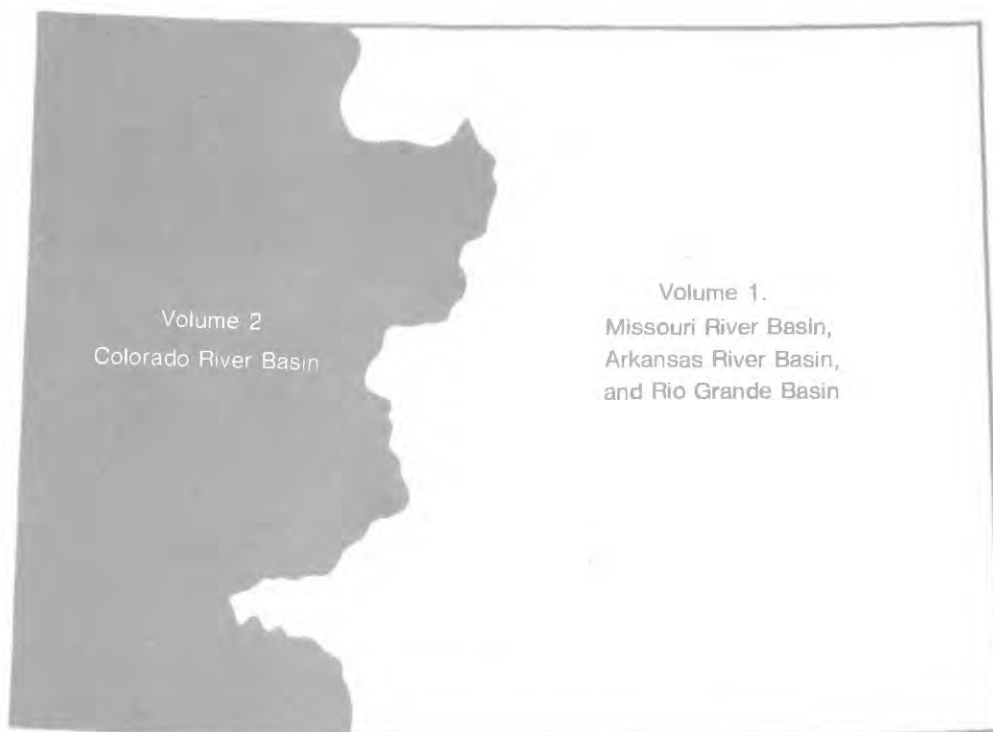




Water Resources Data Colorado Water Year 1994

Volume 2. Colorado River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-94-2
Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1994

1993

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1994

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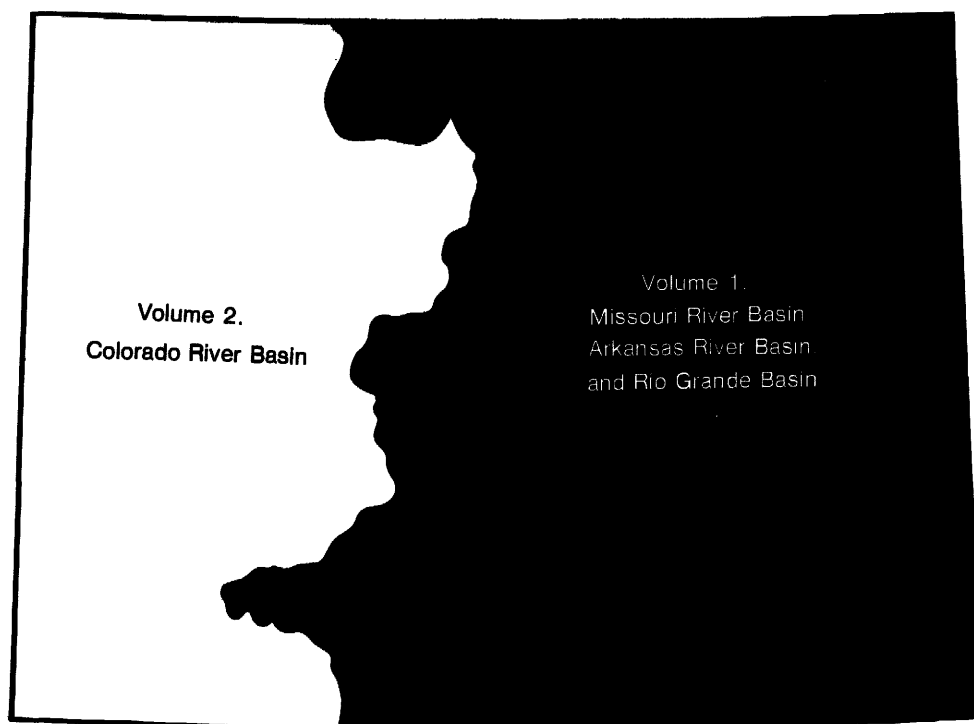
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Water Resources Data Colorado Water Year 1994

Volume 2. Colorado River Basin

by R.C. Ugland, W.S. Maura, E.A. Wilson, and G.B. O'Neill



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-94-2
Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U. S. GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For information on the water program in Colorado write to:

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Lakewood, CO 80225

PREFACE

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

Volume 1. Missouri River, Arkansas River, and Rio Grande
basins in Colorado,

Volume 2. Colorado River basin.

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

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This report was prepared in cooperation with the State of Colorado and with other agencies under the general supervision of D. J. Lystrom, District Chief, Colorado.

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13. ABSTRACT (Maximum 200 words) Water-resources data for Colorado for the 1994 water year consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1 and 2) contains discharge records for 316 gaging stations, stage and contents of 26 lakes and reservoirs, 1 partial-record low-flow station, peak flow information for 46 crest-stage partial record stations; water quality for 98 gaging stations, supplemental water-quality for 178 gaged sites; water-quality for 7 miscellaneous sites, and 15 observation wells, and meteorological data for 22 sites. Nine pertinent stations operated by bordering states also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of D.J. Lystrom, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.					
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CONTENTS

	Page
Preface	III
List of surface-water stations, in downstream order, for which records are published in this volume . . .	VI
Introduction	1
Cooperation	4
Overview of Hydrologic Conditions	5
Precipitation	5
Streamflow	5
Chemical quality of streamflow	10
Special networks and programs	12
Explanation of the records	12
Station identification numbers	12
Downstream order system	12
Latitude-longitude system	13
System for numbering wells, springs, and miscellaneous sites	13
Records of stage and water discharge	13
Data collection and computation	14
Data presentation	14
Station manuscript	15
Data table of daily mean values	16
Statistics of monthly mean data	16
Summary statistics	16
Identifying estimated daily discharge	17
Accuracy of the records	17
Other records available	17
Records of surface-water quality	18
Accuracy of the records	18
Classification of records	18
Arrangement of records	18
Onsite measurement and sample collection	18
Water temperature	19
Sediment	19
Laboratory measurements	19
Data presentation	20
Remark codes	20
Records of ground-water quality	20
Data collection and computation	21
Data presentation	21
Access to WATSTORE DATA	21
Definition of terms	22
Selected references	29
List of discontinued surface-water discharge or stage-only stations	31
List of discontinued surface-water-quality stations	39
Publications on techniques of water-resources investigations	42
Gaging-station records	45
Transmountain diversions	361
Transmountain diversions from Colorado River basin in Colorado	361
Discharge at partial-record stations and miscellaneous sites low-flow partial-record stations	364
Crest-stage partial-record stations	365
Meteorological data at miscellaneous sites	366
Colorado River total dissolved solids investigation	382
Supplemental water-quality data for gaging stations	387
Index	409

ILLUSTRATIONS

	Page
Figures 1-2. Map showing:	
1. Locations of lake and surface-water stations and surface-water-quality stations in Colorado	2
2. Locations of crest-stage partial-record stations in Colorado	3
3. Comparison of monthly precipitation for water year 1994 to normal monthly precipitation for the reference period 1961-90	6
4. Comparison of monthly discharges for water year 1994 to mean monthly discharges of the reference periods indicated on the individual graphs	8
5. Comparison of range and distribution of specific conductance measured during water year 1994 to long-term values	11

TABLES

	Page
Table 1. Precipitation during water year 1994 and departures-from-normal precipitation (1961-90), in inches	5
2. Peak discharges for water year 1994 and for the period of record at selected surface-water stations	7
3. Results of Wilcoxon-Mann-Whitney rank sum tests comparing mean specific conductance of discharge for water year 1994 with mean for the period of record at selected gaging stations	10

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

NOTE.--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report.

(Letter after station name designates type and frequency of published data. Daily tables: (D) discharge, (C) specific conductance, (S) sediment, (T) temperature, (e) elevation or contents, (O) dissolved oxygen, (P) pH.

Partial tables: (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature)

	Station number	Page
COLORADO RIVER BASIN		
Colorado River:		
Colorado River below Baker Gulch, near Grand Lake (D)	09010500	45
GRAND LAKE OUTLET BASIN		
North Inlet (head of Grand Lake Outlet):		
Grand Lake:		
Alva B. Adams tunnel at east portal, near Estes Park (Dct)	09013000	46
Shadow Mountain Lake near Grand Lake (etcb)	09014500	49
Granby Pump Canal near Grand Lake (tc)	09018300	53
Lake Granby Inflow from Windy Gap Tunnel (tc)	400833105532000	55
Lake Granby near Granby (etcbm)	09018500	56
Colorado River near Granby (D)	09019500	64
WILLOW CREEK BASIN		
Willow Creek Reservoir near Granby (e)	09020700	65
FRASER RIVER BASIN		
Fraser River at Upper Station, near Winter Park (Dtc)	09022000	66
Fraser River below Buck Creek at Winter Park (tc)	09023750	68
Fraser River at Winter Park (D)	09024000	70
Vasquez Creek at Winter Park (D)	09025000	71
Fraser River below Vasquez Creek at Winter Park (tc)	09025010	72
Elk Creek near Fraser (D)	09025400	74
St. Louis Creek near Fraser (D)	09026500	75
Fraser River below St. Louis Creek at Fraser (tc)	09027010	76
Fraser River at Tabernash (tc)	09027100	77
Ranch Creek near Fraser (D)	09032000	79
Cabin Creek near Fraser (D)	09032100	80
Fraser River below Crooked Creek at Tabernash (tc)	400009105504600	81
Colorado River at Windy Gap, near Granby (D)	09034250	82
Colorado River at Hot Sulphur Springs (DctCT)	09034500	83
WILLIAMS FORK BASIN		
Bobtail Creek (head of Williams Fork) near Jones Pass (D)	09034900	87
Williams Fork below Steelman Creek (D)	09035500	88
Williams Fork above Darling Creek, near Leal (D)	09035700	89
Darling Creek near Leal (D)	09035800	90
South Fork Williams Fork near Leal (D)	09035900	91
Williams Fork near Leal (D)	09036000	92
Williams Fork near Parshall (D)	09037500	93
Williams Fork Reservoir near Parshall (e)	09038000	94
Williams Fork below Williams Fork Reservoir (D)	09038500	95
MUDDY CREEK BASIN		
Muddy Creek near Kremmling (D)	09041000	96
Muddy Creek above Antelope Creek near Kremmling (DstcCST)	09041090	97
Muddy Creek at Kremmling (DctcCT)	09041500	103
BLUE RIVER BASIN		
Monte Cristo Creek (head of Blue River):		
Monte Cristo diversion near Hoosier Pass (D)	09041900	110
Hoosier Creek:		
Bemrose-Hoosier diversion near Hoosier Pass (D)	09044300	111
Blue River:		
McCullough Creek:		
McCullough-Spruce-Crystal diversion near Hoosier Pass (D)	09044800	112
Blue River at Blue River (D)	09046490	113
Blue River near Dillon (D)	09046600	114
Snake River near Montezuma (D)	09047500	115
Keystone Gulch near Dillon (D)	09047700	116
Tenmile Creek below North Tenmile Creek, at Frisco (D)	09050100	117
Blue River below Dillon (D)	09050700	118
Straight Creek below Laskey Gulch, near Dillon (D)	09051050	119
Rock Creek (tributary to Blue River) near Dillon (D)	09052000	120
Boulder Creek at upper station, near Dillon (D)	09052400	121
Slate Creek at upper station, near Dillon (D)	09052800	122
Black Creek below Black Lake, near Dillon (D)	09054000	123
Cataract Creek near Kremmling (D)	09055300	124

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

VII

	Station number	Page
Colorado River--Continued		
BLUE RIVER BASIN--Continued		
Reservoirs in Blue River basin.		125
Dillon Reservoir (e).	09050600	125
Green Mountain Reservoir (e).	09057000	125
Blue River below Green Mountain Reservoir (D).	09057500	126
Blue River below Spruce Creek near Kremmling (D).	09057520	127
Colorado River near Kremmling (Dct).	09058000	128
PINEY RIVER BASIN		
Piney River below Piney Lake, near Minturn (D).	09058500	131
Dickson Creek near Vail (D).	09058610	132
Freeman Creek near Minturn (D).	09058700	133
East Meadow Creek near Minturn (D).	09058800	134
Piney River near State Bridge (Dtc).	09059500	135
ROCK CREEK BASIN		
Rock Creek at Crater (Dtc).	09060550	137
Rock Creek at McCoy (D).	09060770	140
EAGLE RIVER BASIN		
Eagle River at Red Cliff (D).	09063000	141
Turkey Creek:		
Wearyman Creek near Red Cliff (D).	09063200	142
Turkey Creek near Red Cliff (D).	09063400	143
Homestake Creek:		
Missouri Creek near Gold Park (D).	09063900	144
Homestake Creek at Gold Park (D).	09064000	145
Homestake Creek near Red Cliff (D).	09064500	146
Eagle River near Minturn (D).	09064600	147
Cross Creek near Minturn (D).	09065100	148
Gore Creek at upper station, near Minturn (D).	09065500	149
Black Gore Creek near Minturn (D).	09066000	150
Bighorn Creek near Minturn (D).	09066100	151
Pitkin Creek near Minturn (D).	09066150	152
Booth Creek near Minturn (D).	09066200	153
Middle Creek near Minturn (D).	09066300	154
Gore Creek at Lower Station, at Vail (D).	09066310	155
Red Sandstone Creek near Minturn (D).	09066400	156
Lake Creek near Edwards (D).	09066890	157
Beaver Creek at Avon (D).	09067000	158
Eagle River at Avon (Dct).	09067005	159
Eagle River at Gypsum (ctCT).	09069000	161
Eagle River below Gypsum (D).	09070000	164
Colorado River near Dotsero (D).	09070500	165
GRIZZLY CREEK BASIN		
Grizzly Creek near Glenwood Springs (D).	09071300	166
Colorado River above Glenwood Springs (TCct).	09071750	167
ROARING FORK RIVER BASIN		
Roaring Fork River above Difficult Creek near Aspen (D).	09073300	170
Roaring Fork River near Aspen (D).	09073400	171
Hunter Creek near Aspen (D).	09074000	172
Castle Creek above Aspen (D).	09074800	173
Maroon Creek above Aspen (D).	09075700	174
Fryingpan River:		
Fryingpan River near Thomasville (D).	09078600	175
Ruedi Reservoir near Basalt (e).	09080190	176
Fryingpan River near Ruedi (D).	09080400	177
Crystal River above Avalanche Creek, near Redstone (D).	09081600	178
Roaring Fork River at Glenwood Springs (Dtc).	09085000	179
Colorado River below Glenwood Springs (D).	09085100	181
ELK CREEK BASIN		
West Elk Creek near New Castle (D).	09086000	182
Main Elk Creek near New Castle (D).	09086470	183
East Elk Creek above Boiler Creek near New Castle (D).	09086970	184
DIVIDE CREEK BASIN		
West Divide Creek (head of Divide Creek) near Raven (D).	09089500	185
Colorado River near De Beque (D).	09093700	186
Colorado River near Cameo (DctsCT).	09095500	187
PLATEAU CREEK BASIN		
Plateau Creek near Cameo (DTctcb).	09105000	193
Colorado River below Grand Valley Diversion near Palisade (Dtc).	09106150	197
GUNNISON RIVER BASIN		
Taylor River (head of Gunnison River):		
Taylor River at Taylor Park (D).	09107000	200
Taylor Park Reservoir at Taylor Park (e).	09108500	201

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

	Station number	Page
COLORADO RIVER--CONTINUED		
GUNNISON RIVER BASIN--Continued		
Taylor River below Taylor Park Reservoir (D)	09109000	202
Taylor River at Almont (Dtc)	09110000	203
Slate River:		
Slate River near Crested Butte (D)	09111500	205
East River below Cement Creek near Crested Butte (D)	09112200	206
East River at Almont (Dctb)	09112500	207
Castle Creek above Mouth near Baldwin (D)	09113100	209
Gunnison River near Gunnison (D)	09114500	210
Tomichi Creek:		
Tomichi Creek at Sargents (D)	09115500	211
Cochetopa Creek below Rock Creek, near Parlin (D)	09118450	212
Tomichi Creek at Gunnison (D)	09119000	213
Lake Fork at Gateview (D)	09124500	214
Silver Jack Reservoir near Cimarron (e)	09125800	215
Cimarron River near Cimarron (D)	09126000	216
Gunnison River below Gunnison tunnel (D)	09128000	217
Smith Fork near Crawford (D)	09128500	218
Paonia Reservoir near Bardine (e)	09131495	219
East Muddy Creek (head of North Fork Gunnison River):		
North Fork Gunnison River near Somerset (D)	09132500	220
Minnesota Creek near Paonia (D)	09134000	221
Leroux Creek at Hotchkiss (D)	09135900	222
Tongue Creek:		
Surface Creek near Cedaredge (D)	09143000	223
Surface Creek at Cedaredge (D)	09143500	224
Gunnison River at Delta (D)	09144250	225
Uncompahgre River near Ridgway (D)	09146200	226
Dallas Creek near Ridgway (D)	09147000	227
Ridgway Reservoir near Ridgway (e)	09147022	228
Uncompahgre River below Ridgway Reservoir (D)	09147025	229
Uncompahgre River at Colona (D)	09147500	230
Uncompahgre River at Delta (D)	09149500	231
Gunnison River near Grand Junction (DctmsCT)	09152500	232
REED WASH BASIN		
Reed Wash near Mack (D)	09153290	237
Colorado River near Colorado-Utah State line (DctmsCT)	09163500	238
DOLORES RIVER BASIN		
Dolores River below Rico (D)	09165000	244
Dolores River at Dolores (D)	09166500	245
Lost Canyon Creek near Dolores (D)	09166950	246
Dolores River at Bedrock (DTCct)	09169500	247
West Paradox Creek:		
West Paradox Creek above Bedrock (tc)	09170800	251
Dolores River near Bedrock (DctCT)	09171100	252
San Miguel River near Placerville (D)	09172500	256
San Miguel River at Uravan (D)	09177000	257
GREEN RIVER BASIN		
Yampa River:		
Yampa River above Stagecoach Reservoir (D)	09237450	258
Yampa River below Stagecoach Reservoir (D)	09237500	259
Fish Creek:		
Long Lake Inlet near Buffalo Pass (D)	09238705	260
Fish Creek Tributary below Long Lake, near Buffalo Pass (D)	09238710	261
North Fork Fish Creek:		
Middle Fork Fish Creek near Buffalo Pass (D)	09238750	262
Granite Creek near Buffalo Pass (D)	09238770	263
Fish Creek at upper station, near Steamboat Springs (D)	09238900	264
Yampa River at Steamboat Springs (D)	09239500	265
Elk River near Milner (Dct)	09242500	266
Trout Creek:		
Middle Creek near Oak Creek (D)	09243700	269
Foidel Creek near Oak Creek (D)	09243800	270
Foidel Creek at mouth, near Oak Creek (D)	09243900	271
Elkhead Creek near Elkhead (Dtc)	09245000	273
Yampa River below Craig (Dct)	09247600	275
Williams Fork:		
Williams Fork River at mouth, near Hamilton (D)	09249750	278
Yampa River near Maybell (DcmtsCT)	09251000	279
Little Snake River near Slater (D)	09253000	283
Slater Fork near Slater (D)	09255000	284
Little Snake River near Dixon, WY (D)	09257000	285

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

IX

	Station number	Page
Colorado River--Continued		
GREEN RIVER BASIN--Continued		
Little Snake River below Baggs, WY (cts)	09259050	286
Sand Wash near Sunbeam (cts)	09259990	287
Little Snake River near Lily (Dtcs)	09260000	288
Yampa River at Deerlodge Park (Ds)	09260050	290
North Fork White River:		
North Fork White River at Buford (D)	09303000	292
South Fork White River at Budge's Resort (D)	09303300	293
South Fork White River near Budge's Resort (D)	09303400	294
South Fork White River at Buford (D)	09304000	295
White River above Coal Creek, near Meeker (D)	09304200	296
White River near Meeker (D)	09304500	297
White River below Meeker (D)	09304800	298
Piceance Creek below Rio Blanco (Dtcs)	09306007	299
Stewart Gulch above West Fork, near Rio Blanco (tcs)	09306022	302
Willow Creek near Rio Blanco (tcs)	09306058	304
Piceance Creek below Ryan Gulch, near Rio Blanco (DcsCTt)	09306200	306
Piceance Creek at White River (Dstc)	09306222	310
Yellow Creek:		
Corral Gulch near Rangely (Dtcs)	09306242	313
Yellow Creek near White River (Dcts)	09306255	316
White River below Boise Creek, near Rangely (Dcts)	09306290	319
Douglas Creek at Rangely (Dtcs)	09306380	320
SAN JUAN RIVER BASIN		
East Fork San Juan River above Sand Creek, near Pagosa Springs (D)	09339900	322
San Juan River at Pagosa Springs (D)	09342500	323
Rio Blanco below Blanco diversion dam, near Pagosa Springs (D)	09343300	324
Navajo River at Banded Peak Ranch, near Chromo (D)	09344000	325
Navajo River below Oso diversion dam, near Chromo (D)	09344400	326
Little Navajo River below Little Oso Diversion Dam, near Chromo (D)	09345200	327
Navajo River at Edith (D)	09346000	328
San Juan River near Carracas (D)	09346400	329
Piedra River near Arboles (D)	09349800	330
Los Pinos River:		
Vallecito Creek near Bayfield (Dcmts)	09352900	331
Vallecito Reservoir near Bayfield (e)	09353000	334
Los Pinos River at La Boca (D)	09354500	335
Spring Creek at La Boca (D)	09355000	336
Animas River below Silverton (D)	09359020	337
Animas River at Durango (D)	09361500	340
Lemon Reservoir near Durango (e)	09362800	341
Animas River near Cedar Hill, NM (D)	09363500	342
La Plata River at Hesperus (D)	09365500	343
La Plata River at Colorado-New Mexico State line (D)	09366500	344
Mancos River near Towaoc (D)	09371000	345
San Juan River at Four Corners (D)	09371010	346
McElmo Creek:		
Mud Creek at Highway 32, near Cortez (D)	09371492	347
McElmo Creek above Trail Canyon near Cortez (DctCT)	09371520	354
McElmo Creek near Colorado-Utah State line (Dct)	09372000	359

WATER RESOURCES DATA - COLORADO, 1994

VOLUME 2: COLORADO RIVER BASIN

By R. C. Ugland, W. S. Maura, G. B. O'Neill, and E. A. Wilson

INTRODUCTION

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

This report (Volume 2 of two volumes) includes records of surface water in the State, west of the Continental Divide. Specifically, it contains: (1) discharge records for 179 surface-water stations, for 5 partial-record surface-water stations and peak discharge data for 1 low-flow partial-record site; (2) stage and contents for 13 lakes and reservoirs; and (3) surface-water-quality data for 50 surface water stations, 2 reservoirs, miscellaneous surface-water-quality data for 130 gaged sites, 5 miscellaneous sites, and meteorological data for 8 sites. Locations of lake and surface-water-gaging stations and surface-water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2. Five pertinent stations operated by bordering States also are included in this report. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Colorado were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-water Supply of the United States," Parts 6B, 7, 8, and 9. For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Data on ground-water levels for the 1935 through 1955 water years were published annually under the title "Water Levels and Artesian Pressures in Observation Wells in the United States." For the 1956 through 1974 water years the data were published in four 5-year reports under the title "Ground-Water Levels in the United States." Water-supply papers may be purchased from the, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 810, Box 25425, Denver, CO 80225.

For water years 1961 through 1970, streamflow data were released by the Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-94-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale, in paper copy or in micro-fiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information, including current prices, for ordering specific reports may be obtained from the District office at the address given on the back of the title page or by telephone (303) 236-4882. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Building 810, Box 25425, Denver, CO 80225.

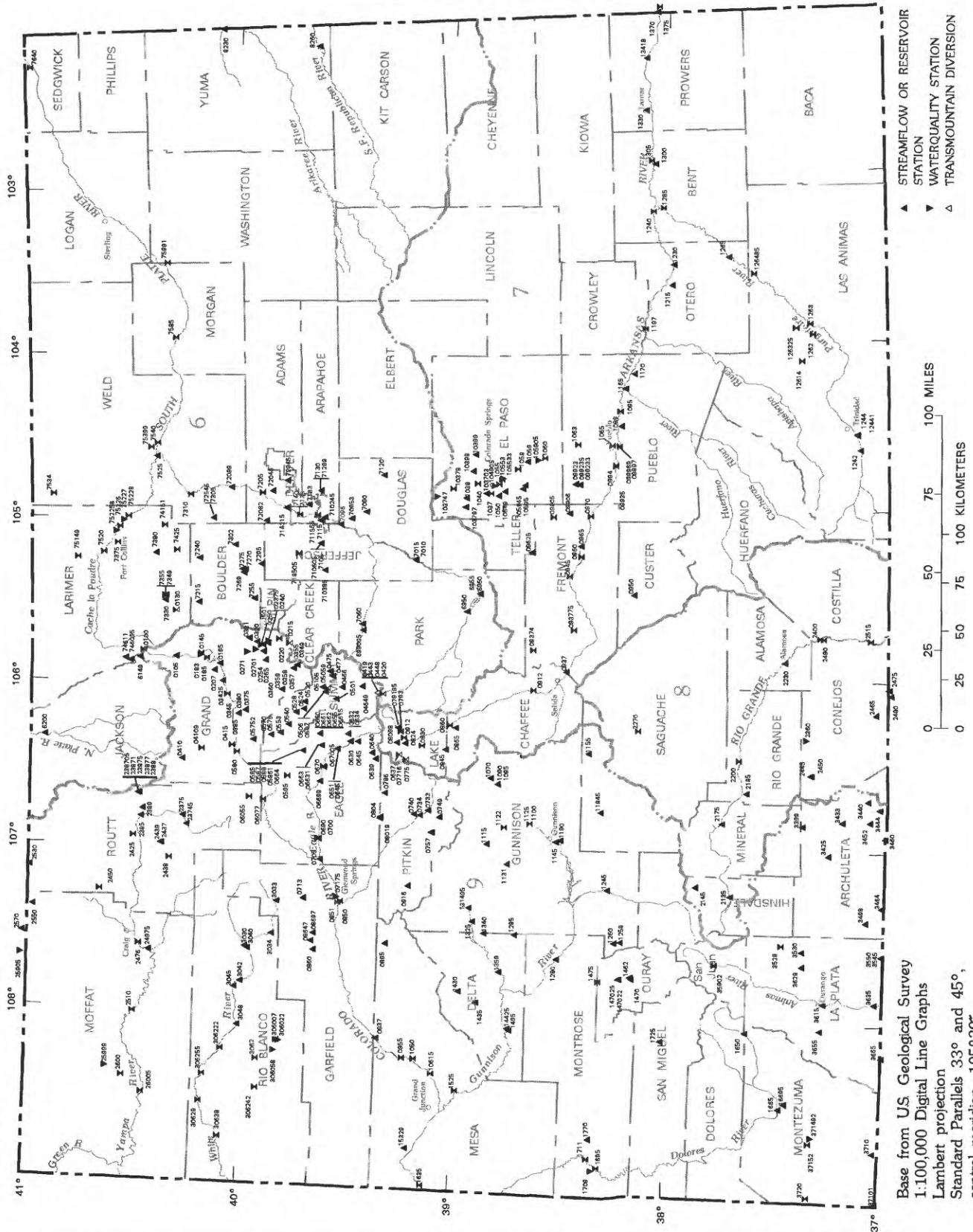


Figure 1.--Map showing locations of lakes and surface-water stations
and surface-water-quality stations in Colorado

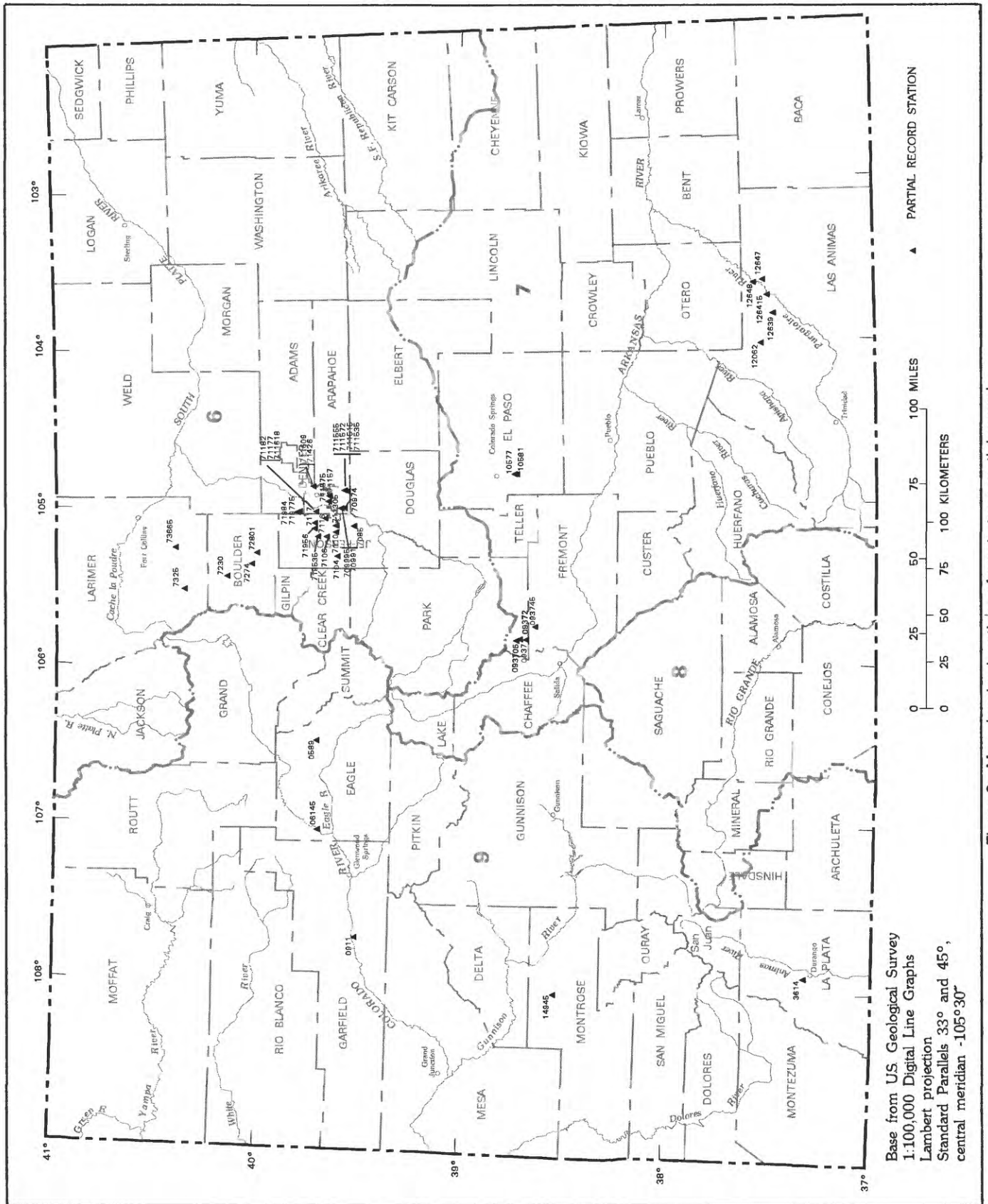


Figure 2.--Map showing locations of crest-stage partial record stations in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Arapahoe County, Water and Wastewater Authority.
 Arkansas River Compact Administration.
 Bent County Commissioners.
 Boulder County Public Works Department.
 Centennial Water and Sanitation District.
 Center Soil Conservation District.
 Central Colorado Water Conservancy District.
 Cherokee Metropolitan District.
 City and County of Denver, Board of Water Commissioners.
 City of Arvada.
 City of Aspen.
 City of Aurora.
 City of Black Hawk.
 City of Boulder.
 City of Colorado Springs.
 City of Englewood.
 City of Fort Collins.
 City of Glendale.
 City of Glenwood Springs.
 City of Golden.
 City of Greenwood Village.
 City of Lakewood.
 City of Lamar.
 City of Las Animas.
 City of Longmont.
 City of Loveland.
 City of Northglenn.
 City of Pueblo.
 City of Rocky Ford.
 City of Steamboat Springs.
 City of Thornton.
 City of Westminster.
 Clear Creek Board of County Commissioners.
 Colorado Department of Agriculture.
 Colorado Department of Health.
 Colorado Department of Transportation.
 Colorado Division of Parks and Outdoor Recreation.
 Colorado Division of Water Resources.
 Colorado Division of Wildlife.
 Colorado Department of Minerals and Geology.
 Colorado Department of Natural Resources.
 Colorado River Water Conservation District.
 Colorado Springs Department of Public Utilities.
 Colorado Water Conservation Board.
 Delta County Board of County Commissioners.
 Eagle County Board of Commissioners.
 East Cherry Creek Valley Water and Sanitation District.
 East Grand County Water-Quality Board.
 Evergreen Metropolitan District.
 Fountain Valley Authority.
 Fremont Sanitation District.
 Garfield County.
 Gunnison County.
 Jefferson County Board of County Commissioners.
 La Plata County.
 Littleton-Englewood Bi-City.
 Lower Fountain Water-Quality Management Association.
 Metro Wastewater Reclamation District.
 Moffat County.
 Mount Crested Butte Water and Sanitation District.
 Northern Colorado Water Conservancy District.
 Pueblo Board of Water Works.
 Pueblo County.
 Pueblo West Metro Water District.
 Purgatoire River Water Conservancy District.
 Rio Blanco County Board of County Commissioners.
 Rio Blanco Water Conservancy District.
 Rio Grande Water Conservation District.
 Routt County.
 Southeastern Colorado Water Conservancy District.
 Southern Ute Indian Tribe.
 Southwestern Colorado Water Conservation District.
 St. Charles Mesa Water District.
 Teller - Park Soil Conservation District.
 Town of Breckenridge.
 Town of Crested Butte.
 Town of Meeker.
 Trinchera Water Conservancy District.
 Uncompahgre Valley Water Users Association.
 Upper Arkansas Council of Governments.
 Upper Arkansas River Water Conservancy District.
 Upper Eagle Regional Water Authority.
 Upper Gunnison River Water Conservancy District.
 Upper Yampa Water Conservancy District.
 Urban Drainage and Flood Control District.
 Ute Mountain Ute Indian Tribe.
 Vail Valley Consolidated Water Authority.
 Willows Water District.
 Yellowjacket Water Conservancy District.

Financial assistance was also provided by the U.S. Army, Corps of Engineers; U.S. Army; U.S. Air Force; Bureau of Land Management, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

OVERVIEW OF HYDROLOGIC CONDITIONS [West of the Continental Divide]

Prepared by K.R. Wilke and R. C. Ugland

Precipitation

Precipitation data for water year 1994 were obtained from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, for the National Weather Service division in Colorado that is west of the Continental Divide. These data are listed in table 1. Precipitation and departures-from-normal precipitation (1961-90) are listed for the first 6 months of the water year when precipitation is predominately snow and for the remaining 6 months when precipitation is predominately rain. Also listed are the precipitation and departure-from-normal precipitation¹ for the entire water year. Precipitation was 18 percent less than normal for October-March.

Graphs of monthly precipitation for the water year and for normal monthly precipitation at selected weather stations are shown in figure 3. Monthly precipitation data for water year 1994 were supplemented by data obtained from the Colorado State University, Department of Atmospheric Science, Colorado Climate Center, in Fort Collins.

**Table 1.--Precipitation during water year 1994 and departures-from-normal precipitation (1961-90), in inches
[--, data unavailable]**

National Weather Service division	October-March		April-September		Water year 1994	
	Precipitation	Departure from normal	Precipitation	Departure from normal	Precipitation	Departure from normal
Colorado Drainage Basin	6.36	-1.44	--	--	--	--

Streamflow

Monthly mean discharges during water year 1994 at selected streamflow-gaging stations are compared to long-term mean monthly discharges in figure 4. Individual graphs show the varied streamflow west of the Continental Divide during the water year. The graphs for the gaging stations indicate that monthly mean discharges during the water year had the same general trend as long-term mean monthly discharges, and, with a few exceptions, were generally less than the long-term means for April through September. At the selected gaging stations, annual mean discharges for water year 1994 were from 16 to 43 percent less than the long-term averages.

The graphs for the gaging stations 09070000, Eagle River below Gypsum (fig. 4, site A), and 09114500, Gunnison River near Gunnison (fig. 4, site B), indicate that monthly mean discharges for water year 1994 were less than long-term means for June through September. For the remaining five gaging stations, monthly mean discharges for water year 1994 were less than long-term means for April through September, except for June for gaging station 09172500, San Miguel River near Placerville (fig. 4, site D), and September for gaging station 09361500, Animas River at Durango (fig. 4, site G), when monthly discharges were greater than long-term means. The June through August mean discharge for water year 1994 was from 23 to 31 percent less than the long-term mean at gaging stations 09114500, Gunnison River near Gunnison (fig. 4, site B); 09172500, San Miguel River near Placerville (fig. 4, site D); and 09361500, Animas River at Durango (fig. 4, site G). The June through August mean discharge for water year 1994 was from 49 to 53 percent less than the long-term mean at gaging stations 09070000, Eagle River below Gypsum (fig. 4, site A), and 09163500, Colorado River near Colorado-Utah State line (fig. 4, site C). The June through August mean discharge for water 1994 was 69 percent less for gaging station 09251000, Yampa River near Maybell (fig. 4, site E), and 70 percent less for gaging station 09304500, White River near Meeker (fig. 4, site F).

Peak discharges during water year 1994 and for the period of record for selected gaging stations are listed in table 2. The peak discharge at gaging station 09346400, San Juan River near Carracas, was greater than the median value for the period of record. The peak discharges for gaging stations 09114500, Gunnison River near Gunnison; 09132500, North Fork Gunnison River near Somerset; 09166500, Dolores River at Dolores; and 09361500, Animas River at Durango, were less than the median values but greater than the 25th-percentile values. The peak discharge at each of the remaining selected gaging stations was less than the 25th-percentile value. The peak discharge for gaging station 09251000, Yampa River near Maybell, was the fifth lowest of record, and the peak discharges for gaging stations 09085100, Colorado River below Glenwood Springs, and 09304500, White River near Meeker, were the fourth lowest of record.

¹Some divisional data were unavailable.

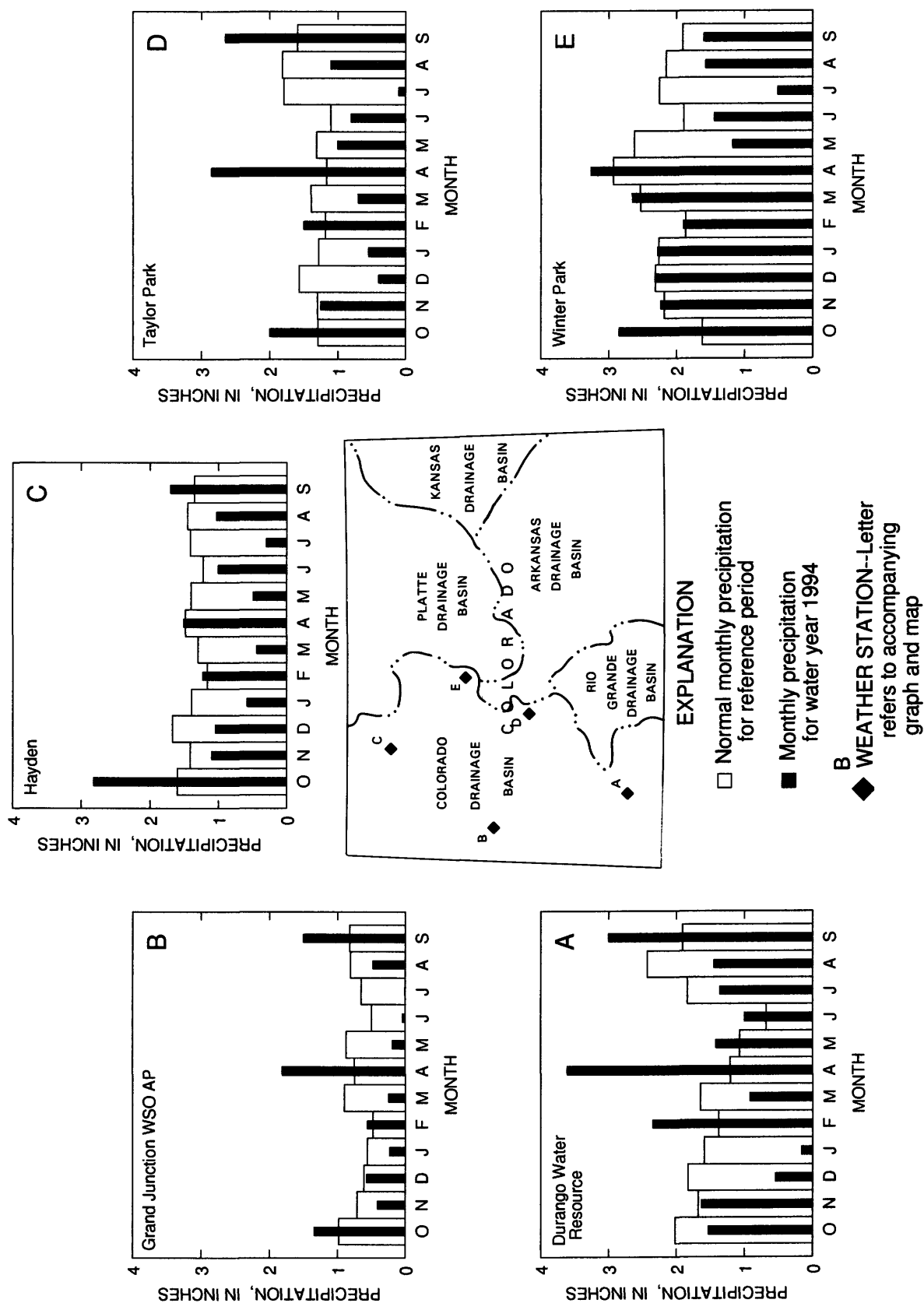
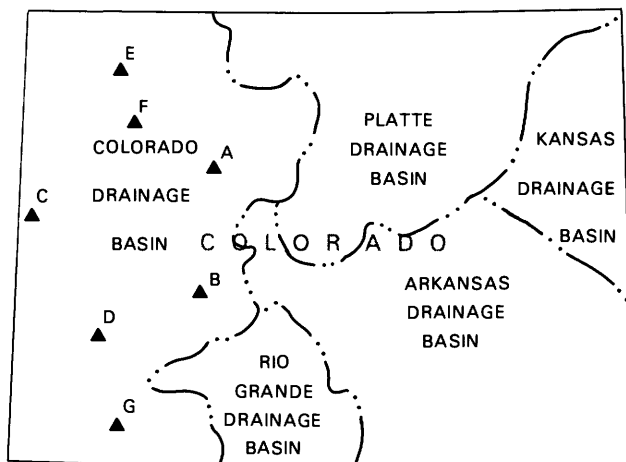
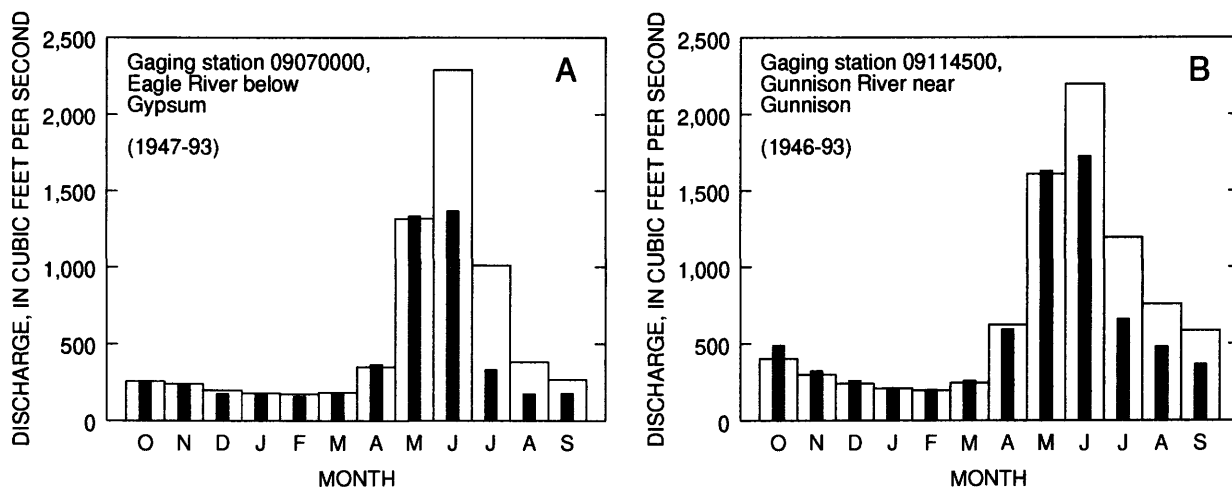


Figure 3.--Comparison of monthly precipitation for water year 1994 to normal monthly precipitation for the reference period 1961-90.

