.3	229	53.1	59.7	53.5	22.9	17.1	14.5	10.1	10.7	12.7
MAX	65	46	607	73	82	80	47	59	20	16	14	33
MIN	20	38	42	36	50	44	13	8.7	11	7.6	9.1	9.7
AC-FT	2,230	2,460	14,080	3,260	3,320	3,290	1,360	1,050	863	622	658	753

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	170	107	92.0	77.0	69.9	52.1	39.1	203	158	101	149	243
MAX	2,718	596	519	359	358	299	149	7,108	3,040	1,184	4,182	7,129
(WY)	(1955)	(1998)	(1992)	(1987)	(1987)	(1987)	(1987)	(1941)	(1941)	(1941)	(1966)	(1941)
MIN	8.70	6.77	9.39	10.6	12.6	10.1	7.46	6.35	7.78	4.43	6.18	5.73
(WY)	(1978)	(1978)	(1978)	(1965)	(1965)	(1978)	(1978)	(1978)	(1971)	(1966)	(1964)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	20,263		17,111.3			
ANNUAL MEAN	55.5		46.9		122	
HIGHEST ANNUAL MEAN					1,694	1941
LOWEST ANNUAL MEAN					18.7	1977
HIGHEST DAILY MEAN	607	Dec 7	607	Dec 7	65,000	Aug 23, 1966
LOWEST DAILY MEAN	11	Sep 9	7.6	Jul 13	2.1	Jun 22, 1978
ANNUAL SEVEN-DAY MINIMUM	13	Sep 6	7.9	Jul 12	2.6	Jul 21, 1966
MAXIMUM PEAK FLOW			733	Dec 13	65,000	Aug 23, 1966
MAXIMUM PEAK STAGE			3.96	Dec 13	a31.60	Aug 23, 1966
INSTANTANEOUS LOW FLOW			5.1	Jul 23	0.54	May 30, 1965
ANNUAL RUNOFF (AC-FT)	40,190		33,940		88,730	
10 PERCENT EXCEEDS	63		64		134	
50 PERCENT EXCEEDS	37		31		47	
90 PERCENT EXCEEDS	19		9.8		13	

a From floodmarks.

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.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1938 to September 1941, October 1951 to June 1986, March 2003 to September 2003.
WATER TEMPERATURE: October 1952 to June 1986, March 2003 to September 2003.

INSTRUMENTATION.--Specific conductance and thermistor since March 2003. Hourly data logged.

REMARKS.--Specific conductance records good. Temperature records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 66,000 microsiemens, Aug. 1, 2, 1966; minimum daily, 402 microsiemens, June 25, 1986.
WATER TEMPERATURE: Maximum daily, 35.0 °C, July 6, 1968; minimum daily, 1.0 °C, Dec. 25, 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 31,300 microsiemens, Aug. 30; minimum daily, 6,520 microsiemens, Mar. 18 and 19.
WATER TEMPERATURE: Maximum daily, 33.2 °C, Aug. 4; minimum daily, 12.5 °C, Mar. 29 and 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
29...	1200	70	685	8.8	116	7.6	8,550	22.0	22.0	2,100	506	203	28.9
DEC													
03...	1030	49	690	6.4	69	7.8	8,660	11.0	13.0	2,000	484	192	37.3
11...	1520	541	682	10.6	105	8.1	5,470	12.0	9.0	1,600	427	123	7.04
APR													
10...	1350	28	687	8.4	106	7.9	12,100	27.0	19.7	2,300	514	240	73.3
28...	1430	18	687	--	--	--	16,200	--	26.0	--	--	--	--
MAY													
20...	1305	9.0	700	--	--	--	19,600	--	20.8	--	--	--	--
JUN													
30...	1110	10	--	--	--	--	17,300	30.0	27.0	--	--	--	--
JUL													
28...	1040	12	--	--	--	--	27,000	30.0	27.3	--	--	--	--
AUG													
20...	0850	8.5	689	5.9	90	8.1	29,700	28.5	26.0	4,100	866	476	225
28...	1130	9.9	--	--	--	--	29,400	30.0	29.8	--	--	--	--
SEP													
29...	1230	14	--	--	--	--	25,400	30.0	25.0	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
29...	11	1,140	--	--	2,180	0.78	12.1	1,680	--	6,380	--	--	--
DEC													
03...	12	1,220	--	--	2,080	0.74	12.7	1,550	--	5,900	--	--	--
11...	7	683	102	122	1,150	0.73	9.2	1,300	3,770	3,930	0.50	0.90	<0.01
APR													
10...	18	1,990	126	150	3,270	0.86	6.5	1,820	8,000	8,450	0.90	1.5	0.34
28...	--	--	--	--	--	--	--	--	--	10,900	--	--	--
MAY													
20...	--	--	--	--	--	--	--	--	--	13,300	--	--	--
JUN													
30...	--	--	--	--	--	--	--	--	--	10,800	--	--	--
JUL													
28...	--	--	--	--	--	--	--	--	--	19,500	--	--	--
AUG													
20...	35	5,150	82	100	8,960	1.1	12.5	3,140	18,900	20,500	1.0	1.4	0.03
28...	--	--	--	--	--	--	--	--	--	20,000	--	--	--
SEP													
29...	--	--	--	--	--	--	--	--	--	14,100	--	--	--

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)
OCT													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	0.01	0.47	<0.010	<0.01	<0.02	0.06	7	6	<5	E.61	<2	74	<0.18
APR													
10...	0.37	0.09	0.010	<0.01	<0.02	0.04	E17	110	<8	<1.50	<4	45	<0.30
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
20...	0.06	<0.02	<0.010	<0.01	<0.02	0.03	E17	E5	<18	<3.30	5	52	<0.66
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recover-able, ug/L (71900)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)
OCT													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	280	<0.11	<0.8	0.94	5.2	<30	0.56	15.8	<0.02	3.7	23.4	<3	<3
APR													
10...	630	<0.18	<1.6	1.46	8.4	<100	<0.40	117	<0.02	5.2	23.2	<5	<5
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
20...	1,540	<0.41	<2.4	1.86	14.0	<240	<0.88	23.3	<0.02	6.2	24.5	19	<8
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
29...	--	--	--	--	--
DEC					
03...	--	--	--	--	--
11...	<0.60	5	5.35	99	75
APR					
10...	M	8	8.90	91	16
28...	--	--	--	--	--
MAY					
20...	--	--	--	--	--
JUN					
30...	--	--	--	--	--
JUL					
28...	--	--	--	--	--
AUG					
20...	<2	E10	9.75	83	11
28...	--	--	--	--	--
SEP					
29...	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
DEC													
11...	1520	<0.006	E.005	<0.006	<0.004	<0.005	E.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005
APR													
10...	1350	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
DEC													
11...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
APR													
10...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
DEC													
11...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
APR													
10...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
DEC													
11...	<0.022	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	0.02	<0.034	<0.02	<0.005	<0.002
APR													
10...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
DEC	
11...	<0.009
APR	
10...	<0.009

Remark codes used in this table:
< -- Less than
E -- Estimated value

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	9,070	8,790	8,970	14,100	13,500	13,800
2	---	---	---	---	---	---	8,830	8,610	8,750	14,200	13,700	13,900
3	---	---	---	---	---	---	8,820	8,650	8,730	14,100	13,600	13,800
4	---	---	---	---	---	---	9,220	8,750	9,070	14,300	13,600	14,100
5	---	---	---	---	---	---	9,680	9,220	9,440	15,000	14,300	14,700
6	---	---	---	---	---	---	10,200	9,680	9,970	15,700	15,000	15,200
7	---	---	---	---	---	---	10,900	10,200	10,500	16,400	15,600	16,000
8	---	---	---	---	---	---	11,600	10,900	11,200	17,200	16,400	16,800
9	---	---	---	---	---	---	12,300	11,600	11,900	18,200	17,200	17,700
10	---	---	---	---	---	---	12,700	12,300	12,400	18,900	18,100	18,500
11	---	---	---	---	---	---	12,700	12,400	12,600	19,400	18,900	19,100
12	---	---	---	---	---	---	12,600	12,200	12,500	19,600	19,300	19,500
13	---	---	---	---	---	---	12,200	11,800	12,100	19,800	19,600	19,700
14	---	---	---	---	---	---	12,300	11,900	12,100	19,700	19,500	19,600
15	---	---	---	8,960	8,790	8,900	13,300	12,300	12,800	19,500	19,300	19,400
16	---	---	---	8,990	7,250	8,340	13,700	13,300	13,500	19,300	18,900	19,200
17	---	---	---	7,450	7,120	7,280	14,700	13,700	14,100	19,300	19,000	19,200
18	---	---	---	7,330	6,520	6,890	15,000	14,600	14,800	19,200	19,100	19,100
19	---	---	---	7,540	6,520	6,880	16,000	15,000	15,500	19,400	19,100	19,300
20	---	---	---	8,060	7,540	7,860	16,400	16,000	16,200	19,800	19,300	19,500
21	---	---	---	8,200	8,060	8,150	16,600	16,400	16,600	20,300	19,800	20,000
22	---	---	---	8,560	8,190	8,280	16,700	16,600	16,600	20,500	20,300	20,400
23	---	---	---	8,800	8,480	8,680	17,000	16,700	16,900	20,800	20,500	20,600
24	---	---	---	8,480	8,350	8,420	17,000	16,800	16,900	20,900	20,700	20,800
25	---	---	---	8,560	8,380	8,470	16,800	15,900	16,400	20,900	17,400	20,400
26	---	---	---	8,640	8,490	8,560	16,200	15,500	15,700	18,600	11,000	14,000
27	---	---	---	8,770	8,540	8,680	16,400	15,600	15,800	11,000	7,940	9,640
28	---	---	---	9,060	8,770	8,890	16,500	13,500	15,700	10,400	9,900	10,200
29	---	---	---	9,170	9,010	9,120	15,100	12,900	14,000	9,900	8,980	9,390
30	---	---	---	9,020	8,720	8,800	13,600	12,800	13,300	9,750	9,090	9,380
31	---	---	---	8,950	8,770	8,880	---	---	---	10,500	9,580	9,940
MONTH	---	---	---	9,170	6,520	8,300	17,000	8,610	13,200	20,900	7,940	16,500
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11,200	10,500	10,900	19,000	18,000	18,400	26,200	25,000	25,500	30,800	29,700	30,300
2	12,200	11,200	11,600	19,900	18,500	19,300	25,300	24,300	24,800	29,800	29,200	29,400
3	12,500	12,000	12,200	20,800	19,200	20,100	24,500	24,000	24,200	29,200	27,700	28,300
4	13,100	12,500	12,800	20,600	20,300	20,400	24,000	23,800	23,800	28,400	27,800	28,000
5	13,700	13,100	13,400	20,300	20,200	20,300	23,900	23,700	23,800	27,800	27,300	27,500
6	13,900	13,600	13,700	20,200	20,000	20,100	24,000	23,900	23,900	27,300	26,700	27,000
7	14,700	13,800	14,200	20,000	19,500	19,800	24,300	24,000	24,100	26,800	26,000	26,400
8	15,300	14,600	14,900	19,700	19,400	19,500	24,900	24,300	24,500	26,200	26,000	26,100
9	15,300	15,100	15,200	20,600	19,600	19,900	25,500	24,900	25,200	26,100	25,900	26,000
10	15,400	15,200	15,300	21,200	20,300	20,600	25,700	25,100	25,400	26,100	25,800	26,000
11	15,400	15,200	15,300	22,200	20,700	21,200	26,400	25,700	26,100	26,200	26,000	26,100
12	15,500	15,300	15,400	22,400	21,500	21,800	27,100	26,400	26,800	26,500	26,100	26,300
13	15,700	15,400	15,600	23,000	21,900	22,200	27,600	27,100	27,400	26,600	26,400	26,500
14	16,100	15,700	15,900	23,200	22,600	22,800	28,000	27,600	27,800	26,500	26,300	26,400
15	16,400	16,000	16,200	23,800	23,000	23,300	28,400	28,000	28,100	26,300	25,800	26,100
16	16,500	16,300	16,400	23,800	23,500	23,600	28,700	28,400	28,500	25,900	25,300	25,500
17	16,700	16,500	16,600	24,000	23,700	23,900	29,000	28,700	28,800	25,300	25,000	25,100
18	16,800	16,600	16,600	24,900	24,000	24,300	29,300	29,000	29,200	25,400	24,700	25,200
19	16,700	16,400	16,600	25,200	24,800	25,000	29,600	29,300	29,400	25,500	24,900	25,300
20	16,600	16,400	16,500	25,700	25,200	25,400	29,800	29,600	29,700	25,900	25,500	25,700
21	16,900	16,600	16,700	26,200	25,700	25,800	30,100	29,800	30,000	26,300	25,900	26,100
22	17,300	16,900	17,100	26,500	26,200	26,300	---	---	---	26,300	26,000	26,100
23	17,600	15,200	17,100	26,800	26,500	26,600	---	---	---	26,400	26,200	26,300
24	17,200	16,000	16,400	26,900	26,600	26,800	---	---	---	26,400	25,500	26,300
25	17,300	16,400	17,000	27,100	26,800	26,900	---	---	---	25,500	17,200	20,400
26	17,500	17,300	17,400	27,300	27,100	27,200	---	---	---	21,400	19,700	20,400
27	17,400	17,100	17,300	---	---	---	---	---	---	23,200	20,600	21,500
28	17,200	16,900	17,100	---	---	---	---	---	---	22,300	20,800	21,300
29	17,300	17,000	17,200	28,700	28,300	28,500	31,000	30,500	30,700	---	---	---
30	18,200	17,300	17,600	28,300	25,100	26,800	31,300	31,000	31,100	---	---	---
31	---	---	---	26,700	24,500	26,100	31,200	30,800	31,100	---	---	---
MONTH	18,200	10,500	15,500	28,700	18,000	23,200	31,300	23,700	27,100	30,800	17,200	25,800
YEAR	31,300	6,520	18,800									

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, NM—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	18.6	15.4	17.1	25.8	20.3	22.8
2	---	---	---	---	---	---	19.4	17.1	18.4	26.4	21.0	23.4
3	---	---	---	---	---	---	20.9	18.2	19.3	25.3	21.5	23.3
4	---	---	---	---	---	---	21.0	17.7	19.2	23.0	20.5	21.7
5	---	---	---	---	---	---	20.7	17.4	19.0	23.5	19.4	21.2
6	---	---	---	---	---	---	20.8	17.4	19.0	23.9	19.6	21.8
7	---	---	---	---	---	---	21.2	16.4	18.6	25.0	20.1	22.6
8	---	---	---	---	---	---	20.6	16.7	18.3	23.6	20.9	22.2
9	---	---	---	---	---	---	19.6	16.1	17.8	24.7	19.6	22.0
10	---	---	---	---	---	---	18.8	16.1	17.5	24.5	20.4	22.3
11	---	---	---	---	---	---	21.6	16.8	19.0	22.2	19.8	21.1
12	---	---	---	---	---	---	21.0	17.6	19.3	23.9	19.9	21.9
13	---	---	---	---	---	---	22.3	19.0	20.4	29.1	22.4	25.0
14	---	---	---	---	---	---	23.3	19.3	21.3	27.8	23.8	25.7
15	---	---	---	20.0	17.8	19.0	22.5	18.3	21.0	26.9	22.9	25.0
16	---	---	---	20.4	18.5	19.4	21.4	16.2	18.8	27.5	21.7	24.2
17	---	---	---	19.0	16.6	18.1	21.1	18.4	19.7	25.5	22.5	24.0
18	---	---	---	16.6	14.2	15.7	22.6	18.6	20.5	27.7	22.9	25.2
19	---	---	---	14.4	13.1	13.7	21.2	18.7	19.9	29.7	23.6	25.9
20	---	---	---	15.2	12.6	13.8	21.3	17.3	19.4	25.2	20.1	22.3
21	---	---	---	15.1	14.1	14.5	19.8	17.3	18.3	22.6	19.3	20.3
22	---	---	---	17.5	14.4	15.6	20.8	17.4	18.9	22.4	19.1	20.5
23	---	---	---	18.4	15.1	16.7	21.2	17.9	19.8	24.7	21.4	22.8
24	---	---	---	19.1	16.5	17.8	20.2	16.7	18.4	27.3	22.8	24.3
25	---	---	---	19.4	17.6	18.3	23.3	17.1	19.7	25.7	20.0	23.9
26	---	---	---	19.5	16.8	18.0	22.9	18.5	20.8	23.4	19.4	21.7
27	---	---	---	18.6	16.3	17.7	23.6	19.6	21.3	23.4	20.2	21.9
28	---	---	---	16.3	13.7	14.9	24.9	20.2	22.3	26.1	22.6	24.4
29	---	---	---	15.5	12.5	13.7	24.3	21.1	22.7	27.0	24.4	25.8
30	---	---	---	16.2	12.5	14.3	24.3	21.0	22.5	27.5	25.5	26.6
31	---	---	---	17.3	14.0	15.6	---	---	---	31.0	25.9	27.8
MONTH	---	---	---	20.4	12.5	16.3	24.9	15.4	19.6	31.0	19.1	23.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.7	25.4	26.6	28.4	24.9	26.6	31.4	26.5	28.7	27.4	23.6	25.3
2	30.2	25.3	26.9	29.2	25.9	27.4	31.8	26.4	28.8	27.4	24.0	25.8
3	30.5	24.8	27.1	29.1	26.6	28.0	32.0	27.4	29.4	28.2	24.4	26.2
4	27.4	25.1	26.1	29.6	26.6	28.0	33.2	27.7	30.1	28.7	24.9	26.7
5	26.8	24.0	25.0	29.8	26.6	28.2	31.0	27.7	29.4	27.8	24.9	26.4
6	29.6	23.2	25.2	29.8	27.0	28.3	29.8	27.7	28.8	28.0	24.8	26.2
7	28.4	23.7	25.1	28.2	26.5	27.4	30.5	27.0	28.8	29.6	24.8	27.0
8	25.6	23.4	24.3	28.4	26.0	26.7	30.7	27.2	28.9	30.4	25.7	27.9
9	27.3	24.6	25.6	28.3	25.6	26.8	31.3	27.2	29.0	28.4	25.8	27.0
10	31.0	24.2	27.1	29.3	26.0	27.5	31.5	27.5	29.4	29.0	25.4	27.1
11	30.8	25.4	27.5	30.3	27.0	28.7	31.1	28.1	29.5	27.6	25.6	26.5
12	30.4	24.9	27.3	30.5	27.3	28.9	30.2	26.9	28.3	27.9	24.0	25.6
13	29.4	24.9	26.7	30.0	26.7	28.2	27.8	25.3	26.5	26.8	23.5	25.0
14	26.8	24.8	25.6	28.8	25.8	27.2	26.9	24.3	25.4	24.5	22.8	23.4
15	27.6	24.0	25.5	28.4	25.4	26.9	26.3	23.8	24.9	26.0	22.2	23.6
16	26.9	24.7	25.8	28.4	25.2	26.8	27.3	23.8	25.6	25.8	22.5	23.9
17	28.3	24.9	26.1	28.1	26.0	26.9	28.5	25.1	26.8	25.8	22.4	24.0
18	27.4	24.7	25.8	30.2	25.8	27.3	28.9	25.6	27.2	25.9	23.0	24.3
19	29.2	24.3	26.1	28.9	25.5	27.1	29.3	25.8	27.4	24.8	22.0	23.4
20	28.2	24.1	25.5	28.6	25.7	27.3	29.6	25.8	27.5	25.6	21.9	23.6
21	29.3	24.7	26.7	29.3	25.9	27.4	29.6	26.0	27.7	27.4	22.3	24.6
22	29.4	26.0	27.6	29.2	26.1	27.7	---	---	---	26.2	23.6	24.9
23	28.7	26.0	26.9	30.6	26.8	28.5	---	---	---	26.1	23.5	24.6
24	30.1	25.3	27.3	30.6	26.9	28.4	---	---	---	27.1	23.3	24.9
25	28.6	26.1	26.9	30.2	27.0	28.6	---	---	---	24.7	21.5	23.3
26	27.8	25.8	26.8	29.8	26.6	28.0	---	---	---	27.5	22.1	24.4
27	27.4	25.1	25.9	---	---	---	---	---	---	26.4	23.1	24.7
28	28.0	25.1	26.1	---	---	---	---	---	---	25.1	22.3	23.7
29	28.1	24.9	26.2	29.6	26.3	27.9	28.7	26.5	27.7	---	---	23.7
30	29.2	24.8	26.3	30.0	25.8	28.0	29.0	26.4	27.4	---	---	---
31	---	---	---	30.0	26.8	28.3	26.9	24.7	25.5	---	---	---
MONTH	31.0	23.2	26.3	30.6	24.9	27.7	33.2	23.8	27.9	30.4	21.5	25.1
YEAR	33.2	12.5	24.1									

08407500 PECOS RIVER AT RED BLUFF, NM

LOCATION.--Lat 32°04'30", long 104°02'21", in SW $^1/_4$ NW $^1/_4$ NE $^1/_4$ 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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 2,850.05 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except for those estimated, 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. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Oct. 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.)

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	42	38	46	49	45	36	15	19	12	7.6	9.2
2	16	40	39	46	57	43	36	12	16	7.4	7.2	8.2
3	17	40	43	47	60	43	34	10	14	9.8	6.9	8.2
4	19	39	44	47	58	44	30	8.9	13	12	6.6	8.3
5	19	39	45	47	56	46	25	8.6	12	13	6.3	8.4
6	19	38	173	44	51	45	22	8.4	12	7.1	6.2	8.0
7	74	38	483	45	44	44	20	7.8	12	8.6	6.4	8.2
8	20	37	528	46	45	43	19	7.4	13	9.5	6.1	8.4
9	20	37	530	45	48	41	19	7.4	12	8.0	6.5	8.6
10	24	35	536	41	51	42	19	7.3	12	6.4	6.3	11
11	29	35	537	42	52	42	22	7.3	12	6.6	e6.2	e10
12	29	36	537	40	51	42	21	8.3	12	6.3	e6.1	e9.7
13	31	34	576	39	47	41	18	9.0	11	5.6	5.5	9.7
14	30	34	530	40	43	38	16	9.3	11	5.2	5.0	10
15	31	36	462	41	41	37	14	8.7	11	4.8	4.9	10
16	34	38	396	45	46	68	14	8.4	11	4.6	5.3	9.6
17	30	39	381	59	48	55	12	8.1	11	4.7	5.2	11
18	29	40	296	60	48	46	11	7.7	11	5.0	5.9	12
19	31	40	173	59	48	39	11	7.7	10	4.9	6.9	12
20	31	37	92	59	57	37	10	7.7	11	4.9	7.5	11
21	30	37	73	60	62	39	9.7	7.6	10	5.1	7.5	11
22	35	37	60	60	70	35	9.8	7.7	9.6	5.4	7.3	11
23	35	37	57	60	70	37	12	7.8	15	5.5	7.1	11
24	34	37	54	66	55	38	13	8.2	46	6.2	6.9	11
25	39	36	51	72	46	38	11	19	18	6.3	8.9	54
26	41	37	51	70	42	37	9.2	166	15	6.5	9.0	21
27	75	36	49	68	47	37	10	37	12	6.8	7.6	15
28	65	37	47	68	48	35	13	64	10	7.8	7.5	13
29	56	37	50	65	---	36	12	47	14	9.0	8.5	12
30	54	38	47	57	---	35	13	30	321	8.6	9.4	11
31	47	---	44	52	---	34	---	22	---	8.1	9.2	---
TOTAL	1,059	1,123	7,022	1,636	1,440	1,282	521.7	591.3	716.6	221.7	213.5	361.5
MEAN	34.2	37.4	227	52.8	51.4	41.4	17.4	19.1	23.9	7.15	6.89	12.1
MAX	75	42	576	72	70	68	36	166	321	13	9.4	54
MIN	15	34	38	39	41	34	9.2	7.3	9.6	4.6	4.9	8.0
AC-FT	2,100	2,230	13,930	3,250	2,860	2,540	1,030	1,170	1,420	440	423	717

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	261	155	124	109	94.6	69.0	57.4	203	172	113	147	263
MAX	5,255	1,382	813	703	534	295	681	6,954	3,181	1,273	4,210	6,521
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1941)	(1941)	(1941)	(1966)	(1941)
MIN	10.0	6.71	8.57	10.7	13.7	7.76	6.38	7.90	4.30	2.55	5.08	5.77
(WY)	(1965)	(1978)	(1978)	(1965)	(1965)	(1978)	(1978)	(1971)	(1990)	(1966)	(1964)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	20,002		16,188.3			
ANNUAL MEAN	54.8		44.4		148	
HIGHEST ANNUAL MEAN					1,655	1941
LOWEST ANNUAL MEAN					19.2	1977
HIGHEST DAILY MEAN	576	Dec 13	576	Dec 13	50,700	Aug 24, 1966
LOWEST DAILY MEAN	10	Jun 19	4.6	Jul 16	0.22	Aug 1, 1966
ANNUAL SEVEN-DAY MINIMUM	12	Jun 13	4.9	Jul 15	0.33	Jul 26, 1966
MAXIMUM PEAK FLOW			1,350	Jun 30	a111,000	Aug 23, 1966
MAXIMUM PEAK STAGE			7.87	Jun 30	33.32	Aug 23, 1966
INSTANTANEOUS LOW FLOW			3.9	Jul 13	0.19	Aug 1, 1966
ANNUAL RUNOFF (AC-FT)	39,670		32,110		107,000	
10 PERCENT EXCEEDS	60		60		202	
50 PERCENT EXCEEDS	37		29		56	
90 PERCENT EXCEEDS	15		7.0		14	

a From rating curve extended above 32,000 ft^3/s, on basis of slope-area measurement of peak flow.
e Estimated

08408500 DELAWARE RIVER NEAR RED BLUFF, NM

LOCATION.--Lat 32°01'23", long 104°03'15", in NE ¼ SW ¼ SE ¼ 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 mi^2.

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 with satellite telemetry and rain gage. 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 fair, except for those estimated, which are poor. One small upstream diversion. Several observations of water temperature were made during the year. No flow for many days most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.59	4.8	1.8	1.3	1.3	1.6	1.2	0.00	0.00	6.4	0.00	0.00
2	0.54	3.0	1.8	1.3	1.4	1.4	1.1	0.00	0.00	0.09	0.00	0.00
3	0.50	2.3	2.8	1.3	1.3	1.6	1.0	0.00	0.00	0.00	0.00	0.00
4	0.41	2.0	2.3	1.2	1.3	1.5	0.93	0.00	0.00	0.00	0.00	0.00
5	0.35	1.8	2.3	1.2	1.3	1.4	0.84	0.00	0.00	0.00	0.00	0.00
6	8.5	1.4	2.1	1.2	1.3	1.3	0.78	0.00	0.00	0.00	0.00	0.00
7	42	1.3	2.0	1.2	1.3	1.3	0.68	0.00	0.00	0.00	0.00	0.00
8	9.7	1.2	1.9	1.2	1.4	1.3	0.66	0.00	0.00	0.00	0.00	0.00
9	8.1	1.2	1.8	1.2	1.6	1.3	0.68	0.00	0.00	0.00	0.00	0.00
10	2.8	1.0	1.8	1.2	1.4	1.4	0.68	0.00	0.00	0.00	1.5	0.00
11	1.2	0.81	1.8	1.2	1.4	1.5	0.66	0.00	0.00	0.00	0.00	0.00
12	0.64	0.74	1.8	1.2	1.4	1.5	0.65	0.00	0.00	0.00	0.00	0.00
13	0.49	0.77	1.8	1.2	1.4	1.4	0.63	0.00	0.00	0.00	0.00	0.00
14	0.54	0.90	1.8	1.3	1.6	1.4	0.60	0.00	0.00	0.00	0.00	0.00
15	0.53	1.0	1.8	1.4	1.4	1.5	0.53	0.00	0.00	0.00	0.00	0.00
16	0.52	1.3	1.8	1.2	1.4	1.5	0.46	0.00	0.00	0.00	0.00	0.00
17	0.48	1.4	1.6	1.2	1.4	1.5	0.45	0.00	0.00	0.00	0.00	0.00
18	0.47	1.3	1.4	1.2	1.4	1.4	0.43	0.00	0.00	0.00	0.00	0.00
19	58	1.1	1.3	1.2	1.4	1.2	0.39	0.00	0.00	0.00	0.00	0.00
20	9.5	1.1	1.3	1.3	1.9	1.2	0.36	0.00	0.00	0.00	0.00	0.00
21	3.6	1.1	1.4	1.3	3.0	1.2	0.35	0.00	0.00	0.00	0.00	0.00
22	3.2	1.3	1.3	1.3	2.7	1.5	0.36	0.00	0.00	0.00	0.00	0.00
23	7.4	1.5	1.3	1.2	2.4	1.5	0.37	0.00	0.00	0.00	0.00	0.00
24	4.6	1.5	1.3	1.2	1.8	1.4	0.32	0.00	0.00	0.00	0.00	0.00
25	1.3	1.4	1.3	1.2	1.6	1.3	0.26	37	0.00	0.00	0.00	0.00
26	5.4	1.4	1.3	1.2	1.6	1.3	0.20	171	0.00	0.00	0.00	0.00
27	25	1.5	1.3	1.3	1.7	1.2	0.11	4.1	0.00	0.00	0.00	e0.00
28	34	1.5	1.3	1.5	1.6	1.2	0.07	0.18	0.00	0.00	0.00	0.00
29	17	1.6	1.3	1.4	---	1.2	0.00	0.12	11	0.00	0.00	e0.00
30	14	1.7	1.3	1.4	---	1.1	0.00	0.05	67	0.00	0.00	e0.00
31	8.7	---	1.3	1.3	---	1.2	---	0.00	---	0.00	0.00	---
TOTAL	270.06	44.92	51.4	39.0	44.7	42.3	15.75	212.45	78.00	6.49	1.50	0.00
MEAN	8.71	1.50	1.66	1.26	1.60	1.36	0.53	6.85	2.60	0.21	0.048	0.000
MAX	58	4.8	2.8	1.5	3.0	1.6	1.2	171	67	6.4	1.5	0.00
MIN	0.35	0.74	1.3	1.2	1.3	1.1	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	536	89	102	77	89	84	31	421	155	13	3.0	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	26.6	3.25	3.05	3.13	2.94	2.63	5.25	8.75	18.3	13.0	20.4	20.4
MAX	748	18.9	7.99	8.57	8.77	9.44	135	233	281	166	326	303
(WY)	(1956)	(1979)	(1987)	(1987)	(1987)	(1987)	(1954)	(1941)	(1938)	(1952)	(1966)	(1978)
MIN	0.000	0.000	0.000	0.000	0.13	0.42	0.23	0.000	0.000	0.000	0.000	0.000
(WY)	(1952)	(2002)	(2002)	(2002)	(1966)	(1993)	(1968)	(2001)	(1950)	(1947)	(1983)	(1953)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	1,261.34		806.57			
ANNUAL MEAN	3.46		2.21		10.7	
HIGHEST ANNUAL MEAN					66.1	1956
LOWEST ANNUAL MEAN					0.71	2001
HIGHEST DAILY MEAN	467	Sep 16	171	May 26	22,000	Oct 2, 1955
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Apr 29	c0.00	Jun 12, 1938
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 29	0.00	Jul 29, 1946
MAXIMUM PEAK FLOW			883	May 26	a81,400	Oct 2, 1955
MAXIMUM PEAK STAGE			6.19	May 26	b27.00	Oct 2, 1955
INSTANTANEOUS LOW FLOW			0.00	Apr 28	0.00	Jun 11, 1938
ANNUAL RUNOFF (AC-FT)	2,500		1,600		7,730	
10 PERCENT EXCEEDS	2.9		1.9		6.8	
50 PERCENT EXCEEDS	0.41		0.74		2.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 6,500 ft^3/s, on basis of slope-area measurement at gage heights 12.84 ft, 17.55 ft, and 27.0 ft.
b From floodmarks.
c No flow most days.
e Estimated

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 mi^2, approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 0.43 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft long. The dam was completed and storage began in Sept. 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.

COOPERATION.--Gage-height records and capacity curve provided by Red Bluff Water Power Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 352,000 acre-ft, Sept. 27, 28, 1941, gage height, 2,846.2 ft, observed on nonrecording gage at service spillway (affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft, May 13, 1948, gage height, 2,781.4 ft.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents observed, 60,490 acre-ft, Mar. 19-26, gage height, 2,808.42 ft; minimum observed, 42,920 acre-ft, Oct. 5, gage height, 2,802.63 ft.

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

Gage height	Contents	Gage height	Contents	Gage height	Contents	Gage height	Contents
2,802	41,350	2,804	46,580	2,806	52,460	2,808	59,010
2,803	43,880	2,805	49,440	2,807	55,650	2,809	62,530

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43,070	44,960	46,140	56,630	58,240	59,820	60,420	58,940	58,540	56,830	54,310	52,100
2	43,070	45,010	46,170	56,660	58,270	59,850	60,420	58,940	58,470	56,790	54,220	52,040
3	43,020	45,120	46,440	56,690	58,300	59,850	60,380	58,840	58,370	56,730	54,120	51,980
4	42,970	45,170	46,440	56,730	58,340	59,890	60,350	58,770	58,300	56,690	54,060	51,920
5	42,920	45,230	46,490	56,760	58,370	59,920	60,350	58,670	58,170	56,660	53,960	51,860
6	42,940	45,230	46,520	56,830	58,400	59,960	60,310	58,570	58,070	56,630	53,870	51,800
7	43,270	45,230	47,150	56,860	58,440	60,000	60,310	58,500	57,970	56,590	53,740	51,740
8	43,400	45,520	47,720	56,890	58,470	60,030	60,280	58,370	57,940	56,560	53,740	51,710
9	43,450	45,580	48,610	56,930	58,500	60,060	60,240	58,300	57,870	56,460	53,470	51,620
10	43,450	45,630	49,380	56,960	58,540	60,100	60,210	58,200	57,760	56,360	53,470	51,620
11	43,450	45,550	50,280	57,000	58,610	60,140	60,170	58,100	57,670	56,260	53,670	51,580
12	43,450	45,500	51,160	57,060	58,880	60,170	60,140	58,000	57,600	56,120	53,610	51,430
13	43,470	45,440	51,950	57,100	58,740	60,240	60,100	57,900	57,530	56,020	53,510	51,340
14	43,450	45,500	52,750	57,130	58,810	60,280	60,060	57,830	57,460	55,890	53,420	51,250
15	43,450	45,520	53,510	57,160	58,840	60,310	60,030	57,660	57,400	55,720	53,360	51,190
16	43,470	45,580	54,280	57,200	58,880	60,350	59,960	57,500	57,330	55,330	53,290	51,130
17	43,520	45,630	54,820	57,230	58,910	60,420	59,890	57,360	57,260	55,270	53,230	51,070
18	43,600	45,680	55,430	57,260	58,940	60,450	59,820	57,330	57,160	55,210	53,160	51,010
19	43,580	45,740	55,820	57,300	59,010	60,490	59,710	57,230	57,100	55,140	53,100	50,920
20	43,650	45,740	55,890	57,330	59,150	60,490	59,610	57,160	57,000	55,080	53,040	50,830
21	43,700	45,740	56,090	57,400	59,430	60,490	59,500	57,130	56,930	55,010	52,840	50,740
22	43,730	45,770	56,120	57,430	59,470	60,490	59,430	57,100	56,860	54,950	52,780	50,710
23	43,750	45,790	56,160	57,460	59,570	60,490	59,360	57,060	56,790	54,890	52,750	50,680
24	43,880	45,850	56,190	57,560	59,570	60,490	59,320	57,060	56,730	54,820	52,650	50,650
25	43,880	45,870	56,260	57,700	59,570	60,490	59,290	57,060	56,660	54,760	52,620	50,620
26	44,010	45,900	56,290	57,770	59,640	60,490	59,220	58,240	56,660	54,700	52,560	50,620
27	44,200	45,930	56,320	57,800	59,710	60,450	59,150	58,500	56,630	54,630	52,460	50,560
28	44,660	45,960	56,360	57,900	59,820	60,450	59,080	58,570	56,590	54,570	52,400	50,520
29	44,740	45,980	56,420	58,040	---	60,450	59,010	58,640	56,560	54,500	52,340	50,500
30	44,850	46,010	56,490	58,100	---	60,450	58,940	58,610	57,030	54,440	52,310	50,430
31	44,850	---	56,560	58,200	---	60,450	---	58,570	---	54,380	52,190	---
MAX	44,850	46,010	56,560	58,200	59,820	60,490	60,420	58,940	58,540	56,830	54,310	52,100
MIN	42,920	44,960	46,140	56,630	58,240	59,820	58,940	57,060	56,560	54,380	52,190	50,430
(+)	2,803.36	2,803.79	2,807.27	2,807.76	2,808.23	2,808.41	2,807.98	2,807.87	2,807.41	2,806.60	2,805.91	2,805.33
(++)	+1,780	+1,160	+10,550	+1,640	+1,620	+630	-1,510	-370	-1,540	-2,650	-2,190	-1,760

CAL YR 2002 MAX 56,560 MIN 38,060 (++) +18,590
WTR YR 2003 MAX 60,490 MIN 42,920 (++) +7,360

(+) Gage height in feet, at end of month.
(++) Change in contents, in acre-feet.

08412500 PECOS RIVER NEAR ORLA, TX

LOCATION.--Lat 31°52'21", long 103°49'52", Reeves County, Hydrologic Unit 13070001, on right bank at bridge on Farm Road 652, 5.5 mi downstream form Salt Creek (Screw Bean Arroyo), 5.9 mi northeast of Orla, and 8.5 mi downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 mi^2, approximately (contributing area).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1937 to current year.

REVISED RECORDS.--WSP 928: 1937.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 2,730.86 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 16, 1969, at site 6.9 mi downstream at datum 12.81 ft lower.

REMARKS.--Water-discharge records fair. Most of flow is releases from storage in Red Bluff Reservoir (station 08410000) 8.5 mi upstream. Occasional runoff occurs from draws between dam and station. There are many diversions above Red Bluff Reservoir for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	12	5.6	4.9	8.5	4.7	3.1	6.1	2.6	16	3.8	4.0
2	26	9.9	5.6	5.2	8.8	4.6	3.2	6.3	11	16	3.7	4.2
3	9.7	9.2	8.3	5.0	8.8	4.6	3.0	6.6	18	16	3.6	4.3
4	5.7	9.4	11	4.9	8.7	4.6	3.1	6.7	18	16	3.6	4.4
5	5.7	8.8	7.6	4.8	8.4	4.3	3.1	6.5	18	15	3.5	4.5
6	24	9.4	6.4	4.7	8.3	4.3	3.0	6.7	9.4	16	3.3	4.7
7	327	8.9	5.9	4.9	8.2	4.1	2.9	7.1	7.1	142	3.1	4.8
8	108	7.8	5.9	5.0	8.3	4.1	3.0	7.5	7.3	442	3.0	4.8
9	68	7.0	5.9	4.9	8.4	4.1	3.0	7.8	8.6	92	3.0	4.8
10	39	6.2	5.8	4.7	8.0	4.1	3.0	7.9	9.5	25	34	5.3
11	19	6.0	5.8	4.7	8.0	4.1	3.1	8.0	9.6	13	6.3	4.8
12	26	6.3	5.6	4.8	7.1	4.0	3.0	9.1	9.5	9.3	3.7	4.7
13	9.0	6.3	5.6	4.9	6.6	3.8	3.1	9.7	9.9	8.2	3.4	4.6
14	11	6.3	5.4	4.9	6.6	3.9	3.3	9.7	11	7.0	3.2	4.6
15	17	6.3	5.4	5.1	6.3	3.9	3.4	10	12	5.6	3.5	4.7
16	9.6	6.7	5.5	5.2	6.2	3.8	3.1	10	13	5.4	3.3	4.7
17	8.7	7.2	5.5	5.3	6.1	3.7	3.6	11	13	5.6	3.3	4.8
18	13	7.0	5.6	5.1	5.9	3.7	4.6	12	14	4.7	3.2	4.7
19	47	6.8	5.2	5.3	5.7	3.4	5.2	12	14	4.8	3.0	4.7
20	16	6.5	5.0	5.4	5.8	3.5	5.2	12	14	4.8	3.0	4.8
21	12	6.2	5.0	5.5	5.7	3.7	5.5	14	14	4.6	3.1	4.9
22	11	6.1	5.0	5.5	5.6	3.8	5.9	14	15	4.5	3.1	4.9
23	10	6.3	5.1	5.6	5.6	3.7	6.2	15	25	4.5	3.2	4.9
24	277	6.3	5.0	5.5	5.5	3.6	5.8	15	19	4.4	5.0	5.0
25	98	6.1	4.9	5.7	5.5	3.5	5.9	72	17	4.3	4.3	5.0
26	12	6.0	4.9	6.8	5.3	3.5	6.0	178	16	4.0	3.2	5.0
27	260	5.7	5.0	7.6	5.1	3.3	5.7	17	16	4.0	3.5	5.0
28	311	5.5	5.1	7.7	4.9	3.2	6.0	11	16	4.1	4.9	5.0
29	296	5.7	5.1	7.9	---	3.3	6.2	6.3	16	4.2	3.8	5.0
30	54	5.7	5.1	8.2	---	3.2	6.2	4.5	16	4.1	5.0	5.0
31	17	---	5.1	8.4	---	3.1	---	3.4	---	3.9	4.1	---
TOTAL	2,171.4	213.6	177.9	174.1	191.9	119.2	127.4	522.9	399.5	911.0	143.7	142.6
MEAN	70.0	7.12	5.74	5.62	6.85	3.85	4.25	16.9	13.3	29.4	4.64	4.75
MAX	327	12	11	8.4	8.8	4.7	6.2	178	25	442	34	5.3
MIN	5.7	5.5	4.9	4.7	4.9	3.1	2.9	3.4	2.6	3.9	3.0	4.0
AC-FT	4,310	424	353	345	381	236	253	1,040	792	1,810	285	283

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	147	66.1	39.3	36.4	41.5	79.9	193	192	215	229	185	216
MAX	5,717	1,474	838	712	617	288	601	2,717	3,481	1,425	686	6,515
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1955)	(1942)	(1941)	(1941)	(1941)	(1941)	(1941)
MIN	1.78	1.38	1.77	0.76	0.46	0.84	1.05	5.86	8.31	8.11	0.74	4.75
(WY)	(1948)	(1960)	(1962)	(1965)	(1965)	(1965)	(1965)	(1978)	(2002)	(1984)	(1965)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	5,315.2		5,295.2			
ANNUAL MEAN	14.6		14.5		137	
HIGHEST ANNUAL MEAN					1,284	1941
LOWEST ANNUAL MEAN					13.1	1953
HIGHEST DAILY MEAN	327	Oct 7	442	Jul 8	23,700	Sep 28, 1941
LOWEST DAILY MEAN	4.9	Dec 25	2.6	Jun 1	0.00	Sep 9, 1946
ANNUAL SEVEN-DAY MINIMUM	5.0	Dec 20	3.0	Apr 6	0.00	Jul 7, 1965
MAXIMUM PEAK FLOW			632	Jul 8	23,700	Sep 29, 1941
MAXIMUM PEAK STAGE			6.74	Jul 8	20.74	Sep 29, 1941
INSTANTANEOUS LOW FLOW			1.9	Jun 1	0.00	Sep 9, 1946
ANNUAL RUNOFF (AC-FT)	10,540		10,500		99,220	
10 PERCENT EXCEEDS	16		16		352	
50 PERCENT EXCEEDS	7.4		5.6		30	
90 PERCENT EXCEEDS	5.7		3.4		5.0	

08412500 PECOS RIVER NEAR ORLA, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: July 1937 to April 2003 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1937 to January 2003 (discontinued).
WATER TEMPERATURE: March 1953 to January 2003 (discontinued).

REMARKS.--October 1937 to September 1969, this station was published as 08410100 Pecos River below Red Bluff Dam, near Orla, TX. Water-quality station operation transferred from the Texas District to the New Mexico District beginning with the 1993 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 29,400 microsiemens, May 16, 1978; minimum daily, 1,590 microsiemens, June 22, 1999.
WATER TEMPERATURE: Maximum daily, 32.5 °C, July 20, 1998; minimum daily, 0.0 °C, many days during winter months.

EXTREMES FOR CURRENT YEAR (Oct. 2002 to Jan. 2003).--
SPECIFIC CONDUCTANCE: Maximum daily, 19,900 microsiemens, Oct. 27; minimum daily, 2,480 microsiemens, Oct. 29.
WATER TEMPERATURE: Maximum daily, 23.0 °C, Oct. 9; minimum daily, 6.0 °C, Dec. 22, 23, 26, 28, 29, and 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV													
06...	1245	9.0	700	9.6	111	8.2	12,800	20.0	16.0	2,600	688	219	30.6
DEC													
10...	1400	5.7	694	11.2	131	8.0	14,600	12.0	16.0	2,900	705	266	36.0
FEB													
18...	1330	6.0	695	9.5	129	8.3	12,000	26.0	24.0	2,800	683	255	34.4
APR													
29...	0900	6.0	692	7.9	100	7.3	12,200	25.0	20.0	2,800	680	265	42.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV													
06...	18	2,090	96	112	2	3,300	0.97	8.9	2,240	8,630	9,140	1,340	<100
DEC													
10...	19	2,320	109	128	--	3,870	0.95	6.4	2,410	9,680	10,100	1,300	<100
FEB													
18...	15	1,760	75	92	--	2,990	0.86	1.2	2,240	8,000	8,630	650	<100
APR													
29...	15	1,850	47	58	--	3,060	0.94	4.8	2,400	8,330	8,920	690	<50

Remark codes used in this table:
< -- Less than

08412500 PECOS RIVER NEAR ORLA, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	13.0	12.0	---	---	---	---	---	---	---	---	---
2	22.0	13.0	12.0	---	---	---	---	---	---	---	---	---
3	22.0	13.0	---	---	---	---	---	---	---	---	---	---
4	21.0	13.0	11.0	---	---	---	---	---	---	---	---	---
5	22.0	13.0	10.0	---	---	---	---	---	---	---	---	---
6	22.0	---	---	---	---	---	---	---	---	---	---	---
7	19.0	---	---	---	---	---	---	---	---	---	---	---
8	21.0	---	---	---	---	---	---	---	---	---	---	---
9	23.0	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	8.0	---	---	---	---	---	---	---	---
11	---	13.0	10.0	8.0	---	---	---	---	---	---	---	---
12	20.0	14.0	10.0	11.0	---	---	---	---	---	---	---	---
13	---	14.0	9.0	11.0	---	---	---	---	---	---	---	---
14	---	13.0	10.0	11.0	---	---	---	---	---	---	---	---
15	19.0	14.0	8.5	10.0	---	---	---	---	---	---	---	---
16	---	12.0	8.0	11.0	---	---	---	---	---	---	---	---
17	---	12.0	8.0	11.0	---	---	---	---	---	---	---	---
18	---	12.0	7.0	---	---	---	---	---	---	---	---	---
19	17.0	12.0	7.0	12.0	---	---	---	---	---	---	---	---
20	---	12.0	8.0	15.0	---	---	---	---	---	---	---	---
21	---	12.0	8.0	---	---	---	---	---	---	---	---	---
22	---	11.0	6.0	---	---	---	---	---	---	---	---	---
23	---	11.0	6.0	7.0	---	---	---	---	---	---	---	---
24	13.0	11.0	---	7.0	---	---	---	---	---	---	---	---
25	---	11.0	---	---	---	---	---	---	---	---	---	---
26	13.0	---	6.0	---	---	---	---	---	---	---	---	---
27	13.0	11.0	6.5	---	---	---	---	---	---	---	---	---
28	11.0	12.0	6.0	---	---	---	---	---	---	---	---	---
29	15.0	---	6.0	7.0	---	---	---	---	---	---	---	---
30	---	---	---	16.0	---	---	---	---	---	---	---	---
31	---	---	6.0	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,100	12,200	13,700	---	---	---	---	---	---	---	---	---
2	13,100	12,200	13,700	---	---	---	---	---	---	---	---	---
3	13,300	12,300	---	---	---	---	---	---	---	---	---	---
4	13,100	12,200	13,000	---	---	---	---	---	---	---	---	---
5	13,200	12,300	17,400	---	---	---	---	---	---	---	---	---
6	13,100	---	---	---	---	---	---	---	---	---	---	---
7	3,020	---	---	---	---	---	---	---	---	---	---	---
8	4,200	---	---	---	---	---	---	---	---	---	---	---
9	5,870	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	12,500	---	---	---	---	---	---	---	---
11	---	15,000	14,600	12,300	---	---	---	---	---	---	---	---
12	8,420	15,100	14,300	12,400	---	---	---	---	---	---	---	---
13	---	14,200	14,200	12,300	---	---	---	---	---	---	---	---
14	---	14,100	14,200	12,200	---	---	---	---	---	---	---	---
15	10,900	14,100	14,100	12,200	---	---	---	---	---	---	---	---
16	---	14,200	14,100	12,200	---	---	---	---	---	---	---	---
17	---	14,000	13,600	12,200	---	---	---	---	---	---	---	---
18	---	13,900	13,500	---	---	---	---	---	---	---	---	---
19	10,400	14,600	13,500	12,200	---	---	---	---	---	---	---	---
20	---	14,600	13,500	12,200	---	---	---	---	---	---	---	---
21	---	14,000	13,400	---	---	---	---	---	---	---	---	---
22	---	14,000	13,700	---	---	---	---	---	---	---	---	---
23	---	14,200	13,500	12,500	---	---	---	---	---	---	---	---
24	4,610	14,100	---	12,300	---	---	---	---	---	---	---	---
25	4,920	13,700	---	---	---	---	---	---	---	---	---	---
26	17,900	---	13,600	---	---	---	---	---	---	---	---	---
27	19,900	13,700	13,400	---	---	---	---	---	---	---	---	---
28	8,280	13,800	13,000	---	---	---	---	---	---	---	---	---
29	2,480	---	12,800	11,700	---	---	---	---	---	---	---	---
30	---	---	---	11,600	---	---	---	---	---	---	---	---
31	---	---	13,000	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

08418010 PECOS RIVER NEAR BARSTOW, TX

LOCATION.--Lat 31°32'49", long 103°29'44", Ward County, Hydrologic Unit 13070001, on left bank 1,500 ft downstream from Ward County Diversion Dam, 8.8 mi northeast of Pecos, TX, and 4.1 mi upstream from bridge on FM Road 3398.

PERIOD OF RECORD.--September 1999 to August 2003 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 2,590 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Red Bluff Reservoir, 50 mi upstream. Diversions by Ward Irrigation District, about 1,500 ft upstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 519 ft^3/s, Apr. 30, 2001, gage height, 4.09 ft; minimum discharge, 0 ft^3/s, Dec. 9, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 417 ft^3/s, Oct. 30, gage height, 4.13 ft; minimum discharge, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	50	3.7	1.6	0.92	1.3	0.06	0.00	0.00	0.00	0.00	---
2	2.1	30	3.4	1.5	1.1	1.2	0.05	0.00	0.00	0.00	0.00	---
3	2.2	21	3.7	1.5	2.0	1.0	0.05	0.00	0.00	0.00	0.00	---
4	2.2	20	3.4	1.5	2.0	0.89	0.02	0.00	0.00	0.00	0.00	---
5	2.4	20	3.1	1.6	2.0	0.78	0.01	0.00	0.00	0.00	0.00	---
6	2.2	58	3.1	1.4	2.2	0.73	0.00	0.00	0.00	0.00	0.00	---
7	2.5	20	3.8	1.4	2.1	0.65	0.00	0.00	0.00	0.00	0.00	---
8	3.9	11	7.0	1.3	2.2	0.65	0.00	0.00	0.00	0.00	0.00	---
9	38	8.4	6.4	1.3	2.5	0.59	0.00	0.00	0.00	0.08	0.00	---
10	15	7.4	5.4	1.2	2.4	0.50	0.00	0.00	0.00	18	0.00	---
11	6.7	6.8	4.9	1.2	2.7	0.51	0.00	0.00	0.00	3.6	0.00	---
12	5.9	6.3	4.4	1.2	2.5	0.44	0.00	0.00	0.00	5.4	0.00	---
13	9.3	5.7	3.9	1.2	2.5	0.34	0.00	0.00	0.00	1.1	0.00	---
14	9.9	5.0	3.7	1.2	2.3	0.30	0.00	0.00	0.00	0.06	0.00	---
15	11	4.3	3.4	1.2	2.0	0.34	0.00	0.00	0.00	0.00	0.00	---
16	10	4.1	3.3	1.2	2.0	0.32	0.00	0.00	0.00	0.00	0.00	---
17	6.2	3.8	3.1	1.1	1.8	0.26	0.00	0.00	0.00	0.00	0.00	---
18	4.4	3.6	2.9	1.1	1.6	0.15	0.00	0.00	0.00	0.00	0.00	---
19	4.5	3.4	2.4	1.1	1.3	0.09	0.00	0.00	0.00	0.00	0.00	---
20	3.3	3.4	2.0	1.2	1.2	0.04	0.00	0.00	0.00	0.00	---	---
21	2.7	3.4	2.0	1.1	2.6	0.15	0.00	0.00	0.00	0.00	---	---
22	2.6	3.2	2.0	1.0	1.6	0.29	0.00	0.00	0.00	0.00	---	---
23	3.4	3.1	2.1	0.94	1.2	0.25	0.00	0.00	0.00	0.00	---	---
24	3.5	3.0	2.1	0.91	1.2	0.28	0.00	0.00	0.00	0.00	---	---
25	3.1	14	1.8	0.98	1.3	0.18	0.00	0.00	0.00	0.00	---	---
26	81	5.2	1.8	0.95	1.5	0.13	0.00	0.00	0.00	0.00	---	---
27	62	4.6	1.8	0.94	1.5	0.12	0.00	0.00	0.00	0.00	---	---
28	57	4.1	1.8	0.95	1.4	0.14	0.00	0.00	0.00	0.00	---	---
29	178	4.1	2.0	0.89	---	0.07	0.00	0.00	0.00	0.00	---	---
30	292	3.9	2.0	0.88	---	0.06	0.00	0.00	0.00	0.00	---	---
31	182	---	1.7	0.89	---	0.04	---	0.00	---	0.00	---	---
TOTAL	1,011.0	340.8	98.1	36.43	51.62	12.79	0.19	0.00	0.00	28.24	---	---
MEAN	32.6	11.4	3.16	1.18	1.84	0.41	0.006	0.000	0.000	0.91	---	---
MAX	292	58	7.0	1.6	2.7	1.3	0.06	0.00	0.00	18	---	---
MIN	2.0	3.0	1.7	0.88	0.92	0.04	0.00	0.00	0.00	0.00	---	---
AC-FT	2,010	676	195	72	102	25	0.4	0.00	0.00	56	---	---

CAL YR 2002 TOTAL 2,896.98 MEAN 7.94 MAX 317 MIN 0.00 AC-FT 5,750

08477110 MIMBRES RIVER AT MIMBRES, NM

LOCATION.--Lat 32°51'17", long 107°58'23", in NW $^1/_4$ SW $^1/_4$ 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.--216 mi^2 (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1978 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.9	5.5	4.5	4.1	3.7	3.3	1.2	0.61	6.9	2.3	4.1
2	1.6	4.8	5.5	4.4	4.2	3.8	2.9	1.3	0.63	5.6	2.2	3.2
3	1.5	4.6	5.9	4.5	4.1	3.8	2.5	1.4	0.67	4.5	2.6	3.0
4	1.7	4.9	5.3	4.5	4.1	3.9	2.3	1.3	0.77	4.3	2.2	3.0
5	1.8	5.0	4.7	4.5	4.1	3.9	2.2	1.3	0.59	4.0	2.0	3.0
6	2.0	5.0	5.4	4.5	2.9	3.9	2.3	1.3	0.73	3.8	1.8	3.0
7	2.4	4.8	5.6	4.5	1.1	3.7	2.2	1.3	0.79	3.1	1.8	3.2
8	4.2	5.0	5.5	4.5	1.3	3.6	2.1	1.2	0.96	1.8	1.8	2.8
9	5.8	5.2	5.4	4.5	1.1	3.3	2.2	1.2	1.0	1.9	1.7	3.0
10	5.1	5.2	5.3	4.5	1.2	3.2	2.2	1.2	1.00	2.1	1.6	3.0
11	4.7	5.0	4.8	4.5	1.5	3.2	2.2	1.2	1.0	2.1	1.2	5.1
12	4.6	5.2	4.7	4.4	1.8	3.3	2.1	1.3	0.98	2.0	0.63	6.0
13	4.6	5.5	5.5	4.3	2.2	3.3	2.0	1.2	1.1	1.9	0.67	5.8
14	4.5	5.4	5.4	4.2	2.4	3.2	2.1	1.2	1.1	2.0	0.61	6.0
15	4.7	5.4	5.0	4.2	2.8	3.1	2.0	1.1	1.2	1.7	0.69	5.9
16	4.3	4.9	4.8	4.2	3.0	3.1	1.9	1.1	1.2	1.9	0.60	5.8
17	4.4	4.4	4.7	4.2	3.0	3.6	1.9	1.1	1.3	1.7	0.60	5.8
18	4.3	4.9	5.4	4.4	3.1	3.8	2.1	1.1	1.5	1.6	0.65	5.6
19	5.0	4.6	5.1	4.3	3.3	3.5	2.0	1.1	1.5	1.7	0.87	5.1
20	5.0	5.0	5.0	4.2	3.8	3.4	1.7	1.2	1.4	1.8	1.1	3.3
21	5.0	5.5	5.0	4.4	3.9	3.6	1.6	1.2	1.5	2.0	1.2	3.1
22	4.7	5.5	4.9	4.4	3.5	3.5	1.6	0.94	1.7	1.9	1.2	3.0
23	4.5	4.9	5.0	4.4	3.7	3.3	1.7	0.82	1.5	2.1	1.2	3.0
24	4.7	4.9	4.8	4.4	3.6	3.3	1.6	0.85	1.5	1.9	1.3	3.0
25	4.7	5.3	4.8	4.4	3.2	3.3	1.4	0.94	1.5	1.5	1.8	3.8
26	4.5	5.4	4.7	4.3	3.4	3.2	1.3	1.0	1.7	1.4	5.1	3.2
27	4.2	5.5	4.6	4.4	3.5	3.3	1.3	0.92	1.5	1.7	3.5	3.2
28	4.6	5.5	4.5	4.3	3.6	3.2	1.3	0.87	1.9	1.6	3.2	3.2
29	4.7	5.4	4.5	4.2	---	3.1	1.3	0.82	2.1	1.4	3.1	2.8
30	4.6	5.4	4.5	4.2	---	2.9	1.2	0.58	5.5	3.1	2.7	2.8
31	4.9	---	4.5	4.1	---	3.4	---	0.53	---	3.4	4.2	---
TOTAL	124.7	153.0	156.3	135.3	83.5	106.4	58.5	33.77	40.43	78.4	56.12	116.8
MEAN	4.02	5.10	5.04	4.36	2.98	3.43	1.95	1.09	1.35	2.53	1.81	3.89
MAX	5.8	5.5	5.9	4.5	4.2	3.9	3.3	1.4	5.5	6.9	5.1	6.0
MIN	1.4	4.4	4.5	4.1	1.1	2.9	1.2	0.53	0.59	1.4	0.60	2.8
AC-FT	247	303	310	268	166	211	116	67	80	156	111	232

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

MEAN	12.4	12.5	28.9	24.8	24.1	28.6	21.3	14.0	7.38	10.9	30.5	12.6
MAX	67.9	43.9	186	163	99.1	93.2	89.5	64.9	23.0	52.1	234	48.6
(WY)	(1986)	(1979)	(1985)	(1993)	(1995)	(1992)	(1992)	(1992)	(1992)	(1986)	(1988)	(1988)
MIN	2.56	2.47	3.65	4.24	2.98	2.16	1.95	1.09	0.28	1.64	0.94	0.87
(WY)	(1995)	(1981)	(1981)	(1981)	(2003)	(1990)	(2003)	(2003)	(2002)	(1994)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1978 - 2003	
ANNUAL TOTAL	1,754.87		1,143.22			
ANNUAL MEAN	4.81		3.13		19.0	
HIGHEST ANNUAL MEAN					45.1	1985
LOWEST ANNUAL MEAN					3.13	2003
HIGHEST DAILY MEAN	60	Jul 19	6.9	Jul 1	2,500	Dec 28, 1984
LOWEST DAILY MEAN	0.00	Jun 16	0.53	May 31	0.00	Jun 16, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 16	0.63	May 30	0.00	Jun 16, 2002
MAXIMUM PEAK FLOW			47	Jun 30	a6,360	Dec 28, 1984
MAXIMUM PEAK STAGE			2.79	Jun 30	b8.05	Dec 28, 1984
INSTANTANEOUS LOW FLOW			0.38	May 30	0.00	Jun 16, 2002
ANNUAL RUNOFF (AC-FT)	3,480		2,270		13,790	
10 PERCENT EXCEEDS	8.1		5.2		43	
50 PERCENT EXCEEDS	4.5		3.2		7.7	
90 PERCENT EXCEEDS	0.64		1.1		2.5	

a From rating curve extended above 450 ft^3/s, on basis of slope-area measurement at gage heights 6.70 ft and 8.05 ft.
b From floodmarks.