Table 2.--Peak discharges for water year 1994 and for the period of record at selected gaging stations[mi², square miles; ft³/s, cubic feet per second]

				Water year 1994		Period of record		
	Gaging station identification	Drainage area (mi ²)	Period of record (water years)	Date	Peak discharge (ft ³ /s)	Date	Peak discharge (ft ³ /s)	Remarks on 1994 peak discharge
09034500	Colorado River at Hot Sulphur Springs	825	1905-93	6/1	795	6/15/21	10,300	Less than 25th percentile
09070000	Eagle River below Gypsum	945	1947-93	6/2	2,620	5/25/84	7,020	Less than 25th percentile
09070500	Colorado River near Dotsero	4,394	1941-93	6/2	4,630	5/25/84	22,200	Less than 25th percentile
09085000	Roaring Fork River at Glenwood Springs	1,451	1906-9, 1911-93	6/2	4,550	7/1/57	19,000	Less than 25th percentile
09085100	Colorado River below Glenwood Springs	6,013	1967-93	6/2	9,180	5/25/84	31,500	Less than 25th percentile (4th lowest)
09095500	Colorado River near Cameo	8,050	1934-93	6/2	12,600	5/26/84	39,300	Less than 25th percentile
09114500	Gunnison River near Gunnison	1,012	1911-27, 1945-93	6/2	2,840	6/13/18	11,400	Greater than 25th percentile
09132500	North Fork Gunnison River near Somerset	526	1934-93	5/12	2,910	5/24/84	9,220	Greater than 25th percentile
09149500	Uncompahgre River at Delta	1,115	1903-31, 1939-93	10/13	1,040	5/15/84	5,800	Less than 25th percentile
09152500	Gunnison River near Grand Junction	7,928	1897-99, 1902-6, 1917-93	5/20	6,290	5/23/20	35,700	Less than 25th percentile
09163500	Colorado River near Colorado-Utah State line	17,843	1951-93	5/19	13,600	5/27/84	69,800	Less than 25th percentile
09166500	Dolores River at Dolores	504	1896-1903, 1911-12, 1922-93	5/18	2,650	10/5/11	10,000	Greater than 25th percentile
09171100	Dolores River near Bedrock	2,145	1970-93	5/19	2,140	4/30/73	9,500	Less than 25th percentile
09239500	Yampa River at Steamboat Springs	604	1904-6, 1910-93	5/17	2,140	6/14/21	6,820	Less than 25th percentile
09251000	Yampa River near Maybell	3,410	1904-5, 1916-93	5/19	5,880	5/17/84	25,100	Less than 25th percentile (5th lowest)
09304500	White River near Meeker	755	1901-5, 1910-93	6/1	1,620	5/25/84	6,950	Less than 25th percentile (4th lowest)
09346400	San Juan River near Carracas	1,230	1962-93	6/4	3,820	9/6/70	9,730	Greater than median
09361500	Animas River at Durango	692	1912-93	6/4	4,720	10/5/11	25,000	Less than median



EXPLANATION

□ Mean monthly discharge for reference period

■ Monthly mean discharge for water year 1994

▲

GAGING STATION--Letter refers to accompanying graph and map

(1947-93)

REFERENCE PERIOD

Figure 4.--Comparison of monthly discharges for water year 1994 to mean monthly discharges for the reference periods indicated on the individual graphs

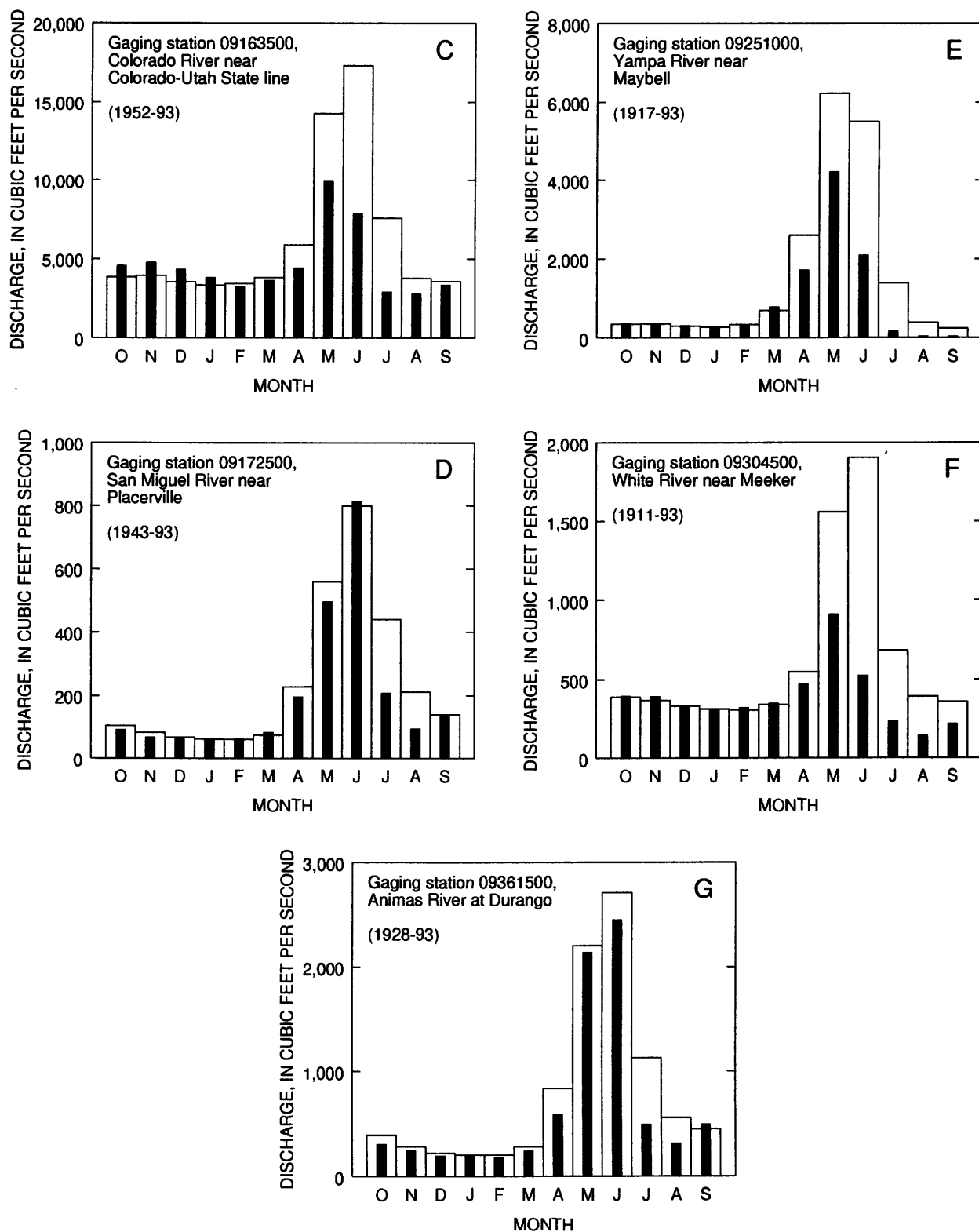


Figure 4.--(continued).

Chemical Quality of Streamflow

To determine if substantial changes occurred during water year 1994 in the chemical quality of streamflow, an analysis was made of specific conductance, which was measured approximately monthly at gaging stations on five representative streams. Each gaging station either is the most downstream station on that stream or is representative of a substantial part of the drainage area of that stream. A comparison of the range and the distribution of the specific conductance for water year 1994 to long-term values for each selected gaging station is shown in figure 5.

Specific conductance can be used to estimate the dissolved-solids concentration in water because specific conductance is directly proportional to the concentrations of ions in water. To determine if there were significant differences between values of specific conductance for water year 1994 and values for the period of record used for comparison, a statistical technique called the Wilcoxon-Mann-Whitney rank sum test was used. This test is a non-parametric counterpart to the common t-test and does not require the data to have normal distribution.

The Wilcoxon-Mann-Whitney rank sum test was applied to the hypothesis that the mean specific conductance for water year 1994 was equal to the mean for the period of record. The procedure for testing the hypothesis involves computing a test statistic from the ranks of the data by using a pooled standard deviation and comparing the test statistic to a value obtained from a table of "Student's" t values (Box and others, 1978). The table value is $(1 - \alpha/2)$, where α (the level of significance) equals 0.05, at the appropriate degrees of freedom for the number of samples. If the absolute value of the computed test statistic (t_R) is greater than the tabular t value (t_{tab}), the hypothesis is rejected. A rejection of the hypothesis is statistical evidence that the two means are different.

Results of the Wilcoxon-Mann-Whitney rank sum tests for the five gaging stations are listed in table 3. For each gaging station, the tests indicate that the mean specific conductance for water year 1994 and the mean specific conductance for the period of record are not statistically different.

Table 3.--Results of Wilcoxon-Mann-Whitney rank sum tests comparing mean specific conductance of discharge for water year 1994 with mean for the period of record at selected gaging stations

[Specific conductance, in microsiemens per centimeter at 25 degrees Celsius;
 t_R , calculated test statistic; t_{tab} , t-values from standard table; A, accepted]

Gaging station identification	Specific conductance						Wilcoxon-Mann-Whitney rank sum test			
	Water year 1994			Period of record			Period used (water years)	t_R	t_{tab}	Hypothesis
	Number of values	Mean	Standard devia- tion	Number of values	Mean	Standard devia- tion				
09095500 Colorado River near Cameo-----	12	886	213	112	875	269	1984-93	0.37	1.98	A
09152500 Gunnison River near Grand Junction---	11	902	201	95	870	306	1984-93	.38	1.99	A
09177000 San Miguel River at Uravan-----	8	955	556	108	703	348	1984-93	1.34	1.98	A
09306290 White River below Boise Creek, near Rangely-----	9	670	215	135	668	174	1984-93	.04	1.98	A
09361500 Animas River at Durango-----	7	380	212	116	422	207	1984-93	-.37	1.98	A

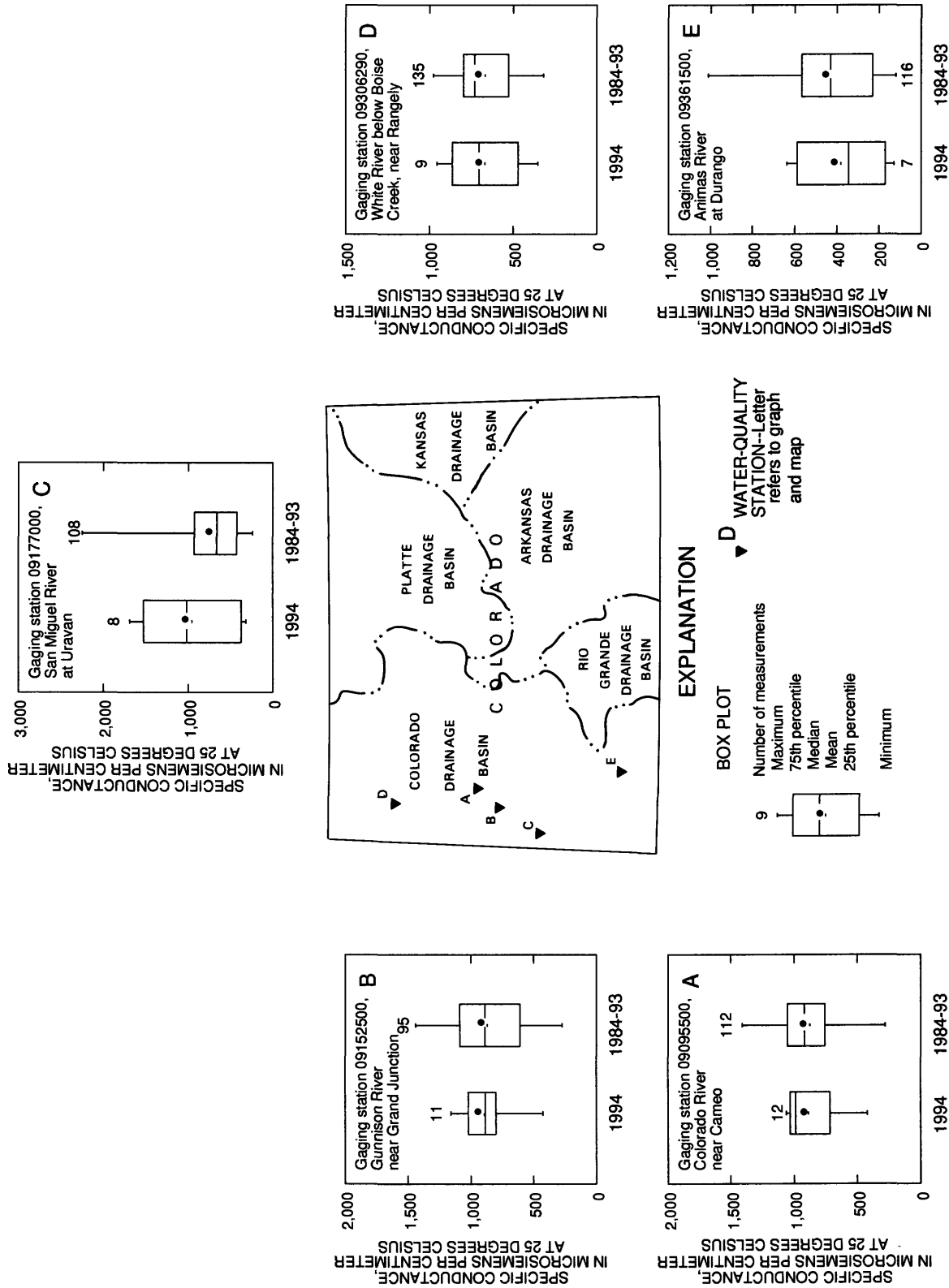


Figure 5.--Comparison of range and distribution of specific conductance measured during water year 1994 to long-term values.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 small sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1993 water year that began on October 1, 1992, and ended September 30, 1993. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface and ground water. The locations of the stations where the surface-water data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

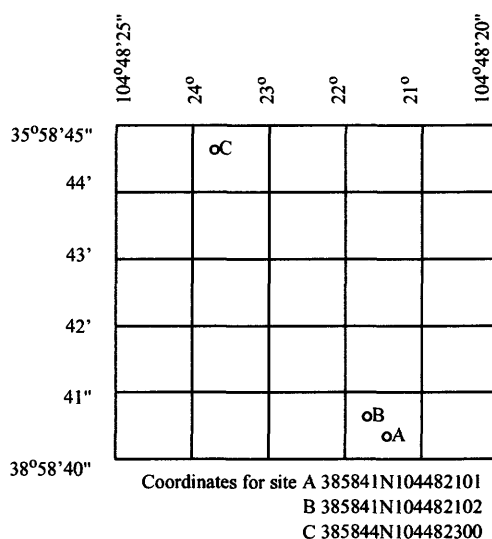
Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 09010500, which appears just to the left of the station name, includes the two-digit Part number "09" plus the six-digit downstream-order number "010500." The Part number designates the major river basin; for example, Part "09" is the Colorado River basin.

Latitude-Longitude System

The identification numbers for wells, springs, and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and may have no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below).



System for numbering wells, springs, and miscellaneous sites.

The local well number locates a well within a 10-acre tract using the U. S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi by townships and is divided in the east-west direction every 6 mi by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi² area described by the township and range designation is subdivided into 1-mi² areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is designated in the same manner by the second letter following the section. The 10-acre area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles. Records of miscellaneous discharge measurements or of measurements from special studies may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals, with electronic recorders that store stage values on computer chips at selected time intervals, or with satellite data collection platforms that transmit near real-time data at selected time intervals to office computers. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This 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 set at some distance from the base gage. At some stations the 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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

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

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

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

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 to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the 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 indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that flow at it can reasonably be considered equivalent with records from the present station.

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

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

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station. 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, outlet works and spillway, and purpose and use of the reservoir.

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

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

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

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

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

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

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 below the daily table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second during 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 also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

If applicable, data collected at partial-record stations follow the information for continuous-record sites. 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 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.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "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 figures. 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. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 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 this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to 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. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

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.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, 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 equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

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

Inches (INCHES) indicates 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 follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of 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 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.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for daily values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. 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 Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Colorado District office. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

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

"In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias."

Accuracy of the Records

Accuracy of water-quality monitor records are based on: (1) The completeness of the record, (2) frequency of calibration checks, (3) the length of time and frequency that data exceed allowable error limits, (4) the magnitude of errors, and (5) confidence in the resultant shifts applied. Listed below are the limits of allowable error.

*	Temperature:	+/- 0.3 degree C.
*	Specific Conductance:	+/- 5 uS/cm or + 5% whichever is greater
*	pH:	+/- 0.2 pH units
*	Dissolved Oxygen:	+/- 0.3 mg/L or + 5% whichever is greater.

A record is rated excellent if the allowable error limits are never exceeded, good if limits are occasionally exceeded and shifts are no greater than two times the limit, fair if limits are regularly exceeded and shifts are no greater than three times the limit, and poor for all others.

Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched or recorded at short intervals on a paper tape, magnetic tape, computer chip, or some other medium. 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 1.

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 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.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on pages 30 and 31 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

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

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

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

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at 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.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are recorded to the nearest 0.1 degree Celsius. Water temperatures measured at the time of water-discharge measurements are published in this report as supplemental water-quality for gaging stations.

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily 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 were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow 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

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

Historical and current (1993) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

Remark Codes

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

PRINTED OUTPUT REMARK

E Estimated value

> Actual value is known to be greater than the value shown

< Actual value is known to be less than the value shown

K Based on non-ideal colony count

M Presence of material verified but not quantified

Records of Ground-Water Quality

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

Data Collection and Computation

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

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

Data Presentation

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

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water-data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- * Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- * Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- * Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- * Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requester will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, VA 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (see address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

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

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

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

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

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

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

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

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

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

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

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

Annual 7-day minimum is 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.)

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

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

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

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

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

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

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

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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

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

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

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

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

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

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

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

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

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter (m²), 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.

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

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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

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

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

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic 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.

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

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

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

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

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

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

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

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

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

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

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

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

Milligrams of oxygen per area or volume per unit time $\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ for periphyton and macrophytes and $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of 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.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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

Sea Level In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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

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

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

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

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

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

7-day 10-year low flow (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituents.

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

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

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a 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.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
<u>Genus</u>	<u>Hexagenia</u>
<u>Species</u>	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variation of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

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

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

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

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

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

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.

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

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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station.

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Lady Creek near Grand Lake, CO	09010100	0.08	1969-75
Jimmy Creek near Grand Lake, CO	09010400	0.08	1969-75
Onahu Creek near Grand Lake, CO	09010600	8.84	1969
Colorado River near Grand Lake, CO	09011000	102	1904-18, 1933-86
Little Columbine Creek above Shadow Mountain Lake at Grand Lake, CO	09011500	1.65	1950-55
Tonahutu Creek near Grand Lake, CO	09012400	16.0	1969
Harbison Ditch near Grand Lake, CO	09012410	--	1969
Tonahutu Creek below Harbison Ditch near Grand Lake, CO	09012420	--	1969
North Inlet at Grand Lake, CO	09012500	45.9	1905-09, 1910-12, 1947-55
East Inlet near Grand Lake, CO	09013500	27.2	1947-55
Grand Lake Outlet at Grand Lake, CO	09014000	76.3	1904-09, 1910-13
Colorado River below Shadow Mountain Reservoir, CO	09015000	190	1947-59
Columbine Creek above Lake Granby near Grand Lake, CO	09015500	7.38	1950-55
Roaring Fork above Lake Granby, CO	09016000	5.95	1951-55
Arapahoe Creek at Monarch Lake Outlet, CO	09016500	46.9	1944-71
Arapahoe Creek below Monarch Lake, CO	09017000	56.9	1934-44
Stillwater Creek above Lake Granby, CO	09018000	17.5	1950-55
Colorado River below Lake Granby, CO	09019000	312	1950-82
Willow Creek near Granby, CO	09020000	109	1934-53
Willow Creek above Willow Creek Reservoir, CO	09020500	127	1953-60
Willow Creek below Willow Creek Reservoir, CO	09021000	134	1953-82
Moffat Water Tunnel at East Portal, CO	09022500	--	1935-82
Fraser River above Winter Park, CO	09023500	22.4	1907-09, 1934-37
Ranch Creek Ditch near Fraser, CO	09031900	--	1948-67
Ranch Creek near Tabernash, CO	09032500	51.3	1934-60
Meadow Creek near Tabernash, CO	09033000	8.03	1935-56
Strawberry Creek near Granby, CO	09033500	11.6	1935-45
Fraser River at Granby, CO	09034000	297	1904-09, 1937-55
Little Muddy Creek near Parshall, CO	09034800	6.52	1953-65
South Fork Williams Fork at Upper Station near Ptarmigan Pass, CO	09035820	2.78	1984-87
South Fork Williams Fork below Old Baldy Mountain near Leal, CO	09035880	21.8	1985-88
South Fork Williams Fork near Ptarmigan Pass, CO	09035830	4.01	1984-88
South Fork Williams Fork above Tributary near Ptarmigan Pass, CO	09035840	5.53	1984-87
South Fork Williams Fork Tributary near Ptarmigan Pass, CO	09035845	0.60	1984-88
South Fork Williams Fork above Short Creek near Ptarmigan Pass, CO	09035850	6.53	1984-87
South Fork Williams Fork below Short Creek near Ptarmigan Pass, CO	09035870	20.0	1984-87
Keyser Creek near Leal, CO	09036500	13.8	1942-52
Williams Fork near Scholl, CO	09037000	141	1910-17
Skylark Creek near Parshall, CO	09037200	2.42	1958-65
Troublesome Creek near Pearmont, CO	09039000	44.6	1953-93
Troublesome Creek at Atmore Ranch near Troublesome, CO	09039500	48.8	1937-43
East Fork Troublesome Creek near Troublesome, CO	09040000	76.0	1937-43, 1953-83
Troublesome Creek near Troublesome, CO	09040500	168	1904-05, 1921-22, 1937-56
Antelope Creek near Kremmling, CO	09041100	11.5	1955-68
Red Dirt Creek near Kremmling, CO	09041200	19.0	1955-74
Pass Creek near Kremmling, CO	09041300	17.8	1957-70
Monte Cristo Creek near Hoosier Pass, CO	09043000	5.66	1953-58
Hoosier Creek near Hoosier Pass, CO	09044000	1.15	1953-58
Bemrose Creek near Hoosier Pass, CO	09044500	1.95	1953-58
McCullough Gulch near Breckenridge, CO	09045000	4.79	1953-58
Spruce Creek near Breckenridge, CO	09045500	5.23	1953-58
Blue River at Dillon, CO	09047000	128	1910-61
Snake River at Dillon, CO	09048000	90.9	1910-19, 1929-64
West Tenmile Creek at Copper Mountain, CO	09049200	21.0	1973-79

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Tenmile Creek at Frisco, CO	09050000	81.0	1942-50
Tenmile Creek at Dillon, CO	09050500	111	1910-19, 1929-61
Straight Creek near Dillon, CO	09051000	12.9	1943-52
Willow Creek near Dillon, CO	09051500	13.4	1942-51
Boulder Creek near Dillon, CO	09052500	9.89	1942-51
Slate Creek near Dillon, CO	09053000	16.6	1942-54
Blue River above Green Mountain Reservoir, CO	09053500	511	1943-71, 1985-88
Black Creek above Green Mountain Reservoir, CO	09054500	18.5	1944-53
Otter Creek above Green Mountain Reservoir, CO	09055000	8.40	1944-53
Cataract Creek above Green Mountain Reservoir, CO	09055500	13.6	1944-53
Blue River near Kremmling, CO	09056000	571	1904-08
Colorado River near Radium, CO	09058030	2,412	1981-90
Dickson Creek near Minturn, CO	09058600	3.41	1964-71
Rock Creek near Toponas, CO	09060500	47.6	1952-81
Egeria Creek near Toponas, CO	09060700	28.2	1965-73
Big Alkali Creek near Burns, CO	09060800	14.2	1958-65
Catamount Creek near Burns, CO	09060900	5.31	1955-61
Big Alkali Creek below Castle Creek near Burns, CO	09060950	34.2	1981-86
Sunnyside Creek near Burns, CO	09061000	9.04	1952-58
Columbine Ditch near Fremont Pass, CO	09061500	--	1930-82
Ewing Ditch at Tennessee Pass, CO	09062000	--	1908-82
Wurtz Ditch near Tennessee Pass, CO	09062500	--	1931-82
Turkey Creek at Red Cliff, CO	09063500	29.4	1913-21, 1944-56
Black Gore Creek near Vail, CO	09066050	19.6	1974-79
Gore Creek at Vail, CO	09066250	57.3	1974-79
Gore Creek near Minturn, CO	09066500	101	1911-14, 1944-56
Beaver Creek at Avon, CO	09067000	14.8	1911, 1912-14, 1974-87, 1988
Alkali Creek near Wolcott, CO	09067300	27.3	1958-65
Eagle River at Eagle, CO	09067500	629	1910-24
East Brush Creek at Yeoman Park near Eagle, CO	09067700	9.74	1965-72
Brush Creek near Eagle, CO	09068000	71.4	1950-72
Gypsum Creek near Gypsum, CO	09069500	62.7	1950-55, 1965-72
Colorado River near Glenwood Springs, CO	09071100	--	1941-85
Colorado River at Glenwood Springs, CO	09072500	4,558	1899-1966
Roaring Fork above Lost Man Creek near Aspen, CO	09072550	9.10	1980-86
Lincoln Creek below Grizzly Reservoir near Aspen, CO	09073005	15.2	1980-86
Roaring Fork River at Aspen, CO	09073500	109	1910-21, 1931-64
Hunter Creek above Midway Creek near Aspen, CO	09073700	6.18	1964-80
Hunter Creek Feeder Conduit near Aspen, CO	09073720	--	1981-83
Midway Creek Feeder Conduit near Aspen, CO	09073790	--	1981-83
Midway Creek near Aspen, CO	09073800	8.62	1971-80
No Name Creek Feeder Conduit near Aspen, CO	09073890	--	1981-83
No Name Creek near Aspen, CO	09073900	6.54	1971-80
Castle Creek near Aspen, CO	09075000	67.0	1911-20
Roaring Fork below Aspen, CO	09075500	228	1913-18
Maroon Creek near Aspen, CO	09076000	41.7	1910-17
Owl Creek near Aspen, CO	09076520	6.60	1974-89
Fryingpan River Feeder Canal near Norrie, CO	09077150	--	1971-83
Fryingpan River near Ivanhoe Lake, CO	09077200	18.7	1963-82
Lily Pad Feeder Canal near Norrie, CO	09077250	--	1972-83
Granite Creek Feeder Conduit near Norrie, CO	09077300	--	1981-83
Fryingpan River near Norrie, CO	09077400	32.2	1963-67
Ivanhoe Creek near Norrie, CO	09077600	9.12	1963-76
Ivanhoe Creek Feeder Canal near Nast, CO	09077605	--	1976-83
Ivanhoe Creek near Nast, CO	09077610	9.43	1976-82
South Fork Fryingpan River Feeder Canal near Norrie, CO	09077750	--	1971-83
South Fork Fryingpan River at Upper Station near Norrie, CO	09077800	11.5	1963-82
South Fork Fryingpan River near Norrie, CO	09077900	17.3	1963-67
Chapman Gulch Feeder Canal near Norrie, CO	09077940	--	1971-83
Chapman Gulch near Nast, CO	09077945	6.00	1973-82
Chapman Gulch near Norrie, CO	09077950	6.38	1966-72
Sawyer Creek Feeder Canal near Norrie, CO	09077960	--	1972-83
Fryingpan River at Norrie, CO	09078000	90.6	1910-17, 1947-83
North Fork Fryingpan River Feeder Canal near Norrie, CO	09078040	--	1980-83
Morman Creek Feeder Canal near Norrie, CO	09078050	--	1979-83
Carter Creek Feeder Canal near Norrie, CO	09078060	--	1980-83
North Fork Fryingpan River above Cunningham Creek near Norrie, CO	09078100	12.0	1963-80
Cunningham Creek Feeder Canal near Norrie, CO	09078140	--	1979-83
Middle Cunningham Creek Feeder Canal near Norrie, CO	09078150	--	1980-83
Cunningham Creek near Norrie, CO	09078200	7.12	1963-80
North Fork Fryingpan River below Cunningham Creek near Norrie, CO	09078300	24.2	1963-68
North Fork Fryingpan River near Norrie, CO	09078500	42.0	1910-17, 1947-82
Lime Creek near Troutville, CO	09078900	4.56	1963-68
Lime Creek at Troutville, CO	09079000	7.76	1950-56

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Lime Creek at Thomasville, CO	09079500	35.0	1950-56
Fryingpan River at Thomasville, CO	09080000	173	1915-20
Fryingpan River at Meredith, CO	09080100	191	1910-15, 1966-80
Fryingpan River at Ruedi, CO	09080200	226	1959-64
Rocky Fork Creek near Meredith, CO	09080300	12.3	1968-82
West Sopris Creek near Basalt, CO	09080800	14.4	1963-68
Crystal River at Marble, CO	09081500	74.3	1910-15, 1916-17
Crystal River at Placita, CO	09081550	107	1959-73, 1975-77
Crystal River near Redstone, CO	09082500	229	1935-63
North Thompson Creek near Carbondale, CO	09082800	26.8	1963-79
Thompson Creek near Carbondale, CO	09083000	75.7	1950-60, 1964-68
Prince Creek near Carbondale, CO	09083700	3.04	1963-68
Cattle Creek near Carbondale, CO	09084000	31.1	1950-55, 1962-72
Fourmile Creek near Carbondale, CO	09084500	8.10	1941-47
Fourmile Creek near Glenwood Springs, CO	09084600	16.7	1957-65
Canyon Creek above New Castle, CO	09085200	23.8	1969-86
East Canyon Creek near New Castle, CO	09085300	15.1	1969-83
Possum Creek near New Castle, CO	09085400	6.41	1969-82
Canyon Creek near New Castle, CO	09085500	55.0	1954-60
Elk Creek at New Castle, CO	09087500	180	1922-24, 1954-60
Colorado River at New Castle, CO	09087600	6,308	1966-72
Baldy Creek near New Castle, CO	09088000	15.3	1955-61
West Divide Creek below Willow Creek near Raven, CO	09089000	34.9	1938-47, 1963-70
East Divide Creek near Silt, CO	09090700	40.8	1959-65
East Rifle Creek near Rifle, CO	09091500	34.3	1936-43, 1956-64
Rifle Creek near Rifle, CO	09092000	137	1939-46, 1952-64
Beaver Creek near Rifle, CO	09092500	7.90	1952-82
Battlement Creek near Parachute, CO	09092600	10.5	1956-65
West Parachute Creek near Parachute, CO	09092800	48.1	1957-62
Northwater Creek near Anvil Points, CO	09092830	12.6	1976-83
East Middle Fork Parachute Creek near Rio Blanco, CO	09092850	22.1	1976-83
East Fork Parachute Creek near Anvil Points, CO	09092960	14.5	1976-83
East Fork Parachute Creek near Rulison, CO	09092970	20.4	1976-83
Ben Good Creek near Rulison, CO	09092980	4.04	1976-83
Parachute Creek near Parachute, CO	09093000	141	1948-54, 1964-70, 1975-86
Parachute Creek at Parachute, CO	09093500	198	1921-27, 1948-54, 1975-82
Roan Creek above Clear Creek near De Beque, CO	09094200	151	1962-68
Clear Creek near De Beque, CO	09094400	110	1966-68
Roan Creek near De Beque, CO	09095000	321	1921-26, 1962-72, 1975-81
Dry Fork near De Beque, CO	09095400	109	1974-82
Government Highline Canal at 16 Road near Loma, CO	09095526	--	1975-85
Lateral No 48 near Mack, CO	09095528	--	1973-81
Government Highline Canal above Camp 7 Spillway near Mack, CO	090955285	--	1983-85
Camp No 7 Spillway near Mack, CO	09095529	--	1975-82
Government Highline Canal near Mack, CO	09095530	--	1973-82
Plateau Creek near Heiberger, CO	09095800	18.6	1958-64
Plateau Creek at Upper Station near Collbran, CO	09096000	24.1	1937-43, 1951-58
Plateau Creek near Collbran, CO	09096500	80.4	1921-80
Buzzard Creek below Owens Creek near Heiberger, CO	09096800	49.7	1955-70
Buzzard Creek near Collbran, CO	09097500	143	1921-80
Brush Creek near Collbran, CO	09097600	9.57	1955-67
Atkinson Creek near Collbran, CO	09098500	0.85	1952-55
East Fork Big Creek near Collbran, CO	09099000	4.92	1940-41, 1950-55
Big Creek at Upper Station near Collbran, CO	09099500	20.2	1945-56
Big Creek near Collbran, CO	09100000	27.1	1937-44
Cottonwood Creek at Upper Station near Molina, CO	09100500	14.0	1945-57
Cottonwood Creek near Molina, CO	09101000	17.8	1937-43
Bull Creek at Upper Station near Molina, CO	09101500	9.85	1945-53
Coon Creek near Mesa, CO	09104000	9.35	1937-43
Mesa Creek near Mesa, CO	09104500	6.79	1937-60
Colorado River near Palisade, CO	09106000	8,738	1901-33
Kiefer Extension to Grand Valley Canal near Fruita, CO	09106104	--	1975-85
Kiefer Extension to Grand Valley Canal near Loma, CO	09106108	--	1975-85
Lewis Wash near Grand Junction, CO	09106200	4.72	1973-79
Texas Creek at Taylor Park, CO	09107500	40.4	1929-34, 1988-92
Willow Creek at Taylor Park, CO	09108000	--	1913-14,

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
East River near Crested Butte, CO	09110500	90.3	1929-34
Coal Creek near Crested Butte, CO	09111000	8.65	1939-51
Slate River near Crested Butte, CO	09111500	70.1	1941-46
Cement Creek near Crested Butte, CO	09112000	26.1	1940-51
Castle Creek near Baldwin, CO	09113000	20.3	1910-13, 1940-51
Ohio Creek at Baldwin, CO	09113300	47.2	1944-50
Ohio Creek near Baldwin, CO	09113500	121	1958-70
			1940-50, 1958-71, 1979-81
Ohio Creek near Gunnison, CO	09114000	167	1944-50
Tomichi Creek at Sargents, CO	09115500	149	1916-22, 1937-72
Tomichi Creek near Doyleville, CO	09116000	209	1944-50
Tomichi Creek at Parlin, CO	09117000	427	1944-51, 1963-70
Quartz Creek near Ohio City, CO	09118000	106	1937-50, 1959-70
Cochetopa Creel near Parlin, CO	09118500	361	1940-48
Gunnison River at Iola, CO	09120500	2,352	1899, 1903, 1937-51
Cebolla Creek near Lake City, CO	09121500	25.2	1946-54
Cebolla Creek near Powderhorn, CO	09121800	248	1960-63
Cebolla Creek at Powderhorn, CO	09122000	340	1937-55
Soap Creek near Sapinero, CO	09122500	57.4	1955-66
Soap Creek at Sapinero, CO	09123000	86.0	1910-14, 1945-52
Lake Fork below mill Gulch near Lake City, CO	09123400	57.5	1981-86
Lake Fork at Lake City, CO	09123500	115	1917-24, 1928-30, 1931-37
Henson Creek at Lake City, CO	09124000	83.1	1917-19, 1928-30, 1931-37
Gunnison River below Blue Mesa Dam, CO	09124700	3,453	1963-68
Curecanti Creek near Sapinero, CO	09125000	35.0	1945-72
Cimarron River at Cimarron, CO	09126500	209	1902-05, 1962-67
Cimarron River below Squaw Creek at Cimarron, CO	09127000	229	1942-52
Crystal Creek near Maher, CO	09127500	42.2	1916-19, 1945-54, 1960-69
Gunnison River above Gunnison Tunnel, CO	09127998	3,965	1905-65
Gunnison Tunnel near Montrose, CO	09127999	3,965	1910-65
Smith Fork at Crawford, CO	09129000	63.1	1954-60
ron Creek near Crawford, CO	09129500	71.5	1947-52
Smith Fork near Lazear, CO	09129600	166	1976-87
Clear Fork near Ragged Mountain, CO	09129800	38.5	1965-73
East Muddy Creek near Bardine, CO	09130500	133	1934-53
West Muddy Creek near Ragged Mountain, CO	09130600	7.42	1955-65
West Muddy Creek near Bowie, CO	09130800	27.7	1968-74
Cow Creek near Paonia, CO	09131100	12.0	1968-82
West Muddy Creek near Somerset, CO	09131200	49.9	1961-73
Ruby Anthracite Creek near Floresta, CO	09132000	20.7	1938-43, 1954-58
Anthracite Creek near Somerset, CO	09132050	94.6	1977-81
Main Hubbard Creek near Paonia, CO	09132700	1.33	1960-68
Middle Hubbard Creek near Paonia, CO	09132800	1.36	1960-68
West Hubbard Creek near Paonia, CO	09132900	2.34	1960-73
Hubbard Creek near Bowie, CO	09132920	20.7	1968-74
North Fork Gunnison River near Paonia, CO	09133000	653	1921-32
Minnesota Creek at Paonia, CO	09134050	53.5	1976-79
Cottonwood Creek near Hotchkiss, CO	09134200	41.0	1976-79
Leroux Creek near Cedaredge, CO	09134500	34.5	1936-56, 1960-69
Cow Creek near Cedaredge, CO	09134700	7.24	1960-69
Leroux Creek near Lazear, CO	09135000	51.8	1917-26
Gunnison River near Lazear, CO	09136200	5,241	1962-85
Currant Creek near Cedaredge, CO	09136500	42.2	1948-54
Currant Creek near Read, CO	09137050	56.9	1976-87
Dirty George Creek near Grand Mesa, CO	09137800	10.6	1957-69
Ward Creek near Grand Mesa, CO	09139200	12.2	1957-69
Ward Creek near Cedaredge, CO	09139500	20.4	1939-46
Kiser Creek near Grand Mesa, CO	09140200	5.35	1957-69
Kiser Creek near Cedaredge, CO	09140500	10.8	1939-46
Cottonwood Creek near Grand Mesa, CO	09140700	2.15	1957-68
Cottonwood Creek near Cedaredge, CO	09141000	4.39	1939-46
Youngs Creek near Grand Mesa, CO	09141200	10.3	1957-69
Youngs Creek near Cedaredge, CO	09141500	11.3	1939-46
Ward Creek below Kiser Creek near Cedaredge, CO	09142000	52.2	1944-52
Surface Creek at Eckert, CO	09144000	43.6	1939-51