08477110 MIMBRES RIVER AT MIMBRES, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-86, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC													
05...	0915	4.8	620	9.6	102	8.6	246	3.0	9.0	110	30.9	6.78	2.76
APR													
04...	0850	2.3	613	8.8	95	8.1	289	10.0	9.0	120	36.8	7.51	2.54
30...	1330	1.2	612	7.2	99	8.1	297	20.5	20.0	130	39.4	7.55	3.16
JUL													
25...	0850	1.7	618	6.0	79	7.8	317	25.0	18.0	130	41.4	7.48	3.27

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
05...	0.5	11.7	108	129	1	3.80	0.29	51.9	5.0	178	--	--	--
APR													
04...	0.5	11.8	142	172	--	2.04	0.24	46.9	5.5	198	<0.20	<0.20	0.02
30...	0.5	12.3	144	175	--	2.90	0.25	48.2	5.9	206	--	--	--
JUL													
25...	0.5	12.5	155	189	--	3.89	0.3	51.8	4.5	218	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
DEC													
05...	--	--	--	--	--	--	--	--	--	--	--	<10	--
APR													
04...	0.03	0.04	<0.010	0.05	0.05	0.06	<2	<0.30	<2	38	<0.06	E10	<0.04
30...	--	--	--	--	--	--	--	--	--	--	--	E10	--
JUL													
25...	--	--	--	--	--	--	--	--	--	--	--	20	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
DEC													
05...	--	--	--	<10	--	--	<0.02	--	--	--	<3	--	--
APR													
04...	<0.8	0.12	0.6	<10	<0.08	2.3	<0.02	0.4	0.27	<3	<3	<0.20	M
30...	--	--	--	<10	--	--	<0.02	--	--	--	<3	--	--
JUL													
25...	--	--	--	11	--	--	<0.02	--	--	--	<5	--	--

08477110 MIMBRES RIVER AT MIMBRES, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
DEC			
05...	--	67	2
APR			
04...	0.58	61	13
30...	--	95	7
JUL			
25...	--	86	8

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

08480594 MALPAIS SPRING NEAR OSCURA, NM

LOCATION.--Lat 33°17'15", long 106°18'33", in SE ¼ NE ¼ NE ¼ sec.8, T.11 S., R.6 E., Otero County, Hydrologic Unit 13050003, on right bank 50 ft downstream from Range Road 9 and 70 mi north of White Sands Missile Range Headquarters.

PERIOD OF RECORD.--July to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 4,150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Station located above all known diversions. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 0.97 ft^3/s, Sept. 29; minimum daily discharge, 0.79 ft^3/s, Aug. 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	0.82	0.82
2	---	---	---	---	---	---	---	---	---	---	0.82	0.82
3	---	---	---	---	---	---	---	---	---	---	0.80	0.82
4	---	---	---	---	---	---	---	---	---	---	0.80	0.82
5	---	---	---	---	---	---	---	---	---	---	0.80	0.84
6	---	---	---	---	---	---	---	---	---	---	0.79	0.84
7	---	---	---	---	---	---	---	---	---	---	0.79	0.84
8	---	---	---	---	---	---	---	---	---	---	0.80	0.84
9	---	---	---	---	---	---	---	---	---	---	0.80	0.85
10	---	---	---	---	---	---	---	---	---	---	0.80	0.85
11	---	---	---	---	---	---	---	---	---	---	0.80	0.87
12	---	---	---	---	---	---	---	---	---	---	0.80	0.89
13	---	---	---	---	---	---	---	---	---	---	0.80	0.87
14	---	---	---	---	---	---	---	---	---	---	0.80	0.87
15	---	---	---	---	---	---	---	---	---	---	0.82	0.87
16	---	---	---	---	---	---	---	---	---	---	0.82	0.90
17	---	---	---	---	---	---	---	---	---	---	0.82	0.89
18	---	---	---	---	---	---	---	---	---	---	0.82	0.89
19	---	---	---	---	---	---	---	---	---	---	0.80	0.90
20	---	---	---	---	---	---	---	---	---	---	0.80	0.90
21	---	---	---	---	---	---	---	---	---	---	0.80	0.92
22	---	---	---	---	---	---	---	---	---	---	0.82	0.92
23	---	---	---	---	---	---	---	---	---	---	0.82	0.94
24	---	---	---	---	---	---	---	---	---	---	0.80	0.94
25	---	---	---	---	---	---	---	---	---	0.84	0.82	0.94
26	---	---	---	---	---	---	---	---	---	0.80	0.82	0.96
27	---	---	---	---	---	---	---	---	---	0.80	0.82	0.94
28	---	---	---	---	---	---	---	---	---	0.80	0.82	0.96
29	---	---	---	---	---	---	---	---	---	0.79	0.82	0.97
30	---	---	---	---	---	---	---	---	---	0.80	0.84	0.96
31	---	---	---	---	---	---	---	---	---	0.82	0.84	---
TOTAL	---	---	---	---	---	---	---	---	---	---	25.12	26.64
MEAN	---	---	---	---	---	---	---	---	---	---	0.81	0.89
MAX	---	---	---	---	---	---	---	---	---	---	0.84	0.97
MIN	---	---	---	---	---	---	---	---	---	---	0.79	0.82
AC-FT	---	---	---	---	---	---	---	---	---	---	50	53

08480595 SALT CREEK NEAR TULAROSA, NM

LOCATION.--Lat 33°16'32", long 106°23'50", in SE ¼ NE ¼ sec.16, T.12 S., R.6 E., Sierra County, Hydrologic Unit 13050003, on right bank, 360 ft upstream from Range Road 316, 0.5 mi east of Range Road 7, and about 65 mi north of small missile range on U.S. Highway 70.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1995 to current year. Published as "at Range Road 316 on White Sands Missile Range," August 1995 to September 1996.

GAGE.--Water-stage recorder. Elevation of gage is 4,020 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	0.23	0.60	0.66	0.95	0.92	0.48	0.27	0.22	0.14	0.07	0.16
2	0.30	0.24	0.64	0.63	0.89	0.93	0.42	0.27	0.20	0.14	0.00	0.14
3	0.25	0.25	24	0.68	0.94	0.93	0.43	0.25	0.20	0.12	0.00	0.12
4	0.26	0.30	2.1	0.70	0.90	0.87	0.44	0.24	0.20	0.05	0.09	0.11
5	0.27	0.26	0.73	0.68	0.91	0.90	0.38	0.24	0.27	0.00	0.00	0.12
6	0.32	0.23	0.58	0.70	0.94	0.84	0.44	0.23	0.46	0.00	0.00	0.14
7	0.35	0.24	0.53	0.69	0.93	0.77	0.44	0.21	0.78	0.00	0.00	0.20
8	0.43	0.23	0.59	0.77	1.2	0.70	0.41	0.21	0.58	0.00	0.00	0.28
9	0.41	0.22	0.55	0.81	1.2	0.67	0.43	0.19	0.31	0.00	0.00	0.16
10	0.39	0.25	0.57	0.78	1.1	0.66	0.44	0.24	0.36	0.00	0.00	0.13
11	0.38	0.27	0.51	0.81	0.99	0.66	0.46	0.23	0.23	0.00	0.00	0.12
12	0.39	0.25	0.50	0.83	0.99	0.64	0.42	0.23	0.20	0.00	0.00	0.09
13	0.40	0.25	0.48	0.82	0.99	0.63	0.39	0.23	0.20	0.00	0.00	0.06
14	0.50	0.27	0.48	0.82	1.5	0.64	0.37	0.23	0.21	0.00	0.00	0.00
15	0.49	0.27	0.48	0.84	1.6	0.64	0.35	0.19	0.20	0.00	0.02	0.00
16	0.57	0.25	0.50	0.82	1.0	0.60	0.43	0.21	0.32	0.00	0.11	0.00
17	14	0.28	0.44	0.86	0.97	0.61	0.34	0.21	0.42	0.00	0.00	0.00
18	1.3	0.30	0.49	0.88	0.98	0.64	0.34	0.21	0.37	0.00	0.03	0.00
19	0.66	0.30	0.48	0.89	0.92	0.62	0.36	0.19	0.34	0.00	0.28	0.00
20	0.51	0.32	0.48	0.91	2.2	0.58	0.35	0.19	0.25	0.00	0.11	0.00
21	0.59	0.33	0.51	0.94	3.2	0.60	0.37	0.20	0.20	0.00	0.00	0.00
22	0.67	0.34	0.53	0.93	1.3	0.59	0.36	0.23	0.17	0.00	0.00	0.00
23	0.83	0.36	0.93	0.90	1.0	0.55	0.33	0.27	0.16	0.00	0.00	0.00
24	19	0.37	0.79	0.91	0.97	0.51	0.36	0.29	0.12	0.00	0.00	0.00
25	1.6	0.38	0.72	0.92	0.98	0.50	0.34	0.26	0.07	0.00	0.00	0.00
26	0.66	0.41	0.63	0.90	1.0	0.47	0.33	0.23	0.10	0.00	25	0.00
27	22	0.41	0.62	0.92	0.98	0.53	0.32	0.24	0.04	0.00	0.30	0.00
28	0.66	0.42	0.61	0.96	0.97	0.47	0.30	0.23	0.09	0.00	1.5	0.00
29	0.28	0.45	0.64	0.97	---	0.46	0.26	0.23	0.15	0.00	26	0.00
30	0.23	0.45	0.67	0.96	---	0.49	0.27	0.22	0.14	0.00	0.33	0.00
31	0.22	---	0.61	0.95	---	0.49	---	0.22	---	0.00	0.17	---
TOTAL	69.29	9.13	42.99	25.84	32.50	20.11	11.36	7.09	7.56	0.45	54.01	1.83
MEAN	2.24	0.30	1.39	0.83	1.16	0.65	0.38	0.23	0.25	0.015	1.74	0.061
MAX	22	0.45	24	0.97	3.2	0.93	0.48	0.29	0.78	0.14	26	0.28
MIN	0.22	0.22	0.44	0.63	0.89	0.46	0.26	0.19	0.04	0.00	0.00	0.00
AC-FT	137	18	85	51	64	40	23	14	15	0.9	107	3.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	0.96	0.74	0.87	0.82	0.75	0.70	0.57	0.59	0.91	1.94	1.56	1.70
MAX	2.24	1.80	1.39	1.25	1.16	1.14	0.79	1.47	2.46	6.80	3.22	7.74
(WY)	(2003)	(1999)	(2003)	(2000)	(2003)	(2001)	(2001)	(2001)	(1996)	(1999)	(1996)	(2001)
MIN	0.13	0.30	0.50	0.55	0.43	0.51	0.38	0.23	0.23	0.015	0.29	0.061
(WY)	(1996)	(2003)	(1996)	(1998)	(1998)	(1996)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	252.53		282.16			
ANNUAL MEAN	0.69		0.77		1.01	
HIGHEST ANNUAL MEAN					1.53	1999
LOWEST ANNUAL MEAN					0.52	2002
HIGHEST DAILY MEAN	24	Dec 3	26	Aug 29	100	Sep 16, 2001
LOWEST DAILY MEAN	0.00	Aug 14	0.00	Jul 5	0.00	Aug 14, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 13	0.00	Jul 5	0.00	Jul 5, 2003
MAXIMUM PEAK FLOW			110	Aug 29	300	Sep 16, 2001
MAXIMUM PEAK STAGE			4.55	Aug 29	7.05	Sep 16, 2001
INSTANTANEOUS LOW FLOW			0.00	Jul 4	0.00	Aug 13, 2002
ANNUAL RUNOFF (AC-FT)	501		560		728	
10 PERCENT EXCEEDS	0.70		0.94		1.0	
50 PERCENT EXCEEDS	0.40		0.34		0.51	
90 PERCENT EXCEEDS	0.14		0.00		0.21	

08480595 SALT CREEK NEAR TULAROSA, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
17...	1350	8.1	--	--	--	--	--	20.0	14.0	--	--	--	--
NOV													
13...	1115	0.27	--	--	--	--	--	12.5	4.0	--	--	--	--
29...	0955	0.45	--	--	--	--	--	14.0	14.0	--	--	--	--
DEC													
30...	1045	0.76	--	--	--	--	--	11.0	--	--	--	--	--
FEB													
14...	1055	1.4	--	--	--	--	--	15.0	7.0	--	--	--	--
MAR													
10...	1340	0.71	--	--	--	--	--	24.0	10.0	--	--	--	--
APR													
07...	1045	0.47	--	--	--	--	--	18.0	6.0	--	--	--	--
MAY													
06...	1055	0.26	655	7.0	86	7.7	33,900	23.0	12.0	4,700	1,020	525	177
JUN													
17...	1045	0.43	--	--	--	--	--	28.0	19.0	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
06...	41	6,510	125	152	2.48	10,100	5.6	<2.60	4,860	23,300	24,800	<0.06	<0.008
JUN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
06...	<0.02	<300	E4	51.6	<10.0	1,180	<160	<200	<160	<120	<200	<1.12	1,670
JUN													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

08480595 SALT CREEK NEAR TULAROSA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT											
17...	--	--	--	--	--	--	--	--	--	44	112
NOV											
13...	--	--	--	--	--	--	--	--	--	67	8
29...	--	--	--	--	--	--	--	--	--	49	9
DEC											
30...	--	--	--	--	--	--	--	--	--	67	10
FEB											
14...	--	--	--	--	--	--	--	--	--	85	25
MAR											
10...	--	--	--	--	--	--	--	--	--	86	12
APR											
07...	--	--	--	--	--	--	--	--	--	75	17
MAY											
06...	79.5	<0.02	<600	<580	E6	<180	23,200	<160	<480	78	32
JUN											
17...	--	--	--	--	--	--	--	--	--	98	34

Remark codes used in this table:
< -- Less than
E -- Estimated value

08481500 TULAROSA CREEK NEAR BENT, NM

LOCATION.--Lat 33°08'41", long 105°53'50", in SE $^1/_4$ NW $^1/_4$ 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 mi^2, approximately.

PERIOD OF RECORD.--December 1947 to November 1996, April 2002 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.--Records fair. Diversions for irrigation of about 1,000 acres, 1959 determination, upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 ft^3/s was computed for station approximately 6 mi downstream near Tularosa. Another flood may have occurred July 2, 1914.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	15	15	18	18	15	16	14	12	13	13	13
2	16	15	15	19	18	14	16	14	12	14	13	13
3	16	15	17	19	15	14	15	14	13	14	13	13
4	16	15	16	19	14	14	15	11	15	14	13	13
5	16	15	16	19	15	14	15	12	15	14	13	14
6	16	15	16	19	16	14	13	12	15	14	13	14
7	16	15	16	19	15	13	13	13	15	14	13	13
8	17	15	16	20	16	13	13	13	14	14	13	13
9	16	15	16	20	16	12	14	14	14	14	13	13
10	17	15	16	19	16	14	15	14	14	14	10	14
11	17	15	16	19	16	13	15	14	14	14	11	13
12	17	15	16	18	16	15	15	14	14	13	11	14
13	17	15	16	18	19	15	15	14	14	12	13	14
14	17	15	16	18	19	15	15	14	14	11	14	13
15	17	15	16	18	19	14	14	15	12	11	16	13
16	17	15	16	18	18	14	14	14	13	12	14	13
17	16	15	16	18	18	15	14	14	14	12	14	13
18	17	15	17	18	17	15	14	11	15	12	14	13
19	16	15	17	18	17	15	14	11	15	13	14	13
20	16	15	17	18	17	15	13	12	15	12	14	13
21	16	15	17	18	17	15	12	14	15	13	14	12
22	16	15	17	19	17	15	12	14	15	13	14	13
23	16	15	18	18	16	14	14	14	15	13	13	13
24	16	15	18	18	15	14	14	14	15	13	12	14
25	13	15	18	18	15	14	14	15	14	13	13	14
26	14	15	18	18	16	16	14	15	14	12	15	14
27	16	15	18	18	15	16	14	15	14	10	14	14
28	15	15	18	17	15	16	14	14	14	10	14	14
29	15	15	18	17	---	16	14	14	11	11	14	14
30	15	15	18	17	---	16	14	14	13	13	14	14
31	15	---	18	17	---	16	---	14	---	13	13	---
TOTAL	496	450	518	567	461	451	424	421	419	395	412	401
MEAN	16.0	15.0	16.7	18.3	16.5	14.5	14.1	13.6	14.0	12.7	13.3	13.4
MAX	17	15	18	20	19	16	16	15	15	14	16	14
MIN	13	15	15	17	14	12	12	11	11	10	10	12
AC-FT	984	893	1,030	1,120	914	895	841	835	831	783	817	795

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	12.7	13.6	14.2	14.4	14.4	13.9	13.3	12.1	10.8	12.6	14.7	13.4
MAX	26.0	26.9	26.5	27.3	26.1	24.5	24.7	24.3	21.1	29.5	40.9	36.0
(WY)	(1991)	(1992)	(1992)	(1995)	(1992)	(1992)	(1992)	(1992)	(1988)	(1995)	(1996)	(1990)
MIN	6.88	7.68	6.91	7.36	8.05	7.66	7.66	5.82	5.09	4.18	4.94	5.68
(WY)	(1962)	(1971)	(1971)	(1967)	(1967)	(1958)	(1960)	(1958)	(1963)	(1963)	(1970)	(1954)

SUMMARY STATISTICS	FOR 2	003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL		15			
ANNUAL MEAN		14.8		13.3	
HIGHEST ANNUAL MEAN				23.6	1991
LOWEST ANNUAL MEAN				8.19	1958
HIGHEST DAILY MEAN		20	Jan 8	631	Aug 14, 1980
LOWEST DAILY MEAN		10	Jul 27	1.4	Aug 3, 1959
ANNUAL SEVEN-DAY MINIMUM		12	Jul 23	2.1	Aug 3, 1959
MAXIMUM PEAK FLOW		87	Aug 15	4,640	Jul 22, 2002
MAXIMUM PEAK STAGE		2.81	Aug 15	5.60	Aug 8, 1988
INSTANTANEOUS LOW FLOW		6.7	Jun 29	0.00	May 14, 1955
ANNUAL RUNOFF (AC-FT)		40		9,650	
10 PERCENT EXCEEDS		18		22	
50 PERCENT EXCEEDS		15		12	
90 PERCENT EXCEEDS		13		6.6	

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE $^1/_4$ SW $^1/_4$ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank 5 ft above the maximum water surface of Navajo Reservoir, 3 mi northwest of Carracas, and 7.2 mi upstream from Piedra River.

DRAINAGE AREA.--1,230 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Statistical summary computed for 1971 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09346400

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,090 ft above NGVD of 1929, from river-profile map.

REMARKS.--Records good except for those estimated, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande Basin through Azotea tunnel (station 08284160) began in Mar. 1971. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of the Colorado District report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; and June 29, 1927.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	126	e108	e62	e78	e80	251	717	1,830	163	99	181
2	130	124	e106	e61	e78	e79	266	713	1,630	145	98	144
3	234	121	e104	e61	e74	e78	261	689	1,500	144	97	126
4	280	115	e103	e64	e71	e80	225	686	1,370	135	78	138
5	237	121	e101	e68	e71	e81	217	628	1,230	128	65	152
6	204	107	97	e70	e69	e82	209	541	1,030	123	51	171
7	175	102	93	e70	e68	87	200	483	891	114	49	213
8	165	116	90	e71	e72	100	179	422	796	102	49	201
9	152	e143	98	e73	e70	116	177	415	763	94	47	244
10	136	e137	e90	e74	e70	147	219	388	726	80	50	2,080
11	123	e119	e88	e74	e72	199	332	377	686	73	59	745
12	118	e113	e84	e71	e80	288	403	382	627	66	82	436
13	118	e117	e88	e70	e105	394	410	494	584	63	82	332
14	109	e118	e88	e72	e137	478	513	557	525	61	94	281
15	101	e108	e88	e72	e110	515	643	689	472	62	70	244
16	96	e104	e84	e71	e102	478	596	871	461	54	60	220
17	93	e105	e79	e71	e102	605	527	1,040	436	54	62	197
18	90	e106	e74	e71	e99	449	495	1,380	452	53	55	179
19	87	e106	e66	e72	e99	354	445	1,240	466	50	53	169
20	81	e111	e68	e74	102	293	384	1,270	500	46	45	150
21	80	e116	e72	e75	99	302	358	1,300	450	61	40	145
22	81	e120	e71	e77	97	315	377	1,480	373	78	37	127
23	87	e123	e74	e77	86	281	400	1,640	337	64	51	116
24	120	e119	e74	e77	80	336	359	1,720	307	54	154	114
25	130	e114	e73	e76	e82	334	361	1,670	272	58	184	99
26	122	e110	e69	e75	e84	336	437	1,670	245	52	160	93
27	168	e104	e68	e74	e85	330	556	1,740	227	49	148	91
28	160	e103	e70	e74	e84	243	673	1,890	209	109	146	88
29	146	e106	e71	e74	---	277	723	1,970	193	148	200	86
30	146	e111	e69	e74	---	247	743	1,960	178	157	196	83
31	129	---	e66	e77	---	e248	---	1,970	---	138	202	---
TOTAL	4,239	3,445	2,574	2,222	2,426	8,232	11,939	32,992	19,766	2,778	2,863	7,645
MEAN	137	115	83.0	71.7	86.6	266	398	1,064	659	89.6	92.4	255
MAX	280	143	108	77	137	605	743	1,970	1,830	163	202	2,080
MIN	80	102	66	61	68	78	177	377	178	46	37	83
AC-FT	8,410	6,830	5,110	4,410	4,810	16,330	23,680	65,440	39,210	5,510	5,680	15,160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	298	239	172	155	190	574	1,030	1,687	1,700	609	330	285
MAX	932	983	406	296	481	1,369	2,524	3,195	4,039	2,427	1,004	880
(WY)	(1987)	(1987)	(1987)	(1987)	(1986)	(1995)	(1979)	(1973)	(1985)	(1995)	(1999)	(1982)
MIN	106	104	72.9	71.7	85.0	130	233	269	72.1	22.5	18.8	61.2
(WY)	(1979)	(1990)	(1990)	(2003)	(1990)	(2002)	(1977)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	41,282.80		101,121			
ANNUAL MEAN	113		277		a607	
HIGHEST ANNUAL MEAN					b1,191	1985
LOWEST ANNUAL MEAN					b112	2002
HIGHEST DAILY MEAN	365	May 20	2,080	Sep 10	b6,700	Mar 12, 1985
LOWEST DAILY MEAN	0.80	Sep 1	37	Aug 22	c0.80	Sep 1, 2002
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 31	49	Aug 17	1.3	Aug 31, 2002
MAXIMUM PEAK FLOW			3,510	Sep 10	d8,590	Mar 6, 1995
MAXIMUM PEAK STAGE			5.28	Sep 10	f8.10	Mar 6, 1995
ANNUAL RUNOFF (AC-FT)	81,880		200,600		439,500	
10 PERCENT EXCEEDS	240		678		1,660	
50 PERCENT EXCEEDS	101		118		270	
90 PERCENT EXCEEDS	17		67		105	

e Estimated.
a Average discharge for 9 years (water years 1962-70), 632 ft^3/s; 457,900 acre-ft/yr, prior to completion of Azotea tunnel.
b Also the highest (or lowest, as is appropriate) for the period of record.
c Also minimum daily discharge for period of record.
d Maximum discharge for period of record, 9,730 ft^3/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft^3/s, on basis of slope-area measurement of peak flow.
f Maximum gage height for statistical period, and period of record, 9.63 ft, Jan. 4, 1994, backwater from ice.

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE ¼ SW ¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 2.5 mi upstream from Navajo Reservoir, 3.0 mi downstream from Ignacio Creek, and 4.6 mi northeast of Arboles Post Office.

DRAINAGE AREA.--629 mi^2.

PERIOD OF RECORD.--August 1962 to current year. Gage 09350000 (Piedra River At Arboles) operated 1895-99 and 1910-27 at site 7.5 mi downstream at elevation 6,000 ft, published in WSP 1313. Low-flow records probably not equivalent. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09349800

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Datum of gage is 6,147.52 ft above NGVD of 1929, Colorado State Highway Department bench mark.

REMARKS.--Records good except for those estimated, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of the Colorado District report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	77	56	e29	21	28	187	603	1,100	63	53	81
2	84	75	54	e27	24	27	223	564	981	57	53	65
3	108	76	51	e26	25	27	204	548	918	55	45	65
4	115	69	54	e29	21	29	172	561	810	52	43	70
5	104	72	50	e31	18	30	161	500	715	50	40	79
6	100	62	44	32	19	27	151	437	599	51	35	96
7	95	63	39	26	e15	26	137	390	e517	50	33	108
8	95	70	33	24	17	29	123	358	e442	48	33	99
9	96	104	34	20	22	35	131	329	e422	42	38	150
10	90	110	27	21	e17	42	167	289	404	38	41	926
11	86	87	30	e21	e18	53	237	274	380	34	40	517
12	81	67	34	e20	e22	72	306	301	344	31	39	328
13	76	59	30	e17	30	124	323	382	310	32	43	259
14	71	65	34	19	34	191	410	428	285	32	40	210
15	67	62	36	22	34	232	521	574	255	30	36	178
16	64	53	35	e17	36	303	465	662	236	29	35	158
17	61	47	39	e16	34	335	439	764	225	32	38	141
18	60	55	35	e17	35	236	447	943	212	28	33	126
19	57	49	28	20	35	178	391	892	222	29	31	116
20	56	50	22	21	29	162	336	895	286	29	35	105
21	54	56	32	21	26	175	324	885	232	35	35	98
22	52	60	27	21	24	205	346	988	195	34	34	93
23	56	65	32	21	22	229	358	1,150	175	34	39	85
24	68	67	33	21	21	310	325	1,180	154	34	59	77
25	70	65	34	21	28	303	339	1,120	139	35	51	70
26	66	58	34	20	30	254	437	e1,090	125	34	56	67
27	85	54	31	19	31	250	569	1,140	111	52	60	70
28	84	50	31	19	32	191	647	1,250	96	55	62	68
29	80	48	38	20	---	156	659	1,310	84	66	64	65
30	81	52	e33	20	---	e149	642	1,190	74	67	68	63
31	76	---	e30	19	---	e156	---	1,180	---	61	96	---
TOTAL	2,418	1,947	1,120	677	720	4,564	10,177	23,177	11,048	1,319	1,408	4,633
MEAN	78.0	64.9	36.1	21.8	25.7	147	339	748	368	42.5	45.4	154
MAX	115	110	56	32	36	335	659	1,310	1,100	67	96	926
MIN	52	47	22	16	15	26	123	274	74	28	31	63
AC-FT	4,800	3,860	2,220	1,340	1,430	9,050	20,190	45,970	21,910	2,620	2,790	9,190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	172	126	89.2	73.7	90.7	315	851	1,267	1,004	329	221	210
MAX	618	517	257	153	244	895	2,126	2,926	2,526	1,133	1,014	943
(WY)	(1973)	(1987)	(1987)	(1987)	(1986)	(1995)	(1979)	(1979)	(1979)	(1975)	(1999)	(1970)
MIN	51.2	48.4	31.2	21.8	25.7	47.4	126	91.7	24.8	12.7	15.2	35.3
(WY)	(1979)	(1968)	(1990)	(2003)	(2003)	(1964)	(1977)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	19,973.0		63,208			
ANNUAL MEAN	54.7		173		396	
HIGHEST ANNUAL MEAN					822	1979
LOWEST ANNUAL MEAN					53.5	2002
HIGHEST DAILY MEAN	307	Sep 12	1,310	May 29	5,360	Sep 6, 1970
LOWEST DAILY MEAN	3.9	Aug 26	e15	Feb 7	a3.9	Aug 26, 2002
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 26	18	Feb 5	4.3	Aug 26, 2002
MAXIMUM PEAK FLOW			1,440	May 29	b8,370	Sep 6, 1970
MAXIMUM PEAK STAGE			3.29	May 29	c6.38	Sep 6, 1970
ANNUAL RUNOFF (AC-FT)	39,620		125,400		287,100	
10 PERCENT EXCEEDS	108		479		1,170	
50 PERCENT EXCEEDS	43		64		145	
90 PERCENT EXCEEDS	11		23		52	

e Estimated.
a Also occurred Aug. 28-29, 2002.
b From rating curve extended above 4,400 ft^3/s, on basis of slope-area measurement of peak flow.
c Gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks.

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE ¼ NW ¼ 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, 0.5 mi upstream from Spring Creek, and 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--520 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09354500

REVISED RECORDS.--WDR CO-00-2: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,127.21 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are poor. Flow regulated by Vallecito Reservoir (station 09353000, capacity 125,640 acre-ft.) 24 mi upstream since April 1941. Diversions for irrigation of about 55,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of the Colorado District report.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911, has not yet been exceeded.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	30	22	e15	e17	26	43	41	65	72	101	68
2	30	28	22	e15	e17	25	49	36	71	74	102	55
3	37	27	23	e15	17	24	52	43	60	74	164	52
4	37	28	23	e15	16	25	47	39	58	79	104	56
5	30	29	21	e15	e17	26	42	28	55	78	68	53
6	28	27	20	e15	16	24	41	29	61	73	55	51
7	27	26	19	e15	17	25	40	25	65	76	55	59
8	23	23	20	e15	17	28	38	20	68	71	59	50
9	21	85	20	e15	17	36	34	19	68	65	70	564
10	18	67	20	e15	18	49	34	41	65	65	63	727
11	17	36	e19	e15	20	88	39	36	66	65	58	151
12	17	27	e19	e16	19	122	48	33	71	70	58	74
13	16	23	e19	e16	27	106	55	27	70	67	59	52
14	16	21	e19	e16	57	80	60	27	74	69	55	41
15	15	19	e18	e16	41	66	67	61	72	67	51	37
16	20	17	e17	e16	28	68	70	46	72	64	69	31
17	49	17	e17	e17	24	164	64	37	83	67	82	28
18	32	17	e16	17	24	146	65	38	94	64	106	25
19	44	16	e16	e17	26	94	59	37	112	63	71	27
20	48	16	e16	e17	22	71	50	34	124	63	55	27
21	47	19	e16	e17	20	68	44	39	103	72	50	26
22	38	22	e16	e17	19	70	42	39	94	69	55	25
23	41	23	e16	e17	17	62	47	47	92	68	55	25
24	44	24	e16	e17	18	68	48	70	84	72	50	25
25	40	25	e16	e17	22	71	43	70	83	71	51	24
26	39	25	e16	17	29	71	47	99	86	76	47	23
27	58	25	e16	e17	30	68	52	85	85	112	48	24
28	46	22	e16	e17	29	60	55	60	80	125	65	23
29	40	20	e16	e17	---	53	51	56	77	119	57	23
30	37	20	e16	e17	---	47	48	61	73	120	61	22
31	34	---	e16	e17	---	45	---	59	---	104	82	---
TOTAL	1,015	804	562	500	641	1,976	1,474	1,382	2,331	2,394	2,126	2,468
MEAN	32.7	26.8	18.1	16.1	22.9	63.7	49.1	44.6	77.7	77.2	68.6	82.3
MAX	58	85	23	17	57	164	70	99	124	125	164	727
MIN	15	16	16	15	16	24	34	19	55	63	47	22
AC-FT	2,010	1,590	1,110	992	1,270	3,920	2,920	2,740	4,620	4,750	4,220	4,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	192	132	100	73.5	94.8	215	337	418	493	293	234	211
MAX	672	709	396	182	362	972	1,339	1,719	1,555	1,381	1,349	725
(WY)	(1987)	(1987)	(1983)	(1985)	(1993)	(1993)	(1979)	(1958)	(1979)	(1957)	(1999)	(1997)
MIN	32.7	26.8	18.1	16.1	22.9	31.7	22.6	40.6	60.8	23.8	13.0	33.4
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	11,778.1		17,673			
ANNUAL MEAN	32.3		48.4		236	
HIGHEST ANNUAL MEAN					582	1973
LOWEST ANNUAL MEAN					44.6	2002
HIGHEST DAILY MEAN	114	Sep 11	727	Sep 10	4,560	Jul 27, 1957
LOWEST DAILY MEAN	6.6	Aug 28	15	Oct 15	6.1	May 1, 1977
ANNUAL SEVEN-DAY MINIMUM	8.7	Aug 23	15	Jan 1	8.3	Apr 30, 1977
MAXIMUM PEAK FLOW			1,490	Sep 10	a6,400	Jul 27, 1957
MAXIMUM PEAK STAGE			6.28	Sep 10	b8.95	Jul 27, 1957
ANNUAL RUNOFF (AC-FT)	23,360		35,050		171,000	
10 PERCENT EXCEEDS	58		80		542	
50 PERCENT EXCEEDS	28		39		131	
90 PERCENT EXCEEDS	14		16		48	

e Estimated.
a From rating curve extended above 5,100 ft^3/s.
b Maximum gage height, 9.00 ft, backwater from ice, sometime during period Dec. 23, 1990, to Jan. 17, 1991.

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE ¼ SW ¼ 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.--58.2 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974, January 1988 to September 1991. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09355000

REVISED RECORDS.-- WDR CO-00-02: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,160 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for those estimated, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from Los Pinos River, which causes a considerable change in the annual pattern and natural flow. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of the Colorado District report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.0	1.5	e0.48	0.34	7.2	0.90	0.17	30	40	43	46
2	1.8	0.92	e1.6	e0.49	0.13	5.6	0.90	3.4	31	42	50	63
3	2.0	0.85	1.7	e0.74	e0.28	5.2	0.97	9.4	29	41	71	69
4	1.6	1.2	1.5	e0.85	e0.51	5.2	0.90	1.7	29	38	56	48
5	1.4	1.2	1.2	e0.85	e0.58	5.9	0.96	1.4	28	42	49	45
6	1.3	0.82	e1.4	e0.79	e0.74	5.7	0.91	4.4	30	42	47	45
7	1.2	0.83	e1.6	e0.63	e1.3	5.7	0.82	7.3	37	41	48	48
8	1.1	1.2	e1.9	e0.46	e1.8	6.2	0.68	7.1	37	40	48	45
9	1.2	12	e2.4	e0.38	e2.3	8.1	0.67	9.2	34	39	51	276
10	e1.1	11	e2.9	e0.38	e3.0	12	0.67	9.4	36	35	46	281
11	e1.0	3.4	e3.0	e0.38	e3.4	22	0.66	8.2	39	41	41	9.1
12	e0.84	2.0	e3.3	e0.38	e3.9	40	0.64	9.3	41	42	40	0.99
13	0.96	1.4	e3.6	e0.35	6.0	34	0.60	8.9	45	43	40	0.33
14	0.89	1.2	e2.7	e0.37	7.7	20	0.45	7.7	43	44	46	0.12
15	0.92	1.1	e2.4	e0.42	7.7	13	0.53	11	41	44	49	0.08
16	0.82	e1.3	e2.0	e0.46	4.8	12	0.60	13	40	43	63	0.05
17	10	e1.4	e1.7	e0.53	3.8	48	0.48	13	41	43	61	0.04
18	6.1	e1.4	e1.5	e0.53	3.8	26	0.40	16	46	43	70	0.02
19	11	e1.3	e1.2	e0.51	3.7	14	0.44	19	49	41	59	0.02
20	17	e1.2	e1.1	e0.46	e2.9	7.1	0.39	19	54	42	52	0.01
21	4.9	e1.2	e0.86	e0.46	e2.7	6.2	0.41	19	43	45	49	0.05
22	1.5	e1.2	e0.86	e0.42	e2.8	7.8	0.39	18	41	48	54	0.02
23	e1.0	e1.2	e0.79	e0.38	e2.8	4.9	0.59	19	39	47	55	0.01
24	1.1	e1.3	e0.67	e0.38	e2.7	4.8	0.51	19	37	50	63	0.01
25	0.55	1.2	e0.67	e0.35	4.0	3.9	0.36	19	37	50	59	0.01
26	1.0	e1.2	e0.67	e0.27	6.5	3.1	0.32	26	40	64	60	0.05
27	3.8	e1.3	e0.67	e0.24	7.4	2.5	0.32	23	41	62	57	0.29
28	1.1	e1.3	e0.67	e0.24	15	1.8	0.27	23	40	95	63	0.78
29	0.77	e1.4	e0.61	0.41	---	1.5	0.23	20	39	46	70	1.4
30	1.1	e1.4	e0.58	0.12	---	e1.3	0.17	27	40	47	61	2.1
31	1.1	---	e0.48	0.39	---	1.1	---	28	---	43	68	---
TOTAL	81.45	59.42	47.73	14.10	102.58	341.8	17.14	419.57	1,157	1,423	1,689	981.48
MEAN	2.63	1.98	1.54	0.45	3.66	11.0	0.57	13.5	38.6	45.9	54.5	32.7
MAX	17	12	3.6	0.85	15	48	0.97	28	54	95	71	281
MIN	0.55	0.82	0.48	0.12	0.13	1.1	0.17	0.17	28	35	40	0.01
AC-FT	162	118	95	28	203	678	34	832	2,290	2,820	3,350	1,950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	34.1	10.4	5.38	4.73	9.78	17.9	12.8	38.1	56.9	65.9	65.1	56.9
MAX	87.9	29.6	20.4	19.3	54.8	89.7	41.1	64.5	79.3	111	132	92.0
(WY)	(1973)	(1956)	(1985)	(1980)	(1980)	(1979)	(1979)	(1992)	(1986)	(1996)	(1996)	(1983)
MIN	2.63	1.98	1.54	0.45	2.06	2.36	0.57	13.5	24.4	1.07	0.45	0.93
(WY)	(2003)	(2003)	(2003)	(2003)	(2000)	(1999)	(2003)	(2003)	(1977)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	2,589.82		6,334.27			
ANNUAL MEAN	7.10		17.4		31.9	
HIGHEST ANNUAL MEAN					47.7	1987
LOWEST ANNUAL MEAN					9.78	2002
HIGHEST DAILY MEAN	64	Jun 11	281	Sep 10	918	Mar 6, 1995
LOWEST DAILY MEAN	0.00	Aug 1	0.01	Sep 20	0.00	Aug 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.03	Aug 12	0.02	Sep 19	0.02	Sep 19, 2003
MAXIMUM PEAK FLOW			742	Sep 10	a1,980	Sep 6, 1970
MAXIMUM PEAK STAGE			5.50	Sep 10	b4.62	Sep 6, 1970
ANNUAL RUNOFF (AC-FT)	5,140		12,560		23,090	
10 PERCENT EXCEEDS	27		48		71	
50 PERCENT EXCEEDS	1.7		3.0		21	
90 PERCENT EXCEEDS	0.37		0.38		3.0	

e Estimated.
a From rating curve extended above 160 ft^3/s, on the basis of field estimate of peak flow.
b Maximum gage height, 5.98 ft, Mar. 9, 1960, backwater from ice.

09355100 NAVAJO RESERVOIR NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'28", long 107°36'31", in SW $^1/_4$ SE $^1/_4$ 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, 33.0 mi east of Farmington, and at mile 298.6.

DRAINAGE AREA.--3,230 mi^2, 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 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 and 11, 1965, elevation, 5,906.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 870,500 acre-ft, Oct. 1, elevation, 6,015.49 ft; minimum contents, 733,100 acre-ft, Sept. 8, elevation, 5,999.28 ft.

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

Elevation	Contents	Elevation	Contents	Elevation	Contents	Elevation	Contents
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 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	870,500	847,100	839,700	826,600	814,400	805,650	813,300	824,000	888,000	882,600	798,100	739,500
2	869,000	846,500	839,500	826,100	813,700	805,130	813,600	825,000	891,200	880,000	796,100	738,300
3	868,400	846,300	839,400	825,600	813,400	804,630	813,600	825,800	893,600	877,700	794,500	736,900
4	868,400	845,900	839,100	825,100	813,000	804,370	813,700	827,100	896,000	875,800	793,000	735,700
5	868,100	845,500	838,700	824,700	812,400	804,280	813,600	827,900	897,700	874,000	791,200	734,600
6	867,600	844,900	838,300	824,400	812,000	804,030	813,400	828,400	898,800	871,900	788,700	734,300
7	866,800	844,600	837,900	824,000	811,400	803,690	813,300	828,100	899,600	869,200	786,200	733,900
8	867,900	844,500	837,500	823,400	810,800	803,260	813,300	827,900	900,200	866,200	783,700	733,100
9	867,100	845,300	837,000	823,100	810,300	803,000	813,100	827,300	900,700	863,200	781,400	735,900
10	866,000	845,800	836,500	822,700	809,700	802,750	812,700	827,100	900,800	860,000	779,100	743,000
11	864,900	845,800	836,000	822,400	809,500	802,750	812,600	827,100	901,000	857,300	777,000	744,700
12	864,000	845,600	835,400	822,100	809,100	803,090	812,600	827,100	900,700	854,400	774,100	745,800
13	863,100	845,300	835,100	821,600	809,200	803,770	812,700	826,900	900,000	851,200	771,200	745,800
14	861,700	845,000	834,600	821,400	809,500	804,710	813,100	827,100	899,700	847,900	768,400	746,300
15	860,700	844,800	834,100	820,800	809,500	805,390	814,300	827,900	899,400	844,700	766,000	746,300
16	859,600	844,500	833,600	820,500	809,500	806,840	814,900	829,400	898,800	841,600	763,200	746,300
17	858,800	844,000	833,600	820,100	809,200	808,380	815,400	831,300	898,000	838,400	760,200	745,900
18	858,000	843,700	833,100	819,700	809,100	809,150	816,000	834,600	897,500	835,000	758,700	744,700
19	856,900	843,300	832,700	819,200	809,000	809,400	816,700	836,700	896,700	831,500	756,200	743,800
20	856,100	842,900	832,000	818,800	808,500	809,490	817,100	839,200	896,500	828,100	754,000	743,500
21	855,000	842,600	831,500	818,400	808,100	809,920	817,500	841,700	896,500	825,300	751,900	743,500
22	853,400	842,500	831,000	818,000	807,600	810,430	817,600	844,800	896,100	822,200	749,900	742,400
23	852,400	842,300	830,600	817,700	807,400	810,860	817,800	848,600	894,700	818,900	748,200	741,300
24	851,500	842,100	830,200	817,300	806,900	811,460	818,000	852,500	893,100	815,800	747,500	740,100
25	850,700	841,900	829,700	817,000	806,900	811,980	818,100	856,200	891,900	813,000	745,700	739,800
26	850,400	841,500	829,300	816,500	806,700	812,400	818,800	860,100	890,400	810,100	744,200	738,700
27	850,000	841,100	828,900	816,200	806,700	813,000	819,800	864,600	889,000	808,000	743,400	738,000
28	849,000	840,800	828,400	815,900	806,200	813,350	821,000	869,800	887,600	806,000	741,900	737,600
29	848,600	840,400	827,900	815,400	---	813,430	821,900	874,700	886,300	804,200	741,400	736,100
30	848,100	840,100	827,500	815,000	---	813,350	822,900	879,000	884,600	802,100	741,400	734,400
31	847,500	---	826,800	814,600	---	813,350	---	883,800	---	800,000	740,200	---
MAX	870,500	847,100	839,700	826,600	814,400	813,430	822,900	883,800	901,000	882,600	798,100	746,300
MIN	847,500	840,100	826,800	814,600	806,200	802,750	812,600	824,000	884,600	800,000	740,200	733,100

CAL YR 2002 MAX 1,333,300 MIN 826,800
WTR YR 2003 MAX 901,000 MIN 733,100

(+) Elevation, in feet, at end of month.
(++) Change in contents, in acre-feet.

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM

LOCATION.--Lat 36°48'05", long 107°41'51", in NW $^1/_4$ NE $^1/_4$ 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 mi^2, 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, was 455,000 acre-ft. The correct value is 1,455,000 acre-ft.

GAGE.--Water-stage recorder and crest-stage gage with satellite telemetry. 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 except for those estimated, which are poor. Flow completely regulated by Navajo Reservoir (station 09355100) 7.0 mi upstream except for minor inflow from 30-mi^2 intervening drainage area. High-water diversions through Azotea tunnel (station 08284160) into Rio Grande Basin began in Mar. 1971. Diversions for irrigation of about 47,000 acres upstream from station. Releases from Navajo Reservoir, beginning in Jan. 1976, for use on Navajo Indian Irrigation Project bypass gage in tunnel on left bank. See tabulation below for monthly and annual releases as furnished by Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	350	359	350	344	349	352	330	449	725	832	486
2	481	348	358	348	343	346	348	329	449	753	837	485
3	482	346	362	348	341	349	347	331	449	789	837	466
4	480	346	361	347	336	351	348	338	448	791	748	444
5	481	341	361	343	333	354	347	339	449	798	661	445
6	479	342	362	344	334	353	344	340	449	793	661	443
7	479	345	363	343	335	356	343	340	449	839	662	442
8	482	349	362	344	335	356	343	341	449	885	737	393
9	479	360	362	344	335	355	343	341	449	882	808	350
10	479	352	361	345	334	357	343	341	449	946	806	351
11	480	355	361	343	336	357	340	345	449	1,000	803	345
12	483	356	361	345	335	355	338	326	449	998	872	345
13	483	356	361	344	342	352	338	347	449	995	955	345
14	483	357	360	345	338	351	357	413	449	989	904	344
15	486	359	361	345	337	348	384	427	449	1,020	891	345
16	481	356	361	344	334	353	381	428	450	1,060	888	344
17	504	357	365	344	333	350	359	427	449	1,060	886	344
18	526	361	360	344	338	352	337	430	449	1,060	792	342
19	523	361	359	345	337	352	332	433	466	1,060	644	341
20	518	358	360	345	335	353	328	434	493	1,060	590	341
21	518	357	357	345	335	355	326	433	488	1,020	586	340
22	516	356	356	345	334	353	326	433	482	979	587	352
23	518	358	357	344	333	352	321	433	479	976	590	364
24	515	360	359	345	334	351	318	435	482	978	591	364
25	511	359	357	346	342	352	325	438	488	978	605	420
26	513	358	354	345	344	352	336	444	504	988	539	431
27	512	359	355	346	347	352	334	444	526	999	487	431
28	502	358	355	345	347	351	334	445	530	999	489	437
29	510	357	354	344	---	352	334	445	531	1,000	487	441
30	502	357	352	345	---	353	336	446	618	1,000	489	484
31	430	---	349	344	---	355	---	447	---	920	486	---
TOTAL	15,325	10,634	11,125	10,694	9,451	10,927	10,242	12,223	14,169	29,340	21,750	11,805
MEAN	494	354	359	345	338	352	341	394	472	946	702	394
MAX	526	361	365	350	347	357	384	447	618	1,060	955	486
MIN	430	341	349	343	333	346	318	326	448	725	486	340
AC-FT	30,400	21,090	22,070	21,210	18,750	21,670	20,320	24,240	28,100	58,200	43,140	23,420
(+)	0	0	0	0	0	1,170	11,360	26,610	18,820	673	487	3,340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	844	849	953	999	1,003	1,080	1,315	1,734	1,852	1,194	985	935
MAX	2,131	3,018	2,886	2,768	2,382	4,216	4,768	4,962	5,169	5,126	3,508	3,241
(WY)	(1966)	(1966)	(1966)	(1986)	(1987)	(1993)	(1979)	(1985)	(1979)	(1979)	(1973)	(1999)
MIN	298	240	162	115	149	207	244	279	300	320	353	338
(WY)	(1963)	(1963)	(1963)	(1963)	(1963)	(1964)	(1964)	(1967)	(1967)	(1967)	(1963)	(1963)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	222,115		167,685			
ANNUAL MEAN	609		459		a1,145	
HIGHEST ANNUAL MEAN					2,686	1987
LOWEST ANNUAL MEAN					280	1963
HIGHEST DAILY MEAN	906	Apr 29	1,060	Jul 16	6,420	Jun 21, 1965
LOWEST DAILY MEAN	341	Nov 5	318	Apr 24	30	Mar 12, 1964
ANNUAL SEVEN-DAY MINIMUM	345	Nov 2	325	Apr 19	108	Jan 10, 1963
MAXIMUM PEAK FLOW			1,490	Aug 13	b18,900	Jul 27, 1957
MAXIMUM PEAK STAGE			4.34	Aug 13	c11.00	Jul 27, 1957
INSTANTANEOUS LOW FLOW			301	May 12	8.0	Feb 28, 1963
ANNUAL RUNOFF (AC-FT)	440,600		332,600		829,700	
10 PERCENT EXCEEDS	847		804		2,560	
50 PERCENT EXCEEDS	513		359		640	
90 PERCENT EXCEEDS	359		338		400	

a Average discharge for 7 years (water years 1956-62), 1,304 ft^3/s, 944,700 acre-ft/yr, prior to closure of Navajo Dam.
b Site and datum then in use.
c Maximum discharge since construction of Navajo Dam in 1962, 6,500 ft^3/s, June 20, 1965, gage height, 4.75 ft.
(+) Discharge, in acre-feet, through Navajo irrigation tunnel.

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JAN													
28...	1220	347	621	11.4	111	8.1	283	13.0	5.5	110	33.8	6.29	1.96
MAR													
18...	1255	352	605	11.4	117	8.6	302	11.5	6.5	110	34.7	6.48	1.92
MAY													
20...	1610	433	624	12.2	142	8.9	299	27.0	13.0	110	34.6	6.55	2.12
JUL													
08...	1330	888	624	10.6	115	8.6	297	36.0	10.0	110	32.4	6.13	1.95

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
JAN													
28...	0.7	15.9	84	101	--	3.26	0.22	9.6	53.2	174	--	--	--
MAR													
18...	0.7	17.6	83	99	1	3.68	0.21	9.7	59.0	183	--	--	--
MAY													
20...	0.7	17.1	84	91	5	3.44	0.2	9.4	55.9	180	0.20	0.20	0.02
JUL													
08...	0.7	16.2	84	99	2	3.31	0.2	10.0	53.3	174	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)
JAN													
28...	--	--	--	--	--	--	11	<1	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	<1	<1	--	--	--	--	--
MAY													
20...	0.03	0.04	<0.010	<0.01	<0.02	<0.02	20	<2	E1	<0.30	<2	94	<0.06
JUL													
08...	--	--	--	--	--	--	5	19	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)
JAN													
28...	20	--	--	--	--	<10	--	--	<0.02	--	--	--	<3
MAR													
18...	20	--	--	--	--	<10	--	--	<0.02	--	--	--	<3
MAY													
20...	20	<0.04	<0.8	0.13	1.5	<10	<0.08	2.6	<0.02	1.4	1.54	<3	<3
JUL													
08...	20	--	--	--	--	<8	--	--	<0.02	--	--	--	<3

09355500 SAN JUAN RIVER NEAR ARCHULETA, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
JAN					
28...	--	--	--	87	9
MAR					
18...	--	--	--	95	6
MAY					
20...	<0.20	1	0.70	94	5
JUL					
08...	--	--	--	82	5

Remark codes used in this table:
< -- Less than
E -- Estimated value

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 mi^2, approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder with satellite telemetry. 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 those estimated, 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; now diverted downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since Nov. 1963 (capacity, 40,100 acre-ft).

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in Oct. 1911 at this location.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	274	272	e205	189	188	319	980	3,070	594	323	520
2	333	269	265	e209	178	174	356	936	3,040	547	329	443
3	367	267	258	e208	172	168	378	897	2,700	531	452	399
4	412	251	269	e214	178	177	359	924	2,350	510	351	403
5	384	253	258	e208	179	199	343	887	2,130	484	293	392
6	400	237	253	194	174	189	307	774	1,820	452	254	387
7	387	229	253	206	166	189	296	701	1,560	416	222	446
8	392	237	233	204	e160	198	313	658	1,450	384	228	441
9	400	367	227	206	e168	193	309	604	1,460	369	295	1,680
10	394	313	229	212	e162	201	332	547	1,450	350	285	2,020
11	379	291	222	223	e172	238	402	510	1,390	331	282	1,510
12	369	301	227	204	194	280	479	498	1,330	314	274	1,180
13	346	280	230	188	263	280	487	687	1,210	301	281	1,160
14	331	288	238	197	278	274	527	850	1,080	284	381	1,160
15	312	280	218	210	224	284	659	1,150	1,060	269	608	1,090
16	298	266	227	203	188	306	673	1,290	1,090	274	487	1,020
17	288	256	255	200	175	424	630	1,600	e1,000	270	494	941
18	291	268	248	198	191	354	649	2,030	e900	254	508	866
19	278	263	e201	183	185	316	624	1,910	928	242	452	803
20	262	255	e214	184	177	279	572	1,900	978	238	402	733
21	255	260	e202	193	175	287	558	2,150	930	240	357	677
22	247	259	e220	202	175	277	e585	2,750	887	235	327	620
23	263	264	e215	199	167	253	e580	3,410	901	244	313	575
24	282	269	e206	199	156	272	e538	3,400	867	232	365	547
25	277	265	e203	199	183	336	e548	3,100	794	215	402	503
26	270	280	e209	182	211	354	e591	2,820	732	198	391	475
27	326	275	e198	176	201	367	e760	3,570	718	292	387	435
28	287	271	e225	187	198	349	963	4,350	692	309	417	402
29	275	265	e211	189	---	325	1,050	4,350	659	344	515	383
30	279	265	e193	183	---	284	1,020	3,990	633	368	528	365
31	272	---	e219	183	---	281	---	3,490	---	368	582	---
TOTAL	9,955	8,118	7,098	6,148	5,239	8,296	16,207	57,713	39,809	10,459	11,785	22,576
MEAN	321	271	229	198	187	268	540	1,862	1,327	337	380	753
MAX	412	367	272	223	278	424	1,050	4,350	3,070	594	608	2,020
MIN	247	229	193	176	156	168	296	498	633	198	222	365
AC-FT	19,750	16,100	14,080	12,190	10,390	16,460	32,150	114,500	78,960	20,750	23,380	44,780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2003, BY WATER YEAR (WY)

MEAN	466	343	271	247	259	426	1,065	2,501	2,947	1,235	634	538
MAX	2,479	1,068	555	388	467	1,043	2,192	5,686	6,145	3,710	2,372	1,922
(WY)	(1942)	(1942)	(1987)	(1973)	(1987)	(1993)	(1985)	(1941)	(1957)	(1957)	(1999)	(1970)
MIN	169	158	159	169	151	141	273	449	367	146	114	155
(WY)	(1957)	(1934)	(1957)	(1954)	(1964)	(1977)	(1977)	(1977)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1934 - 2003	
ANNUAL TOTAL	98,508		203,403			
ANNUAL MEAN	270		557		920	
HIGHEST ANNUAL MEAN					1,713	1941
LOWEST ANNUAL MEAN					268	2002
HIGHEST DAILY MEAN	1,160	Sep 12	4,350	May 28	11,800	Jun 19, 1949
LOWEST DAILY MEAN	89	Aug 27	156	Feb 24	0.00	Nov 1, 1933
ANNUAL SEVEN-DAY MINIMUM	96	Aug 24	169	Feb 5	0.00	Nov 1, 1933
MAXIMUM PEAK FLOW			5,370	Sep 9	13,100	Jun 19, 1949
MAXIMUM PEAK STAGE			8.76	Sep 9	11.45	Jun 19, 1949
INSTANTANEOUS LOW FLOW			121	Feb 7	63	Jan 21, 1935
ANNUAL RUNOFF (AC-FT)	195,400		403,400		666,300	
10 PERCENT EXCEEDS	468		1,110		2,430	
50 PERCENT EXCEEDS	232		307		409	
90 PERCENT EXCEEDS	123		192		210	

e Estimated

09364500 ANIMAS RIVER AT FARMINGTON, NM

LOCATION.--Lat 36°43'17", long 108°12'05", in SW ¼ SW ¼ 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 mi^2, 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 with satellite telemetry. Elevation of gage is 5,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1905, non-recording gage at old bridge 0.1 mi upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.8 mi downstream at lower datums (datum lowered 2.0 ft Aug. 15, 1927, and raised 0.2 ft Dec. 16, 1929). Oct. 5, 1938, to Nov. 1, 1973, at site 900 ft downstream at datum 1.74 ft lower.

REMARKS.--Water-discharge records good except for those estimated, which are poor. Diversions for irrigation of about 30,000 acres upstream from station.

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 ft^3/s).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	285	309	249	206	e218	e216	639	3,540	333	e137	343
2	207	283	307	235	204	e203	309	599	3,690	277	87	259
3	248	284	296	239	191	e191	306	536	3,350	248	e203	205
4	279	282	301	238	189	e187	299	535	2,960	228	e147	166
5	284	262	302	244	195	216	290	555	2,700	211	e120	174
6	288	268	286	238	191	208	281	412	2,350	194	e84	175
7	287	257	287	223	182	192	231	335	2,030	170	e38	200
8	277	259	280	224	174	198	220	334	1,790	132	e27	249
9	267	385	264	218	182	213	210	278	1,700	118	e29	976
10	267	416	257	220	177	217	202	220	1,690	110	e52	2,690
11	249	331	259	228	187	238	212	202	1,610	99	e45	1,880
12	228	299	249	231	204	282	271	181	1,470	97	e49	1,310
13	206	283	249	205	222	309	308	206	1,260	86	32	1,180
14	190	270	256	194	316	284	321	381	1,090	77	362	1,180
15	179	268	269	209	262	298	440	498	951	74	340	1,040
16	168	263	250	216	230	288	528	775	915	49	312	882
17	173	252	286	207	208	410	438	869	841	37	272	781
18	196	253	289	200	208	403	466	1,310	743	29	279	703
19	204	269	264	197	216	354	499	1,270	694	21	270	649
20	183	279	231	185	202	322	428	1,190	746	12	226	580
21	200	278	244	193	191	304	380	1,310	697	12	177	511
22	220	284	232	208	187	312	403	1,700	607	8.5	167	451
23	231	287	250	216	187	302	388	2,180	621	8.1	140	393
24	260	292	245	224	172	294	360	2,310	613	51	171	353
25	255	295	236	219	e172	e322	302	2,180	560	48	189	328
26	273	289	233	218	e216	e373	301	2,060	458	54	213	294
27	323	308	239	199	e224	e385	440	2,570	405	e71	238	263
28	312	302	228	197	e220	e379	659	3,780	387	156	223	246
29	333	297	255	210	---	e344	825	4,100	365	155	255	220
30	284	298	241	207	---	e280	731	3,910	351	161	317	205
31	281	---	223	202	---	e221	---	3,640	---	180	331	---
TOTAL	7,529	8,678	8,117	6,693	5,715	8,747	11,264	41,065	41,184	3,506.6	5,532	18,886
MEAN	243	289	262	216	204	282	375	1,325	1,373	113	178	630
MAX	333	416	309	249	316	410	825	4,100	3,690	333	362	2,690
MIN	168	252	223	185	172	187	202	181	351	8.1	27	166
AC-FT	14,930	17,210	16,100	13,280	11,340	17,350	22,340	81,450	81,690	6,960	10,970	37,460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2003, BY WATER YEAR (WY)

MEAN	429	353	297	275	297	450	970	2,372	2,918	1,101	506	448
MAX	2,726	1,140	609	554	675	1,242	2,489	6,126	6,930	3,609	2,581	2,182
(WY)	(1942)	(1942)	(1987)	(1920)	(1920)	(1997)	(1979)	(1920)	(1920)	(1957)	(1999)	(1925)
MIN	87.0	152	174	163	162	112	54.1	195	171	14.1	4.69	10.6
(WY)	(1957)	(1935)	(1964)	(1996)	(1964)	(1977)	(1977)	(1977)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1914 - 2003	
ANNUAL TOTAL	68,020.4		166,916.6			
ANNUAL MEAN	186		457		869	
HIGHEST ANNUAL MEAN					1,734	1920
LOWEST ANNUAL MEAN					177	2002
HIGHEST DAILY MEAN	1,060	Sep 13	4,100	May 29	11,000	Jun 19, 1949
LOWEST DAILY MEAN	1.1	Aug 18	8.1	Jul 23	0.00	Aug 8, 1996
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 13	18	Jul 17	0.00	Aug 13, 1996
MAXIMUM PEAK FLOW			4,690	Sep 9	a25,000	Jun 29, 1927
MAXIMUM PEAK STAGE			7.84	Sep 9	9.32	Jun 18, 1995
INSTANTANEOUS LOW FLOW			3.8	Jul 23	0.00	Aug 8, 1996
ANNUAL RUNOFF (AC-FT)	134,900		331,100		629,500	
10 PERCENT EXCEEDS	308		929		2,310	
50 PERCENT EXCEEDS	206		262		371	
90 PERCENT EXCEEDS	5.6		164		184	

a Site and datum then in use, from rating curve extended above 10,000 ft^3/s.
e Estimated

09364500 ANIMAS RIVER AT FARMINGTON, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
JAN													
29...	0820	211	13	7.1	633	10.4	93	8.3	717	2.0	3.0	300	94.6
MAR													
19...	0825	356	1,400	850	620	9.6	95	8.3	666	4.0	6.0	270	85.7
MAY													
21...	0940	1,130	120	100	634	10.6	116	8.1	275	27.0	11.0	120	38.4
JUL													
09...	0825	116	4.4	3.2	632	7.6	98	8.3	701	22.0	18.5	270	87.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
JAN													
29...	14.5	2.89	0.9	35.7	131	158	24.7	0.43	3.6	196	450	--	--
MAR													
19...	13.7	3.14	1	38.7	142	171	18.7	0.39	8.0	173	425	--	--
MAY													
21...	5.00	1.18	0.3	7.39	66	80	5.41	0.2	5.7	53.7	157	<0.20	0.80
JUL													
09...	12.6	2.77	1	38.6	134	157	24.6	0.4	3.3	184	431	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)
JAN													
29...	--	--	--	--	--	--	--	260	100	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	E530	E250	--	--	--	--
MAY													
21...	0.01	0.05	0.20	<0.010	<0.01	<0.02	0.29	<17	<10	35	E.16	<2	59
JUL													
09...	--	--	--	--	--	--	--	80	260	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)
JAN													
29...	--	80	--	--	--	--	<10	--	--	<0.02	--	--	--
MAR													
19...	--	50	--	--	--	--	<10	--	--	0.05	--	--	--
MAY													
21...	<0.06	20	<0.04	<0.8	0.12	1.5	E8	E.06	7.0	E.02	1.0	1.51	<3
JUL													
09...	--	70	--	--	--	--	E5	--	--	<0.02	--	--	--

09364500 ANIMAS RIVER AT FARMINGTON, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
JAN 29...	<3	--	--	--	88	49
MAR 19...	3	--	--	--	81	1,490
MAY 21...	<3	<0.20	3	0.78	26	1,210
JUL 09...	<3	--	--	--	93	13

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
MAR 19...	0825	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
MAR 19...	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
MAR 19...	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
MAR 19...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAR 19...	<0.009

Remark codes used in this table:
< -- Less than

09365000 SAN JUAN RIVER AT FARMINGTON, NM

LOCATION.--Lat 36°43'22", long 108°13'30", in NW ¼ SE ¼ 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 mi^2, approximately.