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Tongue Creek at Cory, CO	09144200	197	1957-68, 1976-87
Red Mountain Creek near Ironton, CO	09144500	18.1	1947-55
Uncompahgre River At Ouray, CO	09145000	42.0	1908, 1910-24
Canyon Creek at Ouray, CO	09145500	25.8	1910-15
Uncompahgre River below Ouray, CO	09146000	75.2	1913-29
West Fork Dallas Creek near Ridgway, CO	09146400	14.1	1955-70
East Fork Dallas Creek near Ridgway, CO	09146500	16.8	1955-70
Beaver Creek near Ridgway, CO	09146550	12.2	1960-70
Pleasant Valley Creek near Noel, CO	09146600	8.17	1960-68
Cow Creek near Ridgway, CO	09147100	45.4	1955-67
Spring Creek near Beaver Hill, CO	09149400	41.6	1955-73
Spring Creek near Montrose, CO	09149420	76.6	1977-81
Potter Creek near Columbine Pass, CO	09149900	7.10	1977-81
Potter Creek near Olathe, CO	09149910	26.0	1980-81
Roubideau Creek at Mouth near Delta, CO	09150500	242	1980-81
Escalante Creek near Delta, CO	09151500	209	1938-54, 1976-83
Kannah Creek near Whitewater, CO	09152000	61.9	1922-23, 1970-89
Orchard Mesa Drain at Grand Junction, CO	09152600	3.70	1917-82
Leach Creek at Durham, CO	09152650	24.8	1973-83
Adobe Creek near Fruita, CO	09152900	15.4	1973-83
Colorado River near Fruita, CO	09153000	17,100	1973-83
Big Salt Wash at Fruita, CO	09153270	142	1907-23
Reed Wash near Loma, CO	09153300	29.3	1973-77
West Salt Creek near Carbonera, CO	09153330	95.6	1973-83
West Salt Creek near Mack, CO	09153400	168	1979-82
Badger Wash near Mack, CO	09163050	6.51	1973-83
East Salt Creek near Mack, CO	09163310	197	1973-82
Mack Wash near Mack, CO	09163340	15.9	1973-82
Salt Creek near Mack, CO	09163490	436	1973-83
Hay Press Creek above Fruita Reservoir 3 near Glade Park, CO	09163570	0.77	1983-88
West Fork Dolores River near Stoner, CO	09166000	162	1941-44
Lost Canyon Creek at Dolores, CO	09167000	73.5	1922-27
Plateau Creek near Mouth near Dolores, CO	09167450	83.0	1941-48
Dolores River near McPhee, CO	09167500	817	1982-83
Disappointment Creek near Dove Creek, CO	09168100	147	1938-52
Big Gypsum Creek near Slick Rock, CO	09168800	43.9	1957-86
West Paradox Creek near Paradox, CO	09170500	23.6	1979-81
West Paradox Creek above Bedrock, CO	09170800	53.3	1944-52
West Paradox Creek near Bedrock, CO	09171000	55.3	1971-7
San Miguel River near Telluride, CO	09171200	42.8	1944-52
San Miguel River at Fall Creek, CO	09171500	167	1959-65
Fall Creek near Fall Creek, CO	09172000	33.4	1895-99, 1910
Leopard Creek at Noel, CO	09172100	9.03	1941-59
Saltado Creek near Norwood, CO	09172600	--	1955-63
Gurley Ditch near Norwood, CO	09172700	--	1976-80
West Beaver Creek near Norwood, CO	09172800	--	1976-80
Beaver Creek near Norwood, CO	09173000	40.6	1941-61, 1962-67, 1975-81
Horsefly Creek near Sams, CO	09173500	28.8	1942-51
San Miguel River near Nucla, CO	09174000	649	1953-62
Cottonwood Creek near Nucla, CO	09174500	38.8	1942-51
West Naturita Creek at Upper Station near Norwood, CO	09174700	7.31	1976-80
West Naturita Creek near Norwood, CO	09175000	53.0	1940-52, 1975-80
Lilylands Canal near Norwood, CO	09175200	--	1976-80
Maverick Draw near Norwood, CO	09175400	41.3	1976-80
San Miguel River at Naturita, CO	09175500	1,069	1917-29, 1940-81
Tabeguache Creek near Nucla, CO	09176500	16.9	1946-53
Taylor Creek near Gateway, CO	09177500	15.4	1944-67
Deep Creek near Paradox, CO	09178000	4.31	1944-53
Geyser Creek near Paradox, CO	09178500	--	1944-51
Roc Creek near Uranium CO	09179000	75.8	1944-52
Salt Creek near Gateway, CO	09179200	31.2	1979-85
Dolores River at Gateway, CO	09179500	4,347	1936-54
Vermillion Creek at Ink Springs Ranch, CO	09235450	816	1977-81
Bear River near Toponas, CO	09236000	23.0	1952-65, 1966-86
Bear River near Yampa, CO	09236500	41.6	1939-44
Service Creek near Oak Creek, CO	09237800	38.2	1965-73
Oak Creek near Oak Creek, CO	09238000	14.0	1952-57
North Fork Walton Creek near Rabbit Ears Pass, CO	09238300	0.71	1972-75
Fishhook Creek near Rabbit Ears Pass, CO	09238350	6.45	1972-75
Walton Creek near Steamboat Springs, CO	09238500	42.4	1920-22, 1965-73, 1978-87

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Fish Creek Tributary above Long Lake near Buffalo Pass, CO	09238700	0.43	1984-86
Spring Creek near Steamboat Springs, CO	09239400	6.96	1965-72
Elk River at Hinman Park, CO	09240500	61.0	1911-18
South Fork Elk River near Clark, CO	09240800	33.7	1966-73
Elk River above Clark, CO	09240900	122	1987-93
Elk River above Clark	09240900	122	1987-93
Elk River at Clark	09241000	216	1910-22, 1930-91
Fish Creek near Milner, CO	09244100	216	1955-73
Grassy Creek near Mount Harris, CO	09244300	25.8	1958-66
Yampa River near Hayden, CO	09244400	1,430	1965-72
Gibraltar Canal near Hayden, CO	09244405	--	1965-72
Yampa River below Diversion near Hayden, CO	09244410	1,430	1965-86
Sage Creek above Sage Creek Reservoir near Hayden, CO	09244415	4.17	1980-83
Watering Trough Gulch near Hayden, CO	09244460	2.65	1977-81
Hubberson Gulch near Hayden, CO	09244464	8.08	1977-81
Stokes Gulch near Hayden, CO	09244470	13.6	1976-81
Elkhead Creek near Clark, CO	09244500	45.4	1942-44, 1958-73
North Fork Elkhead Creek near Elkhead, CO	09245500	21.0	1910, 1920, 1958-73
Elkhead Creek near Craig, CO	09246500	249	1906, 1909-18
Fortification Creek near Craig, CO	09246900	34.3	1955-60
Fortification Creek near Fortification, CO	09246920	40.0	1984-90
Fortification Creek at Craig, CO	09247000	258	1903-06, 1909-18, 1943-47
Yampa River at Craig, CO	09247500	1,730	1901-06, 1909-16
East Fork of Williams Fork near Willow Creek, CO	09248500	96.0	1943-47
East Fork of Williams Fork above Willow Creek, CO	09248600	108	1956-72
East Fork of Williams Fork near Pagoda, CO	09249000	150	1953-71
South Fork of Williams Fork near Pagoda, CO	09249200	46.7	1965-79
Waddle Creek near Pagoda, CO	09249450	5.24	1985-86
Deep Rock Gulch near Hamilton, CO	09249455	3.53	1985-86
Williams Fork at Hamilton, CO	09249500	341	1904-06, 1909-27
Morapos Creek near Hamilton, CO	09249700	13.7	1965-67
Milk Creek near Thornburgh, CO	09250000	65.0	1952-86
Good Spring Creek at Axial, CO	09250400	40.0	1975-78
Wilson Creek above Taylor Creek near Axial, CO	09250507	20.0	1980-92
Taylor Creek at mouth near Axial, CO	09250510	7.22	1975-92
Jubb Creek near Axial, CO	09250610	7.53	1975-81
Morgan Gulch near Axial, CO	09250700	25.6	1980-81
Middle Fork Little Snake River near Battle Creek, CO	09251500	120	1912-22
South Fork Little Snake River near Battle Creek, CO	09252500	46.0	1912-20
Battle Creek near Slater, CO	09253500	285	1942-51
Slater Fork at Baxter Ranch near Slater, CO	09254500	80.0	1911-20, 1922
Willow Creek near Dixon, WY	09258000	24.0	1953-93
Little Snake River above Lily, CO	09259950	--	1950-69
Sand Wash near Sunbeam, CO	09259990	239	1987-91
North Fork White River below Trappers Lake, CO	09302400	19.5	1956-65
North Fork White River above Ripple Creek near Trappers Lake, CO	09302420	62.5	1965-73
Lost Creek near Buford, CO	09302450	21.5	1964-89
Marvine Creek near Buford, CO	09302500	59.7	1903-06, 1973-84
North Fork White River near Buford, CO	09302800	220	1903-06, 1956-72
Patterson Creek near Budes Resort, CO	09303340	11.2	1976-77
Wagonwheel Creek at Budes Resort, CO	09303320	7.36	1975-89
South Fork White River near Buford, CO	09303500	157	1903-06, 1910-15, 1942-47
Big Beaver Creek near Buford, CO	09304100	34.1	1967-92
Miller Creek near Meeker, CO	09304150	57.6	1955-64
Coal Creek near Meeker, CO	09304300	25.1	1970-79
White River at Meeker, CO	09304600	808	1957-68
Piceance Creek at Rio Blanco, CO	09305500	8.97	1978-85
Middle Fork Stewart Gulch near Rio Blanco, CO	09306015	24.0	1952-57
Stewart Gulch above West Fork near Rio Blanco, CO	09306022	44.0	1974-76, 1977-82
West Fork Stewart Gulch near Rio Blanco, CO	09306025	14.2	1976-85
West Fork Stewart Gulch at Mouth near Rio Blanco, CO	09306028	15.7	1974-76, 1977-82
Sorghum Gulch near Rio Blanco, CO	09306033	1.22	1974-82
Sorghum Gulch at Mouth near Rio Blanco, CO	09306036	3.62	1974-86
Cottonwood Gulch near Rio Blanco, CO	09306039	1.20	1974-85
Piceance Creek Tributary near Rio Blanco, CO	09306042	1.06	1974-84, 1985-92
Piceance Creek below Gardenhire Gulch near Rio Blanco, CO	09306045	255	1980-82,

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Scandard Gulch near Rio Blanco, CO	09306050	6.61	1985 1974-76, 1978-82
Scandard Gulch at Mouth near Rio Blanco, CO	09306052	7.97	1974-85
Willow Creek near Rio Blanco, CO	09306058	48.4	1974-85
Piceance Creek above Hunter Creek near Rio Blanco, CO	09306061	309	1974-87
Black Sulphur Creek near Rio Blanco, CO	09306175	103	1975-83
Horse Draw near Rangely, CO	09306202	1.47	1977-81
Horse Draw at Mouth near Rangely, CO	09306203	2.87	1977-81
White River above Crooked Wash near White River City, CO	09306224	1,821	1982-89
Stake Springs Draw near Rangely, CO	09306230	26.1	1974-77
Corral Gulch below Water Gulch near Rangely, CO	09306235	8.61	1974-89
Dry Fork near Rangely, CO	09306237	2.74	1974-82
Box Elder Gulch near Rangely, CO	09306240	9.21	1974-85
Box Elder Gulch Tributary near Rangely, CO	09306241	2.39	1975-82
Corral Gulch at 84 Ranch, CO	09306244	37.8	1975-77
Yellow Creek Tributary near 84 Ranch, CO	09306246	5.53	1975-77
Duck Creek at Upper Station near 84 Ranch, CO	09306248	39.1	1975-77
Duck Creek near 84 Ranch, CO	09306250	50.0	1975-77
White River above Rangely, CO	09306300	2,773	1972-82
East Fork San Juan River near Pagosa Springs, CO	09340000	86.9	1935-80
West Fork San Juan River above Borns Lake near Pagosa Springs, CO	09340500	41.2	1937-53
Wolf Creek near Pagosa Springs, CO	09341200	14.0	1968-75
Wolf Creek at Wolf Creek Camp Ground near Pagosa Springs, CO	09341300	18.0	1984-87
Windy Pass Creek near Pagosa Springs, CO	09341350	1.41	1984-87
West Fork San Juan River near Pagosa Springs, CO	09341500	87.9	1935-60, 1984-87
Turkey Creek near Pagosa Springs, CO	09342000	23.0	1937-49
Rio Blanco near Pagosa Springs, CO	09343000	58.0	1935-71
Rito Blanco near Pagosa Springs, CO	09343500	23.3	1935-52
Navajo River above Chromo, CO	09344300	96.4	1956-70
Little Navajo River at Chromo, CO	09345500	21.9	1935-52
Middle Fork Piedra River near Pagosa Springs, CO	09347200	32.2	1969-75
Middle Fork Piedra River near Dyke, CO	09347205	34.1	1978-84
Piedra River at Bridge Ranger Station near Pagosa Springs, CO	09347500	82.3	1936-41, 1946-54
Williams Creek near Bridge Ranger Station near Pagosa Springs, CO	09348500	43.7	1936-41, 1946-49
Weminuche Creek near Bridge Ranger Station near Pagosa Springs, CO	09349000	53.4	1936-41, 1946-49
Piedra River near Piedra, CO	09349500	371	1911-12, 1938-73
Los Pinos River near Bayfield, CO	09353500	270	1927-86
Animas River at Howardsville, CO	09357500	55.9	1935-82
Animas River at Silverton, CO	09358000	70.6	1903, 1991-93
Cement Creek near Silverton, CO	09358500	13.5	1935-37 1946-49
Cement Creek at Silverton, CO	09358550	20.1	1991-93
Mineral Creek above Silverton, CO	09358900	11.0	1968-75
Mineral Creek near Silverton, CO	09359000	43.9	1935-49
Mineral Creek at Silverton, CO	09359010	52.5	1991-93
Lime Creek near Silverton, CO	09359100	33.9	1956-61
Animas River above Tacoma, CO	09359500	348	1945-56
Hermosa Creek near Hermosa, CO	09361000	172	1911, 1912-14, 1919-28, 1939-80
Falls Creek near Durango, CO	09361200	7.18	1959-65
Junction Creek near Durango, CO	09361400	26.3	1959-65
Lightner Creek near Durango, CO	09362000	66.0	1927-49
Florida River near Hermosa, CO	09362900	68.8	1955-63
Florida River near Durango, CO	09363000	97.4	1899, 1901-03, 1910-12, 1917-24, 1926-60
Florida River below Florida Farmers Ditch near Durango, CO	09363050	107	1967-82
Salt Creek near Oxford, CO	09363100	17.7	1956-63, 1967-83
Florida River at Bondad, CO	09363200	221	1956-63, 1967-83
Cherry Creek near Red Mesa, CO	09366000	66.0	1928-50
West Mancos River near Mancos, CO	09368500	39.4	1910-11, 1938-53
East Mancos River near Mancos, CO	09369000	11.9	1937-51
Middle Mancos River near Mancos, CO	09369500	12.1	1937-51
Mancos River near Mancos, CO	09370000	71.5	1921, 1931-38
Mancos River near Cortez, CO	09370800	302	1976-79
Mancos River below Johnson Canyon near Cortez, CO	09370820	320	1979-82
Navajo Wash near Towaoc, CO	09371002	26.3	1986-94
Hartman Draw at Cortez, CO	09371400	34.0	1978-86
McElmo Creek above Alkali Canyon near Cortez, CO	09371420	147	1972-86

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record (calendar years)
Mud Creek near Cortez, CO	09371495	33.6	1978-81
McElmo Creek near Cortez, CO	09371500	230	1926-29, 1940-45, 1950-54, 1982-93
McElmo Creek below Cortez, CO	09371700	283	1972-83

DISCONTINUED CONTINUOUS SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station.

Discontinued continuous-record surface-water-quality stations

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Williams Fork near Parshall, CO	09037500	184	Temp., S.C.	1986-87
Williams Fork below Williams Fork Reservoir, CO	09038500	230	Temp., S.C.	1985-87
West Tenmile Creek at Copper Mountain, CO	09049200	21.0	Sed.	1973-79
Boulder Creek near Dillon, CO	09052500	9.89	Temp., S.C.	1982
Blue River above Green Mountain Reservoir, CO	09053500	511	Temp. S.C.	1986 1986-87
Blue River below Green Mountain Reservoir, CO	09057500	599	Temp., S.C.	1986-87
Rock Creek at Crater, CO	09060550	72.6	Temp., S.C.	1986-87
Black Gore Creek near Vail, CO	09066050	19.6	Sed.	1973-79
Gore Creek at Vail, CO	09066250	57.3	Sed.	1973-79
Colorado River near Dotsero, CO	09070500	4,394	Temp., S.C. Sed.	1980-84 1959-61
Colorado River near Glenwood Springs, CO	09071100	4,560	Temp. S.C.	1969-70, 1980-85 1980-85
Colorado River at Glenwood Springs, CO	09072500	4,558	Temp. Sed.	1954-58 1959-61
Hunter Creek above Midway Creek near Aspen, CO	09073700	6.18	Temp., S.C.	1976-77
Roaring Fork River at Glenwood Springs, CO	09085000	1,451	Temp., S.C. Sed.	1980-84 1959-61
Colorado River below Glenwood Springs, CO	09085100	6,013	Temp., S.C.	1980-84
East Middle Fork Parachute Cr nr Rio Blanco, CO	09092850	22.1	Temp., S.C. Sed.	1976-82 1977-82
East Fork Parachute Creek near Rulison, CO	09092970	20.4	Temp. S.C. Sed.	1977-78, 1980-83 1977-83 1978, 1980-83
Parachute Creek near Parachute, CO	09093000	141	Temp., S.C. Sed.	1975-80 1974-75
Parachute Creek at Parachute, CO	09093500	198	Temp., S.C. Sed.	1975-80 1974-82
Colorado River near De Beque, CO	09093700	7,370	Temp., S.C. Sed.	1973-82 1974-76
Roan Creek near De Beque, CO	09095000	321	Temp., S.C. Sed.	1975-80 1975-81
Government Highline Canal near Mack, CO	09095530	--	Temp. S.C.	1973-80 1974-80
Plateau Creek near Cameo, CO	09105000	592	Temp., S.C.	1971-75
Lewis Wash near Grand Junction, CO	09106200	4.72	Temp., S.C.	1973-77
Uncompahgre River at Delta, CO	09149500	1,115	Sed.	1959
Potter Creek near Columbine Pass, CO	09149900	7.10	Temp., S.C.	1981
Potter Creek near Olathe, CO	09149910	26.0	Temp., S.C.	1981
Orchard Mesa Drain at Grand Junction, CO	09152600	3.70	Temp., S.C.	1973-77
Leach Creek at Durham, CO	09152650	24.8	Temp., S.C.	1973-77
Adobe Creek near Fruita, CO	09152900	15.4	Temp., S.C.	1973-80
Big Salt Wash at Fruita, CO	09153270	142	Temp., S.C.	1973-77
Reed Wash near Loma, CO	09153300	29.3	Temp., S.C.	1973-83
West Salt Creek near Carbonera, CO	09153330	95.6	Temp., S.C.	1981-82
West Salt Creek near Mack, CO	09153400	168	Temp., S.C.	1973-84
Badger Wash Observation Res 4-A near Mack, CO	09160000	.02	Temp., S.C.	1981
Badger Wash Observation Res 12 near Mack, CO	09160500	.09	Temp., S.C.	1981-82
Badger Wash Observation Res 2-A near Mack, CO	09161000	.15	Temp., S.C.	1981
Badger Wash near Mack, CO	09163050	6.51	Temp., S.C.	1973-80
East Salt Creek near Mack, CO	09163310	197	Temp., S.C.	1973-82
Mack Wash near Mack, CO	09163340	15.9	Temp. S.C.	1973-82 1974-82
Salt Creek near Mack, CO	09163490	436	Temp., S.C.	1973-83
Disappointment Creek near Dove Creek, CO	09168100	147	Temp., S.C.	1984
Big Gypsum Creek near Slick Rock, CO	09168800	43.9	Temp., S.C.	1981

DISCONTINUED CONTINUOUS SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Dolores River below W. Paradox Cr nr Bedrock, CO	09171070	2,144	Temp., S.C.	1986-87
Salt Creek near Gateway, CO	09179200	31.2	Temp., S.C.	1981-85
Dolores River at Gateway, CO	09179500	4,347	Temp.	1949-52
Yampa River near Oak Creek, CO	09237500	227	Sed.	1985-88
Middle Creek near Oak Creek, CO	09243700	23.5	Temp., S.C.	1976-81
Foidel Creek near Oak Creek, CO	09243800	8.61	Temp., S.C.	1976-83, 1986-88
Foidel Creek at Mouth near Oak Creek, CO	09243900	17.5	Temp., S.C.	1976-81
			Sed.	1978-81
Sage Creek above Sage Creek Res. near Hayden, CO	09244415	4.17	Temp., S.C.	1981-83
Watering Trough Gulch near Hayden, CO	09244460	2.65	Temp., S.C.	1979-81
Hubberson Gulch near Hayden, CO	09244464	8.08	Temp., S.C.	1979-81
Stokes Gulch near Hayden, CO	09244464	13.6	Temp., S.C., Sed.	1978-81
Good Spring Creek at Axial, CO	09250400	40.0	Temp.	1975-78
			S.C.	1974-78
Wilson Creek above Taylor Creek near Axial, CO	09250507	20.0	Temp., S.C., Sed.	1980-81
Taylor Creek at Mouth near Axial, CO	09250507	7.22	Temp., S.C.	1976-81
Wilson Creek near Axial, CO	09250600	27.4	Temp.	1975-80
			S.C.	1974-80
			Sed.	1976-80
Jubb Creek near Axial, CO	09250610	7.53	Temp., S.C.	1976-81
Morgan Gulch near Axial, CO	09250700	25.6	Temp., S.C.	1980-81
Little Snake River above Lily, CO	09259950	3,730	Temp., S.C.	1950-69
			Sed.	1958-64
Little Snake River near Lily, CO	09260000	3,730	Temp., S.C.	1975-85
			Sed.	1958-64
Yampa River at Deerlodge Park, CO	09260050	7,660	Temp., S.C.	1977-82
White River above Coal Creek, near Meeker, CO	09304200	648	Temp., S.C.	1978-84
White River near Meeker, CO	09304500	755	Temp., S.C.	1973-74
White River at Meeker, CO	09304600	808	Temp., S.C.	1978-85
White River below Meeker, CO	09304800	1,024	Temp., S.C.	1978-85
Piceance Creek below Rio Blanco, CO	09306007	177	Temp., S.C. Sed	1974-85
Middle Fork Stewart Gulch near Rio Blanco, CO	09306015	24.0	Temp., S.C.	1976
				1981
			Sed.	1976
Stewart Gulch above West Fork near Rio Blanco, CO	09306022	44.0	Temp., S.C., Sed.	1974-82
West Fork Stewart Gulch near Rio Blanco, CO	09306025	14.2	Temp.	1974-76, 1980-81
			S.C.	1975-76, 1980-81
			Sed.	1974-76
W.F. Stewart Gulch at Mouth near Rio Blanco, CO	09306028	15.7	Temp.	1980-81
			S.C.	1977, 1980-81
			Sed.	1975-76, 1980-81
Sorghum Gulch near Rio Blanco, CO	09306033	1.22	Temp., S.C.	1975-76, 1980
			Sed.	1975-76
Sorghum Gulch at mouth near Rio Blanco, CO	09306036	3.62	Temp., S.C.	1976, 1978, 1980
			Sed.	1975-77, 1982
Cottonwood Gulch near Rio Blanco, CO	09306039	1.20	Temp., S.C.	1976-78, 1980
			Sed.	1974-77, 1980
Piceance Creek Tributary near Rio Blanco, CO	09306042	1.06	Temp., S.C.	1974-86
			Sed.	1974-82
Piceance Cr bl Gardenhire Gulch nr Rio Blanco, CO	09306045	255	Temp., S.C.	1980-81
Scandard Gulch near Rio Blanco, CO	09306050	6.61	Temp., S.C.	1980
			Sed.	1975-76
Scandard Gulch at Mouth near Rio Blanco, CO	09306052	7.97	Temp., S.C.	1976, 1978, 1980
			Sed.	1974-76, 1980
Willow Creek near Rio Blanco, CO	09306058	48.4	Temp., S.C.	1974-82
			pH, D.O.	1976-82

DISCONTINUED CONTINUOUS SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Piceance Creek above Hunter Cr nr Rio Blanco, CO	09306061	309	Sed.	1974-82
			Temp., S.C., Sed.	1974-85
			pH, D.O.	1974-84
Black Sulphur Creek near Rio Blanco, CO	09306175	103	Temp., S.C., Sed.	1975-81
Piceance Creek below Ryan Gulch nr Rio Blanco, CO	09306200	506	Sed.	1972-83
Horse Draw near Rangely, CO	09306202	1.47	Sed.	1980
Horse Draw at Mouth near Rangely, CO	09306203	2.87	Temp., S.C.	1980
			Sed.	1980-81
Piceance Creek at White River, CO	09306222	652	Temp., S.C., Sed.	1974-83
Stake Springs Draw near Rangely, CO	09306230	26.1	Temp., S.C., Sed.	1977
Corral Gulch below Water Gulch near Rangely, CO	09306235	8.61	Temp., S.C.	1975-85
			Sed.	1974-82
Dry Fork near Rangely, CO	09306237	2.74	Temp., S.C.	1977,
				1979,
				1982
			Sed.	1975,
				1977,
				1979,
				1981-82
Box Elder Gulch near Rangely, CO	09306240	9.21	Temp., S.C.	1975-85
			Sed.	1975-82
Box Elder Gulch Tributary near Rangely, CO	09306241	2.39	Temp.	1976,
				1980-81
			S.C.	1976-77,
				1981
			Sed.	1975,
				1980,
				1982
Corral Gulch near Rangely, CO	09306242	31.6	Temp., S.C.	1975-87
			Sed.	1974-85
Corral Gulch at 84 Ranch, CO	09306244	37.8	Temp., S.C. Sed.	1975-77
Yellow Creek Tributary near 84 Ranch, CO	09306246	5.53	Sed.	1976
Duck Creek at Upper Station near 84 Ranch, CO	09306248	39.1	Sed.	1976
Duck Creek near 84 Ranch, CO	09306250	50.0	Temp., S.C.	1977
Yellow Creek near White River, CO	09306255	262	Temp., S.C. Sed.	1974-82
Windy Pass Creek near Pagosa Springs, CO	09341350	1.41	Sed.	1986
West Fork San Juan River near Pagosa Springs, CO	09341500	87.9	Sed.	1985-87
Rio Blanco near Pagosa Springs, CO	09343000	58.0	Sed.	1961-62
Navajo River above Chromo, CO	09344300	96.4	Sed.	1961-62
Vallecito Creek near Bayfield, CO	09352900	72.1	Temp.	1962-82
Mancos River near Cortez, CO	09370800	302	Temp., S.C.	1976-79
Mancos River below Johnson Canyon nr Cortez, CO	09370820	320	Temp., S.C.	1979-82
Mancos River near Towaoc, CO	09371000	526	Sed.	1961
Hartman Craw at Cortez, CO	09371400	34.0	Temp., S.C.	1978-81
McElmo Creek near Cortez	09371500	230	Temp., S.C.	1982-93

Type of record: Temp. (temperature), S.C. (specific conductance), pH (pH), D.O. (dissolved oxygen), Sed. (sediment).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

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COLORADO RIVER MAIN STEM

09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO

LOCATION.--Lat 40°19'33", long 105°51'22", in NE¹/4NW¹/4 sec.12, T.4 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from Baker Gulch, 1.0 mi upstream from Bowen Gulch, and 5.5 mi northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi².

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 21 to Apr. 17, and Aug. 5-10. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station by Grand River ditch (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	17	13	10	9.1	8.6	8.7	57	373	66	30	29
2	22	17	13	10	9.1	8.6	8.7	56	372	63	36	39
3	21	17	12	9.9	9.1	8.6	8.7	56	338	67	30	29
4	21	16	12	9.9	9.1	8.6	8.7	61	339	63	28	34
5	20	16	12	9.9	9.0	8.6	8.7	78	334	55	26	26
6	20	16	12	9.9	9.0	8.6	8.8	113	317	53	25	23
7	23	16	12	9.9	8.9	8.6	8.9	131	288	51	22	21
8	32	15	11	9.9	8.8	8.6	9.0	146	254	48	21	21
9	27	15	11	9.9	8.8	8.6	9.0	149	216	42	19	19
10	25	15	11	9.9	8.8	8.6	9.0	167	186	39	17	19
11	23	15	11	9.9	8.7	8.6	9.6	197	179	37	16	18
12	29	14	11	9.9	8.6	8.6	11	250	178	35	16	18
13	27	14	11	9.9	8.6	8.6	13	272	173	32	20	17
14	27	14	11	9.9	8.6	8.6	14	256	170	31	19	17
15	29	14	11	9.9	8.6	8.6	15	225	163	30	14	18
16	30	14	11	9.8	8.6	8.6	21	239	152	30	13	17
17	28	14	11	9.8	8.6	8.6	22	277	143	28	13	16
18	29	14	11	9.8	8.6	8.6	38	274	147	27	12	16
19	27	14	11	9.8	8.6	8.6	69	271	151	25	18	18
20	25	14	11	9.8	8.6	8.6	88	282	138	23	17	19
21	23	14	10	9.6	8.3	8.6	107	274	141	22	14	21
22	23	14	10	9.6	8.5	8.6	138	274	146	21	15	21
23	22	14	10	9.5	8.6	8.6	170	272	131	24	15	21
24	22	13	10	9.4	8.6	8.6	180	244	114	34	15	19
25	21	13	10	9.4	8.6	8.6	153	238	104	27	15	18
26	20	13	10	9.4	8.6	8.7	117	262	96	24	14	17
27	20	13	10	9.3	8.6	8.7	98	253	88	21	13	17
28	19	13	10	9.2	8.6	8.7	81	276	82	20	32	16
29	18	13	10	9.2	---	8.7	71	295	75	20	34	16
30	18	13	10	9.2	---	8.7	61	310	70	20	29	16
31	17	---	10	9.1	---	8.7	---	336	---	21	24	---
TOTAL	731	434	339	300.6	244.2	267.2	1564.8	6591	5658	1099	632	616
MEAN	23.6	14.5	10.9	9.70	8.72	8.62	52.2	213	189	35.5	20.4	20.5
MAX	32	17	13	10	9.1	8.7	180	336	373	67	36	39
MIN	17	13	10	9.1	8.3	8.6	8.7	56	70	20	12	16
AC-FT	1450	861	672	596	484	530	3100	13070	11220	2180	1250	1220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1953	23.6	83.7	1962	9.25	1957
1954	14.9	37.2	1962	7.43	1957
1955	9.71	17.4	1962	4.56	1957
1956	7.75	12.8	1985	3.91	1957
1957	6.97	10.6	1984	3.90	1977
1958	7.36	11.9	1972	4.57	1977
1959	27.9	74.5	1962	9.11	1991
1960	165	315	1958	70.9	1981
1961	309	547	1971	69.8	1954
1962	109	425	1983	27.3	1954
1963	32.8	104	1983	11.1	1954
1964	25.9	75.5	1961	11.8	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

ANNUAL TOTAL	26239.3	18476.8	
ANNUAL MEAN	71.9	50.6	62.0
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			26.3
HIGHEST DAILY MEAN	526	373	916
LOWEST DAILY MEAN	6.1	8.3	3.0
ANNUAL SEVEN-DAY MINIMUM	6.1	8.5	3.5
INSTANTANEOUS PEAK FLOW		434	976
INSTANTANEOUS PEAK STAGE		6.32	7.19
ANNUAL RUNOFF (AC-FT)	52050	36650	44920
10 PERCENT EXCEEDS	278	170	186
50 PERCENT EXCEEDS	20	17	17
90 PERCENT EXCEEDS	6.7	8.6	6.4

a-Also occurred Mar 7-11.

b-Maximum gage height, 7.30 ft, Jun 25, 1971.

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1970 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 17...	1415	204	46	7.3	4.5	8.1	17	5.2	1.0	1.8
JAN 24...	1400	553	58	7.7	2.0	8.8	23	6.9	1.3	2.2
MAR 15...	1535	210	61	7.5	2.5	8.9	24	7.2	1.4	2.3
MAY 17...	1340	230	45	7.8	5.5	8.3	18	5.4	0.97	1.8
JUL 22...	1120	506	41	8.2	16.5	7.6	15	4.7	0.88	1.6
SEP 27...	1510	542	55	8.2	12.0	7.9	21	6.6	1.2	2.1
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 17...	0.2	0.6	19	2.7	0.4	0.2	5.6	34	29	0.05
JAN 24...	0.2	0.8	27	3.3	0.5	0.2	6.3	44	38	0.06
MAR 15...	0.2	0.7	26	3.3	0.5	0.1	7.1	38	39	0.05
MAY 17...	0.2	0.4	18	2.7	0.4	0.1	5.9	42	29	0.06
JUL 22...	0.2	0.6	17	2.4	0.4	0.2	5.0	32	26	0.04
SEP 27...	0.2	0.7	24	3.2	0.4	0.1	5.1	32	34	0.04
DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	
NOV 17...	18.7	0.03	0.08	0.01	0.19	0.20	0.02	<0.01	<0.01	
JAN 24...	65.7	<0.01	<0.05	0.01	--	<0.20	<0.01	<0.01	<0.01	
MAR 15...	21.5	<0.01	0.06	0.01	--	<0.20	0.02	<0.01	<0.01	
MAY 17...	26.1	0.02	0.09	0.03	0.17	0.20	<0.01	<0.01	<0.01	
JUL 22...	43.7	<0.01	<0.05	0.02	0.48	0.50	0.02	<0.01	<0.01	
SEP 27...	46.8	<0.01	<0.05	0.01	0.19	0.20	0.01	<0.01	<0.01	

GRAND LAKE OUTLET BASIN

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 17...	1415	6	<0.5	<10	<1	<5	<3	<10	16
JAN 24...	1400	8	<0.5	<10	<1	<5	<3	<10	16
MAR 15...	1535	8	<0.5	<10	<1	<5	<3	<10	18
MAY 17...	1340	5	<0.5	<10	2	<5	<3	<10	34
JUL 22...	1120	5	<0.5	<10	<1	<5	<3	<10	18
SEP 27...	1510	6	<0.5	<10	<1	<5	<3	<10	20

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 17...	10	<4	1	<10	<10	<1	31	<6	7
JAN 24...	<10	<4	<1	<10	<10	<1	39	<6	4
MAR 15...	<10	<4	<1	<10	<10	2	43	<6	<3
MAY 17...	<10	<4	3	<10	<10	<1	29	<6	10
JUL 22...	<10	<4	<1	<10	<10	1	26	<6	9
SEP 27...	<10	<4	<1	<10	<10	<1	41	<6	10

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'26", long 105°50'27", in SW¹/₄NW¹/₄ sec.19, T.3 N., R.75 W., Grand County, Hydrologic Unit 14010001, in gate house on left side of outlet gates near center of Shadow Mountain Dam on Colorado River, 1.0 mi upstream from Pole Creek and 3.2 mi south of town of Grand Lake.

DRAINAGE AREA.--185 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1947 to current year. Prior to October 1960, published as Shadow Mountain Reservoir near Grand Lake.

REVISED RECORDS.--WSP 1149: 1947-48. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level. Supplementary water-stage recorder on Grand Lake, 800 ft north of outlet gates and 2.9 mi north of Shadow Mountain Dam.

REMARKS.--Lake is formed by earth and rockfill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft, including usable capacity of Grand Lake above elevation 8,365 ft, between elevation 8,347 ft, sill of outlet gate, and 8,367 ft, maximum water surface. Dead storage in Shadow Mountain Lake, 506 acre-ft. Dead storage in Grand Lake not determined. Shadow Mountain Lake is used for stabilization of water level in Grand Lake. Usable capacity for diversion through Alva B. Adams tunnel, 3,660 acre-ft between elevations 8,365 ft, crest of tunnel inlet and 8,367 ft, maximum water surface. Figures given represent usable contents as determined from summation of individual contents of Grand Lake and Shadow Mountain Lake. Transmountain diversion from Colorado River basin, including water pumped from Lake Granby, is effected through Grand Lake and Alva B. Adams tunnel, for power and irrigation in South Platte River basin.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,920 acre-ft, May 22, 1955, elevation, 8,367.03 ft; minimum since appreciable storage was first attained, 2,630 acre-ft, May 14, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,530 acre-ft, July 10, elevation, 8,366.86 ft; minimum, 16,890 acre-ft, May 22, elevation, 8,366.48 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,366.74	17,400	-
Oct. 31.	8,366.73	17,360	-40
Nov. 30.	8,366.65	17,240	-120
Dec. 31.	8,366.70	17,300	+60
CAL YR 1993.			+70
Jan. 31.	8,366.64	17,190	-110
Feb. 28.	8,366.68	17,270	+80
Mar. 31.	8,366.59	17,140	-130
Apr. 30.	8,366.71	17,300	+160
May 31.	8,366.59	17,160	-140
June 30.	8,366.72	17,290	+130
July 31.	8,366.85	17,500	+210
Aug. 31.	8,366.80	17,400	-100
Sept. 30.	8,366.71	17,280	-120
WTR YR 1994.			-120

COLORADO RIVER BASIN

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO--Continued

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

REMARKS.--Samples were collected near surface and near bottom, near dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

				SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)				
		DATE	TIME									
OCT												
	08...		1056	0.1	61	7.1	9.0	6.0				
	08...		1057	5.0	61	7.1	9.0	5.8				
	08...		1058	10	61	7.1	9.0	5.6				
	08...		1059	15	61	7.0	9.0	5.5				
	08...		1100	20	61	7.0	9.0	5.5				
	08...		1101	25	61	7.0	9.0	5.4				
MAY												
	27...		0920	0.1	44	7.9	12.0	8.1				
	27...		0921	5.0	44	7.9	12.0	8.1				
	27...		0922	10	43	7.8	11.5	8.0				
	27...		0923	15	43	7.8	11.0	7.8				
	27...		0924	20	43	7.7	10.0	7.5				
	27...		0925	25	42	7.6	8.0	6.1				
JUN												
	24...		0940	0.1	34	7.6	16.5	6.7				
	24...		0941	5.0	34	7.7	16.5	6.6				
	24...		0942	10	34	7.6	16.0	6.4				
	24...		0943	15	35	7.4	15.0	5.2				
	24...		0944	20	36	7.3	14.0	4.4				
	24...		0945	25	37	7.2	13.5	3.6				
JUL												
	21...		0930	0.1	54	7.5	11.5	6.5				
	21...		0931	5.0	54	7.4	11.0	6.4				
	21...		0932	10	54	7.4	10.5	6.2				
	21...		0933	15	54	7.4	10.0	6.1				
	21...		0934	20	54	7.4	10.0	6.1				
	21...		0935	25	54	7.3	9.5	5.7				
AUG												
	26...		0910	0.1	56	7.3	10.5	6.0				
	26...		0911	5.0	56	7.3	10.5	5.7				
	26...		0912	10	56	7.2	10.0	5.3				
	26...		0913	15	56	7.2	10.0	5.1				
	26...		0914	20	56	7.2	9.5	5.1				
	26...		0915	25	56	7.2	9.5	4.7				
SEP												
	16...		1005	0.1	56	7.5	9.0	4.6				
	16...		1006	5.0	56	7.4	8.5	4.7				
	16...		1007	10	56	7.4	8.5	4.7				
	16...		1008	15	56	7.4	8.5	4.6				
	16...		1009	20	56	7.3	8.5	4.6				
	16...		1010	25	56	7.3	8.5	4.3				
		DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT												
	08...		1020	0.1	61	7.1	9.0	64.0	6.0	<1	24	7.3
	08...		1035	25	61	7.0	9.0	--	5.4	--	24	7.4
MAY												
	27...		0930	0.1	44	7.9	12.0	73.0	8.1	K1	19	5.7
	27...		0945	25	42	7.6	8.0	--	6.1	--	19	5.6
JUN												
	24...		1000	0.1	34	7.6	16.5	62.0	6.7	K7	14	4.3
	24...		1020	25	37	7.2	13.5	--	3.6	--	16	4.8
JUL												
	22...		1000	0.1	54	7.5	11.5	119	6.5	<1	23	6.9
	22...		1020	25	54	7.3	9.5	--	5.7	--	23	7.1
AUG												
	26...		0930	0.1	56	7.3	10.5	85.0	6.0	K4	24	7.5
	26...		0945	25	56	7.2	9.5	--	4.7	--	24	7.5
SEP												
	16...		1015	0.1	56	7.5	9.0	76.0	4.6	<1	25	7.7
	16...		1030	25	56	7.3	8.5	--	4.3	--	25	7.6

K-Based on non-ideal colony count.