WATER-DISCHARGE RECORDS

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 with satellite telemetry. 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 except for those above 1,500 ft^3/s, which are fair. 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 are 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.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	665	718	705	656	632	678	671	926	3,350	824	772	702
2	698	690	699	644	634	657	696	890	3,280	790	854	611
3	743	681	695	655	619	643	712	834	3,170	810	1,180	586
4	771	694	707	646	611	665	695	812	2,790	796	747	512
5	781	685	696	642	619	671	649	923	2,470	796	682	550
6	775	687	689	645	616	651	597	787	2,210	775	597	734
7	755	680	691	640	608	636	577	672	1,900	748	585	736
8	738	684	687	650	617	637	558	607	1,690	813	609	644
9	734	983	683	648	616	647	565	561	1,650	805	674	1,300
10	726	985	669	651	610	648	546	515	1,650	790	684	7,090
11	710	789	670	660	617	676	552	468	1,630	870	695	2,620
12	690	724	664	660	630	692	600	445	1,520	863	759	1,440
13	681	702	665	638	653	703	635	452	1,400	852	818	1,290
14	673	689	669	629	716	688	619	908	1,250	837	1,220	1,270
15	671	684	678	640	672	684	716	1,070	1,120	829	1,090	1,140
16	701	675	666	645	648	685	854	1,370	1,150	870	1,040	963
17	698	670	705	640	631	798	762	1,500	1,090	878	1,020	871
18	741	675	698	636	637	786	726	1,920	996	879	991	792
19	741	695	674	636	643	744	738	1,840	989	878	800	743
20	722	696	645	629	628	731	683	1,660	1,120	878	692	684
21	717	689	656	633	617	709	571	1,790	1,080	901	654	633
22	724	691	632	639	613	697	607	2,130	976	837	664	602
23	747	691	653	640	617	685	657	2,650	948	829	633	579
24	785	692	652	643	610	672	664	2,710	920	850	692	572
25	767	693	650	643	654	680	505	2,600	864	853	690	563
26	818	688	639	641	709	711	500	2,470	775	869	697	573
27	974	700	628	627	731	715	635	2,810	758	1,340	887	559
28	838	688	626	621	720	714	871	3,580	747	1,120	849	558
29	1,010	687	648	635	---	701	1,010	3,920	712	860	642	542
30	860	689	656	632	---	681	991	3,880	683	880	649	521
31	827	---	638	630	---	658	---	3,580	---	925	834	---
TOTAL	23,481	21,394	20,733	19,874	17,928	21,343	20,162	51,280	44,888	26,845	24,400	30,980
MEAN	757	713	669	641	640	688	672	1,654	1,496	866	787	1,033
MAX	1,010	985	707	660	731	798	1,010	3,920	3,350	1,340	1,220	7,090
MIN	665	670	626	621	608	636	500	445	683	748	585	512
AC-FT	46,570	42,440	41,120	39,420	35,560	42,330	39,990	101,700	89,040	53,250	48,400	61,450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2003, BY WATER YEAR (WY)

MEAN	1,193	1,001	980	999	1,121	1,537	2,907	4,919	5,323	2,170	1,316	1,184
MAX	7,271	3,549	3,381	3,271	3,032	5,304	9,133	18,830	14,990	8,639	6,044	4,978
(WY)	(1942)	(1987)	(1966)	(1986)	(1987)	(1993)	(1932)	(1941)	(1941)	(1957)	(1999)	(1999)
MIN	286	315	362	329	374	349	391	576	517	192	166	170
(WY)	(1957)	(1951)	(1957)	(1963)	(1964)	(1964)	(1964)	(1977)	(1934)	(1934)	(1939)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1931 - 2003	
ANNUAL TOTAL	271,224		323,308			
ANNUAL MEAN	743		886		2,055	
HIGHEST ANNUAL MEAN					5,054	1941
LOWEST ANNUAL MEAN					728	1963
HIGHEST DAILY MEAN	2,120	Sep 11	7,090	Sep 10	30,000	May 14, 1941
LOWEST DAILY MEAN	523	Sep 26	445	May 12	27	Aug 22, 1939
ANNUAL SEVEN-DAY MINIMUM	569	Sep 23	531	May 7	37	Jul 1, 1934
MAXIMUM PEAK FLOW			9,510	Sep 10	a68,000	Jun 29, 1927
MAXIMUM PEAK STAGE			6.46	Sep 10	b10.20	Jun 29, 1927
INSTANTANEOUS LOW FLOW			396	May 12	14	Aug 22, 1939
ANNUAL RUNOFF (AC-FT)	538,000		641,300		1,489,000	
10 PERCENT EXCEEDS	868		1,260		4,980	
50 PERCENT EXCEEDS	713		695		1,080	
90 PERCENT EXCEEDS	639		611		456	

a From rating curve extended above 37,000 ft^3/s.
b Site and datum then in use.

09365000 SAN JUAN RIVER AT FARMINGTON, NM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-82, 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
JAN													
29...	1215	637	15	6.1	636	11.4	106	8.4	578	12.5	4.5	210	67.1
MAR													
19...	1220	782	1,000	1,300	624	10.2	103	8.2	670	10.0	7.0	230	74.1
MAY													
21...	1450	1,790	120	92	633	8.8	110	8.2	325	--	17.0	130	42.0
JUL													
09...	1240	819	63	59	633	7.8	99	8.3	398	36.0	17.5	140	42.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
JAN													
29...	10.8	2.45	1	38.6	111	134	15.3	0.32	6.8	149	356	--	--
MAR													
19...	11.6	2.78	2	53.7	125	150	17.6	0.34	8.8	188	431	--	--
MAY													
21...	5.75	1.50	0.5	13.6	74	90	6.82	0.2	6.1	66.5	188	0.30	0.80
JUL													
09...	7.19	2.21	0.9	24.6	96	117	7.09	0.2	8.9	84.6	235	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)
JAN													
29...	--	--	--	--	--	--	--	290	150	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	E5900	<250	--	--	--	--
MAY													
21...	0.07	0.11	0.22	<0.010	<0.01	<0.02	0.32	E400	E71	66	E.18	<2	63
JUL													
09...	--	--	--	--	--	--	--	130	230	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)
JAN													
29...	--	50	--	--	--	--	<10	--	--	<0.02	--	--	--
MAR													
19...	--	50	--	--	--	--	<10	--	--	0.03	--	--	--
MAY													
21...	<0.06	20	<0.04	<0.8	0.15	1.9	31	0.24	10.8	0.02	1.1	1.70	<3
JUL													
09...	--	30	--	--	--	--	E4	--	--	<0.02	--	--	--

09365000 SAN JUAN RIVER AT FARMINGTON, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
JAN						
29...	<3	--	--	--	38	127
MAR						
19...	<3	--	--	--	82	1,220
MAY						
21...	<3	<0.20	4	0.89	21	1,360
JUL						
09...	<3	--	--	--	42	816

Remark codes used in this table:
< -- Less than
E -- Estimated value

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW $^1/_4$ SE $^1/_4$ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.5 mi downstream from Johnny Pond Arroyo, and 4.9 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi^2.

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09366500

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder with satellite telemetry and concrete flume. Datum of gage is 5,972.03 ft above NGVD of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934. Mar. 17, 1934, to July 1, 1996, water-stage recorder at same site, and at datum 3.12 ft higher.

REMARKS.--Records good except for those estimated, which are poor. Diversions upstream from station for irrigation of about 15,000 acres, mostly upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.0	3.2	e5.0	0.68	4.2	5.3	43	95	3.4	2.9	1.4
2	3.0	2.9	2.8	e4.0	0.70	4.9	6.0	46	75	1.4	0.44	1.1
3	3.3	2.9	2.6	e4.0	0.65	4.4	14	37	69	0.67	0.00	1.1
4	3.2	3.0	2.3	e4.5	0.62	3.6	14	34	65	1.4	0.00	0.98
5	3.0	2.9	1.4	e5.0	0.74	3.9	11	36	57	1.0	0.00	1.3
6	2.7	2.9	1.0	e6.0	0.76	3.7	9.0	33	49	0.79	0.00	0.95
7	2.6	2.9	0.44	6.3	1.0	4.1	8.5	28	37	0.61	0.00	0.99
8	2.5	3.1	0.47	6.0	1.3	4.2	6.4	27	30	0.44	0.00	0.76
9	2.5	5.2	0.56	6.0	1.3	4.4	5.6	24	30	0.27	0.00	382
10	2.6	4.6	0.79	5.9	1.4	4.2	9.1	21	30	0.16	0.00	124
11	2.4	4.1	1.1	5.9	1.4	3.3	14	18	23	0.05	0.00	22
12	2.2	3.8	1.3	5.9	1.0	3.1	23	16	28	0.01	0.00	31
13	2.2	3.6	1.8	5.4	2.1	3.1	24	19	25	0.00	0.00	20
14	2.4	3.6	2.0	5.3	2.4	4.1	21	24	20	0.00	0.00	18
15	2.4	3.6	2.2	5.4	1.2	4.1	30	41	16	0.00	0.00	15
16	2.5	3.3	1.9	5.2	4.2	3.1	36	52	15	0.00	0.00	17
17	2.5	3.5	3.2	5.1	4.2	7.5	24	55	13	0.00	0.00	15
18	2.6	3.4	4.6	4.9	4.3	6.6	26	64	14	0.00	0.00	10
19	2.6	3.4	e2.8	5.0	3.9	4.5	26	e70	17	0.00	0.00	9.4
20	2.6	3.6	3.1	5.1	3.6	3.6	18	e85	19	0.00	0.00	7.6
21	2.6	3.6	5.0	5.2	3.4	3.5	18	e105	16	0.00	0.00	6.0
22	2.6	3.6	e3.0	5.0	3.1	4.2	20	e130	12	0.00	0.00	5.0
23	2.8	3.9	e3.5	5.0	3.0	4.7	21	e105	8.9	0.00	0.00	4.2
24	2.9	3.9	e3.0	5.0	3.2	5.1	22	59	6.0	0.00	5.3	3.5
25	2.8	3.9	e2.5	5.0	3.8	6.1	e25	54	5.0	0.00	14	2.5
26	2.9	3.8	e2.0	5.0	4.6	7.0	e30	82	6.0	0.00	1.5	2.1
27	3.5	3.7	e2.0	5.1	4.1	7.1	e35	66	6.0	0.00	3.3	3.0
28	3.0	3.7	e3.0	4.4	4.0	6.2	43	74	4.3	0.00	5.2	3.2
29	3.0	4.1	e4.0	2.0	---	6.4	46	84	4.2	0.00	2.3	3.2
30	2.9	3.7	e4.0	1.8	---	5.8	47	94	4.4	0.00	2.6	3.1
31	3.1	---	e4.0	1.6	---	5.5	---	133	---	0.00	4.3	---
TOTAL	84.6	107.2	75.56	151.0	66.65	146.2	637.9	1,759	799.8	10.20	41.84	715.38
MEAN	2.73	3.57	2.44	4.87	2.38	4.72	21.3	56.7	26.7	0.33	1.35	23.8
MAX	3.5	5.2	5.0	6.3	4.6	7.5	47	133	95	3.4	14	382
MIN	2.2	2.9	0.44	1.6	0.62	3.1	5.3	16	4.2	0.00	0.00	0.76
AC-FT	168	213	150	300	132	290	1,270	3,490	1,590	20	83	1,420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2003, BY WATER YEAR (WY)

MEAN	13.4	11.8	12.1	11.8	16.7	36.7	103	107	65.4	19.5	12.0	11.4
MAX	260	99.2	53.9	38.3	53.9	139	364	506	306	99.4	65.1	126
(WY)	(1942)	(1942)	(1987)	(1942)	(1924)	(1997)	(1980)	(1941)	(1957)	(1957)	(1957)	(1927)
MIN	0.097	0.98	1.24	0.80	2.38	0.63	3.06	5.32	1.94	0.019	0.006	0.000
(WY)	(1935)	(1940)	(1978)	(1930)	(2003)	(1977)	(1977)	(1977)	(1924)	(1922)	(1922)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1921 - 2003	
ANNUAL TOTAL	1,581.83		4,595.33			
ANNUAL MEAN	4.33		12.6		35.0	
HIGHEST ANNUAL MEAN					109	1973
LOWEST ANNUAL MEAN					4.44	1977
HIGHEST DAILY MEAN	17	Apr 8	382	Sep 9	1,120	May 4, 1941
LOWEST DAILY MEAN	0.00	Mar 29	0.00	Jul 13	a0.00	Jul 3, 1922
ANNUAL SEVEN-DAY MINIMUM	0.16	Mar 24	0.00	Jul 13	0.00	Jul 3, 1922
MAXIMUM PEAK FLOW			1,380	Sep 9	b4,750	Aug 24, 1927
MAXIMUM PEAK STAGE			8.67	Sep 9	11.36	Aug 24, 1927
ANNUAL RUNOFF (AC-FT)	3,140		9,110		25,380	
10 PERCENT EXCEEDS	8.8		33		84	
50 PERCENT EXCEEDS	3.0		3.8		12	
90 PERCENT EXCEEDS	1.1		0.00		1.7	

e Estimated.
a No flow at times in many years.
b From rating curve extended above 750 ft^3/s, on basis of slope-area measurement of peak flow, at datum then in use.

09368000 SAN JUAN RIVER AT SHIPROCK, NM

LOCATION.--Lat 36°46'53", long 108°41'23", in SE $^1/_4$ sec.25, T.30 N., R.18 W., San Juan County, Hydrologic Unit 14080105, on right bank 500 ft upstream from bridge on U.S. Highway 666 in Shiprock, 3.0 mi downstream from Chaco River, and at mile 215.0.

DRAINAGE AREA.--12,900 mi^2, 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 with satellite telemetry. Datum of gage is 4,890 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 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. Water-stage recorder, at site 4 mi upstream Sept. 1994.

REMARKS.--Water-discharge records good except for those above 1,500 ft^3/s, which are fair. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood occurred Oct. 6, 1911, and reached a stage of 22 ft, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	662	723	567	550	738	572	733	3,290	356	827	693
2	464	608	661	566	557	665	622	689	3,050	474	606	574
3	520	578	652	569	544	605	634	628	2,940	452	1,530	369
4	634	585	666	565	524	642	583	581	2,580	440	995	259
5	730	596	672	550	527	649	551	710	2,150	441	664	216
6	702	e583	669	576	531	615	524	610	1,960	426	409	323
7	639	e578	670	593	535	530	480	534	1,670	428	268	804
8	556	570	667	572	545	516	420	456	1,470	402	e230	783
9	532	818	e661	575	573	528	426	402	1,410	412	e250	867
10	533	1,010	e651	577	562	543	411	363	1,380	385	e260	9,190
11	523	824	e651	587	506	587	389	326	1,340	435	e280	9,020
12	483	791	642	593	519	611	410	288	1,270	495	e324	4,340
13	464	751	639	590	550	673	492	220	1,210	499	616	1,730
14	448	655	638	590	636	722	523	402	1,030	487	1,150	1,440
15	442	641	652	595	637	710	555	714	892	483	1,040	1,200
16	e461	630	649	608	573	706	702	1,060	900	603	1,180	910
17	e518	617	676	589	543	769	737	1,090	842	641	1,020	789
18	e550	619	721	537	548	905	619	1,590	722	597	945	694
19	e589	624	670	535	575	830	554	1,950	722	588	689	636
20	e608	658	651	526	560	797	534	1,750	816	589	472	580
21	e567	631	651	524	553	678	485	1,870	794	586	316	518
22	e515	636	653	531	541	657	462	2,360	718	528	436	446
23	583	639	614	555	543	622	497	3,010	689	468	331	362
24	705	644	594	599	543	563	499	3,260	716	492	527	320
25	717	652	587	545	576	563	469	3,190	631	528	441	309
26	657	645	579	551	678	602	359	2,930	565	522	427	361
27	858	653	611	538	669	606	346	2,900	457	557	723	348
28	695	644	634	517	737	639	542	3,710	389	1,550	797	332
29	931	638	635	511	---	696	756	4,210	360	979	791	323
30	861	640	627	547	---	663	820	4,080	330	1,000	624	307
31	679	---	564	579	---	623	---	3,650	---	990	721	---
TOTAL	18,592	19,820	20,030	17,457	15,935	20,253	15,973	50,266	37,293	17,833	19,889	39,043
MEAN	600	661	646	563	569	653	532	1,621	1,243	575	642	1,301
MAX	931	1,010	723	608	737	905	820	4,210	3,290	1,550	1,530	9,190
MIN	428	570	564	511	506	516	346	220	330	356	230	216
AC-FT	36,880	39,310	39,730	34,630	31,610	40,170	31,680	99,700	73,970	35,370	39,450	77,440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2003, BY WATER YEAR (WY)

MEAN	1,243	1,087	1,050	1,056	1,190	1,589	2,898	4,760	5,206	2,145	1,339	1,224
MAX	8,370	3,997	3,420	3,169	3,314	5,099	9,275	19,790	15,540	8,869	5,731	4,298
(WY)	(1942)	(1987)	(1966)	(1966)	(1987)	(1993)	(1937)	(1941)	(1941)	(1957)	(1999)	(1999)
MIN	247	365	386	390	395	359	274	268	433	185	126	44.4
(WY)	(1957)	(1935)	(1957)	(1963)	(1964)	(1964)	(1977)	(1977)	(2002)	(1963)	(1939)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1935 - 2003	
ANNUAL TOTAL	228,294		292,384			
ANNUAL MEAN	625		801		2,066	
HIGHEST ANNUAL MEAN					5,324	1941
LOWEST ANNUAL MEAN					657	2002
HIGHEST DAILY MEAN	8,090	Sep 12	9,190	Sep 10	33,300	Oct 14, 1941
LOWEST DAILY MEAN	243	Jun 20	216	Sep 5	8.0	Aug 25, 1939
ANNUAL SEVEN-DAY MINIMUM	285	Jun 19	289	Aug 6	13	Jul 24, 1959
MAXIMUM PEAK FLOW			11,800	Sep 11	80,000	Aug 11, 1929
MAXIMUM PEAK STAGE			13.78	Sep 11	14.02	Jun 19, 1995
INSTANTANEOUS LOW FLOW			202	May 13	a8.0	Aug 25, 1939
ANNUAL RUNOFF (AC-FT)	452,800		579,900		1,497,000	
10 PERCENT EXCEEDS	787		1,160		4,950	
50 PERCENT EXCEEDS	612		605		1,100	
90 PERCENT EXCEEDS	323		410		452	

a Also occurred Aug. 26, 1939.
e Estimated

09368000 SAN JUAN RIVER AT SHIPROCK, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1941-45, 1951 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
JAN													
30...	1335	507	14	5.8	643	13.6	130	8.6	689	11.0	6.0	240	75.1
MAR													
20...	1305	826	800	860	636	9.6	100	8.1	713	15.0	9.0	240	76.5
MAY													
22...	1450	2,150	320	280	640	7.8	100	8.0	354	33.0	18.5	140	44.3
JUL													
10...	1245	385	110	30	642	8.4	117	8.6	509	34.0	23.0	170	53.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
JAN													
30...	13.8	2.77	1	49.7	117	139	2	18.9	0.36	4.6	194	429	--
MAR													
20...	12.9	2.83	2	55.4	132	159	--	17.7	0.36	8.9	200	453	--
MAY													
22...	6.56	1.70	0.6	16.0	77	93	--	6.78	0.3	6.0	76.8	206	<0.20
JUL													
10...	9.89	2.45	1	34.3	114	129	5	11.1	0.3	5.9	120	305	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)
JAN													
30...	--	--	--	--	--	--	--	--	<1	<1	--	--	--
MAR													
20...	--	--	--	--	--	--	--	--	>200	E75	--	--	--
MAY													
22...	1.5	0.02	0.08	0.31	<0.010	<0.01	<0.02	0.75	>8000	360	22	E.23	<2
JUL													
10...	--	--	--	--	--	--	--	--	E1	69	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
JAN													
30...	--	--	80	--	--	--	--	<10	--	--	<0.02	--	--
MAR													
20...	--	--	60	--	--	--	--	<10	--	--	0.03	--	--
MAY													
22...	70	<0.06	30	<0.04	<0.8	0.14	1.3	E6	0.10	2.6	0.04	1.5	2.02
JUL													
10...	--	--	40	--	--	--	--	<8	--	--	<0.02	--	--

09368000 SAN JUAN RIVER AT SHIPROCK, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
JAN							
30...	--	<3	--	--	--	65	52
MAR							
20...	--	<3	--	--	--	84	1,030
MAY							
22...	<3	<3	<0.20	2	1.15	--	--
JUL							
10...	--	<3	--	--	--	85	87

Remark codes used in this table:
< -- Less than
> -- Greater than
E -- Estimated value

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO

LOCATION.--Lat 37°00'08", long 109°01'52", SE ¼ NE ¼ SW ¼ sec.21, T.32 N., R.20 W., Montezuma County, Hydrologic Unit 14080201, on right bank 0.1 mi north of New Mexico-Colorado State line, 1,300 ft upstream from bridge on U.S. Highway 160, 1.0 mi east of Four Corners Monument, 3.0 mi downstream from Mancos River, and at mile 187.2.

DRAINAGE AREA.--14,600 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 2003, at site on left bank.

REMARKS.--Water-discharge records good except for those estimated, which are fair. Flow partly regulated by Navajo Reservoir (09355100).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	829	724	559	563	770	628	907	3,710	362	970	863
2	e554	740	714	575	562	711	598	791	3,400	436	739	681
3	e678	682	682	559	560	632	663	725	3,360	466	1,340	577
4	693	667	674	577	535	604	640	637	3,110	462	1,240	381
5	803	680	690	567	523	665	632	671	2,580	456	806	308
6	757	668	697	571	531	659	585	785	2,260	452	551	367
7	740	660	682	601	e545	566	554	602	1,990	442	345	674
8	631	656	680	585	e527	523	486	500	1,780	423	287	836
9	654	755	666	595	e591	518	482	426	1,600	448	275	3,560
10	653	1,730	659	592	e582	534	485	386	1,560	430	286	10,200
11	659	1,150	637	606	512	569	496	347	1,490	413	325	10,100
12	604	957	643	616	499	613	475	301	1,480	491	329	5,280
13	570	893	632	611	529	659	534	246	1,400	508	388	2,200
14	569	751	628	616	570	753	606	195	1,210	493	808	1,580
15	553	690	629	609	666	771	577	657	1,010	483	1,000	1,380
16	557	669	645	620	581	773	701	1,050	971	506	1,110	1,100
17	599	657	635	625	536	764	879	1,410	925	643	1,010	983
18	676	643	708	570	516	1,020	741	1,660	850	599	913	846
19	730	652	679	546	549	986	640	2,190	769	587	e740	789
20	770	669	631	543	540	898	625	2,090	783	568	e565	724
21	749	663	649	530	534	790	575	2,020	930	574	391	654
22	e668	658	653	535	512	706	495	2,270	855	561	324	588
23	e844	660	629	546	498	690	486	2,990	722	472	442	528
24	841	662	600	597	510	619	530	3,450	735	467	633	467
25	846	665	588	578	518	587	529	3,360	674	498	529	453
26	824	668	e554	555	632	601	432	3,100	614	498	473	438
27	1,040	658	e563	558	688	651	327	2,790	524	494	526	481
28	964	672	e600	531	725	655	382	3,710	452	1,440	887	436
29	1,410	657	652	518	---	713	721	4,300	411	1,180	948	425
30	1,290	656	643	528	---	709	932	4,350	387	1,170	725	411
31	844	---	587	582	---	675	---	4,010	---	1,090	668	---
TOTAL	23,270	22,417	20,053	17,801	15,634	21,384	17,436	52,926	42,542	18,112	20,573	48,310
MEAN	751	747	647	574	558	690	581	1,707	1,418	584	664	1,610
MAX	1,410	1,730	724	625	725	1,020	932	4,350	3,710	1,440	1,340	10,200
MIN	500	643	554	518	498	518	327	195	387	362	275	308
AC-FT	46,160	44,460	39,780	35,310	31,010	42,420	34,580	105,000	84,380	35,930	40,810	95,820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

MEAN	1,246	1,313	1,310	1,369	1,455	1,919	2,711	4,450	4,969	2,220	1,482	1,440
MAX	2,959	3,732	3,466	3,300	3,365	5,454	7,893	10,220	10,370	6,846	6,135	4,852
(WY)	(1987)	(1987)	(1987)	(1987)	(1987)	(1993)	(1979)	(1979)	(1979)	(1979)	(1999)	(1999)
MIN	634	747	647	574	558	663	581	713	501	330	259	467
(WY)	(1978)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2002)	(2000)	(1978)	(1989)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1978 - 2003	
ANNUAL TOTAL	258,222		320,458			
ANNUAL MEAN	707		878		2,157	
HIGHEST ANNUAL MEAN					4,180	1987
LOWEST ANNUAL MEAN					738	2002
HIGHEST DAILY MEAN	8,850	Sep 12	10,200	Sep 10	16,400	May 29, 1979
LOWEST DAILY MEAN	283	Jun 21	195	May 14	110	Aug 17, 1978
ANNUAL SEVEN-DAY MINIMUM	327	Jun 20	319	Aug 7	126	Aug 14, 1978
MAXIMUM PEAK FLOW			14,600	Sep 10	16,900	May 29, 1979
MAXIMUM PEAK STAGE			6.14	Sep 10	a6.60	Sep 11, 2002
INSTANTANEOUS LOW FLOW			180	May 14	110	Aug 19, 1978
ANNUAL RUNOFF (AC-FT)	512,200		635,600		1,563,000	
10 PERCENT EXCEEDS	853		1,400		5,270	
50 PERCENT EXCEEDS	657		643		1,270	
90 PERCENT EXCEEDS	378		452		637	

a Maximum gage height, 14.43 ft, Dec. 12, 1978 (backwater from ice).
e Estimated

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
JAN													
30...	0940	509	9.0	5.0	650	11.4	102	8.7	749	3.0	4.0	270	80.4
MAR													
20...	0910	931	1,900	1,100	643	9.8	95	8.3	796	9.0	6.5	270	80.6
MAY													
22...	1010	2,310	440	400	648	7.4	90	8.1	400	32.0	17.0	150	48.4
JUL													
10...	0930	426	28	24	648	7.2	96	8.4	577	27.0	21.0	190	58.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
JAN													
30...	16.7	2.61	2	58.9	122	145	2	19.4	0.35	2.9	228	483	509
MAR													
20...	17.2	2.80	2	65.3	132	159	--	19.0	0.36	8.3	245	516	563
MAY													
22...	7.70	1.80	0.7	19.5	83	101	--	7.60	0.3	6.3	91.6	233	254
JUL													
10...	11.7	2.58	1	40.8	120	140	3	11.6	0.3	4.5	147	349	369

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
JAN		
30...	69	38
MAR		
20...	--	--
MAY		
22...	--	--
JUL		
10...	--	--

09386900 RIO NUTRIA NEAR RAMAH, NM

LOCATION.--Lat 35°16'57", long 108°33'10", in NW $^1/_4$ SW $^1/_4$ 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 mi^2.

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.--Records fair except for those estimated, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.06	0.08	0.05	0.14	0.04	0.63	1.1	0.14	0.12	0.04	0.08
2	0.04	0.06	0.08	0.04	0.10	0.53	0.61	2.2	0.05	0.24	0.05	0.07
3	0.04	0.06	0.21	0.05	0.11	0.14	0.62	2.5	0.05	0.13	0.06	0.05
4	0.04	0.09	0.12	0.06	e0.11	0.53	0.40	e2.9	0.06	0.12	0.04	0.02
5	0.02	0.10	0.04	0.05	e0.12	0.16	0.35	e2.8	0.06	0.12	0.02	0.01
6	0.03	0.09	0.00	0.05	e0.11	0.01	0.16	e2.5	0.03	0.13	0.03	0.01
7	0.12	0.08	0.00	0.06	e0.12	1.1	0.00	e1.5	0.02	0.09	0.03	0.02
8	0.03	0.04	0.01	0.07	e0.13	12	0.00	e0.50	0.03	0.06	0.05	0.02
9	0.01	0.08	0.01	0.07	e0.14	16	0.00	e0.40	0.03	0.08	0.03	0.05
10	0.01	0.28	0.02	0.05	e0.14	12	0.00	e0.30	0.03	0.09	0.03	1.3
11	0.01	0.36	0.04	0.37	e0.15	8.1	0.00	e0.30	0.03	0.09	0.04	0.29
12	0.02	0.16	0.04	0.31	e0.16	5.2	0.00	e0.30	0.03	0.02	0.03	0.04
13	0.14	0.10	0.04	0.26	e0.13	3.2	0.02	e0.30	0.02	0.03	0.04	0.02
14	0.08	0.09	0.04	0.22	e0.11	3.1	0.08	e0.30	0.02	0.06	0.04	0.01
15	0.07	0.10	0.05	0.21	e0.14	1.4	0.23	e0.20	0.03	0.06	0.03	0.01
16	0.05	0.08	0.05	0.20	e0.10	0.90	0.39	e0.20	0.04	0.07	0.02	0.01
17	0.14	0.08	0.06	e0.20	e0.10	14	0.74	e0.20	0.06	0.06	0.03	0.01
18	0.18	0.07	0.06	0.22	e0.11	7.0	3.4	e0.20	0.10	0.07	0.04	0.01
19	0.17	0.08	0.06	0.22	e0.12	7.9	4.5	e0.10	0.12	0.05	1.1	0.01
20	0.10	0.09	0.04	0.23	0.13	16	2.9	e0.10	0.12	0.02	1.4	0.01
21	0.06	0.09	0.06	0.24	0.00	33	1.3	e0.10	0.11	0.02	0.04	0.01
22	0.13	0.07	0.05	0.24	0.00	56	0.34	e0.10	0.09	0.02	0.03	0.01
23	0.72	0.09	0.05	0.21	0.01	113	0.01	e0.11	0.07	0.03	0.03	0.02
24	0.22	0.06	0.04	0.18	0.00	81	1.7	e0.11	0.05	0.03	0.03	0.02
25	0.02	0.06	0.06	0.13	0.00	48	3.0	e0.11	0.06	0.03	0.11	0.02
26	0.04	0.07	0.04	0.15	0.00	32	0.20	e0.11	0.07	0.05	0.28	0.03
27	0.29	0.06	0.04	0.18	0.00	22	0.00	e0.12	0.06	0.03	0.48	0.04
28	0.07	0.06	0.05	0.12	0.00	8.0	0.00	e0.12	0.09	0.08	1.0	0.05
29	0.03	0.06	0.06	0.10	---	2.8	0.01	e0.06	0.12	0.05	0.20	0.05
30	0.04	0.06	0.05	0.10	---	1.5	0.13	0.08	0.25	0.04	0.17	0.04
31	0.04	---	0.05	0.11	---	0.93	---	0.11	---	0.05	0.12	---
TOTAL	2.99	2.83	1.60	4.75	2.48	507.54	21.72	20.03	2.04	2.14	5.64	2.34
MEAN	0.096	0.094	0.052	0.15	0.089	16.4	0.72	0.65	0.068	0.069	0.18	0.078
MAX	0.72	0.36	0.21	0.37	0.16	113	4.5	2.9	0.25	0.24	1.4	1.3
MIN	0.01	0.04	0.00	0.04	0.00	0.01	0.00	0.06	0.02	0.02	0.02	0.01
AC-FT	5.9	5.6	3.2	9.4	4.9	1,010	43	40	4.0	4.2	11	4.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	0.46	0.75	0.75	1.04	5.32	32.7	28.9	3.01	0.30	0.57	1.66	0.61
MAX	3.78	6.24	3.76	18.9	57.1	166	187	33.8	1.33	3.52	14.0	6.04
(WY)	(1999)	(1999)	(1984)	(1993)	(1995)	(1998)	(1973)	(1973)	(1973)	(1982)	(1997)	(1997)
MIN	0.028	0.023	0.019	0.058	0.084	0.11	0.040	0.026	0.031	0.015	0.038	0.033
(WY)	(1994)	(1978)	(1978)	(1976)	(1971)	(1972)	(2002)	(2001)	(1984)	(1993)	(1971)	(1983)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	45.60		576.10			
ANNUAL MEAN	0.12		1.58		6.34	
HIGHEST ANNUAL MEAN					22.4	1980
LOWEST ANNUAL MEAN					0.13	1976
HIGHEST DAILY MEAN	5.5	Sep 11	113	Mar 23	1,030	Mar 6, 1995
LOWEST DAILY MEAN	0.00	Apr 9	0.00	Dec 6	0.00	Oct 1, 1969
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 9	0.00	Feb 21	0.00	Oct 1, 1969
MAXIMUM PEAK FLOW			331	Mar 23	a1,850	Mar 5, 1995
MAXIMUM PEAK STAGE			7.58	Mar 23	b9.34	Mar 5, 1995
INSTANTANEOUS LOW FLOW			0.00	Dec 5	0.00	May 21, 2001
ANNUAL RUNOFF (AC-FT)	90		1,140		4,590	
10 PERCENT EXCEEDS	0.21		1.2		7.6	
50 PERCENT EXCEEDS	0.07		0.08		0.16	
90 PERCENT EXCEEDS	0.03		0.01		0.05	

a From rating curve extended above 470 ft^3/s, maximum gage height, 7.90 ft, Mar. 12, 1985.
b Datum then in use.
e Estimated

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM

LOCATION.--Lat 35°06'03", long 108°45'03", in NE ¼ 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 mi^2, of which 13 mi^2 is noncontributing.

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.--Records fair. Several observations of water temperature were made during the year. No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.15	0.55	0.44	2.0	0.40	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.19	0.41	0.48	1.4	0.34	0.00	0.00	0.00	0.45	0.00
3	0.00	0.00	0.95	0.37	0.32	1.5	0.33	0.00	0.00	0.00	2.5	0.00
4	0.00	0.00	2.2	0.47	0.28	1.3	0.18	0.00	0.00	0.00	0.13	0.00
5	0.00	0.00	0.71	0.59	0.39	1.1	0.12	0.00	0.00	0.00	0.02	0.00
6	0.00	0.00	0.33	0.98	0.45	0.95	0.10	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.24	1.5	0.38	0.92	0.14	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.32	1.6	0.73	0.73	0.51	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.35	2.5	0.70	0.59	0.66	0.00	0.00	0.00	0.00	16
10	0.00	0.00	0.51	1.1	0.57	0.57	0.38	0.00	0.00	0.00	0.00	4.2
11	0.00	0.00	0.30	0.99	0.57	0.58	0.11	0.00	0.00	0.00	0.00	1.1
12	0.00	0.00	0.23	0.86	0.67	0.52	0.05	0.00	0.00	0.00	0.00	0.18
13	0.00	0.00	0.26	0.72	0.99	0.43	0.01	0.00	0.00	0.00	0.00	0.05
14	0.00	0.00	0.27	0.64	1.3	0.48	0.01	0.00	0.00	0.00	0.00	0.01
15	0.00	0.00	0.34	0.62	1.2	0.49	0.01	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.27	0.51	0.85	0.70	0.01	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.49	0.50	0.65	1.9	0.01	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.34	0.46	0.89	3.5	0.53	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.49	0.48	1.4	3.8	0.29	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.32	0.54	1.0	1.7	0.12	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.25	0.61	0.81	1.3	0.06	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.47	0.57	0.76	1.2	0.04	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.44	0.55	0.59	0.93	0.04	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.40	0.55	0.52	0.73	0.05	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.43	0.48	0.61	0.69	0.05	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.44	0.43	1.2	0.68	0.03	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.25	0.42	2.0	0.52	0.01	0.00	0.00	0.00	2.6	0.00
28	0.00	10	0.22	0.42	2.5	0.54	0.00	0.00	0.00	0.00	17	0.00
29	0.00	0.04	0.33	0.40	---	0.53	0.00	0.00	0.00	0.00	2.9	0.00
30	0.00	0.09	0.60	0.41	---	0.42	0.00	0.00	0.00	0.25	0.13	0.00
31	0.00	---	0.55	0.45	---	0.43	---	0.00	---	0.08	0.01	---
TOTAL	0.00	10.13	13.64	21.68	23.25	33.13	4.59	0.00	0.00	0.33	25.74	21.54
MEAN	0.000	0.34	0.44	0.70	0.83	1.07	0.15	0.000	0.000	0.011	0.83	0.72
MAX	0.00	10	2.2	2.5	2.5	3.8	0.66	0.00	0.00	0.25	17	16
MIN	0.00	0.00	0.15	0.37	0.28	0.42	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	20	27	43	46	66	9.1	0.00	0.00	0.7	51	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	1.36	1.29	1.20	2.67	9.06	37.7	44.8	4.66	0.16	2.43	5.16	2.22
MAX	12.6	13.7	5.87	41.9	73.4	263	308	65.3	1.97	25.6	23.6	17.5
(WY)	(1984)	(1984)	(1984)	(1993)	(1980)	(1985)	(1973)	(1973)	(1979)	(1977)	(1977)	(1984)
MIN	0.000	0.000	0.013	0.11	0.33	0.25	0.009	0.000	0.000	0.000	0.000	0.000
(WY)	(1974)	(1971)	(1971)	(1977)	(1972)	(2002)	(1972)	(1997)	(1970)	(1971)	(1986)	(1979)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	136.88		154.03			
ANNUAL MEAN	0.38		0.42		9.36	
HIGHEST ANNUAL MEAN					46.9	1973
LOWEST ANNUAL MEAN					0.32	2002
HIGHEST DAILY MEAN	34	Sep 11	17	Aug 28	1,530	Mar 13, 1985
LOWEST DAILY MEAN	0.00	Apr 6	0.00	Oct 1	0.00	May 22, 1970
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 15	0.00	Oct 1	0.00	May 22, 1970
MAXIMUM PEAK FLOW			95	Sep 9	a5,200	Aug 4, 1974
MAXIMUM PEAK STAGE			3.87	Sep 9	6.61	Aug 4, 1974
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	Oct 1, 1995
ANNUAL RUNOFF (AC-FT)	272		306		6,780	
10 PERCENT EXCEEDS	0.55		0.94		8.5	
50 PERCENT EXCEEDS	0.00		0.00		0.60	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 670 ft^3/s, on basis of slope-area measurements at gage heights 4.05 ft, 3.95 ft, and 6.61 ft.

09430500 GILA RIVER NEAR GILA, NM

LOCATION.--Lat 33°03'39", long 108°32'19", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ 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, 7.0 mi northeast of Gila, and at mile 572.5.

DRAINAGE AREA.--1,864 mi^2.

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 with satellite telemetry. Datum of gage is 4,654.8 ft above National Geodetic Vertical Datum of 1929, from 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 datum 1.00 ft higher. Prior to Feb. 28, 1994, at datum 1.00 ft higher.

REMARKS.--Records good except for those estimated, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in Nov. 1905, Dec. 1906, and Jan. 1916.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	60	68	65	64	100	167	94	39	22	105	66
2	55	60	69	64	64	99	e156	93	38	22	58	59
3	52	59	77	63	63	101	149	89	35	21	63	49
4	50	61	79	63	63	101	158	85	30	21	55	42
5	50	63	78	64	63	99	162	84	29	19	44	37
6	50	63	74	64	63	96	155	83	31	18	37	38
7	59	62	72	64	63	92	146	81	31	17	38	46
8	60	61	71	65	65	85	136	77	31	16	36	69
9	58	62	73	69	67	83	126	74	31	15	35	62
10	56	62	72	70	66	85	116	69	30	15	31	61
11	53	64	70	70	64	92	109	66	29	17	29	59
12	51	64	69	69	64	102	104	65	27	22	29	71
13	51	64	68	68	68	111	104	65	25	24	29	67
14	52	64	66	68	76	117	108	61	23	21	33	55
15	52	65	65	67	78	120	122	59	24	17	43	48
16	52	65	65	67	77	126	144	58	23	18	47	42
17	51	66	66	66	79	140	151	56	26	18	50	37
18	56	66	73	65	81	156	141	56	38	17	46	34
19	57	65	76	64	81	165	131	58	54	17	43	32
20	57	65	72	62	82	155	125	60	49	21	44	32
21	57	64	68	66	84	158	119	60	39	23	42	30
22	58	64	67	67	84	170	110	60	31	41	41	29
23	59	64	73	67	82	177	100	57	28	33	35	31
24	61	64	76	66	80	185	97	52	23	31	34	30
25	60	64	73	65	80	200	97	48	22	29	34	28
26	59	65	69	66	94	210	92	46	20	35	46	32
27	57	67	66	66	105	208	89	46	20	33	50	30
28	57	67	64	65	103	204	87	45	20	41	48	29
29	57	66	63	65	---	209	89	43	22	41	53	27
30	57	66	65	64	---	198	92	42	23	36	53	26
31	60	---	65	64	---	181	---	43	---	39	75	---
TOTAL	1,718	1,912	2,172	2,038	2,103	4,325	3,682	1,975	891	760	1,406	1,298
MEAN	55.4	63.7	70.1	65.7	75.1	140	123	63.7	29.7	24.5	45.4	43.3
MAX	61	67	79	70	105	210	167	94	54	41	105	71
MIN	50	59	63	62	63	83	87	42	20	15	29	26
AC-FT	3,410	3,790	4,310	4,040	4,170	8,580	7,300	3,920	1,770	1,510	2,790	2,570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2003, BY WATER YEAR (WY)

MEAN	119	103	164	169	229	311	216	138	58.6	63.8	141	149
MAX	994	726	1,632	1,810	1,204	1,049	903	716	249	225	901	960
(WY)	(1973)	(1995)	(1979)	(1993)	(1993)	(1985)	(1973)	(1973)	(1992)	(1986)	(1988)	(1988)
MIN	29.1	47.8	50.1	50.0	50.9	53.9	49.2	31.8	19.2	22.3	37.5	24.0
(WY)	(1957)	(1951)	(1954)	(1954)	(1954)	(1971)	(1971)	(2000)	(2002)	(1971)	(2000)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1928 - 2003	
ANNUAL TOTAL	21,583		24,280			
ANNUAL MEAN	59.1		66.5		155	
HIGHEST ANNUAL MEAN					477	1979
LOWEST ANNUAL MEAN					47.8	1956
HIGHEST DAILY MEAN	896	Sep 12	210	Mar 26	23,400	Dec 28, 1984
LOWEST DAILY MEAN	12	Jun 24	15	Jul 9	12	Jun 24, 2002
ANNUAL SEVEN-DAY MINIMUM	14	Jun 21	17	Jul 5	14	Jun 21, 2002
MAXIMUM PEAK FLOW			216	Mar 26	a35,200	Dec 28, 1984
MAXIMUM PEAK STAGE			1.84	Mar 26	b13.00	Dec 28, 1984
INSTANTANEOUS LOW FLOW			14	Jul 8	12	Jun 24, 2002
ANNUAL RUNOFF (AC-FT)	42,810		48,160		112,500	
10 PERCENT EXCEEDS	70		110		308	
50 PERCENT EXCEEDS	58		63		73	
90 PERCENT EXCEEDS	25		28		39	

a From rating curve extended above 7,000 ft^3/s, on basis of slope-area measurement at gage height 12.5 ft, maximum gage height 17.2 ft, from floodmarks Sept. 29, 1941.
b From floodmarks.
e Estimated

09430600 MOGOLLON CREEK NEAR CLIFF, NM

LOCATION.--Lat 33°10'00", long 108°38'57", in SE ¼ SE ¼ 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 mi^2.

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.2	2.0	8.4	5.2	25	34	15	2.1	0.00	0.00	7.2
2	1.9	1.2	2.2	7.2	5.2	23	41	12	1.6	0.00	0.00	3.7
3	2.0	1.2	5.7	6.7	5.4	23	43	11	1.2	0.00	e0.00	2.4
4	2.0	1.8	5.5	8.3	5.3	34	37	11	0.38	0.00	e1.6	1.7
5	1.9	1.5	4.1	13	5.1	32	33	10	0.22	0.00	e9.7	1.4
6	1.7	1.5	3.4	15	4.6	30	30	9.2	0.20	0.00	e13	3.8
7	2.9	1.3	2.8	15	4.3	40	27	8.0	0.11	0.00	e16	2.1
8	3.3	1.2	3.2	15	5.1	52	24	7.3	0.00	0.00	e13	2.1
9	2.7	1.2	2.8	24	4.6	63	24	7.1	0.00	0.00	e10	1.6
10	2.2	6.1	2.5	21	4.6	69	25	6.4	0.00	0.00	e11	10
11	1.9	7.0	2.3	16	4.9	69	27	5.9	0.00	0.00	e9.5	17
12	1.7	3.9	2.2	13	4.9	65	31	5.2	0.00	0.00	e6.5	15
13	1.6	2.8	2.1	10	14	58	33	4.8	0.00	0.00	e3.3	8.3
14	1.5	2.2	2.1	8.9	43	60	34	5.3	0.00	0.00	e3.1	5.7
15	1.4	2.0	2.0	8.0	46	58	38	5.3	0.00	0.00	1.7	4.4
16	1.3	1.8	2.0	7.6	37	54	34	5.1	0.00	0.00	1.3	3.8
17	1.2	1.7	3.5	7.0	30	65	27	4.5	0.00	0.00	0.87	3.1
18	1.5	1.7	4.4	6.7	25	58	26	4.0	0.00	0.00	1.9	2.5
19	1.6	1.6	3.9	6.2	22	53	24	3.8	0.00	0.00	1.5	e2.1
20	1.5	1.6	4.7	5.9	22	52	20	3.4	0.00	0.00	1.6	e1.6
21	1.4	1.5	4.0	7.0	20	60	17	3.1	0.00	0.00	0.52	1.3
22	1.4	1.4	3.7	6.7	17	56	19	2.6	0.00	0.00	0.57	0.62
23	1.5	1.4	4.4	6.3	16	68	20	2.2	0.00	0.00	0.03	0.28
24	1.4	1.5	4.7	6.1	15	79	18	2.0	0.00	0.00	1.9	0.10
25	1.3	1.5	5.2	6.1	14	74	15	1.7	0.00	0.00	1.3	0.06
26	1.3	1.5	6.6	6.3	24	68	16	1.6	0.00	0.00	0.88	4.9
27	1.2	1.6	7.6	6.2	24	65	18	1.5	0.00	0.00	1.8	2.5
28	1.3	1.6	8.2	6.1	25	58	19	1.6	0.00	0.00	e4.2	1.5
29	1.3	1.6	12	6.1	---	47	20	1.8	0.00	0.00	e6.2	0.39
30	1.2	1.6	9.8	5.7	---	38	17	2.3	0.00	0.00	8.1	0.00
31	1.2	---	8.4	5.4	---	33	---	3.1	---	0.00	5.5	---
TOTAL	52.2	59.7	138.0	290.9	453.2	1,629	791	167.8	5.81	0.00	136.57	111.15
MEAN	1.68	1.99	4.45	9.38	16.2	52.5	26.4	5.41	0.19	0.000	4.41	3.71
MAX	3.3	7.0	12	24	46	79	43	15	2.1	0.00	16	17
MIN	1.2	1.2	2.0	5.4	4.3	23	15	1.5	0.00	0.00	0.00	0.00
AC-FT	104	118	274	577	899	3,230	1,570	333	12	0.00	271	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

MEAN	23.9	18.4	41.2	33.3	53.3	68.2	51.3	25.4	3.18	7.27	16.6	15.7
MAX	237	166	410	298	211	272	182	160	24.1	57.0	83.7	120
(WY)	(1973)	(1979)	(1979)	(1993)	(1968)	(1978)	(1973)	(1992)	(1992)	(1996)	(1996)	(1975)
MIN	0.14	1.07	1.03	1.14	0.94	1.33	0.90	0.000	0.000	0.000	1.02	0.34
(WY)	(1980)	(1971)	(1974)	(1971)	(2000)	(1971)	(1971)	(2002)	(1971)	(1980)	(1975)	(1987)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	1,572.90		3,835.33			
ANNUAL MEAN	4.31		10.5		29.9	
HIGHEST ANNUAL MEAN					97.0	1979
LOWEST ANNUAL MEAN					1.55	2000
HIGHEST DAILY MEAN	236	Sep 12	79	Mar 24	6,000	Dec 19, 1978
LOWEST DAILY MEAN	0.00	May 1	0.00	Jun 8	0.00	Jun 17, 1967
ANNUAL SEVEN-DAY MINIMUM	0.00	May 1	0.00	Jun 8	0.00	Jun 23, 1967
MAXIMUM PEAK FLOW			87	Mar 24	a10,800	Aug 12, 1967
MAXIMUM PEAK STAGE			2.60	Mar 24	b13.70	Aug 12, 1967
INSTANTANEOUS LOW FLOW			0.00	Jun 7	0.00	Oct 13, 1995
ANNUAL RUNOFF (AC-FT)	3,120		7,610		21,690	
10 PERCENT EXCEEDS	8.1		33		79	
50 PERCENT EXCEEDS	2.0		3.5		6.1	
90 PERCENT EXCEEDS	0.00		0.00		0.30	

a From rating curve extended above 220 ft^3/s, on basis of slope-area measurement of peak flow.
b From floodmarks.
e Estimated

09430815 UPPER GILA DITCH NEAR GILA, NM

LOCATION.--Lat 33°01'19", long 108°32'32", in SE ¼ SE ¼ SE ¼ sec.12, T.15 S., R.17 W., Grant County, Hydrologic Unit 15040002, on left bank 2,000 ft downstream from ditch heading, 5.5 mi northeast of Cliff, and 5.0 mi from Gila.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for those estimated, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	---	---	---	---	22	24	17	13	27	21
2	16	20	---	---	---	---	22	24	17	13	22	20
3	16	20	---	---	---	---	22	24	17	13	21	19
4	16	20	---	---	---	---	22	23	19	12	21	18
5	16	20	---	---	---	---	22	23	22	12	20	17
6	17	---	---	---	---	---	22	23	23	12	18	16
7	20	---	---	---	---	---	22	23	23	11	18	17
8	20	---	---	---	---	---	21	23	22	10	18	19
9	20	---	---	---	---	---	21	22	23	9.8	18	19
10	20	---	---	---	---	---	20	22	23	9.4	17	19
11	19	---	---	---	---	---	20	22	21	10	16	19
12	19	---	---	---	---	---	20	22	20	12	15	20
13	19	---	---	---	---	---	20	22	17	14	15	19
14	19	---	---	---	---	---	21	21	16	13	17	18
15	20	---	---	---	---	---	21	21	16	12	e16	18
16	19	---	---	---	---	---	21	21	16	11	e17	16
17	19	---	---	---	---	---	21	21	18	12	e17	17
18	20	---	---	---	---	24	21	21	22	11	e18	17
19	20	---	---	---	---	24	20	21	26	11	e18	15
20	20	---	---	---	---	24	20	21	25	12	e17	15
21	20	---	---	---	---	24	19	21	23	14	e18	15
22	20	---	---	---	---	24	19	21	20	21	e19	14
23	20	---	---	---	---	24	19	21	18	21	e19	15
24	20	---	---	---	---	23	18	20	15	19	e18	14
25	20	---	---	---	---	23	18	20	14	18	e17	13
26	20	---	---	---	---	24	18	19	14	20	e18	15
27	20	---	---	---	---	24	18	19	13	19	e18	14
28	20	---	---	---	---	24	17	19	14	21	19	e15
29	20	---	---	---	---	24	20	19	14	22	19	e16
30	20	---	---	---	---	23	24	18	14	20	19	e18
31	20	---	---	---	---	22	---	18	---	20	21	---
TOTAL	591	---	---	---	---	---	611	659	562	448.2	571	508
MEAN	19.1	---	---	---	---	---	20.4	21.3	18.7	14.5	18.4	16.9
MAX	20	---	---	---	---	---	24	24	26	22	27	21
MIN	16	---	---	---	---	---	17	18	13	9.4	15	13
AC-FT	1,170	---	---	---	---	---	1,210	1,310	1,110	889	1,130	1,010

e Estimated

09430820 FORT WEST DITCH NEAR GILA, NM

LOCATION.--Lat 33°00'56", long 108°32'36", in NE ¼ SE ¼ NE ¼, sec.12, T.15 S., R.17 W., Grant County, Hydrologic Unit 15040002, on left bank 4.5 mi east of Gila, and 5.8 mi southeast of Cliff.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder with Parshall flume. Elevation of gage is 4,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	10	---	---	---	---	23	15	16	12	20	9.3
2	17	10	---	---	---	---	23	15	16	10	18	9.2
3	17	9.9	---	---	---	---	23	15	16	9.7	20	8.6
4	17	9.2	---	---	---	---	23	14	14	9.3	18	8.2
5	16	8.5	---	---	---	---	23	14	13	8.9	16	7.6
6	16	---	---	---	---	---	22	14	13	8.6	15	7.2
7	16	---	---	---	---	---	22	14	14	8.4	16	7.3
8	16	---	---	---	---	---	21	13	14	7.9	15	7.6
9	15	---	---	---	---	---	20	17	14	7.7	15	7.3
10	15	---	---	---	---	---	19	27	14	7.5	14	7.7
11	14	---	---	---	---	---	19	26	14	7.8	13	8.6
12	14	---	---	---	---	---	19	26	13	9.0	12	8.8
13	14	---	---	---	---	---	19	26	12	11	11	8.5
14	14	---	---	---	---	---	18	25	13	9.4	11	7.8
15	13	---	---	---	---	---	20	25	12	8.2	12	7.8
16	13	---	---	---	---	---	21	25	12	7.7	12	14
17	13	---	---	---	---	---	21	24	13	8.0	13	17
18	12	---	---	---	---	30	20	25	19	7.7	13	16
19	12	---	---	---	---	30	19	25	23	7.7	13	15
20	12	---	---	---	---	28	19	25	21	8.5	12	15
21	12	---	---	---	---	26	18	21	18	9.4	12	14
22	12	---	---	---	---	26	17	19	15	15	12	14
23	12	---	---	---	---	26	16	19	13	15	11	15
24	12	---	---	---	---	27	16	18	11	18	10	15
25	12	---	---	---	---	27	16	18	11	13	9.6	13
26	12	---	---	---	---	27	15	18	10	14	9.2	15
27	11	---	---	---	---	27	14	17	10	14	9.6	14
28	11	---	---	---	---	26	14	17	10	15	9.4	14
29	11	---	---	---	---	26	15	17	10	16	13	13
30	10	---	---	---	---	25	15	17	11	14	13	13
31	10	---	---	---	---	24	---	17	---	14	10	---
TOTAL	418	---	---	---	---	---	570	608	415	332.4	407.8	338.5
MEAN	13.5	---	---	---	---	---	19.0	19.6	13.8	10.7	13.2	11.3
MAX	17	---	---	---	---	---	23	27	23	18	20	17
MIN	10	---	---	---	---	---	14	13	10	7.5	9.2	7.2
AC-FT	829	---	---	---	---	---	1,130	1,210	823	659	809	671

09430825 GILA FARMS DITCH NEAR GILA, NM

LOCATION.--Lat 32°59'00", long 108°34'13", in SW ¼ NE ¼ NW ¼, sec. 23, T.15 S., R.17 W., Grant County, Hydrologic Unit 15040002, on left bank 0.4 mi from State Highway 153 at Dominguez farms, 1.2 mi from Gila, and 2.5 mi from Cliff.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,550 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	8.9	---	---	---	---	11	8.5	10	3.7	11	14
2	3.0	9.5	---	---	---	---	11	7.1	9.6	3.3	13	13
3	1.6	9.8	---	---	---	---	11	6.4	8.6	3.0	10	4.3
4	e0.50	10	---	---	---	---	11	5.6	7.2	3.0	12	0.90
5	e0.00	9.3	---	---	---	---	11	4.8	5.5	2.9	9.7	0.67
6	e0.00	---	---	---	---	---	10	4.0	5.3	2.9	8.5	0.63
7	e2.0	---	---	---	---	---	10	3.6	4.8	3.1	8.1	0.55
8	9.7	---	---	---	---	---	10	6.1	4.4	3.3	7.6	5.9
9	4.0	---	---	---	---	---	9.7	8.4	3.3	3.2	7.1	12
10	0.53	---	---	---	---	---	9.5	6.8	3.7	2.8	7.0	14
11	0.35	---	---	---	---	---	9.4	5.7	3.1	2.5	6.5	14
12	1.9	---	---	---	---	---	9.2	5.7	4.7	2.3	5.8	14
13	5.3	---	---	---	---	---	9.3	5.3	6.5	2.1	5.4	15
14	6.4	---	---	---	---	---	9.5	5.0	7.0	1.9	5.5	14
15	7.6	---	---	---	---	---	9.2	4.4	7.8	1.6	6.4	6.5
16	6.5	---	---	---	---	---	9.5	4.1	8.5	1.6	9.5	6.7
17	6.2	---	---	---	---	---	9.4	3.5	8.1	1.7	9.8	7.1
18	7.9	---	---	---	---	12	9.2	3.3	8.2	1.8	9.3	2.5
19	8.5	---	---	---	---	12	8.9	3.1	8.8	1.4	11	1.1
20	8.6	---	---	---	---	12	8.7	3.5	6.5	1.1	11	3.0
21	8.5	---	---	---	---	12	8.5	3.5	1.8	1.1	7.5	4.5
22	6.2	---	---	---	---	12	6.8	3.2	0.58	0.96	7.7	6.2
23	3.4	---	---	---	---	12	6.1	3.5	3.3	0.92	7.5	5.7
24	2.1	---	---	---	---	12	5.0	2.6	5.1	2.5	6.4	5.6
25	0.81	---	---	---	---	12	4.2	2.1	6.1	5.2	6.2	8.0
26	0.39	---	---	---	---	12	2.5	1.9	5.4	5.4	1.6	7.2
27	4.0	---	---	---	---	12	2.1	4.6	4.9	5.9	0.60	9.1
28	7.7	---	---	---	---	12	6.4	12	4.7	5.0	0.55	11
29	7.0	---	---	---	---	12	7.8	12	4.3	4.7	0.55	12
30	8.8	---	---	---	---	12	10	12	3.9	5.3	0.55	12
31	8.8	---	---	---	---	11	---	11	---	5.9	8.3	---
TOTAL	143.68	---	---	---	---	---	255.9	173.3	171.68	92.08	221.65	231.15
MEAN	4.63	---	---	---	---	---	8.53	5.59	5.72	2.97	7.15	7.71
MAX	9.7	---	---	---	---	---	11	12	10	5.9	13	15
MIN	0.00	---	---	---	---	---	2.1	1.9	0.58	0.92	0.55	0.55
AC-FT	285	---	---	---	---	---	508	344	341	183	440	458

e Estimated

09431500 GILA RIVER NEAR REDROCK, NM

LOCATION.--Lat 32°43'37", long 108°40'30", in SW ¼ SW ¼ SW ¼ sec.23, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 0.2 mi 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 mi^2.

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" 1904-07.