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT										
08...	1.4	2.3	0.2	0.4	26	3.2	0.5	0.1	7.3	48
08...	1.4	2.3	0.2	0.7	26	3.2	0.4	0.1	7.3	40
MAY										
27...	1.2	1.7	0.2	0.8	20	3.2	0.5	0.2	6.5	36
27...	1.2	1.8	0.2	0.8	19	3.3	0.4	0.2	7.0	40
JUN										
24...	0.9	1.4	0.2	0.5	16	2.5	0.2	0.1	4.8	22
24...	1.0	2.0	0.2	0.6	16	3.0	0.5	0.1	5.6	28
JUL										
22...	1.3	2.1	0.2	1.0	25	3.2	0.4	0.2	6.7	38
22...	1.3	2.1	0.2	0.7	25	3.3	0.4	0.2	6.9	44
AUG										
26...	1.3	2.4	0.2	0.8	26	2.6	0.5	0.2	6.9	44
26...	1.3	2.5	0.2	0.8	27	2.6	0.5	0.1	7.1	52
SEP										
16...	1.4	2.2	0.2	0.6	26	3.0	0.4	0.2	7.4	40
16...	1.4	2.2	0.2	0.6	26	2.9	0.4	0.1	7.4	40

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT										
08...	38	<0.01	0.05	<0.01	0.30	0.02	<0.01	<0.01	6.6	0.2
08...	39	<0.01	0.05	<0.01	<0.20	<0.01	<0.01	<0.01	--	--
MAY										
27...	32	0.03	0.09	0.05	0.20	<0.01	<0.01	<0.01	1.2	<0.1
27...	32	0.03	<0.05	0.05	0.20	0.01	<0.01	<0.01	--	--
JUN										
24...	24	<0.01	<0.05	0.01	0.20	0.03	<0.01	<0.01	4.0	0.2
24...	28	<0.01	0.06	0.02	<0.20	<0.01	<0.01	<0.01	--	--
JUL										
22...	37	<0.01	<0.05	0.02	0.20	0.01	<0.01	<0.01	3.8	<0.1
22...	37	<0.01	<0.05	0.01	0.30	0.01	<0.01	<0.01	--	--
AUG										
26...	38	<0.01	<0.05	0.01	0.20	<0.01	<0.01	<0.01	2.8	<0.1
26...	39	<0.01	0.06	0.01	<0.20	0.02	<0.01	<0.01	--	--
SEP										
16...	39	<0.01	0.07	<0.01	0.20	0.01	<0.01	<0.01	3.7	0.5
16...	39	<0.01	0.08	<0.01	0.20	0.01	<0.01	<0.01	--	--

DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
08...	1020	8	<0.5	<10	<1	<5	<3	<10	24
08...	1035	8	<0.5	<10	2	<5	<3	<10	14
MAY									
27...	0930	7	<0.5	<10	<1	<5	<3	<10	54
27...	0945	7	<0.5	<10	2	<5	4	<10	72
JUN									
24...	1000	6	<0.5	<10	<1	<5	<3	<10	39
24...	1020	7	<0.5	<10	1	<5	<3	<10	98
JUL									
22...	1000	8	<0.5	<10	<1	<5	<3	<10	16
22...	1020	8	<0.5	<10	<1	<5	<3	<10	14
AUG									
26...	0930	8	<0.5	<10	<1	<5	<3	<10	19
26...	0945	8	<0.5	<10	<1	<5	<3	<10	17
SEP									
16...	1015	8	<0.5	<10	<1	<5	<3	<10	13
16...	1030	8	<0.5	<10	<1	<5	<3	<10	12

COLORADO RIVER BASIN

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
08...	<10	<4	3	<10	<10	<0.2	45	<6	11
08...	<10	<4	1	<10	<10	<0.2	45	<6	13
MAY									
27...	<10	<4	32	<10	<10	<0.2	32	<6	7
27...	<10	<4	57	<10	<10	<0.2	30	<6	15
JUN									
24...	<10	<4	2	<10	<10	<0.2	25	<6	7
24...	<10	<4	27	<10	<10	<0.2	28	<6	29
JUL									
22...	<10	<4	2	<10	<10	<0.2	39	<6	4
22...	<10	<4	1	<10	<10	<0.2	42	<6	<3
AUG									
26...	<10	<4	4	<10	<10	<0.2	46	<6	8
26...	<10	<4	6	<10	<10	<0.2	47	<6	11
SEP									
16...	<10	<4	7	<10	<10	<0.2	45	<6	13
16...	<10	<4	4	<10	<10	<0.2	45	<6	<3

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°12'25", long 105°50'56", in SW¹/4NE¹/4 sec.24, T. 3 N., R.76 W., Grand County, Hydrologic Unit 14010001, at road crossing at south end of Shadow Mountain Lake, 4 mi southwest of Grand Lake, and 13.5 mi northeast of Granby.

PERIOD OF RECORD.--September 1970 to September 1975, March 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
NOV 03...	2000	387	58	7.8	4.0	5.9	21	6.4	1.2	2.1
DEC 09...	0700	715	60	8.0	2.5	10.6	24	7.4	1.3	2.4
JAN 13...	1745	702	59	7.3	3.5	11.2	23	7.2	1.3	2.3
FEB 10...	1900	710	61	8.1	2.5	8.8	23	7.2	1.3	2.3
JUL 21...	1930	792	69	7.3	7.5	5.4	25	7.5	1.4	2.3
AUG 18...	1815	780	60	7.4	7.5	4.5	24	7.3	1.3	2.2

DATE	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
NOV 03...	0.2	0.7	25	3.1	1.7	0.1	6.2	32	37
DEC 09...	0.2	0.6	29	4.0	0.3	0.2	6.3	46	40
JAN 13...	0.2	0.7	26	3.4	0.5	0.1	6.8	47	38
FEB 10...	0.2	0.8	26	3.3	0.5	<0.1	6.4	48	38
JUL 21...	0.2	0.6	26	3.3	0.5	0.2	7.2	40	39
AUG 18...	0.2	0.7	26	3.5	0.5	0.1	7.4	40	39

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	GEN. AMMONIA DIS-SOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 03...	0.04	33.4	<0.01	<0.20	<0.05	0.02	0.03	0.02	0.01
DEC 09...	0.06	88.8	--	<0.20	--	--	<0.01	--	--
JAN 13...	0.06	89.1	<0.01	0.20	<0.05	0.02	0.02	0.02	<0.01
FEB 10...	0.06	92.0	0.02	0.20	<0.05	0.02	0.03	<0.01	<0.01
JUL 21...	0.05	85.5	<0.01	<0.20	<0.05	<0.01	0.01	<0.01	<0.01
AUG 18...	0.05	84.2	<0.01	<0.20	0.07	0.02	<0.01	<0.01	<0.01

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 03...	7	<0.5	<1	<5	<3	<10	7	<10
DEC 09...	9	<0.5	<1	<5	<3	<10	61	<10
JAN 13...	8	<0.5	<1	<5	<3	<10	8	<10
FEB 10...	8	<0.5	1	<5	<3	<10	11	<10
JUL 21...	8	<0.5	<1	<5	<3	<10	14	<10
AUG 18...	7	<0.5	<1	<5	<3	<10	15	<10

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 03...	6	1	<10	<10	<1	40	<6	5
DEC 09...	<4	25	<10	<10	<1	45	<6	6
JAN 13...	<4	1	<10	<10	2	45	<6	5
FEB 10...	<4	<1	<10	<10	<1	45	<6	5
JUL 21...	<4	2	<10	<10	2	45	<6	14
AUG 18...	<4	3	<10	<10	<1	45	<6	8

400833105532000 LAKE GRANBY INFLOW FROM WINDY GAP TUNNEL

WATER-QUALITY RECORDS

LOCATION.--Lat 40°08'33", long 105°53'20", SW¹/4SE¹/4 sec.10, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, left tunnel in outflow structure.

PERIOD OF RECORD.--June 12, 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE	PH	TEMPER- ATURE WATER	COLI - FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	
		(US/CM)	UNITS)	(DEG C)						
MAY 25...	1330	91	7.7	10.5	K14	35	11	1.9	3.7	
DATE	TIME	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
MAY 25...	0.3	1.0	39	3.6	1.4	0.1	11	70	58	
DATE	TIME	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	
MAY 25...	0.03	<0.05	0.06	0.30	0.06	<0.01	0.01	1.2	0.1	
DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	
MAY 25...	1330	14	<0.5	<10	<1	<5	<3	<10	110	
DATE	TIME	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY 25...	<10	<4	45	<10	<10	<0.2	65	<6	<3	

K-Based on non-ideal colony count.

09018500 LAKE GRANBY NEAR GRANBY, CO

LOCATION.--Lat 40°10'55", long 105°52'14", in NW¹/₄NE¹/₄ sec.35, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, in Granby pumping plant at north shore of lake, 2.5 mi north of Granby Dam on Colorado River and 7.5 mi northeast of Granby.

DRAINAGE AREA.--312 mi².

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1955, published as Granby Reservoir near Granby.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level. Prior to Apr. 9, 1951, nonrecording gage at dam at present datum.

REMARKS.--Lake is formed by earthfill dam and dikes. Regulation began Sept. 13, 1949, and usable storage began June 14, 1950, while dam was under construction. Usable capacity, 465,600 acre-ft, between elevations 8,186.00 ft, trash rack sill at outlet, and 8,280.00 ft, top of radial spillway gates. Dead storage, 74,190 acre-ft. Figures given represent usable contents. Lake is used to store water for pumping to Shadow Mountain Lake for transmountain diversion through Alva B. Adams tunnel for, power and irrigation in South Platte River basin.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,900 acre-ft, July 13, 1962, elevation, 8,280.05 ft; minimum since appreciable storage was attained, 13,070 acre-ft, Apr. 16, 1978, elevation, 8,190.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 421,800 acre-ft, June 29, elevation, 8,273.86 ft; minimum, 277,400 acre ft, Mar. 27-29, elevation, 8,251.44 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,266.73	373,000	-
Oct. 31.	8,265.33	363,800	-9,200
Nov. 30.	8,263.91	354,500	-9,300
Dec. 31.	8,259.84	328,500	-26,000
CAL YR 1993.			+116,800
Jan. 31.	8,256.03	304,900	-23,600
Feb. 28.	8,253.17	287,600	-17,300
Mar. 31.	8,251.50	277,700	-9,900
Apr. 30.	8,254.39	294,900	+17,200
May 31.	8,266.69	372,700	+77,800
June 30.	8,273.79	421,300	+48,600
July 31.	8,269.73	393,300	-28,000
Aug. 31.	8,265.69	366,200	-27,100
Sept. 30.	8,261.58	339,500	-26,700
WTR YR 1994.			-33,500

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, June 1979 to current year.

REMARKS.--Samples were collected near surface and near bottom, near spillway.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT						
07...	0945	0.1	56	7.7	12.5	7.2
07...	0946	5.0	56	7.7	12.5	7.2
07...	0947	10	56	7.7	12.5	7.2
07...	0948	15	56	7.7	12.5	7.0
07...	0949	20	56	7.7	12.5	7.0
07...	0950	25	56	7.6	12.5	7.0
07...	0951	30	56	7.6	12.5	7.0
07...	0952	40	56	7.6	12.5	7.0
07...	0953	50	56	7.5	12.0	6.8
07...	0954	60	57	7.2	11.0	4.6
07...	0955	70	59	7.1	8.5	2.6
07...	0956	80	60	7.1	8.5	2.3
07...	0957	90	61	7.1	8.0	2.2
07...	0958	100	61	7.1	8.0	2.1
07...	0959	110	61	7.1	8.0	2.1
07...	1000	120	61	7.1	8.0	2.0
07...	1001	130	61	7.1	8.0	2.0
07...	1002	140	61	7.0	8.0	2.0
07...	1003	145	61	7.1	8.0	2.0
MAY						
26...	0911	0.1	52	7.8	9.0	8.7
26...	0912	5.0	52	7.8	9.5	8.7
26...	0913	10	52	7.8	9.5	8.8
26...	0914	15	52	7.8	9.0	8.7
26...	0915	20	52	7.8	9.0	8.6
26...	0916	25	52	7.8	9.0	8.6
26...	0917	30	52	7.7	9.0	8.6
26...	0918	40	53	7.7	8.5	8.5
26...	0919	50	53	7.7	8.0	8.4
26...	0920	60	54	7.7	7.0	8.2
26...	0921	70	54	7.6	5.5	8.0
26...	0922	80	54	7.6	5.5	7.9
26...	0923	90	54	7.6	5.5	7.9
26...	0924	100	54	7.6	5.5	7.9
26...	0925	110	54	7.5	5.0	7.8
26...	0926	120	54	7.5	5.0	7.7
26...	0927	130	54	7.5	4.5	7.5
26...	0928	140	54	7.5	4.5	7.4
JUN						
23...	0956	0.1	53	8.1	16.0	7.4
23...	0957	5.0	53	8.2	16.0	7.4
23...	0958	10	53	8.1	15.5	7.4
23...	0959	15	53	8.1	15.5	7.4
23...	1000	20	53	8.1	15.5	7.3
23...	1001	25	53	7.9	13.5	6.9
23...	1002	30	52	7.9	13.0	6.8
23...	1003	40	54	7.7	11.5	6.6
23...	1004	50	55	7.7	7.0	6.2
23...	1005	60	54	7.6	6.5	6.3
23...	1006	70	54	7.6	6.0	6.3
23...	1007	80	54	7.5	6.0	6.2
23...	1008	90	54	7.5	6.0	6.2
23...	1009	100	54	7.5	5.5	6.2
23...	1010	110	54	7.5	5.5	6.1
23...	1011	120	55	7.5	5.5	6.1
23...	1012	130	55	7.4	5.5	6.0
23...	1013	140	55	7.4	5.5	6.0

COLORADO RIVER MAIN STEM

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
JUL						
21...	0915	0.1	54	8.4	17.0	7.2
21...	0916	5.0	54	8.4	17.0	7.1
21...	0917	10	54	8.4	17.0	7.0
21...	0918	15	54	8.4	17.0	7.0
21...	0919	20	54	8.4	17.0	6.9
21...	0920	25	54	8.2	16.0	6.5
21...	0921	30	54	8.0	16.0	6.4
21...	0922	40	54	7.8	14.0	5.5
21...	0923	50	54	7.7	8.0	4.9
21...	0924	60	55	7.6	7.0	4.7
21...	0925	70	55	7.5	6.5	4.9
21...	0926	80	55	7.5	6.5	5.0
21...	0927	90	54	7.4	6.5	4.9
21...	0928	100	54	7.4	6.5	4.9
21...	0929	110	54	7.4	6.5	4.9
21...	0930	120	54	7.4	6.5	5.0
21...	0931	130	54	7.3	6.0	4.9
21...	0932	140	54	7.3	6.0	4.9
21...	0933	145	54	7.3	6.0	4.8
AUG						
26...	0905	0.1	55	9.0	17.5	7.5
26...	0906	5.0	55	9.0	17.5	7.5
26...	0907	10	55	9.0	17.5	7.5
26...	0908	15	55	9.0	17.5	7.4
26...	0909	20	55	8.8	17.0	7.1
26...	0910	25	55	8.8	17.0	7.0
26...	0911	30	55	8.7	17.0	6.8
26...	0912	40	55	8.0	15.0	4.6
26...	0913	50	55	7.8	9.0	3.1
26...	0914	60	55	7.6	8.0	3.2
26...	0915	70	55	7.5	7.0	3.7
26...	0916	80	55	7.4	7.0	3.7
26...	0917	90	55	7.4	7.0	3.7
26...	0918	100	55	7.3	6.5	3.8
26...	0919	110	55	7.3	6.5	3.8
26...	0920	120	55	7.2	6.5	3.8
26...	0921	130	55	7.2	6.5	3.8
26...	0922	135	55	7.2	6.5	3.6
SEP						
16...	0920	0.10	55	8.9	15.5	7.2
16...	0921	5.00	55	8.9	15.5	7.1
16...	0922	10	55	8.9	15.5	7.1
16...	0923	15	55	8.9	15.5	7.0
16...	0924	20	55	8.9	15.5	7.0
16...	0925	25	55	8.9	15.5	7.0
16...	0926	30	55	8.9	15.5	7.0
16...	0927	40	55	8.0	14.0	3.5
16...	0928	50	54	7.7	10.0	2.8
16...	0929	60	54	7.6	8.5	2.9
16...	0930	70	55	7.6	7.5	2.6
16...	0931	80	55	7.5	7.0	2.9
16...	0932	90	55	7.4	7.0	2.9
16...	0933	100	55	7.4	7.0	2.9
16...	0934	110	55	7.4	7.0	2.9
16...	0935	120	55	7.3	6.5	3.0
16...	0936	130	55	7.3	6.5	3.0

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT										
07...	0920	0.1	56	7.7	12.5	128	7.2	<1	23	6.9
07...	0935	145	61	7.1	8.0	--	2.0	--	25	7.5
MAY										
26...	0945	0.1	52	7.8	9.0	114	8.7	<1	23	7.0
26...	0955	140	54	7.5	4.5	--	7.4	--	24	7.3
JUN										
23...	1030	0.1	53	8.1	16.0	141	7.4	<1	22	6.8
23...	1045	140	55	7.4	5.5	--	6.0	--	24	7.3
JUL										
21...	1000	0.1	54	8.4	17.0	153	7.2	<1	22	6.9
21...	1015	145	54	7.3	6.0	--	4.8	--	23	7.2
AUG										
25...	0940	0.1	55	9.0	17.5	138	7.5	<1	23	7.2
25...	1000	135	55	7.2	6.5	--	3.6	--	23	7.1
SEP										
15...	0945	0.1	55	8.9	15.5	88.0	7.2	<1	24	7.3
15...	1000	130	55	7.3	6.5	--	3.0	--	24	7.5

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT										
07...	1.3	2.0	0.2	0.6	24	2.9	0.4	0.1	5.7	50
07...	1.4	2.3	0.2	0.7	26	3.3	0.4	0.1	7.9	42
MAY										
26...	1.4	2.2	0.2	0.7	25	3.4	0.5	0.1	7.0	44
26...	1.3	2.4	0.2	0.8	26	3.5	0.4	0.1	7.0	50
JUN										
23...	1.2	2.1	0.2	1.0	24	3.4	0.6	0.1	5.8	30
23...	1.3	2.3	0.2	0.7	26	3.3	0.5	0.1	6.8	36
JUL										
21...	1.2	2.2	0.2	0.7	25	3.1	0.4	0.2	6.2	41
21...	1.3	2.2	0.2	0.7	26	3.2	0.4	0.2	7.2	44
AUG										
25...	1.2	2.4	0.2	0.7	25	2.4	0.5	0.1	6.0	36
25...	1.2	2.3	0.2	0.7	26	2.6	0.5	0.2	6.9	44
SEP										
15...	1.3	2.1	0.2	0.7	25	2.9	0.4	0.1	6.3	32
15...	1.3	2.2	0.2	0.8	26	2.9	0.4	0.1	7.7	40

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT										
07...	34	<0.01	<0.05	<0.01	<0.20	0.03	<0.01	<0.01	3.0	<0.1
07...	40	<0.01	0.15	0.01	<0.20	0.02	<0.01	0.01	--	--
MAY										
26...	38	0.03	<0.05	0.05	0.20	<0.01	<0.01	<0.01	1.3	<0.1
26...	39	0.02	<0.05	0.04	0.20	0.01	<0.01	<0.01	--	--
JUN										
23...	35	<0.01	<0.05	0.01	<0.20	0.02	<0.01	<0.01	1.6	<0.1
23...	38	<0.01	<0.05	<0.01	<0.20	0.02	<0.01	<0.01	--	--
JUL										
21...	36	<0.01	<0.05	<0.01	0.20	0.01	<0.01	<0.01	2.5	<0.1
21...	38	<0.01	0.06	0.01	<0.20	0.01	<0.01	<0.01	--	--
AUG										
25...	36	<0.01	<0.05	0.01	0.20	<0.01	<0.01	<0.01	4.4	<0.1
25...	38	<0.01	0.09	0.01	<0.20	0.01	<0.01	<0.01	--	--
SEP										
15...	36	<0.01	<0.05	<0.01	0.20	<0.01	<0.01	<0.01	8.4	0.2
15...	39	<0.01	0.11	<0.01	<0.20	<0.01	<0.01	<0.01	--	--

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
07...	0920	8	<0.5	<10	<1	<5	<3	<10	13
07...	0935	7	<0.5	<10	<1	<5	<3	<10	22
MAY									
26...	0945	9	<0.5	<10	1	<5	4	<10	30
26...	0955	7	<0.5	<10	1	<5	<3	<10	18
JUN									
23...	1030	8	<0.5	<10	<1	<5	<3	<10	12
23...	1045	8	<0.5	<10	<1	<5	<3	<10	16
JUL									
21...	1000	8	<0.5	<10	<1	<5	<3	<10	12
21...	1015	8	<0.5	<10	<1	<5	<3	<10	9
AUG									
25...	0940	8	<0.5	<10	<1	<5	<3	<10	<3
25...	1000	9	<0.5	10	<1	<5	<3	<10	11
SEP									
15...	0945	8	<0.5	<10	2	<5	<3	<10	16
15...	1000	8	<0.5	<10	<1	<5	<3	<10	10

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
07...	<10	<4	1	<10	<10	<0.2	42	<6	13
07...	<10	<4	6	<10	<10	<0.2	47	<6	16
MAY									
26...	<10	<4	4	<10	<10	<0.2	45	<6	<3
26...	10	<4	8	<10	<10	<0.2	45	<6	13
JUN									
23...	<10	<4	<1	<10	<10	<0.2	43	<6	8
23...	<10	<4	8	<10	<10	<0.2	48	<6	11
JUL									
21...	<10	<4	1	<10	<10	<0.2	40	<6	13
21...	<10	<4	10	<10	<10	<0.2	44	<6	5
AUG									
25...	<10	<4	<1	<10	<10	<0.2	44	<6	5
25...	<10	<4	8	<10	<10	<0.2	45	<6	13
SEP									
15...	<10	<4	1	<10	<10	<0.2	44	<6	<3
15...	<10	<4	3	<10	<10	<0.2	45	<6	7

400844105530800 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Samples were collected near surface and near bottom, near dam in Rainbow Bay.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT						
07...	1050	0.1	56	7.7	12.0	8.0
07...	1051	5.0	56	7.7	12.0	7.8
07...	1052	10	56	7.7	12.0	7.7
07...	1053	15	56	7.7	12.0	7.6
07...	1054	20	56	7.6	12.0	7.5
07...	1055	25	56	7.6	12.0	7.3
07...	1056	30	56	7.6	12.0	7.2
07...	1057	40	56	7.5	12.0	7.2
07...	1058	50	56	7.2	12.0	7.2
MAY						
26...	1047	0.1	58	7.8	11.0	8.5
26...	1048	5.0	58	7.8	11.0	8.6
26...	1049	10	61	7.8	10.5	8.6
26...	1050	15	62	7.7	10.0	8.5
26...	1051	20	62	7.7	10.5	8.5
26...	1052	25	62	7.7	10.0	8.5
26...	1053	30	63	7.7	10.0	8.5
26...	1054	40	64	7.7	10.0	8.5
26...	1055	50	62	7.7	9.5	8.4
JUN						
23...	1133	0.1	54	7.9	17.0	7.2
23...	1134	5.0	54	8.0	16.0	7.4
23...	1135	10	54	8.0	16.0	7.3
23...	1136	15	54	7.9	15.5	7.2
23...	1137	20	54	7.8	15.0	7.2
23...	1138	25	54	7.7	14.0	7.0
23...	1139	30	55	7.6	13.0	6.8
23...	1140	40	54	7.6	12.0	6.7
23...	1141	50	56	7.5	8.0	6.0
23...	1142	60	56	7.4	7.0	5.7
23...	1143	70	55	7.4	6.5	5.7
JUL						
21...	1035	0.1	55	8.4	17.5	7.1
21...	1036	5.0	55	8.4	17.0	7.1
21...	1037	10	55	8.4	17.0	7.1
21...	1038	15	55	8.3	17.0	7.0
21...	1039	20	55	8.3	17.0	7.0
21...	1040	25	55	8.2	16.5	6.8
21...	1041	30	55	8.1	16.0	6.7
21...	1042	40	55	7.6	11.5	4.8
21...	1043	50	55	7.5	9.0	4.2
AUG						
26...	1015	0.1	56	8.9	17.5	7.4
26...	1016	5.0	56	8.8	17.5	7.5
26...	1017	10	56	8.8	17.0	7.5
26...	1018	15	56	8.8	17.0	7.4
26...	1019	20	56	8.9	17.0	7.4
26...	1020	25	56	8.9	17.0	7.4
26...	1021	30	56	8.9	17.0	7.3
26...	1022	40	55	8.0	13.0	3.6
26...	1023	50	55	7.6	12.0	3.1
SEP						
16...	1020	0.1	55	8.9	15.0	7.1
16...	1021	5.0	55	8.9	15.0	7.1
16...	1022	10	55	8.9	15.0	7.0
16...	1023	15	55	8.9	15.0	7.0
16...	1024	20	55	8.8	15.0	7.0
16...	1025	25	55	8.8	15.0	6.9
16...	1026	30	55	8.8	15.0	7.0
16...	1027	40	55	8.8	15.0	7.0
16...	1028	50	56	7.8	11.0	1.9

COLORADO RIVER MAIN STEM

400844105530800 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT										
07...	1025	0.1	56	7.7	12.5	--	8.0	<1	23	7.1
07...	1040	50	56	7.2	12.0	--	7.2	--	22	6.8
MAY										
26...	1100	0.1	58	7.8	11.0	57.0	8.5	<1	26	7.9
26...	1115	50	62	7.7	9.5	--	8.4	--	26	7.8
JUN										
23...	1200	0.1	54	7.9	17.0	112	7.2	K3	22	6.8
23...	1215	70	55	7.4	6.5	--	5.7	--	24	7.4
JUL										
21...	1055	0.1	55	8.4	17.5	93.0	7.1	K1	23	7.0
21...	1115	50	55	7.5	9.0	--	4.2	--	23	7.2
AUG										
25...	1045	0.1	56	8.9	17.5	56.0	7.4	<1	23	7.3
25...	1100	50	55	7.6	12.0	--	3.1	--	23	7.4
SEP										
15...	1045	0.1	55	8.9	15.0	87.0	7.1	<1	24	7.3
15...	1100	50	56	7.8	11.0	--	1.9	--	24	7.5

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT										
07...	1.3	2.2	0.2	0.6	24	3.1	0.4	0.1	5.8	54
07...	1.3	2.1	0.2	0.6	24	3.0	0.3	0.1	5.8	44
MAY										
26...	1.5	2.6	0.2	0.8	28	3.6	0.5	0.1	8.0	48
26...	1.5	2.6	0.2	0.8	28	3.7	0.6	0.1	8.4	40
JUN										
23...	1.2	2.2	0.2	0.7	25	3.2	0.4	0.1	5.9	54
23...	1.3	2.3	0.2	0.7	26	3.4	0.4	0.1	6.8	40
JUL										
21...	1.3	2.0	0.2	0.8	25	3.1	0.4	0.2	6.3	44
21...	1.3	2.1	0.2	0.7	26	3.3	0.4	0.2	6.8	36
AUG										
25...	1.2	2.3	0.2	0.9	26	2.4	0.4	<0.1	6.1	32
25...	1.2	2.4	0.2	0.8	26	2.5	0.4	0.1	6.6	46
SEP										
15...	1.3	2.1	0.2	0.6	26	2.8	0.4	0.1	6.3	42
15...	1.3	2.3	0.2	0.7	26	2.8	0.4	0.1	6.9	36

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHODIS- SOLVED (MG/L AS P)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT										
07...	35	<0.01	<0.05	0.01	<0.20	<0.01	<0.01	<0.01	3.6	<0.1
07...	34	<0.01	<0.05	0.01	<0.20	<0.01	<0.01	<0.01	--	--
MAY										
26...	42	0.03	<0.05	0.05	0.20	0.01	<0.01	<0.01	1.2	<0.1
26...	43	0.03	<0.05	0.05	0.30	0.01	<0.01	<0.01	--	--
JUN										
23...	36	<0.01	<0.05	0.02	0.20	0.04	0.03	<0.01	1.4	<0.1
23...	38	<0.01	<0.05	0.02	0.20	0.02	<0.01	<0.01	--	--
JUL										
21...	36	<0.01	<0.05	0.01	0.20	0.03	<0.01	<0.01	3.1	<0.1
21...	38	<0.01	<0.05	0.01	0.20	0.01	<0.01	<0.01	--	--
AUG										
25...	36	<0.01	<0.05	<0.01	0.20	<0.01	<0.01	<0.01	4.5	<0.1
25...	37	<0.01	<0.05	0.02	<0.20	0.01	<0.01	<0.01	--	--
SEP										
15...	37	<0.01	<0.05	0.03	0.30	0.02	0.02	0.01	7.9	0.3
15...	38	<0.01	0.09	<0.01	<0.20	<0.01	0.01	<0.01	--	--

K-Based on non-ideal colony count.

400844105530800 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
07...	1025	8	<0.5	<10	<1	<5	<3	<10	10
07...	1040	8	<0.5	<10	<1	<5	<3	<10	13
MAY									
26...	1100	10	<0.5	<10	1	<5	<3	<10	46
26...	1115	10	<0.5	<10	2	<5	<3	<10	51
JUN									
23...	1200	8	<0.5	<10	<1	<5	<3	<10	10
23...	1215	9	<0.5	<10	<1	<5	<3	<10	13
JUL									
21...	1055	8	<0.5	<10	<1	<5	<3	<10	8
21...	1115	9	<0.5	<10	<1	<5	<3	<10	10
AUG									
25...	1045	9	<0.5	<10	<1	<5	<3	<10	4
25...	1100	9	<0.5	<10	<1	<5	<3	<10	5
SEP									
15...	1045	8	<0.5	<10	<1	<5	<3	<10	9
15...	1100	8	<0.5	<10	1	<5	<3	<10	6

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
07...	<10	<4	<1	<10	<10	<0.2	42	<6	16
07...	<10	<4	<1	<10	<10	<0.2	41	<6	4
MAY									
26...	<10	<4	8	<10	<10	<0.2	52	<6	12
26...	<10	<4	8	<10	<10	<0.2	54	<6	8
JUN									
23...	<10	<4	<1	<10	<10	<0.2	44	<6	<3
23...	<10	<4	3	<10	<10	<0.2	49	<6	9
JUL									
21...	<10	4	<1	<10	<10	<0.2	40	<6	7
21...	<10	<4	3	10	<10	<0.2	43	<6	3
AUG									
25...	<10	<4	<1	<10	<10	<0.2	44	<6	<3
25...	<10	<4	7	<10	<10	<0.2	45	<6	8
SEP									
15...	<10	<4	<1	10	<10	<0.2	42	<6	<3
15...	<10	<4	2	<10	<10	<0.2	44	<6	9

09019500 COLORADO RIVER NEAR GRANBY, CO

LOCATION.--Lat 40°07'15", long 105°54'00", in SW¹/₄NW¹/₄ sec.22, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi upstream from bridge on U.S. Highway 34, 1.3 mi upstream from Willow Creek, and 3.2 mi northeast of Granby.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--October 1907 to September 1911 (published as Grand River near Granby), October 1933 to September 1953. May 1961 to current year (irrigation season only). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,960 ft above sea level, from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,510 ft³/s, July 11, 1983, gage height, 5.39 ft; minimum daily, 9.6 ft³/s, Sept. 21, 1981.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft³/s, June 20, 1909, gage height, 5.5 ft, site and datum then in use; minimum daily, 6.6 ft³/s, Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft³/s, Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 101 ft³/s at 1700 June 19, gage height, 1.26 ft; minimum daily, 15 ft³/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	27	78	76	57	27
2	---	---	---	---	---	---	---	55	78	78	40	18
3	---	---	---	---	---	---	---	74	81	81	41	18
4	---	---	---	---	---	---	---	73	82	81	41	18
5	---	---	---	---	---	---	---	71	86	76	41	18
6	---	---	---	---	---	---	---	72	85	72	40	19
7	---	---	---	---	---	---	---	73	81	77	41	20
8	---	---	---	---	---	---	---	73	82	76	41	20
9	---	---	---	---	---	---	---	70	81	75	41	20
10	---	---	---	---	---	---	---	73	79	75	41	20
11	---	---	---	---	---	---	---	72	80	77	37	20
12	---	---	---	---	---	---	---	72	77	78	38	20
13	---	---	---	---	---	---	---	77	80	76	38	20
14	---	---	---	---	---	---	---	75	80	74	37	22
15	---	---	---	---	---	---	---	74	80	76	38	18
16	---	---	---	---	---	---	---	73	78	79	38	19
17	---	---	---	---	---	---	---	72	77	80	38	20
18	---	---	---	---	---	---	---	72	76	79	37	19
19	---	---	---	---	---	---	---	72	82	78	39	19
20	---	---	---	---	---	---	---	71	81	77	40	17
21	---	---	---	---	---	---	---	69	80	77	38	15
22	---	---	---	---	---	---	---	71	83	76	38	16
23	---	---	---	---	---	---	---	72	81	77	38	17
24	---	---	---	---	---	---	---	72	80	79	38	17
25	---	---	---	---	---	---	---	70	80	81	38	18
26	---	---	---	---	---	---	---	73	80	80	38	19
27	---	---	---	---	---	---	---	71	82	76	38	20
28	---	---	---	---	---	---	---	72	83	77	38	20
29	---	---	---	---	---	---	---	75	81	79	38	19
30	---	---	---	---	---	---	---	73	78	78	37	18
31	---	---	---	---	---	---	---	72	---	80	37	---
TOTAL	---	---	---	---	---	---	---	2181	2412	2401	1220	571
MEAN	---	---	---	---	---	---	---	70.4	80.4	77.5	39.4	19.0
MAX	---	---	---	---	---	---	---	77	86	81	57	27
MIN	---	---	---	---	---	---	---	27	76	72	37	15
AC-FT	---	---	---	---	---	---	---	4330	4780	4760	2420	1130

09020700 WILLOW CREEK RESERVOIR NEAR GRANBY, CO

LOCATION.--Lat 40°08'49", long 105°56'31", in SE¹/₄ sec.7, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, in shaft house near right end of Willow Creek Dam, 3.2 mi upstream from mouth, and 4.2 mi north of Granby.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by earth and rockfill dam; storage began March 1953. Dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft between elevations 8,077.00 ft, trash rack sill at outlet, and 8,130.00 ft, crest of spillway. Dead storage, 1,490 acre-ft. Figures given represent usable contents. Water is pumped to Lake Granby for transmountain diversion for irrigation and power in South Platte River basin.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,100 acre-ft, May 24, 1984, elevation, 8,130.12 ft; minimum 50 acre-ft, Dec. 4, 1985 to Jan. 17, 1986, drawdown for maintenance, elevation, 8,077.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,080 acre-ft, Nov. 9, elevation, 8,126.61 ft; minimum, 5,680 acre-ft, Nov. 16, elevation, 8,116.71 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,123.71	7,310	-
Oct. 31.	8,126.05	7,930	+620
Nov. 30.	8,117.75	5,900	-2,030
Dec. 31.	8,119.68	6,330	+430
CAL YR 1993.			+230
Jan. 31.	8,121.23	6,700	+370
Feb. 28.	8,122.05	6,900	+200
Mar. 31.	8,124.24	7,450	+550
Apr. 30.	8,119.44	6,280	-1,170
May 31.	8,121.77	6,830	+550
June 30.	8,121.46	6,750	-80
July 31.	8,121.42	6,740	-10
Aug. 31.	8,123.15	7,170	+430
Sept. 30.	8,123.68	7,300	+130
WTR YR 1994.			-10

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, CO

LOCATION.--Lat 39°50'45", long 105°45'05", in sec.26, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.8 mi upstream from Parsenn Creek, 2.5 mi south of Winter Park, and 7.8 mi southeast of Fraser.

DRAINAGE AREA.--10.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1908, July to November 1909 (published as "at upper station near Fraser"), October 1968 to September 1973, Aug. 21, 1984 to current year. January to September 1911, gage heights only (published as "near Fraser"). Records for August to December 1910, published in WSP 289 as "near Fraser" are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,520 ft above sea level, from topographic map. Prior to Oct. 1, 1968, nonrecording gage at site 0.9 mi upstream at different datum. Since Oct. 1, 1968, supplementary water-stage recorder and Parshall flume on Berthoud Pass ditch.

REMARKS.--Estimated daily discharges: Oct. 29 to Apr. 29, and Aug. 26 to Sept. 30. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch to Moffat water tunnel, (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained, and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	3.8	3.5	2.4	2.0	1.8	3.3	6.0	71	21	8.3	4.9
2	5.0	3.8	3.5	2.4	2.0	1.8	3.3	5.5	68	21	8.3	6.0
3	5.0	3.8	3.5	2.4	2.0	1.8	3.3	5.3	70	20	8.1	5.6
4	4.9	3.8	3.5	2.4	2.0	1.8	3.6	5.4	72	18	7.7	4.9
5	4.8	3.8	3.4	2.4	2.0	2.0	3.6	6.0	68	17	7.5	4.8
6	4.7	3.8	3.2	2.4	2.2	2.2	3.6	7.9	64	16	7.2	4.7
7	5.3	3.8	3.2	2.4	2.0	2.3	3.6	10	60	15	7.0	4.7
8	5.5	3.8	3.2	2.4	2.0	2.3	3.6	12	55	14	6.8	4.5
9	5.1	3.8	3.2	2.4	2.0	2.3	3.6	14	52	13	7.5	4.2
10	5.1	3.8	3.2	2.2	2.0	2.3	3.6	15	49	12	7.9	4.4
11	5.0	3.8	3.0	2.2	1.8	2.3	3.6	20	49	12	7.0	4.4
12	5.2	3.8	3.0	2.2	1.8	2.3	3.6	30	48	11	6.7	4.4
13	5.1	3.8	3.0	2.2	1.8	2.3	3.6	32	48	11	6.9	4.7
14	5.1	3.8	3.0	2.2	1.8	2.3	3.7	31	46	11	6.7	5.0
15	5.3	3.8	3.0	2.2	1.8	2.3	3.8	32	45	11	6.2	4.7
16	5.1	3.8	2.8	2.2	1.8	2.4	3.9	37	44	11	6.0	4.4
17	5.0	3.8	2.8	2.0	1.8	2.5	4.1	43	42	11	6.0	4.4
18	5.1	3.8	2.8	2.0	1.7	2.5	4.3	46	42	11	6.0	4.4
19	4.7	3.8	2.8	2.0	1.7	2.5	4.5	47	41	10	6.3	4.4
20	4.6	3.8	2.8	2.0	1.7	2.6	5.0	49	41	10	6.6	4.4
21	5.1	3.8	2.6	2.0	1.7	2.8	8.0	46	42	10	6.2	4.7
22	5.1	3.8	2.6	2.0	1.7	3.0	12	44	42	9.7	5.9	4.4
23	5.0	3.8	2.6	2.0	1.7	3.0	11	43	39	9.6	5.3	4.4
24	4.9	3.8	2.6	2.0	1.7	3.0	11	41	36	9.8	5.1	4.4
25	4.8	3.8	2.5	2.0	1.6	3.0	10	42	33	9.6	5.0	4.4
26	4.5	3.6	2.4	2.0	1.5	3.0	9.0	43	31	9.3	4.9	4.5
27	3.9	3.6	2.4	2.0	1.8	3.0	7.6	43	29	9.1	4.9	4.5
28	3.9	3.6	2.4	2.0	1.8	3.0	6.4	46	27	8.8	5.4	4.5
29	3.8	3.6	2.4	2.0	---	3.0	6.2	47	24	8.7	4.9	4.5
30	3.8	3.6	2.4	2.0	---	3.0	6.0	52	22	8.6	4.9	4.5
31	3.8	---	2.4	2.0	---	3.0	---	60	---	8.5	4.9	---
TOTAL	149.3	113.0	89.7	67.0	51.4	77.4	162.4	961.1	1400	377.7	198.1	138.7
MEAN	4.82	3.77	2.89	2.16	1.84	2.50	5.41	31.0	46.7	12.2	6.39	4.62
MAX	5.5	3.8	3.5	2.4	2.2	3.0	12	60	72	21	8.3	6.0
MIN	3.8	3.6	2.4	2.0	1.5	1.8	3.3	5.3	22	8.5	4.9	4.2
AC-FT	296	224	178	133	102	154	322	1910	2780	749	393	275

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

	MEAN	5.67	4.02	3.04	2.37	1.96	2.04	4.60	27.1	67.9	27.3	11.6	7.77
MAX	9.66	5.62	3.68	2.85	2.57	2.61	6.45	42.2	86.1	41.7	14.6	13.0	
(WY)	1985	1985	1971	1985	1985	1969	1971	1992	1986	1971	1986	1984	
MIN	4.33	2.69	2.58	1.63	1.45	1.41	2.12	17.1	38.2	12.2	6.39	4.62	
(WY)	1993	1992	1992	1987	1987	1987	1973	1971	1989	1994	1994	1994	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1969 - 1994

ANNUAL TOTAL	5428.6	3785.8	
ANNUAL MEAN	14.9	10.4	13.8
HIGHEST ANNUAL MEAN			16.9
LOWEST ANNUAL MEAN			10.4
HIGHEST DAILY MEAN	107	Jun 17	135
LOWEST DAILY MEAN	1.9	Feb 22	1.2
ANNUAL SEVEN-DAY MINIMUM	1.9	Feb 28	1.4
INSTANTANEOUS PEAK FLOW			181
INSTANTANEOUS PEAK STAGE			2.15
ANNUAL RUNOFF (AC-FT)	10770	7510	9970
10 PERCENT EXCEEDS	47	41	41
50 PERCENT EXCEEDS	4.5	4.4	5.0
90 PERCENT EXCEEDS	2.1	2.0	2.0

a-Also occurred Feb 23-24, 28, Mar 1-7, and Mar 9-14.

b-Also occurred Jun 4.

09022000 FRASER RIVER AT UPPER STATION NEAR WINTER PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1994 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)
MAR 09...	1115	2.3	130	7.5	0.0	10.6	18	18
APR 07...	1115	3.7	167	8.1	0.0	9.9	30	3
MAY 04...	0830	5.0	148	7.8	0.5	9.8	28	4
JUN 01...	0735	e71	50	7.9	2.5	8.8	5.3	11
JUL 07...	1700	16	69	7.4	9.0	9.8	4.7	1
AUG 03...	0800	e8.1	74	--	6.5	--	5.4	2
SEP 08...	1540	4.2	87	7.5	10.0	7.7	6.6	2

e-Estimated

FRASER RIVER BASIN

09023750 FRASER RIVER BELOW BUCK CREEK AT WINTER PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°53'35", long 105°45'52", T.2. S., R.75 W., Grand County, Hydrologic Unit 14010001 on left bank approximately 400 ft upstream from the confluence of Cub Creek and the Fraser River.

DRAINAGE AREA.--25.6 mi².

PERIOD OF RECORD.--August 1990 to current year.