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 with satellite telemetry. 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.--Records fair except for those estimated, which are poor. Diversions for irrigation of about 5,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e65	70	87	85	76	113	219	101	36	19	18	57
2	e60	73	88	85	74	112	204	105	34	19	20	50
3	55	75	95	84	73	113	208	103	32	18	18	43
4	56	76	98	84	70	113	208	98	30	17	17	37
5	57	77	99	83	73	115	212	99	27	17	16	35
6	56	73	99	82	70	115	209	95	27	16	15	33
7	73	71	97	79	67	112	199	96	21	15	16	31
8	107	72	96	81	67	111	192	94	16	15	13	31
9	82	72	95	82	57	110	176	89	16	14	10	33
10	69	79	96	83	57	113	160	85	20	15	10	35
11	73	82	91	85	55	121	151	78	15	16	11	36
12	68	82	82	87	54	128	145	80	21	15	11	33
13	61	83	80	87	72	138	e146	68	23	12	10	35
14	62	74	87	86	75	143	e149	65	22	11	11	34
15	62	72	86	85	81	156	e167	64	21	9.7	12	33
16	65	77	87	85	97	168	e192	62	20	8.7	12	32
17	58	75	86	85	81	193	e201	47	21	9.0	21	28
18	64	77	90	85	81	224	198	39	23	13	15	25
19	68	74	93	84	80	242	184	55	24	15	15	25
20	70	75	94	83	80	244	169	54	23	15	18	25
21	69	74	93	84	84	248	165	57	23	16	19	26
22	69	78	92	86	83	253	152	56	18	18	22	25
23	64	77	96	87	91	233	143	55	16	21	23	25
24	63	77	100	87	80	275	136	52	19	18	25	25
25	64	78	97	87	103	315	131	48	19	58	28	26
26	65	78	95	88	104	326	126	48	18	22	23	39
27	71	83	92	88	108	327	127	46	18	20	22	29
28	69	83	88	89	112	317	124	42	25	17	184	27
29	63	85	86	88	---	288	115	40	21	18	71	26
30	67	85	86	85	---	275	105	39	19	20	55	25
31	72	---	85	79	---	257	---	37	---	20	49	---
TOTAL	2,067	2,307	2,836	2,628	2,205	5,998	5,013	2,097	668	537.4	810	964
MEAN	66.7	76.9	91.5	84.8	78.8	193	167	67.6	22.3	17.3	26.1	32.1
MAX	107	85	100	89	112	327	219	105	36	58	184	57
MIN	55	70	80	79	54	110	105	37	15	8.7	10	25
AC-FT	4,100	4,580	5,630	5,210	4,370	11,900	9,940	4,160	1,320	1,070	1,610	1,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	200	164	316	300	388	469	297	183	58.6	74.3	206	227
MAX	1,768	912	2,200	2,987	1,692	1,438	1,155	1,068	278	287	1,182	1,315
(WY)	(1973)	(1995)	(1979)	(1993)	(1993)	(1978)	(1973)	(1992)	(1992)	(1986)	(1988)	(1975)
MIN	27.6	55.1	60.0	64.9	53.8	40.0	41.2	25.1	12.0	15.6	21.6	22.2
(WY)	(1974)	(1974)	(1981)	(1971)	(1971)	(1971)	(1971)	(1996)	(1974)	(1978)	(2000)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	27,525.1		28,130.4			
ANNUAL MEAN	75.4		77.1		240	
HIGHEST ANNUAL MEAN					664	1993
LOWEST ANNUAL MEAN					57.0	2000
HIGHEST DAILY MEAN	1,600	Sep 12	327	Mar 27	34,000	Dec 19, 1978
LOWEST DAILY MEAN	4.6	Jul 1	8.7	Jul 16	3.6	Jul 20, 1978
ANNUAL SEVEN-DAY MINIMUM	5.0	Jun 25	11	Aug 9	4.9	Jul 16, 1971
MAXIMUM PEAK FLOW			1,130	Aug 28	a48,800	Dec 19, 1978
MAXIMUM PEAK STAGE			7.59	Aug 28	b29.80	Dec 19, 1978
INSTANTANEOUS LOW FLOW			7.0	Aug 9	2.2	Aug 5, 1947
ANNUAL RUNOFF (AC-FT)	54,600		55,800		173,700	
10 PERCENT EXCEEDS	96		151		517	
50 PERCENT EXCEEDS	70		73		95	
90 PERCENT EXCEEDS	19		17		32	

a From rating curve extended above 9,500 ft^3/s, on basis of slope-area measurement of peak flow.
b In gage well and 34.10 ft from floodmarks.
e Estimated

09431500 GILA RIVER NEAR REDROCK, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-97, 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC													
04...	0910	94	660	9.4	96	8.3	412	7.5	10.0	140	42.7	8.58	2.14
APR													
03...	0910	209	656	9.4	102	8.1	312	18.0	12.0	99	29.6	6.14	1.50
JUN													
11...	0920	32	656	7.8	99	8.4	457	26.0	19.5	160	48.1	9.63	2.61
JUL													
24...	0845	42	660	6.6	89	8.1	501	29.0	23.0	180	54.5	9.72	3.32

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
04...	1	34.3	134	160	--	16.2	1.89	35.1	34.1	254	--	--	--
APR													
03...	1	26.4	111	134	--	10.1	1.94	33.8	23.1	200	<0.20	0.30	0.01
JUN													
11...	1	36.3	160	190	2	15.3	2.0	35.0	43.2	288	--	--	--
JUL													
24...	1	35.7	172	209	--	15.2	1.8	34.3	52.7	310	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	50	--
APR													
03...	0.06	0.26	<0.010	0.03	0.03	0.09	3	<0.30	<2	13	<0.06	30	<0.04
JUN													
11...	--	--	--	--	--	--	--	--	--	--	--	50	--
JUL													
24...	--	--	--	--	--	--	--	--	--	--	--	60	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
DEC													
04...	--	--	--	<10	--	--	<0.02	--	--	--	<3	--	--
APR													
03...	<0.8	0.10	0.8	<10	<0.08	3.4	<0.02	1.8	0.33	<3	<3	<0.20	M
JUN													
11...	--	--	--	<8	--	--	<0.02	--	--	--	<3	--	--
JUL													
24...	--	--	--	<8	--	--	E.01	--	--	--	<5	--	--

09431500 GILA RIVER NEAR REDROCK, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
DEC			
04...	--	98	33
APR			
03...	1.14	86	75
JUN			
11...	--	62	22
JUL			
24...	--	100	208

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

09431503 GRANDPA HARPER DITCH NEAR REDROCK, NM

LOCATION.--Lat 32°43'36", long 108°41'15", in SE ¼ NW ¼ NW ¼, sec.22, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 2 mi northeast of Redrock, 24 mi north of Lordsburg, and 27 mi west of Silver City.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder with Parshall flume. Elevation of gage is 4,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	0.00	---	---	---	---	4.5	8.8	0.55	9.4	5.4	1.1
2	7.7	0.00	---	---	---	---	7.0	4.9	0.51	7.9	3.1	1.1
3	7.9	0.00	---	---	---	---	7.1	2.5	0.41	1.2	2.9	1.1
4	8.3	0.00	---	---	---	---	7.5	2.5	0.43	1.1	2.7	1.2
5	8.3	---	---	---	---	---	7.5	2.4	0.36	1.2	2.2	1.2
6	5.8	---	---	---	---	---	7.6	2.3	0.43	2.8	1.6	1.3
7	0.14	---	---	---	---	---	7.5	2.2	0.44	8.8	1.4	1.3
8	0.10	---	---	---	---	---	7.5	2.0	2.2	8.3	1.2	3.3
9	0.00	---	---	---	---	---	6.0	3.3	7.2	0.15	1.1	8.6
10	0.00	---	---	---	---	---	1.9	11	8.7	0.23	0.84	8.8
11	0.00	---	---	---	---	0.49	1.8	8.3	6.7	0.40	0.57	8.6
12	0.00	---	---	---	---	0.47	1.6	1.7	8.6	0.98	0.42	4.3
13	0.00	---	---	---	---	0.50	1.5	1.4	9.9	1.7	1.1	1.8
14	0.00	---	---	---	---	2.7	1.3	1.3	9.9	1.0	0.43	1.5
15	0.00	---	---	---	---	8.2	4.0	1.2	7.1	0.60	0.43	1.4
16	0.00	---	---	---	---	8.4	8.0	1.1	0.97	0.36	0.52	1.4
17	0.00	---	---	---	---	4.1	4.6	1.1	1.0	0.52	0.50	1.3
18	0.00	---	---	---	---	0.93	2.2	0.99	0.91	0.40	0.88	1.3
19	0.00	---	---	---	---	0.84	2.0	0.90	0.69	0.27	0.93	1.2
20	0.00	---	---	---	---	0.56	2.1	0.82	1.6	0.62	0.87	1.0
21	0.00	---	---	---	---	0.48	2.1	0.75	6.4	0.99	0.81	1.0
22	0.00	---	---	---	---	0.23	1.7	0.71	5.2	4.0	0.75	1.0
23	0.00	---	---	---	---	1.3	6.5	2.4	1.0	3.5	0.82	0.93
24	0.00	---	---	---	---	5.4	9.0	8.0	0.99	3.0	4.0	0.93
25	0.00	---	---	---	---	5.7	9.1	7.0	0.99	2.4	7.9	0.86
26	0.00	---	---	---	---	4.3	9.2	6.6	0.73	2.8	3.7	e0.50
27	0.00	---	---	---	---	3.7	9.3	6.1	0.71	2.8	1.1	e0.45
28	0.00	---	---	---	---	3.5	9.3	5.6	0.61	3.3	1.1	e0.40
29	0.00	---	---	---	---	2.7	9.1	2.3	0.05	3.7	1.0	e0.30
30	0.00	---	---	---	---	2.1	8.8	0.76	4.7	2.9	1.2	e0.30
31	0.00	---	---	---	---	2.0	---	0.71	---	2.7	1.1	---
TOTAL	46.24	---	---	---	---	---	167.3	101.64	89.98	80.02	52.57	59.47
MEAN	1.49	---	---	---	---	---	5.58	3.28	3.00	2.58	1.70	1.98
MAX	8.3	---	---	---	---	---	9.3	11	9.9	9.4	7.9	8.8
MIN	0.00	---	---	---	---	---	1.3	0.71	0.05	0.15	0.42	0.30
AC-FT	92	---	---	---	---	---	332	202	178	159	104	118

e Estimated

09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM

LOCATION.--Lat 32°38'53", long 108°50'43", in SE ¼ SW ¼ sec.18, T.19 S., R.19 W., Grant County, Hydrologic Unit 15040002, on left bank at head of canyon, 1.4 mi downstream from Blue Creek, 10 mi east of Virden, and 16 mi upstream from New Mexico-Arizona State line.

DRAINAGE AREA.--3,203 mi^2, excluding Animas River Basin.

PERIOD OF RECORD.--May to November 1914, March to September 1915, July 1927 to current year. July 1927 to May 1931, monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi downstream, and in Sunset Canal. Published as "Gila River near Duncan, AZ," 1914-15, and as "Gila River at Fuller's Ranch, near Duncan, AZ," 1931-38.

REVISED RECORDS.--WSP 1283: drainage area. WSP 1313: 1929, 1931-32(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,875 ft above sea level, from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum. Since Apr. 18, 1980, supplementary gage on left bank 800 ft downstream at same datum. Since June 1980, crest-stage gages at supplementary gage site. Since Nov. 1990, water-stage recorder at supplementary gage.

REMARKS.--Records fair except for those estimated, which are poor. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,700 ft^3/s Dec. 19, 1978, gage height, 29.00 ft, from rating curve extended above 38,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, 1 ft^3/s July 14, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,920 ft^3/s, Oct. 7, gage height, 9.34 ft; minimum daily discharge, 3.8 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	72	88	91	75	102	226	109	34	12	13	e98
2	53	72	88	91	74	106	200	107	33	12	12	e84
3	52	73	92	89	71	112	190	108	31	11	13	e65
4	51	74	92	89	68	113	188	105	29	11	12	57
5	51	75	94	89	68	114	184	103	27	11	11	54
6	50	75	95	87	69	115	184	101	25	11	9.9	46
7	1,330	72	95	84	69	116	180	98	23	9.8	9.5	40
8	189	73	94	84	69	116	172	96	20	8.5	9.6	39
9	101	73	93	85	71	116	164	93	17	7.8	8.8	43
10	85	75	94	85	69	121	158	88	15	7.4	8.3	44
11	80	76	93	86	68	127	151	79	14	7.5	8.1	42
12	77	77	91	87	67	130	145	79	13	7.6	8.0	37
13	74	78	87	88	70	135	140	75	12	e7.7	8.7	41
14	71	77	88	88	75	139	141	68	11	e7.1	9.2	48
15	72	74	90	88	77	145	140	66	10	6.5	9.5	55
16	71	74	90	85	85	153	147	63	10	6.1	10	49
17	69	76	90	85	85	162	156	60	11	5.9	11	48
18	68	75	91	84	83	183	158	54	12	5.8	34	29
19	71	75	91	84	83	203	154	52	13	5.4	21	24
20	72	74	93	83	84	217	144	54	13	4.9	16	21
21	72	74	94	82	86	224	139	53	13	4.5	18	17
22	73	79	93	82	86	231	134	53	12	4.5	19	e14
23	72	84	95	83	93	227	128	51	11	4.2	20	e15
24	70	83	96	84	85	233	123	49	10	3.8	22	14
25	69	83	96	83	95	265	120	46	10	7.0	36	14
26	69	84	96	82	98	282	117	44	10	12	26	18
27	70	84	94	81	97	293	117	43	9.9	10	31	36
28	72	85	92	82	99	294	117	42	10	11	194	77
29	70	87	91	81	---	276	112	38	12	11	123	24
30	68	87	90	80	---	265	110	37	13	15	93	19
31	71	---	89	77	---	255	---	36	---	14	86	---
TOTAL	3,518	2,320	2,855	2,629	2,219	5,570	4,539	2,150	483.9	263.0	910.6	1,212
MEAN	113	77.3	92.1	84.8	79.2	180	151	69.4	16.1	8.48	29.4	40.4
MAX	1,330	87	96	91	99	294	226	109	34	15	194	98
MIN	50	72	87	77	67	102	110	36	9.9	3.8	8.0	14
AC-FT	6,980	4,600	5,660	5,210	4,400	11,050	9,000	4,260	960	522	1,810	2,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2003, BY WATER YEAR (WY)

MEAN	161	138	244	302	347	418	266	147	49.6	74.1	199	200
MAX	1,667	1,040	2,485	4,158	1,752	1,464	1,138	977	298	366	1,164	1,507
(WY)	(1973)	(1995)	(1979)	(1993)	(1993)	(1973)	(1973)	(1992)	(1992)	(1986)	(1988)	(1975)
MIN	5.39	34.9	47.6	64.0	61.1	45.1	27.7	13.5	4.43	4.85	9.35	4.89
(WY)	(1957)	(1957)	(1957)	(1981)	(1971)	(1971)	(1955)	(1956)	(1956)	(1951)	(1951)	(1953)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1932 - 2003	
ANNUAL TOTAL	30,074.1		28,669.5			
ANNUAL MEAN	82.4		78.5		207	
HIGHEST ANNUAL MEAN					746	1993
LOWEST ANNUAL MEAN					43.1	1956
HIGHEST DAILY MEAN	2,360	Sep 12	1,330	Oct 7	33,100	Dec 19, 1978
LOWEST DAILY MEAN	3.0	Jul 13	3.8	Jul 24	1.7	Jul 11, 1956
ANNUAL SEVEN-DAY MINIMUM	3.2	Jul 1	4.7	Jul 18	2.0	Sep 26, 1956
ANNUAL RUNOFF (AC-FT)	59,650		56,870		149,900	
10 PERCENT EXCEEDS	98		144		439	
50 PERCENT EXCEEDS	69		75		92	
90 PERCENT EXCEEDS	9.8		10		22	

e Estimated

09442625 NORTH SIDE LUNA DITCH NEAR LUNA, NM

LOCATION.--Lat 33°49'05", long 108°59'18" in NE ¼ NE ¼ NE ¼ sec.14, T.6 S., R.21 W., Catron County, Hydrologic Unit 15040004, on left bank ¼ mi downstream from ditch heading and 2 mi northeast of Luna, and 250 ft from U.S. Highway 180 at road side park on left side of highway.

PERIOD OF RECORD.--March to September 2003 (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 7,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	1.2	1.1	0.37	2.4	0.30
2	---	---	---	---	---	---	0.00	1.2	0.64	0.23	2.5	1.0
3	---	---	---	---	---	---	0.00	1.1	1.7	0.11	2.5	0.18
4	---	---	---	---	---	---	0.00	1.1	0.60	3.5	2.4	1.1
5	---	---	---	---	---	---	0.00	1.1	1.1	3.4	2.3	2.5
6	---	---	---	---	---	---	0.00	1.0	0.53	2.2	2.2	2.1
7	---	---	---	---	---	---	0.93	1.0	0.32	1.8	2.3	0.93
8	---	---	---	---	---	---	2.3	0.98	3.7	1.4	2.3	0.52
9	---	---	---	---	---	---	2.2	0.94	4.2	1.00	2.1	0.57
10	---	---	---	---	---	---	1.8	0.90	4.2	0.51	2.0	2.9
11	---	---	---	---	---	---	1.7	0.90	4.1	1.8	2.1	2.0
12	---	---	---	---	---	---	1.7	0.85	4.0	1.8	1.5	1.0
13	---	---	---	---	---	---	1.6	0.81	3.9	1.6	0.52	0.71
14	---	---	---	---	---	---	1.6	1.2	3.8	1.6	0.53	0.56
15	---	---	---	---	---	---	1.6	1.5	3.4	1.1	0.34	0.46
16	---	---	---	---	---	---	1.7	1.2	2.9	0.79	0.15	0.38
17	---	---	---	---	---	---	1.5	0.92	1.8	0.66	0.07	0.34
18	---	---	---	---	---	---	1.5	0.89	0.95	1.0	0.03	0.31
19	---	---	---	---	---	---	1.4	0.74	0.65	1.1	0.02	0.28
20	---	---	---	---	---	---	0.10	1.3	0.64	1.2	1.0	0.02	0.28
21	---	---	---	---	---	---	0.07	1.2	0.61	0.59	1.8	0.01	0.25
22	---	---	---	---	---	---	0.04	1.2	0.58	0.37	1.9	0.00	0.24
23	---	---	---	---	---	---	0.03	1.1	0.52	0.84	1.7	0.00	0.22
24	---	---	---	---	---	---	0.02	1.1	0.46	3.1	1.2	0.00	0.22
25	---	---	---	---	---	---	0.01	1.1	0.76	2.4	1.1	0.00	0.24
26	---	---	---	---	---	---	0.01	1.2	1.1	2.1	1.0	0.00	0.19
27	---	---	---	---	---	---	0.00	1.4	3.6	2.3	1.6	0.00	0.14
28	---	---	---	---	---	---	0.00	1.4	3.0	1.5	0.68	0.01	0.10
29	---	---	---	---	---	---	0.00	1.3	1.8	1.0	2.1	0.02	0.04
30	---	---	---	---	---	---	0.00	1.3	1.3	0.65	2.5	0.17	0.03
31	---	---	---	---	---	---	0.00	---	1.6	---	2.5	0.12	---
TOTAL	---	---	---	---	---	---	---	35.13	35.50	59.64	45.05	28.61	20.09
MEAN	---	---	---	---	---	---	---	1.17	1.15	1.99	1.45	0.92	0.67
MAX	---	---	---	---	---	---	---	2.3	3.6	4.2	3.5	2.5	2.9
MIN	---	---	---	---	---	---	---	0.00	0.46	0.32	0.11	0.00	0.03
AC-FT	---	---	---	---	---	---	---	70	70	118	89	57	40

09442666 W.S. LANEY DITCH NEAR LUNA, NM

LOCATION.--Lat 33°51'46", long 108°52'24", in SE¼,SE¼,SW¼, sec. 13, T.5 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank 9.0 mi northeast of Luna, and 20 mi north of Reserve, NM.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder with Parshall flume. Elevation of gage is 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.91	1.7	---	---	---	---	0.26	0.70	0.59	0.31	0.74	0.70
2	0.98	2.1	---	---	---	---	0.26	0.15	0.64	0.31	1.5	0.71
3	1.0	2.0	---	---	---	---	0.24	0.00	0.67	0.30	0.99	0.63
4	1.4	2.4	---	---	---	---	0.23	0.01	0.68	0.29	0.68	0.61
5	1.4	---	---	---	---	---	0.20	0.02	0.73	0.29	0.54	0.68
6	1.3	---	---	---	---	---	0.42	0.04	0.81	0.35	0.83	0.68
7	1.3	---	---	---	---	---	0.71	0.05	0.87	0.41	0.59	0.62
8	1.4	---	---	---	---	---	0.70	0.05	0.85	0.41	0.56	0.54
9	1.2	---	---	---	---	---	0.71	0.05	0.89	0.40	0.62	0.57
10	0.87	---	---	---	---	---	0.70	0.06	0.90	0.37	0.55	0.79
11	0.83	---	---	---	---	---	0.71	0.07	0.92	0.37	0.58	0.66
12	0.80	---	---	---	---	---	0.72	0.09	0.94	0.42	0.59	0.51
13	0.81	---	---	---	---	---	0.69	0.10	0.95	0.42	0.64	0.48
14	1.1	---	---	---	---	---	0.54	0.11	0.99	0.41	0.75	0.45
15	1.5	---	---	---	---	---	0.38	0.12	1.00	0.41	0.81	0.47
16	1.5	---	---	---	---	---	0.35	0.11	1.0	0.42	0.80	0.46
17	1.5	---	---	---	---	---	0.35	0.10	1.1	0.41	0.66	0.46
18	1.6	---	---	---	---	---	0.32	0.10	1.4	0.43	0.67	0.44
19	1.2	---	---	---	---	---	0.32	0.12	1.8	0.41	0.89	0.47
20	1.1	---	---	---	---	0.89	0.32	0.14	1.8	0.46	2.0	0.55
21	1.1	---	---	---	---	0.87	0.31	0.16	1.8	0.49	1.0	0.53
22	1.1	---	---	---	---	0.82	0.30	0.17	1.8	0.52	0.76	0.54
23	1.1	---	---	---	---	0.80	0.27	0.19	1.8	0.48	0.64	0.56
24	1.2	---	---	---	---	0.88	0.44	0.21	1.1	0.48	0.73	0.59
25	1.1	---	---	---	---	1.0	0.71	0.25	0.31	0.55	0.62	0.66
26	1.1	---	---	---	---	0.89	0.70	0.34	0.31	0.51	0.62	0.63
27	1.2	---	---	---	---	0.84	0.71	0.37	0.31	0.88	0.65	0.62
28	1.2	---	---	---	---	0.96	0.70	0.41	0.33	0.61	0.86	0.60
29	1.2	---	---	---	---	0.93	0.71	0.43	0.33	0.64	0.87	0.61
30	1.2	---	---	---	---	0.68	0.72	0.47	0.32	0.59	0.79	0.62
31	1.2	---	---	---	---	0.27	---	0.54	---	0.63	0.70	---
TOTAL	36.40	---	---	---	---	---	14.70	5.73	27.94	13.98	24.23	17.44
MEAN	1.17	---	---	---	---	---	0.49	0.18	0.93	0.45	0.78	0.58
MAX	1.6	---	---	---	---	---	0.72	0.70	1.8	0.88	2.0	0.79
MIN	0.80	---	---	---	---	---	0.20	0.00	0.31	0.29	0.54	0.44
AC-FT	72	---	---	---	---	---	29	11	55	28	48	35

09442669 LEWIS DITCH NEAR RESERVE, NM

LOCATION.--Lat 33°48'27", long 108°46'52", in SW 1/4 SE 1/4 NW 1/4 sec.2, T.6 S., R.19 W., Catron County, Hydrologic Unit 15040004, on right bank 50 ft downstream from ditch heading, 7.0 mi due north of Reserve, and 4.0 mi northwest of State Highway 12 at JTS Park turn.

PERIOD OF RECORD.--October 2002 to September 2003 (irrigation season only).

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

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	4.8	---	---	---	---	10	4.5	2.4	2.1	1.8	2.0
2	2.3	4.1	---	---	---	---	9.9	4.5	2.4	1.9	1.8	2.0
3	2.1	3.3	---	---	---	---	9.6	4.3	2.4	1.8	1.8	2.1
4	2.0	5.1	---	---	---	---	9.2	4.3	2.3	1.9	1.7	2.0
5	2.2	---	---	---	---	---	8.8	4.2	2.3	1.9	1.6	2.5
6	2.2	---	---	---	---	---	8.5	4.2	2.3	1.8	1.6	2.9
7	2.2	---	---	---	---	---	8.3	4.3	2.4	1.8	1.6	2.6
8	2.3	---	---	---	---	---	7.8	4.3	2.4	1.6	1.6	2.2
9	2.3	---	---	---	---	---	6.9	4.1	2.4	1.5	1.9	2.3
10	2.4	---	---	---	---	---	6.6	3.6	2.4	1.5	1.7	3.4
11	2.5	---	---	---	---	---	6.5	3.5	2.1	1.6	1.7	3.0
12	2.5	---	---	---	---	---	6.4	3.4	2.1	1.7	1.8	2.5
13	2.9	---	---	---	---	---	6.0	3.3	2.0	1.7	1.8	2.3
14	2.8	---	---	---	---	---	5.8	3.3	2.0	1.6	2.1	2.1
15	2.5	---	---	---	---	---	6.6	3.3	1.9	1.6	2.3	2.1
16	3.0	---	---	---	---	---	6.5	3.2	1.9	1.7	2.3	2.0
17	3.6	---	---	---	---	---	6.1	2.9	2.1	1.6	2.2	2.1
18	4.5	---	---	---	---	---	5.8	2.9	2.4	1.7	2.0	2.0
19	4.1	---	---	---	---	---	5.7	2.9	2.5	1.7	1.9	1.9
20	3.1	---	---	---	---	---	5.6	2.9	2.2	1.7	2.0	2.0
21	3.0	---	---	---	---	14	5.4	2.9	2.1	1.8	2.2	1.9
22	3.2	---	---	---	---	14	5.3	2.9	2.0	1.9	2.2	1.9
23	3.2	---	---	---	---	13	5.2	2.9	1.9	1.8	1.9	2.0
24	3.1	---	---	---	---	13	5.0	2.7	1.9	1.7	1.9	2.0
25	3.2	---	---	---	---	12	4.8	2.6	1.9	1.8	1.9	2.2
26	3.4	---	---	---	---	12	4.9	2.6	1.9	1.7	2.0	2.2
27	4.0	---	---	---	---	12	4.8	2.6	1.9	1.9	2.1	2.1
28	4.4	---	---	---	---	12	4.6	2.6	2.2	1.8	2.5	2.0
29	4.4	---	---	---	---	11	4.6	2.5	2.3	1.8	2.5	2.0
30	4.4	---	---	---	---	11	4.6	2.5	2.2	1.7	2.4	2.1
31	4.7	---	---	---	---	11	---	2.5	---	1.8	2.1	---
TOTAL	94.4	---	---	---	---	---	195.8	103.2	65.2	54.1	60.9	66.4
MEAN	3.05	---	---	---	---	---	6.53	3.33	2.17	1.75	1.96	2.21
MAX	4.7	---	---	---	---	---	10	4.5	2.5	2.1	2.5	3.4
MIN	1.9	---	---	---	---	---	4.6	2.5	1.9	1.5	1.6	1.9
AC-FT	187	---	---	---	---	---	388	205	129	107	121	132

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

LOCATION.--Lat 33°44'12", long 108°46'14", in NE ¼ NW ¼ SE ¼ 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 mi^2, 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 with satellite telemetry. 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 fiar, except for those estimated, which are poor. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres upstream from station. Several observations of water temperature were made during the year.

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 ft^3/s at Alma (downstream). See WSP 1313.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.1	4.6	5.1	4.6	7.6	12	5.0	3.0	6.0	1.9	3.4
2	4.5	3.9	4.6	4.3	4.6	7.3	11	5.8	4.9	4.4	2.8	3.2
3	4.4	3.8	5.8	4.9	4.1	7.1	11	5.7	3.1	1.6	2.2	3.0
4	4.3	4.5	5.6	5.1	4.0	7.2	10	5.2	3.0	1.6	1.5	2.9
5	4.2	4.6	5.2	5.3	3.2	7.4	9.5	5.3	3.0	1.4	1.0	3.1
6	4.1	4.2	4.9	5.6	3.4	7.8	9.0	5.2	5.0	1.1	0.92	3.5
7	4.0	4.2	4.8	5.4	3.3	7.7	8.8	5.0	5.3	1.2	1.2	3.6
8	4.4	4.2	4.9	5.5	4.2	8.1	8.6	4.7	4.1	1.1	1.2	3.3
9	4.2	4.5	4.9	5.7	4.1	8.8	7.7	5.1	5.3	1.0	1.1	3.1
10	3.7	4.8	4.6	5.5	4.3	11	7.4	4.6	4.9	0.82	0.99	4.7
11	3.6	4.9	5.0	5.4	4.4	13	7.2	4.2	3.9	0.86	1.4	3.7
12	3.6	4.6	4.5	5.2	4.6	13	7.2	4.4	4.1	1.3	1.5	3.4
13	3.6	4.6	4.5	5.1	6.0	13	6.8	4.2	4.0	0.84	1.8	3.1
14	3.8	4.4	4.5	5.0	7.8	12	6.5	4.1	3.6	0.79	2.9	2.9
15	5.0	4.3	4.8	5.0	7.2	12	7.0	3.6	3.4	0.82	3.0	2.8
16	4.2	4.4	4.7	5.0	6.8	12	7.6	3.7	3.6	1.1	2.7	2.4
17	4.3	4.7	4.9	4.9	6.4	14	7.0	3.5	4.4	1.3	2.2	2.2
18	4.8	4.4	4.8	5.0	6.1	19	6.6	4.1	4.8	1.3	1.9	2.1
19	5.2	4.2	4.9	5.0	5.9	22	6.4	6.1	4.8	1.2	2.0	2.0
20	4.6	4.1	4.0	4.5	6.0	22	5.8	7.2	4.6	1.3	2.2	2.0
21	4.6	4.2	5.0	e4.8	6.2	21	5.1	7.0	4.7	2.4	2.2	1.9
22	5.3	4.2	4.9	e5.0	5.9	19	5.2	4.8	4.5	2.2	2.6	1.9
23	5.2	4.2	5.4	5.0	5.7	17	6.0	8.4	4.3	1.8	2.1	1.9
24	4.4	4.2	5.5	4.9	5.6	16	5.6	6.8	4.6	2.7	2.1	2.0
25	3.9	4.2	5.0	5.0	5.7	16	5.9	4.0	4.7	2.7	2.3	2.0
26	4.5	4.3	4.4	4.8	7.5	15	5.4	5.6	4.7	2.4	2.4	2.0
27	4.8	4.2	3.6	4.7	7.8	15	5.6	4.3	5.3	2.0	3.5	1.9
28	4.6	4.3	4.5	4.7	7.7	14	5.2	4.6	6.8	1.6	2.5	1.8
29	4.4	4.3	5.0	4.7	---	13	5.4	3.1	6.3	1.6	2.7	1.8
30	4.2	4.4	5.4	4.7	---	13	5.6	2.8	6.1	1.6	8.4	1.6
31	4.1	---	4.6	4.6	---	13	---	4.0	---	1.7	4.5	---
TOTAL	134.5	129.9	149.8	155.4	153.1	404.0	218.1	152.1	134.8	53.73	71.71	79.2
MEAN	4.34	4.33	4.83	5.01	5.47	13.0	7.27	4.91	4.49	1.73	2.31	2.64
MAX	5.3	4.9	5.8	5.7	7.8	22	12	8.4	6.8	6.0	8.4	4.7
MIN	3.6	3.8	3.6	4.3	3.2	7.1	5.1	2.8	3.0	0.79	0.92	1.6
AC-FT	267	258	297	308	304	801	433	302	267	107	142	157

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	27.7	19.0	19.5	20.1	36.7	72.4	49.7	18.5	6.31	8.08	16.6	18.7
MAX	430	211	159	159	231	336	398	162	39.7	28.3	96.2	172
(WY)	(1984)	(1979)	(1979)	(1993)	(1993)	(1985)	(1973)	(1973)	(1992)	(1967)	(1999)	(1983)
MIN	3.27	4.33	4.83	5.01	5.14	4.04	3.38	2.27	1.39	1.34	2.31	1.75
(WY)	(1983)	(2003)	(2003)	(2003)	(1964)	(1959)	(1967)	(2002)	(1990)	(1995)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1959 - 2003	
ANNUAL TOTAL	1,932.4		1,836.34			
ANNUAL MEAN	5.29		5.03		26.3	
HIGHEST ANNUAL MEAN					101	1973
LOWEST ANNUAL MEAN					5.03	2003
HIGHEST DAILY MEAN	222	Sep 11	22	Mar 19	5,000	Oct 20, 1972
LOWEST DAILY MEAN	1.1	May 18	0.79	Jul 14	0.24	Jul 18, 1997
ANNUAL SEVEN-DAY MINIMUM	1.3	May 22	0.92	Jul 9	0.43	Sep 21, 2000
MAXIMUM PEAK FLOW			197	Aug 30	a9,830	Oct 1, 1983
MAXIMUM PEAK STAGE			2.64	Aug 30	b11.71	Oct 1, 1983
INSTANTANEOUS LOW FLOW			0.00	Jul 5	0.00	Jul 5, 2003
ANNUAL RUNOFF (AC-FT)	3,830		3,640		19,090	
10 PERCENT EXCEEDS	6.9		7.8		51	
50 PERCENT EXCEEDS	4.4		4.6		8.2	
90 PERCENT EXCEEDS	2.2		1.9		3.4	

a From rating curve extended above 1,400 ft^3/s, on basis of slope-area measurement of peak flow.
b Recorded, 11.30 ft, from floodmarks.
e Estimated

09442682 KIEHNE DITCH NEAR RESERVE, NM

LOCATION.--Lat 33°42'14", long 108°45'24", in SE ¼ SW ¼ NE ¼, sec. 12, T.7 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 0.7 mi southwest of Reserve, and 12.7 mi southwest of Apache Creek, NM.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder with Parshall flume. Elevation of gage is 5,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	0.00	---	---	---	---	0.00	4.0	2.7	0.88	0.51	1.2
2	1.0	0.00	---	---	---	---	0.00	4.5	2.5	0.78	0.50	0.62
3	0.19	0.00	---	---	---	---	0.00	5.1	2.5	0.73	0.42	0.25
4	0.03	---	---	---	---	---	0.00	5.4	2.4	0.51	0.61	0.23
5	0.04	---	---	---	---	---	0.00	5.7	2.5	0.54	0.46	0.23
6	0.00	---	---	---	---	---	0.00	5.9	2.5	0.51	0.44	0.26
7	0.00	---	---	---	---	---	0.00	6.1	2.4	0.57	0.41	0.17
8	0.00	---	---	---	---	---	0.00	6.0	2.2	0.61	0.38	0.18
9	0.00	---	---	---	---	---	0.00	6.1	2.2	0.56	0.63	0.17
10	0.00	---	---	---	---	---	0.00	5.6	2.3	0.42	0.54	0.14
11	0.00	---	---	---	---	---	0.00	5.4	2.2	0.38	0.49	0.13
12	0.00	---	---	---	---	---	0.00	5.3	2.1	0.44	0.52	0.13
13	0.00	---	---	---	---	---	0.00	5.2	2.1	0.35	0.55	0.10
14	0.00	---	---	---	---	---	0.00	5.2	1.9	0.39	0.62	0.10
15	0.00	---	---	---	---	---	0.00	5.1	1.7	0.40	0.66	0.10
16	0.00	---	---	---	---	---	0.00	5.0	1.6	0.33	0.65	0.10
17	0.00	---	---	---	---	---	0.00	4.8	1.6	0.36	0.74	0.08
18	0.00	---	---	---	---	---	0.00	4.6	1.8	0.34	0.49	0.02
19	0.00	---	---	---	---	---	0.00	4.3	1.7	0.30	0.60	0.01
20	0.00	---	---	---	---	0.00	0.00	3.6	1.5	0.37	1.0	0.00
21	0.00	---	---	---	---	0.00	0.00	3.4	1.4	0.43	1.1	0.00
22	0.00	---	---	---	---	0.00	0.00	3.3	1.3	0.35	1.2	0.00
23	0.00	---	---	---	---	0.00	0.00	3.2	1.3	0.30	1.1	0.45
24	0.00	---	---	---	---	0.00	0.00	3.0	1.2	0.24	1.1	1.3
25	0.00	---	---	---	---	0.00	0.00	3.0	1.1	0.16	1.1	1.4
26	0.00	---	---	---	---	0.00	0.00	3.0	1.0	0.13	1.2	0.87
27	0.00	---	---	---	---	0.00	0.00	2.9	0.96	0.05	0.91	0.15
28	0.00	---	---	---	---	0.00	0.00	2.9	1.3	0.43	0.96	0.10
29	0.00	---	---	---	---	0.00	2.5	2.8	1.2	0.69	0.96	0.05
30	0.00	---	---	---	---	0.00	3.4	2.7	0.96	0.56	1.3	0.03
31	0.00	---	---	---	---	0.00	---	2.7	---	0.52	1.5	---
TOTAL	2.26	---	---	---	---	---	5.90	135.8	54.12	13.63	23.65	8.57
MEAN	0.073	---	---	---	---	---	0.20	4.38	1.80	0.44	0.76	0.29
MAX	1.0	---	---	---	---	---	3.4	6.1	2.7	0.88	1.5	1.4
MIN	0.00	---	---	---	---	---	0.00	2.7	0.96	0.05	0.38	0.00
AC-FT	4.5	---	---	---	---	---	12	269	107	27	47	17

09442683 PARSONS DITCH NEAR RESERVE, NM

LOCATION.--Lat 33°41'26", long 108°45'56" in SW $^1/_4$ NW $^1/_4$ SW $^1/_4$ sec.13, T.7 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1.5 mi southwest of Reserve, 1/8 mi south of State Highway 435, and 500 ft south of San Francisco Plaza.

PERIOD OF RECORD.--March to September 2003 (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 5,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.11	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.07	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.06	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.08	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	0.00	0.07	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.14	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.02	---
TOTAL	---	---	---	---	---	---	0.08	0.41	0.00	0.00	0.16	0.00
MEAN	---	---	---	---	---	---	0.003	0.013	0.000	0.000	0.005	0.000
MAX	---	---	---	---	---	---	0.07	0.11	0.00	0.00	0.14	0.00
MIN	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	0.2	0.8	0.00	0.00	0.3	0.00

09442684 MIDDLE FRISCO DITCH NEAR RESERVE, NM

LOCATION.--Lat 33°41'27", long 108°45'57" in SE ¼ NE ¼ SE ¼ sec.14, T.7 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1.5 mi southwest of Reserve, 1/8 mi south of State Highway 435, and 500 ft south of San Francisco Plaza.

PERIOD OF RECORD.--March to September 2003 (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 5,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	1.7	2.0	0.26	0.11	0.35
2	---	---	---	---	---	---	0.00	1.8	1.8	0.21	0.09	0.08
3	---	---	---	---	---	---	0.00	1.9	1.4	0.17	0.05	0.00
4	---	---	---	---	---	---	0.00	1.5	1.2	0.09	0.09	0.00
5	---	---	---	---	---	---	0.00	2.2	1.4	0.09	0.12	0.00
6	---	---	---	---	---	---	0.00	2.3	1.5	0.08	0.34	0.00
7	---	---	---	---	---	---	0.00	1.8	1.4	0.11	0.31	0.00
8	---	---	---	---	---	---	0.00	2.1	1.2	0.17	0.28	0.00
9	---	---	---	---	---	---	0.00	1.4	1.1	0.22	0.55	0.00
10	---	---	---	---	---	---	0.00	1.6	1.2	0.14	0.44	0.00
11	---	---	---	---	---	---	0.00	2.1	1.2	0.10	0.38	0.00
12	---	---	---	---	---	---	0.00	1.9	1.1	0.17	0.41	0.00
13	---	---	---	---	---	---	0.00	1.4	0.99	0.11	0.02	0.00
14	---	---	---	---	---	---	0.00	1.7	0.90	0.12	0.00	0.00
15	---	---	---	---	---	---	0.00	2.6	0.82	0.13	0.00	0.00
16	---	---	---	---	---	---	0.00	3.0	0.77	0.08	0.00	0.00
17	---	---	---	---	---	---	0.00	3.0	0.63	0.07	0.00	0.00
18	---	---	---	---	---	---	0.00	3.0	0.69	0.09	0.00	0.00
19	---	---	---	---	---	---	0.00	2.7	0.67	0.07	0.07	0.00
20	---	---	---	---	---	---	0.00	1.7	0.55	0.10	0.23	0.00
21	---	---	---	---	---	0.00	0.00	2.2	0.53	0.17	0.27	0.00
22	---	---	---	---	---	0.00	0.00	2.1	0.52	0.15	0.27	0.00
23	---	---	---	---	---	0.00	0.00	2.0	0.48	0.12	0.18	0.00
24	---	---	---	---	---	0.00	0.00	1.9	0.46	0.06	0.15	0.00
25	---	---	---	---	---	0.00	0.00	1.7	0.52	0.00	0.11	0.00
26	---	---	---	---	---	0.00	0.00	1.4	0.54	0.00	0.15	0.00
27	---	---	---	---	---	0.00	0.00	1.2	0.29	0.00	0.05	0.00
28	---	---	---	---	---	0.00	0.00	2.1	0.40	0.07	0.03	0.00
29	---	---	---	---	---	0.00	0.70	2.1	0.40	0.24	0.09	0.00
30	---	---	---	---	---	0.00	1.5	2.2	0.30	0.15	0.29	0.00
31	---	---	---	---	---	0.00	---	2.2	---	0.11	0.74	---
TOTAL	---	---	---	---	---	---	2.20	62.5	26.96	3.65	5.82	0.43
MEAN	---	---	---	---	---	---	0.073	2.02	0.90	0.12	0.19	0.014
MAX	---	---	---	---	---	---	1.5	3.0	2.0	0.26	0.74	0.35
MIN	---	---	---	---	---	---	0.00	1.2	0.29	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	4.4	124	53	7.2	12	0.9

09442956 THOMASON FLAT DITCH NEAR GLENWOOD, NM

LOCATION.--Lat 33°25'54", long 108°55'54", in NW ¼ NW ¼ NW ¼ sec.20, T.10 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank 3.7 mi northwest of Alma, and 11 mi north of Glenwood.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder with Parshall flume. Elevation of gage is 4,860 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	---	---	---	---	0.55	3.0	3.3	e1.3	1.5	2.9
2	0.00	0.00	---	---	---	---	1.5	2.8	1.3	e1.2	1.6	2.8
3	0.00	0.00	---	---	---	---	5.6	0.42	2.3	e1.0	1.0	2.7
4	0.00	0.00	---	---	---	---	5.7	0.00	1.1	e1.2	0.20	2.6
5	0.00	0.00	---	---	---	---	5.4	0.49	3.8	e1.5	0.04	2.8
6	0.00	---	---	---	---	---	4.8	1.5	e3.7	e1.3	0.07	3.0
7	0.00	---	---	---	---	---	4.0	0.24	e3.6	e1.4	0.41	3.1
8	0.00	---	---	---	---	---	3.1	0.08	e3.5	e1.5	0.50	3.1
9	0.00	---	---	---	---	---	2.2	0.43	e3.8	e2.0	0.52	3.1
10	0.00	---	---	---	---	---	1.7	2.0	e3.9	2.5	0.85	4.7
11	0.00	---	---	---	---	---	1.5	1.6	e4.0	2.7	1.1	5.3
12	0.00	---	---	---	---	---	0.66	1.1	e3.5	3.4	0.91	3.0
13	0.00	---	---	---	---	---	1.1	1.00	e3.3	5.0	0.75	2.8
14	0.00	---	---	---	---	---	2.0	0.82	e3.0	4.5	3.1	2.7
15	0.00	---	---	---	---	---	1.5	0.53	e2.5	4.2	0.55	2.7
16	0.00	---	---	---	---	---	2.3	0.44	e2.4	4.5	0.02	2.7
17	0.00	---	---	---	---	---	2.3	0.20	e2.1	4.8	0.02	2.6
18	0.00	---	---	---	---	---	1.7	1.1	e2.0	4.7	0.00	2.7
19	0.00	---	---	---	---	2.6	1.8	1.2	e1.9	4.7	2.1	2.6
20	0.00	---	---	---	---	0.42	2.0	0.45	e1.8	3.7	1.6	2.7
21	0.00	---	---	---	---	0.50	1.3	0.00	e1.9	4.6	0.00	2.7
22	0.00	---	---	---	---	1.1	0.60	0.00	e1.8	4.5	0.00	2.7
23	0.00	---	---	---	---	1.8	0.28	0.13	e1.7	2.7	0.20	2.7
24	0.00	---	---	---	---	3.6	0.28	2.1	e1.6	1.7	0.93	2.9
25	0.00	---	---	---	---	1.9	0.12	1.8	e1.3	1.3	0.53	2.9
26	0.00	---	---	---	---	0.00	2.0	1.7	e1.4	1.0	0.64	3.0
27	0.00	---	---	---	---	0.00	5.4	0.49	e1.5	1.7	1.1	3.0
28	0.00	---	---	---	---	1.1	4.5	1.4	e1.2	0.91	2.2	2.9
29	0.00	---	---	---	---	2.7	4.0	1.4	e1.3	0.87	2.4	3.1
30	0.00	---	---	---	---	0.88	3.6	1.4	e1.2	0.68	0.62	2.9
31	0.00	---	---	---	---	0.72	---	3.2	---	1.4	2.8	---
TOTAL	0.00	---	---	---	---	---	73.49	33.02	71.7	78.46	28.26	89.4
MEAN	0.000	---	---	---	---	---	2.45	1.07	2.39	2.53	0.91	2.98
MAX	0.00	---	---	---	---	---	5.7	3.2	4.0	5.0	3.1	5.3
MIN	0.00	---	---	---	---	---	0.12	0.00	1.1	0.68	0.00	2.6
AC-FT	0.00	---	---	---	---	---	146	65	142	156	56	177

e Estimated

09442958 SPURGEON #2 DITCH NEAR GLENWOOD, NM

LOCATION.--Lat 33°26'57", long 108°55'43", in SW ¼ SE ¼ NW ¼ sec.8, T.10 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank ¼ mi downstream from ditch heading and U.S. 180 Highway bridge over San Francisco River, 5.3 mi north of village of Alma, and 11.5 mi north of Glenwood.

PERIOD OF RECORD.--March to September 2003 (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,995 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.7	2.4	1.7	2.7	3.4	0.00
2	---	---	---	---	---	---	2.7	2.1	2.2	2.7	3.4	0.00
3	---	---	---	---	---	---	2.7	2.1	2.0	2.7	3.3	0.00
4	---	---	---	---	---	---	2.7	2.2	2.1	0.97	3.5	0.00
5	---	---	---	---	---	---	2.7	2.3	2.0	0.00	3.3	0.00
6	---	---	---	---	---	---	2.7	2.6	2.0	0.00	3.4	0.00
7	---	---	---	---	---	---	2.6	2.6	1.8	0.39	2.8	0.00
8	---	---	---	---	---	---	2.6	2.6	1.8	2.8	2.1	0.00
9	---	---	---	---	---	---	2.6	2.4	1.8	2.8	1.6	0.00
10	---	---	---	---	---	---	2.5	2.4	1.9	2.7	1.6	0.00
11	---	---	---	---	---	---	2.5	2.4	2.0	2.7	1.5	0.00
12	---	---	---	---	---	---	2.5	2.5	2.4	2.6	1.3	0.00
13	---	---	---	---	---	---	2.4	2.4	2.8	1.8	3.2	0.00
14	---	---	---	---	---	---	2.4	2.4	2.9	1.9	4.9	0.00
15	---	---	---	---	---	---	2.4	2.3	2.9	2.0	5.0	0.00
16	---	---	---	---	---	---	2.4	2.2	3.0	1.9	4.8	0.00
17	---	---	---	---	---	---	2.4	2.2	2.9	1.8	4.6	0.00
18	---	---	---	---	---	0.00	2.4	2.2	3.3	2.0	4.7	0.00
19	---	---	---	---	---	2.8	2.3	2.3	2.8	2.0	1.6	0.00
20	---	---	---	---	---	2.8	2.3	2.2	2.4	2.0	0.00	0.00
21	---	---	---	---	---	2.8	2.3	2.2	2.4	2.0	0.00	0.00
22	---	---	---	---	---	2.9	2.4	2.1	2.4	2.7	0.00	0.00
23	---	---	---	---	---	3.0	2.3	2.1	2.5	3.0	1.7	0.00
24	---	---	---	---	---	3.2	2.3	2.1	2.5	3.0	2.7	0.00
25	---	---	---	---	---	3.2	2.3	2.1	2.5	3.4	2.7	0.00
26	---	---	---	---	---	3.1	2.3	2.1	2.4	3.8	2.9	0.00
27	---	---	---	---	---	3.0	2.3	2.2	2.6	4.2	2.9	0.00
28	---	---	---	---	---	2.9	2.3	2.2	3.0	3.9	3.3	0.00
29	---	---	---	---	---	2.9	2.3	2.2	3.0	3.9	0.00	0.00
30	---	---	---	---	---	2.8	2.2	2.2	2.8	3.9	0.00	0.18
31	---	---	---	---	---	2.8	---	1.9	---	4.2	0.00	---
TOTAL	---	---	---	---	---	---	73.5	70.2	72.8	76.46	76.20	0.18
MEAN	---	---	---	---	---	---	2.45	2.26	2.43	2.47	2.46	0.006
MAX	---	---	---	---	---	---	2.7	2.6	3.3	4.2	5.0	0.18
MIN	---	---	---	---	---	---	2.2	1.9	1.7	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	146	139	144	152	151	0.4

09442960 W.S. DITCH NEAR GLENWOOD, NM

LOCATION.--Lat 33°24'40", long 108°54'57", in SE ¼ NE ¼ NW ¼, sec.29, T.10 S., R.20 W., Catron County, Hydrologic Unit 15040004, on left bank 2.0 mi northwest of Alma, and 7.0 mi north of Glenwood.

PERIOD OF RECORD.--October 1999 to current year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	3.1	---	---	---	---	11	11	6.4	3.9	3.5	8.5
2	9.6	3.0	---	---	---	---	11	11	8.0	3.8	5.0	7.0
3	9.5	2.9	---	---	---	---	10	12	6.8	3.7	6.5	6.0
4	10	2.8	---	---	---	---	10	11	7.3	4.1	4.5	6.1
5	9.5	2.8	---	---	---	---	10	10	6.5	3.9	4.5	5.9
6	9.1	2.6	---	---	---	---	11	8.6	6.2	3.3	4.6	6.2
7	8.2	---	---	---	---	---	10	9.1	6.3	3.4	5.0	6.1
8	10	---	---	---	---	---	8.6	8.2	5.9	3.1	5.0	6.2
9	13	---	---	---	---	---	7.4	7.5	5.9	3.5	4.7	6.1
10	14	---	---	---	---	---	5.8	5.7	5.8	4.0	4.8	6.7
11	12	---	---	---	---	---	4.9	6.0	5.6	4.0	4.7	7.2
12	9.5	---	---	---	---	---	6.9	7.4	6.1	4.0	5.0	6.8
13	9.6	---	---	---	---	---	11	8.6	5.8	3.6	4.8	6.1
14	8.6	---	---	---	---	---	12	7.9	6.0	3.6	6.6	5.6
15	7.1	---	---	---	---	---	12	8.8	6.2	3.4	6.3	6.0
16	6.7	---	---	---	---	---	12	9.2	6.2	3.3	5.7	6.5
17	7.4	---	---	---	---	---	11	9.4	5.3	3.3	5.2	5.9
18	7.6	---	---	---	---	---	11	7.9	5.7	3.4	5.6	5.8
19	7.3	---	---	---	---	4.1	7.8	7.7	5.4	3.4	6.7	6.9
20	7.3	---	---	---	---	4.6	5.3	8.1	5.0	3.4	6.7	4.4
21	7.2	---	---	---	---	4.1	6.3	12	5.6	3.6	7.5	4.2
22	7.0	---	---	---	---	4.9	8.5	12	5.6	3.8	7.3	5.8
23	6.8	---	---	---	---	6.8	8.4	9.0	5.5	3.9	7.1	6.5
24	6.8	---	---	---	---	5.3	8.2	6.0	5.2	3.5	5.8	7.2
25	6.5	---	---	---	---	6.9	8.9	5.7	4.9	3.4	5.1	7.3
26	6.4	---	---	---	---	13	7.4	5.8	4.5	3.3	4.9	5.0
27	6.4	---	---	---	---	14	6.2	5.8	4.2	3.3	4.8	4.7
28	6.2	---	---	---	---	14	8.3	6.0	4.3	3.5	4.9	4.8
29	4.7	---	---	---	---	13	12	6.1	4.3	3.6	6.3	4.8
30	3.4	---	---	---	---	13	12	8.1	4.0	3.6	7.6	4.8
31	3.2	---	---	---	---	13	---	6.5	---	3.6	7.8	---
TOTAL	250.6	---	---	---	---	---	274.9	258.1	170.5	111.2	174.5	181.1
MEAN	8.08	---	---	---	---	---	9.16	8.33	5.68	3.59	5.63	6.04
MAX	14	---	---	---	---	---	12	12	8.0	4.1	7.8	8.5
MIN	3.2	---	---	---	---	---	4.9	5.7	4.0	3.1	3.5	4.2
AC-FT	497	---	---	---	---	---	545	512	338	221	346	359

09443900 FISH POND DITCH ABOVE HATCHERY AT GLENWOOD, NM

LOCATION.--Lat 33°19'21", long 108°52'38", in NW ¼ NE ¼ NW ¼ sec.26, T.11 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank at the New Mexico Glenwood Fish Hatchery in Glenwood.

PERIOD OF RECORD.--May 2002 to current year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,710 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	1.8	---	---	---	---	3.5	3.3	3.8	2.5	0.85	0.67
2	5.2	1.7	---	---	---	---	3.7	3.3	3.8	1.8	0.70	1.2
3	5.1	1.6	---	---	---	---	3.8	3.3	3.8	1.9	0.73	1.5
4	5.1	1.5	---	---	---	---	3.8	3.3	3.8	1.9	1.1	1.6
5	5.1	1.4	---	---	---	---	3.8	3.3	3.8	1.7	1.8	1.7
6	5.1	1.3	---	---	---	---	3.8	3.3	3.9	1.5	1.5	1.8
7	5.2	---	---	---	---	---	3.9	3.3	4.1	1.4	1.8	1.8
8	5.2	---	---	---	---	---	3.9	3.4	4.0	1.3	0.87	1.9
9	5.2	---	---	---	---	---	3.9	3.4	4.1	1.3	0.87	2.1
10	5.3	---	---	---	---	---	3.9	3.4	4.1	1.6	0.89	2.2
11	5.2	---	---	---	---	---	3.8	3.4	4.2	1.6	1.5	2.4
12	5.2	---	---	---	---	---	3.7	3.5	4.2	1.1	2.0	2.6
13	5.1	---	---	---	---	---	3.7	3.6	4.3	1.3	1.3	2.7
14	5.1	---	---	---	---	---	3.7	3.5	4.4	1.6	0.92	2.7
15	5.1	---	---	---	---	---	3.7	3.5	4.4	1.6	1.0	2.6
16	5.0	---	---	---	---	---	3.6	3.5	4.5	1.5	1.4	2.2
17	4.9	---	---	---	---	---	3.6	3.6	4.6	0.99	1.6	2.4
18	4.9	---	---	---	---	---	3.6	3.6	4.6	1.00	1.5	2.5
19	4.8	---	---	---	---	3.0	3.5	3.6	4.6	0.73	1.1	2.5
20	4.7	---	---	---	---	3.0	3.5	3.6	4.6	0.67	1.0	2.2
21	4.5	---	---	---	---	3.1	3.5	3.6	4.6	0.64	1.1	2.0
22	4.3	---	---	---	---	3.1	3.5	3.7	4.6	0.67	1.1	2.1
23	4.0	---	---	---	---	3.2	3.5	3.7	4.4	0.72	1.1	2.5
24	3.8	---	---	---	---	3.2	3.5	3.7	4.2	0.74	1.1	2.2
25	3.5	---	---	---	---	3.2	3.5	3.7	3.9	0.55	1.1	2.0
26	3.1	---	---	---	---	3.2	3.4	3.7	3.6	0.47	1.2	2.0
27	2.7	---	---	---	---	3.2	3.4	3.7	3.2	0.48	1.3	2.0
28	2.4	---	---	---	---	3.3	3.3	3.7	2.8	0.69	0.91	1.8
29	2.2	---	---	---	---	3.3	3.3	3.7	2.4	0.93	0.67	1.7
30	2.0	---	---	---	---	3.4	3.3	3.8	2.6	1.1	0.67	1.5
31	1.9	---	---	---	---	3.4	---	3.8	---	1.1	0.66	---
TOTAL	135.8	---	---	---	---	---	108.6	109.5	119.9	37.08	35.34	61.07
MEAN	4.38	---	---	---	---	---	3.62	3.53	4.00	1.20	1.14	2.04
MAX	5.3	---	---	---	---	---	3.9	3.8	4.6	2.5	2.0	2.7
MIN	1.9	---	---	---	---	---	3.3	3.3	2.4	0.47	0.66	0.67
AC-FT	269	---	---	---	---	---	215	217	238	74	70	121

09443938 EAST PLEASANTON DITCH NEAR GLENWOOD, NM

LOCATION.--Lat 33°17'36", long 108°53'25", in SE 1/4 SW 1/4 SE 1/4, sec.34, T.5 S., R.20 W., Catron County, Hydrologic Unit 15040004, on right bank 50 ft from heading gate, on San Francisco River, and 1.5 mi south of Glenwood.

PERIOD OF RECORD.--October 1999 to curent year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 4,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	6.0	---	---	---	---	7.2	7.7	7.7	7.4	7.5	5.4
2	6.7	5.9	---	---	---	---	7.1	7.9	7.7	7.7	7.4	4.4
3	6.7	5.9	---	---	---	---	7.1	8.0	7.6	7.4	7.3	4.7
4	6.8	6.0	---	---	---	---	7.3	8.1	7.6	7.3	7.3	5.3
5	6.8	5.9	---	---	---	---	7.4	8.1	7.5	7.0	7.2	5.7
6	6.8	---	---	---	---	---	7.4	7.9	7.4	7.1	7.2	5.8
7	6.7	---	---	---	---	---	7.3	8.0	7.4	7.2	7.2	6.4
8	6.6	---	---	---	---	---	7.2	8.0	7.4	6.9	7.2	6.4
9	6.6	---	---	---	---	---	7.2	7.9	7.5	6.9	7.0	6.4
10	6.6	---	---	---	---	---	7.2	7.8	7.5	7.3	7.0	8.0
11	6.6	---	---	---	---	---	7.2	7.8	7.5	6.9	6.9	8.4
12	6.6	---	---	---	---	---	7.1	7.8	7.5	6.9	6.8	8.2
13	6.6	---	---	---	---	---	7.0	7.8	7.5	6.9	6.9	7.8
14	6.6	---	---	---	---	---	7.1	7.7	7.5	6.8	6.8	7.7
15	6.6	---	---	---	---	---	7.3	7.7	7.5	6.7	6.8	7.6
16	6.5	---	---	---	---	---	7.3	7.7	7.5	6.5	6.9	7.0
17	6.5	---	---	---	---	---	7.3	7.7	7.6	6.4	6.9	6.9
18	6.3	---	---	---	---	---	7.2	7.7	7.5	6.0	6.9	7.2
19	6.2	---	---	---	---	6.7	7.3	7.7	7.5	6.0	7.0	7.6
20	6.3	---	---	---	---	6.7	7.3	7.7	7.5	5.1	7.0	7.8
21	6.3	---	---	---	---	6.8	7.3	7.8	7.5	4.7	7.1	7.7
22	6.2	---	---	---	---	7.0	7.3	7.8	7.5	5.4	7.2	7.2
23	6.2	---	---	---	---	7.2	7.3	7.7	7.4	6.7	7.3	7.3
24	6.2	---	---	---	---	7.6	7.4	7.7	7.4	7.1	7.4	7.6
25	6.2	---	---	---	---	7.7	7.4	7.7	7.5	7.2	7.5	7.8
26	6.2	---	---	---	---	7.6	7.5	7.7	7.5	7.3	7.6	7.8
27	6.1	---	---	---	---	7.5	7.5	7.7	7.4	7.3	7.8	7.4
28	6.1	---	---	---	---	7.3	7.5	7.7	7.4	7.3	7.8	7.4
29	6.1	---	---	---	---	7.2	7.6	7.7	7.3	7.3	7.8	7.5
30	6.1	---	---	---	---	7.2	7.5	7.7	7.3	7.5	7.0	6.9
31	6.0	---	---	---	---	7.2	---	8.2	---	7.4	5.6	---
TOTAL	199.5	---	---	---	---	---	218.8	242.1	224.6	211.6	221.3	209.3
MEAN	6.44	---	---	---	---	---	7.29	7.81	7.49	6.83	7.14	6.98
MAX	6.8	---	---	---	---	---	7.6	8.2	7.7	7.7	7.8	8.4
MIN	6.0	---	---	---	---	---	7.0	7.7	7.3	4.7	5.6	4.4
AC-FT	396	---	---	---	---	---	434	480	445	420	439	415

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM

LOCATION.--Lat 33°14'48", long 108°52'47", in NE 1/4 NW 1/4 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 White Water Creek, and at mile 511.5.

DRAINAGE AREA.--1,653 mi^2.

WATER-DISCHARGE RECORDS

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 with satellite telemetry 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. Diversions for irrigation of about 2,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 60,000 ft^3/s or greater were computed for station at Clifton, AZ. On Nov. 26, 1905, a peak of 25,000 ft^3/s was measured (by float-area method) at station at Alma (about 12 mi upstream, drainage area 1,560 mi^2). A similar measurement of 21,000 ft^3/s was made at the Alma station for peak of Dec. 3, 1906.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	21	25	30	28	38	91	37	25	15	19	16
2	29	20	25	28	29	42	85	36	26	15	23	15
3	29	19	27	27	28	42	82	36	26	14	21	15
4	30	23	27	26	28	42	83	36	26	14	15	14
5	30	22	27	25	28	41	83	37	27	13	14	15
6	30	20	28	24	27	39	81	32	27	13	15	13
7	44	23	30	24	27	39	77	33	27	13	16	14
8	39	20	30	25	29	37	73	31	26	14	17	15
9	35	20	28	26	29	37	71	31	28	13	16	14
10	35	22	28	26	28	38	70	30	27	14	17	19
11	36	21	30	31	28	40	65	30	26	13	17	27
12	36	19	30	30	27	49	61	30	25	14	16	22
13	36	19	30	31	29	61	55	30	25	15	18	17
14	34	20	29	31	31	67	56	30	25	13	19	15
15	30	19	28	30	31	71	60	28	24	12	19	14
16	34	20	28	29	31	73	61	28	23	14	18	14
17	30	21	31	29	31	77	58	28	27	14	18	12
18	29	22	32	29	31	82	58	25	28	14	17	12
19	26	22	31	28	30	91	58	27	27	15	17	12
20	26	23	30	28	30	92	58	27	23	17	15	11
21	26	25	31	29	30	91	55	28	23	17	15	10
22	28	23	31	30	28	112	49	26	23	16	14	9.7
23	25	22	34	30	26	140	53	25	24	15	14	9.7
24	26	25	33	29	28	167	51	24	23	14	15	10
25	25	26	32	30	30	177	49	24	22	14	15	10
26	26	26	32	29	34	169	48	26	21	16	14	12
27	25	28	31	29	34	158	46	24	20	18	18	10
28	24	27	30	28	36	146	42	25	22	15	25	8.0
29	22	26	31	29	---	127	40	24	18	15	23	7.6
30	24	25	31	28	---	110	39	27	17	14	23	7.2
31	24	---	29	28	---	100	---	29	---	16	21	---
TOTAL	923	669	919	876	826	2,595	1,858	904	731	449	544	400.2
MEAN	29.8	22.3	29.6	28.3	29.5	83.7	61.9	29.2	24.4	14.5	17.5	13.3
MAX	44	28	34	31	36	177	91	37	28	18	25	27
MIN	22	19	25	24	26	37	39	24	17	12	14	7.2
AC-FT	1,830	1,330	1,820	1,740	1,640	5,150	3,690	1,790	1,450	891	1,080	794

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2003, BY WATER YEAR (WY)

MEAN	88.4	53.4	84.3	96.7	124	190	141	74.3	28.2	36.7	75.5	61.4
MAX	2,026	520	1,068	1,568	1,034	1,036	1,049	593	146	108	392	368
(WY)	(1984)	(1979)	(1979)	(1993)	(1993)	(1985)	(1973)	(1973)	(1992)	(1930)	(1957)	(1988)
MIN	9.77	10.8	12.9	13.5	14.9	11.3	10.3	8.65	5.70	13.2	13.7	7.66
(WY)	(1966)	(1957)	(1954)	(1956)	(1956)	(1959)	(1957)	(1956)	(1956)	(1963)	(1960)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1928 - 2003	
ANNUAL TOTAL	13,901.4		11,694.2			
ANNUAL MEAN	38.1		32.0		87.7	
HIGHEST ANNUAL MEAN					351	1979
LOWEST ANNUAL MEAN					13.9	1956
HIGHEST DAILY MEAN	3,110	Sep 11	177	Mar 25	27,500	Oct 2, 1983
LOWEST DAILY MEAN	9.0	Jun 3	7.2	Sep 30	2.5	Jun 25, 1956
ANNUAL SEVEN-DAY MINIMUM	9.5	Jun 10	9.3	Sep 24	3.9	Jun 22, 1956
MAXIMUM PEAK FLOW			181	Mar 25	a37,100	Oct 2, 1983
MAXIMUM PEAK STAGE			3.71	Mar 25	b18.15	Oct 2, 1983
INSTANTANEOUS LOW FLOW			5.9	Sep 30	1.5	Dec 3, 1906
ANNUAL RUNOFF (AC-FT)	27,570		23,200		63,570	
10 PERCENT EXCEEDS	33		58		170	
50 PERCENT EXCEEDS	24		27		31	
90 PERCENT EXCEEDS	11		14		15	

a From rating curve extended above 4,200 ft^3/s, on basis of slope-area measurement at gage heights 10.74 ft, 15.60 ft, and 20.80 ft.
b 20.80 ft outside floodmarks.

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-85, 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC													
04...	1450	28	648	8.8	103	8.1	371	13.0	15.0	160	43.2	11.5	2.29
APR													
03...	1440	82	643	9.6	121	8.3	312	22.0	18.0	120	34.4	8.91	1.69
JUN													
10...	1500	26	645	10.2	139	8.5	324	33.0	22.0	140	38.5	9.86	1.96
JUL													
24...	1415	15	648	13.0	186	8.3	396	40.0	25.0	160	45.2	11.5	2.32

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
04...	0.8	22.2	164	198	--	6.04	0.40	37.7	8.2	229	--	--	--
APR													
03...	0.8	19.1	143	174	--	4.27	0.37	33.5	9.2	197	<0.20	0.40	0.02
JUN													
10...	0.8	20.3	155	182	3	5.69	0.4	35.7	7.7	213	--	--	--
JUL													
24...	0.8	23.4	186	227	--	7.20	0.4	35.3	8.7	246	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	20	--
APR													
03...	0.04	0.08	<0.010	0.05	0.05	0.08	E1	<0.30	E1	11	<0.06	20	<0.04
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	20	--
JUL													
24...	--	--	--	--	--	--	--	--	--	--	--	30	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
DEC													
04...	--	--	--	<10	--	--	<0.02	--	--	--	<3	--	--
APR													
03...	<0.8	0.16	0.6	<10	<0.08	10.4	<0.02	0.6	0.38	<3	<3	<0.20	M
JUN													
10...	--	--	--	<8	--	--	<0.02	--	--	--	<3	--	--
JUL													
24...	--	--	--	<8	--	--	<0.02	--	--	--	<5	--	--

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
DEC			
04...	--	85	15
APR			
03...	1.53	65	37
JUN			
10...	--	84	37
JUL			
24...	--	85	21

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Because 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 flood-flow 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 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (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-	05-15-03	4.14	1,100	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.	1953-96[g] 1999-	- -03	<0.46	<38	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.	1971-96[g] 1997-	07-20-03	5.26	88	08-25-82	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* 1968-96[g] 1999-	07-28-03	2.02	26	06-18-65	3.05	151
Dog Creek near Shoemaker (07220900)	Lat 35°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.	1954-95[g] 1999-	09-03-03	7.98	440	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.	1961-96[g] 1999-	- -03	---	[k]	05-11-94	5.83	1,500
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-	08-08-03	2.23	410	09-11-65	12.00	14,100
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 12.0 mi^2.	1971-96[g] 1999-	09-10-03	6.38	46	08-29-77	17.37	7,020
Pajarito Creek at Newkirk (07225000)	Lat 35°04'20", long 104°14'50", Guadalupe County, downstream side of bridge on U.S. Highway 66, 1 mi east of Newkirk. Drainage area is 55.0 mi^2.	1954-95[g] 1999-	- -03	---	[k]	07-16-81	8.01	3,500
Bluewater Creek near Tucumcari (07225300)	Lat 35°08'31", long 103°47'32", Quay County, 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.	1971-96[g] 1999-	05-27-03	8.84	629	08-11-81	12.71	[c]2,350
Bueyeros Creek at Bueyeros (07226200)	Lat 35°58'10", long 103°41'05", Harding County, on right upstream wingwall of culvert on State Road 102 at Bueyeros. Drainage area is [a]34.0 mi^2.	1957-96[g] 1999-	05-27-03	3.56	230	08-11-81	3.65	1,150

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
ARKANSAS RIVER BASIN--Continued								
Carrizo Creek near Roy (07226300)	Lat 36°02'58", long 103°57'48", Harding County, Hydrologic Unit 11080007, 800 ft downstream from State Highway 120, and 15 mi northeast of Roy. Drainage area is [a]68 mi^2.	1954-	06-18-03	6.36	1,280	08-11-81	[n]7.11	[n]1,800
Plaza Largo 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.	1952-96[g] 1999-	05-27-03	4.26	364	07-16-58	12.70	1,170
Tramperos Creek near Stead (07227200)	Lat 36°04'15", long 103°12'10", in NW 1/2 NW 1/2 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 [a]556 mi^2.	1966-73* 1974-	- -03	---	[k]	10-17-65	16.5	12,300
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 [a]42.0 mi^2.	1953-96[g] 1999-	- -03	---	[k]	06--53	8.85	10,300
BRAZOS RIVER BASIN								
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-	08-29-03	2.83	304	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-	- -03	<2.38	<180	07-07-98	[d]11.56	4,620
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.	1971-96[g] 1999-	- -03	<5.30	<4	07-28-74	10.62	508
Rito de los Frijoles in Bandelier Nation Monument (08313350)	Lat 35°46'35", long 106°16'06", Sandoval County, Hydrologic Unit 13020201, in Bandelier National Monument, on right bank 800 ft downstream from Monument Headquarters, 6.5 mi south of Los Alamos, and 18.5 mi northwest of Santa Fe. Drainage area is 17.5 mi^2.	1963-69 1977-	05-26-03	2.47	24	07-21-78	6.34	[q]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-	09-11-03	2.61	75	[n]08- -77	[n]3.73	[n]300
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 1959-95[g] 1999-	08-27-03	3.83	272	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-	07-20-03	7.11	2,530	08-09-99	17.75	13,200
San Pedro Creek near Golden (08318900)	Lat 35°13'45", long 106°18'00", Sandoval County, Hydrologic Unit 13020201, 1 mi downstream from bridge on State Highway 14, and 5.5 mi southwest of Golden. Drainage area is 45.2 mi^2.	1953-	09-11-03	0.50	400	09-24-55	[n]12.95	10,800

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
RIO GRANDE BASIN--Continued								
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 southeast of Cedro, and 4.5 mi northwest of Miera. Drainage area is 1.57 mi^2.	1959-96[g] 1999-	- -03	<0.93	<15	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-	- -03	<1.83	<110	06-24-67	6.85	6,500
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 [a]35 mi^2.	1961-	07-26-03	1.30	76	[n]07-31-97	[n]7.47	[n]5,600
Rio Puerco at Cuba (08332525)	Lat 36°00'38", long 106°58'48", Sandoval County, Hydrologic Unit 13020204, on downstream side of bridge on State Road 197, 0.5 mi southwest of State Highway 44, and 1.0 mi southwest of Cuba.	1997-	09-10-03	6.61	310	06-06-97	11.04	2,730
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.	1969-96[g] 1999-	10-13-02	1.69	9	08-27-93	3.56	195
La Jencia Creek near Magdalena (08353500)	Lat 34°09'45", long 107°12'35", Socorro County, Hydrologic Unit 13020209, 3.5 mi northeast of Magdalena. Drainage area is 195 mi^2.	1957- 1961-96[g] 1999-	09-10-03	1.48	410	07-08-98	11.36	4,950
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.	1961-96[g] 1999-	07-05-03	1.48	134	09-10-80	4.75	620
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.	1959-96[g] 1999-	- -03	<1.51	<910	06-10-88	6.09	5,070
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* 1973-95[g] 1997-	07-10-03	4.18	586	08-13-64	14.04	10,800
Percha Creek near Hillsboro (08361700)	Lat 32°54'55", long 107°36'05", Sierra County, 150 ft south of State Highway 180, and 2 mi west of Hillsboro. Drainage area is 35.4 mi^2.	1957-78[g] 1980-	- -03	<1.31	<45	08-06-99	[d]14.0	19,900
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.	1959-96[g] 1999-	- -03	1.50	87	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-	09-03-03	4.34	190	[n]06-01-37	---	[n,c]20.000

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
RIO GRANDE BASIN--Continued								
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 7.60 mi^2.	1957-96[g] 1999-	- -03	---	[k]	08-01-66	5.26	2,530
Pintada Arroyo near Santa Rosa (08383300)	Lat 34°53'20", long 104°43'50", Guadalupe County, at bridge on U.S. Highway 54, and 4.5 mi southwest of Santa Rosa. Drainage area is 896 mi^2.	1959-86[g] 1996-	- -03	---	[k]	06-26-96	12.97	5,000
Pecos River tributary near Puerto de Luna (08383370)	Lat 34°52'35", long 104°38'15", 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.	1961-96[g] 1999-	05-25-03	8.67	203	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.	1962-96[g] 1999-	- -03	---	[k]	07-11-72	6.86	2,850
Yeso Creek near Fort Sumner (08385600)	Lat 34°16'32", long 104°17'28", DeBaca 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.	1937-95[g] 1997-	05-25-03	2.18	584	04-30-99	14.24	22,900
Aragon Creek tributary near Encinoso (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 Encinoso. Drainage area is 6.07 mi^2.	1961-96[g] 1999-	- -03	<3.25	<10	09-06-61	5.10	1,610
Rio Bonito near Fort Stanton (08389000)	Lat 33°31'05", long 105°29'10", Lincoln County, Hydrologic Unit 13060008, on left bank 130 ft upstream from culvert on U.S. Highway 380, 2.5 mi northeast of Fort Stanton. Drainage area is [a]85 mi^2.	1955-95, 1997-	- -03	<3.82	<245	05-17-79	7.20	4,100
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.	1971-96[g] 1999-	- -03	3.07	126	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 Picacho. Drainage area is 1.32 mi^2.	1962-96[g] 1999-	- -03	---	[k]	09-13-96	10.38	3,600
Pancho Canyon near Arabela (08393700)	Lat 33°30'36", long 105°11'38", Lincoln County, Hydrologic Unit 13060008, 200 ft downstream from dip on State Highway 368, and 5.6 mi south of Arabela. Drainage area is 16.7 mi^2.	1962-96[g] 1999-	08-09-03	7.55	503	06-14-02	11.81	3,390
Eight Mile Draw near Roswell (08393900)	Lat 33°24'05", long 104°37'54", Chaves County, Hydrologic Unit 13060008, 6.5 mi west of Roswell. Drainage area is 397 mi^2.	1941 1952-	08-09-03	13.59	860	07-13-91	17.80	10,300
Twin Butte Canyon tributary near Roswell (08394300)	Lat 33°10'34", long 104°51'30", Chaves 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.	1968-96[g] 1999-	08-09-03	3.33	188	09-08-95	9.60	5,900
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-	10-26-02	4.28	1,690	05-30-65	13.70	16,400

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
			RIO GRANDE BASIN--Continued					
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 [a]20 mi^2.	1963-96[g] 1999-	- -03	---	[k]	07-30-94	4.85	530
			MIMBRES BASIN					
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.	1958-96[g] 1999-	- -03 - -02	<0.78 <0.78[h]	<50 <50[h]	09-13-99	5.55	6,500
Cameron Creek at Central (08478000)	Lat 32°47'38", long 108°08'58", Grant County, 0.5 mi upstream from culvert on U.S. Highway 260,at north edge of Central. Drainage area is 18.8 mi^2.	1954-95[g] 1999-	07-17-03	1.78	234	08-29-59	7.30	2,200
Mimbres River at Deming (08478500)	Lat 32°17'00", long 107°45'35", Luna County, Hydrologic Unit 13030202, at culvert on U.S. Highway 180, at north end of Deming. Drainage area is 1,370 mi^2.	1954-79, 1983-	- -03	---	[k]	[n]12-19-78	[n]5.91	[n]2,350
Seventy-Six 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.	1967-96[g] 1999-	- -03	---	[k]	06-27-00	8.20	290
			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-	- -03	<2.47	<900	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 mi west of Indian Divide, 7 mi northwest of Capitan, and 2 mi north of Nogal. Drainage area is 1.94 mi^2.	1968-96[g] 1999-	07-05-03 09-13-02	2.79 3.24	5 32[h]	08-10-77	8.45	655
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.	1961-96[g] 1999-	07-05-03	2.87	215	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* 1959-96[g] 1999-	08-10-03	5.54	195	07-14-91	12.08	3,000
Three Rivers at Three Rivers (08481000)	Lat 33°18'12", long 106°04'20", Otero County, Hydrologic Unit 13050003, on downstream side of bridge on State Highway 54, 1.3 mi south of Three Rivers. Drainage area is 96.0 mi^2.	1956-77[g] 2000-	07-05-03	6.36	1,430	08-15-67	[p]7.50	15,000
			ESTANCIA BASIN					
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 [a]20 mi^2.	1962-96[g] 1999-	05-20-03	2.12	86	08-01-89	2.48	150
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.	1954-96[g] 1999-	08-27-03	3.25	2,010	08-09-67	4.23	4,310
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 southeast of Mountainair. Drainage area is 3.90 mi^2.	1953-96[g] 1999-	08-27-03	4.87	261	09-25-54	8.68	1,710

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
		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.	1959-96[g] 1999-	05-25-03	6.23	2,210	- -69	8.75	5,800
		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 1976-96[g] 1999-	- -03	<3.66	<1	07-16-66	5.73	900
		SAN JUAN RIVER BASIN						
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.	1970-96[g] 1999-	- -03	---	[k]	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.	1956-95[g] 1999-	09-09-03	2.87	142	08-02-65	10.37	2,520
Gobernador Canyon near Gobernador (09355700)	Lat 36°41'05", long 107°25'10", Rio Arriba 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.	1956-96[g] 1999-	09-10-03	2.00	230	08-06-63	9.30	3,450
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.	1970-96[g] 1999-	08-23-03	17.10	444	06-29-81	10.87	725
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-	08-23-03	11.00	4,970	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* 1983-96[g] 1999-	08-16-03	3.78	1,060	01-21-99	--	2,250
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.	1980-96[g] 1999-	09-10-03	3.44	522	09-13-93	2.44	295
		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.	1954-95[g] 1999-	- -03	---	[k]	08-06-54	4.70	1,320
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 [a]19 mi^2.	1957-95[g] 1999-	- -03	---	[k]	09-05-70	6.40	660
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.	1949-95[g] 1999-	- -03	<0.06	<37	- -49	4.20	1,360

Station name and number	Location and drainage area	Period of record	Water year 2003			Period of record		
			Date	Gage height (ft)	Maximum discharge (ft^3/s)	Date	Gage height (ft)	Maximum discharge (ft^3/s)
		GILA RIVER BASIN						
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 [a]228 mi^2.	1957-	07-31-03	4.39	985	01-18-93	11.76	7,400
Mangas Creek near Cliff (09431130)	Lat 32°51'39", long 108°34'01", Grant County, Hydrologic Unit 1504002, on right bank, about 0.5 mi upstream from U.S. Forest Service Road 806, in close proximity to Bill Evans Lake, 7 mi south of Cliff.	1986-	07-28-03	4.87	628	09-22-97	9.49	3,720
Animas Creek near Cloverdale (09438200)	Lat 31°34'15", long 108°52'30", Hidalgo County, 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-	08-01-03	3.63	210	10-13-74	7.78	3,400
Mail Hollow near Luna (09442630)	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.	1970-96[g] 1999-	08-16-03	4.68	420	08-16-03	4.68	420
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.	1954-95[g] 1999-	- -03	<0.88	<21	10-02-83	4.93	2,790
Tularosa River near Reserve (09442740)	Lat 33°44'00", long 108°42'10", Catron County, 150 ft west of Eagle Peak Lookout Road, and 3.3 mi northeast of Reserve. Drainage area is 426 mi^2.	1956-86[g] 1997-	- -03	<1.67	<52	10-02-83	9.80	3,020
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.	1959-96[g] 1999-	10-07-02	3.12	166	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 Record not completed for water year.
p Different gage datum.
q Record affected by fire.

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 2003

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Conchas Canal (07154400)	Canadian River	Lat 32°22'55", long 104°10'58", in 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.	---	1997-2002		Dry
Lea Lake Drain (08394026) (formerly 08394018)	Pecos River	Lat 33°18'56", long 104°19'56", in SW 1/4 SE 1/4 SW 1/4 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.	---	1976-2002	11-06-02 01-13-03 04-23-03 07-02-03	15.4 18.8 12.8 8.88
Castle Springs (08405490)	Black River	Lat 32°11'59", long 104°15'13", in SW 1/4 SW 1/4 SW 1/4 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.	---	1975-2002	10-16-02 01-14-03 04-21-03 07-12-03	0.61 1.73 2.10 1.15
Mangas Creek (09431100)	Gila River	Lat 32°50'48", long 108°30'57", in NW 1/4 NE 1/4 sec.8, T.17 S., R.16 W., Grant County, Hydrologic Unit 15040002, 0.4 mi northwest of Mangas Springs.	177	1970-2002	12-10-02 03-10-03 09-11-03	3.25 3.40 2.74

Rio Grande Seepage Investigation

REACH.--The Rio Grande seepage investigation was conducted along the 9.1-mile reach between two gaging stations (08313000) Rio Grande at Otowi Bridge near San Ildefonso, New Mexico, and (08313268) Rio Grande near White Rock, New Mexico. River miles are referenced from the Rio Grande at El Paso, Texas, which is designated as river mile 0.0.

PREVIOUS INVESTIGATIONS.--None.

DATE.--November 21, 2002.

WEATHER.--Weather was favorable with no precipitation during the seepage investigation. The mean daily temperature at Los Alamos, New Mexico, was 7 degrees Celsius on November 21, 2002, with a low of 1 degree Celsius and a high of 13 degrees Celsius.

STREAMFLOW.--The seepage investigation was conducted during the non-irrigation season. Discharge measurements indicate a net seepage loss of 12.0 ft^3/s from river mile 1614.2 to river mile 1605.1, with total wastewater inflow of 0.33 ft^3/s. Channel gain or loss includes seepage to or from the unlined river channel, evaporation from the water surface, and transpiration by vegetation along the channel banks.

REMARKS.--The seepage investigation is rated good on the basis of steady streamflow conditions and steady reach inflow. Individual discharge measurements were rated good (within 5 percent) at both measurement sections. The accuracy of discharge measurements needs to be considered when evaluating indicated gains and losses.

[ft^3/s, cubic feet per second; NM, New Mexico; --, no data or not applicable]

River mile	Stream	Location	Date	Time	Water temperature (^oC)	Discharge, in ft^3/s		
						Main stream	Inflow	Gain or loss
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°52'29", long 106°12'20"	11-21-02	0938	--	333		
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°46'51", long 106°12'20"	11-21-02	1031	4.0	332		
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°46'51", long 106°12'20"	11-21-02	1117	4.0	332		
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°46'51", long 106°12'20"	11-21-02	1206	--	337		
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°46'51", long 106°12'20"	11-21-02	1251	--	337		
1614.2	Rio Grande	At Otowi Bridge, NM Lat 35°46'51", long 106°12'20"	11-21-02	1331	6.5	334		
	White Rock Wastewater Inflow	Near White Rock, NM	11-21-02	--	--	--	0.33	
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1035	--	327		
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1145	--	331		
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1252	5.8	319		
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1350	6.7	316		
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1448	7.1	322		
1605.1	Rio Grande	Near White Rock, NM Lat 35°46'51", long 106°12'20"	11-21-02	1550	--	318		

West Drain Seepage Investigation

REACH.--The West Drain seepage investigation was conducted along the 23.7-mile reach from the head of the drain near San Miguel, New Mexico, to the junction at Nemexas Drain near Santa Teresa, New Mexico. Drain miles are referenced upstream from the junction of the drain, which is designated as drain mile 0.0.

PREVIOUS INVESTIGATIONS.--None.

DATE.--February 24-26 and August 25-27, 2003.

WEATHER.--Brief scattered rain showers occurred during the seepage investigation on February 26 with 0.03 inch of precipitation reported at Berino, New Mexico. The mean daily temperature at Berino, New Mexico, was 10 degrees Celsius on February 24, 7 degrees Celsius on February 25, and 9 degrees Celsius on February 26, 2003, with a low of minus 1 degree Celsius on February 25 and a high of 19 degrees Celsius on February 24. Weather was favorable with no precipitation during the seepage investigation on August 25-27, 2003. The mean daily temperature at Berino, New Mexico, was 26 degrees Celsius on August 25, 26, and 27, 2003, with a low of 17 degrees Celsius on August 26 and a high of 36 degrees Celsius on August 25.

STREAMFLOW.--The seepage investigation on February 24-26, 2003, was conducted during the non-irrigation season. Discharge measurements indicate a net seepage gain of 8.4 ft^3/s from drain mile 23.7 to drain mile 0.0, with total side-channel inflow of 2.3 ft^3/s. The seepage investigation on August 25-27, 2003, was conducted during the irrigation season. Discharge measurements indicate a net seepage gain of 4.3 ft^3/s from drain mile 23.7 to drain mile 0.0, with total side-channel inflow of 3.1 ft^3/s. Indicated gains (+) and losses (-) throughout the reach are shown below. Tributary flow recorded as inflow is considered a contribution and not a gain; no outflow (diversions) occurred during the investigation. Channel gain or loss includes seepage to or from the unlined channel, evaporation from the water surface, and transpiration by vegetation along the channel banks.

REMARKS.--The seepage investigation conducted on February 24-26, 2003, is rated good on the basis of steady streamflow conditions. Individual discharge measurements were rated good (within 5 percent) throughout most of the stream reach. Discharge measurements were rated fair (within 8 percent) at drain mile 4.7 and drain mile 0.0 due to channel conditions. The seepage investigation conducted on August 25-27, 2003, is rated good from drain mile 23.7 to drain mile 10.7. The seepage investigation is rated poor from drain mile 10.7 to drain mile 0.0 on the basis of unsteady streamflow conditions. Discharge measurements at drain mile 10.7 indicate unsteady streamflow at 2.05 ft^3/s on August 26 at 1615 hours and 1.69 ft^3/s on August 27 at 0920 hours. Individual discharge measurements were rated good (within 5 percent) throughout most of the stream reach. Individual discharge measurements were rated fair (within 8 percent) at drain miles 18.9 and 10.7 and rated poor (over 8 percent) at drain miles 20.8, 15.5, and 0.7 due to low stream velocity and poor channel conditions. The accuracy of discharge measurements needs to be considered when evaluating indicated gains and losses.

Ground-water pumpage to supplement reduced surface-water allotments significantly increased in the 2003 irrigation season. Numerous nearby irrigation wells were observed to be pumping during the seepage investigation conducted on August 25-27, 2003. Cooperation by the local irrigation districts to limit spillway inflows during the seepage investigation is gratefully acknowledged.

[ft^3/s, cubic feet per second; µS/cm, microsiemens per centimeter at 25 degrees Celsius; NM, New Mexico; --, no data or not applicable; TX, Texas]

Drain mile	Stream	Location	Date	Time	Water temperature (°C)	Specific conductance (µS/cm)	Discharge, in ft^3/s		
							Main stream	Inflow	Gain or loss
23.7	West Drain	At head near San Miguel, NM	02-24-03	1330	--	--	[1]0	--	--
		Lat 32°09'14", long 106°44'53"	08-25-03	1205	--	--	[1]0	--	--
23.6	Prescott Spur Drain	Near San Miguel, NM	02-24-03	1340	--	--	--	[1]0	--
	Inlet	Lat 32°09'13", long 106°44'48"	08-25-03	1210	--	--	--	[1]0	--
23.0	San Miguel Spur	Near San Miguel, NM	02-25-03	0815	8.0	2,110	--	[2]0	--
	Drain Inlet	Lat 32°08'49", long 106°44'33"	08-26-03	0850	22.0	1,500	--	[3]0.057	--
22.1	West Drain	At Emerson Farm Road near San Miguel, NM	02-25-03	0845	5.0	1,810	[3]0.179	--	+0.18
		Lat 32°08'20", long 106°43'55"	08-26-03	0815	22.5	1,550	[3]0.063	--	+0.006
22.0	Wallace Spur Drain	Near San Miguel, NM	02-25-03	0915	6.0	1,320	--	[3]0.188	--
	Inlet	Lat 32°08'12", long 106°43'52"	08-26-03	0940	22.5	980	--	[3]0.312	--
21.5	Payne Spur Drain	Near La Mesa, NM	--	--	--	--	--	--	--
	Inlet	Lat 32°07'51", long 106°43'42"							
20.8	Mundy Spur Drain	Near La Mesa, NM	02-24-03	1430	14.0	1,480	--	[2]0	--
	Inlet	Lat 32°07'18", long 106°43'23"	08-26-03	0900	22.5	1,080	--	0.76	--
20.2	West La Mesa Spur	Near La Mesa, NM	02-24-03	1550	13.5	1,440	--	[2]0	--
	Drain Inlet	Lat 32°06'49", long 106°43'07"	08-25-03	1345	28.5	1,040	--	[2]0	--
20.0	Shafer Lateral Spill-	Near La Mesa, NM	--	--	--	--	--	[1]0	--
	way Inlet	Lat 32°06'39", long 106°43'03"	08-26-03	0850	--	--	--	[2]0	--
18.9	Cozine Spur Drain	Near La Mesa, NM	02-24-03	1645	12.5	1,430	--	[2]0	--
	Inlet	Lat 32°05'50", long 106°42'32"	08-26-03	1005	24.5	970	--	0.68	--
18.6	Cox Spur Drain Inlet	Near La Mesa, NM	--	--	--	--	--	--	--
		Lat 32°05'37", long 106°42'24"	08-26-03	1020	26.0	1,040	--	[3]0.035	--
17.3	Garret Spur Drain	Near Chamberino, NM	02-24-03	1720	11.5	1,410	--	[2]0	--
	Inlet/Spillway	Lat 32°04'35", long 106°41'47"	08-25-03	1520	30.0	1,110	--	[2]0	--
17.0	West Drain	Above Neale Spur Drain near Chamberino, NM	02-25-03	1055	9.5	1,380	[3]0.208	--	-0.16
		Lat 32°04'22", long 106°41'39"	08-26-03	1140	25.0	1,140	3.16	--	+1.31

West Drain Seepage Investigation--Continued

Drain mile	Stream	Location	Date	Time	Water temperature (°C)	Specific conductance (µS/cm)	Discharge, in ft³/s: Main stream	Discharge, in ft³/s: Inflow	Discharge, in ft³/s: Gain or loss
16.8	Neale Spur Drain Inlet	Near Chamberino, NM Lat 32°04'12", long 106°41'32"	02-25-03 08-25-03	1645 1610	15.0 --	1,790 --	-- --	[2]/0 [1]/0	-- --
15.5	Want Lateral Spillway No. 35E Inlet	Near Chamberino, NM Lat 32°03'09", long 106°40'59"	-- 08-26-03	-- 1030	-- --	-- 900	-- --	[1]/0 0.05	-- --
10.7	West Drain	At County Road A47 near La Union, NM Lat 31°59'07", long 106°39'52"	02-25-03 02-26-03 08-26-03 08-27-03	1522 0916 1615 0920	18.0 -- 31.5 --	1,790 -- 1,200 --	2.30 2.45 2.05 1.69	-- -- -- --	+2.09 -- -1.16 --
5.5	West Drain	At NM 273 near La Union, NM Lat 31°54'50", long 106°38'42"	02-26-03 08-27-03	1048 0945	12.5 26.0	1,930 1,330	4.92 [3]/0.008	-- --	+2.47 -1.68
4.7	Central Drain Inlet	Near Cañutillo, TX Lat 31°54'23", long 106°38'14"	02-26-03 08-27-03	1442 1050	14.0 24.5	3,190 2,870	-- --	1.06 [3]/0.179	--
1.8	Crawford Spur Drain Inlet	Near El Paso, TX Lat 31°51'53", long 106°37'55"	02-26-03 08-27-03	0900 1200	8.0 23.0	2,450 2,160	-- --	[2]/0 [3]/0.017	--
1.6	Crawford Lateral Spillway No. 32G	Near Santa Teresa, NM Lat 31°51'42", long 106°37'52"	-- 08-27-03	-- 1000	-- --	-- --	-- --	-- [1]/0	-- --
1.3	Santa Teresa Wastewater Inflow	Near Santa Teresa, NM Lat 31°51'21", long 106°37'29"	02-26-03 08-27-03	1410 1355	15.0 27.0	2,460 2,690	-- --	0.72 0.82	-- --
0.7	Borderland Spur Drain Inlet	At Stevens Lateral Spillway near Santa Teresa, NM Lat 31°51'09", long 106°37'15"	02-26-03 08-27-03	1430 1145	14.0 25.5	3,280 2,730	-- --	[3]/0.29 0.15	--
0.0	West Drain Inlet	At Nemexas Drain near Santa Teresa, NM Lat 31°50'42", long 106°36'44"	02-26-03 08-27-03	1534 1505	15.0 30.0	2,390 2,340	10.8 6.96	-- --	+3.8 +5.79

[1] Dry.
[2] No flow; ponded.
[3] Parshall flume.

The following water-quality tables for miscellaneous sites in the Rio Grande Basin are identified by 15-digit latitude-longitude site numbers and are in order by ascending site numbers as shown before the site name. This departure from the normal downstream order for surface-water sites was taken to facilitate locating these sites in this report and for comparing results for the same group of analyses

RIO GRANDE BASIN

315042106364410 WEST DRAIN INLET AT NEMEXAS DRAIN NR SANTA TERESA, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
FEB													
26...	1515	11	44	661	7.9	91	8.0	2,390	18.0	15.0	410	67	114
AUG													
27...	1530	7.0	21	665	1.1	17	7.8	2,340	34.5	30.0	350	--	89.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
FEB													
26...	30.9	9.42	8	387	351	421	0.48	258	0.99	38.1	515	1,570	1,610
AUG													
27...	31.3	15.3	8	350	363	442	0.43	271	1.1	39.7	441	1,480	1,470

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Boron, water, fltrd, ug/L (01020)
FEB									
26...	7.1	2.85	0.18	0.26	0.089	0.55	0.57	1.53	560
AUG									
27...	11	8.31	--	<0.06	E.004	3.40	3.52	3.73	540

Remark codes used in this table:
< -- Less than
E -- Estimated value

RIO GRANDE BASIN

315450106384210 WEST DRAIN AT NM273 NEAR LA UNION, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
FEB													
26...	1020	4.9	14	663	8.2	89	8.2	1,930	11.0	12.5	400	120	119
AUG													
27...	0900	0.01	1.6	667	3.9	55	7.7	1,330	22.0	26.0	260	89	70.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
FEB													
26...	24.9	5.65	6	286	276	331	3	0.31	184	0.81	32.8	447	1,270
AUG													
27...	20.5	7.73	5	168	171	208	--	0.18	127	0.8	20.1	288	807

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Boron, water, fltrd, ug/L (01020)
FEB									
26...	1,310	0.41	0.09	0.22	E.004	0.02	<0.04	0.06	400
AUG									
27...	855	1.1	0.56	<0.06	<0.008	<0.02	E.02	E.02	280

Remark codes used in this table:
< -- Less than
E -- Estimated value

RIO GRANDE BASIN

315907106395210 WEST DRAIN AT COUNTY ROAD A47 NEAR LA UNION, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
FEB													
25...	1450	2.3	12	662	9.8	120	8.3	1,790	23.0	18.0	420	160	124
AUG													
26...	1610	2.0	15	665	9.7	153	8.4	1,200	32.0	31.5	260	110	70.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
FEB													
25...	26.7	6.26	5	239	256	305	4	0.26	169	0.65	29.2	405	1,160
AUG													
26...	21.3	7.80	4	151	159	184	5	0.16	117	0.7	16.2	263	743

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Boron, water, fltrd, ug/L (01020)
FEB									
25...	1,210	0.40	0.04	0.30	E.007	E.02	<0.04	0.05	330
AUG									
26...	756	0.46	<0.04	<0.06	<0.008	<0.02	<0.04	E.04	260

Remark codes used in this table:
< -- Less than
E -- Estimated value

RIO GRANDE BASIN

320422106413910 WEST DRAIN ABV NEALE SPUR DRAIN NR CHAMBERINO, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
FEB													
25...	1045	0.21	29	664	4.5	45	7.8	1,380	9.0	9.5	370	180	107
AUG													
26...	1230	3.2	37	664	5.0	70	7.9	1,140	31.0	25.0	270	81	76.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
FEB													
25...	24.9	9.28	4	158	192	232	0.09	128	0.68	10.1	311	865	914
AUG													
26...	18.8	7.32	4	132	186	227	0.16	107	0.7	21.6	219	695	724

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Boron, water, fltrd, ug/L (01020)
FEB									
25...	0.90	0.17	0.21	0.22	0.011	E.01	<0.04	0.09	250
AUG									
26...	0.56	0.07	--	<0.06	<0.008	<0.02	E.02	0.08	230

Remark codes used in this table:
< -- Less than
E -- Estimated value

Water-quality partial-record stations and water-quality miscellaneous sites are surface-water locations where chemical-quality, biological, and/or sediment data are collected on a limited frequency over a short period of years or once only for use in hydrologic investigations.

TULAROSA VALLEY BASIN

08480594 MALPAIS SPRING NR OSCURA, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
MAY													
07...	1040	1.5	653	8.2	99	7.6	6,370	25.0	16.0	2,300	2,200	670	142

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
MAY													
07...	7.48	6	606	44	54	0.0	0.44	1,180	1.30	27.1	1,890	4,580	4,910

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
MAY													
07...	2.94	<0.008	<0.02	<40	2	10.8	<1.5	220	<24	<30	<24	<20	<30

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
MAY											
07...	<0.24	43	<5.0	<0.02	<90	<90	6	<27	11,400	E13	<72

Remark codes used in this table:
< -- Less than
E -- Estimated value

The following water-quality tables for miscellaneous sites in the Tularosa Valley Basin are identified by 15-digit latitude-longitude site numbers and are in order by ascending site numbers as shown before the site names. This departure from the normal downstream order for surface-water sites was taken to facilitate locating these sites in this report and for comparing results for the same group of analyses.

TULAROSA VALLEY BASIN

331158106265710 SALT CREEK NR NW-50 ON WSMR, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
MAY													
06...	1355	0.02	655	5.6	114	8.8	75,500	27.0	28.5	8,900	8,800	1,310	1,350

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
MAY													
06...	736	78	16,800	65	66	6	6.62	27,400	8.1	<5.20	9,700	57,400	60,000

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
MAY													
06...	<0.06	<0.008	0.02	<600	<15	97.1	<20.0	2,550	<320	<400	<320	<230	<400

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
MAY											
06...	<2.48	4,100	75.1	<0.02	<1,200	<1,200	<21	<360	44,500	<320	<960

Remark codes used in this table:
< -- Less than

TULAROSA VALLEY BASIN

332057106211310 SALT CREEK 4 AT RANGE ROAD 7 ON WSMR, NM

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
MAY													
06...	1155	0.13	655	7.0	96	7.6	29,400	30.5	18.0	3,500	3,300	930	286

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
MAY													
06...	125	38	5,110	186	226	0.0	2.09	9,200	5.1	22.8	2,980	18,800	20,300

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
MAY													
06...	<0.06	<0.008	<0.02	<300	<6	26.1	<10.0	560	<160	<200	<160	<120	<200

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
MAY											
06...	<0.96	1,170	136	<0.02	<600	<580	<8	<180	18,100	<160	<480

Remark codes used in this table:
< -- Less than

BERNALILLO COUNTY

Albuquerque Area

350256106390801. Local number, 10N.03E.32.314.
LOCATION.--Lat 35°02'56", long 106°39'09", Hydrologic Unit 13020203.
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 measurement.
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, 45.47 ft below land-surface datum, July 16, 1994.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.07	36.44	35.73	36.08	35.54	35.26	35.89	36.38	38.43	40.79	41.36	40.62
10	38.63	36.53	34.97	34.36	35.57	36.39	35.46	37.12	38.26	41.39	41.75	39.84
15	38.13	36.60	35.07	33.88	35.41	36.01	35.47	36.83	39.16	41.92	41.59	38.67
20	38.37	36.25	34.73	35.20	34.62	35.76	35.59	36.83	40.02	41.91	41.26	39.61
25	37.95	35.76	34.93	35.65	34.73	34.70	35.80	37.58	39.14	41.31	40.49	39.57
EOM	37.24	36.77	35.59	35.41	35.21	35.07	35.56	37.91	38.59	41.51	40.59	39.48

WTR YR 2003 HIGHEST 33.86 JAN 14 LOWEST 42.74 AUG 8-9

Albuquerque Area

351051106395304. Local number, 11N.03E.18.411D.
LOCATION.--Lat 35°10'51", long 106°39'53", Hydrologic Unit 13020203.
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, 46.89 ft below land-surface datum, Sept. 16, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	45.75	FEB 04	44.69

CHAVES COUNTY

Roswell Basin

334138104343801 (formerly 334645104344501). Local number, 07S.23E.23.24431.
LOCATION.--Lat 33°41'38", long 104°34'38", Hydrologic Unit 13060005.
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 March 1960, January 1962 to January 1966, January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	261.68	AUG 21	263.13

Roswell Basin

332615104303601. Local number, 10S.24E.21.212222.
LOCATION.--Lat 33°26'15", long 104°30'36", Hydrologic Unit 13060008.
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. Monthly steel-tape measurements.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	42.80	DEC 05	37.00	JAN 24	35.00	APR 04	38.60	JUN 13	42.10	AUG 15	46.65
15	42.00	17	36.30	FEB 05	34.80	15	39.10	25	43.95	25	47.00
25	39.60	24	36.05	14	34.60	25	40.30	JUL 03	45.95	SEP 05	46.70
NOV 05	38.60	JAN 06	35.60	25	34.70	MAY 15	40.80	15	46.00	15	45.70
15	38.00	14	35.34	MAR 14	36.40	23	41.70	25	49.00	25	46.50
25	37.50	15	35.15	25	38.40	JUN 05	42.30	AUG 05	46.90		

CHAVES COUNTY—Continued

Roswell Basin

332255104360401. Local number, 11S.23E.03.342223.
LOCATION.--Lat 33°22'55", long 104°36'04", Hydrologic Unit 13060008.
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.--March 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	175.02	AUG 20	DRY

Roswell Basin

331914104253701 (formerly 331930104261001). Local number, 11S.25E.29.34333.
LOCATION.--Lat 33°19'14", long 104°25'37", Hydrologic Unit 13060007.
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.--August 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	PUMPING

Roswell Basin

331705104262801 (formerly 332200104270001). Local number, 12S.25E.09.42230.
LOCATION.--Lat 33°17'05", long 104°26'28", Hydrologic Unit 13060007.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 15	69.23	AUG 21	71.73

Roswell Basin

331525104245201 (formerly 331205104245101). Local number, 12S.25E.23.344412.
LOCATION.--Lat 33°15'25", long l04°24'52", Hydrologic Unit 13060007.
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 measurement.
DATUM.--Elevation of land-surface datum is 3,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 2.30 ft above land-surface datum.
REMARKS.--Records good, except for June 6-19 and June 30-July 24, which are missing due to recorder malfunction.
PERIOD OF RECORD.--January 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.39 ft below land-surface datum, Mar. 5, 2002; lowest measured, 199.68 ft below land-surface datum, June 20, 1978.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.76	27.43	19.85	13.23	20.75	33.07	114.35	87.56	---	---	156.44	107.11
10	52.43	25.53	18.41	13.92	16.99	46.82	101.85	88.25	---	---	148.85	98.66
15	50.24	28.60	17.66	13.00	25.38	71.69	97.41	89.63	---	---	138.87	93.53
20	42.60	26.07	16.48	11.50	28.88	67.32	100.15	112.07	129.11	---	129.37	90.56
25	39.89	23.50	14.98	15.33	24.23	80.53	110.16	117.11	130.98	146.80	120.15	94.07
EOM	31.15	22.67	13.50	17.58	30.87	100.28	102.12	120.91	---	156.20	115.14	85.72

WTR YR 2003 HIGHEST 11.50 JAN 20 LOWEST 160.87 AUG 1

CHAVES COUNTY—Continued

Roswell Basin

331524104245101. Local number, 12S.25E.23.344234A.
LOCATION.--Lat 33°15'24", long 104°24'51", Hydrologic Unit 13060007.
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 measurement.
DATUM.--Elevation of land-surface datum is 3,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelf, 2.40 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 99.32 ft below land-surface datum, Apr. 14, 2000; lowest measured, 110.98 ft below land-surface datum, Oct. 1, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	102.09	102.18	102.11	101.80	101.47	101.29	101.23	101.43	101.71	102.04	102.37	102.71
10	102.14	102.16	101.98	101.74	101.45	101.27	101.27	101.56	101.75	102.09	102.41	102.77
15	102.13	102.21	102.02	101.68	101.47	101.21	101.25	101.47	101.85	102.16	102.49	102.81
20	102.15	102.23	101.93	101.68	101.38	101.29	101.40	101.75	101.80	102.19	102.53	102.86
25	102.21	102.15	101.93	101.66	101.30	101.32	101.39	101.68	101.94	102.27	102.57	102.98
EOM	102.23	102.14	101.82	101.62	101.31	101.23	101.41	101.73	101.99	102.31	102.67	103.06

WTR YR 2003 HIGHEST 101.19 MAR 16 LOWEST 103.25 SEP 30

Roswell Basin

331213104241601 (formerly 331216104241701). Local number, 13S.25E.12.311134.
LOCATION.--Lat 33°12'13", long 104°24'16", Hydrologic Unit 13060007.
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.
REMARKS.--"S" indicates nearby well pumping.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.23 ft below land-surface datum, Feb. 3, 1942; lowest measured, 99.21S ft below land-surface datum, Aug. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 16	88.23S	AUG 21	94.11

Roswell Basin

331002104254701 (formerly 331002104272001). Local number, 13S.25E.27.211144.
LOCATION.--Lat 33°10'02", long 104°25'47", Hydrologic Unit 13060007.
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. Monthly steel-tape measurements.
PERIOD OF RECORD.--1940 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -3.49 ft above land-surface datum, Feb. 5, 1999; lowest measured, 198.30 ft below land-surface datum, July 18, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	76.88	DEC 16	12.51	FEB 14	18.74	APR 25	140.44	JUL 03	185.56	SEP 15	110.41
15	57.31	26	7.60	25	21.88	MAY 05	136.71	15	188.54	25	106.94
25	36.49	JAN 06	5.31	MAR 05	36.41	15	129.05	25	181.41		
NOV 05	23.21	15	4.19	14	95.21	23	148.85	AUG 05	185.57		
15	30.51	16	5.28	25	108.99	JUN 05	156.96	15	172.73		
25	19.11	24	5.44	APR 04	141.41	13	162.36	25	147.06		
DEC 05	15.01	FEB 05	12.80	15	116.43	25	163.41	SEP 05	131.94		

Roswell Basin

330702104402401 (formerly 330700104402501). Local number, 14S.23E.08.144344.
LOCATION.--Lat 33°07'02", long 104°40'24", Hydrologic Unit 13060009.
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.--April 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, 328.69 ft below land-surface datum, Aug. 21, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	328.69

CHAVES COUNTY—Continued

Roswell Basin

330646104173301 (formerly 330640104174501). Local number, 14S.26E.12.431331.
LOCATION.--Lat 33°06'46", long l04°17'33", Hydrologic Unit 13060007.
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.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	20.80

Roswell Basin

330404104221201. Local number, 14S.26E.30.44444.
LOCATION.--Lat 33°04'04", long 104°22'12", Hydrologic Unit 13060007.
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.--February 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.10 ft below land-surface datum, Feb. 11, 1993; lowest measured, 295.05 ft below land-surface datum, Aug. 21, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	295.05

Penasco Valley

325654105180101. Local number, 16S.16E.03.312132.
LOCATION.--Lat 32°56'54", long 105°18'01", Hydrologic Unit 13060010.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled water-table irrigation well, depth 163 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,743.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: end of discharge pipe, 4.53 ft above land surface.
PERIOD OF RECORD.--August 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.19 ft below land-surface datum, Aug. 13, 1987; lowest measured, 38.37 ft below land-surface datum, Jan. 21, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	31.22

CIBOLA COUNTY

Grants-Bluewater Area

350346107521201 (formerly 350400107510501). Local number, 10N.10W.26.331.
LOCATION.--Lat 35°03'46", long 107°52'12", Hydrologic Unit 13020207.
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 $\frac{1}{2}$-in. hole in pump base, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--February 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	30.91	AUG 11	30.20

CIBOLA COUNTY—Continued

Grants-Bluewater Area

350923107522701 (formerly 350925107523001). Local number, 11N.10W.27.241.
LOCATION.--Lat 35°09'23", long 107°52'27", Hydrologic Unit 13020207.
AQUIFER.--San Andres Limestone.
WELL CHARACTERISTICS.--Drilled water-table unused 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.--February 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.23 ft below land-surface datum, Sept. 29, 1988; lowest measured, 42.28 ft below land-surface datum, Aug. 11, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	38.34	AUG 11	42.28

Grants-Bluewater Area

351304107543701 (formerly 351400107524201). Local number, 12N.10W.29.434.
LOCATION.--Lat 35°13'04", long 107°54'37", Hydrologic Unit 13020207.
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.--October 1944, February 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	83.29	AUG 11	85.48

Grants-Bluewater Area

351651107594501 (formerly 351650107535001). Local number, 12N.11W.09.424.
LOCATION.--Lat 35°16'51", long 107°59'45", Hydrologic Unit 13020207.
AQUIFER.--San Andres Limestone and Yeso Formation of Permian age.
WELL CHARACTERISTICS.--Drilled artesian unused well, diameter 16 in., reported depth 505 ft, 16-in. casing to 175 ft, 12-in. casing to 325 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,642 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 3.05 ft above land-surface datum.
PERIOD OF RECORD.--May 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.69 ft below land-surface datum, Sept. 29, 1988; lowest measured, 274.81 ft below land-surface datum, Jan. 23, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	125.11	AUG 11	128.44

Grants-Bluewater Area

351630107572801 (formerly 351637107584501). Local number, 12N.11W.14.213.
LOCATION.--Lat 35°16'30", long 107°57'28", Hydrologic Unit 13020207.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	88.29	AUG 11	89.10

COLFAX COUNTY

Capulin Basin

364522104034501 (formerly 364500104031501). Local number, 29N.27E.16.222.
LOCATION.--Lat 36°45'22", long 104°03'45", Hydrologic Unit 11040001.
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.--February 1957 to February 1969, February 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, 11.42 ft below land-surface datum, July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 27	9.26	JUL 10	11.42

COSTILLA COUNTY (in Colorado)

Sunshine Valley

370004105402201 (formerly 370009105410001). Local number, 01N.74W.33.322.
LOCATION.--Lat 37°00'04", long 105°40'22", Hydrologic Unit 13020101.
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.--February 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 101.82 ft below land-surface datum, Aug. 26, 1968; lowest measured, 139.24 ft below land-surface datum, Sept. 2, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 20	123.68	JUL 11	124.28

CURRY COUNTY

Clovis Area

341836103052001. Local number, 01N.37E.17.113133.
LOCATION.--Lat 34°18'53", long 103°05'26", Hydrologic Unit 12050002.
AQUIFER.--Ogallala.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 16 in., depth 373 ft, screened 293-373 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,113 ft above National Geodetic Vertical Datum of 1929. Measuring point: top edge of recorder shelter apron, 3.93 ft above land-surface datum.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--January 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 158.17 ft below land-surface datum, Jan. 28, 1972; lowest measured, 303.28S ft below land-surface datum, Aug. 25, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	297.88	NOV 06	297.58	DEC 19	296.70	JAN 15	295.63	FEB 20	295.51	AUG 25	303.28S

Clovis Area

342358103093601. Local number, 02N.36E.15.11111.
LOCATION.--Lat 34°23'58", long 103°09'36", Hydrologic Unit 12050002.
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.--January 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, 304.47 ft below land-surface datum, July 31, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
FEB 20	295.22

CURRY COUNTY—Continued

Clovis Area

342736103203701 (formerly 342815103270001). Local number, 03N.34E.23.433133.
LOCATION.--Lat 34°27'36", long 103°20'37", Hydrologic Unit 12050001.
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.--April 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, 362.32 ft below land-surface datum, Aug. 14, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 20	361.42	JUL 08	362.06

Clovis Area

343347103345001. Local number, 04N.32E.22.111114.
LOCATION.--Lat 34°33'47", long l03°34'50", Hydrologic Unit 12050001.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 401 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
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.
PERIOD OF RECORD.--January 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 295.35 ft above land-surface datum, July 8, 2003; lowest measured, 309.92 ft below land-surface datum, Jan. 9, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	295.49	JUL 08	295.35

Clovis Area

343615103123801. Local number, 05N.35E.35.31324.
LOCATION.--Lat 34°36'15", long 103°12'38", Hydrologic Unit 12050005.
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.
PERIOD OF RECORD.--January 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, 458.53 ft below land-surface datum, July 8, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 20	458.19	JUL 08	458.53

DONA ANA COUNTY

Rincon and Mesilla Valleys

322203106484101 (formerly 322210106483001). Local number, 22S.01E.26.411.
LOCATION.--Lat 32°22'03", long 106°48'41", Hydrologic Unit 13030102.
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.--April 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.56 ft below land-surface datum, July 24, 2001; lowest measured, 25.57 ft below land-surface datum, Apr. 25, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04	12.04	JUL 24	14.89

DONA ANA COUNTY—Continued

Tularosa Basin

322323106314701. Local number, 22S.04E.15.331.
LOCATION.--Lat 32°23'23", long 106°31'47".
AQUIFER.--Bolson fill.
WELL CHARACTERISTICS.--4-in.-diameter PVC casing, depth 295 ft, screen interval 125-285 ft.
INSTRUMENTATION.--Pressure transducer, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 4,622 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 8-in. steel surface casing on north side at 1.65 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--December 1998 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.40 ft below land-surface datum, Apr. 21, 1999; lowest measured, 69.97 ft below land-surface datum, Sept. 30, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	69.38	69.38	69.25	69.13	68.97	68.87	68.77	68.75	68.92	69.31	69.58	69.80
10	69.41	69.33	69.23	69.12	69.01	68.93	68.84	68.77	69.01	69.38	69.65	69.77
15	69.40	69.34	69.22	69.10	68.94	68.86	68.76	68.78	69.10	69.44	69.71	69.84
20	69.39	69.37	69.19	69.07	68.84	68.84	68.79	68.88	69.12	69.48	69.68	69.83
25	69.39	69.29	69.13	69.07	68.90	68.87	68.75	68.86	69.18	69.50	69.72	69.87
EOM	69.41	69.31	69.12	69.07	68.87	68.90	68.75	68.91	69.28	69.56	69.77	69.94

WTR YR 2003 HIGHEST 68.72 APR 18 LOWEST 69.97 SEP 30

Rincon and Mesilla Valleys

321606106462901 (formerly 321620106461501). Local number, 23S.02E.31.213.
LOCATION.--Lat 32°16'06", long 106°46'29", Hydrologic Unit 13030102.
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.--February 1948, April 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 29	22.52	JUL 24	24.37

EDDY COUNTY

Roswell Basin

325702104352801 (formerly 325735104360701). Local number, 16S.24E.04.411341.
LOCATION.--Lat 32°57'02", long 104°35'28", Hydrologic Unit 13060007.
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.--January 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.48 ft below land-surface datum, Jan. 29, 1996; lowest measured, 100.54 ft below land-surface datum, Aug. 27, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	64.62	AUG 21	72.65

Roswell Basin

325638104274801. Local number, 16S.25E.11.111131A.
LOCATION.--Lat 32°56'38", long 104°27'48", Hydrologic Unit 13060007.
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, 69.73 ft below land-surface datum, June 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	69.02	DEC 06	67.65	JAN 17	66.94	APR 18	67.97	JUL 22	68.94	SEP 23	68.75
NOV 04	68.42	JAN 13	66.98	FEB 04	66.62	MAY 22	68.95	AUG 21	68.86		

EDDY COUNTY—Continued

Roswell Basin

325450104251101 (formerly 325445104253501). Local number, 16S.26E.19.21113.
LOCATION.--Lat 32°54'50", long 104°25'11", Hydrologic Unit 13060007.
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: ½-in. by 3-in. vertical slot under pump base, at land-surface datum.
PERIOD OF RECORD.--January 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, 140.89 ft below land-surface datum, Aug. 6, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 17	111.24	AUG 21	120.75

Roswell Basin

324838104435301 (formerly 324831104435701). Local number, 17S.23E.30.12344.
LOCATION.--Lat 32°48'38", long 104°43'53", Hydrologic Unit 13060007.
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 on north side of concrete base, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--December 1968, January 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 508.63 ft below land-surface datum, Jan. 27, 1988; lowest measured, 553.18 ft below land-surface datum, Aug. 11, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	520.83

Roswell Basin

324620104255001 (formerly 324624104244501). Local number, 18S.26E.06.442221A.
LOCATION.--Lat 32°46'20", long 104°25'50", Hydrologic Unit 13060007.
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 measurement.
DATUM.--Elevation of land-surface datum is 3,402.1 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelf, 2.40 ft above land-surface datum.
REMARKS.--Records fair, except May 23-June 19, which are missing due to recorder malfunction.
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.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.98	113.41	101.49	94.33	87.46	89.37	137.22	136.80	---	161.33	176.37	170.87
10	135.64	110.74	100.22	92.87	86.61	93.24	139.15	139.58	---	163.27	175.01	167.34
15	130.79	108.78	98.05	91.58	85.86	103.49	144.08	136.08	---	166.61	177.72	157.58
20	125.10	107.38	96.60	90.40	85.50	113.21	142.82	141.06	156.33	170.88	180.58	155.62
25	120.20	105.34	96.78	89.23	85.52	122.79	138.69	---	162.85	173.41	178.32	155.80
EOM	116.18	103.47	94.23	88.39	87.80	128.50	134.71	---	161.33	176.53	176.38	148.65

WTR YR 2003 HIGHEST 84.89 FEB 23 LOWEST 183.88 AUG 22

EDDY COUNTY—Continued

Roswell Basin

324620104255101. Local number, 18S.26E.06.442212B.
LOCATION.--Lat 32°46'20", long 104°25'51", Hydrologic Unit 13060007.
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 measurement.
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, 145.98 ft below land-surface datum, Sept. 14, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	143.10	138.88	134.41	130.66	127.42	125.58	129.05	134.27	137.49	141.14	144.13	145.49
10	142.57	138.02	133.65	130.17	127.09	125.52	130.29	134.92	138.17	141.69	144.56	145.55
15	141.90	137.37	133.13	129.49	126.67	125.55	131.33	135.29	138.96	142.27	144.90	145.63
20	141.38	136.67	132.45	129.00	126.32	126.38	132.76	136.16	139.37	142.80	145.03	145.58
25	140.65	135.90	132.03	128.56	126.02	126.93	133.33	136.32	140.14	143.35	145.21	145.52
EOM	139.78	135.14	131.08	128.11	125.81	128.01	133.86	136.84	140.74	143.78	145.46	145.24

WTR YR 2003 HIGHEST 125.47 MAR 11 LOWEST 145.98 SEP 14

Roswell Basin

324325104233001. Local number, 18S.26E.28.122111.
LOCATION.--Lat 32°43'25", long 104°23'30", Hydrologic Unit 13060011.
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.--August 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, 127.44 ft below land-surface datum, Sept. 24, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	127.05	DEC 09	127.19	JAN 23	127.25	APR 18	127.18	JUL 22	127.38	SEP 24	127.44
NOV 05	127.09	JAN 13	127.18	FEB 04	127.20	MAY 22	127.28	AUG 22	127.41		

Roswell Basin

323705104225501. Local number, 19S.26E.33.41224.
LOCATION.--Lat 32°37'05", long 104°22'55", Hydrologic Unit 13060011.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 14 in., depth 225 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,282 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. hole, in north side of pump base, 0.95 ft above land-surface datum.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--January 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.96 ft below land-surface datum, Feb. 26, 2001; lowest measured, 124.00 ft below land-surface datum, Jan. 9, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22	99.40S	AUG 22	OBSTRUCTI

Roswell Basin

323542104242701 (formerly 323540104232001). Local number, 20S.26E.08.121111.
LOCATION.--Lat 32°35'42", long 104°24'27", Hydrologic Unit 13060011.
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.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--January 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.47 ft below land-surface datum, May 26, 1992; lowest measured, 90.25 ft below land-surface datum, Aug. 8, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22	53.68S	AUG 22	OBSTRUCTI

EDDY COUNTY—Continued

Carlsbad Area

322637104142301 (formerly 322652104141901). Local number, 21S.26E.36.22110.
LOCATION.--Lat 32°26'37", long 104°14'23", Hydrologic Unit 13060011.
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 measurement.
DATUM.--Elevation of land-surface datum is 3,122.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelf, 4.26 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--April 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.98 ft below land-surface datum, June 14, 1987; lowest measured, 26.07 ft below land-surface datum, Aug. 2, 1974.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.67	22.88	22.63	22.25	23.27	24.05	24.94	24.84	24.67	24.93	25.21	25.21
10	23.53	22.83	22.33	22.33	23.40	24.40	24.92	24.95	24.69	25.02	25.42	25.04
15	23.45	22.89	22.22	22.38	23.52	24.47	24.74	24.79	24.81	25.30	25.42	25.05
20	23.33	22.90	22.21	22.73	23.73	24.58	24.74	24.88	24.79	25.14	25.34	25.00
25	23.22	22.81	22.21	22.95	23.86	24.71	24.72	24.72	24.79	25.20	25.27	25.17
EOM	23.01	22.72	22.13	23.20	23.91	24.90	24.92	24.51	24.92	25.14	25.28	25.00

WTR YR 2003 HIGHEST 22.20 DEC 30 LOWEST 25.64 AUG 9

Carlsbad Area

322712104074501 (formerly 322710104073901). Local number, 21S.28E.30.14123.
LOCATION.--Lat 32°27'12", long 104°07'45", Hydrologic Unit 13060011.
AQUIFER.--Capitan Limestone.
WELL CHARACTERISTICS.--Drilled exploration well, diameter 8 5/8 in. by 5 $\frac{1}{2}$ in., reported depth 1,060 ft, plugged back, total depth 906 ft.
INSTRUMENTATION.--Digital recorder, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 3,181.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 2.27 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.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.03	93.15	92.89	92.43	93.28	93.87	94.80	94.92	94.59	94.91	95.11	95.12
10	94.00	93.13	92.61	92.47	93.40	94.13	94.99	94.93	94.71	94.92	95.32	95.02
15	93.96	93.17	92.45	92.50	93.47	94.29	94.83	94.92	94.84	95.04	95.45	95.02
20	93.83	93.13	92.38	92.75	93.68	94.32	94.77	94.89	94.88	95.15	95.30	95.01
25	93.69	93.05	92.38	92.97	93.81	94.52	94.75	94.82	94.80	95.23	95.27	95.02
EOM	93.48	93.00	92.30	93.18	93.79	94.81	94.87	94.57	94.92	95.13	95.16	95.06

WTR YR 2003 HIGHEST 92.27 JAN 1 LOWEST 95.46 AUG 15

Carlsbad Area

322120104151501. Local number, 22S.26E.25.333333 (formerly 22S.26E.36.111A).
LOCATION.--Lat 32°21'20", long 104°15'15", Hydrologic Unit 13060011.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 12 in., depth 260 ft, cased to 260 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,228.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.40 ft above land-surface datum.
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, Sept. 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	170.82	NOV 05	166.84	DEC 11	162.31	JAN 14	160.02

Carlsbad Area

322238104101801 (formerly 322231104131001). Local number, 22S.27E.22.421333.
LOCATION.--Lat 32°22'38", long 104°10'18", Hydrologic Unit 13060011.
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.--September 1947 to August 1968, January 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.43 ft below land-surface datum, Sept. 15, 1950; lowest measured, 81.10 ft below land-surface datum, Aug. 8, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 16	46.31	FEB 03	50.40	AUG 22	50.75

EDDY COUNTY—Continued

Carlsbad Area

321939104113301 (formerly 321930104113301). Local number, 23S.27E.09.211124.
LOCATION.--Lat 32°19'39", long 104°11'33", Hydrologic Unit 13060011.
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 November 1955, January 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.70 ft below land-surface datum, Sept. 15, 1950; lowest measured, 64.95 ft below land-surface datum, Feb. 3, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 03	64.95	AUG 22	47.98

Carlsbad Area

320604104284101 (formerly 320602104285201). Local number, 25S.24E.27.421121.
LOCATION.--Lat 32°06'04", long 104°28'41", Hydrologic Unit 13060011.
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.--April 1952 to August 1967, January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 05	PUMPING	AUG 22	PUMPING