REVISED RECORDS.--WDR CO-93-2: Drainage area.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
06...	1230	4.7	92	8.1	6.0	0.60	9.4
13...	0945	14	78	7.9	3.0	--	9.6
19...	0810	6.0	94	7.7	2.5	--	10.3
27...	1320	8.5	91	8.1	2.0	--	10.2
NOV							
03...	1240	6.9	93	8.5	2.0	0.90	10.3
10...	1030	5.8	93	8.3	1.5	--	11.4
17...	0810	5.6	92	9.0	0.5	--	10.5
24...	1330	5.8	88	7.9	0.0	--	11.6
DEC							
01...	1300	5.2	92	8.4	0.0	0.80	11.1
08...	1045	4.8	93	8.4	1.0	--	10.6
15...	0845	4.9	94	8.1	0.5	--	10.0
22...	1330	5.3	94	8.3	0.5	--	10.0
30...	1030	4.9	94	7.7	1.0	--	--
JAN							
05...	1255	5.2	101	8.2	0.0	1.0	10.3
12...	0935	4.9	96	8.2	0.5	--	11.0
19...	1100	4.2	108	7.3	1.0	--	11.5
26...	1115	4.3	100	7.9	0.5	--	10.8
FEB							
02...	1215	4.8	96	8.0	0.0	1.0	10.7
09...	0905	5.2	102	8.0	0.0	--	10.0
16...	1230	4.6	124	7.8	2.0	--	10.6
23...	1050	5.4	103	8.4	0.5	--	9.9
MAR							
02...	1230	4.7	143	7.6	3.0	40	12.2
09...	0930	3.7	132	7.4	0.0	--	10.4
17...	1400	4.7	156	7.9	1.0	--	9.9
24...	1145	6.3	139	8.0	1.5	--	10.5
31...	0930	4.6	142	7.9	1.5	--	9.8
APR							
07...	1215	4.7	157	8.0	2.0	1.5	10.1
14...	0800	5.4	155	7.9	1.5	--	10.7
29...	1355	4.6	286	7.8	2.0	--	9.7
MAY							
04...	1320	4.9	186	7.8	7.0	5.3	9.6
19...	1020	16	73	7.7	3.5	--	9.5
JUN							
01...	0815	152	48	7.9	3.0	5.1	8.5
15...	1405	67	50	7.7	10.0	--	7.7
29...	1045	39	63	8.0	7.0	--	9.7
JUL							
07...	1345	29	69	8.0	5.5	0.60	9.2
13...	1230	22	67	8.1	11.0	--	8.2
20...	1300	19	71	8.0	11.5	--	8.2
27...	1205	15	75	8.0	10.0	--	8.0
AUG							
03...	1215	14	79	8.2	10.5	1.3	9.0
10...	0930	14	78	8.1	8.5	--	8.8
18...	1300	13	85	8.1	10.0	--	--
24...	1230	12	87	8.0	10.0	--	8.4
31...	0905	8.7	89	8.2	7.0	--	8.6
SEP							
08...	0920	7.9	93	8.1	5.0	0.80	9.2
14...	1400	11	91	8.3	7.5	--	8.9
29...	1120	4.3	103	7.2	7.0	--	8.7

09023750 FRASER RIVER BELOW BUCK CREEK AT WINTER PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT						
06...	--	--	--	<0.001	<0.005	0.003
13...	--	--	--	--	--	--
19...	--	--	--	--	--	--
27...	--	--	--	--	--	--
NOV						
03...	--	--	--	<0.001	0.019	<0.002
10...	--	--	--	--	--	--
17...	--	--	--	--	--	--
24...	--	--	--	--	--	--
DEC						
01...	--	--	0.056	0.001	0.057	<0.002
08...	--	--	--	--	--	--
15...	--	--	--	--	--	--
22...	--	--	--	--	--	--
30...	--	--	--	--	--	--
JAN						
05...	--	--	--	<0.001	0.055	<0.002
12...	--	--	--	--	--	--
19...	--	--	--	--	--	--
26...	--	--	--	--	--	--
FEB						
02...	--	--	0.099	0.005	0.104	0.019
09...	--	--	--	--	--	--
16...	--	--	--	--	--	--
23...	--	--	--	--	--	--
MAR						
02...	--	--	0.097	0.003	0.100	<0.002
09...	11	14	--	--	--	--
17...	--	--	--	--	--	--
24...	--	--	--	--	--	--
31...	--	--	--	--	--	--
APR						
07...	22	6	0.087	0.001	0.088	<0.002
14...	--	--	--	--	--	--
29...	--	--	--	--	--	--
MAY						
04...	32	13	0.088	0.002	0.090	<0.002
19...	--	--	--	--	--	--
JUN						
01...	3.9	14	0.114	0.001	0.115	0.003
15...	--	--	--	--	--	--
29...	--	--	--	--	--	--
JUL						
07...	3.9	2	--	<0.001	0.018	0.006
13...	--	--	--	--	--	--
20...	--	--	--	--	--	--
27...	--	--	--	--	--	--
AUG						
03...	4.9	4	0.076	0.001	0.077	<0.002
10...	--	--	--	--	--	--
18...	--	--	--	--	--	--
24...	--	--	--	--	--	--
31...	--	--	--	--	--	--
SEP						
08...	6.1	3	0.046	0.001	0.047	<0.002
14...	--	--	--	--	--	--
29...	--	--	--	--	--	--

09024000 FRASER RIVER AT WINTER PARK, CO

LOCATION.--Lat 39°54'00", long 105°46'34", in SE 1/4 sec.4, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from bridge on U.S. Highway 40, 1.4 mi south of Winter Park, 2.0 mi upstream from Vazquez Creek, 3.5 mi downstream from point of diversion for Moffat water tunnel, and 3.9 mi southeast of Fraser.

DRAINAGE AREA.--27.6 mi².

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Arrow" 1910-23 and as "near West Portal" 1924-39 and as "near Winter Park" 1990-1992. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

REVISED RECORDS.--WSP 929: Drainage area. WDR CO-89-2: 1988 (M).

GAGE.--Water-stage recorder. Datum of gage is 8,906.23 ft above sea level, Colorado State Highway Datum (levels by U.S. Geological Survey). Sept. 23, 1910, to May 12, 1916, nonrecording gage at trail bridge 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 27, Oct. 29 to Nov. 11, Nov. 16-22, 25, Dec. 14, 15, Jan. 7-9, 19, 20, 28, Feb. 13, 14, Mar. 4-7, 10, 19-24, and Mar. 27 to Apr. 1. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.0	6.4	6.2	6.0	6.1	6.4	6.8	132	33	17	10
2	5.0	7.0	6.2	6.2	6.0	6.2	6.4	7.1	133	33	15	10
3	5.0	6.9	6.1	6.2	6.1	6.3	6.6	7.3	128	33	15	9.9
4	5.0	6.9	6.1	6.2	6.1	6.3	6.7	8.1	133	31	14	9.6
5	4.9	6.9	6.2	6.2	6.1	6.2	6.1	9.7	121	30	14	9.5
6	6.8	6.9	6.2	6.0	6.4	6.2	6.2	12	111	28	14	9.5
7	15	6.9	6.2	6.2	6.5	6.0	6.0	14	96	28	14	9.5
8	16	6.8	6.2	6.2	6.5	5.9	6.6	15	87	26	14	9.5
9	15	6.8	6.2	6.2	6.3	6.1	5.9	15	81	25	16	9.6
10	15	6.8	6.1	6.2	6.4	6.2	5.9	17	75	24	15	9.5
11	15	6.7	6.0	6.1	6.3	6.2	6.9	20	72	23	14	9.8
12	16	6.9	6.1	6.2	6.1	6.1	6.2	19	72	22	14	11
13	15	6.8	6.1	6.2	6.2	6.1	6.5	21	69	21	14	12
14	14	6.5	6.1	6.1	6.3	6.0	6.8	21	65	21	13	11
15	8.8	7.7	6.4	5.9	6.4	6.5	6.9	23	62	21	13	10
16	8.6	9.0	6.6	6.1	6.3	6.6	8.3	24	62	20	13	6.2
17	8.2	9.0	6.4	6.2	6.2	6.4	9.4	22	61	19	13	5.4
18	8.2	8.9	6.2	6.1	6.2	6.5	10	22	61	19	13	5.4
19	7.9	8.8	6.3	6.4	6.1	6.5	11	23	61	18	14	5.4
20	7.7	8.6	6.3	6.4	6.4	6.4	12	27	60	18	12	5.9
21	7.5	7.9	6.3	6.5	6.2	6.4	15	25	60	17	15	5.6
22	7.5	7.6	6.2	6.6	6.2	6.4	17	25	61	17	13	5.4
23	7.4	6.8	6.2	6.4	6.2	6.3	16	24	57	18	12	5.3
24	7.3	6.5	6.2	6.5	6.2	6.3	16	24	54	17	12	5.1
25	7.3	6.5	6.2	6.4	6.1	6.3	12	25	49	17	11	5.1
26	7.2	6.9	6.2	6.5	6.0	5.9	9.0	25	46	16	11	5.1
27	7.6	6.4	6.2	6.3	6.0	6.0	8.9	30	43	16	11	5.1
28	7.4	6.2	6.2	6.5	6.1	6.2	7.4	44	40	16	12	5.1
29	7.4	6.3	6.1	6.6	---	6.4	7.1	43	37	15	11	5.1
30	7.2	6.4	6.2	6.1	---	6.4	7.1	59	35	15	10	5.3
31	7.1	---	6.2	6.1	---	6.4	---	97	---	15	10	---
TOTAL	283.5	215.3	192.6	194.0	173.9	193.8	262.3	755.0	2224	672	409	230.9
MEAN	9.15	7.18	6.21	6.26	6.21	6.25	8.74	24.4	74.1	21.7	13.2	7.70
MAX	16	9.0	6.6	6.6	6.5	6.6	17	97	133	33	17	12
MIN	4.9	6.2	6.0	5.9	6.0	5.9	5.9	6.8	35	15	10	5.1
AC-FT	562	427	382	385	345	384	520	1500	4410	1330	811	458

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

	MEAN	10.8	9.70	7.69	6.71	6.26	6.66	12.9	49.6	113	46.9	19.3	13.0
MAX	31.0	20.4	21.1	12.1	9.88	13.6	31.5	163	354	209	72.2	46.0	
(WY)	1914	1928	1928	1928	1938	1918	1925	1928	1918	1957	1929	1925	
MIN	2.93	2.72	2.83	2.92	3.11	3.58	5.05	7.42	5.76	4.92	3.37	2.57	
(WY)	1957	1965	1965	1967	1933	1990	1970	1954	1954	1954	1954	1966	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1911 - 1994
ANNUAL TOTAL	9961.5	5806.3	
ANNUAL MEAN	27.3	15.9	25.2
HIGHEST ANNUAL MEAN			60.9
LOWEST ANNUAL MEAN			5.93
HIGHEST DAILY MEAN	a211	b133	622
LOWEST DAILY MEAN	4.9	4.9	c2.0
ANNUAL SEVEN-DAY MINIMUM	5.5	5.1	2.1
INSTANTANEOUS PEAK FLOW		d149	820
INSTANTANEOUS PEAK STAGE		e1.75	2.90
INSTANTANEOUS LOW FLOW			2.0
ANNUAL RUNOFF (AC-FT)	19760	11520	18280
10 PERCENT EXCEEDS	93	33	58
50 PERCENT EXCEEDS	8.7	7.1	8.8
90 PERCENT EXCEEDS	6.2	6.1	4.1

a-Also occurred Jun 23.

b-Also occurred Jun 4.

c-Also occurred Mar 30, Apr 9, 1912, and Jan 23, 1915.

d-Also occurred Jun 3 and 4.

e-Maximum gage height, 1.90 ft, Nov 10, backwater from ice.

09025000 VASQUEZ CREEK AT WINTER PARK, CO

LOCATION.--Lat 39°55'13", long 105°47'05", in NE¹/4NW¹/4 sec.33, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 30 ft downstream from bridge on U.S. Highway 40, 0.2 mi upstream from mouth, 2.5 mi southeast of Fraser, and 4.5 mi downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi².

PERIOD OF RECORD.--June to August 1907, July to November 1909, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, are unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907-9, as "near West Portal" 1934-39, and as "near Winter Park" 1940-87. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8,768.48 ft above sea level. June 1, 1907, to Oct. 31, 1909, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 21-28, Oct. 30 to Nov. 27, Dec. 1-21, 30, Jan. 3, 5-18, 23-31, Feb. 10-28, Mar. 3-5, 8-24, Mar. 27 to Apr. 4, and Apr. 6-7. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	3.5	4.5	6.7	6.9	6.7	6.4	8.9	108	8.6	8.8	9.0
2	14	3.5	4.7	6.7	6.8	6.6	6.4	8.5	106	8.8	8.6	9.2
3	14	3.4	4.9	6.7	6.7	6.6	6.4	8.0	107	9.3	8.5	8.7
4	14	3.3	5.0	6.7	6.7	6.6	6.4	8.2	110	8.7	8.3	8.6
5	14	3.2	5.2	6.8	6.7	6.4	6.4	10	105	8.7	8.1	8.4
6	14	3.2	5.8	6.8	6.6	6.5	6.8	14	103	8.5	8.1	8.5
7	15	3.2	6.0	6.8	6.7	6.4	6.8	18	96	8.6	8.1	8.4
8	16	3.1	6.0	6.8	6.8	6.6	6.6	20	82	8.7	8.2	8.4
9	15	3.1	6.6	6.8	6.7	6.6	6.9	19	51	8.5	9.9	8.5
10	15	3.1	6.7	6.8	6.8	6.6	6.6	17	14	8.3	22	8.6
11	15	3.1	6.7	6.8	6.8	6.6	7.0	18	14	8.4	14	8.5
12	16	3.0	6.8	6.8	6.8	6.6	6.8	19	13	8.5	8.0	8.8
13	16	3.0	6.8	6.8	6.7	6.6	6.9	19	9.7	8.2	8.1	9.2
14	15	3.0	6.9	6.8	6.7	6.6	7.2	19	9.5	8.4	8.0	8.9
15	7.4	3.0	7.0	6.8	6.7	6.6	7.1	18	9.2	8.4	8.0	8.5
16	6.3	3.0	7.4	6.8	6.7	6.6	7.9	21	9.0	8.4	7.9	4.9
17	6.1	3.0	7.8	6.8	6.7	6.6	9.1	20	8.8	8.3	12	4.5
18	6.1	3.0	8.0	6.8	6.7	6.6	9.4	20	9.2	8.3	13	4.5
19	5.9	3.0	8.0	6.9	6.7	6.6	10	20	10	8.2	8.5	4.6
20	5.8	3.1	8.0	6.8	6.7	6.6	11	20	10	8.2	8.2	4.8
21	5.4	3.2	8.0	6.7	6.7	6.6	13	19	20	8.1	8.1	5.1
22	5.2	3.2	8.2	6.7	6.7	6.6	15	20	48	8.0	8.1	4.8
23	5.2	3.4	8.3	6.8	6.7	6.4	16	21	38	8.0	8.1	4.6
24	5.0	3.5	8.2	6.8	6.7	6.4	18	17	18	8.2	8.0	4.5
25	4.8	3.7	8.2	6.8	6.7	6.5	15	18	9.6	8.3	8.0	4.5
26	4.6	3.9	7.7	6.8	6.7	6.3	12	19	9.0	8.2	7.8	4.5
27	4.4	4.0	7.3	6.8	6.6	6.2	11	21	9.0	8.1	8.3	4.6
28	4.2	4.2	7.3	6.8	6.6	6.2	9.9	54	8.9	8.2	8.8	4.8
29	3.9	4.4	7.4	6.8	---	6.4	9.3	59	8.9	8.2	8.7	4.9
30	3.8	4.5	7.0	6.8	---	6.4	9.1	79	8.7	8.3	8.6	5.0
31	3.7	---	6.8	6.8	---	6.4	---	97	---	8.3	8.9	---
TOTAL	294.8	100.8	213.2	210.3	188.0	202.0	276.4	749.6	1162.5	259.9	285.7	200.8
MEAN	9.51	3.36	6.88	6.78	6.71	6.52	9.21	24.2	38.7	8.38	9.22	6.69
MAX	16	4.5	8.3	6.9	6.9	6.7	18	97	110	9.3	22	9.2
MIN	3.7	3.0	4.5	6.7	6.6	6.2	6.4	8.0	8.7	8.0	7.8	4.5
AC-FT	585	200	423	417	373	401	548	1490	2310	516	567	398

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

	MEAN	5.89	6.71	5.46	4.70	4.32	4.41	7.39	26.5	63.4	21.6	7.54	6.30
MAX	35.1	21.9	13.4	10.0	9.99	9.02	19.8	119	234	177	41.2	24.5	
(WY)	1962	1962	1962	1958	1958	1958	1943	1958	1942	1983	1936	1984	
MIN	.66	1.84	1.30	1.28	.80	1.02	2.41	2.81	.14	.34	.39	.20	
(WY)	1965	1963	1965	1965	1960	1965	1965	1954	1940	1956	1960	1944	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1934 - 1994

ANNUAL TOTAL	9413.1	4144.0		
ANNUAL MEAN	25.8	11.4		
HIGHEST ANNUAL MEAN			39.6	1936
LOWEST ANNUAL MEAN			2.30	1963
HIGHEST DAILY MEAN	192	Jun 23	417	Jun 25 1983
LOWEST DAILY MEAN	^a 3.0	Nov 12	^a 3.0	Sep 9 1944
ANNUAL SEVEN-DAY MINIMUM	3.0	Nov 12	3.0	Sep 9 1944
INSTANTANEOUS PEAK FLOW			133	Jun 27 1983
INSTANTANEOUS PEAK STAGE			^d 2.67	Jun 27 1983
ANNUAL RUNOFF (AC-FT)	18670	8220		
10 PERCENT EXCEEDS	87	18	20	
50 PERCENT EXCEEDS	7.4	7.2	5.4	
90 PERCENT EXCEEDS	3.8	4.5	1.5	

a-Also occurred Nov 13-19.

b-Also no flow at times in 1946, 1956, 1960, and 1966.

c-From rating curve extended above 286 ft³/s.

d-Maximum gage height, 2.73 ft, Feb 23, backwater from ice.

FRASER RIVER BASIN

09025010 FRASER RIVER BELOW VASQUEZ CREEK AT WINTER PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°55'37", long 105°47'08", NE¹/4SW¹/4 sec.28, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001
on left bank approximately 1,500 ft downstream from the confluence of Vasquez Creek and the Fraser River.

DRAINAGE AREA.--59.1 mi².

PERIOD OF RECORD.--August 1990 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT										
06...	1315	20	60	7.9	6.0	9.1	--	<0.001	0.022	0.007
13...	1100	29	64	7.9	3.5	9.9	--	--	--	--
19...	0915	13	78	7.5	1.5	10.5	--	--	--	--
27...	0900	4.5	91	7.8	0.0	10.9	--	--	--	--
NOV										
03...	1350	13	78	8.4	0.5	11.0	--	<0.001	0.051	<0.002
10...	1155	9.9	80	8.2	0.0	11.1	--	--	--	--
17...	1000	5.9	79	7.9	0.0	10.8	--	--	--	--
24...	0910	8.7	79	7.6	0.0	10.7	--	--	--	--
DEC										
01...	1405	11	81	7.8	0.0	10.2	0.160	0.002	0.162	0.064
08...	1210	14	73	7.9	0.0	10.8	--	--	--	--
15...	0930	13	76	8.0	0.0	9.8	--	--	--	--
22...	0940	13	75	8.0	0.0	12.0	--	--	--	--
30...	1210	15	78	7.5	0.5	11.0	--	--	--	--
JAN										
05...	1400	14	100	7.9	0.0	7.9	0.214	0.002	0.216	0.296
12...	1120	15	78	7.7	0.0	10.2	--	--	--	--
19...	0910	12	78	7.9	0.0	11.4	--	--	--	--
26...	1300	13	80	7.8	0.0	10.8	--	--	--	--
FEB										
02...	1325	12	80	7.9	0.0	10.5	0.389	0.008	0.397	0.500
09...	1040	14	81	7.8	0.0	10.4	--	--	--	--
16...	0900	13	86	7.6	0.5	12.6	--	--	--	--
23...	1215	13	85	7.9	0.0	13.0	--	--	--	--
MAR										
02...	1330	13	87	7.7	1.0	9.8	0.291	0.001	0.292	0.332
09...	1315	13	92	7.5	0.0	11.2	--	--	--	--
17...	0915	12	118	8.1	0.0	11.6	--	--	--	--
24...	1310	20	108	8.1	0.5	11.0	--	--	--	--
31...	1055	12	105	8.1	0.5	10.8	--	--	--	--
APR										
07...	1300	15	120	8.4	0.5	10.6	0.351	0.003	0.354	0.607
14...	0915	14	111	8.1	1.0	11.1	--	--	--	--
21...	1000	28	106	7.3	1.0	12.0	0.222	0.004	0.226	0.186
21...	1145	--	106	7.9	4.0	11.8	0.214	0.002	0.216	0.151
21...	1255	--	103	7.9	5.0	12.2	--	--	--	--
21...	1500	--	104	8.2	7.0	10.4	0.207	0.007	0.214	0.131
21...	1700	45	105	7.9	6.0	9.3	--	--	--	--
21...	1900	--	98	7.7	4.0	9.4	0.207	0.005	0.212	0.163
21...	2115	--	96	7.6	2.0	7.8	--	--	--	--
21...	2315	--	101	7.4	2.0	8.0	0.228	0.007	0.235	0.208
22...	0110	--	116	7.3	1.0	10.4	--	--	--	--
22...	0310	--	111	7.4	1.0	10.0	--	--	--	--
22...	0500	--	110	7.4	1.0	10.0	--	--	--	--
22...	0700	39	111	7.5	0.5	10.0	0.242	0.004	0.246	0.185
29...	0955	18	134	8.3	1.0	11.1	--	--	--	--
MAY										
04...	1410	20	113	9.3	5.0	10.6	0.067	0.004	0.071	<0.002
19...	1150	51	60	8.7	5.5	9.3	--	--	--	--
JUN										
01...	0935	217	42	7.7	4.5	8.7	0.088	0.002	0.090	<0.002
15...	0920	71	50	7.9	5.0	9.0	--	--	--	--
29...	1200	49	60	8.0	9.5	8.4	--	--	--	--
JUL										
07...	1500	40	66	8.0	8.0	9.0	--	<0.001	0.013	0.007
13...	1410	30	61	8.1	13.5	8.7	--	--	--	--
20...	0900	25	65	8.0	8.0	8.5	--	--	--	--
27...	1330	23	67	8.0	14.0	7.2	--	--	--	--
AUG										
03...	1315	20	68	8.1	12.5	8.0	0.058	0.005	0.063	0.020
10...	1100	31	65	7.6	7.0	--	--	--	--	--
18...	0930	31	65	7.6	7.0	--	--	--	--	--
24...	1315	23	72	8.0	11.5	8.2	--	--	--	--
31...	1005	17	71	8.1	8.0	8.4	--	--	--	--

09025010 FRASER RIVER BELOW VASQUEZ CREEK AT WINTER PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
SEP										
08...	1030	15	73	7.8	7.0	8.8	0.078	0.002	0.080	0.010
14...	1100	22	76	8.7	7.5	8.7	--	--	--	--
22...	0920	10	78	7.6	2.5	10.6	0.109	0.001	0.110	0.003
22...	1130	--	78	7.9	4.5	9.7	--	--	--	--
22...	1330	--	78	7.9	7.0	9.7	0.096	0.001	0.097	0.008
22...	1535	10	79	8.0	9.0	8.2	--	--	--	--
22...	1710	--	81	8.0	8.5	8.1	0.100	0.001	0.101	0.009
22...	1900	--	80	8.1	7.0	8.0	--	--	--	--
22...	2100	--	79	8.1	5.0	9.1	--	--	--	--
22...	2325	--	79	8.0	4.0	9.2	--	--	--	--
23...	0100	--	78	7.8	3.5	9.4	--	<0.001	0.112	0.006
23...	0310	--	78	7.7	3.0	9.1	--	<0.001	0.114	0.010
23...	0500	--	79	7.6	3.0	9.2	--	--	--	--
23...	0700	--	80	7.6	2.5	9.3	0.118	0.002	0.120	0.013
29...	1220	8.3	80	--	7.0	8.2	--	--	--	--

09025400 ELK CREEK NEAR FRASER, CO

LOCATION.--Lat 39°55'09", long 105°49'31", in SE¹/4NW¹/4 sec.31, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 100 ft upstream from unnamed tributary, 1,150 ft downstream from West Elk Creek, 2.0 mi southwest of Fraser, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--7.15 mi².

PERIOD OF RECORD.--September 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,805 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27, and Oct. 29 to Apr. 8. Records fair except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel. Diversions for irrigation of about 100 acres of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.40	.40	.26	.24	.24	.40	2.3	15	2.0	1.0	.82
2	.80	.40	.40	.26	.24	.24	.42	1.9	14	2.0	1.1	.86
3	.80	.40	.39	.26	.24	.24	.44	2.3	14	2.4	1.0	.42
4	.60	.40	.37	.26	.24	.24	.45	2.7	14	1.9	.78	.36
5	.35	.40	.35	.26	.24	.24	.46	4.0	13	1.8	.81	.33
6	.34	.40	.35	.26	.24	.24	.47	5.9	13	1.7	.74	.31
7	.54	.40	.35	.26	.23	.24	.48	7.1	12	1.6	.50	.31
8	.54	.41	.35	.26	.23	.24	.48	7.3	12	1.6	.49	.42
9	.39	.41	.35	.26	.23	.24	.48	7.3	11	1.4	.52	.50
10	.54	.40	.35	.26	.23	.25	.44	7.7	8.1	1.3	.61	.39
11	.72	.41	.35	.26	.23	.25	.49	8.4	3.4	1.3	.46	.38
12	1.3	.41	.35	.26	.23	.25	.48	9.2	2.9	1.3	.42	.42
13	1.7	.41	.35	.26	.23	.25	.55	10	1.8	1.0	.42	.72
14	1.8	.40	.35	.26	.23	.25	.66	10	1.8	.89	.52	1.1
15	2.1	.40	.35	.25	.23	.25	.69	10	2.9	.91	.55	.69
16	2.2	.41	.36	.25	.23	.25	1.1	10	3.2	.89	.53	.49
17	.92	.41	.35	.25	.23	.26	1.5	10	2.8	.83	.70	.47
18	.82	.41	.35	.26	.23	.26	1.8	10	3.8	.77	.63	.45
19	.62	.41	.35	.26	.23	.26	1.9	10	5.3	.76	.75	.49
20	.54	.40	.32	.25	.24	.26	2.2	9.2	5.8	.68	.72	.53
21	.54	.40	.30	.25	.24	.26	3.3	8.2	5.8	.59	.66	.91
22	.39	.40	.29	.25	.24	.26	4.4	6.1	6.4	.54	.67	.68
23	.41	.40	.28	.25	.24	.27	4.4	5.6	4.6	.50	.47	.57
24	.48	.40	.28	.25	.24	.27	5.0	4.2	4.0	.58	.44	.44
25	.46	.39	.28	.26	.24	.28	4.3	3.5	3.6	.56	.42	.47
26	.36	.40	.28	.26	.24	.29	3.0	3.3	3.2	.51	.42	.50
27	.40	.40	.27	.26	.24	.30	3.0	2.8	2.8	.52	.38	.50
28	.42	.40	.27	.26	.24	.32	2.0	3.9	2.4	.52	.56	.62
29	.40	.40	.27	.25	---	.34	1.9	12	2.5	.80	.61	.50
30	.40	.40	.26	.25	---	.36	1.9	12	2.3	.92	.58	.49
31	.40	---	.26	.25	---	.38	---	13	---	.89	.64	---
TOTAL	22.98	12.08	10.18	7.95	6.59	8.28	49.09	219.9	197.4	33.96	19.10	16.14
MEAN	.74	.40	.33	.26	.24	.27	1.64	7.09	6.58	1.10	.62	.54
MAX	2.2	.41	.40	.26	.24	.38	5.0	13	15	2.4	1.1	1.1
MIN	.34	.39	.26	.25	.23	.24	.40	1.9	1.8	.50	.38	.31
AC-FT	46	24	20	16	13	16	97	436	392	67	38	32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	.85	.55	.47	.48	.45	.47	1.61	10.1	12.7	5.20	1.52	1.09
MAX	2.00	1.35	1.03	1.46	1.30	1.14	4.14	34.8	45.1	22.7	3.65	2.65	
(WY)	1971	1971	1993	1993	1993	1993	1971	1984	1983	1983	1984	1984	1984
MIN	.30	.26	.12	.11	.11	.26	.32	1.69	1.07	1.05	.62	.35	
(WY)	1984	1984	1977	1977	1977	1977	1973	1977	1977	1976	1994	1978	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	2016.75	603.65	
ANNUAL MEAN	5.53	1.65	2.96
HIGHEST ANNUAL MEAN			7.22 1984
LOWEST ANNUAL MEAN			.83 1977
HIGHEST DAILY MEAN	46 May 28	15 Jun 1	95 May 25 1984
LOWEST DAILY MEAN	a .26 Dec 30	b .23 Feb 7	.10 Jan 13 1977
ANNUAL SEVEN-DAY MINIMUM	.27 Dec 25	.23 Feb 7	.11 Jan 9 1977
INSTANTANEOUS PEAK FLOW		16 May 31	106 May 24 1984
INSTANTANEOUS PEAK STAGE		1.97 May 31	c 3.13 May 24 1984
ANNUAL RUNOFF (AC-FT)	4000	1200	2150
10 PERCENT EXCEEDS	23	4.8	6.8
50 PERCENT EXCEEDS	1.3	.45	.80
90 PERCENT EXCEEDS	.40	.24	.32

a-Also occurred Dec 31.

b-Also occurred Feb 8-19.

c-Maximum gage height, 3.97 ft, Mar 12, and Apr 10-16, 1987, backwater from ice

09026500 ST. LOUIS CREEK NEAR FRASER, CO

LOCATION.--Lat 39°54'36", long 105°52'40", in SE¹/4SW¹/4 sec.34, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 300 ft downstream from West St. Louis Creek and 4.1 mi southwest of Fraser.

DRAINAGE AREA.--32.9 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to August 1934, monthly discharge only, published in WSP 1313. Records for May 1956 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 26 to Nov. 20, Dec. 14-16, Jan. 4-31, Feb. 24-28, Mar. 1-5, 7-11, Mar. 13-16, 18-31, Apr. 1, 3-12, 14-17, and Apr. 19-21. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	6.4	6.6	6.5	5.9	5.8	7.0	6.6	141	17	19	11
2	9.6	6.3	6.2	6.5	5.9	5.8	7.2	6.9	136	18	17	14
3	9.6	6.2	6.2	6.6	5.9	5.7	7.2	6.6	135	19	16	12
4	9.4	6.2	6.4	6.7	6.0	5.7	7.1	7.2	141	17	15	11
5	9.4	6.2	6.4	6.8	6.2	5.7	7.0	8.7	136	16	14	10
6	9.3	6.0	6.2	6.8	6.2	5.6	7.0	10	122	17	14	9.8
7	10	6.0	6.2	6.8	6.2	5.6	7.0	12	93	18	13	9.6
8	10	6.2	6.2	6.9	6.2	5.6	7.1	13	77	17	13	9.5
9	8.2	6.2	6.2	6.9	6.2	5.6	7.2	13	47	17	13	9.4
10	8.3	6.0	6.4	6.8	6.2	5.8	7.3	14	29	17	15	10
11	7.2	6.0	6.4	6.8	6.2	5.9	7.0	15	22	16	14	9.3
12	8.6	6.3	6.4	6.8	6.4	5.9	7.1	16	21	16	13	9.4
13	11	6.4	6.4	6.8	6.4	5.9	7.1	16	20	16	13	11
14	17	6.4	6.5	6.8	6.8	6.0	7.2	17	19	16	13	12
15	15	6.3	6.5	6.9	6.8	6.1	7.8	16	19	16	12	10
16	8.9	6.2	6.5	6.8	6.9	6.1	7.9	18	20	16	12	8.4
17	8.5	6.6	6.5	6.7	7.1	6.1	7.9	20	19	16	12	8.0
18	8.5	6.9	6.6	6.6	7.2	6.1	7.8	36	19	16	12	8.0
19	7.4	6.9	7.0	6.4	6.7	6.2	7.8	24	22	15	13	8.2
20	7.6	6.8	7.0	6.2	6.5	6.2	7.9	26	21	15	14	9.1
21	7.2	6.8	6.8	6.2	6.4	6.4	8.0	25	51	16	12	10
22	7.2	6.7	6.7	6.2	6.2	6.4	9.7	26	99	16	12	9.3
23	6.6	6.6	6.6	6.2	6.2	6.6	10	26	85	16	11	8.9
24	6.6	6.2	6.5	6.2	6.4	6.6	11	31	54	16	11	8.7
25	6.2	6.6	6.8	6.2	6.3	6.6	10	35	22	16	10	8.6
26	6.2	6.6	6.8	6.2	6.2	6.7	9.4	39	20	16	10	8.4
27	6.2	6.6	6.5	6.2	5.9	6.7	8.9	37	19	15	10	8.3
28	6.1	6.7	6.5	6.1	5.8	6.7	7.6	52	19	15	11	8.3
29	6.1	6.8	6.5	6.1	---	7.0	7.0	79	18	15	11	8.3
30	6.2	6.8	6.5	6.0	---	7.0	8.1	98	17	15	11	8.6
31	6.2	---	6.5	6.0	---	7.0	---	121	---	15	10	---
TOTAL	264.1	192.9	201.5	201.7	177.3	191.1	236.3	871.0	1663	502	396	287.1
MEAN	8.52	6.43	6.50	6.51	6.33	6.16	7.88	28.1	55.4	16.2	12.8	9.57
MAX	17	6.9	7.0	6.9	7.2	7.0	11	121	141	19	19	14
MIN	6.1	6.0	6.2	6.0	5.8	5.6	7.0	6.6	17	15	10	8.0
AC-FT	524	383	400	400	352	379	469	1730	3300	996	785	569

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

	MEAN	11.8	9.32	7.61	6.86	6.30	6.38	9.57	37.5	113	65.3	24.2	14.6
MAX	31.4	17.8	14.3	12.0	11.0	12.0	26.2	102	257	209	70.1	34.1	
(WY)	1962	1950	1946	1946	1946	1946	1960	1936	1952	1983	1945	1938	
MIN	2.63	2.90	2.28	2.00	2.07	2.35	3.41	8.62	21.6	16.2	11.3	4.39	
(WY)	1965	1967	1968	1961	1968	1968	1970	1968	1989	1994	1963	1963	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1934 - 1994

ANNUAL TOTAL	11783.4	5184.0	
ANNUAL MEAN	32.3	14.2	26.1
HIGHEST ANNUAL MEAN			47.9
LOWEST ANNUAL MEAN			9.98
HIGHEST DAILY MEAN	265	Jun 29	377
LOWEST DAILY MEAN	5.5	Mar 10	1.8
ANNUAL SEVEN-DAY MINIMUM	5.6	Mar 4	1.8
INSTANTANEOUS PEAK FLOW			470
INSTANTANEOUS PEAK STAGE			2.89
ANNUAL RUNOFF (AC-FT)	23370	10280	18880
10 PERCENT EXCEEDS	120	20	62
50 PERCENT EXCEEDS	7.4	7.4	10
90 PERCENT EXCEEDS	6.0	6.2	4.7

a-Also occurred Jun 4.

b-Also occurred Mar 7-9.

c-Also occurred Jan 26-30, Feb 1, 2, and Feb 14.

d-Maximum gage height, 3.21 ft, Jun 10, 1952, backwater from log on control.

09027010 FRASER RIVER BELOW ST. LOUIS CREEK AT FRASER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°57'15", long 105°48'48", SE¹/4SE¹/4 sec.18, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001 on left bank approximately 600 ft downstream from the confluence of St. Louis Creek and the Fraser River.

DRAINAGE AREA.--111 mi².

PERIOD OF RECORD.--August 1990 to current year.

REMARK.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT										
06...	0900	16	71	7.8	3.0	11.2	--	<0.001	0.015	0.008
13...	1235	37	75	7.9	6.0	9.6	--	--	--	--
19...	1020	20	91	7.5	3.0	10.5	--	--	--	--
27...	1040	6.7	98	8.0	0.0	11.0	--	--	--	--
NOV										
03...	0900	15	95	8.0	0.0	10.7	--	<0.001	0.079	<0.002
10...	1320	20	91	7.9	0.0	11.7	--	--	--	--
17...	1105	19	95	7.6	0.0	9.8	--	--	--	--
24...	1030	16	91	7.5	0.0	10.5	--	--	--	--
DEC										
01...	0935	e12	95	7.6	0.0	10.7	0.156	0.001	0.157	0.042
08...	1445	19	86	7.8	0.0	10.3	--	--	--	--
15...	1115	18	90	7.8	0.0	9.8	--	--	--	--
22...	1100	e22	92	7.8	0.0	10.0	--	--	--	--
30...	0845	e18	93	7.4	0.0	9.8	--	--	--	--
JAN										
05...	1445	e17	92	7.7	0.0	10.5	0.253	0.004	0.257	0.319
12...	1225	e18	90	7.6	0.0	9.9	--	--	--	--
19...	1000	e16	93	7.3	0.0	11.2	--	--	--	--
26...	0905	e16	93	7.5	0.0	11.2	--	--	--	--
FEB										
02...	1405	e16	92	7.8	0.0	10.7	0.437	0.010	0.447	0.867
09...	1200	e18	95	7.6	0.0	10.2	--	--	--	--
16...	0955	e18	98	7.7	0.0	11.0	--	--	--	--
23...	0900	e20	98	8.3	0.0	9.8	--	--	--	--
MAR										
02...	1400	e17	102	7.5	0.5	8.6	0.317	0.004	0.321	0.614
09...	1345	--	101	7.5	0.0	9.6	--	--	--	--
17...	1150	26	105	7.9	0.0	10.9	--	--	--	--
24...	0915	17	114	8.1	0.0	10.9	--	--	--	--
31...	1230	e16	103	7.9	0.5	10.6	--	--	--	--
APR										
07...	1345	19	106	8.2	0.5	10.7	0.215	0.002	0.217	0.420
14...	1020	32	104	8.0	1.0	10.3	--	--	--	--
29...	1120	34	105	8.1	3.5	9.6	--	--	--	--
MAY										
04...	0945	34	104	8.2	3.5	11.0	0.076	0.003	0.079	0.110
19...	1305	88	73	8.0	7.5	8.8	--	--	--	--
JUN										
01...	1055	379	47	7.7	6.5	9.1	0.073	0.001	0.074	<0.002
15...	1100	73	55	7.7	9.0	8.3	--	--	--	--
29...	0845	57	68	8.1	8.5	10.4	--	--	--	--
JUL										
07...	1545	40	75	8.3	10.5	8.7	0.007	0.001	0.008	0.016
13...	1455	26	67	8.6	15.5	8.0	--	--	--	--
20...	1015	21	69	8.2	11.5	--	--	--	--	--
27...	0918	16	80	8.0	9.0	7.9	--	--	--	--
AUG										
03...	1400	28	75	8.2	16.0	7.3	0.056	0.005	0.061	0.014
10...	1215	35	65	8.1	14.5	7.7	--	--	--	--
18...	1100	28	69	7.8	11.5	--	--	--	--	--
24...	1015	21	84	7.8	10.5	8.5	--	--	--	--
31...	1130	25	79	8.1	10.5	8.2	--	--	--	--
SEP										
08...	1140	18	80	--	11.0	8.0	0.045	0.002	0.047	<0.002
14...	1215	24	88	9.0	9.0	8.1	--	--	--	--
29...	0900	6.7	89	7.8	4.5	9.2	--	--	--	--

e-Estimated

09027100 FRASER RIVER AT TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°59'25", long 105°49'44", SE¹/4NW¹/4 sec.6, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank approximately 100 ft upstream from the bridge over the Fraser River.

DRAINAGE AREA.--116 mi².

REVISED RECORDS.--WDR CO-93-2: Drainage area.

PERIOD OF RECORD.--August 1990 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT										
06...	0940	18	83	8.3	4.0	11.0	0.012	0.002	0.014	0.009
13...	0800	35	81	7.8	3.5	11.2	--	--	--	--
19...	1145	21	102	9.0	5.5	11.8	--	--	--	--
27...	1205	13	96	9.6	1.5	12.6	--	--	--	--
NOV										
03...	1000	18	105	8.8	0.0	12.7	--	<0.001	0.018	<0.002
10...	0850	15	113	8.1	0.0	12.4	--	--	--	--
17...	1230	20	104	8.5	0.5	12.9	--	--	--	--
24...	1155	18	102	7.7	0.0	10.4	--	--	--	--
DEC										
01...	1035	17	104	7.5	0.0	10.6	0.278	0.005	0.283	0.151
08...	0935	22	95	7.7	0.0	10.8	--	--	--	--
15...	1245	20	97	7.7	0.0	10.3	--	--	--	--
22...	1200	21	100	7.5	0.0	9.1	--	--	--	--
30...	0930	25	107	7.9	0.0	--	--	--	--	--
JAN										
05...	1000	22	100	7.5	0.0	9.4	0.362	0.004	0.366	0.440
12...	1415	21	100	7.4	0.0	9.0	--	--	--	--
19...	1015	23	96	7.2	0.0	10.1	--	--	--	--
26...	1025	22	103	7.6	0.0	9.7	--	--	--	--
FEB										
02...	0945	20	101	7.6	0.0	9.6	0.271	0.007	0.278	0.462
09...	1245	21	103	7.4	0.0	9.4	--	--	--	--
16...	1110	23	107	7.5	0.0	10.2	--	--	--	--
23...	1000	26	106	7.8	0.0	9.9	--	--	--	--
MAR										
02...	1000	21	112	8.4	0.0	10.3	0.513	0.006	0.519	0.894
09...	1430	23	113	7.5	0.0	8.0	--	--	--	--
17...	1320	29	125	7.5	0.0	9.8	--	--	--	--
24...	1030	22	144	7.6	0.0	10.2	--	--	--	--
31...	0810	20	131	7.5	0.5	9.9	--	--	--	--
APR										
07...	1430	25	128	8.0	0.0	11.2	0.472	0.006	0.478	1.20
14...	1200	44	114	7.7	0.5	9.9	--	--	--	--
21...	1100	57	105	7.6	4.5	10.2	0.218	0.006	0.224	0.425
21...	1220	--	105	7.7	7.0	11.1	--	--	--	--
21...	1400	--	106	7.8	10.0	8.4	0.215	0.010	0.225	0.410
21...	1600	--	97	8.0	11.5	8.4	0.184	0.010	0.194	0.241
21...	1750	106	90	7.8	10.5	8.4	--	--	--	--
21...	1945	--	87	7.7	8.0	8.2	0.145	0.009	0.154	0.170
21...	2215	--	85	7.4	4.0	5.7	--	--	--	--
22...	0015	--	87	7.4	2.5	7.4	0.163	0.006	0.169	0.209
22...	0200	--	89	7.4	2.0	8.2	--	--	--	--
22...	0405	--	93	7.5	1.5	9.6	--	--	--	--
22...	0600	--	104	7.5	1.0	10.0	--	--	--	--
22...	0800	69	102	7.6	1.0	10.2	0.205	0.006	0.211	0.266
29...	1245	36	119	8.4	5.0	9.7	--	--	--	--
MAY										
04...	1030	42	111	8.8	5.5	11.2	0.134	0.007	0.141	0.111
19...	0905	100	68	7.9	5.0	9.8	--	--	--	--
JUN										
01...	1245	360	46	7.7	10.0	8.6	0.072	0.001	0.073	<0.002
15...	1235	86	56	8.0	13.0	8.0	--	--	--	--
29...	0955	54	72	8.0	10.5	8.3	--	--	--	--
JUL										
07...	1000	43	90	8.0	8.0	8.7	0.035	0.005	0.040	0.042
13...	1535	31	76	8.6	19.5	8.2	--	--	--	--
20...	1150	26	83	8.6	16.5	7.7	--	--	--	--
27...	1043	22	95	8.6	13.0	8.7	--	--	--	--
AUG										
03...	0925	20	98	8.8	11.0	8.8	0.105	0.015	0.120	0.002
10...	1330	39	75	9.4	19.0	8.3	--	--	--	--
18...	1215	34	80	9.1	13.5	--	--	--	--	--
24...	1115	27	90	9.2	13.0	9.7	--	--	--	--
31...	0750	24	92	8.6	8.0	9.6	--	--	--	--

FRASER RIVER BASIN

09027100 FRASER RIVER AT TABERNASH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
SEP										
08...	1245	21	87	7.7	15.0	8.3	0.034	0.003	0.037	0.024
14...	1300	31	93	8.7	11.5	8.9	--	--	--	--
22...	1010	15	103	8.1	7.0	8.4	0.045	0.004	0.049	0.005
22...	1250	--	96	8.4	10.0	10.0	--	--	--	--
22...	1405	--	96	8.8	11.5	9.6	0.045	0.005	0.050	0.013
22...	1620	14	98	9.1	13.5	8.6	--	--	--	--
22...	1800	--	98	8.8	12.5	8.4	0.047	0.004	0.051	0.009
22...	2005	--	102	8.2	10.0	7.8	--	--	--	--
22...	2245	--	99	8.0	6.0	10.8	--	--	--	--
23...	0015	--	103	8.0	5.5	8.8	--	--	--	--
23...	0130	--	103	7.8	5.0	9.1	--	--	--	--
23...	0400	--	104	7.7	4.0	8.6	0.063	0.003	0.066	0.009
23...	0600	--	103	7.6	3.5	8.8	--	--	--	--
23...	0800	--	102	7.8	2.5	9.5	0.068	0.004	0.072	0.010
29...	1018	9.3	103	7.7	7.0	9.6	--	--	--	--

09032000 RANCH CREEK NEAR FRASER, CO

LOCATION.--Lat 39°57'00", long 105°45'54", in NW¹/4NE¹/4 sec.22, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 450 ft downstream from Middle Fork and 2.7 mi east of Fraser.