Carlsbad Area

320316104294301 (formerly 320257104295201). Local number, 26S.24E.09.443111.
LOCATION.--Lat 32°03'16", long 104°29'43", Hydrologic Unit 13060011.
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.--April 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, Sept. 8, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 05	52.92	AUG 22	52.49

GRANT COUNTY

Mimbres Basin

324245108175603. Local number, 18S.14W.28.143B.
LOCATION.--Lat 32°42'45", long 108°17'56", Hydrologic Unit 13030202.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 6 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,800 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4-in. hole in cover plate, at land-surface datum.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--March 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 268.84 ft below land-surface datum, Jan. 14, 1986; lowest measured, 404.60S ft below land-surface datum, Jan. 6, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 31	396.80	JUN 24	396.79

GRANT COUNTY—Continued

Silver City Area

324600108222501. Local number, 18S.15W.11.323.
LOCATION.--Lat 32°46'00", long 108°22'25", Hydrologic Unit 15040002.
AQUIFER.--Gila Conglomerate.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 12 in., depth 580 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,845 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 12-in. casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--March 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, 300.51 ft below land-surface datum, Sept. 24, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 31	300.10	JUN 24	300.08

GUADALUPE COUNTY

Santa Rosa Area

350414104485101. Local number, 10N.20E.28.2241.
LOCATION.--Lat 35°04'14", long 104°48'51", Hydrologic Unit 13060001.
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 measurement.
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, except for missing period Jan. 4 to Feb. 10, due to equipment malfunction.
PERIOD OF RECORD.--May 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 343.67 ft below land-surface datum, July 27, 1992; lowest measured, 366.72 ft below land-surface datum, Apr. 16, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	361.55	361.99	362.88	---	---	365.04	365.71	364.95	362.90	362.55	363.51	363.61
10	361.60	362.09	363.14	---	---	365.20	365.81	364.75	362.77	362.74	363.19	363.42
15	361.39	362.40	363.15	---	364.75	365.41	365.95	364.79	362.49	362.79	363.31	363.54
20	361.56	362.47	363.20	---	364.68	365.50	365.87	364.34	362.56	362.68	363.41	363.68
25	361.67	362.57	363.33	---	364.80	365.44	365.54	363.96	362.33	362.76	363.89	363.86
EOM	361.85	362.73	363.71	---	364.89	365.59	365.21	363.62	362.17	363.16	363.65	364.48

WTR YR 2003 HIGHEST 361.06 OCT 1 LOWEST 366.72 APR 16

HARDING COUNTY

Roy Area

355352104054201. Local number, 19N.27E.05.334.
LOCATION.--Lat 35°53'52", long 104°05'42", Hydrologic Unit 11080007.
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-in. plugged hole, east side, 1.50 ft above land-surface datum.
REMARKS.--Submersible pump installed in 1984.
PERIOD OF RECORD.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 27	49.39	JUL 09	50.20

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.
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.--January 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.50 ft below land-surface datum, Jan. 11, 1993; lowest measured, 15.79 ft below land-surface datum, Aug. 4, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
JUN 25	14.38

HIDALGO COUNTY—Continued

Lordsburg Area

321849108392001 (formerly 321848108391401). Local number, 23S.18W.12.333.
LOCATION.--Lat 32°18'49", long 108°39'20", Hydrologic Unit 15040003.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 12 in., depth 220 ft, perforations 100-220 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.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--April 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	164.86	JUN 24	167.22S

Lordsburg Area

321248108331401 (formerly 321257108331201). Local number, 24S.17W.14.442.
LOCATION.--Lat 32°12'48", long 108°33'14", Hydrologic Unit 15040003.
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.
REMARKS.--"X" indicates affected by surface water.
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, 227.25 ft below land-surface datum, July 17, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27	OBSTRUCTIO	JUN 24	93.00X

Animas Valley

321624108504001 (formerly 321540108514101). Local number, 23S.20W.25.422.
LOCATION.--Lat 32°16'24", long 108°50'40", Hydrologic Unit 15040003.
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, 56.09 ft below land-surface datum, Jan. 29, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
JUN 25	55.32

Animas Valley

315610108483901 (formerly 315645108493501). Local number, 27S.19W.20.343.
LOCATION.--Lat 31°56'10", long 108°48'39", Hydrologic Unit 15040003.
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, 208.30 ft below land-surface datum, Jan. 6, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 06	208.30	JUN 25	PUMPING

HIDALGO COUNTY—Continued

San Simon Valley

315738109004001. Local number, 27S.21W.17.124.
LOCATION.--Lat 31°57'38", long l09°00'40", Hydrologic Unit 15040006.
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.--January 1978, January 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, 158.45 ft below land-surface datum, January 30, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
JAN 30	158.45

San Simon Valley

315048109010201 (formerly 315010108570001). Local number, 28S.21W.30.222.
LOCATION.--Lat 31°50'48", long 109°01'02", Hydrologic Unit 15040006.
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.--January 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, 128.02 ft below land-surface datum, Jan. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 30	126.95	JUN 25	127.36

Playas Valley

313502108275001. Local number, 31S.16W.33.233.
LOCATION.--Lat 31°35'02", long 108°27'50", Hydrologic Unit 13030201.
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.--January 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, Sept. 4, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	47.73	JUN 25	59.48

LEA COUNTY

Tatum-Lovington-Hobbs Area

332115103403301. Local number, 11S.32E.24.113222.
LOCATION.--Lat 33°21'15", long l03°40'33", Hydrologic Unit 12080001.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 $\frac{1}{2}$ 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 shelter door, 3.43 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--October 1977 to November 1998, July 1999 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.74 ft above land-surface datum, Oct. 3, 1993; lowest measured, 62.67 ft below land-surface datum, Apr. 19, 1993.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.88	59.92	59.94	59.94	59.93	59.93	59.91	59.90	59.90	59.92	59.93	59.94
10	59.89	59.93	59.94	59.93	59.94	59.93	59.93	59.90	59.90	59.93	59.93	59.93
15	59.91	59.94	59.94	59.92	59.93	59.92	59.88	59.87	59.93	59.94	59.93	59.95
20	59.92	59.94	59.94	59.92	59.94	59.92	59.93	59.93	59.90	59.93	59.92	59.95
25	59.92	59.94	59.94	59.94	59.94	59.91	59.91	59.90	59.93	59.93	59.93	59.95
EOM	59.93	59.94	59.93	59.93	59.94	59.93	59.91	59.90	59.92	59.94	59.94	59.95

WTR YR 2003 HIGHEST 59.74 OCT 3 LOWEST 62.67 JAN 15

LEA COUNTY—Continued

Tatum-Lovington-Hobbs Area

331713103283301 (formerly 331740103285001). Local number, 12S.34E.11.42134.
LOCATION.--Lat 33°17'31", long 103°28'33", Hydrologic Unit 12080006.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 03	32.74	AUG 26	32.88

Tatum-Lovington-Hobbs Area

330458103251001 (formerly 330455103251301). Local number, 14S.35E.28.111133.
LOCATION.--Lat 33°04'58", long 103°25'10", Hydrologic Unit 12080003.
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.--January 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.05 ft below land-surface datum, Jan. 5, 1994; lowest measured, 44.73 ft below land-surface datum, Aug. 7, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 04	44.20	AUG 25	44.19

Tatum-Lovington-Hobbs Area

330405103194501 (formerly 330400103193401). Local number, 14S.36E.32.12121.
LOCATION.--Lat 33°04'05", long 103°19'45", Hydrologic Unit 12080003.
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.--January 1949 to January 1950, January 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, 76.14 ft below land-surface datum, Aug. 19, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 04	73.77	AUG 25	74.32

Tatum-Lovington-Hobbs Area

325730103213901 (formerly 325703103213201). Local number, 16S.36E.04.32232.
LOCATION.--Lat 32°57'30", long 103°21'39", Hydrologic Unit 12080003.
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 measurement.
DATUM.--Elevation of land-surface datum is 3,926 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelf, 4.25 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--August 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.69 ft below land-surface datum, Mar. 26, 1998; lowest measured, 67.11 ft below land-surface datum, Aug. 24, 1971.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.06	57.87	57.60	57.92	57.28	57.50	57.48	57.59	57.79	57.86	57.92	58.02
10	58.05	57.88	57.49	57.95	57.22	57.48	57.52	57.63	57.80	57.87	57.95	58.00
15	58.01	57.84	57.44	57.66	57.55	57.45	57.49	57.64	57.80	57.87	58.01	58.00
20	57.97	57.79	57.81	57.57	57.54	57.50	57.57	57.72	57.80	57.88	58.02	57.97
25	57.94	57.73	57.84	57.50	57.51	57.49	57.58	57.74	57.80	57.91	58.02	57.98
EOM	57.92	57.66	57.89	57.39	57.53	57.52	57.59	57.77	57.86	57.92	58.04	57.98

WTR YR 2003 HIGHEST 57.45 MAR 15 LOWEST 67.11 OCT 6

LEA COUNTY—Continued

Tatum-Lovington-Hobbs Area

325132103112501. Local number, 17S.38E.07.111311.
LOCATION.--Lat 32°51'32", long 103°11'25", Hydrologic Unit 12080003.
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 pipe on west side of pump, 0.95 ft above land-surface datum.
REMARKS.--"P" indicates well pumping.
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, 82.44P ft below land-surface datum, Aug. 26, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05	71.90	AUG 25	74.78

Tatum-Lovington Hobbs Area

324745103082001. Local number, 17S.38E.34.113143.
LOCATION.--Lat 32°47'45", long 103°08'20", Hydrologic Unit 12080003.
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.--November 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, 78.84 ft below land-surface datum, July 10, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05	75.45	AUG 25	76.69

LINCOLN COUNTY

Hondo Valley

333241105341101 (formerly 333242105340701). Local number, 09S.14E.10.13221.
LOCATION.--Lat 33°32'41", long 105°34'11", Hydrologic Unit 13060008.
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, 35.02 ft below land-surface datum, Feb. 26, 2001; lowest measured, 69.77 ft below land-surface datum, Nov. 28, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 28	36.62	MAR 03	36.73	JUL 22	37.74	AUG 20	37.78

Hondo Valley

332110105092501 (formerly 332157105094101). Local number, 11S.18E.15.33313.
LOCATION.--Lat 33°21'10", long 105°09'25", Hydrologic Unit 13060008.
AQUIFER.--Yeso Formation of Permian age.
WELL CHARACTERISTICS.--Drilled water-table domestic and stock well, diameter 12 in., depth 125 ft, cased to 110 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,989 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.50 ft above land-surface datum.
PERIOD OF RECORD.--October 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04	50.55	AUG 20	48.05

LUNA COUNTY

Nutt-Hockett

322927107220101 (formerly 322930107221001). Local number, 21S.05W.08.444.
LOCATION.--Lat 32°29'27", long 107°22'01", Hydrologic Unit 13030202.
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 northeast side of pump shell, 1.60 ft above land-surface datum.
PERIOD OF RECORD.--November 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, 230.35 ft below land-surface datum, Jan. 3, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 03	230.35	JUN 24	PUMPING

Mimbres Valley

321352107493901. Local number, 24S.10W.12.431.
LOCATION.--Lat 32°13'52", long 107°49'39", Hydrologic Unit 13030202.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Dug and drilled water-table unused well, diameter 36 in., reported depth 132 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,363 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelter shelf, 3.20 ft above land-surface datum.
REMARKS.--Recorder removed.
PERIOD OF RECORD.--April 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, 124.73 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	112.46	DEC 26	111.39	FEB 24	111.28	APR 25	112.58	JUN 26	113.02	AUG 26	114.07
NOV 25	111.94	JAN 24	110.90	MAR 31	111.42	MAY 23	113.05	JUL 25	113.93		

Mimbres Valley

321328107565301 (formerly 321415107565501). Local number, 24S.11W.14.122.
LOCATION.--Lat 32°13'28", long 107°56'55", Hydrologic Unit 13030202.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	OBSTRUC TIO	JUN 24	169.60

Mimbres Valley

321010107260201 (formerly 321015107260501). Local number, 25S.06W.02.111.
LOCATION.--Lat 32°10'10", long 107°26'02", Hydrologic Unit 13030202.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	15.28	JUN 24	18.88

LUNA COUNTY—Continued

Mimbres Valley

320918107293301 (formerly 320915104294501). Local number, 25S.06W.07.211.
LOCATION.--Lat 32°09'18", long 107°29'33", Hydrologic Unit 13030202.
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.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	78.66	JUN 24	78.80

Mimbres Valley

320647107490701. Local number, 25S.09W.19.31331.
LOCATION.--Lat 32°26'47", long 107°49'07", Hydrologic Unit 13030202.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 14 in., depth 240 ft, cased to 240 ft, perforated 80-240 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,248 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.
PERIOD OF RECORD.--July 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 150.70 ft below land-surface datum, July 18, 1957; lowest measured, 229.90 ft below land-surface datum, July 5, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	159.60	JUN 24	205.70S

Mimbres Valley

315517107375001 (formerly 315525107374501). Local number, 27S.08W.35.122.
LOCATION.--Lat 31°55'17", long 107°37'50", Hydrologic Unit 13030202.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	74.83	JUN 24	75.24

Mimbres Valley

315903107424501 (formerly 315905107425001). Local number, 27S.09W.01.431.
LOCATION.--Lat 31°59'03", long 107°42'45", Hydrologic Unit 13030202.
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.--January 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, 48.07 ft below land-surface datum, July 11, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	40.70	JUN 24	41.02

LUNA COUNTY—Continued

Mimbres Valley

315009107352401. Local number, 28S.07W.30.443.
LOCATION.--Lat 31°50'09", long 107°35'24", Hydrologic Unit 13030202.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled water-table irrrigation well, diameter 16 in., depth 1,000 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,013 ft above National Geodetic Vertical Datum of 1929. Measuring point: notch in casing, east side at land surface.
PERIOD OF RECORD.--February 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.20 ft below land-surface datum, Jan. 31, 1992; lowest measured, 22.18 ft below land-surface datum, June 24, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	22.00	JUN 24	22.18

McKINLEY COUNTY

San Juan Basin

352023107473201. Local number, 13N.09W.21.4123.
LOCATION.--Lat 35°20'23", long 107°47'32", Hydrologic Unit 13020207.
AQUIFER.--Morrison Formation.
WELL CHARACTERISTICS.--Drilled water-table unused stock well, diameter 6 in., depth 155 ft, cased to 155 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,785 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--July 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.30 ft below land-surface datum, Feb. 22, 1978; lowest measured, 144.80 ft below land-surface datum, Dec. 8, 1955.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 14	111.73	AUG 11	113.82

San Juan Basin

353645108011501. Local number, 16N.11W.17.4322.
LOCATION.--Lat 35°36'45", long 108°01'15", Hydrologic Unit 14080106.
AQUIFER.--Gallup Sandstone.
WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 5/8 in., depth 570 ft, cased to 570 ft, perforated 470-570 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,070 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.53 ft above land-surface datum.
REMARKS.--"V" indicates foreign substance was present on surface of water.
PERIOD OF RECORD.--July 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 246.27 ft below land-surface datum, Feb. 29, 2000; lowest measured, 318.28 ft below land-surface datum, July 21, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 13	289.37V	AUG 13	288.33

San Juan Basin

353521108284901. Local number, 16N.16W.25.142.
LOCATION.--Lat 35°35'21", long 108°28'49", Hydrologic Unit 15020006.
AQUIFER.--Entrada Sandstone.
WELL CHARACTERISTICS.--Drilled water-table well, diameter 8 3/4 in., depth 1,052 ft, cased to 1,052 ft, perforated 628-896, 974-1,033 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 7,115 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cover plate, 0.80 ft above land-surface datum.
REMARKS.--"P" indicates well pumping; "R" indicates well recently pumped.
PERIOD OF RECORD.--October 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.55 ft below land-surface datum, Feb. 2, 1995; lowest measured, 183.05P ft below land-surface datum, Feb. 25, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 30	140.17P	AUG 13	139.28R

McKINLEY COUNTY—Continued

San Juan Basin

354235108170702. Local number, 17N.14W.13.1144B.
LOCATION.--Lat 35°42'35", long 108°17'07", Hydrologic Unit 14080106.
AQUIFER.--Morrison Sandstone.
WELL CHARACTERISTICS.--Drilled water-table well, diameter 8 5/8 in. 0-2,225 ft, total depth 2,225 ft. Perforated 1,820-2,225 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,757.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/8-in. plug, 1.70 ft above land-surface datum.
PERIOD OF RECORD.--August 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 239.00 ft below land-surface datum, Aug. 13, 2003; lowest measured, 350.38 ft below land-surface datum, Oct. 8, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 13	239.63	AUG 13	239.00

San Juan Basin

354235108170703. Local number, 17N.14W.13.1144C.
LOCATION.--Lat 35°42'35", long 108°17'07", Hydrologic Unit 14080106.
AQUIFER.--Dakota Sandstone.
WELL CHARACTERISTICS.--Drilled water-table well, diameter 8 5/8 in. 0-54 ft, 6 5/8 in. 54-1,728 ft. Perforated 1,587-1,728 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,757.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/8-in. plug, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--August 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.21 ft below land-surface datum, Aug. 4, 1982; lowest measured, 123.93 ft below land-surface datum, Sept. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 13	123.73	AUG 13	123.82

OTERO COUNTY

Tularosa-Alamogordo Area

330321106011101 (formerly 330324106011201). Local number, 14S.10E.31.144.
LOCATION.--Lat 33°03'18", long 106°01'08", Hydrologic Unit 13050003.
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.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--April 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 13	97.43	JUL 24	105.53

Penasco Valley

325115105321401. Local number, 17S.14E.08.12111.
LOCATION.--Lat 32°51'15", long 105°32'14", Hydrologic Unit 13060010.
AQUIFER.--Bolson deposits.
WELL CHARACTERISTICS.--Drilled water-table irrigation well, diameter 8 in., cased 0-120 ft, perforated 35-120 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,850.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 1.50 feet above land surface.
PERIOD OF RECORD.--March 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.53 ft below land-surface datum, Aug. 23, 2001; lowest measured, 45.13 ft below land-surface datum, July 22, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
AUG 21	29.91

OTERO COUNTY—Continued

Crow Flats Basin

(Salt Basin)

320657105061501. Local number, 25S.18E.21.233.
LOCATION.--Lat 32°06'57", long 105°06'15", Hydrologic Unit 13050004.
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.--April 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.80 ft below land-surface datum, Apr. 20, 1956; lowest measured, 101.55 ft below land-surface datum, Sept. 15, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 05	97.18	AUG 26	100.17

Crow Flats Basin

(Salt Basin)

320138105063101 (formerly 320650105034801). Local number, 26S.18E.21.331.
LOCATION.--Lat 32°01'38", long 105°06'31", Hydrologic Unit 13050004.
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.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 05	65.89	AUG 26	76.82

Crow Flats Basin

(Salt Basin)

320008105064501. Local number, 26S.18E.33.133.
LOCATION.--Lat 32°00'08", long 105°06'45", Hydrologic Unit 13050004.
AQUIFER.--Bone Spring Limestone.
WELL CHARACTERISTICS.--Drilled water-table used irrigation well, diameter 14 in., depth 435 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,620 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--February 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.50 ft below land-surface datum, Feb. 15, 1956; lowest measured, 67.80 ft below land-surface datum, Aug. 26, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 05	PUMPING	AUG 26	67.80

QUAY COUNTY

House Area

343848103555801. Local number, 05N.28E.23.222232.
LOCATION.--Lat 34°38'48", long 103°55'58", Hydrologic Unit 13060004.
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 recently pumped.
PERIOD OF RECORD.--January 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.50 ft below land-surface datum, Sept. 15, 1994; lowest measured, 84.22R ft below land-surface datum, Feb. 18, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	74.93	JUL 07	74.79

QUAY COUNTY—Continued

House Area

343855103482901 (formerly 343810103463001). Local number, 05N.30E.18.331311.
LOCATION.--Lat 34°38'55", long 103°48'29", Hydrologic Unit 13060004.
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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 1	PUMPING	JUL 07	46.30

House Area

344406103555501. Local number, 06N.28E.13.33333.
LOCATION.--Lat 34°44'06", long 103°55'55", Hydrologic Unit 13060004.
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.--January 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, 120.20 ft below land-surface datum, Sept. 24, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	119.80	JUL 07	119.82

Lower Canadian

351040103433602. Local number, 11N.30E.14.144D.
LOCATION.--Lat 35°10'40", long 104°43'36", Hydrologic Unit 11080006.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused test well, diameter 6 in., depth 295 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,080 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1.5-in. pipe extension, 4.20 ft above land-surface datum.
PERIOD OF RECORD.--July 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.20 ft below land-surface datum, Sept. 9, 1963; lowest measured, 137.66 ft below land-surface datum, Dec. 16, 1952.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	46.40	JUL 09	67.46

Northern High Plains

353239103111301. Local number, 15N.35E.11.21222.
LOCATION.--Lat 35°32'39", long 103°11'13", Hydrologic Unit 11080006.
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 $\frac{1}{2}$-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, 88.83 ft below land-surface datum, July 26, 1995; lowest measured, 114.67 ft below land-surface datum, Feb. 5, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	91.75	JUL 09	91.78

QUAY COUNTY—Continued

Northern High Plains

354238103132301. Local number, 17N.35E.16.221.
LOCATION.--Lat 35°42'38", long 103°13'23", Hydrologic Unit 11090101.
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.--October 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, Sept. 19, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	164.68	JUL 09	160.52

ROOSEVELT COUNTY

Portales Valley

341014103264401. Local number, 01S.33E.35.434344.
LOCATION.--Lat 34°10'14", long 103°26'44", Hydrologic Unit 12050002.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 16 in., depth 84 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,066 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of recorder shelter apron, 3.24 ft above land-surface datum.
PERIOD OF RECORD.--April 1996 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.37 ft below land-surface datum, Apr. 25, 1996; lowest measured, 69.04 ft below land-surface datum, July 8, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	68.81	JUL 08	69.04

Portales Valley

341037103254501. Local number, 01S.33E.36.23111.
LOCATION.--Lat 34°10'37", long 103°25'45", Hydrologic Unit 12050002.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 18 in., depth 105 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,048 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 1.95 ft above land-surface datum.
PERIOD OF RECORD.--January 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, 96.85 ft below land-surface datum, July 8, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	94.95	JUL 08	96.85

Portales Valley

340753103083101. Local number, 02S.36E.14.311111.
LOCATION.--Lat 34°07'53", long l03°08'31", Hydrologic Unit 12050001.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 16 in., depth 151 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,938 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 2.00 ft above land-surface datum.
REMARKS.--"R" indicates well recently pumped.
PERIOD OF RECORD.--January 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, 124.50R ft below land-surface datum, Aug. 13, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 21	113.95	JUL 08	118.78R

ROOSEVELT COUNTY—Continued

Portales Valley

340844103055001. Local number, 02S.37E.07.432222.
LOCATION.--Lat 34°08'44", long 103°05'50", Hydrologic Unit 12050001.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 13.5 in., depth 204 ft, cased to 204 ft, perforated 151-204 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 3,982 ft above National Geodetic Vertical Datum of 1929. Measuring point: edge of recorder shelter, 3.00 ft above land-surface datum.
REMARKS.--Records fair. Several days of records lost due to broken float tape. "S" indicates nearby well pumping.
PERIOD OF RECORD.--June 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.78 ft below land-surface datum, June 2, 1992; lowest measured, 144.27 ft below land-surface datum, June 19, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	141.58	NOV 06	137.10	DEC 19	136.64	JAN 15	136.02	FEB 21	139.98	JUL 08	141.58S

Causey-Lingo Area

334700103030601 (formerly 335655103032001). Local number, 06S.38E.21.233131.
LOCATION.--Lat 33°47'00", long 103°03'11", Hydrologic Unit 12050001.
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" indicates well pumping.
PERIOD OF RECORD.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 19	94.29	JUL 08	95.33

SANDOVAL COUNTY

Bernalillo Area

352121106285501 (formerly 352235106282401). Local number, 13N.04E.12.112.
LOCATION.--Lat 35°21'21", long 106°28'55", Hydrologic Unit 13020201.
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.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	25.15	AUG 18	23.75

Corrales Area

351319106373501. Local number, 12N.03E.33.414A.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 60 ft, screened interval 30-50 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.56 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.72 ft below land-surface datum, Nov. 1, 1995; lowest measured, 12.18 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	11.53	AUG 12	12.18

SANDOVAL COUNTY—Continued

Corrales Area

351319106373502. Local number, 12N.03E.33.414B.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 270 ft, screened interval 220-260 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.65 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.31 ft below land-surface datum, May 5, 1995; lowest measured, 31.44 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	28.12	AUG 12	31.44

Corrales Area

351319106373503. Local number, 12N.03E.33.414C.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 120 ft, screened interval 90-110 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.47 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.10 ft below land-surface datum, Nov. 1, 1995; lowest measured, 16.31 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	15.04	AUG 12	16.31

Corrales Area

351319106373504. Local number, 12N.03E.33.414D.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 400 ft, screened interval 350-390 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.52 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.29 ft below land-surface datum, Mar. 31, 1995; lowest measured, 41.23 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	37.24	AUG 12	41.23

Corrales Area

351319106373505. Local number, 12N.03E.33.414E.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 800 ft, screened interval 710-790 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.65 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.00 ft below land-surface datum, May 5, 1995; lowest measured, 60.97 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	55.36	AUG 12	60.97

SANDOVAL COUNTY—Continued

Corrales Area

351319106373506. Local number, 12N.03E.33.414F.
LOCATION.--Lat 35°13'19", long 106°37'35", Hydrologic Unit 13020204.
AQUIFER.--Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 1,470 ft, screened interval 1,360-1,460 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,003 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of 1-in. casing, 0.61 ft below land-surface datum.
PERIOD OF RECORD.--March 1995 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.27 ft below land-surface datum, Mar. 31, 1995; lowest measured, 64.61 ft below land-surface datum, Aug. 12, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	59.31	AUG 12	64.61

SAN JUAN COUNTY

San Juan Basin

364744108225001. Local number, 30N.15W.23.4411.
LOCATION.--Lat 36°47'44", long 108°22'50", Hydrologic Unit 14080105.
AQUIFER.--Pictured Cliffs Sandstone.
WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 729.5 ft, cased to 729.5 ft, perforated 613-729.5 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,290 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--February 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 123.75 ft below land-surface datum, Feb. 21, 1978; lowest measured, 184.89 ft below land-surface datum, Aug. 13, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 19	180.07	AUG 13	184.89

SAN MIGUEL COUNTY

Las Vegas Area

353346105145201. Local number, 15N.16E.04.242.
LOCATION.--Lat 35°33'46", long 105°14'52", Hydrologic Unit 13060001.
AQUIFER.--Santa Rosa Sandstone.
WELL CHARACTERISTICS.--Drilled water-table municipal well, diameter 10 in. 0-612 ft, 7 in. 612-772 ft, depth 815 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,462 ft above National Geodetic Vertical Datum of 1929. Measuring point: entry port, west side of pump base, 1.95 ft above land-surface datum.
PERIOD OF RECORD.--December 1999 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.82 ft below land-surface datum, Dec. 15, 1999; lowest measured, 50.82 ft below land-surface datum, July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 26	47.09	JUL 10	50.82

Las Vegas Area

353418105145601. Local number, 16N.16E.33.143.
LOCATION.--Lat 35°34'18", long 105°14'56", Hydrologic Unit 13060001.
AQUIFER.--Santa Rosa Sandstone.
WELL CHARACTERISTICS.--Drilled water-table municipal well, diameter 10 in. 0-596 ft, 8 in. 596-824 ft, depth 829 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,477 ft above National Geodetic Vertical Datum of 1929. Measuring point: entry port, west side of pump base, 1.95 ft above land-surface datum.
PERIOD OF RECORD.--December 1999 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 79.81 ft below land-surface datum, July 27, 2001; lowest measured, 112.40 ft below land-surface datum, July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 26	108.99	JUL 10	112.40

SANTA FE COUNTY

Estancia Valley

350534106024801 (formerly 350525106025001). Local number, 10N.08E.13.1332.
LOCATION.--Lat 35°05'34", long 106°02'53", Hydrologic Unit 13050001.
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.--"P" indicates well pumping.
PERIOD OF RECORD.--February 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 10	163.19	SEP 02	176.46

Estancia Valley

350344106004601 (formerly 350340106005001). Local number, 10N.09E.29.1334.
LOCATION.--Lat 35°03'45", long 106°00'46", Hydrologic Unit 13050001.
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.
REMARKS.--"S" indicates nearby well pumping.
PERIOD OF RECORD.--February 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, 146.28S ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 10	132.04	SEP 02	146.28S

Estancia Valley

350859106002901. Local number, 11N.09E.29.143.
LOCATION.--Lat 35°08'59", long 106°00'29", Hydrologic Unit 13050001.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 15 in., depth unknown.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,274 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.80 ft above land-surface datum.
PERIOD OF RECORD.--July 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.93 ft below land-surface datum, Apr. 1, 1987; lowest measured, 149.00 ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 24	148.60	SEP 02	149.00

Santa Fe Area

353636106021001. Local number, 16N.08E.13.444.
LOCATION.--Lat 35°36'36", long 106°02'10", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 $\frac{1}{2}$ 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.--February 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, 264.79 ft below land-surface datum, Aug. 15, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 28	264.04	JUL 11	264.30

SANTA FE COUNTY—Continued

Santa Fe Area

353516106035801. Local number, 16N.08E.26.32112.
LOCATION.--Lat 35°35'16", long 106°03'58", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 10 in., depth 160 ft, cased to 160 ft, perforated 125-160 ft.
INSTRUMENTATION.--Digital recorder, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 6,285 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 1.25 ft above land-surface datum.
REMARKS.--Records good, except for July 18 to Aug. 22, which are missing due to recorder malfunction.
PERIOD OF RECORD.--July 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.62 ft below land-surface datum, June 11, 1973; lowest measured, 132.54 ft below land-surface datum, July 18, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.00	130.77	130.84	130.92	130.93	131.12	131.07	131.20	131.24	131.26	---	131.34
10	130.92	130.79	130.80	130.94	130.99	131.05	131.12	131.28	131.24	131.23	---	131.37
15	130.84	130.80	130.86	130.96	131.07	131.06	131.09	131.12	131.27	131.31	---	131.30
20	130.84	130.80	130.82	130.95	131.01	131.11	131.17	131.21	131.25	---	---	131.30
25	130.83	130.78	130.92	130.93	131.01	131.17	131.17	131.25	131.34	---	131.34	131.29
EOM	130.79	130.81	130.88	130.96	131.07	131.09	131.18	131.24	131.23	---	131.36	131.32

WTR YR 2003 HIGHEST 130.01 FEB 13 LOWEST 132.54 JUL 18

Santa Fe Area

353735105581201 (formerly 353753105580501). Local number, 16N.09E.10.42114.
LOCATION.--Lat 35°37'53", long 105°58'05", Hydrologic Unit 13020201.
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: $\frac{1}{2}$-in. plug in cover plate, 6.00 ft below land-surface datum.
REMARKS.--"V" indicates foreign substance was present on surface of water.
PERIOD OF RECORD.--August 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, 235.50V ft below land-surface datum, July 11, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10	234.54V	JAN 23	235.50V	JUL 11	DRY

Santa Fe Area

354013105580601 (formerly 354005105574501). Local number, 17N.09E.27.441.
LOCATION.--Lat 35°40'13", long 105°58'06", Hydrologic Unit 13020201.
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 6,845 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 2.70 ft below land-surface datum.
REMARKS.--"R" indicates well recently pumped.
PERIOD OF RECORD.--December 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, 249.69R ft below land-surface datum, Aug. 30, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 20	244.91	JUL 11	246.84

SANTA FE COUNTY—Continued

Santa Fe Area

353945105574501. Local number, 17N.09E.35.1314A.
LOCATION.--Lat 35°39'45", long 105°57'45", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 1,952 ft, screened interval 1,917-1,922 ft.
INSTRUMENTATION.--Pressure transducer, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 6,880 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 2.60 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--October 1998 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.73 ft below land-surface datum, Nov. 9, 1998; lowest measured, 98.52 ft below land-surface datum, Sept. 30, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.35	94.39	94.66	94.85	94.93	95.15	95.55	95.18	95.77	96.30	96.82	97.95
10	94.40	94.36	94.59	94.91	95.13	95.41	95.79	95.29	95.82	96.39	96.95	98.01
15	94.37	94.47	94.65	94.95	95.10	95.35	95.64	95.34	96.04	96.54	97.06	98.20
20	94.40	94.65	94.59	94.97	95.12	95.45	95.24	95.67	96.00	96.64	97.05	98.18
25	94.37	94.54	94.70	95.07	95.15	95.51	95.15	95.64	96.10	96.63	97.09	98.26
EOM	94.39	94.65	94.72	95.12	95.13	95.62	95.11	95.76	96.23	96.76	97.14	98.43

WTR YR 2003 HIGHEST 94.20 OCT 1 LOWEST 98.52 SEP 30

Santa Fe Area

353945105574502. Local number, 17N.09E.35.1314B.
LOCATION.--Lat 35°39'45", long 105°57'45", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 1,060 ft, screened interval 1,025-1,030 ft.
INSTRUMENTATION.--Pressure transducer, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 6,880 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 2.70 ft above land-surface datum.
REMARKS.--Records good, except for five days lost due to recorder malfunction.
PERIOD OF RECORD.--October 1998 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 187.41 ft below land-surface datum, Mar. 2, 1999; lowest measured, 232.92 ft below land-surface datum, Sept. 6-7, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	227.19	227.24	227.55	227.81	227.65	227.24	227.20	226.29	227.33	229.07	230.51	232.72
10	227.20	227.19	227.64	227.84	227.63	227.28	227.17	226.41	227.63	229.37	230.71	232.75
15	227.19	227.36	227.69	227.84	227.53	227.32	227.15	226.59	227.95	229.64	230.87	232.57
20	227.24	227.47	227.70	227.83	227.24	226.92	225.64	226.73	228.18	229.94	231.02	232.42
25	227.12	227.53	227.75	227.79	227.42	227.21	225.98	227.08	228.39	230.17	231.17	232.39
EOM	227.11	227.57	227.74	227.81	227.28	227.33	226.07	227.02	228.80	230.39	231.31	232.40

WTR YR 2003 HIGHEST 225.59 APR 22 LOWEST 232.92 SEP 6-7

Santa Fe Area

353945105574503. Local number, 17N.09E.35.1314C.
LOCATION.--Lat 35°39'45", long 105°57'45", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitoring well, diameter 2 in., depth 780 ft, screened interval 669-674 ft.
INSTRUMENTATION.--Pressure transducer, 1-hour measurement.
DATUM.--Elevation of land-surface datum is 6,880 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 3.00 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--October 1998 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 240.00 ft below land-surface datum, Oct. 17, 1998; lowest measured, 350.60 ft below land-surface datum, Aug. 27, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	303.70	299.58	299.04	298.92	298.68	298.16	297.89	337.39	344.97	348.20	349.48	335.78
10	302.36	299.37	299.00	298.96	298.49	298.17	297.85	339.73	345.88	348.54	349.74	317.34
15	301.50	299.20	298.95	298.99	298.42	298.16	297.77	341.89	346.10	348.93	350.08	311.16
20	300.85	299.17	298.85	298.99	298.38	298.01	304.68	343.40	346.65	349.24	350.45	308.46
25	300.33	299.13	298.82	298.97	298.29	297.96	326.29	344.27	347.17	349.25	350.57	306.99
EOM	299.83	299.10	298.87	298.97	298.23	297.95	332.68	343.91	347.77	349.17	350.04	306.02

WTR YR 2003 HIGHEST 297.76 APR 16 LOWEST 350.60 AUG 27

SANTA FE COUNTY—Continued

Santa Fe Area

355000106092802. Local number, 19N.07E.36.3113B.
LOCATION.--Lat 35°50'00", long 106°09'28", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4.5 in., depth 824 ft, screened 802-812 ft.
INSTRUMENTATION.--Transducer and data logger, 1-hour measurements.
DATUM.--Elevation of land-surface datum is 5,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1.80 ft above land-surface datum.
REMARKS.--Records fair, except for many days missing due to transducer oversubmergence.
PERIOD OF RECORD.--February 1999 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 321.57 ft below land-surface datum, Apr. 27, 2000; lowest measured, 519.10 ft below land-surface datum, Nov. 24, 1999.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	481.46	448.95	417.52	434.04	---	---	471.21	458.37	447.09	444.60	445.23	413.83
10	485.95	429.29	435.62	442.81	---	---	467.43	456.79	447.87	444.32	445.79	399.61
15	487.41	445.99	431.81	406.98	---	---	465.88	455.06	444.17	444.98	443.38	391.05
20	488.20	463.11	422.04	---	---	---	466.07	452.87	425.51	445.24	425.72	414.91
25	488.75	426.56	---	---	---	---	464.74	452.61	441.20	445.53	424.90	414.27
EOM	471.98	459.20	---	---	---	469.98	464.82	436.05	444.13	440.26	---	420.43

WTR YR 2003 HIGHEST 391.05 SEP 15 LOWEST 488.98 OCT 26-27

Santa Fe Area

355000106092803. Local number, 19N.07E.36.3113C.
LOCATION.--Lat 35°50'00", long 106°09'28", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of Santa Fe Group.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4.5 in., depth 356 ft, screened 324-334 ft.
INSTRUMENTATION.--Transducer and data logger, 1-hour measurements.
DATUM.--Elevation of land-surface datum is 5,540 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1.80 ft above land-surface datum.
REMARKS.--Records good.
PERIOD OF RECORD.--July 1997 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 214.06 ft below land-surface datum, May 4, 1999; lowest measured, 235.01 ft below land-surface datum, Aug. 25, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	232.78	232.59	233.21	232.92	232.99	233.10	233.25	233.61	233.83	234.13	234.32	234.28
10	232.83	232.79	232.77	233.09	233.22	233.47	233.64	233.58	233.90	234.22	234.49	233.87
15	232.85	232.57	233.01	232.58	233.13	233.35	233.42	233.73	233.95	234.26	234.63	233.37
20	232.85	233.10	232.79	233.10	233.16	233.31	233.65	233.97	234.19	234.32	234.34	234.15
25	232.81	232.61	233.13	233.21	233.19	233.41	233.58	233.81	233.94	234.24	234.58	234.35
EOM	232.84	233.07	231.95	233.26	233.05	233.61	233.55	233.88	234.16	234.32	233.95	234.51

WTR YR 2003 HIGHEST 231.90 JAN 1 LOWEST 235.01 AUG 25

Santa Fe Area

355002106093701. Local number, 19N.07E.35.4222A.
LOCATION.--Lat 35°50'02", long 106°09'37", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of the Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 300 ft, screen interval 274-284 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,480 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.96 ft below land-surface datum, Jan. 15, 1988; lowest measured, 186.62 ft below land-surface datum, Sept. 8, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	185.50	JAN 14	185.73	MAY 28	186.55	SEP 08	186.62
DEC 05	185.57	MAR 26	185.70	JUL 22	186.53		

SANTA FE COUNTY--Continued

Santa Fe Area

355002106093702. Local number, 19N.07E.35.4222B.
LOCATION.--Lat 35°50'02", long 106°09'37", Hydrologic Unit 13020201.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 170 ft, screen interval 149-159 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,480 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.70 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.44 ft below land-surface datum, Aug. 17, 1988; lowest measured, 18.79 ft below land-surface datum, Oct. 21, 1997. !

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	15.19	JAN 14	17.99	MAY 28	16.46	SEP 08	16.86
DEC 05	17.98	MAR 26	15.25	JUL 22	15.28		

Santa Fe Area

355002106093703. Local number, 19N.07E.35.4222C.
LOCATION.--Lat 35°50'02", long 106°09'37", Hydrologic Unit 13020201.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 60 ft, screen interval 40-50 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,480 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.80 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.88 ft below land-surface datum, June 23, 1999; lowest measured, 17.72 ft below land-surface datum, Sept. 8, 2003. !

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	17.58	JAN 14	17.39	MAY 28	16.81	SEP 08	17.72
DEC 05	17.44	MAR 26	17.12	JUL 22	17.38		

Santa Fe Area

355003106094301. Local number, 19N.07E.35.4212A.
LOCATION.--Lat 35°50'03", long 106°09'43", Hydrologic Unit 13020201.
AQUIFER.--Tesuque Formation of the Santa Fe Group.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 304 ft, screen interval 260-270 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,470 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.80 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.86 ft below land-surface datum, Jan. 15, 1988; lowest measured, 156.00 ft below land-surface datum, Sept. 8, 2003. !

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	154.45	JAN 14	155.30	MAY 28	155.80	SEP 08	156.00
DEC 05	155.34	MAR 26	154.64	JUL 22	155.42		

Santa Fe Area

355003106094302. Local number, 19N.07E.35.4212B.
LOCATION.--Lat 35°50'03", long 106°09'43", Hydrologic Unit 13020201.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 130 ft, screen interval 110-120 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,470 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.30 ft above land-surface datum, Aug. 17, 1988; lowest measured, 6.40 ft below land-surface datum, Feb. 8, 2000. !

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	4.14	JAN 14	5.74	MAY 28	4.71	SEP 08	5.70
DEC 05	5.88	MAR 26	4.17	JUL 22	4.02		

SANTA FE COUNTY--Continued

Santa Fe Area

355003106094303. Local number, 19N.07E.35.4212C.
LOCATION.--Lat 35°50'03", long 106°09'43", Hydrologic Unit 13020201.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 60 ft, screen interval 40-50 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,470 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.80 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.45 ft below land-surface datum, Oct. 21, 1997; lowest measured, 13.05 ft below land-surface datum, Sept. 8, 2003. !

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	12.98	JAN 14	12.78	MAY 28	12.04	SEP 08	13.05
DEC 05	12.83	MAR 26	12.52	JUL 22	12.64		

Santa Fe Area

355006106094803. Local number, 19N.07E.35.4122C.
LOCATION.--Lat 35°50'06", long 106°09'48", Hydrologic Unit 13020201.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled monitor well, diameter 4 in., depth 74 ft, screen interval 49-59 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 5,455 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 1.90 ft above land-surface datum.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.29 ft below land-surface datum, June 24, 1997; lowest measured, 5.96 ft below land-surface datum, Dec. 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	5.95	JAN 14	5.95	MAY 28	4.93	SEP 08	5.92
DEC 05	5.96	MAR 26	5.52	JUL 22	5.33		

SIERRA COUNTY

Hot Springs Area

331002107150001. Local number, 13S.04W.21.213.
LOCATION.--Lat 33°10'02", long 107°15'00", Hydrologic Unit 13030101.
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.--February 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.54 ft below land-surface datum, Feb. 28, 1997; lowest measured, 65.56 ft below land-surface datum, Feb. 25, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04	49.31	JUL 24	50.62

Hot Springs Area

325921107185101 (formerly 325550107184001). Local number, 15S.05W.24.312.
LOCATION.--Lat 32°59'21", long 107°18'51", Hydrologic Unit 13030101.
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, 21.97 ft below land-surface datum, July 27, 1992; lowest measured, 47.49 ft below land-surface datum, July 26, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04	44.35	JUL 24	45.19

SIERRA COUNTY—Continued

Rincon Valley

325340107183001 (formerly 325350107175501). Local number, 16S.05W.25.211.
LOCATION.--Lat 32°53'40", long 107°18'30", Hydrologic Unit 13030102.
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.--January 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 04	24.10	JUL 24	24.86

TAOS COUNTY

Sunshine Valley

365035105360501 (formerly 365036105353301). Local number, 30N.13E.18.1121.
LOCATION.--Lat 36°50'35", long 105°36'05", Hydrologic Unit 13020101.
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.--September 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.50 ft below land-surface datum, Jan. 16, 1994; lowest measured, 77.33 ft below land-surface datum, Aug. 9, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	70.39	DEC 02	70.46	FEB 20	70.53	JUL 11	71.00

Sunshine Valley

365644105363501 (formerly 365650105370001). Local number, 01S.74W.24.244.
LOCATION.--Lat 36°56'44", long 105°36'35", Hydrologic Unit 13020101.
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 7,628 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, 182.78 ft below land-surface datum, Jan. 17, 1996; lowest measured, 213.53 ft below land-surface datum, Aug. 10, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 20	184.20	JUL 11	185.24

TORRANCE COUNTY

Estancia Valley

343443106024401. Local number, 04N.09E.07.334.
LOCATION.--Lat 34°34'43", long 106°02'44", Hydrologic Unit 13050001.
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.--February 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, 110.90 ft below land-surface datum, Aug. 3, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 10	102.48	SEP 02	PUMPING

TORRANCE COUNTY—Continued

Estancia Valley

344016106070901 (formerly 344016106064701). Local number, 05N.08E.08.424.
LOCATION.--Lat 34°40'16", long 106°07'09", Hydrologic Unit 13050001.
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. plug in south side of discharge pipe, 1.80 ft above land-surface datum.
PERIOD OF RECORD.--March 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, 140.89 ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 10	133.08	SEP 02	140.89

Estancia Valley

344234106070601 (formerly 344234106074901). Local number, 06N.08E.32.212.
LOCATION.--Lat 34°42'34", long 106°07'06", Hydrologic Unit 13050001.
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 $\frac{1}{2}$-in. hole in pump base, 0.04 ft above land-surface datum.
PERIOD OF RECORD.--February 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, 97.74 ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 10	92.44	SEP 02	97.74

Estancia Valley

344604105574601 (formerly 344622105575501). Local number, 06N.09E.11.211.
LOCATION.--Lat 34°46'04", long 105°57'46", Hydrologic Unit 13050001.
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, 43.26 ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	32.90	SEP 02	43.26

Estancia Valley

344842106032701. Local number, 07N.08E.25.121.
LOCATION.--Lat 34°48'43", long 106°03'22", Hydrologic Unit 13050001.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled water-table unused irrigation well, diameter 16 in., depth 200 ft.
INSTRUMENTATION.--Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 6,131 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 0.00 ft above land-surface datum.
PERIOD OF RECORD.--February 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.30 ft below land-surface datum, Feb. 7, 1962; lowest measured, 75.71 ft below land-surface datum, Sept. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23	67.45	SEP 02	75.71

UNION COUNTY

Clayton Area

355144103041201 (formerly 360940103083501). Local number, 19N.36E.23.2444.
LOCATION.--Lat 35°51'44", long 103°04'12", Hydrologic Unit 11090102.
AQUIFER.--Dakota and Purgatoire Formations.
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.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.22 ft below land-surface datum, Mar. 17, 1971; lowest measured, 158.58S ft below land-surface datum, Aug. 19, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	151.80	JUL 09	151.86

Clayton Area

361847103064701 (formerly 361910103170501). Local number, 24N.36E.17.244.
LOCATION.--Lat 36°18'47", long 103°06'47", Hydrologic Unit 11090103.
AQUIFER.--Ogallala Formation.
WELL CHARACTERISTICS.--Drilled water-table unused well, diameter 20 in., depth 231 ft.
INSTRUMENTATION.--Continuous strip-chart recorder removed. Periodic steel-tape measurements.
DATUM.--Elevation of land-surface datum is 4,707 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 1.95 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, 107.00 ft below land-surface datum, July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 28	106.64	JUL 10	107.00

Clayton Area

362540103095001. Local number, 25N.35E.02.441.
LOCATION.--Lat 36°25'40", long 103°09'50", Hydrologic Unit 11090103.
AQUIFER.--Ogalalla 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.--December 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	94.95	JUL 10	94.18

Clayton Area

363410103064801. Local number, 27N.36E.17.434.
LOCATION.--Lat 36°34'10", long 103°06'48", Hydrologic Unit 11100101.
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.--February 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, 102.09 ft below land-surface datum, July 9, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	101.90	JUL 09	102.09

UNION COUNTY—Continued

Capulin Area

364444104000201 (formerly 364430103595501). Local number, 29N.28E.18.341.
LOCATION.--Lat 36°44'44", long 104°00'02", Hydrologic Unit 11040001.
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.
PERIOD OF RECORD.--July 1951, August 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 27	35.35	JUL 10	34.30

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES
(LISTED FROM YOUNGEST TO OLDEST AGE, U-UPPER, M-MIDDLE, L-LOWER)

110 AVMB	Cenozoic, Quaternary, alluvium, bolson deposits, and other surface deposits
121 TSUQ	Cenozoic, Quaternary, Tesuque Formation, undifferentiated unit
112 SNTF	Cenozoic, Pleistocene, Santa Fe Formation
121OGLL	Cenozoic, Tertiary, Ogallala Formation
400 PCMB	Paleozoic, Precambrian, Precambrian Erathem

LOCAL IDENTIFIER.--Indicates location by New Mexico or Texas local well number. If area is not included in a public survey, location is by site name.

REMARKS.--Ground-water sites in this table are segregated by county, which appear alphabetically. The sites are then listed in ascending well numbers that are explained at the beginning of this report.

DONA ANA COUNTY

Local identifier	Station number	County	Station type	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)
21S.04E.10.233	322947106311101	013	GW	10-10-02	1140	400PCMB	163	5,691.94	0.9	7.3
21S.04E.10.321	322943106312801	013	GW	10-10-02	1025	400PCMB	103	5,794.94	0.1	7.3
21S.04E.10.322A	322943106312301	013	GW	10-09-02	1010	400PCMB	155	5,755.18	--	7.0
21S.04E.10.324	322935106311801	013	GW	10-09-02	1520	400PCMB	135	5,679.70	0.8	7.0
21S.04E.10.411B	322941106311301	013	GW	10-09-02	1110	400PCMB	85	5,691.25	--	7.1
21S.04E.10.411C	322941106311502	013	GW	10-09-02	1200	400PCMB	80	5,687.96	--	7.3
21S.04E.10.411D	322939106311701	013	GW	10-09-02	1300	400PCMB	110	5,695.75	--	7.1
21S.04E.10.411E	322943106311401	013	GW	10-10-02	1330	400PCMB	100	5,699.34	4.4	7.1
21S.04E.10.411G	322944106311601	013	GW	10-10-02	1235	400PCMB	158	5,723.32	0.4	7.2
21S.04E.10.412	322943106310501	013	GW	10-10-02	1040	400PCMB	120	5,643.55	0.5	7.0
21S.04E.10.413A	322938106311601	013	GW	10-09-02	1350	400PCMB	120	5,689.92	--	7.2
21S.04E.10.413B	322933106310901	013	GW	10-10-02	1530	400PCMB	110	5,619.35	0.8	7.3
21S.04E.10.414A	322938106310801	013	GW	10-10-02	0945	400PCMB	102	5,642.92	5.0	7.2
21S.04E.10.414B	322937106310901	013	GW	10-09-02	1655	400PCMB	103	5,641.18	3.8	7.3
21S.04E.10.414C	322936106311001	013	GW	10-09-02	1605	400PCMB	110	5,641.49	3.0	7.2
21S.04E.10.414D	322937106310902	013	GW	10-09-02	1735	400PCMB	159	5,637.96	2.6	7.1
21S.04E.10.421	322939106305701	013	GW	10-10-02	1130	400PCMB	200	5,568.09	7.3	7.2
21S.04E.10.422	322940106305101	013	GW	10-11-02	1000	400PCMB	200	5,531.54	0.5	7.3
21S.04E.10.423	322935106310301	013	GW	10-10-02	1420	400PCMB	147	5,594.83	5.0	7.2
21S.04E.10.434	322924106310501	013	GW	10-10-02	1610	400PCMB	110	5,557.15	4.1	7.1
21S.04E.10.441	322932106305601	013	GW	10-11-02	1050	400PCMB	130	5,536.59	5.4	7.2
21S.04E.10.442	322927106305101	013	GW	10-11-02	1200	400PCMB	179	5,494.5	0.3	7.1
21S.04E.11.333	322923106304601	013	GW	10-11-02	1300	400PCMB	145	5,451.22	4.6	7.1
21S.04E.11.343	322924106302601	013	GW	10-11-02	1000	400PCMB	75	5,343.77	5.3	7.5
21S.04E.12.414	322938106291101	013	GW	07-07-03	1155	--	62	5,040	2.3	7.0
21S.04E.13.143	322857106292801	013	GW	10-09-02	1440	400PCMB	99	4,956.87	0.3	7.2
21S.04E.13.232	322901106290101	013	GW	04-09-03	1340	400PCMB	144.6	4,834.79	4.5	7.0
21S.04E.13.331	322837106294301	013	GW	10-11-02	1140	400PCMB	136.8	4,993.49	2.2	7.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Magnes-ium, water, unfltrd recover-able, mg/L (00927)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419)
21S.04E.10.233	10-10-02	980	19.8	400	113	28.0	30.0	1.51	1	65.4	--
21S.04E.10.321	10-10-02	870	19.9	350	99.4	24.9	27.0	3.54	1	58.6	--
21S.04E.10.322A	10-09-02	907	19.7	390	112	27.9	30.0	1.29	1	62.3	--
21S.04E.10.324	10-09-02	664	20.3	280	80.7	18.9	20.0	2.54	1	46.3	--
21S.04E.10.411B	10-09-02	887	19.9	380	107	28.2	30.0	1.00	1	60.2	--
21S.04E.10.411C	10-09-02	850	19.7	360	101	26.4	28.0	1.22	1	58.2	--
21S.04E.10.411D	10-09-02	849	20.2	350	97.4	27.1	30.0	1.36	1	56.1	--
21S.04E.10.411E	10-10-02	990	19.9	400	116	28.0	30.0	1.06	1	63.7	--
21S.04E.10.411G	10-10-02	949	20.3	400	116	26.8	29.0	1.19	2	72.4	--
21S.04E.10.412	10-10-02	981	19.9	390	112	25.6	28.0	2.21	1	64.5	--
21S.04E.10.413A	10-09-02	803	20.2	340	96.0	25.1	27.0	1.38	1	52.5	--
21S.04E.10.413B	10-10-02	879	20.6	350	100	23.6	22.0	1.88	1	56.1	--
21S.04E.10.414A	10-10-02	981	20.0	380	111	25.5	28.0	1.21	1	60.6	--
21S.04E.10.414B	10-09-02	923	20.1	390	112	25.7	28.0	0.79	1	60.6	--
21S.04E.10.414C	10-09-02	922	20.0	390	111	26.3	28.0	1.15	1	60.0	--
21S.04E.10.414D	10-09-02	919	20.2	370	107	24.9	27.0	1.41	1	63.4	--
21S.04E.10.421	10-10-02	916	21.1	360	102	26.7	28.0	1.08	1	60.4	--
21S.04E.10.422	10-11-02	921	20.9	360	103	24.6	22.0	3.26	2	65.7	--
21S.04E.10.423	10-10-02	977	20.5	390	113	25.8	27.0	1.51	1	60.4	--
21S.04E.10.434	10-10-02	831	19.7	330	96.6	21.6	20.0	1.77	1	54.3	--
21S.04E.10.441	10-11-02	848	20.5	330	95.3	21.5	20.0	1.01	1	58.5	--
21S.04E.10.442	10-11-02	737	21.0	300	84.7	21.8	21.0	2.33	1	41.8	--
21S.04E.11.333	10-11-02	830	20.4	310	90.6	19.8	19.0	0.96	1	59.3	--
21S.04E.11.343	10-11-02	881	20.1	320	95.7	20.0	18.0	0.91	2	62.9	--
21S.04E.12.414	07-07-03	979	21.6	540	112	63.1	--	2.10	0.4	23.3	--
21S.04E.13.143	10-09-02	830	22.1	340	97.6	23.3	25.0	1.15	2	65.0	--
21S.04E.13.232	04-09-03	962	22.2	400	114	29.1	--	1.78	2	74.7	252
21S.04E.13.331	10-11-02	761	21.1	290	92.7	13.8	13.0	1.84	1	55.8	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Bicar-bonate, wat unf incrm. titr., field, mg/L (00450)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Sulfide water unfltrd mg/L (00745)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, unfltrd mg/L as N (00610)
21S.04E.10.233	10-10-02	--	0.27	32.3	4.14	23.8	207	M	--	670	E.033
21S.04E.10.321	10-10-02	--	0.26	30.1	3.38	25.8	149	0.1	--	572	E.050
21S.04E.10.322A	10-09-02	--	0.26	30.2	3.88	23.6	197	M	--	645	E.056
21S.04E.10.324	10-09-02	--	0.20	22.8	5.38	23.9	107	M	438	449	<0.100
21S.04E.10.411B	10-09-02	--	0.27	29.2	4.62	24.5	172	<0.1	--	636	E.034
21S.04E.10.411C	10-09-02	--	0.25	27.7	4.64	24.0	155	M	--	608	E.026
21S.04E.10.411D	10-09-02	--	0.21	36.3	4.06	22.5	157	<0.1	--	602	E.061
21S.04E.10.411E	10-10-02	--	0.27	38.8	4.64	24.1	175	<0.1	595	677	E.033
21S.04E.10.411G	10-10-02	--	0.28	30.4	4.38	23.9	208	<0.1	--	670	0.140
21S.04E.10.412	10-10-02	--	0.28	38.2	3.92	21.0	188	M	--	666	E.032
21S.04E.10.413A	10-09-02	--	0.24	32.0	4.16	22.7	146	<0.1	--	527	E.067
21S.04E.10.413B	10-10-02	--	0.27	37.5	3.88	20.6	152	<0.1	513	593	E.064
21S.04E.10.414A	10-10-02	--	0.26	52.9	4.52	22.5	164	0.1	--	657	E.024
21S.04E.10.414B	10-09-02	--	0.25	47.6	4.66	23.0	165	<0.1	559	658	E.031
21S.04E.10.414C	10-09-02	--	0.26	48.0	4.38	22.0	172	<0.1	575	658	E.025
21S.04E.10.414D	10-09-02	--	0.26	51.3	4.34	22.7	168	M	--	655	E.040
21S.04E.10.421	10-10-02	--	0.25	32.4	3.86	22.4	181	M	--	621	E.019
21S.04E.10.422	10-11-02	--	0.21	32.3	3.40	22.1	196	<0.1	--	614	E.084
21S.04E.10.423	10-10-02	--	0.32	39.5	3.74	21.1	165	M	--	665	E.020
21S.04E.10.434	10-10-02	--	0.26	30.4	5.02	23.4	134	<0.1	--	552	E.032
21S.04E.10.441	10-11-02	--	0.27	32.4	4.98	22.3	140	<0.1	--	564	E.019
21S.04E.10.442	10-11-02	--	0.21	30.4	3.34	26.6	135	<0.1	--	484	E.037
21S.04E.11.333	10-11-02	--	0.26	34.8	5.14	21.4	137	M	--	546	E.024
21S.04E.11.343	10-11-02	--	0.25	36.7	4.52	23.3	156	<0.1	--	576	E.031
21S.04E.12.414	07-07-03	--	0.15	27.2	1.2	21.0	201	--	638	646	E.055
21S.04E.13.143	10-09-02	--	0.25	37.2	4.08	24.0	177	<0.1	--	588	E.027
21S.04E.13.232	04-09-03	308	0.23	35.9	3.86	28.5	199	--	638	664	E.074
21S.04E.13.331	10-11-02	--	0.19	26.1	4.36	28.7	143	M	--	515	E.031

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Nitrite + nitrate water unfltrd mg/L as N (00630)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Boron, water, fltrd, ug/L (01020)	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, unfltrd recover -able, ug/L (01034)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, unfltrd recover -able, ug/L (01051)
21S.04E.10.233	10-10-02	2.70	E.8	M	M	40	M	M	<10	E90	M
21S.04E.10.321	10-10-02	<0.100	7.3	M	M	40	<1.0	M	97	150	M
21S.04E.10.322A	10-09-02	2.50	E.6	M	M	40	<1.0	M	<10	10	<1.0
21S.04E.10.324	10-09-02	1.90	E.7	M	M	30	M	M	<10	E20	M
21S.04E.10.411B	10-09-02	6.70	E.5	M	M	50	M	M	<10	E50	M
21S.04E.10.411C	10-09-02	8.40	E.5	M	M	70	M	M	<10	<100	<1.0
21S.04E.10.411D	10-09-02	7.90	E.3	M	M	110	M	E2	<10	150	M
21S.04E.10.411E	10-10-02	7.90	E.7	M	M	50	<1.0	M	<10	<100	<1.0
21S.04E.10.411G	10-10-02	1.80	E.5	M	M	40	M	M	<10	140	M
21S.04E.10.412	10-10-02	8.10	E.7	M	M	40	M	M	<10	<100	M
21S.04E.10.413A	10-09-02	6.30	E.9	M	M	30	M	M	<10	E40	M
21S.04E.10.413B	10-10-02	11.0	E.8	M	M	40	M	M	E7	<100	M
21S.04E.10.414A	10-10-02	10.0	E.6	M	M	40	<1.0	M	<10	<100	<1.0
21S.04E.10.414B	10-09-02	11.0	E.6	M	M	40	<1.0	M	<10	<100	<1.0
21S.04E.10.414C	10-09-02	13.0	E.5	M	M	40	<1.0	M	<10	<100	<1.0
21S.04E.10.414D	10-09-02	10.0	E.7	M	M	40	M	M	<10	E10	<1.0
21S.04E.10.421	10-10-02	8.50	E.4	M	M	40	<1.0	M	<10	E20	<1.0
21S.04E.10.422	10-11-02	1.40	1.1	M	M	50	M	M	<10	E20	M
21S.04E.10.423	10-10-02	23.0	E.6	M	M	40	<1.0	M	<10	E90	<1.0
21S.04E.10.434	10-10-02	8.90	E.7	M	M	40	M	M	<10	<100	<1.0
21S.04E.10.441	10-11-02	12.0	E.5	M	M	40	<1.0	M	<10	<100	<1.0
21S.04E.10.442	10-11-02	1.20	E.4	M	M	30	M	M	<10	E20	M
21S.04E.11.333	10-11-02	9.90	E.6	M	M	40	M	M	<10	100	M
21S.04E.11.343	10-11-02	8.50	E.7	M	M	40	M	M	<10	E10	<1.0
21S.04E.12.414	07-07-03	0.100	--	M	M	40	M	3	9	2,400	M
21S.04E.13.143	10-09-02	4.50	E.6	M	M	40	M	E1	<10	<100	M
21S.04E.13.232	04-09-03	4.00	--	M	M	40	<1.0	6	<10	E40	M
21S.04E.13.331	10-11-02	2.90	1.0	M	M	50	<1.0	M	<10	E20	<1.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Lithium water, fltrd, ug/L (01130)	Mercury water, unfltrd recover -able, ug/L (71900)	Selen- ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Stront- ium, water, fltrd, ug/L (01080)	Per- chlor- ate, water, unfltrd mg/L (62171)
21S.04E.10.233	10-10-02	--	M	E1	E.02	--	0.16
21S.04E.10.321	10-10-02	--	<0.2	M	<5.00	--	<0.02
21S.04E.10.322A	10-09-02	--	<0.2	E2	E.01	--	E0.012
21S.04E.10.324	10-09-02	--	M	E2	E.06	--	0.11
21S.04E.10.411B	10-09-02	--	M	E2	<5.00	--	6.9
21S.04E.10.411C	10-09-02	--	<0.2	E2	<5.00	--	6.3
21S.04E.10.411D	10-09-02	--	<0.2	E2	E.15	--	6.6
21S.04E.10.411E	10-10-02	--	M	E2	E.01	--	18
21S.04E.10.411G	10-10-02	--	M	E2	E.02	--	0.27
21S.04E.10.412	10-10-02	--	M	E3	E.03	--	7.2
21S.04E.10.413A	10-09-02	--	M	E2	E.11	--	1.3
21S.04E.10.413B	10-10-02	--	<0.2	E3	E.06	--	7.4
21S.04E.10.414A	10-10-02	--	<0.2	E2	E.01	--	21
21S.04E.10.414B	10-09-02	--	M	E2	E.02	--	17
21S.04E.10.414C	10-09-02	--	M	E2	E.06	--	16
21S.04E.10.414D	10-09-02	--	M	E2	E.01	--	19
21S.04E.10.421	10-10-02	--	M	E2	<5.00	--	3.6
21S.04E.10.422	10-11-02	--	<0.2	E2	E.02	--	0.32
21S.04E.10.423	10-10-02	--	M	E4	E.01	--	5.5
21S.04E.10.434	10-10-02	--	<0.2	E3	E.04	--	1.3
21S.04E.10.441	10-11-02	--	<0.2	E4	E.04	--	2.4
21S.04E.10.442	10-11-02	--	<0.2	E2	E.02	--	0.093
21S.04E.11.333	10-11-02	--	<0.2	E3	<5.00	--	0.9
21S.04E.11.343	10-11-02	--	<0.2	E3	E.03	--	0.3
21S.04E.12.414	07-07-03	9	<0.2	<5	<5.00	707	<0.0002
21S.04E.13.143	10-09-02	--	M	E2	<5.00	--	0.045
21S.04E.13.232	04-09-03	14	<0.2	E2	E.16	376	0.018
21S.04E.13.331	10-11-02	--	<0.2	E2	E.03	--	E0.0058

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Station number	County	Station type	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)
21S.04E.14.114	322910106303601	013	GW	10-11-02	0918	400PCMB	161	5,355.16	4.9	7.2
21S.04E.14.122	322913106301801	013	GW	10-10-02	1420	400PCMB	72	5,269	4.6	7.0
21S.04E.14.142	322902106302201	013	GW	10-09-02	1110	400PCMB	85	5,251.66	0.3	7.1
21S.04E.14.223	322906106300301	013	GW	10-09-02	1305	400PCMB	145	5,159.15	--	7.3
21S.04E.15.422	322848106305501	013	GW	10-11-02	1100	400PCMB	107	5,368.81	5.6	7.2
21S.04E.22.222	322310106305101	013	GW	10-09-02	1640	400PCMB	--	5,212.82	2.2	6.9
21S.04E.23.233B	322804106301701	013	GW	10-10-02	1435	400PCMB	180	5,043.16	4.2	7.2
21S.04E.23.233C	322800106300901	013	GW	10-10-02	1435	400PCMB	100	4,993.99	4.5	7.3
21S.04E.23.432	322745106300201	013	GW	10-09-02	1550	400PCMB	139	4,938.28	0.6	7.2
21S.04E.25.234	322711106290401	013	GW	04-09-03	1205	400PCMB	37	--	1.8	7.3
21S.04E.25.311	322702106294401	013	GW	10-09-02	1310	400PCMB	97	4,798.49	2.3	7.3
21S.04E.25.412	322704106290601	013	GW	10-09-02	1420	400PCMB	159	4,618.42	0.2	7.2
21S.04E.35.222	322639106294701	013	GW	10-09-02	1140	400PCMB	138	4,695.93	0.4	7.4
21S.04E.35.232	322624106300201	013	GW	10-09-02	1045	400PCMB	119	4,723.95	3.7	6.9
21S.04E.35.422	322612106294901	013	GW	10-08-02	1550	400PCMB	149	4,649.42	0.5	7.5
21S.04E.36.411	322609106291401	013	GW	10-08-02	1420	400PCMB	199	4,513.63	0.2	7.1
21S.05E.17.334	322834106273201	013	GW	10-07-02	1445	400PCMB	516	4,366.45	6.4	7.3
21S.05E.18.443	322828106275301	013	GW	10-10-02	1020	400PCMB	159	4,457.84	0.9	7.2
21S.05E.19.112	322823106283501	013	GW	10-09-02	1550	400PCMB	139	4,637.73	0.3	7.1
21S.05E.19.212	322827106280101	013	GW	04-11-03	0920	400PCMB	183.8	4,491.74	5.8	7.9
21S.05E.30.122	322731106281901	013	GW	10-11-02	1240	400PCMB	125	4,502.11	4.5	7.1
22S.04E.01.223	322538106285701	013	GW	10-08-02	1130	400PCMB	159	4,406.41	1.1	7.0
22S.04E.01.431	322508106291001	013	GW	10-08-02	0920	400PCMB	419	4,411.85	5.5	7.4
Upper Ash Spring	323807106324510	013	SP	07-30-03	0930	--	--	5,650	3.1	7.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Magnes-ium, water, unfltrd recover-able, mg/L (00927)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)
21S.04E.14.114	10-11-02	740	--	21.8	300	--	88.2	19.3	19.0	0.85	1
21S.04E.14.122	10-10-02	824	--	19.9	310	--	89.3	20.7	23.0	0.90	2
21S.04E.14.142	10-09-02	840	--	20.7	340	--	98.8	22.0	23.0	1.04	2
21S.04E.14.223	10-09-02	860	--	22.3	330	--	93.1	23.0	25.0	3.04	2
21S.04E.15.422	10-11-02	820	--	21.2	340	--	100	22.3	22.0	3.23	1
21S.04E.22.222	10-09-02	688	--	20.7	240	--	74.4	13.1	14.0	1.36	1
21S.04E.23.233B	10-10-02	710	--	23.0	260	--	83.8	13.4	14.0	1.52	1
21S.04E.23.233C	10-10-02	750	--	22.0	270	--	86.5	14.1	--	1.68	1
21S.04E.23.432	10-09-02	727	--	22.0	260	--	83.2	12.9	14.0	1.92	1
21S.04E.25.234	04-09-03	775	--	17.7	300	--	96.0	15.0	--	2.10	2
21S.04E.25.311	10-09-02	636	--	23.0	250	--	77.3	12.8	14.0	2.69	1
21S.04E.25.412	10-09-02	849	--	23.2	340	--	105	18.2	19.0	2.82	1
21S.04E.35.222	10-09-02	644	--	24.6	230	--	71.7	11.5	12.0	2.69	1
21S.04E.35.232	10-09-02	613	--	23.1	220	--	70.5	11.8	12.0	1.43	1
21S.04E.35.422	10-08-02	701	--	23.3	250	--	80.3	11.6	<0.2	2.40	2
21S.04E.36.411	10-08-02	737	--	25.0	260	--	84.0	11.8	<0.2	2.47	2
21S.05E.17.334	10-07-02	773	--	26.0	240	--	68.6	17.3	--	2.80	2
21S.05E.18.443	10-10-02	663	--	23.1	280	--	86.3	15.1	16.0	2.87	1
21S.05E.19.112	10-09-02	680	--	22.7	270	--	85.9	13.9	15.0	2.28	1
21S.05E.19.212	04-11-03	750	--	24.4	320	--	94.4	20.2	--	3.13	1
21S.05E.30.122	10-11-02	720	--	24.6	300	--	94.7	14.9	14.0	1.82	1
22S.04E.01.223	10-08-02	818	--	23.5	280	--	95.1	10.4	<0.2	3.57	2
22S.04E.01.431	10-08-02	1,050	--	24.4	410	--	127	21.7	<0.2	3.48	1
Upper Ash Spring	07-30-03	715	29.5	17.5	400	120	129	17.8	--	1.02	0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Bicar-bonate, wat unf incrm. titr., field, mg/L (00450)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
21S.04E.14.114	10-11-02	58.0	--	--	--	--	0.20	26.1	4.88	24.6	128
21S.04E.14.122	10-10-02	60.8	--	--	--	--	0.22	30.8	4.80	24.2	145
21S.04E.14.142	10-09-02	65.1	--	--	--	--	0.26	35.7	4.90	24.6	178
21S.04E.14.223	10-09-02	75.5	--	--	--	--	0.28	42.9	4.86	27.1	174
21S.04E.15.422	10-11-02	57.6	--	--	--	--	0.25	29.1	4.18	25.9	149
21S.04E.22.222	10-09-02	47.5	--	--	--	--	0.20	23.5	3.78	33.7	117
21S.04E.23.233B	10-10-02	51.3	--	--	--	--	0.21	25.6	3.86	31.4	130
21S.04E.23.233C	10-10-02	53.6	--	--	--	--	0.23	30.3	3.82	30.7	142
21S.04E.23.432	10-09-02	50.6	--	--	--	--	0.20	25.2	3.54	24.7	137
21S.04E.25.234	04-09-03	65.7	214	--	--	261	0.18	29.0	4.32	27.5	149
21S.04E.25.311	10-09-02	44.0	--	--	--	--	0.13	14.7	4.16	26.8	94.6
21S.04E.25.412	10-09-02	46.6	--	--	--	--	0.25	38.3	2.70	31.1	187
21S.04E.35.222	10-09-02	45.2	--	--	--	--	0.13	17.6	4.20	31.8	94.0
21S.04E.35.232	10-09-02	40.2	--	--	--	--	0.14	13.7	4.58	39.4	81.2
21S.04E.35.422	10-08-02	55.8	--	--	--	--	0.33	34.7	3.44	32.2	102
21S.04E.36.411	10-08-02	62.4	--	--	--	--	0.20	25.8	2.88	28.7	87.5
21S.05E.17.334	10-07-02	71.2	--	--	--	--	0.19	30.4	2.81	31.6	152
21S.05E.18.443	10-10-02	44.2	--	--	--	--	0.15	23.3	3.00	31.8	139
21S.05E.19.112	10-09-02	50.0	--	--	--	--	0.17	25.1	3.56	32.1	141
21S.05E.19.212	04-11-03	50.2	169	--	--	206	0.17	29.8	2.75	31.0	157
21S.05E.30.122	10-11-02	51.2	--	--	--	--	0.19	27.3	3.72	34.2	133
22S.04E.01.223	10-08-02	66.1	--	--	--	--	0.17	20.6	3.28	35.8	92.6
22S.04E.01.431	10-08-02	49.1	--	--	--	--	0.51	108	2.26	32.9	211
Upper Ash Spring	07-30-03	11.4	--	277	337	--	0.07	11.4	0.3	17.7	86.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Sulfide water unfltrd mg/L (00745)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Organic carbon, water, unfltrd mg/L (00680)	Alum-inum, water, fltrd, ug/L (01106)
21S.04E.14.114	10-11-02	<0.1	488	507	E.025	--	3.10	--	--	E.4	--
21S.04E.14.122	10-10-02	<0.1	510	538	E.041	--	4.50	--	--	E.5	--
21S.04E.14.142	10-09-02	<0.1	--	595	E.036	--	2.70	--	--	E.6	--
21S.04E.14.223	10-09-02	0.1	--	576	E.020	--	<0.100	--	--	1.5	--
21S.04E.15.422	10-11-02	M	--	541	E.029	--	1.70	--	--	E.9	--
21S.04E.22.222	10-09-02	<0.1	424	441	E.036	--	1.20	--	--	E.4	--
21S.04E.23.233B	10-10-02	M	451	483	E.017	--	4.80	--	--	0.3	--
21S.04E.23.233C	10-10-02	--	461	493	--	--	--	--	--	--	--
21S.04E.23.432	10-09-02	M	--	454	E.029	--	0.850	--	--	1.5	--
21S.04E.25.234	04-09-03	--	517	518	E.070	--	1.80	--	--	--	--
21S.04E.25.311	10-09-02	M	--	417	E.024	--	2.20	--	--	4.3	--
21S.04E.25.412	10-09-02	M	--	546	E.022	--	E.027	--	--	0.3	--
21S.04E.35.222	10-09-02	M	374	389	E.074	--	0.300	--	--	9.8	--
21S.04E.35.232	10-09-02	M	365	391	E.042	--	2.50	--	--	<1.0	--
21S.04E.35.422	10-08-02	1.9	436	465	E.030	--	2.20	--	--	3.9	--
21S.04E.36.411	10-08-02	0.1	--	425	E.026	--	<0.100	--	--	10.0	--
21S.05E.17.334	10-07-02	--	482	519	--	--	--	--	--	--	--
21S.05E.18.443	10-10-02	<0.1	451	478	E.065	--	0.710	--	--	7.9	--
21S.05E.19.112	10-09-02	M	--	500	E.027	--	6.70	--	--	E.3	--
21S.05E.19.212	04-11-03	--	490	508	<0.100	--	4.80	--	--	--	--
21S.05E.30.122	10-11-02	M	--	525	E.031	--	5.90	--	--	E.5	--
22S.04E.01.223	10-08-02	M	--	531	E.057	--	1.10	--	--	13.0	--
22S.04E.01.431	10-08-02	<0.1	616	693	E.026	--	13.0	--	--	1.1	--
Upper Ash Spring	07-30-03	--	445	459	--	0.59	--	E.004	<0.02	--	12

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, fltrd, ug/L (01030)	Chrom- ium, water, unfltrd recover -able, ug/L (01034)
21S.04E.14.114	10-11-02	--	M	--	M	--	30	--	<1.0	--	M
21S.04E.14.122	10-10-02	--	M	--	M	--	40	--	M	--	M
21S.04E.14.142	10-09-02	--	M	--	M	--	40	--	M	--	M
21S.04E.14.223	10-09-02	--	M	--	M	--	50	--	<1.0	--	M
21S.04E.15.422	10-11-02	--	M	--	M	--	30	--	M	--	M
21S.04E.22.222	10-09-02	--	M	--	M	--	30	--	M	--	M
21S.04E.23.233B	10-10-02	--	M	--	M	--	40	--	<1.0	--	M
21S.04E.23.233C	10-10-02	--	--	--	--	--	40	--	--	--	--
21S.04E.23.432	10-09-02	--	E2	--	M	--	30	--	<1.0	--	6
21S.04E.25.234	04-09-03	--	M	--	M	--	40	--	<1.0	--	E2
21S.04E.25.311	10-09-02	--	M	--	M	--	40	--	M	--	3
21S.04E.25.412	10-09-02	--	M	--	M	--	50	--	<1.0	--	5
21S.04E.35.222	10-09-02	--	M	--	M	--	40	--	<1.0	--	6
21S.04E.35.232	10-09-02	--	M	--	M	--	40	--	M	--	E1
21S.04E.35.422	10-08-02	--	E2	--	M	--	40	--	M	--	5
21S.04E.36.411	10-08-02	--	M	--	M	--	50	--	<1.0	--	9
21S.05E.17.334	10-07-02	--	--	--	--	--	50	--	--	--	--
21S.05E.18.443	10-10-02	--	M	--	M	--	60	--	M	--	E2
21S.05E.19.112	10-09-02	--	M	--	M	--	50	--	<1.0	--	M
21S.05E.19.212	04-11-03	--	M	--	M	--	40	--	<1.0	--	3
21S.05E.30.122	10-11-02	--	M	--	M	--	40	--	M	--	M
22S.04E.01.223	10-08-02	--	M	--	M	--	50	--	M	--	E1
22S.04E.01.431	10-08-02	--	E1	--	M	--	50	--	M	--	E2
Upper Ash Spring	07-30-03	<2	--	58.5	--	<0.4	60	<2	--	<5	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover -able, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)
21S.04E.14.114	10-11-02	--	--	<10	<100	--	M	--	--	<0.2	--
21S.04E.14.122	10-10-02	--	--	<10	E40	--	<1.0	--	--	M	--
21S.04E.14.142	10-09-02	--	--	E9	E30	--	<1.0	--	--	<0.2	--
21S.04E.14.223	10-09-02	--	--	61	100	--	M	--	--	M	--
21S.04E.15.422	10-11-02	--	--	<10	E30	--	M	--	--	<0.2	--
21S.04E.22.222	10-09-02	--	--	<10	190	--	M	--	--	<0.2	--
21S.04E.23.233B	10-10-02	--	--	<10	E20	--	<1.0	--	--	<0.2	--
21S.04E.23.233C	10-10-02	--	--	<10	--	--	--	--	--	--	--
21S.04E.23.432	10-09-02	--	--	<10	450	--	M	--	--	M	--
21S.04E.25.234	04-09-03	--	--	<10	E30	--	M	28	--	<0.2	--
21S.04E.25.311	10-09-02	--	--	54	520	--	M	--	--	<0.2	--
21S.04E.25.412	10-09-02	--	--	158	210	--	<1.0	--	--	M	--
21S.04E.35.222	10-09-02	--	--	21	100	--	M	--	--	M	--
21S.04E.35.232	10-09-02	--	--	22	E20	--	M	--	--	M	--
21S.04E.35.422	10-08-02	--	--	34	580	--	M	--	--	<0.2	--
21S.04E.36.411	10-08-02	--	--	53	220	--	M	--	--	<0.2	--
21S.05E.17.334	10-07-02	--	--	<10	--	--	--	--	--	--	--
21S.05E.18.443	10-10-02	--	--	15	460	--	M	--	--	M	--
21S.05E.19.112	10-09-02	--	--	<10	<100	--	M	--	--	M	--
21S.05E.19.212	04-11-03	--	--	<10	100	--	M	28	--	<0.2	--
21S.05E.30.122	10-11-02	--	--	<10	E20	--	M	--	--	<0.2	--
22S.04E.01.223	10-08-02	--	--	108	200	--	M	--	--	<0.2	--
22S.04E.01.431	10-08-02	--	--	<10	3,000	--	M	--	--	<0.2	--
Upper Ash Spring	07-30-03	<3	<7	12	--	E.05	--	5	<0.02	--	<7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

DONA ANA COUNTY--Continued

Local identifier	Date	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover -able, ug/L (01077)	Stront-ium, water, fltrd, ug/L (01080)	Vanad-ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Per-chlor-ate, water, unfltrd mg/L (62171)
21S.04E.14.114	10-11-02	--	E2	--	<5.00	--	--	--	<0.02
21S.04E.14.122	10-10-02	--	E2	--	E.01	--	--	--	0.021
21S.04E.14.142	10-09-02	--	E2	--	<5.00	--	--	--	<0.02
21S.04E.14.223	10-09-02	--	M	--	<5.00	--	--	--	<0.02
21S.04E.15.422	10-11-02	--	E3	--	<5.00	--	--	--	<0.02
21S.04E.22.222	10-09-02	--	E1	--	<5.00	--	--	--	E0.0065
21S.04E.23.233B	10-10-02	--	E2	--	<5.00	--	--	--	E0.0097
21S.04E.23.233C	10-10-02	--	--	--	--	--	--	--	--
21S.04E.23.432	10-09-02	--	18	--	E.05	--	--	--	<0.02
21S.04E.25.234	04-09-03	--	E1	--	<5.00	419	--	--	0.001
21S.04E.25.311	10-09-02	--	M	--	E.02	--	--	--	<0.02
21S.04E.25.412	10-09-02	--	M	--	E.02	--	--	--	E0.0088
21S.04E.35.222	10-09-02	--	M	--	E.06	--	--	--	<0.02
21S.04E.35.232	10-09-02	--	E1	--	E.02	--	--	--	<0.02
21S.04E.35.422	10-08-02	--	E3	--	E.05	--	--	--	<0.02
21S.04E.36.411	10-08-02	--	M	--	E.06	--	--	--	<0.02
21S.05E.17.334	10-07-02	--	--	--	--	--	--	--	--
21S.05E.18.443	10-10-02	--	E2	--	<5.00	--	--	--	<0.02
21S.05E.19.112	10-09-02	--	E2	--	<5.00	--	--	--	E0.0062
21S.05E.19.212	04-11-03	--	E2	--	<5.00	516	--	--	0.001
21S.05E.30.122	10-11-02	--	E2	--	<5.00	--	--	--	E0.0057
22S.04E.01.223	10-08-02	--	E1	--	<5.00	--	--	--	<0.02
22S.04E.01.431	10-08-02	--	6	--	E.18	--	--	--	E0.0076
Upper Ash Spring	07-30-03	<3	--	<5	--	726	<6	6	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

OTERO COUNTY

Local identifier	Station number	County	Station type	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
17S.09E.26.334	324805105594301	035	GW	08-19-03	1100	110AVMB	150	--	--	50.49
17S.09E.26.334	324805105594301	035	GW	09-22-03	1135	110AVMB	150	150	74	50.49
17S.09E.26.334	324805105594301	035	GW	10-20-03	1100	110AVMB	150	150	74	50.72
17S.09E.26.344	324802105592001	035	GW	08-19-03	1015	110AVMB	170	--	--	54.72
17S.09E.26.344	324802105592001	035	GW	09-22-03	1115	110AVMB	170	170	115	55.80
17S.09E.26.344	324802105592001	035	GW	10-20-03	1115	110AVMB	170	170	115	56.63
17S.09E.35.212	324756105590801	035	GW	08-19-03	0945	110AVMB	235	--	--	59.50
17S.09E.35.212	324756105590801	035	GW	09-22-03	1040	110AVMB	235	--	--	61.01
17S.09E.35.212	324756105590801	035	GW	10-20-03	1045	110AVMB	235	215	195	62.24
19S.06E.28.141	323752106200701	035	GW	07-02-03	1320	110AVMB	67.6	--	--	--
19S.06E.28.141	323752106200701	035	GW	10-06-03	1345	110AVMB	67.6	--	--	--
19S.06E.28.2123	323759106195201	035	GW	10-08-02	1230	110AVMB	60.0	--	--	--
19S.06E.28.2123	323759106195201	035	GW	01-07-03	1130	110AVMB	60.0	--	--	--
19S.06E.28.2123	323759106195201	035	GW	04-08-03	1335	110AVMB	60.0	--	--	--
19S.06E.28.2123	323759106195201	035	GW	07-08-03	1045	110AVMB	60.0	--	--	--
19S.06E.28.2123	323759106195201	035	GW	10-06-03	1515	110AVMB	60.0	--	--	--
19S.06E.28.2132	323758106195301	035	GW	10-08-02	1045	110AVMB	60.0	--	--	--
19S.06E.28.2132	323758106195301	035	GW	01-07-03	0955	110AVMB	60.0	--	--	--
19S.06E.28.2132	323758106195301	035	GW	04-08-03	1025	110AVMB	60.0	--	--	--
19S.06E.28.2132	323758106195301	035	GW	07-08-03	1015	110AVMB	60.0	--	--	--
19S.06E.28.2132	323758106195301	035	GW	10-07-03	1155	110AVMB	60.0	--	--	--
19S.06E.28.2144	323759106195301	035	GW	10-08-02	1430	110AVMB	49.0	--	--	--
19S.06E.28.2144	323759106195301	035	GW	01-07-03	1415	110AVMB	49.0	--	--	--
19S.06E.28.2144	323759106195301	035	GW	04-08-03	1400	110AVMB	49.0	--	--	--
19S.06E.28.2144	323759106195301	035	GW	07-08-03	1300	110AVMB	49.0	--	--	--
19S.06E.28.2144	323759106195301	035	GW	10-07-03	1430	110AVMB	49.0	--	--	--
19S.06E.28.221B	323805106194101	035	GW	10-07-02	1500	110AVMB	50.0	--	--	--
19S.06E.28.221B	323805106194101	035	GW	01-06-03	1522	110AVMB	50.0	--	--	--
19S.06E.28.221B	323805106194101	035	GW	04-07-03	1610	110AVMB	50.0	--	--	--
19S.06E.28.221B	323805106194101	035	GW	07-07-03	1515	110AVMB	50.0	--	--	--

Local identifier	Date	Altitude of land surface feet (72000)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)
17S.09E.26.334	08-19-03	4,085	15	--	--	7.4	1,820	31.5	19.0	770	630
17S.09E.26.334	09-22-03	4,085	15	--	--	8.0	2,170	27.5	19.5	690	540
17S.09E.26.334	10-20-03	4,085	30	--	--	7.3	1,780	29.0	26.5	670	510
17S.09E.26.344	08-19-03	4,090	--	--	--	7.0	5,220	28.0	19.5	2,300	2,200
17S.09E.26.344	09-22-03	4,090	15	--	--	7.0	6,260	26.0	19.5	2,200	2,100
17S.09E.26.344	10-20-03	4,090	30	--	--	7.2	4,720	28.0	26.0	2,100	2,000
17S.09E.35.212	08-19-03	4,090	10	--	--	7.2	3,130	26.5	15.0	1,200	1,100
17S.09E.35.212	09-22-03	4,090	15	--	--	7.1	--	19.5	25.5	1,200	1,100
17S.09E.35.212	10-20-03	4,090	30	--	--	7.2	3,420	27.0	25.0	1,200	1,000
19S.06E.28.141	07-02-03	3,961.39	--	29	9.9	7.5	14,800	--	20.0	--	--
19S.06E.28.141	10-06-03	3,961.39	--	3.0	6.4	7.6	14,800	--	20.7	--	--
19S.06E.28.2123	10-08-02	3,955.10	--	0.8	0.7	6.9	10,600	--	21.9	--	--
19S.06E.28.2123	01-07-03	3,955.10	--	0.5	1.6	7.4	10,200	--	21.7	--	--
19S.06E.28.2123	04-08-03	3,955.10	--	0.4	1.9	6.9	10,400	--	21.9	--	--
19S.06E.28.2123	07-08-03	3,955.10	--	0.4	1.4	7.3	10,300	--	22.5	--	--
19S.06E.28.2123	10-06-03	3,955.10	--	0.6	1.8	7.0	10,100	--	22.5	--	--
19S.06E.28.2132	10-08-02	3,955.43	--	0.4	0.8	7.0	12,400	--	22.0	--	--
19S.06E.28.2132	01-07-03	3,955.43	--	0.6	1.2	7.6	11,900	--	21.9	--	--
19S.06E.28.2132	04-08-03	3,955.43	--	0.3	1.2	7.0	12,300	--	21.4	--	--
19S.06E.28.2132	07-08-03	3,955.43	--	0.4	0.8	6.9	11,800	--	22.9	--	--
19S.06E.28.2132	10-07-03	3,955.43	--	1.0	1.4	7.2	11,700	--	22.4	--	--
19S.06E.28.2144	10-08-02	3,952.63	--	--	--	7.1	9,030	--	22.2	--	--
19S.06E.28.2144	01-07-03	3,952.63	--	12	--	7.3	9,470	--	17.8	--	--
19S.06E.28.2144	04-08-03	3,952.63	--	--	--	6.9	--	--	21.3	--	--
19S.06E.28.2144	07-08-03	3,952.63	--	--	0.3	6.7	9,040	--	23.8	--	--
19S.06E.28.2144	10-07-03	3,952.63	--	--	--	6.7	8,550	--	22.7	--	--
19S.06E.28.221B	10-07-02	3,953.53	--	0.5	5.0	7.4	21,000	--	19.7	--	--
19S.06E.28.221B	01-06-03	3,953.53	--	0.6	6.1	7.7	20,800	--	18.4	--	--
19S.06E.28.221B	04-07-03	3,953.53	--	0.3	5.0	7.5	21,000	--	19.5	--	--
19S.06E.28.221B	07-07-03	3,953.53	--	0.8	5.8	7.5	20,100	--	21.8	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover-able, mg/L (00916)	Magnesium, water, fltrd, mg/L (00925)	Magnesium, water, unfltrd recover-able, mg/L (00927)	Potassium, water, fltrd, mg/L (00935)	Potassium, water, unfltrd recover-able, mg/L (00937)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, water, unfltrd recover-able, mg/L (00929)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
17S.09E.26.334	08-19-03	171	--	84.1	--	3.07	--	2	125	--	--
17S.09E.26.334	09-22-03	147	--	79.3	--	2.93	--	2	121	--	--
17S.09E.26.334	10-20-03	139	--	78.1	--	2.89	--	2	112	--	--
17S.09E.26.344	08-19-03	528	--	247	--	3.57	--	3	308	--	--
17S.09E.26.344	09-22-03	488	--	242	--	3.68	--	3	295	--	--
17S.09E.26.344	10-20-03	461	--	235	--	3.33	--	3	298	--	--
17S.09E.35.212	08-19-03	296	--	118	--	2.71	--	3	224	--	--
17S.09E.35.212	09-22-03	294	--	122	--	2.92	--	3	256	--	--
17S.09E.35.212	10-20-03	279	--	121	--	2.71	--	3	246	--	--
19S.06E.28.141	07-02-03	--	470	--	800	--	76.0	--	--	2,900	110
19S.06E.28.141	10-06-03	--	430	--	700	--	76.0	--	--	2,700	110
19S.06E.28.2123	10-08-02	--	--	--	--	--	--	--	--	--	380
19S.06E.28.2123	01-07-03	--	310	--	410	--	75.0	--	--	2,100	340
19S.06E.28.2123	04-08-03	--	290	--	400	--	69.0	--	--	2,000	360
19S.06E.28.2123	07-08-03	--	300	--	430	--	71.0	--	--	2,100	380
19S.06E.28.2123	10-06-03	--	270	--	370	--	69.0	--	--	1,900	400
19S.06E.28.2132	10-08-02	--	--	--	--	--	--	--	--	--	240
19S.06E.28.2132	01-07-03	--	340	--	490	--	89.0	--	--	2,500	260
19S.06E.28.2132	04-08-03	--	320	--	490	--	87.0	--	--	2,400	260
19S.06E.28.2132	07-08-03	--	340	--	520	--	87.0	--	--	2,600	250
19S.06E.28.2132	10-07-03	--	290	--	430	--	86.0	--	--	2,300	250
19S.06E.28.2144	10-08-02	--	--	--	--	--	--	--	--	--	560
19S.06E.28.2144	01-07-03	--	350	--	420	--	64.0	--	--	1,700	860
19S.06E.28.2144	04-08-03	--	330	--	360	--	73.0	--	--	1,700	1,400
19S.06E.28.2144	07-08-03	--	300	--	330	--	64.0	--	--	1,700	1,600
19S.06E.28.2144	10-07-03	--	310	--	310	--	67.0	--	--	1,500	1,400
19S.06E.28.221B	10-07-02	--	--	--	--	--	--	--	--	--	150
19S.06E.28.221B	01-06-03	--	380	--	1,300	--	110	--	--	3,600	150
19S.06E.28.221B	04-07-03	--	390	--	1,400	--	120	--	--	3,700	150
19S.06E.28.221B	07-07-03	--	440	--	1,400	--	120	--	--	4,100	140

Local identifier	Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Fluoride, water, unfltrd mg/L (00951)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Sulfide water unfltrd mg/L (00745)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
17S.09E.26.334	08-19-03	142	174	165	0.5	--	25.9	574	--	1,230	--
17S.09E.26.334	09-22-03	157	191	154	0.5	--	25.3	577	--	1,200	--
17S.09E.26.334	10-20-03	155	189	128	0.5	--	25.4	543	--	1,120	--
17S.09E.26.344	08-19-03	142	173	1,030	0.2	--	24.6	1,450	--	3,670	--
17S.09E.26.344	09-22-03	159	193	942	0.2	--	23.7	1,310	--	3,400	--
17S.09E.26.344	10-20-03	157	190	926	0.2	--	23.5	1,300	--	3,340	--
17S.09E.35.212	08-19-03	153	186	463	0.3	--	24.3	978	--	2,200	--
17S.09E.35.212	09-22-03	162	197	466	0.3	--	24.5	988	--	2,250	--
17S.09E.35.212	10-20-03	162	197	439	0.3	--	24.2	929	--	2,140	--
19S.06E.28.141	07-02-03	--	--	1,900	--	E4.8	--	5,800	<0.5	--	14,000
19S.06E.28.141	10-06-03	--	--	--	--	E2.8	--	--	<0.1	--	15,000
19S.06E.28.2123	10-08-02	--	--	860	--	E3.3	--	4,700	<0.1	--	9,400
19S.06E.28.2123	01-07-03	--	--	820	--	E4.4	--	5,300	<0.1	--	9,200
19S.06E.28.2123	04-08-03	--	--	800	--	<5.0	--	4,500	<0.1	--	9,300
19S.06E.28.2123	07-08-03	--	--	810	--	5.8	--	5,200	<0.1	--	9,300
19S.06E.28.2123	10-06-03	--	--	--	--	E4.4	--	--	<0.1	--	9,600
19S.06E.28.2132	10-08-02	--	--	990	--	E3.8	--	6,900	<0.1	--	11,000
19S.06E.28.2132	01-07-03	--	--	910	--	E4.3	--	6,400	<0.1	--	10,000
19S.06E.28.2132	04-08-03	--	--	900	--	<5.0	--	5,900	<0.1	--	11,000
19S.06E.28.2132	07-08-03	--	--	870	--	6.4	--	6,800	<0.1	--	11,000
19S.06E.28.2132	10-07-03	--	--	--	--	E4.7	--	--	<0.1	--	11,000
19S.06E.28.2144	10-08-02	--	--	580	--	E2.8	--	4,000	0.8	--	7,500
19S.06E.28.2144	01-07-03	--	--	870	--	E3.6	--	4,300	5.4	--	8,300
19S.06E.28.2144	04-08-03	--	--	800	--	<5.0	--	3,000	<0.1	--	7,600
19S.06E.28.2144	07-08-03	--	--	710	--	E4.6	--	3,100	4.4	--	6,500
19S.06E.28.2144	10-07-03	--	--	--	--	E3.9	--	--	15.0	--	8,400
19S.06E.28.221B	10-07-02	--	--	2,800	--	E3.6	--	10,000	<0.1	--	20,000
19S.06E.28.221B	01-06-03	--	--	2,900	--	E5.4	--	11,000	<0.1	--	18,000
19S.06E.28.221B	04-07-03	--	--	2,600	--	<20.0	--	9,400	<0.1	--	19,000
19S.06E.28.221B	07-07-03	--	--	2,800	--	E5.7	--	10,000	<0.1	--	20,000

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water unfltrd mg/L as N (00620)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Cobalt water, unfltrd recover-able, ug/L (01037)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	<0.100	67.0	<2.50	E.8	17	M	<5.0	M	4	M
19S.06E.28.141	10-06-03	<0.100	63.0	--	E.7	10	M	<5.0	M	4	<10
19S.06E.28.2123	10-08-02	E.019	26.0	<2.50	2.3	13	M	<2.0	M	25	M
19S.06E.28.2123	01-07-03	E.020	25.0	<2.50	3.1	11	M	<5.0	M	12	M
19S.06E.28.2123	04-08-03	E.071	23.0	<25.0	2.7	12	M	<5.0	M	14	M
19S.06E.28.2123	07-08-03	<0.100	25.0	<2.50	2.0	12	M	M	M	11	M
19S.06E.28.2123	10-06-03	<0.100	22.0	--	2.1	10	M	<5.0	M	8	<10
19S.06E.28.2132	10-08-02	E.016	34.0	<2.50	2.7	18	M	<2.0	M	26	<10
19S.06E.28.2132	01-07-03	<0.100	27.0	<2.50	3.8	14	M	M	M	21	M
19S.06E.28.2132	04-08-03	<0.100	28.0	<25.0	3.0	15	M	<5.0	M	22	M
19S.06E.28.2132	07-08-03	<0.100	30.0	<2.50	2.7	14	M	M	M	24	<10
19S.06E.28.2132	10-07-03	<0.100	26.0	--	2.8	12	M	<5.0	M	21	<10
19S.06E.28.2144	10-08-02	0.620	7.90	<2.50	5.3	7	M	<2.0	M	3	<10
19S.06E.28.2144	01-07-03	0.570	3.60	<2.50	13.0	5	M	M	M	6	M
19S.06E.28.2144	04-08-03	<0.100	<2.50	<25.0	17.0	6	M	<5.0	M	8	M
19S.06E.28.2144	07-08-03	<0.100	E.88	<2.50	20.0	7	M	M	M	7	<10
19S.06E.28.2144	10-07-03	E.060	E1.10	--	15.0	E4	M	<5.0	M	5	<10
19S.06E.28.221B	10-07-02	<0.100	97.0	<5.00	2.6	26	M	<2.0	M	1,700	<10
19S.06E.28.221B	01-06-03	<0.100	98.0	<5.00	3.0	19	M	M	M	1,300	<10
19S.06E.28.221B	04-07-03	<0.100	85.0	<10.0	2.4	30	M	M	M	1,500	M
19S.06E.28.221B	07-07-03	<0.100	97.0	<5.00	2.4	27	M	<5.0	M	1,600	<10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Lead, water, unfltrd recover -able, ug/L (01051)	Selen- ium, water, unfltrd ug/L (01147)	Cyanide water, unfltrd EPA contrac rec, mg/L (99896)
17S.09E.26.334	08-19-03	--	--	--
17S.09E.26.334	09-22-03	--	--	--
17S.09E.26.334	10-20-03	--	--	--
17S.09E.26.344	08-19-03	--	--	--
17S.09E.26.344	09-22-03	--	--	--
17S.09E.26.344	10-20-03	--	--	--
17S.09E.35.212	08-19-03	--	--	--
17S.09E.35.212	09-22-03	--	--	--
17S.09E.35.212	10-20-03	--	--	--
19S.06E.28.141	07-02-03	M	150	<0.01
19S.06E.28.141	10-06-03	<1.0	110	--
19S.06E.28.2123	10-08-02	M	81	M
19S.06E.28.2123	01-07-03	M	68	E.01
19S.06E.28.2123	04-08-03	<1.0	65	E.01
19S.06E.28.2123	07-08-03	<1.0	58	<0.01
19S.06E.28.2123	10-06-03	<1.0	46	--
19S.06E.28.2132	10-08-02	<1.0	100	M
19S.06E.28.2132	01-07-03	<1.0	86	E.01
19S.06E.28.2132	04-08-03	<1.0	82	E.01
19S.06E.28.2132	07-08-03	<1.0	76	<0.01
19S.06E.28.2132	10-07-03	<1.0	57	--
19S.06E.28.2144	10-08-02	M	35	E.01
19S.06E.28.2144	01-07-03	M	15	E.01
19S.06E.28.2144	04-08-03	M	9	E.01
19S.06E.28.2144	07-08-03	M	E3	<0.01
19S.06E.28.2144	10-07-03	M	E2	--
19S.06E.28.221B	10-07-02	<1.0	680	E.01
19S.06E.28.221B	01-06-03	<1.0	540	M
19S.06E.28.221B	04-07-03	<1.0	660	M
19S.06E.28.221B	07-07-03	<1.0	600	<0.01

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Station number	Date	Time	Organic carbon, water, unfltrd mg/L (00680)	1,2-Di-chloro-ethene, water, unfltrd ug/L (45617)	2,4,5-Tri-chloro-phenol, water, unfltrd ug/L (77687)	2,4,6-Tri-chloro-phenol, water, unfltrd ug/L (34621)	2,4-Di-chloro-phenol, water, unfltrd ug/L (34601)	2,4-Di-methyl-phenol, water, unfltrd ug/L (34606)	2,4-Di-nitro-phenol, water, unfltrd ug/L (34616)
17S.09E.26.334	324805105594301	08-19-03	1100	--	--	--	--	--	--	--
17S.09E.26.334	324805105594301	09-22-03	1135	--	--	--	--	--	--	--
17S.09E.26.334	324805105594301	10-20-03	1100	--	--	--	--	--	--	--
17S.09E.26.344	324802105592001	08-19-03	1015	--	--	--	--	--	--	--
17S.09E.26.344	324802105592001	09-22-03	1115	--	--	--	--	--	--	--
17S.09E.26.344	324802105592001	10-20-03	1115	--	--	--	--	--	--	--
17S.09E.35.212	324756105590801	08-19-03	0945	--	--	--	--	--	--	--
17S.09E.35.212	324756105590801	09-22-03	1040	--	--	--	--	--	--	--
17S.09E.35.212	324756105590801	10-20-03	1045	--	--	--	--	--	--	--
19S.06E.28.141	323752106200701	07-02-03	1320	E.8	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.141	323752106200701	10-06-03	1345	E.7	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2123	323759106195201	10-08-02	1230	2.3	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2123	323759106195201	01-07-03	1130	3.1	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2123	323759106195201	04-08-03	1335	2.7	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2123	323759106195201	07-08-03	1045	2.0	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2123	323759106195201	10-06-03	1515	2.1	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2132	323758106195301	10-08-02	1045	2.7	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2132	323758106195301	01-07-03	0955	3.8	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2132	323758106195301	04-08-03	1025	3.0	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2132	323758106195301	07-08-03	1015	2.7	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2132	323758106195301	10-07-03	1155	2.8	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2144	323759106195301	10-08-02	1430	5.3	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2144	323759106195301	01-07-03	1415	13.0	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.2144	323759106195301	04-08-03	1400	17.0	<4.0	<200	<200	<200	<200	<1,000
19S.06E.28.2144	323759106195301	07-08-03	1300	20.0	<1.0	<100	<100	<100	<100	<500
19S.06E.28.2144	323759106195301	10-07-03	1430	15.0	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.221B	323805106194101	10-07-02	1500	2.6	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.221B	323805106194101	01-06-03	1522	3.0	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.221B	323805106194101	04-07-03	1610	2.4	<1.0	<10	<10	<10	<10.0	<50
19S.06E.28.221B	323805106194101	07-07-03	1515	2.4	<1.0	<10	<10	<10	<10.0	<50

Local identifier	Date	2,4-Di-nitro-toluene water unfltrd ug/L (34611)	2,6-Di-nitro-toluene water unfltrd ug/L (34626)	2,6-Di-t-butyl -4-methyl-phenol, wat unf ug/L (61698)	2-Chloro-naphth-alene, water, unfltrd ug/L (34581)	2-chloro-phenol, water, unfltrd ug/L (34586)	2-Methyl-4,6-di-nitro-phenol, wat unf ug/L (34657)	2-Methyl-naphth-alene, water, unfltrd ug/L (30194)	2-Nitro-aniline water unfltrd ug/L (30195)	2-nitro-phenol, water unfltrd ug/L (34591)	3,3-Di' chloro-benzi-dine, water, unfltrd ug/L (34631)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	<10.0	--	<10	<50	--	--	<10	--
19S.06E.28.141	10-06-03	<10	<10	--	<10	<10	<50	<10.0	<50	<10	<50
19S.06E.28.2123	10-08-02	<10	<10	<10.0	<10	<10	<50	--	<50	<10	<50
19S.06E.28.2123	01-07-03	<10	<10	<10.0	<10	<10	<50	E2.0	<50	<10	<50
19S.06E.28.2123	04-08-03	<10	<10	<10.0	<10	<10	<50	E2.9	<50	<10	<50
19S.06E.28.2123	07-08-03	<10	<10	<10.0	<10	<10	<50	<10.0	<50	<10	<50
19S.06E.28.2123	10-06-03	<10	<10	--	<10	<10	<50	E1.2	<50	<10	<50
19S.06E.28.2132	10-08-02	<10	<10	<10.0	<10	<10	<50	--	<50	<10	<50
19S.06E.28.2132	01-07-03	<10	<10	<10.0	<10	<10	<50	29.0	<50	<10	<50
19S.06E.28.2132	04-08-03	<10	<10	<10.0	<10	<10	<50	23.0	<50	<10	<50
19S.06E.28.2132	07-08-03	<10	<10	<10.0	<10	<10	<50	21.0	<50	<10	<50
19S.06E.28.2132	10-07-03	<10	<10	--	<10	<10	<50	14.0	<50	<10	<50
19S.06E.28.2144	10-08-02	<10	<10	<10.0	<10	<10	<50	--	<50	<10	<50
19S.06E.28.2144	01-07-03	<10	<10	<10.0	<10	<10	<50	93.0	<50	<10	<50
19S.06E.28.2144	04-08-03	<200	<200	<200	<200	<200	<1,000	2,300	<1,000	<200	<1,000
19S.06E.28.2144	07-08-03	<100	<100	<100	<100	<100	<500	790	<500	<100	<500
19S.06E.28.2144	10-07-03	<10	<10	--	<10	<10	<50	120	<50	<10	<50
19S.06E.28.221B	10-07-02	<10	<10	<10.0	<10	<10	<50	--	<50	<10	<50
19S.06E.28.221B	01-06-03	<10	<10	<10.0	<10	<10	<50	<10.0	<50	<10	<50
19S.06E.28.221B	04-07-03	<10	<10	<10.0	<10	<10	<50	<10.0	<50	<10	<50
19S.06E.28.221B	07-07-03	<10	<10	<10.0	<10	<10	<50	<10.0	<50	<10	<50

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	3-Nitro-aniline water unfltrd ug/L (78300)	4-Bromo-phenyl phenyl ether, wat unf ug/L (34636)	4-Chloro-3-methyl-phenol, wat unf ug/L (34452)	4-chloro-aniline water, fltrd, ug/L (50312)	4-Chloro-phenyl phenyl ether, wat unf ug/L (34641)	4-Nitro-aniline water unfltrd ug/L (30196)	4-Nitro-phenol, water, unfltrd ug/L (34646)	9H-Fluor-ene, water, unfltrd ug/L (34381)	Ace-naphth-ene, water, unfltrd ug/L (34205)	Ace-naphth-ylene, water, unfltrd ug/L (34200)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	<10	--	--	--	<50	--	--	--
19S.06E.28.141	10-06-03	<50	<10	<10	--	<10	<50	<50	<10	<10	<10
19S.06E.28.2123	10-08-02	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.2123	01-07-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.2123	04-08-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.2123	07-08-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.2123	10-06-03	<50	<10	<10	--	<10	<50	<50	<10	<10	<10
19S.06E.28.2132	10-08-02	<50	<10	<10	<10.00	<10	<50	<50	<10	E1	<10
19S.06E.28.2132	01-07-03	<50	<10	<10	<10.00	<10	<50	<50	<10	E2	<10
19S.06E.28.2132	04-08-03	<50	<10	<10	<10.00	<10	<50	<50	<10	E1	<10
19S.06E.28.2132	07-08-03	<50	<10	<10	<10.00	<10	<50	<50	<10	E1	<10
19S.06E.28.2132	10-07-03	<50	<10	<10	--	<10	<50	<50	<10	E1	<10
19S.06E.28.2144	10-08-02	<50	<10	<10	<10.00	<10	<50	<50	E6	E5	<10
19S.06E.28.2144	01-07-03	<50	<10	<10	<10.00	<10	<50	<50	E6	E5	<10
19S.06E.28.2144	04-08-03	<1,000	<200	<200	<200.0	<200	<1,000	<1,000	550	<200	<200
19S.06E.28.2144	07-08-03	<500	<100	<100	<100.0	<100	<500	<500	170	<100	<100
19S.06E.28.2144	10-07-03	<50	<10	<10	--	<10	<50	<50	13	<10	<10
19S.06E.28.221B	10-07-02	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.221B	01-06-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.221B	04-07-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10
19S.06E.28.221B	07-07-03	<50	<10	<10	<10.00	<10	<50	<50	<10	<10	<10

Local identifier	Date	Anthra-cene, water, unfltrd ug/L (34220)	Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluor-anthene water unfltrd ug/L (34230)	Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluor-anthene water unfltrd ug/L (34242)	Benzyl n-butyl phthal-ate, water, unfltrd ug/L (34292)	Bis(2-chloro-ethoxy) methane water unfltrd ug/L (34278)	Bis(2-chloro-ethyl) ether, water, unfltrd ug/L (34273)	Bis(2-chloro-iso-propyl) ether, wat unf ug/L (34283)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	10-06-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2123	10-08-02	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2123	01-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2123	04-08-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2123	07-08-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2123	10-06-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2132	10-08-02	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2132	01-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2132	04-08-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2132	07-08-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2132	10-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2144	10-08-02	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2144	01-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.2144	04-08-03	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
19S.06E.28.2144	07-08-03	E22	<100	<100	<100	<100	<100	<100	<100	<100	<100
19S.06E.28.2144	10-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.221B	10-07-02	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.221B	01-06-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.221B	04-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
19S.06E.28.221B	07-07-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Bis(2-ethylhexyl) phthalate, wat unf ug/L (39100)	Carbazole, water, unfltrd ug/L (77571)	Chrysene, water, unfltrd ug/L (34320)	Dibenzo-[a,h]-anthracene, wat unf ug/L (34556)	Dibenzofuran, water, unfltrd ug/L (81302)	Diesel range organic cmpds, water unfltrd ug/L (04585)	Diethyl phthalate, water, unfltrd ug/L (34336)	Dimethyl phthalate, water, unfltrd ug/L (34341)	Di-n-butyl phthalate, water, unfltrd ug/L (39110)	Di-n-octyl phthalate, water, unfltrd ug/L (34596)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	--	--	--	250	--	--	--	--
19S.06E.28.141	10-06-03	<10	<10.0	<10	<10	<10	<250	<10	<10	<10	<10
19S.06E.28.2123	10-08-02	<10	<10.0	<10	<10	<10	--	<10	<10	<10	<10
19S.06E.28.2123	01-07-03	<10	<10.0	<10	<10	<10	250	<10	<10	<10	<10
19S.06E.28.2123	04-08-03	<10	<10.0	<10	<10	<10	110	<10	<10	<10	<10
19S.06E.28.2123	07-08-03	<10	<10.0	<10	<10	<10	45	<10	<10	<10	<10
19S.06E.28.2123	10-06-03	<10	<10.0	<10	<10	<10	<250	<10	<10	<10	<10
19S.06E.28.2132	10-08-02	<10	<10.0	<10	<10	<10	--	<10	<10	<10	<10
19S.06E.28.2132	01-07-03	<10	<10.0	<10	<10	<10	430	<10	<10	<10	<10
19S.06E.28.2132	04-08-03	<10	<10.0	<10	<10	<10	340	<10	<10	<10	<10
19S.06E.28.2132	07-08-03	E4	<10.0	<10	<10	<10	390	<10	<10	<10	<10
19S.06E.28.2132	10-07-03	<10	E1.5	<10	<10	E4.9	420	<10	<10	<10	<10
19S.06E.28.2144	10-08-02	<10	<10.0	<10	<10	10	--	<10	<10	<10	<10
19S.06E.28.2144	01-07-03	<10	E2.0	<10	<10	11	2,200	<10	<10	<10	<10
19S.06E.28.2144	04-08-03	<200	<200	<200	<200	<200	890,000	<200	<200	<200	<200
19S.06E.28.2144	07-08-03	E44	<100	<100	<100	140	11,000	<100	<100	<100	<100
19S.06E.28.2144	10-07-03	<10	E7.7	<10	<10	19	22,000	<10	<10	<10	<10
19S.06E.28.221B	10-07-02	<10	<10.0	<10	<10	<10	--	<10	<10	<10	<10
19S.06E.28.221B	01-06-03	<10	<10.0	<10	<10	<10	250	<10	<10	<10	<10
19S.06E.28.221B	04-07-03	<10	<10.0	<10	<10	<10	250	<10	<10	<10	<10
19S.06E.28.221B	07-07-03	<10	<10.0	<10	<10	<10	250	<10	<10	<10	<10

Local identifier	Date	Fluoranthene water unfltrd ug/L (34376)	Hexachlorobenzene water unfltrd ug/L (39700)	Hexachlorocyclopentadiene, wat unf ug/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403)	Isophorone water unfltrd ug/L (34408)	Nitrobenzene water unfltrd ug/L (34447)	N-NItroso-di-n-propylamine, wat unf ug/L (34428)	N-NItroso-di-phenylamine, wat unf ug/L (34433)	o-Cresol, soil, ug/kg (62268)	Organic halides water unfltrd ug/L as Cl (79747)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	--	--	--	--	--	--	<10	<40
19S.06E.28.141	10-06-03	<10	<10	<50	<10	<10	<10	<10	<10	--	E19
19S.06E.28.2123	10-08-02	<10	<10	<50	<10	<10	<10	<10	<10	<10	E37
19S.06E.28.2123	01-07-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	39
19S.06E.28.2123	04-08-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	22
19S.06E.28.2123	07-08-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	42
19S.06E.28.2123	10-06-03	<10	<10	<50	<10	<10	<10	<10	<10	--	35
19S.06E.28.2132	10-08-02	<10	<10	<50	<10	<10	<10	<10	<10	<10	E34
19S.06E.28.2132	01-07-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	30
19S.06E.28.2132	04-08-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	32
19S.06E.28.2132	07-08-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	<40
19S.06E.28.2132	10-07-03	<10	<10	<50	<10	<10	<10	<10	<10	--	33
19S.06E.28.2144	10-08-02	<10	<10	<50	<10	<10	<10	<10	<10	<10	<60
19S.06E.28.2144	01-07-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	<100
19S.06E.28.2144	04-08-03	<200	<200	<1,000	<200	<200	<200	<200	<200	<200	<250
19S.06E.28.2144	07-08-03	<100	<100	<500	<100	<100	<100	<100	<100	<100	<40
19S.06E.28.2144	10-07-03	<10	<10	<50	<10	<10	<10	<10	<10	--	E16
19S.06E.28.221B	10-07-02	<10	<10	<50	<10	<10	<10	<10	<10	<10	E41
19S.06E.28.221B	01-06-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	31
19S.06E.28.221B	04-07-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	33
19S.06E.28.221B	07-07-03	<10	<10	<50	<10	<10	<10	<10	<10	<10	E32

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Penta-chloro-phenol, water, unfltrd ug/L (39032)	Phenan-threne, water, unfltrd ug/L (34461)	Phenol, water, unfltrd ug/L (34694)	Pyrene, water, unfltrd ug/L (34469)	Xylenes water unfltrd ug/L (81551)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	<50	--	<10.0	--	<2	<1	<1	<1	<1	<1
19S.06E.28.141	10-06-03	<50	<10	<10.0	<10	<2	<1	<1	<1	<1	M
19S.06E.28.2123	10-08-02	<50	<10	<10.0	<10	<1	<1	<1	<1	2	<1
19S.06E.28.2123	01-07-03	<50	<10	<10.0	<10	<2	<1	<1	<1	2	<1
19S.06E.28.2123	04-08-03	<50	<10	<10.0	<10	<2	<1	<1	<1	3	<1
19S.06E.28.2123	07-08-03	<50	<10	<10.0	<10	<2	<1	<1	<1	2	<1
19S.06E.28.2123	10-06-03	<50	<10	<10.0	<10	<2	<1	<1	<1	4	M
19S.06E.28.2132	10-08-02	<50	E3	<10.0	<10	<1	<1	<1	<1	M	<1
19S.06E.28.2132	01-07-03	<50	E3	<10.0	<10	<2	<1	<1	<1	M	<1
19S.06E.28.2132	04-08-03	<50	E2	<10.0	<10	<2	<1	<1	<1	M	<1
19S.06E.28.2132	07-08-03	<50	E3	<10.0	<10	<2	<1	<1	<1	M	M
19S.06E.28.2132	10-07-03	<50	E4	<10.0	<10	<2	<1	<1	<1	M	M
19S.06E.28.2144	10-08-02	<50	E8	<10.0	<10	<1	<1	<1	<1	2	<1
19S.06E.28.2144	01-07-03	<50	E10	<10.0	<10	<2	<1	<1	<1	2	<1
19S.06E.28.2144	04-08-03	<1,000	830	<200	E90	<8	<4	<4	<4	E3	<4
19S.06E.28.2144	07-08-03	<500	260	<100	E24	<2	M	<1	<1	3	M
19S.06E.28.2144	10-07-03	<50	18	<10.0	E1	<2	M	<1	<1	3	<1
19S.06E.28.221B	10-07-02	<50	<10	<10.0	<10	<1	<1	<1	<1	<1	5
19S.06E.28.221B	01-06-03	<50	<10	<10.0	<10	<2	<1	<1	<1	<1	4
19S.06E.28.221B	04-07-03	<50	<10	<10.0	<10	<2	<1	<1	<1	<1	4
19S.06E.28.221B	07-07-03	<50	<10	<10.0	<10	<2	<1	<1	<1	<1	5

Local identifier	Date	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Acetone water unfltrd ug/L (81552)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-methane water unfltrd ug/L (34413)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	<1	<1	--	--	<10	<1	<1	<2
19S.06E.28.141	10-06-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.2123	10-08-02	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.2123	01-07-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.2123	04-08-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.2123	07-08-03	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2123	10-06-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.2132	10-08-02	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2132	01-07-03	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2132	04-08-03	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2132	07-08-03	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2132	10-07-03	<10	<10	<1	<1	<10	<10	<10	M	<1	<2
19S.06E.28.2144	10-08-02	<10	<10	<1	<1	<10	<10	<10	1	<1	<2
19S.06E.28.2144	01-07-03	<10	<10	<1	<1	<10	<10	<10	4	<1	<2
19S.06E.28.2144	04-08-03	<200	<200	<4	<4	<200	<200	<40	7	<4	<8
19S.06E.28.2144	07-08-03	<100	<100	<1	<1	<100	<100	<10	4	<1	<2
19S.06E.28.2144	10-07-03	<10	<10	<1	<1	<10	<10	<10	3	<1	<2
19S.06E.28.221B	10-07-02	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.221B	01-06-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.221B	04-07-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2
19S.06E.28.221B	07-07-03	<10	<10	<1	<1	<10	<10	<10	<1	<1	<2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-chloro-methane water unfltrd ug/L (34423)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.141	10-06-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.2123	10-08-02	<1.0	<1	<2	<2	<1.0	<1	<1	<1	<5.0	<1
19S.06E.28.2123	01-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.2123	04-08-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.2123	07-08-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.2123	10-06-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.2132	10-08-02	<1.0	<1	<2	<2	<1.0	<1	<1	<1	<5.0	<1
19S.06E.28.2132	01-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.2132	04-08-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.2132	07-08-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.2132	10-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.2144	10-08-02	<1.0	<1	<2	<2	<1.0	<1	<1	<1	<5.0	<1
19S.06E.28.2144	01-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.2144	04-08-03	<4.0	<4	<8	<8	<4.0	<4	<4	E1	<20	<4
19S.06E.28.2144	07-08-03	0.2	<1	<2	<2	<1.0	<1	<1	M	<5.0	M
19S.06E.28.2144	10-07-03	E.3	<1	<2	<2	<1.0	<1	<1	M	<5.0	M
19S.06E.28.221B	10-07-02	<1.0	<1	<2	<2	<1.0	<1	<1	<1	<5.0	<1
19S.06E.28.221B	01-06-03	<1.0	<1	<2	<2	<1.0	<1	<1	<5	<5.0	<1
19S.06E.28.221B	04-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1
19S.06E.28.221B	07-07-03	<1.0	<1	<2	<2	<1.0	<1	<1	M	<5.0	<1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	Styrene water unfltrd ug/L (77128)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)
17S.09E.26.334	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--	--	--	--	--	--
19S.06E.28.141	07-02-03	--	--	<5.0	--	<5.0	<1	<1	<1	<1	<1
19S.06E.28.141	10-06-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2123	10-08-02	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2123	01-07-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2123	04-08-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2123	07-08-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2123	10-06-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2132	10-08-02	<10	<10	<5.0	E2	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2132	01-07-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2132	04-08-03	<10	<10	<5.0	E2	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2132	07-08-03	<10	<10	<5.0	E2	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2132	10-07-03	<10	<10	<5.0	<10	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2144	10-08-02	<10	<10	<5.0	20	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2144	01-07-03	<10	<10	<5.0	26	<5.0	<1	<1	<1	<1	<0.50
19S.06E.28.2144	04-08-03	<200	<200	<20	240	<20	<4	<4	<4	<4	<2
19S.06E.28.2144	07-08-03	<100	<100	<5.0	110	<5.0	<1	<1	<1	<1	<1
19S.06E.28.2144	10-07-03	<10	<10	<5.0	38	<5.0	<1	<1	<1	<1	<1
19S.06E.28.221B	10-07-02	<10	<10	<5.0	<10	<5.0	<1	M	<1	<1	<0.50
19S.06E.28.221B	01-06-03	<10	<10	<5.0	<10	<5.0	<1	M	<1	<1	<0.50
19S.06E.28.221B	04-07-03	<10	<10	<5.0	<10	<5.0	<1	M	<1	<1	<0.50
19S.06E.28.221B	07-07-03	<10	<10	<5.0	<10	<5.0	<1	M	<1	<1	<1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