DRAINAGE AREA.--19.9 mi².

PERIOD OF RECORD.--August 1934 to current year. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Elevation of gage is 8,685 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26 to Nov. 4, and Jan. 9 to Apr. 12. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of hay meadows along Fraser River. Transmountain diversion upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	4.2	3.1	2.5	2.2	1.7	1.9	6.4	109	2.8	3.7	5.7
2	7.4	4.0	3.0	2.3	2.2	1.5	2.0	6.3	103	2.7	3.6	6.2
3	7.2	3.8	2.9	2.3	2.2	1.4	2.0	6.2	103	3.6	3.3	5.5
4	7.2	3.7	2.9	2.6	2.2	1.4	2.0	6.6	101	3.1	3.1	5.3
5	7.2	3.6	2.9	2.6	2.2	1.3	2.0	8.0	92	3.0	3.0	4.9
6	7.0	3.5	2.9	2.6	2.2	1.3	2.0	10	83	3.2	2.9	4.8
7	8.0	3.4	3.0	2.5	2.2	1.3	2.0	13	52	3.2	2.7	4.7
8	9.0	3.5	3.1	2.4	2.2	1.3	2.0	15	24	3.2	2.7	4.7
9	8.2	3.4	2.9	2.4	2.2	1.3	2.0	17	20	2.8	2.9	4.5
10	7.9	3.4	2.9	2.4	2.2	1.3	2.0	19	4.1	2.7	4.0	4.6
11	7.6	3.4	2.9	2.4	2.1	1.2	2.0	20	3.5	2.7	3.3	4.5
12	8.4	3.5	2.9	2.4	2.1	1.3	2.0	22	3.7	2.7	3.0	4.8
13	8.2	3.6	2.9	2.4	2.1	1.3	2.7	23	4.2	2.5	3.1	6.2
14	8.7	3.5	2.7	2.4	2.1	1.3	3.0	24	3.8	2.3	3.0	7.0
15	9.0	3.4	2.7	2.2	2.1	1.3	3.0	22	3.4	1.7	2.8	5.6
16	8.7	3.4	2.7	2.2	2.1	1.3	3.7	21	3.1	1.6	5.3	5.3
17	8.3	3.2	2.7	2.2	2.1	1.3	4.5	24	2.8	1.4	6.8	5.1
18	8.7	3.2	2.7	2.2	2.1	1.3	5.1	26	3.6	1.3	5.9	4.3
19	8.4	3.2	2.8	2.3	2.0	1.3	6.2	28	6.6	1.4	8.0	3.7
20	7.7	3.2	2.9	2.2	2.0	1.3	7.3	27	6.9	3.1	8.1	4.8
21	7.1	3.1	2.9	2.2	2.0	1.3	9.0	56	7.7	4.6	6.6	6.1
22	7.7	3.1	2.9	2.2	2.0	1.3	11	29	19	4.4	6.7	5.6
23	7.4	3.2	2.9	2.2	2.0	1.3	11	23	26	4.2	5.9	5.3
24	7.3	3.2	2.9	2.2	2.0	1.4	13	19	21	4.4	5.6	5.1
25	7.3	3.2	2.8	2.2	1.9	1.4	12	20	12	4.3	5.4	4.9
26	6.5	3.1	2.7	2.2	1.9	1.4	11	25	4.4	4.0	5.3	4.9
27	6.0	3.1	2.7	2.2	1.9	1.5	13	24	4.5	3.8	5.1	4.7
28	5.0	3.1	2.6	2.2	1.8	1.6	8.2	50	4.2	3.7	5.8	4.6
29	4.6	3.1	2.6	2.2	---	1.6	7.1	43	4.0	3.9	5.9	4.3
30	4.5	3.1	2.5	2.2	---	1.7	7.4	66	3.8	3.7	5.5	4.2
31	4.4	---	2.4	2.2	---	1.8	---	100	---	3.4	5.2	---
TOTAL	228.0	101.4	87.4	71.7	58.3	43.0	162.1	799.5	839.3	95.4	144.2	151.9
MEAN	7.35	3.38	2.82	2.31	2.08	1.39	5.40	25.8	28.0	3.08	4.65	5.06
MAX	9.0	4.2	3.1	2.6	2.2	1.8	13	100	109	4.6	8.1	7.0
MIN	4.4	3.1	2.4	2.2	1.8	1.2	1.9	6.2	2.8	1.3	2.7	3.7
AC-FT	452	201	173	142	116	85	322	1590	1660	189	286	301

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1994, BY WATER YEAR (WY)

	MEAN	4.80	4.29	3.50	3.07	2.73	2.64	5.41	30.5	74.6	24.4	7.58	5.06
MAX	19.6	14.6	8.11	5.63	4.65	5.34	17.4	99.4	192	130	27.3	13.8	
(WY)	1962	1962	1962	1962	1966	1950	1946	1936	1983	1983	1945	1945	
MIN	.98	1.09	.87	.89	.74	.65	1.61	3.69	2.68	2.40	1.52	.98	
(WY)	1969	1965	1965	1964	1964	1964	1961	1954	1966	1966	1960	1960	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1935 - 1994

ANNUAL TOTAL	7048.5	2782.2	
ANNUAL MEAN	19.3	7.62	
HIGHEST ANNUAL MEAN			31.4
LOWEST ANNUAL MEAN			2.55
HIGHEST DAILY MEAN	153	Jun 21	345
LOWEST DAILY MEAN	2.4	Dec 31	1.40
ANNUAL SEVEN-DAY MINIMUM	2.6	Dec 25	1.3
INSTANTANEOUS PEAK FLOW			126
INSTANTANEOUS PEAK STAGE			2.51
ANNUAL RUNOFF (AC-FT)	13980	5520	3.96
10 PERCENT EXCEEDS	67	14	30
50 PERCENT EXCEEDS	5.2	3.3	4.1
90 PERCENT EXCEEDS	3.1	1.8	1.8

a-Also occurred Oct 6, 1960, and Sep 24-26, 1988.

09032100 CABIN CREEK NEAR FRASER, CO

LOCATION.--Lat 39°59'09", long 105°44'40", in NW1/4SE1/4 sec.2, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 200 ft downstream from concrete diversion dam, 2.7 mi upstream from mouth and 4.6 mi northeast of Fraser.

DRAINAGE AREA.--4.87 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 9,560 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, 21, 24, 25, Oct. 27 to Apr. 20, and Apr. 27 to May 26. Records poor. Transmountain diversion upstream from station to Moffat water tunnel, amount unknown. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.2	1.6	1.2	.91	.89	1.2	5.4	51	8.5	2.8	1.5
2	3.1	2.2	1.6	1.1	.90	.89	1.5	5.0	49	8.9	2.9	1.7
3	2.7	2.1	1.5	1.1	.88	.88	1.1	4.2	47	9.2	2.8	1.5
4	2.6	2.1	1.5	1.1	.87	.88	1.1	4.1	44	8.2	2.4	1.5
5	2.5	2.1	1.4	1.0	.86	.87	1.0	3.8	38	7.6	2.4	1.4
6	2.5	2.1	1.4	1.0	.86	.88	1.0	3.9	36	7.0	2.3	1.3
7	3.1	2.1	1.4	1.0	.87	.88	.98	5.0	33	6.9	2.2	1.3
8	3.6	2.0	1.4	1.0	.88	.89	.98	7.2	30	6.5	2.2	1.3
9	3.4	2.0	1.4	.98	.90	.91	.94	8.6	28	6.0	2.2	1.3
10	3.0	2.0	1.4	.96	.92	.92	.90	10	22	5.6	2.2	1.3
11	3.2	2.0	1.3	.94	.92	.94	.86	11	11	5.3	1.9	1.2
12	2.7	2.0	1.3	.92	.93	.95	.84	13	11	5.0	1.8	1.3
13	2.5	2.0	1.3	.91	.94	.96	.82	14	11	4.7	1.8	1.6
14	2.4	2.0	1.3	.92	.93	1.0	.84	15	11	4.6	1.8	2.1
15	2.3	2.0	1.3	.94	.94	1.0	.84	16	10	4.4	1.6	1.7
16	2.2	2.0	1.3	.94	.94	1.0	.88	17	10	4.2	1.6	1.5
17	2.2	2.0	1.3	.94	.94	1.0	1.0	18	11	4.0	1.6	1.4
18	2.3	2.0	1.3	.95	.94	1.0	1.2	18	11	3.7	1.5	1.3
19	2.1	2.0	1.3	.96	.94	1.1	2.3	19	11	3.6	1.9	1.4
20	2.1	1.9	1.3	.97	.93	1.1	5.0	19	11	3.5	2.1	1.6
21	2.5	1.9	1.3	.97	.92	1.1	6.2	18	11	3.4	1.8	2.2
22	2.2	1.8	1.3	.97	.92	1.1	4.7	14	11	3.0	1.7	1.8
23	2.3	1.8	1.2	.97	.93	1.1	5.5	11	10	3.4	1.6	1.6
24	2.4	1.8	1.3	.96	.93	1.1	6.0	6.1	9.6	4.0	1.5	1.5
25	2.4	1.8	1.3	.96	.92	1.2	5.5	4.0	9.3	3.4	1.5	1.4
26	2.2	1.8	1.3	.95	.91	1.2	5.9	2.5	8.9	3.1	1.4	1.4
27	2.3	1.7	1.3	.94	.90	1.2	5.8	2.9	8.5	2.9	1.3	1.4
28	2.3	1.7	1.3	.93	.90	1.2	5.8	8.8	8.8	2.8	1.6	1.3
29	2.2	1.7	1.3	.92	---	1.2	5.8	18	9.1	3.1	1.7	1.3
30	2.2	1.6	1.4	.92	---	1.2	5.6	37	8.7	3.0	1.6	1.4
31	2.2	---	1.3	.92	---	1.3	---	43	---	2.7	1.5	---
TOTAL	78.1	58.4	41.9	30.24	25.53	31.84	82.08	382.5	580.9	152.2	59.2	44.5
MEAN	2.52	1.95	1.35	.98	.91	1.03	2.74	12.3	19.4	4.91	1.91	1.48
MAX	3.6	2.2	1.6	1.2	.94	1.3	6.2	43	51	9.2	2.9	2.2
MIN	2.1	1.6	1.2	.91	.86	.87	.82	2.5	8.5	2.7	1.3	1.2
AC-FT	155	116	83	60	51	63	163	759	1150	302	117	88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

MEAN	2.47	1.95	1.44	1.20	1.02	1.06	1.56	9.24	29.6	11.4	4.35	3.05
MAX	4.54	2.93	2.12	1.74	1.40	1.40	2.74	24.1	58.3	25.8	8.05	5.12
(WY)	1986	1986	1986	1987	1992	1992	1994	1984	1984	1984	1984	1984
MIN	1.67	.48	.47	.59	.30	.12	.079	1.60	9.99	4.91	1.91	1.48
(WY)	1990	1985	1985	1985	1985	1985	1985	1985	1989	1994	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1984 - 1994

ANNUAL TOTAL	1928.42	1567.39	
ANNUAL MEAN	5.28	4.29	
HIGHEST ANNUAL MEAN			11.0 1984
LOWEST ANNUAL MEAN			3.77 1989
HIGHEST DAILY MEAN	45	51	96 Jun 14 1984
LOWEST DAILY MEAN	.92 Jun 30	.82 Jun 1	.04 May 7 1985
ANNUAL SEVEN-DAY MINIMUM	.95 Jan 24	.85 Apr 13	.07 Apr 12 1985
INSTANTANEOUS PEAK FLOW		59 Jun 1	126 Jun 13 1984
INSTANTANEOUS PEAK STAGE		1.92 Jun 1	2.37 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	3830	3110	
10 PERCENT EXCEEDS	15	10	14
50 PERCENT EXCEEDS	2.0	1.7	2.0
90 PERCENT EXCEEDS	1.0	.92	.98

400009105504600 FRASER RIVER BELOW CROOKED CREEK AT TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°00'09", long 105°50'46", in NW¹/4SE¹/4 sec.36, T.1 N., R.76 W., Grand County, Hydrologic Unit 14010001 on left bank approximately 100 ft downstream from the confluence of Crooked Creek and the Fraser River.

DRAINAGE AREA.--224 mi².

PERIOD OF RECORD.--October 1990 to current year.

REVISED RECORDS.--WDR CO-93-2: Drainage area.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 06...	1115	48	120	8.2	6.0	9.7	--	<0.001	<0.005	0.006
NOV 03...	1135	44	156	8.4	0.0	11.1	--	<0.001	0.087	<0.002
DEC 01...	1220	e23	101	7.8	0.0	11.6	0.204	0.004	0.208	0.070
JAN 05...	1120	e25	110	7.5	0.0	9.0	0.306	0.003	0.309	0.325
FEB 02...	1110	e22	109	7.7	0.0	9.4	0.295	0.007	0.302	0.461
MAR 02...	1130	e21	126	7.5	0.0	9.1	0.389	0.004	0.393	0.439
APR 07...	0945	41	179	8.1	0.0	11.1	0.218	0.002	0.220	0.206
MAY 04...	1155	116	144	8.4	6.0	9.8	0.038	0.004	0.042	0.003
JUN 01...	1400	--	71	8.0	12.0	8.7	0.044	0.001	0.045	<0.002
JUL 07...	1230	70	141	8.0	9.0	8.7	0.029	0.003	0.032	0.052
AUG 03...	1035	44	140	8.6	15.5	9.4	0.014	0.004	0.018	<0.002
SEP 08...	1415	33	109	7.8	17.0	7.5	0.013	0.001	0.014	<0.002

e-Estimated

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, CO

LOCATION.--Lat 40°06'30", long 106°00'13" in NW¹/₄ sec.27, R.77 W., T.2 N., Grand County, Hydrologic Unit 14010001, on right bank 300 ft downstream from county highway bridge, 1.1 mi downstream from Windy Gap diversion dam, 2.4 mi downstream from mouth of Fraser River, and 3.8 mi northwest of Granby.

DRAINAGE AREA.--789 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 13, and Mar. 19-23. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, and diversions for irrigation. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	107	96	87	92	94	116	256	694	252	164	103
2	109	116	96	89	91	94	137	270	696	264	146	92
3	109	113	94	91	90	95	130	297	651	313	134	91
4	109	118	92	92	90	95	160	305	654	277	123	91
5	103	112	95	93	88	96	155	302	615	247	120	90
6	100	112	97	93	87	96	129	336	557	225	120	78
7	115	91	98	93	86	97	125	380	534	228	114	71
8	148	101	98	92	86	100	118	424	598	231	114	62
9	150	96	97	92	85	100	117	310	511	217	119	62
10	150	103	96	92	83	101	119	262	409	205	122	74
11	142	112	97	92	84	102	111	282	349	205	121	75
12	135	123	97	93	84	102	119	297	313	206	111	79
13	173	115	96	92	84	102	147	344	316	197	106	76
14	142	114	96	92	84	104	224	382	302	195	117	95
15	179	114	95	92	84	104	220	340	296	194	112	82
16	165	108	95	92	85	117	264	319	286	198	105	77
17	148	108	95	92	85	136	333	328	280	197	108	71
18	180	105	93	92	85	129	360	375	286	194	108	71
19	175	103	92	92	86	130	358	387	309	197	114	66
20	149	102	91	92	90	130	388	399	396	197	135	67
21	113	101	90	92	92	132	408	390	437	193	117	74
22	128	99	90	93	92	133	448	344	534	184	107	75
23	121	96	89	94	93	140	413	291	547	180	107	75
24	124	97	88	95	93	135	396	223	463	186	101	71
25	112	98	88	93	93	135	393	199	363	195	98	66
26	121	98	87	93	93	127	303	189	314	191	96	75
27	106	98	85	92	93	112	280	200	294	175	94	71
28	110	96	84	92	93	100	272	231	276	169	98	71
29	114	95	81	92	---	105	263	385	270	169	104	69
30	92	94	82	92	---	96	238	385	257	168	104	69
31	99	---	85	92	---	101	---	552	---	163	116	---
TOTAL	4029	3145	2855	2855	2471	3440	7244	9984	12807	6412	3555	2289
MEAN	130	105	92.1	92.1	88.2	111	241	322	427	207	115	76.3
MAX	180	123	98	95	93	140	448	552	696	313	164	103
MIN	92	91	81	87	83	94	111	189	257	163	94	62
AC-FT	7990	6240	5660	5660	4900	6820	14370	19800	25400	12720	7050	4540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	97.8	102	82.5	78.0	77.5	103	279	636	805	528	165	100	
MAX	152	188	120	110	110	260	827	2326	2997	2096	403	202	
(WY)	1985	1986	1985	1985	1985	1984	1984	1984	1984	1983	1983	1984	
MIN	59.9	76.5	64.3	59.0	63.5	75.8	132	138	186	172	106	65.4	
(WY)	1982	1982	1982	1989	1982	1983	1983	1992	1990	1989	1989	1989	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1982 - 1994

ANNUAL TOTAL	97097	61086	
ANNUAL MEAN	266	167	255
HIGHEST ANNUAL MEAN			726
LOWEST ANNUAL MEAN			122
HIGHEST DAILY MEAN	1710	May 29	4930
LOWEST DAILY MEAN	58	Mar 25	42
ANNUAL SEVEN-DAY MINIMUM	66	Feb 20	51
INSTANTANEOUS PEAK FLOW			5260
INSTANTANEOUS PEAK STAGE			7.34
ANNUAL RUNOFF (AC-FT)	192600	121200	184800
10 PERCENT EXCEEDS	811	344	503
50 PERCENT EXCEEDS	116	111	107
90 PERCENT EXCEEDS	78	85	68

a-Also occurred Sep 9.

b-Also occurred Oct 2, 1981.

c-Maximum gage height, 5.20 ft, Feb 16, backwater from ice.

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¹/4NE¹/4 sec.2, T.1 N., R.78W., Grand County, Hydrologic Unit 14010001, on left bank about 1,000 ft north of U.S. Highway 40, 1 mi northeast of Hot Sulphur Springs, and 4.5 mi upstream from Beaver Creek.

DRAINAGE AREA.--825 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to September 1994 (Discontinued). Monthly discharge only for some periods, published in WSP 1313. Prior to 1907 and 1914-18, published as Grand River at Hot Sulphur Springs, and as Grand River at Sulphur Springs 1907-13. Statistical summary computed for 1954 to current year.

REVISED RECORDS.--WSP 1313: 1905. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,670 ft above sea level, from railroad elevations. July 28, 1904, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi downstream at datum 7,651.26 ft, above sea level. Supplemental water-stage recorder (nonrecording gage prior to Jan. 1, 1963) at different datum at site 1.7 mi downstream, used for winter records some years.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 26. Records good except for estimated daily discharges, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions upstream from station for irrigation of about 13,000 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	102	100	97	89	88	108	269	684	271	193	108
2	114	112	100	96	89	90	129	282	682	253	164	94
3	114	107	100	96	89	92	126	312	633	300	148	94
4	116	112	96	96	89	94	138	320	633	286	124	92
5	109	108	100	96	89	96	137	318	593	281	123	91
6	103	116	101	94	88	98	118	353	534	249	131	83
7	113	96	102	94	86	100	107	398	505	246	136	75
8	146	104	101	94	86	101	104	444	638	251	142	68
9	147	105	100	94	86	100	105	357	533	229	149	63
10	149	115	100	94	88	100	110	300	391	196	124	77
11	145	107	100	92	87	101	110	320	326	195	131	75
12	128	117	100	93	86	101	127	336	288	201	133	79
13	169	121	100	94	86	102	130	379	301	197	114	76
14	141	125	100	90	86	103	181	421	312	194	137	90
15	174	121	100	90	86	104	185	377	305	237	118	84
16	164	114	100	90	86	112	224	353	290	234	122	77
17	150	112	100	90	86	140	300	359	274	225	123	75
18	175	111	100	90	86	130	335	397	278	208	105	78
19	175	110	100	90	86	130	323	410	311	188	110	75
20	154	109	100	90	86	130	362	418	371	187	132	77
21	113	108	100	90	86	131	393	410	418	192	117	84
22	129	107	100	90	86	137	442	366	496	204	108	83
23	129	107	100	90	86	144	430	317	530	196	109	83
24	122	107	100	90	86	154	409	256	451	199	104	82
25	120	106	100	90	86	135	406	225	389	206	100	71
26	125	106	100	90	86	132	320	209	330	199	98	80
27	109	105	100	90	86	127	299	222	288	167	99	74
28	110	103	100	90	86	104	301	267	283	164	101	76
29	119	102	100	90	---	107	284	392	302	168	106	75
30	101	101	100	90	---	88	258	413	295	170	105	72
31	101	---	100	90	---	97	---	571	---	196	114	---
TOTAL	4078	3276	3100	2850	2428	3468	7001	10771	12664	6689	3820	2411
MEAN	132	109	100	91.9	86.7	112	233	347	422	216	123	80.4
MAX	175	125	102	97	89	154	442	571	684	300	193	108
MIN	101	96	96	90	86	88	104	209	274	164	98	63
AC-FT	8090	6500	6150	5650	4820	6880	13890	21360	25120	13270	7580	4780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	MEAN	93.5	92.0	78.3	73.1	74.6	100	269	638	750	412	148	86.3
MAX	291	201	133	122	125	265	1254	2415	2950	2081	401	186	
(WY)	1962	1986	1985	1985	1985	1984	1962	1984	1984	1983	1983	1961	
MIN	52.8	58.1	49.7	47.5	54.1	55.6	124	159	174	141	82.0	44.2	
(WY)	1965	1965	1961	1961	1961	1964	1981	1992	1954	1954	1981	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	102455	62556	
ANNUAL MEAN	281	171	a 235
HIGHEST ANNUAL MEAN			736
LOWEST ANNUAL MEAN			111
HIGHEST DAILY MEAN	1830	May 29	5310
LOWEST DAILY MEAN	69	Feb 21	33
ANNUAL SEVEN-DAY MINIMUM	69	Feb 19	37
INSTANTANEOUS PEAK FLOW			c 5720
INSTANTANEOUS PEAK STAGE			d 1.94
ANNUAL RUNOFF (AC-FT)	203200	124100	e 5.10
10 PERCENT EXCEEDS	841	358	170300
50 PERCENT EXCEEDS	124	112	100
90 PERCENT EXCEEDS	84	86	63

a-Average discharge for 39 years (water years 1905-09, 1911-47), 675 ft³/s; 489000 acre-ft/yr, prior to storage by Lake Granby.

b-Also occurred Feb 22-25.

c-Maximum discharge and stage for period of record, 10300 ft³/s, Jun 15, 1921, gage height, 8.7 ft, site and datum then in use.

d-Maximum gage height, 3.05 ft, Mar 20, backwater from ice.

e-Maximum gage height for statistical period, 5.52 ft, Nov 22, 1961, backwater from ice.

COLORADO RIVER MAIN STEM

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1947 to September 1994 (Discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1947 to current year.

WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Limited temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily observed, 524 microsiemens, Dec. 24, 1986; minimum daily observed, 48 microsiemens, June 2, 1947.

WATER TEMPERATURE: Maximum daily observed, 29°C, Aug. 3, 1981; minimum daily observed, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily observed, 193 microsiemens, Dec. 4; minimum daily observed, 70 microsiemens, June 2.

WATER TEMPERATURE: Maximum daily observed, 22°C, Aug. 17, and 26; minimum daily observed, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 07...	1030	105	140	7.9	7.0	8.7	57	18	2.8
MAR 10...	1300	e90	144	7.8	0.0	8.1	57	18	2.9
MAY 06...	1000	378	117	8.3	8.5	8.2	48	15	2.5
AUG 18...	1135	104	133	8.4	14.0	9.6	52	16	2.8

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT 07...	6.2	0.4	1.0	65	5.0	1.7	0.3	12	86
MAR 10...	7.5	0.4	1.8	61	6.2	3.3	0.2	14	93
MAY 06...	5.0	0.3	1.2	51	5.0	2.5	0.2	11	73
AUG 18...	5.9	0.4	1.4	60	3.8	2.0	0.2	11	79

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
OCT 07...	0.12	24.4	1	<0.05	0.20	<0.20	0.01	0.02
MAR 10...	0.13	22.5	6	0.36	0.40	0.30	0.07	0.05
MAY 06...	0.10	74.7	19	<0.05	0.50	0.20	0.07	0.01
AUG 18...	0.11	22.3	7	<0.05	0.30	<0.20	0.03	0.02

e-Estimated.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

COLORADO RIVER MAIN STEM

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	152	151	143	141	135	156	134	72	141	134	126
2	140	146	140	139	140	137	162	136	70	140	135	128
3	128	147	143	139	140	137	156	132	72	144	141	130
4	147	145	193	139	140	142	156	130	71	150	144	132
5	128	144	142	138	136	141	157	124	74	150	145	134
6	142	144	147	138	140	142	155	118	75	151	142	136
7	141	145	137	139	139	144	158	110	78	149	142	135
8	143	156	142	139	136	148	162	105	84	150	143	136
9	143	165	138	144	136	153	154	101	91	148	143	136
10	143	144	140	142	135	148	156	98	101	148	141	135
11	138	144	138	141	136	148	164	97	107	145	136	137
12	140	137	148	143	135	149	158	96	116	145	133	140
13	139	141	143	138	137	144	168	96	120	144	135	135
14	137	143	145	138	140	148	154	94	125	144	134	136
15	133	142	157	137	141	149	150	93	129	144	138	136
16	136	144	140	136	137	152	142	92	130	143	137	135
17	136	145	139	138	140	151	134	91	131	145	131	135
18	142	146	144	153	137	150	130	89	135	142	137	136
19	146	146	146	138	135	161	133	86	134	141	130	142
20	145	155	145	138	135	132	125	84	135	141	132	139
21	150	146	143	137	135	148	123	83	142	143	130	140
22	152	165	145	142	135	149	124	81	129	143	135	141
23	145	140	140	138	138	149	113	85	122	141	131	148
24	145	153	144	143	138	151	112	88	124	139	128	141
25	151	146	142	162	136	164	112	95	132	139	127	141
26	144	154	141	138	134	163	112	96	137	138	125	145
27	146	159	141	137	135	165	121	99	138	139	126	140
28	145	150	137	137	175	182	125	97	141	138	125	139
29	145	153	138	140	---	164	135	92	140	135	131	139
30	146	142	141	140	---	160	135	88	142	134	129	139
31	151	---	145	140	---	157	---	77	---	132	129	---
MEAN	142	148	144	140	139	150	141	100	113	143	134	137

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	1.0	.0	.0	.0	.0	7.0	10.0	13.0	14.0	14.0	15.0
2	14.0	4.0	.0	.0	.0	.0	4.0	7.0	14.0	15.0	13.0	20.0
3	15.0	1.0	.0	.0	.0	.0	8.0	6.0	12.0	18.0	13.0	20.0
4	10.0	2.0	.0	.0	.0	.0	3.0	10.0	13.0	15.0	13.0	17.0
5	14.0	2.0	.0	.0	.0	.0	6.0	8.0	13.0	19.0	14.0	19.0
6	14.0	3.0	.0	.0	.0	.0	7.0	14.0	11.0	12.0	19.0	18.0
7	9.0	2.0	.0	.0	.0	.0	4.0	14.0	14.0	10.0	21.0	19.0
8	13.0	1.0	.0	.0	.0	1.0	5.0	9.0	13.0	11.0	13.0	19.0
9	8.0	1.0	.0	.0	.0	2.0	3.0	9.0	12.0	12.0	14.0	17.0
10	8.0	2.0	.0	.0	.0	1.0	8.0	14.0	14.0	16.0	13.0	17.0
11	10.0	2.0	.0	.0	.0	1.0	7.0	8.0	17.0	12.0	15.0	15.0
12	9.0	4.0	.0	.0	.0	.0	10.0	12.0	14.0	13.0	19.0	12.0
13	7.0	3.0	.0	.0	.0	1.0	2.0	10.0	12.0	13.0	20.0	19.0
14	11.0	3.0	.0	.0	.0	.0	7.0	8.0	14.0	13.0	20.0	14.0
15	10.0	3.0	.0	.0	.0	2.0	7.0	10.0	13.0	13.0	13.0	14.0
16	9.0	1.0	.0	.0	.0	.0	11.0	9.0	15.0	15.0	15.0	15.0
17	9.0	.0	.0	.0	.0	2.0	10.0	14.0	12.0	16.0	22.0	16.0
18	6.0	.0	.0	.0	.0	2.0	5.0	14.0	12.0	12.0	12.0	16.0
19	8.0	.0	.0	.0	.0	1.0	5.0	12.0	18.0	12.0	17.0	10.0
20	10.0	.0	.0	.0	.0	4.0	10.0	14.0	14.0	14.0	14.0	15.0
21	10.0	.0	.0	.0	.0	3.0	11.0	12.0	17.0	13.0	19.0	14.0
22	9.0	.0	.0	.0	.0	3.0	10.0	13.0	17.0	13.0	12.0	15.0
23	10.0	.0	.0	.0	.0	3.0	8.0	11.0	14.0	18.0	18.0	6.0
24	9.0	.0	.0	.0	.0	5.0	10.0	13.0	15.0	20.0	20.0	15.0
25	8.0	.0	.0	.0	.0	4.0	10.0	12.0	17.0	14.0	20.0	14.0
26	8.0	.0	.0	.0	.0	5.0	8.0	15.0	16.0	14.0	22.0	8.0
27	7.0	.0	.0	.0	.0	5.0	4.0	11.0	14.0	12.0	20.0	15.0
28	5.0	.0	.0	.0	.0	2.0	9.0	12.0	15.0	13.0	20.0	15.0
29	5.0	.0	.0	.0	---	3.0	8.0	11.0	16.0	13.0	12.0	15.0
30	3.0	.0	.0	.0	---	5.0	10.0	15.0	17.0	15.0	16.0	15.0
31	4.0	---	.0	.0	---	7.0	---	11.0	---	17.0	11.0	---
MEAN	9.2	1.2	.0	.0	.0	2.0	7.2	11.2	14.3	14.1	16.3	15.3

09034900 BOBTAIL CREEK NEAR JONES PASS, CO

LOCATION.--Lat 39°45'37", long 105°54'21", in sec.28, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 320 ft upstream from diversion dam and 0.4 mi south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,430 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 19, 21-25, and Oct. 27 to May 9. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.9	1.2	.86	.70	.70	1.8	3.9	76	26	8.1	6.9
2	2.8	1.9	1.2	.86	.70	.70	1.8	3.9	74	26	7.4	10
3	2.7	1.9	1.2	.86	.70	.70	1.8	3.9	78	25	7.0	7.1
4	2.6	1.9	1.2	.86	.70	.70	1.8	3.9	80	23	6.3	6.9
5	2.5	1.9	1.2	.86	.70	.70	1.8	3.9	74	22	6.3	6.4
6	2.3	1.8	1.1	.80	.70	.70	1.8	5.0	70	18	6.0	6.4
7	3.3	1.7	1.1	.80	.70	.70	1.8	6.0	66	17	5.8	6.2
8	3.2	1.7	1.1	.80	.70	.70	1.8	8.0	62	16	5.7	5.9
9	2.9	1.7	1.1	.80	.70	.70	1.8	9.6	54	16	6.1	5.9
10	2.5	1.7	1.1	.80	.70	.70	1.8	10	51	16	6.5	5.5
11	4.7	1.7	1.1	.74	.70	.74	1.8	15	51	13	5.9	5.1
12	2.9	1.6	1.1	.74	.70	.74	1.8	24	52	10	5.8	5.2
13	2.8	1.5	1.1	.74	.70	.74	1.9	21	52	10	5.9	6.5
14	2.6	1.5	1.1	.74	.70	.74	1.9	16	50	10	5.6	5.5
15	2.7	1.5	1.1	.74	.70	.74	2.0	18	49	11	5.4	4.9
16	2.5	1.5	1.0	.72	.70	.76	2.1	25	47	8.9	5.1	4.4
17	2.2	1.5	1.0	.72	.70	.77	2.1	33	46	8.5	5.2	4.1
18	2.8	1.5	1.0	.72	.70	.78	2.2	36	48	8.9	5.1	4.0
19	3.1	1.5	1.0	.72	.70	.82	2.3	38	58	8.2	6.8	3.9
20	2.4	1.5	1.0	.72	.70	.87	2.5	42	55	7.8	6.1	4.1
21	2.5	1.4	1.0	.72	.70	.92	2.7	42	55	7.6	5.6	5.2
22	2.5	1.4	1.0	.72	.70	1.0	3.3	44	63	7.3	5.4	4.4
23	2.6	1.4	1.0	.72	.70	1.1	4.0	40	52	8.1	4.9	3.9
24	3.0	1.4	1.0	.72	.70	1.3	6.0	35	45	7.5	4.8	3.5
25	3.5	1.4	1.0	.72	.68	1.5	9.0	37	41	7.4	4.6	3.4
26	2.0	1.3	.94	.70	.70	1.6	7.5	40	38	7.1	4.5	3.2
27	2.0	1.3	.94	.70	.70	1.7	5.8	45	36	6.9	4.6	3.1
28	2.0	1.3	.94	.70	.70	1.7	4.6	44	34	6.7	5.4	2.9
29	2.0	1.3	.94	.70	---	1.7	3.9	48	32	6.3	4.8	2.9
30	1.9	1.3	.94	.70	---	1.7	3.9	60	30	6.3	4.5	3.3
31	1.9	---	.94	.70	---	1.8	---	66	---	6.3	4.2	---
TOTAL	82.3	46.9	32.64	23.40	19.58	30.72	89.3	827.1	1619	378.8	175.4	150.7
MEAN	2.65	1.56	1.05	.75	.70	.99	2.98	26.7	54.0	12.2	5.66	5.02
MAX	4.7	1.9	1.2	.86	.70	1.8	9.0	66	80	26	8.1	10
MIN	1.9	1.3	.94	.70	.68	.70	1.8	3.9	30	6.3	4.2	2.9
AC-FT	163	93	65	46	39	61	177	1640	3210	751	348	299

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	MEAN	2.90	1.70	1.09	.86	.77	.75	1.50	14.4	56.1	29.1	9.30	4.57
MAX	5.49	3.33	1.79	1.24	1.10	1.12	4.30	28.8	82.0	70.6	25.5	9.74	
(WY)	1985	1984	1983	1983	1984	1984	1969	1969	1986	1983	1983	1983	
MIN	1.51	1.03	.78	.58	.48	.52	.68	3.90	27.3	7.08	4.90	2.35	
(WY)	1981	1974	1977	1972	1972	1972	1973	1983	1966	1977	1977	1987	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1966 - 1994

	ANNUAL TOTAL	4500.77	3475.84	
ANNUAL MEAN	12.3	9.52	10.3	
HIGHEST ANNUAL MEAN			15.5	1984
LOWEST ANNUAL MEAN			6.28	1977
HIGHEST DAILY MEAN	109	Jun 29	146	Jun 25 1983
LOWEST DAILY MEAN	.50	Mar 15	.44	Feb 11 1972
ANNUAL SEVEN-DAY MINIMUM	.51	Mar 12	.46	Feb 11 1972
INSTANTANEOUS PEAK FLOW		119	Jun 19	Jun 28 1988
INSTANTANEOUS PEAK STAGE		4.34	Jun 19	Jun 28 1988
ANNUAL RUNOFF (AC-FT)	8930	6890	7440	
10 PERCENT EXCEEDS	46	38	33	
50 PERCENT EXCEEDS	1.9	2.5	1.9	
90 PERCENT EXCEEDS	.58	.70	.70	

a-Maximum gage height, 7.57 ft, May 15, 1984, backwater from ice.

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 700 ft downstream from Steelman Creek and 6.5 mi southeast of Leal.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--July 1933 to September 1941, published as Williams River below Steelman Creek. October 1965 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 9,800 ft above sea level, from topographic map. Prior to July 21, 1933, nonrecording gage, and July 21, 1933, to Sept. 30, 1941, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 21-22, and Oct. 27 to Apr. 25. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through August P. Gumlick Tunnel (station 09036000) since May 10, 1940. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	7.9	5.0	4.0	3.5	3.4	5.8	14	196	58	19	13
2	8.8	7.6	5.0	4.0	3.5	3.4	5.8	14	189	58	17	22
3	8.8	7.2	5.0	4.0	3.5	3.4	5.8	14	191	56	16	13
4	8.6	7.0	5.0	3.8	3.5	3.4	5.8	14	197	48	14	13
5	8.4	6.8	5.0	3.8	3.5	3.4	5.8	14	188	44	14	12
6	8.4	6.6	4.8	3.8	3.5	3.4	5.8	17	180	40	14	11
7	10	6.5	4.8	3.8	3.5	3.4	5.8	22	169	37	13	11
8	10	6.3	4.8	3.8	3.5	3.4	5.8	26	159	34	13	11
9	9.5	6.1	4.8	3.8	3.5	3.4	5.8	29	140	31	14	11
10	9.3	5.9	4.8	3.6	3.5	3.4	5.8	30	128	28	15	10
11	11	5.8	4.6	3.6	3.4	3.5	5.8	39	128	27	13	9.8
12	9.8	5.7	4.6	3.6	3.4	3.5	5.9	57	126	26	13	10
13	9.7	5.6	4.6	3.6	3.4	3.5	6.0	54	122	25	13	13
14	9.6	5.6	4.6	3.6	3.4	3.5	6.0	48	115	24	13	12
15	9.6	5.5	4.6	3.6	3.4	3.5	6.2	49	111	23	12	10
16	9.3	5.5	4.4	3.6	3.4	3.6	6.4	62	107	22	11	9.6
17	9.0	5.5	4.4	3.5	3.4	3.7	6.5	81	101	21	12	9.1
18	9.3	5.5	4.4	3.5	3.4	3.7	6.7	88	104	20	11	9.0
19	9.7	5.5	4.4	3.5	3.4	3.9	6.9	93	131	19	15	8.9
20	8.5	5.5	4.4	3.5	3.4	4.2	7.3	102	151	18	14	9.6
21	8.6	5.4	4.2	3.5	3.4	4.3	8.3	102	154	17	12	12
22	8.8	5.4	4.2	3.5	3.4	4.6	11	105	179	17	12	10
23	8.8	5.4	4.2	3.5	3.4	4.9	15	97	139	18	11	9.2
24	9.2	5.4	4.2	3.5	3.4	5.2	20	84	114	18	10	8.8
25	9.7	5.4	4.2	3.5	3.2	5.5	25	94	103	17	10	8.4
26	8.5	5.2	4.0	3.5	3.4	5.6	20	101	95	16	9.6	8.1
27	8.5	5.2	4.0	3.5	3.4	5.6	16	109	84	16	9.7	7.9
28	8.4	5.2	4.0	3.5	3.4	5.6	15	112	77	16	11	7.8
29	8.4	5.2	4.0	3.5	---	5.7	15	115	70	15	10	7.7
30	8.3	5.2	4.0	3.5	---	5.7	14	146	63	15	9.8	8.5
31	8.1	---	4.0	3.5	---	5.7	---	171	---	15	9.5	---
TOTAL	281.5	176.6	139.0	112.5	96.0	129.0	281.0	2103	4011	839	390.6	316.4
MEAN	9.08	5.89	4.48	3.63	3.43	4.16	9.37	67.8	134	27.1	12.6	10.5
MAX	11	7.9	5.0	4.0	3.5	5.7	25	171	197	58	19	22
MIN	8.1	5.2	4.0	3.5	3.2	3.4	5.8	14	63	15	9.5	7.7
AC-FT	558	350	276	223	190	256	557	4170	7960	1660	775	628

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1994, BY WATER YEAR (WY)

	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
MEAN	5.16	3.26	2.23	1.88	1.83	1.87	3.77	30.3	112	56.7	11.5	7.10
MAX	16.3	8.07	4.80	4.30	3.90	4.99	10.6	89.2	213	188	44.5	18.4
(WY)	1985	1938	1939	1939	1939	1985	1992	1936	1938	1983	1983	1984
MIN	.98	.58	.39	.31	.30	.35	.61	5.45	15.5	4.85	.70	.70
(WY)	1967	1987	1987	1978	1978	1987	1973	1991	1976	1968	1979	1979

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1933 - 1994

ANNUAL TOTAL	11419.3	8875.6	
ANNUAL MEAN	31.3	24.3	a 26.0
HIGHEST ANNUAL MEAN			38.6 1984
LOWEST ANNUAL MEAN			4.11 1976
HIGHEST DAILY MEAN	271 Jun 29	197 Jun 4	325 Jun 21 1938
LOWEST DAILY MEAN	b 2.4 Apr 8	3.2 Feb 25	.20 Mar 6 1967
ANNUAL SEVEN-DAY MINIMUM	2.5 Feb 23	3.4 Feb 19	.27 Feb 13 1971
INSTANTANEOUS PEAK FLOW		279 Jun 19	c 441 Jun 21 1938
INSTANTANEOUS PEAK STAGE		5.12 Jun 19	d 2.48 Jun 21 1938
INSTANTANEOUS LOW FLOW			.20 Mar 6 1967
ANNUAL RUNOFF (AC-FT)	22650	17600	14340
10 PERCENT EXCEEDS	113	94	65
50 PERCENT EXCEEDS	6.1	8.4	3.4
90 PERCENT EXCEEDS	2.6	3.5	.60

a-Including diversions to August P. Gumlick Tunnel.

b-Also occurred Apr 9.

c-Site and datum then in use, from rating curve extended above 260 ft³/s.

d-Maximum gage height, 6.96 ft, May 15, 1984, backwater from ice.