OTERO COUNTY--Continued

Local identifier	Date	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
17S.09E.26.334	08-19-03	--	--	--	--	--
17S.09E.26.334	09-22-03	--	--	--	--	--
17S.09E.26.334	10-20-03	--	--	--	--	--
17S.09E.26.344	08-19-03	--	--	--	--	--
17S.09E.26.344	09-22-03	--	--	--	--	--
17S.09E.26.344	10-20-03	--	--	--	--	--
17S.09E.35.212	08-19-03	--	--	--	--	--
17S.09E.35.212	09-22-03	--	--	--	--	--
17S.09E.35.212	10-20-03	--	--	--	--	--
19S.06E.28.141	07-02-03	<1	<1	<1	4	<2
19S.06E.28.141	10-06-03	<1	<1	<1	5	<2
19S.06E.28.2123	10-08-02	<1	<1	M	1	<2
19S.06E.28.2123	01-07-03	<1	<1	M	1	<2
19S.06E.28.2123	04-08-03	<1	<1	M	1	--
19S.06E.28.2123	07-08-03	<1	<1	M	M	<2
19S.06E.28.2123	10-06-03	<1	<1	M	1	<2
19S.06E.28.2132	10-08-02	<1	<1	M	M	<2
19S.06E.28.2132	01-07-03	<1	<1	<1	M	<2
19S.06E.28.2132	04-08-03	<1	<1	<1	M	--
19S.06E.28.2132	07-08-03	<1	<1	M	M	<2
19S.06E.28.2132	10-07-03	<1	<1	M	M	<2
19S.06E.28.2144	10-08-02	<1	<1	<1	M	<2
19S.06E.28.2144	01-07-03	<1	<1	<1	M	<2
19S.06E.28.2144	04-08-03	<4	<4	<4	<4	--
19S.06E.28.2144	07-08-03	<1	<1	<1	<1	<2
19S.06E.28.2144	10-07-03	<1	<1	<1	<1	<2
19S.06E.28.221B	10-07-02	<1	<1	6	4	<2
19S.06E.28.221B	01-06-03	<1	<1	5	3	<2
19S.06E.28.221B	04-07-03	<1	<1	4	3	--
19S.06E.28.221B	07-07-03	<1	<1	5	4	<2

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

ROOSEVELT COUNTY

Local identifier	Station number	County	Station type	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Turbidity, water, unfltrd field, NTU (61028)
01N.29E.01.222122	342046103503501	041	GW	12-05-02	1320	110AVMB	101	--	4,260.15	0.4
01N.29E.01.222122	342046103503501	041	GW	12-05-02	1321	110AVMB	101	--	4,260.15	--
01N.29E.01.222122	342046103503501	041	GW	03-18-03	1415	110AVMB	101	66.42	4,260.15	0.8
01N.30E.03.213334	342031103464701	041	GW	12-05-02	1200	110AVMB	103	53.36	4,231.74	0.9
01N.30E.03.213334	342031103464701	041	GW	12-05-02	1201	110AVMB	103	--	4,231.74	--
01N.30E.03.213334	342031103464701	041	GW	03-19-03	1230	110AVMB	103	53.71	4,231.74	0.7
01N.30E.05.112	342048103492701	041	GW	12-05-02	1445	121OGLL	--	82.92	4,270.64	4.0
01N.30E.05.112	342048103492701	041	GW	12-05-02	1446	121OGLL	--	--	4,270.64	--
01N.30E.05.112	342048103492701	041	GW	03-19-03	1515	121OGLL	--	--	4,270.64	1.4
01N.30E.13.414424	341820103442601	041	GW	12-02-02	1400	110AVMB	165	--	4,268.22	0.2
01N.30E.13.414424	341820103442601	041	GW	12-02-02	1401	110AVMB	165	--	4,268.22	--
01N.30E.13.414424	341820103442601	041	GW	03-19-03	0815	110AVMB	165	--	4,268.22	0.5
01N.30E.15.324	341825103470301	041	GW	12-04-02	1200	121OGLL	181	147.51	4,323.21	9.4
01N.30E.15.324	341825103470301	041	GW	12-04-02	1201	121OGLL	181	--	4,323.21	--
01N.30E.15.324	341825103470301	041	GW	03-20-03	1005	121OGLL	181	147.36	4,323.21	15
01N.30E.16.233	341845103475801	041	GW	12-06-02	0900	121OGLL	160	142.84	4,343.27	21
01N.30E.16.233	341845103475801	041	GW	12-06-02	0901	121OGLL	160	--	4,343.27	--
01N.30E.16.233	341845103475801	041	GW	03-20-03	0810	121OGLL	160	142.29	4,343.27	52
01N.30E.19.43441	341720103494701	041	GW	12-03-02	1000	110AVMB	--	108.86	4,468.60	160
01N.30E.19.43441	341720103494701	041	GW	12-03-02	1001	110AVMB	--	--	4,468.60	--
01N.30E.19.43441	341720103494701	041	GW	03-18-03	0915	110AVMB	--	108.54	4,468.60	180
01N.30E.22.321	341743103470801	041	GW	12-04-02	1420	121OGLL	181.6	105.35	4,356.27	9.8
01N.30E.22.321	341743103470801	041	GW	12-04-02	1421	121OGLL	181.6	--	4,356.27	--
01N.30E.22.321	341743103470801	041	GW	03-20-03	1200	121OGLL	181.6	104.80	4,356.27	6.8
01N.30E.25.222	341714103442502	041	GW	12-02-02	1530	121OGLL	245	119.42	4,290.73	10
01N.30E.25.222	341714103442502	041	GW	12-02-02	1531	121OGLL	245	--	4,290.73	--
01N.30E.25.222	341714103442502	041	GW	03-17-03	1010	121OGLL	245	119.25	4,290.73	6.0
01N.30E.27.324	341640103470501	041	GW	12-04-02	1000	121OGLL	--	65.09	4,380.67	19
01N.30E.27.324	341640103470501	041	GW	12-04-02	1001	121OGLL	--	--	4,380.67	--
01N.30E.27.324	341640103470501	041	GW	03-21-03	0830	121OGLL	--	64.82	4,380.67	5.4
01S.29E.12.222222	341954103503101	041	GW	12-03-02	1330	110AVMB	60	44.48	4,639.78	1.2
01S.29E.12.222222	341954103503101	041	GW	12-03-02	1331	110AVMB	60	--	4,639.78	--
01S.29E.12.222222	341954103503101	041	GW	03-18-03	1200	110AVMB	60	--	4,639.78	0.3
01S.30E.14.32131	341828103460001	041	GW	12-06-02	1510	110AVMB	--	54.24	4,405.44	13
01S.30E.14.32131	341828103460001	041	GW	12-06-02	1511	110AVMB	--	--	4,405.44	--
01S.30E.14.32131	341828103460001	041	GW	03-17-03	1415	110AVMB	--	53.89	4,405.44	9.3
015.30E.18.2211	341345103494301	041	GW	12-03-02	1530	121OGLL	--	--	4,664.03	4.3
015.30E.18.2211	341345103494301	041	GW	12-03-02	1531	121OGLL	--	--	4,664.03	--
015.30E.18.2211	341345103494301	041	GW	03-18-03	1315	121OGLL	--	119.40	4,664.03	1.3
01S.31E.04.444	341440103411101	041	GW	12-06-02	1225	121OGLL	165	150.71	4,279.27	5.1
01S.31E.04.444	341440103411101	041	GW	12-06-02	1226	121OGLL	165	--	4,279.27	--
01S.31E.04.444	341440103411101	041	GW	03-17-03	1225	121OGLL	165	150.10	4,279.27	220
02N.30E.25.414	342152103444201	041	GW	12-05-02	1020	121OGLL	--	22.15	4,202.05	0.9
02N.30E.25.414	342152103444201	041	GW	12-05-02	1021	121OGLL	--	--	4,202.05	--
02N.30E.25.414	342152103444201	041	GW	03-19-03	1100	121OGLL	--	24.40	4,202.05	0.9

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water unfltrd recover-able, mg/L (00916)	Magnes-ium, water, unfltrd recover-able, mg/L (00927)	Potas-sium, water, unfltrd recover-able, mg/L (00937)	Sodium, water, unfltrd recover-able, mg/L (00929)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Bromide water, fltrd, mg/L (71870)
01N.29E.01.222122	12-05-02	2.3	7.3	774	17.7	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	58	27	E2.7	77	150	0.79
01N.29E.01.222122	03-18-03	7.6	7.9	850	17.4	62	26	E2.1	74	150	0.39
01N.30E.03.213334	12-05-02	2.4	7.3	644	17.0	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	43	25	3.2	70	170	E.16
01N.30E.03.213334	03-19-03	7.7	7.5	674	17.9	41	22	E2.4	63	170	0.30
01N.30E.05.112	12-05-02	8.1	7.4	556	17.5	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	37	20	E2.7	64	160	E.16
01N.30E.05.112	03-19-03	--	6.9	568	18.4	37	18	E2.0	55	160	0.50
01N.30E.13.414424	12-02-02	6.6	7.8	782	18.6	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	29	33	5.6	83	150	0.50
01N.30E.13.414424	03-19-03	7.1	8.2	792	17.4	28	31	4.7	78	160	0.45
01N.30E.15.324	12-04-02	6.8	7.5	10,200	19.3	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	310	280	15	2,100	45	7.8
01N.30E.15.324	03-20-03	5.9	6.9	8,670	22.3	260	240	12	1,800	40	6.7
01N.30E.16.233	12-06-02	--	7.5	2,620	18.7	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	61	58	7.9	560	140	2.0
01N.30E.16.233	03-20-03	--	7.1	2,530	17.8	41	39	4.4	320	100	1.3
01N.30E.19.43441	12-03-02	2.5	7.4	3,180	16.9	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	52	21	4.2	650	230	3.1
01N.30E.19.43441	03-18-03	3.2	7.6	3,130	17.0	44	18	E2.9	620	240	3.4
01N.30E.22.321	12-04-02	1.7	7.6	7,710	19.6	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	120	76	8.9	1,700	140	8.8
01N.30E.22.321	03-20-03	1.6	6.9	7,270	19.9	120	83	7.5	1,400	150	9.2
01N.30E.25.222	12-02-02	0.6	7.7	1,030	21.6	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	170	110	8.2	2,100	69	7.2
01N.30E.25.222	03-17-03	0.4	7.6	9,070	31.4	180	120	8.4	2,100	91	8.7
01N.30E.27.324	12-04-02	6.3	7.6	3,680	17.5	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	87	77	13	690	130	4.6
01N.30E.27.324	03-21-03	4.1	8.0	3,830	16.5	62	57	9.2	660	150	4.5
01S.29E.12.222222	12-03-02	8.2	7.1	658	15.0	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	54	41	5.3	16	220	0.35
01S.29E.12.222222	03-18-03	7.0	7.7	652	16.7	52	40	5.0	17	230	0.27
01S.30E.14.32131	12-06-02	8.5	7.7	1,380	16.1	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	82	71	5.9	140	280	0.72
01S.30E.14.32131	03-17-03	5.4	7.3	1,340	18.1	78	66	5.2	130	280	0.62
015.30E.18.2211	12-03-02	3.9	7.4	1,500	18.5	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	64	56	9.3	160	170	1.3
015.30E.18.2211	03-18-03	5.3	7.9	1,620	17.7	73	61	8.4	150	170	1.4
01S.31E.04.444	12-06-02	7.6	8.0	1,480	20.0	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	32	59	11	200	210	1.4
01S.31E.04.444	03-17-03	5.41	7.79	1,420	19.7	30	54	9.8	180	200	1.1
02N.30E.25.414	12-05-02	5.5	7.3	568	15.3	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	45	22	3.1	59	180	0.22
02N.30E.25.414	03-19-03	7.6	7.6	596	15.1	42	19	E2.7	51	190	0.40

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd mg/L (00951)	Sulfate water, fltrd, mg/L (00945)	Sulfide water unfltrd mg/L (00745)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recoverable, ug/L (01105)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	48	1.9	160	<4.0	530	<0.10	1.7	E.02	E.70	<100
01N.29E.01.222122	03-18-03	55	1.6	170	<4.0	550	E.07	1.6	<0.05	E.62	<100
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	21	2.4	97	<4.0	430	E.03	6.5	0.16	E.29	<100
01N.30E.03.213334	03-19-03	23	2.4	100	<4.0	440	E.09	6.3	<0.05	E.43	<100
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	13	2.6	75	<4.0	370	<0.10	5.7	0.47	<1.0	E21
01N.30E.05.112	03-19-03	15	2.7	79	<4.0	370	E.07	4.7	<0.05	<1.0	<100
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	61	2.0	140	<4.0	460	E.03	0.89	0.12	E.33	<100
01N.30E.13.414424	03-19-03	56	1.9	130	<4.0	470	E.04	0.85	E.03	<1.0	20
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	3,000	<5.0	1,500	<4.0	6,500	E.04	0.79	<0.05	<1.0	280
01N.30E.15.324	03-20-03	2,500	E1.5	1,300	<4.0	5,900	E.07	0.73	<0.05	<1.0	220
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	460	2.2	560	<4.0	1,700	E.04	0.25	0.12	<1.0	2,400
01N.30E.16.233	03-20-03	290	1.4	350	<4.0	1,100	0.42	0.18	<0.05	E.47	180
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	450	3.3	600	<4.0	1,900	E.05	0.26	0.13	1.8	5,900
01N.30E.19.43441	03-18-03	440	2.9	600	<4.0	1,900	0.12	0.33	<0.05	1.5	<100
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	1,500	<5.0	1,800	<4.0	5,000	E.10	5.8	0.16	6.5	1,600
01N.30E.22.321	03-20-03	1,300	E2.6	1,600	<4.0	4,700	E.10	5.4	E.02	6.2	180
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	3,300	<5.0	1,200	<4.0	7,700	0.29	<0.10	0.19	E.74	<100
01N.30E.25.222	03-17-03	2,900	<5.0	1,100	<4.0	6,000	0.38	<0.10	<0.05	1.1	E21
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	570	3.7	890	<4.0	2,300	E.06	2.3	0.06	E.63	5,600
01N.30E.27.324	03-21-03	550	2.9	920	<4.0	2,400	1.1	2.1	<0.05	E.31	E72
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	24	E.91	48	<4.0	390	E.03	12	0.39	E.80	<100
01S.29E.12.222222	03-18-03	23	E.80	41	<4.0	380	0.50	12	<0.05	E.95	<100
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	94	4.0	290	<4.0	880	0.15	1.4	0.17	E.96	E40
01S.30E.14.32131	03-17-03	87	3.9	260	<4.0	840	0.16	1.4	<0.05	E.75	E99
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	200	1.8	230	<4.0	870	E.02	9.9	0.08	1.3	<100
015.30E.18.2211	03-18-03	220	1.5	230	<4.0	960	E.07	11	<0.05	E.99	<100
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	230	4.5	160	<4.0	830	E.02	6.1	0.64	E.86	110
01S.31E.04.444	03-17-03	210	3.8	140	<4.0	780	E.08	6.3	0.05	E.61	<100
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	18	1.8	59	<4.0	360	E.05	5.7	0.35	E.29	E24
02N.30E.25.414	03-19-03	19	1.9	57	<4.0	370	E.06	5.6	<0.05	<1.0	<100

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Anti-mony, water, unfltrd ug/L (01097)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Cobalt water, unfltrd recover-able, ug/L (01037)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	<10	E5.4	30	<5.0	<5.0	<10	<10	<10	E2.3	<10
01N.29E.01.222122	03-18-03	<10	E9.2	33	<5.0	<5.0	<10	<10	E.92	<3.0	E1.2
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	<10	E6.9	30	<5.0	<5.0	<10	<10	<10	<3.0	<10
01N.30E.03.213334	03-19-03	<10	E5.0	30	<5.0	<5.0	E.9	<10	880	35	<10
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	<10	E5.8	32	<5.0	<5.0	<10	<10	<10	<3.0	E5.3
01N.30E.05.112	03-19-03	<10	E5.8	31	<5.0	<5.0	E1.0	<10	<10	E2.4	E.80
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	<10	E6.5	24	<5.0	<5.0	<10	<10	E3.1	E2.2	<10
01N.30E.13.414424	03-19-03	<10	E8.7	26	<5.0	<5.0	E1.2	<10	E1.0	E2.4	<10
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	<10	<15	21	<5.0	<5.0	E7.8	E2.1	E5.0	<3.0	12
01N.30E.15.324	03-20-03	<10	<15	18	<5.0	<5.0	13	E1.0	E7.7	7.4	E7.1
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	<10	<15	48	<5.0	<5.0	27	E2.3	E3.6	<3.0	63
01N.30E.16.233	03-20-03	<10	<15	38	<5.0	<5.0	E6.6	<10	E2.0	3.0	20
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	<10	<15	35	<5.0	<5.0	12	E4.8	20	6.5	110
01N.30E.19.43441	03-18-03	<10	<15	E9.8	<5.0	<5.0	<10	<10	E2.3	<3.0	E1.6
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	<10	<15	17	<5.0	<5.0	E8.8	E3.4	E2.7	<3.0	59
01N.30E.22.321	03-20-03	<10	<15	12	<5.0	<5.0	E2.3	<10	E3.5	2.0	35
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	<10	<15	32	<5.0	<5.0	<10	<10	E3.3	E2.4	280
01N.30E.25.222	03-17-03	<10	<15	47	<5.0	<5.0	<10	14	E.79	<3.0	430
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	<10	<15	73	<5.0	<5.0	39	E6.0	E6.7	4.4	84
01N.30E.27.324	03-21-03	<10	<15	13	<5.0	<5.0	E3.4	<10	E.92	E2.4	E1.9
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	<10	<15	120	<5.0	<5.0	<10	<10	E1.9	<3.0	<10
01S.29E.12.222222	03-18-03	<10	<15	120	<5.0	<5.0	<10	<10	E.78	<3.0	<10
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	<10	<15	39	<5.0	<5.0	<10	E1.0	E4.8	E2.5	12
01S.30E.14.32131	03-17-03	<10	<15	36	<5.0	<5.0	E1.0	<10	E7.8	<3.0	E9.1
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	<10	<15	33	<5.0	<5.0	<10	<10	E6.2	<3.0	E3.5
015.30E.18.2211	03-18-03	<10	<15	30	<5.0	<5.0	<10	<10	E3.7	<3.0	E2.0
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	<10	E4.7	47	<5.0	<5.0	E1.5	<10	12	<3.0	100
01S.31E.04.444	03-17-03	<10	<15	40	<5.0	<5.0	<10	<10	<10	<3.0	E2.8
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	<10	<15	46	<5.0	<5.0	<10	<10	E4.1	<3.0	<10
02N.30E.25.414	03-19-03	<10	E6.7	45	<5.0	<5.0	<10	<10	E2.4	<3.0	<10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Mercury water, unfltrd recover -able, ug/L (71900)	Molyb- denum, water, unfltrd recover -able, ug/L (01062)	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen- ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Vanad- ium, water, unfltrd ug/L (01087)	Zinc, water, unfltrd recover -able, ug/L (01092)	Per- chlor- ate, water, unfltrd mg/L (62171)	Deu- terium/ Protium ratio, water, unfltrd per mil (82082)	O-18 / O-16 ratio, water, unfltrd per mil (82085)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	-44.7	-6.11
01N.29E.01.222122	12-05-02	E.02	E5.0	<40	E6.8	<10	49	E9.0	--	--	--
01N.29E.01.222122	03-18-03	<0.20	E5.4	<40	<15	<10	47	<20	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	-44.6	-6.19
01N.30E.03.213334	12-05-02	E.02	E4.3	<40	<15	<10	60	25	--	--	--
01N.30E.03.213334	03-19-03	E.03	E3.4	E2.0	E7.2	<10	56	490	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	-45.8	-6.22
01N.30E.05.112	12-05-02	E.02	E3.4	<40	<15	<10	50	36	--	--	--
01N.30E.05.112	03-19-03	E.03	E2.4	<40	<15	<10	52	E16	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	-44.2	-5.99
01N.30E.13.414424	12-02-02	E.03	E5.8	<40	E5.8	<10	65	E10	--	--	--
01N.30E.13.414424	03-19-03	E.03	E5.5	<40	E5.8	<10	72	<20	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	-66.6	-9.23
01N.30E.15.324	12-04-02	<0.20	E13	<40	20	E.89	E6.3	29	--	--	--
01N.30E.15.324	03-20-03	E.03	E9.8	E6.9	24	E.58	E4.9	30	<0.005	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	-66.8	-9.39
01N.30E.16.233	12-06-02	<0.20	E6.9	E12	<15	<10	15	22	--	--	--
01N.30E.16.233	03-20-03	E.04	E4.7	E6.7	E5.1	<10	E9.0	24	<0.001	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	-71.8	-10.00
01N.30E.19.43441	12-03-02	E.04	E14	E10	<15	<10	10	190	--	--	--
01N.30E.19.43441	03-18-03	<0.20	E19	<40	<15	<10	E3.3	50	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	-45.4	-6.47
01N.30E.22.321	12-04-02	<0.20	E18	<40	150	<10	10	49	--	--	--
01N.30E.22.321	03-20-03	E.04	E14	E3.0	150	<10	E7.1	E18	0.02	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	-58.5	-7.95
01N.30E.25.222	12-02-02	<0.20	E18	E8.0	<15	<10	<10	<20	--	--	--
01N.30E.25.222	03-17-03	<0.20	27	E6.8	<15	<10	<10	20	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	-64.5	-8.77
01N.30E.27.324	12-04-02	<0.20	28	E22	20	<10	11	38	--	--	--
01N.30E.27.324	03-21-03	E.04	28	E4.7	26	<10	E3.6	E9.2	0.0026	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	-45.4	-6.60
01S.29E.12.222222	12-03-02	E.02	E3.7	1.7	<15	<10	27	E8.9	--	--	--
01S.29E.12.222222	03-18-03	<0.20	E5.4	<40	<15	<10	34	<20	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	-42.0	-6.24
01S.30E.14.32131	12-06-02	<0.20	E11	<40	41	<10	22	150	--	--	--
01S.30E.14.32131	03-17-03	<0.20	E10	<40	34	<10	21	60	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	-60.9	-8.64
015.30E.18.2211	12-03-02	E.02	E7.6	<40	22	<10	E2.6	51	--	--	--
015.30E.18.2211	03-18-03	<0.20	E8.0	<40	23	<10	<10	32	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	-56.7	-7.99
01S.31E.04.444	12-06-02	E.03	E10	<40	17	<10	48	93	--	--	--
01S.31E.04.444	03-17-03	<0.20	E11	<40	E7.0	<10	32	E13	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	-42.8	-6.09
02N.30E.25.414	12-05-02	E.02	E5.2	<40	<15	<10	55	E12	--	--	--
02N.30E.25.414	03-19-03	E.03	E3.9	<40	E5.8	<10	52	E12	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Cyanide water, unfltrd EPA contrac rec, mg/L (99896)
01N.29E.01.222122	12-05-02	--
01N.29E.01.222122	12-05-02	E.003
01N.29E.01.222122	03-18-03	<0.01
01N.30E.03.213334	12-05-02	--
01N.30E.03.213334	12-05-02	E.004
01N.30E.03.213334	03-19-03	E.006
01N.30E.05.112	12-05-02	--
01N.30E.05.112	12-05-02	E.004
01N.30E.05.112	03-19-03	E.007
01N.30E.13.414424	12-02-02	--
01N.30E.13.414424	12-02-02	E.008
01N.30E.13.414424	03-19-03	E.006
01N.30E.15.324	12-04-02	--
01N.30E.15.324	12-04-02	E.003
01N.30E.15.324	03-20-03	E.005
01N.30E.16.233	12-06-02	--
01N.30E.16.233	12-06-02	E.003
01N.30E.16.233	03-20-03	E.005
01N.30E.19.43441	12-03-02	--
01N.30E.19.43441	12-03-02	E.003
01N.30E.19.43441	03-18-03	<0.01
01N.30E.22.321	12-04-02	--
01N.30E.22.321	12-04-02	E.003
01N.30E.22.321	03-20-03	<0.01
01N.30E.25.222	12-02-02	--
01N.30E.25.222	12-02-02	E.005
01N.30E.25.222	03-17-03	E.004
01N.30E.27.324	12-04-02	--
01N.30E.27.324	12-04-02	E.003
01N.30E.27.324	03-21-03	<0.01
01S.29E.12.222222	12-03-02	--
01S.29E.12.222222	12-03-02	E.004
01S.29E.12.222222	03-18-03	<0.01
01S.30E.14.32131	12-06-02	--
01S.30E.14.32131	12-06-02	E.003
01S.30E.14.32131	03-17-03	<0.01
015.30E.18.2211	12-03-02	--
015.30E.18.2211	12-03-02	E.003
015.30E.18.2211	03-18-03	<0.01
01S.31E.04.444	12-06-02	--
01S.31E.04.444	12-06-02	E.004
01S.31E.04.444	03-17-03	<0.01
02N.30E.25.414	12-05-02	--
02N.30E.25.414	12-05-02	E.004
02N.30E.25.414	03-19-03	E.0051

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Station number	Date	Time	Organic carbon, water, unfltrd mg/L (00680)	CFC-113 water unfltrd undr N2 pg/kg (50283)	2,4,5-Tri-chloro-phenol, water, unfltrd ug/L (77687)	2,4,6-Tri-chloro-phenol, water, unfltrd ug/L (34621)	2,4-Di-chloro-phenol, water, unfltrd ug/L (34601)	2,4-Di-methyl-phenol, water, unfltrd ug/L (34606)	2,4-Di-nitro-phenol, water, unfltrd ug/L (34616)
01N.29E.01.222122	342046103503501	12-05-02	1320	--	5.5	--	--	--	--	--
01N.29E.01.222122	342046103503501	12-05-02	1321	E.70	--	--	--	--	--	--
01N.29E.01.222122	342046103503501	03-18-03	1415	E.62	--	--	--	--	--	--
01N.30E.03.213334	342031103464701	12-05-02	1200	--	0	--	--	--	--	--
01N.30E.03.213334	342031103464701	12-05-02	1201	E.29	--	--	--	--	--	--
01N.30E.03.213334	342031103464701	03-19-03	1230	E.43	--	--	--	--	--	--
01N.30E.05.112	342048103492701	12-05-02	1445	--	0	--	--	--	--	--
01N.30E.05.112	342048103492701	12-05-02	1446	<1.0	--	--	--	--	--	--
01N.30E.05.112	342048103492701	03-19-03	1515	<1.0	--	--	--	--	--	--
01N.30E.13.414424	341820103442601	12-02-02	1400	--	0	--	--	--	--	--
01N.30E.13.414424	341820103442601	12-02-02	1401	E.33	--	--	--	--	--	--
01N.30E.13.414424	341820103442601	03-19-03	0815	<1.0	--	--	--	--	--	--
01N.30E.15.324	341825103470301	12-04-02	1200	--	76.2	--	--	--	--	--
01N.30E.15.324	341825103470301	12-04-02	1201	<1.0	--	--	--	--	--	--
01N.30E.15.324	341825103470301	03-20-03	1005	<1.0	--	<10	<10	<10	<10	<50
01N.30E.16.233	341845103475801	12-06-02	0900	--	81.4	--	--	--	--	--
01N.30E.16.233	341845103475801	12-06-02	0901	<1.0	--	--	--	--	--	--
01N.30E.16.233	341845103475801	03-20-03	0810	E.47	--	<10	<10	<10	<10	<50
01N.30E.19.43441	341720103494701	12-03-02	1000	--	112	--	--	--	--	--
01N.30E.19.43441	341720103494701	12-03-02	1001	1.8	--	--	--	--	--	--
01N.30E.19.43441	341720103494701	03-18-03	0915	1.5	--	--	--	--	--	--
01N.30E.22.321	341743103470801	12-04-02	1420	--	1,240	--	--	--	--	--
01N.30E.22.321	341743103470801	12-04-02	1421	6.5	--	--	--	--	--	--
01N.30E.22.321	341743103470801	03-20-03	1200	6.2	--	<10	<10	<10	<10	<50
01N.30E.25.222	341714103442502	12-02-02	1530	--	27.1	--	--	--	--	--
01N.30E.25.222	341714103442502	12-02-02	1531	E.74	--	--	--	--	--	--
01N.30E.25.222	341714103442502	03-17-03	1010	1.1	--	--	--	--	--	--
01N.30E.27.324	341640103470501	12-04-02	1000	--	97.5	--	--	--	--	--
01N.30E.27.324	341640103470501	12-04-02	1001	E.63	--	--	--	--	--	--
01N.30E.27.324	341640103470501	03-21-03	0830	E.31	--	<10	<10	<10	<10	<50
01S.29E.12.222222	341954103503101	12-03-02	1330	--	39.3	--	--	--	--	--
01S.29E.12.222222	341954103503101	12-03-02	1331	E.80	--	--	--	--	--	--
01S.29E.12.222222	341954103503101	03-18-03	1200	E.95	--	--	--	--	--	--
01S.30E.14.32131	341828103460001	12-06-02	1510	--	64.7	--	--	--	--	--
01S.30E.14.32131	341828103460001	12-06-02	1511	E.96	--	--	--	--	--	--
01S.30E.14.32131	341828103460001	03-17-03	1415	E.75	--	--	--	--	--	--
015.30E.18.2211	341345103494301	12-03-02	1530	--	8.9	--	--	--	--	--
015.30E.18.2211	341345103494301	12-03-02	1531	1.3	--	--	--	--	--	--
015.30E.18.2211	341345103494301	03-18-03	1315	E.99	--	--	--	--	--	--
01S.31E.04.444	341440103411101	12-06-02	1225	--	59.4	--	--	--	--	--
01S.31E.04.444	341440103411101	12-06-02	1226	E.86	--	--	--	--	--	--
01S.31E.04.444	341440103411101	03-17-03	1225	E.61	--	--	--	--	--	--
02N.30E.25.414	342152103444201	12-05-02	1020	--	35.7	--	--	--	--	--
02N.30E.25.414	342152103444201	12-05-02	1021	E.29	--	--	--	--	--	--
02N.30E.25.414	342152103444201	03-19-03	1100	<1.0	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	2,4-Dinitrotoluene water unfltrd ug/L (34611)	2,6-Dinitrotoluene water unfltrd ug/L (34626)	2,6-Di-t-butyl-4-methylphenol, wat unf ug/L (61698)	2-Chloronaphthalene, water, unfltrd ug/L (34581)	2-chlorophenol, water, unfltrd ug/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf ug/L (34657)	2-Methylnaphthalene, water, unfltrd ug/L (30194)	2-Nitroaniline water unfltrd ug/L (30195)	2-nitrophenol, water unfltrd ug/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd ug/L (34631)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<10	<10	<10	<10	<50	<10	<50	<10	<50
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<10	<10	<10	<10	<50	<10	<50	<10	<50
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<10	<10	<10	<10	<50	<10	<50	<10	<50
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<10	<10	<10	<10	<50	<10	<50	<10	<50
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	3-Nitro-aniline water unfltrd ug/L (78300)	4-Bromo-phenyl phenyl ether, wat unf ug/L (34636)	4-Chloro-3-methyl-phenol, wat unf ug/L (34452)	4-chloro-aniline water, fltrd, ug/L (50312)	4-Chloro-phenyl phenyl ether, wat unf ug/L (34641)	4-Nitro-aniline water unfltrd ug/L (30196)	4-Nitro-phenol, water, unfltrd ug/L (34646)	9H-Fluor-ene, water, unfltrd ug/L (34381)	Ace-naphth-ene, water, unfltrd ug/L (34205)	Ace-naphth-ylene, water, unfltrd ug/L (34200)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<50	<10	<10	<10	<10	<50	<50	<10	<10	<10
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<50	<10	<10	<10	<10	<50	<50	<10	<10	<10
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<50	<10	<10	<10	<10	<50	<50	<10	<10	<10
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<50	<10	<10	<10	<10	<50	<50	<10	<10	<10
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	<10	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Aceto-phenone water unfltrd ug/L (62811)	Anthra-cene, water, unfltrd ug/L (34220)	Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluor-anthene water unfltrd ug/L (34230)	Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluor-anthene water unfltrd ug/L (34242)	Benzyl alcohol water unfltrd ug/L (77147)	Benzyl n-butyl phthal-ate, water, unfltrd ug/L (34292)	Bis(2-chloro-ethoxy) methane water unfltrd ug/L (34278)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Bis(2-chloro-ethyl) ether, water, unfltrd ug/L (34273)	Bis(2-chloro-iso-propyl) ether, wat unf ug/L (34283)	Bis(2-ethyl-hexyl) phthal-ate, wat unf ug/L (39100)	Chrys-ene, water, unfltrd ug/L (34320)	Di-benzo-[a,h]-anthra-cene, wat unf ug/L (34556)	Di-benzo-furan, water, unfltrd ug/L (81302)	CFC-12, water, unfltrd undr N2 pg/kg (50282)	Di-ethyl phthal-ate, water, unfltrd ug/L (34336)	Di-methyl phthal-ate, water, unfltrd ug/L (34341)	Di-n-butyl phthal-ate, water, unfltrd ug/L (39110)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	29.6	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	25.5	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	13.7	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	0	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	141	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<10	<10	<10	<10	<10	--	<10	<10	<10
01N.30E.16.233	12-06-02	--	--	--	--	--	--	286	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<10	<10	<10	<10	<10	--	<10	<10	<10
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	146	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	426	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<10	E4.4	<10	<10	<10	--	<10	<10	<10
01N.30E.25.222	12-02-02	--	--	--	--	--	--	86.8	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	481	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<10	<10	<10	<10	<10	--	<10	<10	<10
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	183	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	257	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	152	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	373	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	150	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Di-n-octyl phthalate, water, unfltrd ug/L (34596)	Diphenylamine, water, unfltrd ug/L (77579)	Fluoranthene water unfltrd ug/L (34376)	Hexachlorobenzene water unfltrd ug/L (39700)	Hexachlorocyclopentadiene, wat unf ug/L (34386)	Indeno[1,2,3-cd]pyrene, water, unfltrd ug/L (34403)	Isophorone water unfltrd ug/L (34408)	Nitrobenzene water unfltrd ug/L (34447)	N-NItroso-dimethylamine, wat unf ug/L (34438)	N-NItroso-di-n-propylamine, wat unf ug/L (34428)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	N-NItroso-di-phenyl-amine, wat unf ug/L (34433)	o-Cresol, soil, ug/kg (62268)	Organic halides water unfltrd ug/L as Cl (79747)	Penta-chloro-benzene water unfltrd ug/L (77793)	Penta-chloro-ethane, water, unfltrd ug/L (81501)	Penta-chloro-phenol, water, unfltrd ug/L (39032)	Per-chlor-ate, water, unfltrd mg/L (62171)	Phenan-threne, water, unfltrd ug/L (34461)	Phenol, water, unfltrd ug/L (34694)	Pron-amide, water, unfltrd ug/L (39080)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<10	<20	<10	<50	<50	<5.0	<10	<10	<20
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<10	<20	<10	<50	<50	<1.0	<10	<10	<20
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<10	32	<10	<50	<50	20	<10	<10	<20
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<10	<20	<10	<50	<50	2.6	<10	<10	<20
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Pyrene, water, unfltrd ug/L (34469)	Tri-chloro-fluoro-methane wat unf undr N2 pg/kg (50281)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1- Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene water unfltrd ug/L (77168)
01N.29E.01.222122	12-05-02	--	40	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	16.5	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	4.5	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	1.2	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	256	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01N.30E.16.233	12-06-02	--	868	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01N.30E.19.43441	12-03-02	--	189	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	520	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01N.30E.25.222	12-02-02	--	147	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	722	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01S.29E.12.222222	12-03-02	--	328	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	409	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	55.4	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	1,490	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	235	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<1.0	<1.0	<10	<1.0	<2.0	<1.0	<10	<1.0	<1.0	<1.0
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<1.0	<1.0	<10	<1.0	<2.0	<1.0	<10	<1.0	<1.0	<1.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<1.0	<1.0	<10	<1.0	<2.0	<1.0	<10	<1.0	<1.0	<1.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<1.0	<1.0	<10	<1.0	<2.0	<1.0	<10	<1.0	<1.0	<1.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<1.0	<10	<5.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<1.0	<10	<5.0	<1.0	<1.0	<1.0	E2.9	<1.0	<1.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<1.0	<10	<5.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<1.0	<10	<5.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	E.20
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)	Isopropylbenzene water unfltrd ug/L (77223)	meta- + para-Xylene, water, unfltrd ug/L (85795)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<1.0	<2.0	<10	<5.0	<1.0	<10	<10	<5.0	<1.0	<2.0
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<1.0	<2.0	<10	<5.0	<1.0	<10	<10	<5.0	<1.0	<2.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<1.0	<2.0	<10	<5.0	<1.0	<10	<10	<5.0	<1.0	<2.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<1.0	<2.0	<10	<5.0	<1.0	<10	<10	<5.0	<1.0	<2.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetrachloroethene, water, unfltrd ug/L (34475)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<10	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003—Continued

ROOSEVELT COUNTY--Continued

Local identifier	Date	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--
01N.29E.01.222122	12-05-02	--	--	--	--	--	--	--	--
01N.29E.01.222122	03-18-03	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--
01N.30E.03.213334	12-05-02	--	--	--	--	--	--	--	--
01N.30E.03.213334	03-19-03	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--
01N.30E.05.112	12-05-02	--	--	--	--	--	--	--	--
01N.30E.05.112	03-19-03	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--
01N.30E.13.414424	12-02-02	--	--	--	--	--	--	--	--
01N.30E.13.414424	03-19-03	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--
01N.30E.15.324	12-04-02	--	--	--	--	--	--	--	--
01N.30E.15.324	03-20-03	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<2.0	<1.0
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--
01N.30E.16.233	12-06-02	--	--	--	--	--	--	--	--
01N.30E.16.233	03-20-03	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<2.0	<1.0
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--
01N.30E.19.43441	12-03-02	--	--	--	--	--	--	--	--
01N.30E.19.43441	03-18-03	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--
01N.30E.22.321	12-04-02	--	--	--	--	--	--	--	--
01N.30E.22.321	03-20-03	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<2.0	<1.0
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--
01N.30E.25.222	12-02-02	--	--	--	--	--	--	--	--
01N.30E.25.222	03-17-03	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--
01N.30E.27.324	12-04-02	--	--	--	--	--	--	--	--
01N.30E.27.324	03-21-03	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<2.0	<1.0
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--
01S.29E.12.222222	12-03-02	--	--	--	--	--	--	--	--
01S.29E.12.222222	03-18-03	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--
01S.30E.14.32131	12-06-02	--	--	--	--	--	--	--	--
01S.30E.14.32131	03-17-03	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--
015.30E.18.2211	12-03-02	--	--	--	--	--	--	--	--
015.30E.18.2211	03-18-03	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--
01S.31E.04.444	12-06-02	--	--	--	--	--	--	--	--
01S.31E.04.444	03-17-03	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--
02N.30E.25.414	12-05-02	--	--	--	--	--	--	--	--
02N.30E.25.414	03-19-03	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

EL PASO COUNTY, TX

Local identifier	Station number	County	Station type	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
JL-49-04-466	315712106364301	141	GW	09-03-03	1410	110AVMB	59.00	57	52	10.60
JL-49-04-467	315712106364302	141	GW	09-03-03	1645	112SNTF	159.00	157	152	11.90
JL-49-04-468	315712106364303	141	GW	09-04-03	1010	112SNTF	299.00	297	292	41.78
JL-49-04-469	315712106364304	141	GW	09-04-03	1630	112SNTF	800.00	798	792	71.38
JL-49-04-478	315712106361201	141	GW	09-09-03	0940	110AVMB	52.00	50	45	10.53
JL-49-04-479	315712106361202	141	GW	09-09-03	1300	112SNTF	156.00	154	149	19.66
JL-49-04-480	315712106361203	141	GW	09-09-03	1630	112SNTF	334.00	332	327	43.99
JL-49-04-481	315712106361204	141	GW	09-10-03	1330	112SNTF	803.00	801	796	65.38

Local identifier	Date	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
JL-49-04-466	09-03-03	3,771	<2.0	--	669	0.2	3	7.6	1,240	32.5	24.0
JL-49-04-467	09-03-03	3,771	5.0	--	667	--	--	7.6	1,720	34.5	22.0
JL-49-04-468	09-04-03	3,771	5.0	130	670	<0.1	--	8.3	992	26.5	24.5
JL-49-04-469	09-04-03	3,771	4.6	310	670	<0.1	--	9.2	380	32.5	29.5
JL-49-04-478	09-09-03	3,777	4.0	80	666	0.1	1	7.7	1,130	31.0	19.0
JL-49-04-479	09-09-03	3,777	2.6	115	665	<0.1	--	7.9	1,120	34.0	20.0
JL-49-04-480	09-09-03	3,777	4.0	145	663	<0.1	--	8.5	975	32.0	23.5
JL-49-04-481	09-10-03	3,777	4.3	345	665	<0.1	--	9.0	1,990	29.5	28.0

Local identifier	Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
JL-49-04-466	09-03-03	350	140	102	22.2	8.88	3	114	211	257	--
JL-49-04-467	09-03-03	130	--	40.1	5.96	5.01	12	299	313	382	--
JL-49-04-468	09-04-03	110	26	35.9	3.59	3.93	6	151	80	97	--
JL-49-04-469	09-04-03	7	--	2.56	0.025	0.57	14	81.1	68	54	14
JL-49-04-478	09-09-03	230	55	55.0	21.2	9.64	4	123	173	211	--
JL-49-04-479	09-09-03	180	--	62.1	5.17	5.33	5	151	E158	E192	--
JL-49-04-480	09-09-03	100	64	36.4	2.47	4.54	6	145	38	46	--
JL-49-04-481	09-10-03	180	--	69.2	0.318	3.86	11	334	E16	E13	3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

EL PASO COUNTY, TX--Continued

Local identifier	Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
JL-49-04-466	09-03-03	125	0.6	32.2	212	747	780	0.46	0.12	<0.06	<0.008
JL-49-04-467	09-03-03	125	0.8	40.0	300	1,010	1,040	0.14	<0.04	<0.06	<0.008
JL-49-04-468	09-04-03	142	0.4	29.9	165	581	597	<0.10	<0.04	<0.06	<0.008
JL-49-04-469	09-04-03	26.3	1.1	34.7	64.0	251	254	<0.10	<0.04	<0.06	<0.008
JL-49-04-478	09-09-03	102	0.7	23.0	204	650	682	E.08	<0.04	0.55	<0.008
JL-49-04-479	09-09-03	105	<0.2	46.1	211	686	714	0.11	<0.04	<0.06	<0.008
JL-49-04-480	09-09-03	141	0.5	31.2	195	579	619	E.05	<0.04	<0.06	<0.008
JL-49-04-481	09-10-03	424	0.2	20.6	330	1,200	1,260	<0.10	<0.04	<0.06	<0.008

Local identifier	Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
JL-49-04-466	09-03-03	<0.02	0.007	E1	4	56.3	170	<0.2	<0.8	<1.2	119
JL-49-04-467	09-03-03	<0.02	0.008	E1	8	38.0	270	<0.2	<0.8	E.7	20
JL-49-04-468	09-04-03	<0.02	0.004	3	7	65.3	140	<0.2	<0.8	<1.2	<8
JL-49-04-469	09-04-03	<0.02	0.005	13	29	10.3	90	<0.2	<0.8	<1.2	<8
JL-49-04-478	09-09-03	<0.02	E.003	E1	3	26.4	200	<0.2	<0.8	E.7	1,030
JL-49-04-479	09-09-03	<0.02	E.004	2	16	62.6	170	<0.2	<0.8	<1.2	66
JL-49-04-480	09-09-03	<0.02	E.003	E1	13	37.3	100	<0.2	<0.8	<1.2	<8
JL-49-04-481	09-10-03	<0.02	<0.004	8	3	81.1	60	<0.2	<0.8	E.7	<8

Local identifier	Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01090)
JL-49-04-466	09-03-03	<1	149	<0.02	2.0	<3	<0.3	2,050	73
JL-49-04-467	09-03-03	M	155	--	<2.0	<3	<0.3	517	14
JL-49-04-468	09-04-03	<1	74	<0.02	<2.0	<3	<0.3	494	35
JL-49-04-469	09-04-03	<1	20	<0.02	<2.0	<3	<0.3	23.7	78
JL-49-04-478	09-09-03	<1	126	<0.02	<2.0	3	<0.3	2,710	40
JL-49-04-479	09-09-03	<1	139	<0.02	<2.0	E2	<0.3	1,230	7
JL-49-04-480	09-09-03	<1	76	<0.02	<2.0	E2	<0.3	647	10
JL-49-04-481	09-10-03	M	155	<0.02	<2.0	4	<0.3	690	22

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

A

Abiquiu Reservoir near Abiquiu 112
Academy Acres Drain at Albuquerque 151
Acid neutralizing capacity, definition of 28
Acre-foot, definition of 28
Adenosine triphosphate, definition of 28
Adjusted discharge, definition of 28
Algae,
  Blue-green, definition of 29
  Fire, definition of 32
  Green, definition of 33
Algal growth potential, definition of 28
Alkalinity, definition of 28
Animas River at Farmington 293
Animas River near Cedar Hill 292
Annual runoff, definition of 28
Annual 7-day minimum, definition of 28
Aquifer
  Confined, definition of 30
  Unconfined, definition of 41
  Water-table, definition of 41
Aroclor, definition of 28
Arroyo 19A at Albuquerque 156
Arroyo Hondo near Santa Fe 132
Artificial substrate, definition of 28
Ash mass, definition of 28
Aspect, definition of 28
Azotea Tunnel at Outlet, near Chama 101

B

Bacteria, definition of 28
  Enterococcus, definition of 31
  Escherichia coli, definition of 32
  Fecal coliform, definition of 32
  Fecal streptococcal, definition of 32
  Total coliform, definition of 40
Bankfull stage, definition of 29
Base discharge, definition of 29
Base flow, definition of 29
Bed material, definition of 29
Bedload, definition of 29
Bedload discharge, definition of 29
Benthic organisms, definition of 29
Bernardo Interior Drain near Bernardo 175
Biochemical oxygen demand, definition of 29
Biomass, definition of 29
Biomass pigment ratio, definition of 29
Black River above Malaga 257
Black River at Malaga 258
Blue Springs above Diversions near Whites City 256
Blue-green algae, definition of 29
Bluewater Lake near Bluewater 177
Bottom material, definition of 29
Brantley Lake near Carlsbad 243
Bulk electrical conductivity, definition of 29

C

Caballo Reservoir near Arrey 199
Campus Wash at Albuquerque 145
Canadian Geodetic Vertical Datum 1928, definition of . . 29
Canadian River above New Mexico-Texas State line . . . 71
Canadian River at Logan 67
Canadian River near Sanchez 63
Canadian River near Taylor Springs 59
Carlsbad Main Canal at Head, near Carlsbad 247
Casias Creek near Costilla 76
Cell volume, definition of 29
Cells/volume, definition of 29
Cfs-day, definition of 30
Channel bars, definition of 30
Chemical oxygen demand, definition of 30
Cieneguilla Creek near Eagle Nest 51
Cimarron River at Springer 58
Cimarron River below Eagle Nest Dam 54
Cimarron River near Cimarron 55
Clostridium perfringens, definition of 30
Cochiti Lake near Cochiti Pueblo 133
Coliphages, definition of 30
Color unit, definition of 30
Conchas Lake at Conchas Dam 64
Conductivity, definition of 38
Confined aquifer, definition of 30
Contents, definition of 30
Continuous-record station, definition of 30
Control, definition of 30
Control structure, definition of 30
Costilla Creek above Costilla Dam 75
Costilla Creek near Garcia 81
Costilla Creek below Costilla Dam 79
Costilla Creek near Costilla 80
Costilla Reservoir near Costilla 78
Coyote Creek near Golondrinas 62
Cubic foot per second, definition of 30
Cubic foot per second-day, definition of 30
Cubic foot per second per square mile, definition of 30

D

Daily mean suspended-sediment concentration, definition of 30
Daily record station, definition of 30
Dark Canyon Draw at Carlsbad 252
Dark Canyon Draw near Whites City 250
Data collection platform, definition of 30
Data logger, definition of 30
Datum, definition of 30
Delaware River near Red Bluff 270
Diatoms, definition of 31
Diel, definition of 31
Discharge, definition of 31
Dissolved, definition of 31
Dissolved oxygen, definition of 31
Dissolved solids concentration, definition of 31
Diversity index, definition of 31
Drainage area, definition of 31
Drainage basin, definition of 31

Dry mass, definition of 31
Dry weight, definition of 31

E

Eagle Creek below South Fork, near Alto 227
Eagle Nest Lake near Eagle Nest. 53
Eagle Tail Ditch near Maxwell 48
East Pleasanton Ditch near Glenwood 328
El Vado Reservoir near Tierra Amarilla 106
Elephant Butte Reservoir at Elephant Butte. 197
Embeddedness, definition of 31
Embudo Arroyo at Albuquerque 146
Embudo Creek at Dixon 97
Enterococcus bacteria, definition of. 31
EPT Index, definition of 32
Escherichia coli (*E. coli*), definition of. 32
Estimated (E) value, definition of 32
Euglenoids, definition of 32
Extractable organic halides, definition of 32

F

Fecal coliform bacteria, definition of 32
Fecal streptococcal bacteria, definition of 32
Fire algae, definition of. 32
Fish Pond Ditch above Hatchery at Glenwood. 327
Flow, definition of 31
Flow-duration percentiles, definition of 32
Fort Sumner Main Canal near Fort Sumner 219
Fort West Ditch near Gila 310
Fourmile Draw near Lakewood. 241

G

Gage datum, definition of 32
Gage height, definition of 32
Gage values, definition of 32
Gaging station, definition of. 32
Galisteo Creek below Galisteo Dam 136
Galisteo Reservoir near Cerrillos. 135
Gallinas Creek near Montezuma 207
Gallinas River near Colonias 208
Gas chromatography/flame ionization detector, definition of 32
Geomorphic channel units, definition of 33
Gila Farms Ditch near Gila 311
Gila River below Blue Creek, near Virden 316
Gila River near Gila 307
Gila River near Redrock 312
Grandpa Harper Ditch near Redrock 315
Green algae, definition of 33
Ground-water levels 350

H

Habitat, definition of 33
Habitat quality index, definition of 33
Hahn Arroyo at Albuquerque 150
Hardness, definition of 33
Heron Reservoir near Los Ojos. 104
High tide, definition of 33
Hilsenhoff's Biotic Index, definition of 33
Horizontal datum, definition of. 33
Horse Lake Creek above Heron Reservoir, near Los Ojos 103
Hydrologic index stations, definition of. 33
Hydrologic unit, definition of 33

I

Inch, definition of 33
Instantaneous discharge, definition of 33
International Boundary Commission Survey Datum, definition of 33
Island, definition of 33

J

Jemez Canyon Reservoir near Bernalillo 143
Jemez River below Jemez Canyon Dam 144
Jemez River near Jemez 141

K

Kiehne Ditch near Reserve 321

L

La Cueva Arroyo Tributary at Albuquerque 153
La Plata River at Colorado-New Mexico State line 299
Laboratory reporting level, definition of 33
Ladera Arroyo at Albuquerque 158
Lake Avalon near Carlsbad. 248
Lake Maloya near Raton 47
Lake Sumner near Fort Sumner 217
Land-surface datum, definition of. 33
Latent heat flux, definition of 33
Lewis Ditch near Reserve. 319
Light-attenuation coefficient, definition of. 34
Lipid, definition of 34
Little Tesuque Creek at Bishops Lodge near Santa Fe 122
Long-term method detection level, definition of 34
Los Pinos River at La Boca, CO. 286
Low flow, 7-day, 10-year, definition of. 38
Low tide, definition of 34

M

Macrophytes, definition of 34
Malpais Spring near Oscura 279
Mariposa Diversion of San Antonio Arroyo at Albuquerque 157
McClure Reservoir near Santa Fe. 129
Mean concentration of suspended sediment, definition of 34
Mean discharge, definition of 34
Mean high tide, definition of. 34
Mean low tide, definition of 34
Mean sea level, definition of 34
Measuring point, definition of 34
Megahertz, definition of. 34
Membrane filter, definition of 34
Metamorphic stage, definition of 34
Method detection limit, definition of. 34
Method of Cubatures, definition of. 34
Methylene blue active substances, definition of. 34
Micrograms per gram, definition of 34
Micrograms per kilogram, definition of. 34

Micrograms per liter, definition of 35
Microsiemens per centimeter, definition of 35
Middle Frisco Ditch near Reserve 323
Milligrams per liter, definition of 35
Mimbres River at Mimbres 276
Minimum reporting level, definition of. 35
Miscellaneous site, definition of 35
Mogollon Creek near Cliff. 308
Mora River at La Cueva 60
Mora River near Golondrinas 61
Moreno Creek at Eagle Nest. 50
Most probable number, definition of 35
Multiple-plate samplers, definition of. 35

N

Nambe Falls Reservoir near Nambe. 119
Nanograms per liter, definition of 35
National Geodetic Vertical Datum of 1929,
definition of 35
Natural substrate, definition of 35
Navajo Reservoir near Archuleta. 288
Nekton, definition of 35
Nephelometric turbidity unit, definition of 35
Nichols Reservoir near Santa Fe 131
North American Datum of 1927, definition of 35
North American Datum of 1983, definition of 35
North American Vertical Datum of 1988, definition of . 35
North Camino Arroyo at Sunset Hills in Albuquerque. 155
North Floodway Channel at Albuquerque 147
North Floodway Channel near Alameda 154
North Fork Hahn Arroyo at Albuquerque 149
North Side Luna Ditch near Luna 317

O

Open interval, definition of 35
Organic carbon, definition of 35
Organic mass, definition of 35
Organism count,
Area, definition of 36
Total, definition of 41
Volume, definition of 36
Organochlorine compounds, definition of 36

P

Parameter code, definition of 36
Parsons Ditch near Reserve 322
Partial-record station, definition of 36
Particle size, definition of 36
Particle-size classification, definition of 36
Peak flow, definition of. 36
Peak stage, definition of 36
Pecos River (Kaiser Channel) near Lakewood 240
Pecos River above Canon del Uta near Colonias 209
Pecos River above Santa Rosa Lake 210
Pecos River at Damsite 3, near Carlsbad. 246
Pecos River at Pierce Canyon Crossing,
near Malaga 263
Pecos River at Red Bluff 269
Pecos River below Avalon Dam 249
Pecos River below Brantley Dam near Carlsbad 244
Pecos River below Dark Canyon Draw, at Carlsbad. . . 253
Pecos River below Santa Rosa Dam 213
Pecos River below Sixmile Draw near Roswell. 223
Pecos River below Sumner Dam 218
Pecos River below Taiban Creek near Fort Sumner . . . 221
Pecos River near Acme 224
Pecos River near Anton Chico. 206
Pecos River near Artesia 233
Pecos River near Barstow. 275
Pecos River near Dunlap 222
Pecos River near Fort Sumner 220
Pecos River near Lake Arthur 232
Pecos River near Malaga 259
Pecos River near Orla, TX 272
Pecos River near Pecos 205
Pecos River near Puerto de Luna 214
Percent composition, definition of 36
Percent of total, definition of. 36
Percent shading, definition of 36
Periodic-record station, definition of. 36
Periphyton, definition of. 36
Pesticides, definition of 36
pH, definition of 36
Phytoplankton, definition of 37
Picocurie, definition of. 37
Piedra River near Arboles, CO 285
Plankton, definition of 37
Polychlorinated biphenyls, definition of 37
Polychlorinated naphthalenes, definition of 37
Ponil Creek near Cimarron 56
Pool, definition of 37
Primary productivity, definition of 37
Carbon method, definition of 37
Oxygen method, definition of 37

Q

Quality of ground water 387

R

Radioisotopes, definition of 37
Rayado Creek near Cimarron 57
Reach, definition of. 37
Recoverable from bed (bottom) material,
definition of 37
Recurrence interval, definition of. 37
Red Bluff Reservoir near Orla, TX. 271
Red River below Fish Hatchery near Questa. 84
Red River near Questa 83
Replicate samples, definition of 38
Return period, definition of. 38
Revuelto Creek near Logan. 69
Riffle, definition of 38
Rio Chama above Abiquiu Reservoir 108
Rio Chama below Abiquiu Dam 113
Rio Chama below El Vado Dam 107
Rio Chama near Chamita 115
Rio Chama near La Puente 99

Rio Grande at Albuquerque 159
Rio Grande at El Paso, TX. 201
Rio Grande at Embudo 98
Rio Grande at Isleta 167
Rio Grande at Isleta Lakes near Isleta 166
Rio Grande at Otowi Bridge, near San Ildefonso 123
Rio Grande at San Felipe. 137
Rio Grande below Caballo Dam 200
Rio Grande below Cochiti Dam 134
Rio Grande below Elephant Butte 198
Rio Grande below Taos Junction bridge, near Taos. . . . 92
Rio Grande Conveyance Channel at San Acacia. 184
Rio Grande Conveyance Channel at San Marcial 190
Rio Grande Conveyance Channel near Bernardo 171
Rio Grande del Rancho near Talpa 90
Rio Grande Floodway at San Acacia 185
Rio Grande Floodway at San Marcial. 191
Rio Grande Floodway near Bernardo 172
Rio Grande near Arroyo Hondo 87
Rio Grande near Cerro 82
Rio Grande near White Rock 127
Rio Grande near Lobatos, CO. 72
Rio Hondo at Diamond A Ranch, near Roswell 228
Rio Hondo below Diamond A Dam, near Roswell . . . 230
Rio Hondo near Roswell 231
Rio Hondo near Valdez. 85
Rio Lucero near Arroyo Seco. 89
Rio Mora near Terrero 204
Rio Nambe above Nambe Falls Dam near Nambe . . . 118
Rio Nambe below Nambe Falls Dam, near Nambe . . . 120
Rio Nutria near Ramah 305
Rio Ojo Caliente at La Madera 114
Rio Penasco at Dayton 239
Rio Penasco near Dunken 237
Rio Penasco near Hope 238
Rio Pueblo de Taos below Los Cordovas 91
Rio Pueblo de Taos near Taos 88
Rio Pueblo near Penasco 95
Rio Puerco above Arroyo Chico, near Guadalupe. . . . 176
Rio Puerco near Bernardo 180
Rio Ruidoso at Hollywood. 226
Rio Ruidoso at Ruidoso. 225
Rio San Jose at Grants 178
Rio San Jose near Grants. 179
Rio Santa Barbara near Penasco 96
River mileage, definition of 38
Rocky Arroyo at Highway Bridge, near Carlsbad 245
Run, definition of. 38
Runoff, definition of. 38

S

Salt Creek near Tularosa 280
San Francisco River near Glenwood 329
San Francisco River near Reserve 320
San Juan River at Farmington. 296
San Juan River at Four Corners, CO 303
San Juan River at Shiprock 300
San Juan River near Archuleta. 289
San Juan River near Carracas, CO 284
Santa Cruz River at Cundiyo. 117
Santa Fe River above McClure Reservoir near
  Santa Fe 128
Santa Fe River near Santa Fe. 130
Santa Rosa Lake near Santa Rosa 212
Santistevan Creek near Costilla 77
Screened interval, definition of 35
Sea level, definition of 38
Sediment, definition of. 38
Sensible heat flux, definition of 38
Seven-day, 10-year low flow, definition of 38
Shelves, definition of. 38
Sixmile Creek near Eagle Nest 52
Socorro Main Canal North at San Acacia. 183
Sodium adsorption ratio, definition of 38
Soil heat flux, definition of 38
Soil-water content, definition of 38
South Diversion Channel above Tijeras Arroyo near
  Albuquerque 165
South Fork Hahn Arroyo at Albuquerque. 148
South Seven Rivers near Lakewood 242
Specific electrical conductance (conductivity),
  definition of 38
Spring Creek at La Boca, CO 287
Spurgeon #2 Ditch near Glenwood 325
Stable isotope ratio, definition of 39
Stage, definition of 39
Stage-discharge relation, definition of. 39
Streamflow, definition of 39
Substrate, definition of. 39
  Artificial, definition of. 28
  Natural, definition of 35
Substrate embeddedness class, definition of 39
Summary of hydrologic conditions 2
Surface area of a lake, definition of 39
Surficial bed material, definition of 39
Surrogate, definition of 39
Suspended, definition of. 39
  Recoverable, definition of 39
  Total, definition of 40
Suspended sediment, definition of 39
Suspended-sediment concentration, definition of. 39
Suspended-sediment discharge, definition of 39
Suspended-sediment load, definition of. 39
Suspended solids, total residue at 105 ˚C concentration,
  definition of 40
Synoptic studies, definition of 40

T

Taxa (species) richness, definition of 40
Taxonomy, definition of. 40
Tesuque Creek above Diversions near Santa Fe 121
Thalweg, definition of 40
Thermograph, definition of 40
Thomason Flat Ditch near Glenwood 324

Tijeras Arroyo near Albuquerque 164
Time-weighted average, definition of. 40
Tons per acre-foot, definition of 40
Tons per day, definition of. 40
Total, definition of 40
Total coliform bacteria, definition of 40
Total discharge, definition of 40
Total in bottom material, definition of 40
Total length, definition of 41
Total load, definition of. 41
Total organism count, definition of 41
Total recoverable, definition of. 41
Total sediment discharge, definition of. 41
Total sediment load, definition of 41
Tramway Floodway Channel at Albuquerque 163
Transect, definition of. 41
Tularosa Creek near Bent 283
Turbidity, definition of 41
Two Rivers Reservoir near Roswell. 229

U

Ultraviolet (UV) absorbance (absorption), definition of . 41
Unconfined aquifer, definition of 41
Upper Gila Ditch near Gila 309
Ute Creek near Logan. 65
Ute Reservoir near Logan 66

V

Vermejo River near Dawson 49
Vertical datum, definition of 41
Volatile mass, definition of 35
Volatile organic compounds, definition of 41

W

W.S. Ditch near Glenwood 326
W.S. Laney Ditch near Luna 318
Water table, definition of. 41
Water-table aquifer, definition of 41
Water year, definition of 41
Watershed, definition of 42
WDR, definition of 42
Weighted average, definition of 42
Wet mass, definition of 42
Wet weight, definition of. 42
Willow Creek above Heron Reservoir, near Los Ojos . 102
Willow Creek below Heron Dam 105
WSP, definition of 42

Z

Zooplankton, definition of 42
Zuni River above Black Rock Reservoir. 306

Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter (mm)
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubic hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	cubic meter (m^3)
	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second-per-day [(ft^3/s/d]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.223×10^{3}	cubic meter (m^3)
	1.223×10^{-3}	cubic hectometer (hm^3)
	1.223×10^{-6}	cubic kilometer (km^3)
	Flow rate	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$°F = (1.8 \times °C) + 32$$