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO

LOCATION.--Lat 39°47'50", long 106°01'32", in NW¹/4NW¹/4 sec.16, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.3 mi upstream from Darling Creek and 1.4 mi southeast of Leal.

DRAINAGE AREA.--35.0 mi² (revised).

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WDR CO-93-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,940 ft above sea level, from topographic map. Prior to Oct. 1, 1972, and May 6, 1981 to Jan. 31, 1983, at site 300 ft upstream at different datum. Prior to Oct. 20, 1992, and Oct. 1, 1972 to May 5, 1981, at site 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 27 to May 3, and Aug. 16 to Sept. 30. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	11	8.8	8.1	7.8	14	18	262	90	38	35
2	16	16	11	8.9	8.0	7.8	14	18	254	88	36	51
3	16	15	11	9.0	8.0	7.8	14	17	253	92	32	40
4	15	15	11	9.0	7.9	7.8	15	20	269	80	28	30
5	15	16	11	8.9	7.9	7.9	15	26	263	72	27	26
6	15	16	10	8.7	7.9	7.9	15	41	251	68	27	22
7	18	14	10	8.6	7.8	7.9	14	52	236	65	25	19
8	19	14	10	8.4	7.8	7.9	14	59	219	61	24	15
9	17	13	10	8.3	7.8	7.9	15	62	202	57	26	17
10	17	12	10	8.3	7.8	7.9	15	65	190	54	32	18
11	18	12	10	8.2	7.8	7.9	16	80	184	51	26	20
12	19	12	10	8.2	7.8	8.1	17	104	185	49	24	16
13	18	12	10	8.2	7.7	8.2	18	109	182	47	26	18
14	18	12	9.9	8.2	7.7	8.5	20	100	177	46	25	22
15	18	12	9.9	8.3	7.7	8.5	20	98	170	45	24	19
16	18	13	9.8	8.3	7.7	8.6	21	113	165	42	25	17
17	18	12	9.8	8.3	7.7	8.7	24	143	157	40	26	17
18	18	12	9.7	8.2	7.7	8.8	27	154	159	39	27	16
19	17	12	9.5	8.1	7.8	8.8	33	163	171	38	28	15
20	16	12	9.6	8.0	7.8	8.9	37	169	184	36	33	20
21	18	11	9.6	8.1	7.7	9.4	45	169	181	35	32	19
22	17	11	9.7	8.1	7.7	10	50	171	206	33	32	18
23	16	11	9.6	8.1	7.6	10	48	164	173	33	28	18
24	16	11	9.4	8.1	7.7	11	35	148	154	35	26	17
25	17	11	9.2	8.0	7.7	12	31	157	141	32	23	16
26	15	11	9.0	8.0	7.7	12	27	169	130	32	23	16
27	15	11	9.0	8.0	7.8	12	21	171	120	30	24	15
28	15	11	9.0	8.0	7.8	14	20	177	111	30	24	15
29	16	11	8.9	8.0	---	14	19	176	104	29	23	14
30	16	11	8.9	8.0	---	14	18	208	97	28	21	15
31	16	---	8.9	8.0	---	14	---	234	---	28	20	---
TOTAL	519	378	304.4	257.3	218.1	296.0	692	3555	5550	1505	835	616
MEAN	16.7	12.6	9.82	8.30	7.79	9.55	23.1	115	185	48.5	26.9	20.5
MAX	19	16	11	9.0	8.1	14	50	234	269	92	38	51
MIN	15	11	8.9	8.0	7.6	7.8	14	17	97	28	20	14
AC-FT	1030	750	604	510	433	587	1370	7050	11010	2990	1660	1220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	MEAN	11.4	8.54	7.05	5.94	5.39	5.84	10.7	56.0	195	103	25.7	15.3
MAX	26.2	15.2	11.9	9.23	7.98	9.55	23.1	121	319	318	75.5	40.9	
(WY)	1985	1985	1984	1992	1970	1994	1994	1984	1984	1983	1983	1984	
MIN	6.20	4.90	3.87	3.43	3.47	3.21	5.29	21.3	63.6	21.9	10.4	7.09	
(WY)	1980	1990	1975	1975	1975	1980	1973	1975	1966	1977	1981	1966	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1966 - 1994

ANNUAL TOTAL	19783.0	14725.8	
ANNUAL MEAN	54.2	40.3	37.5
HIGHEST ANNUAL MEAN			71.3
LOWEST ANNUAL MEAN			17.6
HIGHEST DAILY MEAN	394	269	518
LOWEST DAILY MEAN	3.8	7.6	2.7
ANNUAL SEVEN-DAY MINIMUM	3.8	7.7	2.8
INSTANTANEOUS PEAK FLOW		333	677
INSTANTANEOUS PEAK STAGE		6.27	7.12
ANNUAL RUNOFF (AC-FT)	39240	29210	27180
10 PERCENT EXCEEDS	203	154	109
50 PERCENT EXCEEDS	13	16	10
90 PERCENT EXCEEDS	4.4	8.0	4.7

a-Also occurred Mar 9-12.

b-Also occurred Jun 4.

c-Site and datum then in use, from rating curve extended above 430 ft³/s.

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'20", long 106°01'05", in NE¹/4SW¹/4 sec.9, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.6 mi upstream from mouth and 1.4 mi southeast of Leal.

DRAINAGE AREA.--8.21 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,090 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 28 to Apr. 13. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.0	3.0	2.1	1.9	1.9	2.6	3.4	42	11	6.5	4.4
2	5.5	4.9	2.9	2.1	1.9	1.9	2.6	3.4	40	11	4.6	6.7
3	5.5	4.9	2.9	2.1	1.8	1.9	2.6	3.2	41	12	4.1	4.0
4	5.4	4.8	3.0	2.2	1.8	1.9	2.6	3.3	41	9.4	3.7	3.7
5	5.1	4.5	3.0	2.2	1.8	1.9	2.6	4.2	40	9.0	3.9	3.4
6	4.8	4.6	2.9	2.1	1.8	2.0	2.6	5.9	38	8.3	3.6	3.2
7	5.5	4.8	2.8	2.1	1.7	2.0	2.7	7.4	37	8.2	3.2	2.9
8	5.7	4.9	2.7	2.1	1.8	2.0	2.7	8.2	36	7.9	3.1	2.6
9	5.5	4.5	2.7	2.1	1.7	2.1	2.7	9.1	33	7.4	3.7	2.7
10	5.4	4.2	2.7	2.0	1.6	2.2	2.7	10	31	6.9	4.5	2.9
11	5.6	3.8	2.7	2.0	1.7	2.2	2.7	13	30	6.9	3.7	2.5
12	5.7	3.7	2.6	2.0	1.7	2.2	2.7	17	29	6.6	3.2	2.6
13	5.6	3.6	2.6	2.0	1.7	2.2	2.7	17	28	6.4	3.8	4.1
14	5.6	3.5	2.6	2.0	1.7	2.2	2.7	16	27	6.4	3.5	3.6
15	5.5	3.5	2.5	2.0	1.7	2.3	2.5	16	25	6.1	3.3	3.1
16	5.5	3.6	2.5	2.0	1.8	2.3	3.1	19	24	6.0	3.0	2.8
17	5.3	3.8	2.4	1.9	1.8	2.3	3.9	23	22	5.7	3.0	2.6
18	5.5	3.4	2.4	2.0	1.7	2.3	4.4	27	22	5.4	2.9	2.5
19	5.2	3.3	2.4	1.9	1.7	2.4	4.7	28	24	5.4	4.9	2.6
20	5.1	3.2	2.4	1.9	1.8	2.4	5.1	30	23	5.2	4.6	3.2
21	5.2	3.1	2.4	1.9	1.9	2.4	6.0	30	23	4.8	3.6	4.2
22	5.2	3.1	2.3	1.9	1.8	2.4	6.7	31	26	4.6	3.6	3.2
23	5.2	3.0	2.3	1.9	1.8	2.4	7.4	30	21	4.6	3.1	3.0
24	5.2	3.0	2.3	1.9	1.8	2.4	7.7	28	19	4.6	2.8	2.7
25	5.1	3.0	2.2	1.9	1.8	2.5	6.8	29	17	4.5	2.9	2.6
26	4.9	3.0	2.3	1.9	1.8	2.5	5.0	30	16	4.4	2.7	2.4
27	4.6	3.0	2.4	1.9	1.8	2.5	4.4	29	15	4.3	2.7	2.3
28	4.6	3.0	2.2	1.9	1.8	2.5	4.0	30	14	4.1	3.2	2.2
29	4.6	3.0	2.2	1.9	---	2.6	3.8	30	13	4.2	3.3	2.2
30	4.8	3.0	2.2	1.9	---	2.6	3.6	34	12	4.2	3.4	2.8
31	4.9	---	2.2	1.9	---	2.6	---	38	---	4.2	3.4	---
TOTAL	162.8	112.7	78.7	61.7	49.6	70.0	116.3	603.1	809	199.7	111.5	93.7
MEAN	5.25	3.76	2.54	1.99	1.77	2.26	3.88	19.5	27.0	6.44	3.60	3.12
MAX	5.7	5.0	3.0	2.2	1.9	2.6	7.7	38	42	12	6.5	6.7
MIN	4.6	3.0	2.2	1.9	1.6	1.9	2.5	3.2	12	4.1	2.7	2.2
AC-FT	323	224	156	122	98	139	231	1200	1600	396	221	186

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	MEAN	4.02	3.06	2.50	2.12	1.94	1.96	2.87	14.3	47.4	21.8	7.20	4.61
MAX	7.86	5.52	4.33	3.00	3.00	2.90	6.03	26.3	85.1	91.6	20.2	9.64	
(WY)	1985	1985	1985	1985	1985	1985	1985	1974	1984	1983	1983	1984	
MIN	2.55	1.82	1.38	1.20	1.21	1.10	1.49	4.39	20.5	5.32	3.44	2.59	
(WY)	1979	1976	1976	1976	1975	1975	1975	1983	1966	1977	1981	1979	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1966 - 1994

	ANNUAL TOTAL	4331.3	2468.8	
ANNUAL MEAN	11.9	6.76	9.48	
HIGHEST ANNUAL MEAN			18.1	1983
LOWEST ANNUAL MEAN			5.64	1977
HIGHEST DAILY MEAN			175	Jun 25 1983
LOWEST DAILY MEAN	^a 69	Jun 17	1.6	Feb 10 1975
ANNUAL SEVEN-DAY MINIMUM	1.8	Mar 12	1.7	Feb 9 1975
INSTANTANEOUS PEAK FLOW			51	Jun 1
INSTANTANEOUS PEAK STAGE			3.19	Jun 1
ANNUAL RUNOFF (AC-FT)	8590	4900	6870	
10 PERCENT EXCEEDS	38	22	26	
50 PERCENT EXCEEDS	4.2	3.2	3.4	
90 PERCENT EXCEEDS	2.0	1.9	1.8	

a-Also occurred Jun 29-30.

b-Also occurred Feb 19, and Mar 14-17.

c-From rating curve extended above 100 ft³/s.

09035900 SOUTH FORK WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'45", long 106°01'48", in NE1/4 sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft upstream from highway bridge, 0.6 mi upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--27.3 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,950 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30 to May 5. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	9.9	6.9	6.0	6.5	5.6	13	186	41	34	16
2	14	14	9.8	6.9	6.0	6.5	5.8	13	191	38	27	33
3	14	13	9.7	6.8	6.0	6.6	6.0	13	189	39	23	18
4	14	13	9.6	6.7	6.0	6.6	6.0	13	194	34	21	17
5	14	13	9.6	6.6	6.0	6.6	6.2	14	194	31	20	15
6	13	13	9.3	6.6	5.9	6.6	6.1	26	184	29	20	14
7	15	14	9.0	6.6	5.9	6.7	6.2	35	171	27	19	14
8	16	15	9.0	6.6	5.8	7.0	6.5	40	161	28	18	14
9	15	12	9.0	6.6	5.7	7.4	6.8	43	145	33	19	14
10	15	12	9.0	6.6	5.7	7.7	7.0	44	129	31	23	14
11	15	12	8.9	6.5	5.6	7.8	7.2	54	129	31	19	13
12	16	12	8.8	6.5	5.6	8.0	7.5	68	128	29	18	13
13	15	12	8.8	6.5	5.6	8.0	7.8	72	126	28	18	15
14	15	11	8.8	6.5	5.7	8.1	8.0	73	116	28	19	17
15	16	12	8.4	6.4	5.7	8.2	8.8	75	110	27	17	14
16	16	13	8.3	6.4	5.8	8.4	9.0	81	105	25	16	14
17	15	11	8.2	6.4	5.9	9.0	9.5	94	99	24	18	13
18	15	12	8.0	6.4	5.8	8.4	10	70	102	24	16	13
19	14	13	8.2	6.3	5.8	8.5	11	70	113	23	20	13
20	14	12	8.1	6.3	5.8	8.4	14	78	119	22	22	13
21	14	12	8.0	6.2	5.9	7.5	16	80	125	21	18	16
22	14	11	8.0	6.2	6.0	8.0	18	81	126	21	18	14
23	14	11	8.0	6.1	6.1	8.4	28	86	101	21	15	13
24	13	11	7.8	6.1	6.2	7.8	30	78	86	23	15	13
25	13	11	7.6	6.1	6.4	8.2	36	83	75	21	14	13
26	13	10	7.4	6.1	6.4	7.7	29	95	65	22	14	12
27	15	10	7.2	6.0	6.4	7.2	19	97	59	23	14	12
28	14	10	7.0	6.0	6.4	8.0	16	104	53	22	15	12
29	13	10	7.0	6.0	---	7.6	14	101	48	22	15	12
30	12	9.9	7.0	6.0	---	8.3	13	120	44	21	14	12
31	12	---	7.0	6.0	---	5.4	---	173	---	21	14	---
TOTAL	442	358.9	260.4	197.9	166.1	235.1	374.0	2087	3673	830	573	436
MEAN	14.3	12.0	8.40	6.38	5.93	7.58	12.5	67.3	122	26.8	18.5	14.5
MAX	16	15	9.9	6.9	6.4	9.0	36	173	194	41	34	33
MIN	12	9.9	7.0	6.0	5.6	5.4	5.6	13	44	21	14	12
AC-FT	877	712	517	393	329	466	742	4140	7290	1650	1140	865

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	MEAN	13.3	10.6	8.95	7.35	6.95	7.04	11.4	55.7	154	70.1	25.6	16.4
MAX	24.0	15.6	21.1	10.3	9.55	9.77	25.0	99.3	243	215	63.3	32.3	
(WY)	1985	1985	1986	1983	1983	1981	1971	1984	1984	1983	1983	1984	
MIN	8.94	3.71	3.46	2.95	2.90	3.19	4.47	23.0	78.9	24.0	12.0	10.1	
(WY)	1970	1967	1967	1967	1967	1967	1967	1968	1977	1966	1966	1966	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1966 - 1994

ANNUAL TOTAL	14967.7	9633.4	
ANNUAL MEAN	41.0	26.4	32.3
HIGHEST ANNUAL MEAN			54.8
LOWEST ANNUAL MEAN			20.2
HIGHEST DAILY MEAN	271	194	355
LOWEST DAILY MEAN	6.0	5.4	2.6
ANNUAL SEVEN-DAY MINIMUM	6.1	5.7	2.8
INSTANTANEOUS PEAK FLOW		325	464
INSTANTANEOUS PEAK STAGE		3.69	3.37
ANNUAL RUNOFF (AC-FT)	29690	19110	23430
10 PERCENT EXCEEDS	140	79	94
50 PERCENT EXCEEDS	13	13	12
90 PERCENT EXCEEDS	7.2	6.1	6.4

a-Also occurred Jun 5.

b-Also occurred Mar 15-16.

c-Maximum gage height, 4.22 ft, Nov 22, 1979, backwater from ice.

09036000 WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°50'02", long 106°03'21", in sec.31, T.2 S., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank at downstream side of bridge, 100 ft downstream from Kinney Creek, and 1.7 mi northwest of Leal.

DRAINAGE AREA.--89.5 mi².

PERIOD OF RECORD.--July 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Prior to October 1958, published as Williams River near Leal.

REVISED RECORDS.--WSP 1733: 1951. WSP 2124: Drainage area. WRD Colo. 1973: 1972.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above sea level, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 7-9, 16-20, Dec. 4, Dec. 13 to Mar. 13, Mar. 27-28, 30, and June 7-14. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows upstream from station and about 40 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	48	29	23	23	20	24	53	567	177	84	42
2	50	46	29	23	23	18	26	52	560	172	76	90
3	48	46	29	23	23	17	24	51	545	183	66	54
4	46	47	29	23	22	17	25	52	601	157	59	49
5	43	40	30	23	22	17	24	63	597	147	56	44
6	43	44	28	23	22	18	22	90	570	138	55	41
7	48	42	29	23	22	18	23	112	560	133	52	40
8	54	40	28	23	22	18	23	125	540	127	50	38
9	50	38	28	23	22	19	23	135	520	117	51	37
10	51	35	27	23	22	19	23	139	500	110	63	40
11	48	35	27	23	22	20	22	165	460	105	52	36
12	56	36	27	23	22	20	23	213	430	102	49	37
13	53	35	28	23	22	20	25	225	410	99	52	41
14	53	34	28	23	22	21	27	210	380	96	50	52
15	55	32	27	23	22	21	26	206	351	93	47	40
16	57	32	27	23	21	22	31	224	338	88	44	39
17	56	32	26	23	21	24	40	277	320	85	47	37
18	57	32	26	23	21	22	45	301	321	81	45	35
19	52	32	26	23	21	25	48	327	351	79	55	35
20	52	33	25	23	21	25	56	344	376	77	65	36
21	47	33	25	23	21	20	69	356	381	72	51	45
22	53	32	24	23	21	24	84	354	423	68	53	42
23	50	33	24	23	21	26	96	358	359	67	46	39
24	50	31	24	23	20	23	115	326	311	73	43	37
25	51	31	24	23	20	25	111	329	280	67	42	35
26	52	31	24	23	20	23	85	362	257	63	39	34
27	38	32	24	23	20	22	70	359	237	60	38	33
28	49	31	24	23	20	24	62	377	219	59	42	32
29	46	31	24	23	---	24	58	364	204	58	44	32
30	35	30	24	23	---	24	55	424	190	56	41	33
31	44	---	24	23	---	23	---	501	---	56	38	---
TOTAL	1535	1074	818	713	601	659	1385	7474	12158	3065	1595	1225
MEAN	49.5	35.8	26.4	23.0	21.5	21.3	46.2	241	405	98.9	51.5	40.8
MAX	57	48	30	23	23	26	115	501	601	183	84	90
MIN	35	30	24	23	20	17	22	51	190	56	38	32
AC-FT	3040	2130	1620	1410	1190	1310	2750	14820	24120	6080	3160	2430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

	MEAN	37.7	29.5	23.8	20.6	19.1	19.0	36.5	174	477	212	68.9	43.5
MAX	102	52.6	35.1	28.6	26.4	24.5	24.5	91.3	386	966	765	198	98.4
(WY)	1962	1962	1985	1985	1962	1946	1946	1936	1938	1983	1983	1961	1961
MIN	18.5	18.7	14.4	14.1	14.0	14.1	19.8	76.1	119	59.6	29.0	24.2	24.2
(WY)	1964	1964	1964	1964	1964	1964	1944	1968	1954	1934	1954	1964	1964
a	0	0	0	0	0	0	0	0	0	0	0	0	0

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1934 - 1994

	ANNUAL TOTAL	48614	32302	
ANNUAL MEAN	133	b88.5	b104	
HIGHEST ANNUAL MEAN			c176	1984
LOWEST ANNUAL MEAN			d45.4	1954
HIGHEST DAILY MEAN	830	Jun 23	601	Jun 4
LOWEST DAILY MEAN	18	Mar 1	e17	Mar 3
ANNUAL SEVEN-DAY MINIMUM	18	Mar 4	18	Mar 2
INSTANTANEOUS PEAK FLOW			663	Jun 1
INSTANTANEOUS PEAK STAGE			3.09	Jun 1
ANNUAL RUNOFF (AC-FT)	96430	64070	70200	
10 PERCENT EXCEEDS	463	315	269	
50 PERCENT EXCEEDS	46	40	33	
90 PERCENT EXCEEDS	19	22	18	

a-Diversions in acre-feet, through August P. Gumlick Tunnel, provided by Denver Water Board.

b-Includes diversions through August P. Gumlick Tunnel, since May 10, 1940.

c-Does not include diversions through August P. Gumlick Tunnel.

d-Also occurred Mar 4-11, 15-17, 20.

e-Also occurred Mar 4-5.

f-Also occurred at times in 1963, 1964, and 1967.

g-Maximum gage height, 5.46 ft, Jun 29, 1971, backwater from log.

09037500 WILLIAMS FORK NEAR PARSHALL, CO

LOCATION.--Lat 40°00'01", long 106°10'45", in SW¹/4SW¹/4 sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on left bank 30 ft downstream from bridge on State Highway 286, 3.7 mi downstream from Skylark Creek, 3.9 mi south of Parshall, and 4.2 mi upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--July 1904 to September 1924, June 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Published as "near (Hot) Sulphur Springs" 1904-12 and as Williams River near Parshall June 1933 to September 1958. Water-quality data available, April 1986 to September 1987.

REVISED RECORDS.--WSP 1243: 1918. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft above sea level, (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938. Aug. 10, 1938 to Aug. 19, 1983, gage located on right bank at present datum. Aug. 19, 1983 to May 14, 1991, gage located 120 ft downstream of present site on left bank at present datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 15. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Diversions upstream from station for irrigation of about 1,300 acres upstream from station, and about 2,500 acres downstream from station. About 150 acres upstream from station irrigated by diversions into the drainage area. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	55	36	32	32	31	32	91	405	31	35	22
2	58	53	35	32	32	31	33	89	414	30	35	43
3	57	51	35	32	32	32	33	85	384	69	28	27
4	57	49	35	32	32	32	34	75	397	194	24	25
5	44	47	35	32	32	32	34	76	396	82	23	25
6	33	46	35	32	32	32	34	108	369	30	23	25
7	33	45	35	32	32	32	34	157	344	29	23	25
8	33	45	35	32	32	32	35	179	316	28	23	24
9	32	45	35	32	32	32	35	201	283	27	23	24
10	32	45	35	32	32	31	35	221	248	27	23	23
11	32	43	34	32	32	31	35	245	241	27	22	23
12	52	43	33	32	31	31	35	294	240	27	22	23
13	71	43	33	32	31	30	35	319	241	26	22	23
14	70	43	33	32	31	30	35	319	230	25	22	23
15	71	43	33	32	31	30	37	310	210	25	25	23
16	73	42	33	32	31	30	51	302	202	25	25	24
17	71	41	33	32	31	30	73	367	181	25	22	24
18	73	40	33	32	31	31	88	389	176	25	22	24
19	68	40	33	32	31	31	95	399	171	25	22	24
20	66	40	33	32	31	31	109	394	249	25	24	23
21	59	40	33	32	31	31	132	394	245	25	23	23
22	66	40	32	32	31	31	169	375	283	25	22	23
23	62	40	32	32	31	31	181	353	246	25	22	23
24	60	40	32	32	31	31	202	294	178	24	22	23
25	60	39	32	32	32	32	198	269	143	24	22	23
26	64	38	32	32	32	32	152	295	119	24	22	31
27	52	37	32	32	32	33	125	284	89	24	22	39
28	62	37	32	32	32	33	109	294	75	24	22	39
29	63	37	32	32	---	32	103	275	52	24	22	39
30	58	37	32	32	---	32	98	297	43	24	22	41
31	58	---	32	32	---	32	---	354	---	24	22	---
TOTAL	1748	1284	1035	992	883	972	2401	8104	7170	1069	731	801
MEAN	56.4	42.8	33.4	32.0	31.5	31.4	80.0	261	239	34.5	23.6	26.7
MAX	73	55	36	32	32	33	202	399	414	194	35	43
MIN	32	37	32	32	31	30	32	75	43	24	22	22
AC-FT	3470	2550	2050	1970	1750	1930	4760	16070	14220	2120	1450	1590
a	0	0	0	0	0	0	0	0	0	0	0	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1994, BY WATER YEAR (WY)

	MEAN	60.6	51.4	42.3	37.1	35.2	39.6	80.9	267	558	217	88.7	64.1
MAX	151	80.9	65.6	59.5	53.9	87.8	199	711	1243	855	245	153	
(WY)	1962	1985	1985	1910	1912	1910	1962	1984	1918	1983	1984	1909	
MIN	17.6	32.5	26.8	22.6	22.6	21.5	29.9	28.9	38.6	19.4	13.8	11.1	
(WY)	1956	1982	1950	1964	1964	1971	1981	1963	1954	1963	1988	1966	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1905 - 1994

ANNUAL TOTAL	51572	27190	
ANNUAL MEAN	141	^b 74.5	^b 129
HIGHEST ANNUAL MEAN			^c 248
LOWEST ANNUAL MEAN			^c 38.8
HIGHEST DAILY MEAN	792	Jun 18	2520 Jun 14 1918
LOWEST DAILY MEAN	30	Feb 14	^d 22 Aug 11
ANNUAL SEVEN-DAY MINIMUM	31	Feb 10	22 Aug 22
INSTANTANEOUS PEAK FLOW			467 Jun 2
INSTANTANEOUS PEAK STAGE			3.76 Jun 2
ANNUAL RUNOFF (AC-FT)	102300	53930	93150
10 PERCENT EXCEEDS	541	241	344
50 PERCENT EXCEEDS	43	32	53
90 PERCENT EXCEEDS	33	23	30

a-Diversions in acre-ft through August P. Gumlick Tunnel provided by Denver Water Board.

b-Includes diversions through August P. Gumlick Tunnel.

c-Does not include diversions through August P. Gumlick Tunnel.

d-Also occurred Aug 12-14, 17-19, and Aug 22 to Sep 1.

e-Also occurred May 8-10, 1972.

f-Site and datum then in use, from rating curve extended above 1400 ft³/s.

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, CO

LOCATION.--Lat 40°02'06", long 106°12'17", in SE¹/₄ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, at dam on Williams Fork, 2.1 mi upstream from mouth, and 2.2 mi southwest of Parshall.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--April 1939 to current year. Prior to October 1948, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is above sea level, (levels by city engineer of Denver); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by concrete-arch dam completed in October 1939; storage began April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity, 96,820 acre-ft, between elevations 7,634 ft, invert of outlet, and 7,811 ft, top of radial gates on spillway. No dead storage. Figures given represent usable contents. Reservoir is used for power development and to store water to compensate for water diverted through August P. Gumlick Tunnel. Water is released during periods of low flow in Colorado River to supply decreed prior water rights. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 97,280 acre-ft, July 11, 1993, elevation, 7,811.28 ft; no contents at times in 1958 (construction) and 1966 (drained for repairs).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 91,140 acre-ft, July 4, elevation, 7,807.41 ft; minimum, 63,990 acre-ft, Apr. 17, 19, elevation, 7,787.32 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,803.73	85,630	-
Oct. 31.	7,801.42	82,300	-3,330
Nov. 30.	7,799.48	79,600	-2,700
Dec. 31.	7,797.05	76,290	-3,310
CAL YR 1993.			-3,690
Jan. 31.	7,794.25	72,600	-3,690
Feb. 28.	7,791.41	68,970	-3,630
Mar. 31.	7,788.69	65,630	-3,340
Apr. 30.	7,788.08	64,890	-740
May 31.	7,796.60	75,690	+10,800
June 30.	7,807.23	90,870	+15,180
July 31.	7,804.55	86,830	-4,040
Aug. 31.	7,799.81	80,050	-6,780
Sept. 30.	7,792.22	69,990	-10,060
WTR YR 1994.			-15,640

09041000 MUDDY CREEK NEAR KREMMLING, CO

LOCATION.--Lat 40°17'37", long 106°28'59", in NE¹/₄SE¹/₄ sec. 20, T.4 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank 0.2 mile upstream from Lindsey Creek, 0.5 mile upstream from bridge on U.S. Highway 40, 3 miles downstream from Albert Creek, and 17 miles northwest of Kremmling.

DRAINAGE AREA.--87.4 mi².

PERIOD OF RECORD.--September 1937 to September 1943, October 1955 to September 1971, October 1993 to September 1994. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,856 ft above sea level, from topographic map. Prior to Oct. 1, 1955 non-recording gage at site 3 miles upstream at different datum. Prior to Oct. 1, 1993, at site 100 feet upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-7, and Nov. 6 to May 4. Some regulations by Barber Reservoir (capacity, 4,290 acre-ft). Diversions for irrigation of about 900 acres above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	11	8.0	7.2	5.6	15	10	125	161	19	8.2	4.6
2	3.0	9.6	8.0	7.0	5.8	16	13	130	130	13	7.7	5.9
3	2.9	9.1	8.0	7.0	5.8	17	12	140	108	18	7.5	6.2
4	2.9	8.0	8.0	7.0	5.8	18	13	145	92	23	6.3	4.9
5	2.8	7.4	8.0	7.0	6.0	21	14	182	76	18	8.0	4.1
6	3.2	8.0	8.0	7.0	6.0	20	15	237	66	17	6.0	3.6
7	4.8	8.2	7.8	7.0	6.2	20	16	308	58	13	5.5	3.3
8	6.4	8.2	8.0	7.0	6.2	20	17	333	57	14	5.5	3.2
9	10	8.2	7.8	7.0	6.4	20	18	360	43	15	6.1	3.2
10	8.6	8.4	7.6	7.0	6.4	19	18	354	38	17	7.3	2.9
11	7.6	8.4	7.6	7.0	6.6	19	19	381	35	16	7.6	2.3
12	9.1	8.3	7.6	7.0	6.8	19	22	419	36	14	6.6	2.1
13	16	8.1	7.8	6.8	6.8	19	25	438	36	14	6.0	2.2
14	14	7.9	7.8	7.0	6.8	18	30	433	25	13	5.5	2.2
15	17	7.8	8.0	7.0	7.0	17	40	441	22	12	4.7	2.4
16	17	7.9	8.0	7.2	7.2	16	52	428	22	15	4.3	2.5
17	15	8.0	8.0	7.0	7.2	17	60	441	20	13	4.2	2.5
18	16	8.0	7.8	6.6	7.4	17	90	419	23	10	3.9	2.4
19	14	8.0	7.6	6.4	7.6	18	130	369	29	8.9	4.4	2.2
20	12	8.0	7.6	6.4	8.0	17	160	359	47	7.8	5.0	2.5
21	10	8.0	7.4	6.6	8.4	17	190	301	48	6.8	5.0	3.8
22	9.5	8.0	7.4	6.6	8.8	16	230	290	35	4.9	4.9	3.9
23	8.6	8.0	7.4	6.4	9.4	15	272	281	39	4.8	4.2	3.2
24	8.2	8.0	7.4	6.4	10	13	327	238	28	6.0	3.6	2.8
25	7.9	8.0	7.4	6.2	10	12	316	236	21	5.5	3.5	2.7
26	10	8.2	7.4	6.2	11	10	218	237	21	5.2	3.3	2.4
27	10	8.4	7.4	6.0	12	9.4	175	211	18	4.7	3.0	2.3
28	8.9	8.6	7.6	6.0	13	9.0	153	215	18	6.2	4.3	2.3
29	11	8.2	7.6	6.0	---	8.4	142	203	20	7.7	4.3	2.3
30	12	8.0	7.4	5.8	---	8.6	135	173	20	8.2	4.3	2.4
31	11	---	7.2	5.6	---	8.8	---	165	---	7.5	4.2	---
TOTAL	292.7	247.9	238.6	206.4	214.2	490.2	2932	8992	1392	358.2	164.9	93.3
MEAN	9.44	8.26	7.70	6.66	7.65	15.8	97.7	290	46.4	11.6	5.32	3.11
MAX	17	11	8.0	7.2	13	21	327	441	161	23	8.2	6.2
MIN	2.8	7.4	7.2	5.6	5.6	8.4	10	125	18	4.7	3.0	2.1
AC-FT	581	492	473	409	425	972	5820	17840	2760	710	327	185

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

	MEAN	8.47	7.63	5.97	5.14	5.20	9.60	83.5	294	167	23.7	7.62	5.67
MAX	29.9	26.7	13.0	9.00	10.0	46.5	233	456	481	104	28.2	16.4	
(WY)	1962	1960	1960	1960	1962	1960	1962	1958	1957	1957	1957	1961	
MIN	3.00	4.00	3.00	3.00	3.00	3.50	17.0	175	31.5	3.25	.48	1.22	
(WY)	1941	1941	1941	1938	1938	1941	1964	1966	1966	1939	1940	1942	

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

ANNUAL TOTAL	15622.4		
ANNUAL MEAN	42.8	52.1	
HIGHEST ANNUAL MEAN		85.7	1957
LOWEST ANNUAL MEAN		28.3	1966
HIGHEST DAILY MEAN	^a 441	746	May 9 1957
LOWEST DAILY MEAN	2.1	^b 1.0	Aug 19 1940
ANNUAL SEVEN-DAY MINIMUM	2.3	.20	Aug 18 1940
INSTANTANEOUS PEAK FLOW	514	992	May 9 1957
INSTANTANEOUS PEAK STAGE	7.23	^c 6.46	May 9 1957
ANNUAL RUNOFF (AC-FT)	30990	37760	
10 PERCENT EXCEEDS	156	192	
50 PERCENT EXCEEDS	8.2	7.5	
90 PERCENT EXCEEDS	4.0	3.2	

a-Also occurred May 17.

b-Also occurred Aug 24, 1940.

c-Maximum gage height, 7.23 ft, May 17, 1994, current datum.

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO

LOCATION.--Lat 40°12'09", long 106°25'19", in SE¹/4SE¹/4 sec.23, T.3 N., R.81 W., Grand County, Hydrologic Unit 14010001, on left bank at upstream side of box culverts on U.S. Highway 40, 10.9 mi north of Kremmling, on U.S. Highway 40.

DRAINAGE AREA.--145 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1990 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,520 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 31 to Apr. 5. Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	10	8.4	7.6	6.2	13	9.2	142	132	3.1	4.3	4.4
2	3.2	10	8.4	7.6	6.0	14	11	142	104	2.2	4.9	5.4
3	3.0	10	8.4	7.6	6.2	15	15	151	95	1.3	4.4	6.3
4	3.0	10	8.4	7.4	6.2	15	14	149	88	5.4	4.4	5.7
5	2.9	9.4	8.4	7.4	6.4	17	13	181	71	9.1	6.4	4.9
6	2.9	9.0	8.4	7.4	6.4	20	15	232	60	5.0	7.9	4.3
7	3.2	8.4	8.2	7.4	6.6	23	15	320	49	4.6	5.9	3.5
8	4.6	8.5	8.6	7.4	6.6	22	12	355	46	2.1	5.3	3.2
9	8.0	8.6	8.4	7.4	6.8	22	14	384	36	2.2	5.3	3.2
10	8.1	8.6	8.0	7.4	7.0	22	14	369	26	2.9	6.2	3.4
11	6.9	8.8	8.0	7.4	7.0	21	12	386	24	3.1	7.3	3.0
12	6.4	8.8	8.0	7.4	7.2	21	11	422	26	2.1	7.6	2.2
13	13	8.8	8.2	7.4	7.2	20	20	445	26	1.7	6.1	1.9
14	11	8.4	8.4	7.2	7.2	20	31	437	18	1.1	5.9	2.0
15	13	8.0	8.4	7.4	7.4	19	34	447	5.7	2.7	5.3	2.1
16	14	8.0	8.4	7.6	7.6	18	47	425	2.1	2.2	4.4	2.7
17	12	8.2	8.4	7.6	7.7	17	65	444	2.8	2.9	4.1	2.8
18	13	8.4	8.2	7.2	7.8	18	90	419	3.5	5.1	3.9	2.9
19	12	8.2	8.0	7.0	8.0	18	137	374	2.9	4.1	4.1	2.6
20	10	8.2	8.0	6.8	8.6	18	169	365	127	3.1	5.0	2.6
21	9.3	8.2	8.0	7.0	8.9	19	189	297	72	1.4	4.9	3.7
22	8.2	8.4	7.8	7.0	9.4	18	233	272	27	1.2	5.9	4.5
23	7.7	8.4	7.8	6.8	10	15	278	273	29	1.5	5.0	4.6
24	7.2	8.4	7.8	6.8	11	13	343	224	19	1.3	4.2	4.1
25	6.9	8.4	7.8	6.6	11	12	345	217	13	.96	3.8	3.6
26	7.8	8.4	7.8	6.6	11	11	224	219	14	1.1	3.8	3.4
27	8.1	8.6	7.8	6.6	11	10	179	191	11	1.3	3.6	3.4
28	8.0	9.0	7.8	6.6	11	9.4	161	186	5.6	1.2	5.3	3.4
29	9.0	8.8	8.0	6.6	---	9.0	155	179	2.3	1.7	5.1	3.2
30	9.9	8.4	8.0	6.6	---	8.6	153	150	2.8	2.6	4.5	2.3
31	11	---	7.6	6.4	---	9.0	---	136	---	3.0	4.4	---
TOTAL	247.0	261.3	251.8	221.2	223.4	507.0	3008.2	8933	1140.7	83.26	159.2	105.3
MEAN	7.97	8.71	8.12	7.14	7.98	16.4	100	288	38.0	2.69	5.14	3.51
MAX	14	10	8.6	7.6	11	23	345	447	132	9.1	7.9	6.3
MIN	2.9	8.0	7.6	6.4	6.0	8.6	9.2	136	2.1	.96	3.6	1.9
AC-FT	490	518	499	439	443	1010	5970	17720	2260	165	316	209

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	MEAN	5.65	6.91	5.27	5.55	6.49	14.4	83.2	300	107	8.70	9.07	5.57
MAX	7.97	8.71	8.12	8.85	10.7	20.1	121	444	216	15.3	13.9	8.05	
(WY)	1994	1994	1994	1993	1993	1993	1990	1993	1993	1993	1991	1993	
MIN	4.32	5.64	2.82	2.68	3.00	9.92	50.8	190	32.2	2.69	5.14	3.51	
(WY)	1993	1991	1991	1991	1991	1991	1993	1992	1992	1994	1994	1994	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1990 - 1994		
ANNUAL TOTAL	24768.6			15141.36					
ANNUAL MEAN	67.9			41.5			48.6		
HIGHEST ANNUAL MEAN							67.2		
LOWEST ANNUAL MEAN							29.0		
HIGHEST DAILY MEAN	789			447			789		
LOWEST DAILY MEAN	2.9			.96			.96		
ANNUAL SEVEN-DAY MINIMUM	3.1			1.2			1.2		
INSTANTANEOUS PEAK FLOW				955			955		
INSTANTANEOUS PEAK STAGE				7.36			7.36		
ANNUAL RUNOFF (AC-FT)	49130			30030			35200		
10 PERCENT EXCEEDS	242			152			178		
50 PERCENT EXCEEDS	11			8.0			8.2		
90 PERCENT EXCEEDS	7.4			2.9			3.0		

a-Also occurred Oct 6.

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1990 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1990 to current year.

WATER TEMPERATURE: April 1990 to current year.

SUSPENDED-SEDIMENT DISCHARGE: April 1990 to current year.

INSTRUMENTATION.--Water-quality monitor from April 1990 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 999 microsiemens, July 23, 1994; minimum, 88 microsiemens, May 20, 1994.

WATER TEMPERATURE: Maximum, 26.4°C, July 14, 1991; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 999 microsiemens, July 23; minimum daily, 88 microsiemens, May 20.

WATER TEMPERATURE: Maximum 25.3°C, Aug 15; minimum, 1.0°C, April 29.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
05...	1115	3.1	604	8.3	7.5	2.2	8.2	280	75	22
NOV										
03...	1030	11	394	8.4	0.0	5.4	12.6	170	48	13
DEC										
08...	1400	8.6	393	8.0	0.0	6.0	9.7	170	48	13
APR										
28...	1330	152	219	8.3	4.0	9.5	10.4	94	27	6.4
MAY										
04...	1230	146	268	8.3	7.0	37	8.2	120	36	8.2
12...	1545	423	137	8.2	8.5	80	9.2	57	17	3.6
19...	1440	381	110	8.2	9.0	32	7.8	47	14	3.0
25...	1515	207	150	8.1	11.0	19	3.3	64	19	4.0
JUN										
15...	1230	7.1	556	8.2	17.0	1.8	--	270	75	19
JUL										
20...	1230	4.5	771	8.1	17.5	1.6	8.0	350	97	26
AUG										
15...	1400	4.9	495	8.4	21.0	2.0	7.8	220	61	17
SEP										
13...	1345	1.8	514	8.3	14.5	3.6	8.0	230	62	17

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
OCT									
05...	26	17	0.7	2.4	162	160	2.3	0.2	7.4
NOV									
03...	13	14	0.4	1.5	126	78	1.8	0.2	9.3
DEC									
08...	14	15	0.5	1.5	134	77	1.5	<0.1	10
APR									
28...	7.1	14	0.3	1.3	83	28	0.7	0.1	9.3
MAY									
04...	8.0	12	0.3	1.4	95	39	1.0	0.1	8.8
12...	4.0	13	0.2	1.0	58	15	0.2	0.1	8.0
19...	3.1	12	0.2	0.7	43	12	0.4	<0.1	7.4
25...	4.0	12	0.2	0.9	58	18	0.4	<0.1	8.4
JUN									
15...	20	14	0.5	2.2	203	94	1.6	0.2	12
JUL									
20...	32	17	0.7	1.9	280	150	1.9	0.3	11
AUG									
15...	18	15	0.5	2.2	152	100	1.7	0.2	7.3
SEP									
13...	19	15	0.6	2.2	153	110	2.0	0.2	7.2

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

		SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEDED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)			
	DATE												
	OCT 05...	402	392	0.55	3.40	--	<0.01	<0.05	0.02	0.38			
	NOV 03...	238	240	0.32	6.94	--	<0.01	<0.05	0.03	0.27			
	DEC 08...	252	245	0.34	5.87	12	--	--	--	--			
	APR 28...	136	130	0.18	55.8	--	<0.01	0.14	0.02	0.58			
	MAY 04...	160	160	0.22	63.1	75	<0.01	0.07	0.02	0.48			
	12...	97	84	0.13	111	--	<0.01	0.05	0.02	0.78			
	19...	78	67	0.11	80.2	--	<0.01	<0.05	0.03	0.27			
	25...	102	90	0.14	57.0	--	<0.01	<0.05	0.01	0.39			
	JUN 15...	372	346	0.51	7.08	--	<0.01	<0.05	0.01	0.59			
	JUL 20...	502	488	0.68	6.05	4	<0.01	<0.05	0.02	0.48			
	AUG 15...	324	299	0.44	4.26	--	<0.01	<0.05	0.02	0.18			
	SEP 13...	316	313	0.43	1.58	11	<0.01	0.10	0.02	0.18			
	DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)			
	OCT 05...	--	0.40	<0.20	0.40	<0.01	0.01	<0.01	--	--			
	NOV 03...	--	0.30	<0.20	0.30	0.02	<0.01	<0.01	--	--			
	DEC 08...	--	<0.20	--	--	0.02	--	--	3.5	5.1			
	APR 28...	0.38	0.60	0.40	0.74	0.09	0.01	<0.01	--	--			
	MAY 04...	0.28	0.50	0.30	0.57	0.10	0.01	<0.01	9.9	8.2			
	12...	0.28	0.80	0.30	0.85	0.18	<0.01	<0.01	--	--			
	19...	0.17	0.30	0.20	0.30	0.10	<0.01	<0.01	--	--			
	25...	0.19	0.40	0.20	0.40	0.04	<0.01	<0.01	--	--			
	JUN 15...	0.49	0.60	0.50	0.60	0.02	<0.01	<0.01	--	--			
	JUL 20...	0.38	0.50	0.40	0.50	0.01	0.01	<0.01	8.6	8.1			
	AUG 15...	--	0.20	<0.20	0.20	<0.01	<0.01	<0.01	--	--			
	SEP 13...	0.18	0.20	0.20	0.30	0.01	0.02	<0.01	4.9	5.0			
	DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
	OCT 05...	1115	--	--	--	--	--	--	--	--	--	--	--
	NOV 03...	1030	--	--	--	--	--	--	--	--	--	--	--
	DEC 08...	1400	--	--	--	--	--	--	--	--	--	--	--
	APR 28...	1330	--	--	--	--	--	--	--	--	--	--	--
	MAY 04...	1230	760	1	<1	<100	48	<10	20	<1	<1	1	<1
	12...	1545	--	--	--	--	--	--	--	--	--	--	--
	19...	1440	--	--	--	--	--	--	--	--	--	--	--
	25...	1515	--	--	--	--	--	--	--	--	--	--	--
	JUN 15...	1230	--	--	--	--	--	--	--	--	--	--	--
	JUL 20...	1230	--	--	--	--	--	--	--	--	--	--	--
	AUG 15...	1400	--	--	--	--	--	--	--	--	--	--	--
	SEP 13...	1345	140	<1	1	<100	67	<10	60	<1	<1	<1	<1

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
OCT 05...	--	--	--	--	18	--	--	--	--	--	--	--
NOV 03...	--	--	--	--	34	--	--	--	--	--	--	--
DEC 08...	--	--	--	--	56	--	--	--	--	--	--	--
APR 28...	--	--	--	--	89	--	--	--	--	--	--	--
MAY 04...	<1	4	<1	1800	120	2	<1	10	60	12	<0.1	<0.1
12...	--	--	--	--	110	--	--	--	--	--	--	--
19...	--	--	--	--	110	--	--	--	--	--	--	--
25...	--	--	--	--	77	--	--	--	--	--	--	--
JUN 15...	--	--	--	--	110	--	--	--	--	--	--	--
JUL 20...	--	--	--	--	15	--	--	--	--	--	--	--
AUG 15...	--	--	--	--	8	--	--	--	--	--	--	--
SEP 13...	<1	2	1	340	10	<1	<1	30	40	30	<0.1	<0.1

DATE	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL SOLVED (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 05...	--	--	--	--	--	--	--	--	--	--	--
NOV 03...	--	--	--	--	--	--	--	--	--	--	--
DEC 08...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	1	<1	6	2	1	<2	<1	<1	270	20	4
12...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUN 15...	--	--	--	--	--	--	--	--	--	--	--
JUL 20...	--	--	--	--	--	--	--	--	--	--	--
AUG 15...	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	<1	1	2	2	<1	<1	<1	<1	510	<10	14

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 05...	1115	3.1	9	0.08
NOV 03...	1030	11	15	0.43
DEC 08...	1400	8.6	12	0.28
APR 28...	1330	152	96	40
MAY 04...	1230	146	84	33
12...	1545	423	281	321
19...	1440	381	120	123
20...	0945	36	145	14
25...	1515	207	63	35
JUN 15...	1230	7.1	15	0.29
JUL 07...	0922	22	37	2.2
AUG 15...	1400	4.9	9	0.12
SEP 13...	1345	1.8	7	0.03

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	---	---	---	---	---	---	289	229	745	734	490
2	612	---	---	---	---	---	---	272	250	743	739	486
3	610	---	---	---	---	---	---	262	268	783	749	469
4	624	---	---	---	---	---	---	262	284	802	723	443
5	603	---	---	---	---	---	---	234	298	727	705	452
6	585	---	---	---	---	---	---	204	318	797	634	461
7	581	---	---	---	---	---	---	183	342	789	667	471
8	588	---	---	---	---	---	---	171	371	836	623	483
9	558	---	---	---	---	---	---	157	414	866	584	492
10	436	---	---	---	---	---	---	157	447	865	541	498
11	415	---	---	---	---	---	---	148	495	842	503	502
12	424	---	---	---	---	---	---	134	498	803	478	506
13	414	---	---	---	---	---	---	133	493	819	488	514
14	323	---	---	---	---	---	---	134	506	870	498	542
15	328	---	---	---	---	---	---	122	---	806	503	566
16	324	---	---	---	---	---	---	117	---	784	490	583
17	318	---	---	---	---	---	---	111	---	791	495	590
18	332	---	---	---	---	---	---	102	744	765	495	585
19	343	---	---	---	---	---	---	100	741	793	492	579
20	340	---	---	---	---	---	---	96	690	816	517	571
21	342	---	---	---	---	---	---	102	645	863	520	564
22	355	---	---	---	---	---	---	111	674	937	483	570
23	366	---	---	---	---	---	---	124	609	---	484	532
24	372	---	---	---	---	---	---	132	600	905	495	502
25	---	---	---	---	---	---	---	142	639	936	503	506
26	---	---	---	---	---	---	---	149	671	938	504	516
27	---	---	---	---	---	---	---	161	695	925	508	527
28	---	---	---	---	---	---	---	175	761	839	494	536
29	---	---	---	---	---	---	241	178	793	791	731	543
30	---	---	---	---	---	---	292	203	770	760	554	550
31	---	---	---	---	---	---	---	216	---	748	503	---
MEAN	---	---	---	---	---	---	---	164	---	---	562	521

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

TEMPERATURE WATER, (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.1	6.1	---	---	---	---	---	---	---	---	---	---
2	15.3	6.3	---	---	---	---	---	---	---	---	---	---
3	15.2	6.2	---	---	---	---	---	---	---	---	---	---
4	14.7	6.3	---	---	---	---	---	---	---	---	---	---
5	14.0	6.2	---	---	---	---	---	---	---	---	---	---
6	12.7	6.2	---	---	---	---	---	---	---	---	---	---
7	9.3	7.5	---	---	---	---	---	---	---	---	---	---
8	11.3	6.9	---	---	---	---	---	---	---	---	---	---
9	10.7	6.4	---	---	---	---	---	---	---	---	---	---
10	7.8	4.6	---	---	---	---	---	---	---	---	---	---
11	7.9	2.8	---	---	---	---	---	---	---	---	---	---
12	9.6	5.7	---	---	---	---	---	---	---	---	---	---
13	8.8	6.7	---	---	---	---	---	---	---	---	---	---
14	8.0	6.1	---	---	---	---	---	---	---	---	---	---
15	7.9	5.3	---	---	---	---	---	---	---	---	---	---
16	7.9	5.7	---	---	---	---	---	---	---	---	---	---
17	7.4	5.3	---	---	---	---	---	---	---	---	---	---
18	6.8	5.3	---	---	---	---	---	---	---	---	---	---
19	7.0	4.0	---	---	---	---	---	---	---	---	---	---
20	8.0	4.1	---	---	---	---	---	---	---	---	---	---
21	7.3	2.4	---	---	---	---	---	---	---	---	---	---
22	6.6	3.3	---	---	---	---	---	---	---	---	---	---
23	7.9	2.3	---	---	---	---	---	---	---	---	---	---
24	7.9	2.5	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	6.3	3.8	16.0	9.3	23.4	14.1	19.5	15.9	17.6	11.0
2	---	---	9.4	4.2	17.9	9.9	18.9	14.9	22.2	15.2	20.6	11.8
3	---	---	6.9	4.6	16.9	10.9	20.1	11.9	21.7	15.2	18.4	14.7
4	---	---	9.2	3.8	18.8	10.9	23.2	12.6	23.8	14.9	20.0	12.5
5	---	---	9.0	5.1	19.3	10.6	23.5	13.3	21.5	15.7	20.5	10.8
6	---	---	9.5	4.5	18.8	12.1	22.3	12.6	22.0	14.3	19.5	9.9
7	---	---	9.2	3.8	17.9	10.7	18.4	11.3	20.8	14.6	20.5	12.5
8	---	---	9.3	2.7	19.0	10.5	21.9	9.7	20.4	13.6	21.1	11.1
9	---	---	8.4	3.1	18.8	9.5	24.0	11.9	18.6	15.4	18.6	11.6
10	---	---	9.1	2.9	19.5	9.6	19.6	12.4	23.3	14.6	17.9	11.2
11	---	---	9.4	2.8	20.7	10.5	18.4	12.4	20.2	16.6	17.8	12.1
12	---	---	9.6	3.5	16.8	11.6	21.5	11.5	21.7	15.1	18.1	11.7
13	---	---	8.0	3.6	18.1	10.9	21.7	12.3	20.8	15.3	17.6	12.3
14	---	---	9.8	3.7	20.1	11.6	20.7	12.5	24.2	14.7	15.3	11.1
15	---	---	8.4	3.1	---	---	20.6	12.1	25.3	15.2	15.0	9.4
16	---	---	9.1	3.6	---	---	16.8	12.1	22.0	14.8	16.6	7.2
17	---	---	9.6	3.7	---	---	20.9	11.1	23.7	14.3	16.9	8.4
18	---	---	8.5	3.4	23.3	12.6	19.6	12.2	19.2	13.8	15.5	8.9
19	---	---	9.1	3.8	20.1	12.8	23.2	12.3	18.5	14.0	15.2	10.2
20	---	---	9.9	4.6	24.9	12.0	23.6	13.5	21.6	13.7	15.2	9.5
21	---	---	10.7	4.0	18.6	12.0	24.1	12.6	19.8	13.5	15.8	9.8
22	---	---	11.0	4.8	17.8	14.2	23.5	12.9	20.8	12.8	15.3	4.6
23	---	---	9.3	6.2	21.2	12.1	25.1	15.3	22.6	12.8	16.0	5.8
24	---	---	9.2	5.1	24.1	13.1	21.7	14.0	21.2	13.4	16.0	6.4
25	---	---	10.3	5.6	24.5	13.7	22.6	13.3	21.4	14.0	16.3	6.8
26	---	---	13.6	6.8	24.3	14.4	23.6	13.8	23.4	13.3	15.5	7.0
27	---	---	12.7	7.2	24.7	14.4	21.8	13.1	20.9	13.6	15.5	6.5
28	---	---	12.1	8.6	22.9	12.6	22.4	14.4	20.1	15.5	16.2	6.6
29	5.2	1.0	14.0	6.9	22.5	13.6	20.1	15.2	19.2	13.4	12.7	7.2
30	6.7	1.7	16.5	8.5	24.5	13.1	23.7	13.2	19.2	12.0	13.6	9.3
31	---	---	15.2	9.4	---	---	21.1	15.6	17.4	11.5	---	---
MONTH	---	---	16.5	2.7	---	---	25.1	9.7	25.3	11.5	21.1	4.6

09041500 MUDDY CREEK AT KREMMLING, CO

LOCATION.--Lat 40°03'43", long 106°23'43", in NW¹/4SE¹/4 sec. 7, T.1 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 900 ft upstream from U.S. Highway 40 bridge at Kremmling and 3.0 mi upstream from mouth.

DRAINAGE AREA.--290 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to October 1904, April to October 1905. Monthly discharge only in WSP 1313. April 1982 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,340 ft above sea level, from topographic map. Prior to Aug. 23, 1989, at site 450 ft downstream at same datum. Supplementary recorder on diversion ditch about 2,000 ft downstream from point of diversion.

REMARKS.--Estimated daily discharges: Nov. 1 to Mar. 31. Records fair except for estimated daily discharges, which are poor. Records include flow of diversion ditch.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	12	12	9.4	7.8	21	9.4	174	180	36	31	7.0
2	7.3	12	12	9.2	7.6	22	17	166	156	46	38	7.3
3	7.5	12	12	9.2	7.4	24	18	175	133	48	23	7.4
4	7.4	12	12	9.2	7.2	25	24	180	123	43	18	8.4
5	8.3	12	12	9.2	7.4	27	26	202	106	43	15	8.5
6	8.0	12	12	9.2	7.6	28	23	268	78	37	16	6.2
7	9.6	11	12	9.0	8.0	29	23	376	82	30	16	4.8
8	18	10	12	9.0	8.2	30	24	443	77	30	13	3.9
9	17	10	11	9.0	8.4	30	25	467	72	29	12	3.4
10	18	11	11	9.0	8.6	30	26	472	66	29	14	3.2
11	18	11	11	9.0	8.7	29	27	476	54	33	14	3.1
12	16	12	10	8.8	8.9	29	28	511	53	39	13	3.0
13	17	12	10	8.8	9.1	29	30	539	58	36	14	3.0
14	26	12	10	9.0	9.1	28	40	552	59	33	15	2.5
15	25	12	10	9.0	9.3	28	51	560	41	33	11	1.5
16	30	11	10	9.2	9.5	27	60	540	28	34	8.8	1.3
17	30	11	11	9.4	9.7	27	79	548	34	31	7.9	2.6
18	32	12	11	9.0	10	26	98	541	37	29	7.8	1.5
19	31	12	11	9.0	11	26	139	500	45	20	8.4	.61
20	26	11	10	8.6	12	25	171	461	45	22	11	1.1
21	22	11	9.8	8.6	12	26	198	391	208	20	14	3.4
22	20	11	9.8	8.4	13	26	246	352	99	18	11	2.8
23	18	12	9.8	8.6	14	28	309	355	91	12	9.2	1.9
24	17	12	9.6	8.4	15	27	389	334	76	8.8	9.4	2.7
25	16	12	9.4	8.2	16	27	434	304	53	34	6.5	2.8
26	15	12	9.4	8.2	17	24	326	276	47	18	5.1	3.2
27	15	12	9.4	8.0	18	20	245	254	42	15	4.3	3.7
28	16	12	9.4	8.0	19	14	210	235	41	14	4.2	5.1
29	18	12	9.4	8.0	---	11	185	247	36	14	8.2	4.6
30	11	13	9.6	8.0	---	10	188	210	34	15	14	4.5
31	12	---	9.6	8.0	---	9.8	---	192	---	16	9.6	---
TOTAL	538.5	349	327.2	271.6	299.5	762.8	3668.4	11301	2254	865.8	402.4	115.01
MEAN	17.4	11.6	10.6	8.76	10.7	24.6	122	365	75.1	27.9	13.0	3.83
MAX	32	13	12	9.4	19	30	434	560	208	48	38	8.5
MIN	6.4	10	9.4	8.0	7.2	9.8	9.4	166	28	8.8	4.2	.61
AC-FT	1070	692	649	539	594	1510	7280	22420	4470	1720	798	228

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	16.9	15.9	14.4	14.1	16.5	38.0	153	477	272	81.8	25.6	14.1
MAX	33.2	29.3	28.6	24.5	42.1	91.2	310	957	722	246	64.4	34.4
(WY)	1987	1986	1986	1986	1986	1986	1986	1984	1983	1983	1983	1984
MIN	7.60	8.35	6.77	5.52	7.01	21.5	59.8	214	75.1	27.9	11.5	3.83
(WY)	1990	1988	1991	1991	1991	1983	1983	1990	1994	1994	1988	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1983 - 1994

ANNUAL TOTAL	34673.8	21155.21	95.4
ANNUAL MEAN	95.0	58.0	172
HIGHEST ANNUAL MEAN			44.8
LOWEST ANNUAL MEAN			1590
HIGHEST DAILY MEAN	852	May 22	560
LOWEST DAILY MEAN	5.7	Sep 28	.61
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 28	1.6
INSTANTANEOUS PEAK FLOW			601
INSTANTANEOUS PEAK STAGE			7.60
ANNUAL RUNOFF (AC-FT)	68780	41960	69110
10 PERCENT EXCEEDS	356	190	278
50 PERCENT EXCEEDS	18	14	23
90 PERCENT EXCEEDS	9.8	7.4	7.8

MUDDY CREEK BASIN

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1986 to September 1987, April 1990 to current year.

WATER TEMPERATURE: April 1986 to September 1987, April 1990 to current year.

INSTRUMENTATION.--Water-quality monitor from April 1986 to September 1987, April 1990 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,340 microsiemens, Sept. 17, 1993; minimum, 177 microsiemens, May 15, 1991.

WATER TEMPERATURE: Maximum, 25.9°C, July 1-2, 1990; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum measured, 2,280 microsiemens, Oct. 5; minimum measured, 155 microsiemens, May 29.

WATER TEMPERATURE: Maximum, 24.7°C, July 23; minimum, 1.3°C, on April 28.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
04...	1530	8.3	1420	8.3	13.0	13	8.6	650	150	68
NOV										
02...	1345	12	1140	8.3	1.5	2.8	11.5	490	110	52
DEC										
07...	1400	12	897	7.9	0.0	4.7	11.4	390	98	36
JAN										
13...	1540	9.1	640	7.8	0.0	9.3	10.8	270	71	23
FEB										
08...	1400	8.3	614	7.9	0.0	9.7	9.2	250	67	20
MAR										
08...	1500	30	1350	8.0	0.0	10	9.6	520	92	71
APR										
22...	1230	298	393	--	9.0	250	8.3	170	43	14
MAY										
03...	1300	189	436	8.3	7.5	72	7.6	190	50	16
JUN										
16...	1330	1.3	956	8.2	17.0	5.3	8.2	460	120	39
JUL										
19...	1300	7.5	1290	8.3	18.5	1.2	7.5	640	160	58
AUG										
15...	1120	7.6	1270	8.2	19.0	24	6.6	610	140	63
SEP										
14...	1230	2.7	1520	8.3	14.5	9.0	7.8	690	140	81

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT									
04...	82	21	1	3.3	187	600	10	0.3	5.5
NOV									
02...	59	21	1	2.6	178	400	6.8	0.3	8.1
DEC									
07...	40	18	0.9	2.1	184	310	4.5	0.2	10
JAN									
13...	32	20	0.8	1.9	169	170	4.8	0.3	13
FEB									
08...	28	19	0.8	2.0	167	150	4.7	0.2	0.4
MAR									
08...	99	29	2	7.0	138	580	11	0.2	9.7
APR									
22...	16	17	0.5	2.2	102	81	1.8	0.2	8.9
MAY									
03...	18	17	0.6	1.8	112	110	2.2	0.1	9.1
JUN									
16...	39	15	0.8	3.9	203	320	3.7	0.3	12
JUL									
19...	51	15	0.9	3.2	230	520	3.9	0.4	9.4
AUG									
15...	60	18	1	3.6	178	530	5.0	0.3	6.5
SEP									
14...	84	21	1	3.9	163	660	6.3	0.3	3.8

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 04...	1110	1030	1.51	24.8	--	<0.01	<0.05	0.02	0.38
NOV 02...	744	746	1.01	24.9	--	<0.01	0.07	0.03	0.27
DEC 07...	634	612	0.86	21.2	15	<0.01	0.09	0.02	0.18
JAN 13...	448	418	0.61	11.0	--	<0.01	0.15	0.05	0.15
FEB 08...	392	373	0.53	8.76	--	0.02	0.18	0.06	0.24
MAR 08...	1030	956	1.40	84.5	--	0.07	0.74	0.36	0.94
APR 22...	258	230	0.35	208	--	0.01	0.23	0.09	0.91
MAY 03...	274	275	0.37	140	146	<0.01	0.08	0.02	0.58
JUN 16...	690	660	0.94	2.40	--	<0.01	<0.05	0.01	0.69
JUL 19...	972	944	1.32	19.7	35	<0.01	<0.05	0.03	0.47
AUG 15...	976	915	1.33	19.9	--	<0.01	<0.05	0.02	0.38
SEP 14...	1160	1080	1.58	8.52	23	<0.01	0.05	0.03	0.37
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT 04...	--	0.40	<0.20	0.40	0.03	<0.01	<0.01	--	--
NOV 02...	--	0.30	<0.20	0.37	<0.01	<0.01	<0.01	--	--
DEC 07...	--	0.20	<0.20	0.29	0.02	<0.01	<0.01	4.1	4.8
JAN 13...	--	0.20	<0.20	0.35	0.02	<0.01	<0.01	--	--
FEB 08...	0.14	0.30	0.20	0.48	0.03	0.02	<0.01	--	--
MAR 08...	0.74	1.3	1.1	2.0	0.06	0.03	<0.01	--	--
APR 22...	0.31	1.0	0.40	1.2	0.21	<0.01	0.01	--	--
MAY 03...	0.28	0.60	0.30	0.68	0.16	<0.01	<0.01	10	7.0
JUN 16...	0.49	0.70	0.50	0.70	0.07	0.02	0.02	--	--
JUL 19...	0.37	0.50	0.40	0.50	0.05	0.01	<0.01	8.7	7.4
AUG 15...	0.18	0.40	0.20	0.40	0.02	<0.01	<0.01	--	--
SEP 14...	0.27	0.40	0.30	0.45	0.03	<0.01	<0.01	6.7	5.8

MUDDY CREEK BASIN

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 04...	1530	--	--	--	--	--	--	--	--	--	--	--
NOV 02...	1345	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	1400	--	--	--	--	--	--	--	--	--	--	--
JAN 13...	1540	--	--	--	--	--	--	--	--	--	--	--
FEB 08...	1400	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	1500	--	--	--	--	--	--	--	--	--	--	--
APR 22...	1230	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	1300	1400	1	<1	<100	47	<10	30	<1	<1	2	<1
JUN 16...	1330	--	--	--	--	--	--	--	--	--	--	--
JUL 19...	1300	--	--	--	--	--	--	--	--	--	--	--
AUG 15...	1120	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	1230	310	1	1	200	93	<10	160	<1	<1	<1	<1

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
OCT 04...	--	--	--	--	4	--	--	--	--	--	--	--
NOV 02...	--	--	--	--	9	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	6	--	--	--	--	--	--	--
JAN 13...	--	--	--	--	22	--	--	--	--	--	--	--
FEB 08...	--	--	--	--	27	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	79	--	--	--	--	--	--	--
APR 22...	--	--	--	--	77	--	--	--	--	--	--	--
MAY 03...	1	4	1	3000	79	3	<1	20	90	13	<0.1	<0.1
JUN 16...	--	--	--	--	46	--	--	--	--	--	--	--
JUL 19...	--	--	--	--	4	--	--	--	--	--	--	--
AUG 15...	--	--	--	--	<3	--	--	--	--	--	--	--
SEP 14...	1	2	2	540	<3	<1	<1	100	110	91	<0.1	<0.1

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL SOLVED (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--
NOV 02...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 13...	--	--	--	--	--	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	<1	<1	6	2	2	<1	<1	<1	410	30	12
JUN 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 15...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	<1	2	3	3	3	3	<1	<1	1500	<10	8

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 04...	1530	8.3	31	0.69
NOV 02...	1345	12	10	0.32
DEC 07...	1400	12	48	1.6
JAN 13...	1540	9.1	35	0.86
FEB 08...	1400	8.3	39	0.87
MAR 08...	1500	30	29	2.4
APR 22...	1230	298	1750	1410
MAY 03...	1300	189	185	94
AUG 15...	1120	7.6	57	1.2
SEP 14...	1230	2.7	26	0.19

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	---	---	---	---	---	1090	523	266	1160	1330	1280
2	1260	---	---	---	---	---	1100	---	305	1120	1320	1270
3	1330	---	---	---	---	---	1100	---	334	1080	1600	1310
4	1470	---	---	---	---	---	1220	---	371	1080	1720	1610
5	1990	---	---	---	---	---	1330	---	378	1090	1730	1880
6	1940	---	---	---	---	---	1310	---	418	1130	1620	1980
7	1730	---	---	---	---	---	1280	---	447	1130	1540	1900
8	1680	---	---	---	---	---	1260	---	494	1180	1470	1740
9	1600	---	---	---	---	---	1230	244	514	1270	1440	1660
10	1570	---	---	---	---	---	1200	249	586	1270	1370	1610
11	1880	---	---	---	---	---	1150	279	703	1320	1310	1580
12	1760	---	---	---	---	---	1130	278	795	1290	1310	1560
13	1370	---	---	---	---	---	1120	277	734	1300	1350	1530
14	1300	---	---	---	---	---	1080	292	710	1270	1380	1510
15	1360	---	---	---	---	---	1030	303	---	1240	1360	1520
16	1120	---	---	---	---	---	956	304	---	1220	1290	1510
17	1170	---	---	---	---	---	799	305	---	1230	1280	1510
18	1170	---	---	---	---	---	613	301	1160	1240	1300	1470
19	1190	---	---	---	---	---	516	281	1180	1280	1290	1460
20	1320	---	---	---	---	---	467	261	1190	1290	1280	1460
21	1300	---	---	---	---	---	431	233	---	1300	1270	1470
22	1170	---	---	---	---	---	397	214	---	1270	1260	1430
23	1140	---	---	---	---	---	339	215	---	1290	1340	1400
24	1120	---	---	---	---	---	294	227	---	1310	1380	1400
25	---	---	---	---	---	---	263	---	985	1330	1380	1400
26	---	---	---	---	---	---	301	---	1010	1360	1360	1420
27	---	---	---	---	---	---	303	---	1030	1370	1350	1430
28	---	---	---	---	---	---	352	---	1060	1390	1360	1450
29	---	---	---	---	---	---	375	190	1040	1380	1330	1460
30	---	---	---	---	---	---	441	192	1150	1360	1290	1450
31	---	---	---	---	---	---	---	208	---	1350	1260	---
MEAN	---	---	---	---	---	---	816	---	---	1250	1380	1520

09041500 MUDDY CREEK AT KREMLING, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.8	7.6	---	---	---	---	---	---	---	---	---	---
2	12.6	8.3	---	---	---	---	---	---	---	---	---	---
3	12.8	7.2	---	---	---	---	---	---	---	---	---	---
4	12.9	8.6	---	---	---	---	---	---	---	---	---	---
5	13.4	9.4	---	---	---	---	---	---	---	---	---	---
6	12.4	9.4	---	---	---	---	---	---	---	---	---	---
7	11.8	7.4	---	---	---	---	---	---	---	---	---	---
8	10.5	9.2	---	---	---	---	---	---	---	---	---	---
9	10.2	6.7	---	---	---	---	---	---	---	---	---	---
10	10.0	7.1	---	---	---	---	---	---	---	---	---	---
11	8.1	5.0	---	---	---	---	---	---	---	---	---	---
12	7.6	5.8	---	---	---	---	---	---	---	---	---	---
13	9.2	6.5	---	---	---	---	---	---	---	---	---	---
14	9.7	6.9	---	---	---	---	---	---	---	---	---	---
15	9.3	6.4	---	---	---	---	---	---	---	---	---	---
16	8.9	7.3	---	---	---	---	---	---	---	---	---	---
17	9.3	5.7	---	---	---	---	---	---	---	---	---	---
18	7.6	5.7	---	---	---	---	---	---	---	---	---	---
19	6.9	3.5	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.1	4.1	---	---	---	---	---	---	20.1	18.8	17.1	12.8
2	6.8	4.9	---	---	---	---	---	---	19.2	17.6	20.2	13.9
3	7.6	3.8	---	---	---	---	---	---	21.2	17.6	18.8	15.1
4	7.1	5.2	---	---	---	---	21.2	18.5	22.6	19.4	18.4	15.3
5	5.4	3.0	---	---	---	---	22.6	19.7	21.3	19.6	19.4	15.1
6	5.9	3.4	---	---	---	---	22.3	17.6	21.3	18.9	20.6	10.6
7	5.1	3.9	---	---	---	---	18.8	15.2	20.6	18.8	19.5	9.0
8	6.1	2.7	---	---	---	---	18.2	13.8	20.2	18.0	20.8	4.9
9	5.3	4.1	---	---	---	---	19.9	15.1	20.1	18.0	20.2	3.6
10	5.6	3.4	---	---	---	---	20.6	12.8	22.3	17.7	19.7	3.9
11	6.1	3.5	---	---	---	---	20.0	17.5	22.0	19.0	20.1	8.5
12	7.7	4.3	10.2	9.5	---	---	19.3	15.6	23.2	19.2	20.6	6.8
13	9.4	5.6	9.8	9.0	---	---	20.8	14.4	21.7	19.5	20.5	6.6
14	9.4	7.8	9.1	8.5	---	---	20.0	14.8	22.8	18.8	---	---
15	9.2	6.2	9.5	9.1	---	---	20.6	14.8	23.3	19.2	---	---
16	10.4	6.6	9.2	8.4	---	---	20.3	14.8	22.1	18.4	---	---
17	10.8	8.4	9.5	9.1	---	---	20.1	13.5	22.0	17.7	---	---
18	10.8	8.7	9.7	9.3	---	---	19.5	13.7	20.7	16.4	---	---
19	11.1	8.1	9.7	8.7	---	---	21.9	13.2	19.5	17.0	---	---
20	---	---	11.3	9.3	---	---	21.1	15.0	20.4	16.9	---	---
21	11.7	6.4	12.1	9.4	---	---	24.0	13.5	19.9	16.9	---	---
22	11.3	8.0	12.6	9.7	---	---	24.3	12.7	20.9	16.8	---	---
23	9.9	7.2	11.6	10.3	---	---	24.7	14.7	22.2	17.0	---	---
24	9.1	7.1	10.9	8.8	---	---	22.2	16.5	20.2	17.7	---	---
25	7.1	3.3	---	---	---	---	20.5	18.0	21.3	14.7	---	---
26	5.7	2.8	---	---	---	---	21.4	18.4	21.8	9.3	---	---
27	4.7	1.9	---	---	---	---	22.1	19.0	19.5	7.8	---	---
28	7.1	1.3	---	---	---	---	21.3	18.1	19.7	12.9	---	---
29	6.3	4.0	---	---	---	---	20.6	18.6	19.7	9.8	---	---
30	7.8	3.0	---	---	---	---	20.7	17.5	18.9	16.5	---	---
31	---	---	---	---	---	---	20.4	19.1	18.3	15.3	---	---
MONTH	---	---	---	---	---	---	---	---	23.3	7.8	---	---

BLUE RIVER BASIN

09041900 MONTE CRISTO DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'15", in NE¹/4SE¹/4 sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft downstream from diversion point, 1.4 mi northwest of Hoosier Pass, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year (seasonal record).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30-31, Apr. 1 to May 10, and June 29 to Sept. 21. Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW¹/4NE¹/4 sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 73 ft³/s, Sept. 29, 1994; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	---	---	---	---	---	.00	.00	8.8	.00	.00	.00
2	27	---	---	---	---	---	.00	.00	7.8	.00	.00	.00
3	26	---	---	---	---	---	.00	.00	6.8	.00	.00	.00
4	26	---	---	---	---	---	.00	.00	6.5	.00	.00	.00
5	29	---	---	---	---	---	.00	.00	5.3	.00	.00	.00
6	32	---	---	---	---	---	.00	.00	4.8	.00	.00	.00
7	32	---	---	---	---	---	.00	.00	4.2	.00	.00	.00
8	31	---	---	---	---	---	.00	.00	3.5	.00	.00	.00
9	32	---	---	---	---	---	.00	.00	3.1	.00	.00	.00
10	31	---	---	---	---	---	.00	1.1	2.6	.00	.00	.00
11	30	---	---	---	---	---	.00	3.4	2.6	.00	.00	.00
12	30	---	---	---	---	---	.00	4.2	2.6	.00	.00	.00
13	31	---	---	---	---	---	.00	4.9	2.3	.00	.00	.00
14	31	---	---	---	---	---	.00	5.6	2.2	.00	.00	.00
15	31	---	---	---	---	---	.00	5.4	2.0	.00	.00	.00
16	30	---	---	---	---	---	.00	6.5	2.0	.00	.00	.00
17	27	---	---	---	---	---	.00	6.8	2.1	.00	.00	.00
18	23	---	---	---	---	---	.00	5.8	2.7	.00	.00	.00
19	31	---	---	---	---	---	.00	6.3	2.8	.00	.00	.00
20	38	---	---	---	---	---	.00	6.5	3.0	.00	.00	.00
21	37	---	---	---	---	---	.00	5.4	4.2	.00	.00	29
22	35	---	---	---	---	---	.00	5.0	4.6	.00	.00	70
23	36	---	---	---	---	---	.00	4.9	3.6	.00	.00	69
24	37	---	---	---	---	---	.00	4.9	2.8	.00	.00	68
25	35	---	---	---	---	---	.00	4.6	2.4	.00	.00	70
26	34	---	---	---	---	---	.00	4.4	2.0	.00	.00	66
27	27	---	---	---	---	---	.00	4.6	5.5	.00	.00	65
28	20	---	---	---	---	---	.00	4.8	20	.00	.00	69
29	9.4	---	---	---	---	---	.00	6.1	8.2	.00	.00	73
30	1.6	---	---	---	---	---	.00	7.4	.00	.00	.00	70
31	.00	---	---	---	---	---	---	8.2	---	.00	.00	---
TOTAL	868.00	---	---	---	---	---	0.00	116.80	131.00	0.00	0.00	649.00
MEAN	28.0	---	---	---	---	---	.000	3.77	4.37	.000	.000	21.6
MAX	38	---	---	---	---	---	.00	8.2	20	.00	.00	73
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	1720	---	---	---	---	---	.00	232	260	.00	.00	1290

09044300 BEMROSE-HOOSIER DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'50", long 106°04'13", in NE¹/₄SE¹/₄ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on Bemrose Creek, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year (seasonal record).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1-19, and Aug. 5 to Sept. 30. Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from Bemrose and Hoosier Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW¹/₄SW¹/₄ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with City of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s, June 21, 1965; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	1.3	22	4.1	1.8	.00
2	---	---	---	---	---	---	.00	1.3	20	4.0	1.6	.00
3	---	---	---	---	---	---	.00	1.3	23	3.9	1.5	.00
4	---	---	---	---	---	---	.00	1.3	23	3.6	1.4	.00
5	---	---	---	---	---	---	.00	1.8	21	3.4	1.2	.00
6	---	---	---	---	---	---	.00	2.6	19	3.2	.00	.00
7	---	---	---	---	---	---	.00	3.2	18	3.1	.00	.00
8	---	---	---	---	---	---	.00	3.2	16	2.9	.00	.00
9	---	---	---	---	---	---	.00	2.7	15	2.8	.00	.00
10	---	---	---	---	---	---	.00	2.3	14	2.6	.00	.00
11	---	---	---	---	---	---	.00	2.9	14	2.6	.00	.00
12	---	---	---	---	---	---	.00	3.3	13	2.5	.00	.00
13	---	---	---	---	---	---	.00	3.5	13	2.4	.00	.00
14	---	---	---	---	---	---	.00	4.1	12	2.3	.00	.00
15	---	---	---	---	---	---	.00	4.4	12	2.3	.00	.00
16	---	---	---	---	---	---	.00	5.5	11	2.1	.00	.00
17	---	---	---	---	---	---	.00	6.1	11	2.1	.00	.00
18	---	---	---	---	---	---	.00	6.4	12	2.0	.00	.00
19	---	---	---	---	---	---	.10	6.9	12	1.9	.00	.00
20	---	---	---	---	---	---	6.8	8.0	11	1.9	.00	.00
21	---	---	---	---	---	---	4.2	7.6	11	1.8	.00	.00
22	---	---	---	---	---	---	2.2	7.9	11	1.7	.00	.00
23	---	---	---	---	---	---	2.4	8.3	9.7	1.7	.00	.00
24	---	---	---	---	---	---	2.2	8.7	9.0	1.7	.00	.00
25	---	---	---	---	---	---	1.7	8.6	8.5	1.6	.00	.00
26	---	---	---	---	---	---	1.3	8.6	8.0	1.6	.00	.00
27	---	---	---	---	---	---	1.3	10	7.5	1.5	.00	.00
28	---	---	---	---	---	---	1.3	11	7.0	1.5	.00	.00
29	---	---	---	---	---	---	1.3	12	5.6	1.5	.00	.00
30	---	---	---	---	---	---	1.3	15	4.4	1.5	.00	.00
31	---	---	---	---	---	---	---	18	---	1.5	.00	---
TOTAL	---	---	---	---	---	---	26.10	187.8	393.7	73.3	7.50	0.00
MEAN	---	---	---	---	---	---	.87	6.06	13.1	2.36	.24	.000
MAX	---	---	---	---	---	---	6.8	18	23	4.1	1.8	.00
MIN	---	---	---	---	---	---	.00	1.3	4.4	1.5	.00	.00
AC-FT	---	---	---	---	---	---	52	373	781	145	15	.00

09044800 MCCULLOUGH-SPRUCE-CRYSTAL DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'14", in NE¹/₄SE¹/₄ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on McCullough Gulch, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year (seasonal record). Prior to October 1961, Published as McCullough diversion near Hoosier Pass.

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Elevation of gage is 10,986 ft, above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1 to May 18, and June 29 to Sept. 30. Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from McCullough Gulch and Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in secs.14, 23, and 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with City of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 123 ft³/s, June 20, 1968; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	72	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	67	.00	.00	.00
3	---	---	---	---	---	---	.00	.00	74	.00	.00	.00
4	---	---	---	---	---	---	.00	.00	72	.00	.00	.00
5	---	---	---	---	---	---	.00	.00	67	.00	.00	.00
6	---	---	---	---	---	---	.00	.00	66	.00	.00	.00
7	---	---	---	---	---	---	.00	.00	57	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	49	.00	.00	.00
9	---	---	---	---	---	---	.00	.00	45	.00	.00	.00
10	---	---	---	---	---	---	.00	.00	44	.00	.00	.00
11	---	---	---	---	---	---	.00	.00	51	.00	.00	.00
12	---	---	---	---	---	---	.00	.00	54	.00	.00	.00
13	---	---	---	---	---	---	.00	.00	57	.00	.00	.00
14	---	---	---	---	---	---	.00	.00	51	.00	.00	.00
15	---	---	---	---	---	---	.00	.00	46	.00	.00	.00
16	---	---	---	---	---	---	.00	.00	49	.00	.00	.00
17	---	---	---	---	---	---	.00	.00	51	.00	.00	.00
18	---	---	---	---	---	---	.00	.20	62	.00	.00	.00
19	---	---	---	---	---	---	.00	14	79	.00	.00	.00
20	---	---	---	---	---	---	.00	21	74	.00	.00	.00
21	---	---	---	---	---	---	.00	18	80	.00	.00	.00
22	---	---	---	---	---	---	.00	18	78	.00	.00	.00
23	---	---	---	---	---	---	.00	17	54	.00	.00	.00
24	---	---	---	---	---	---	.00	25	42	.00	.00	.00
25	---	---	---	---	---	---	.00	27	46	.00	.00	.00
26	---	---	---	---	---	---	.00	26	45	.00	.00	.00
27	---	---	---	---	---	---	.00	30	43	.00	.00	.00
28	---	---	---	---	---	---	.00	35	39	.00	.00	.00
29	---	---	---	---	---	---	.00	36	18	.00	.00	.00
30	---	---	---	---	---	---	.00	50	.00	.00	.00	.00
31	---	---	---	---	---	---	---	64	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.00	381.20	1632.00	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	.000	12.3	54.4	.000	.000	.000
MAX	---	---	---	---	---	---	.00	64	80	.00	.00	.00
MIN	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	.00	756	3240	.00	.00	.00

09046490 BLUE RIVER AT BLUE RIVER, CO

LOCATION.--Lat 39°27'21", long 106°01'52", in NE¹/4SE¹/4 sec.7, T.7 S, R.77 W., Summit County, Hydrologic Unit 14010002 on left bank, 350 ft downstream from spillway of Goose Pasture Tarn Dam and 2.0 mi southeast of Breckenridge.

DRAINAGE AREA.--22.6 mi².

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,835 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 29, and Feb. 12-13. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	14	9.3	5.3	5.8	4.1	3.4	13	109	73	38	24
2	16	14	9.3	6.0	5.6	4.0	3.7	13	108	74	52	49
3	16	13	9.2	6.2	5.4	4.0	3.1	14	105	75	44	60
4	16	14	8.7	6.1	5.3	4.0	3.6	14	107	69	38	51
5	16	13	9.1	6.4	5.1	3.9	3.9	20	100	66	33	39
6	16	12	8.6	7.1	4.5	4.0	3.9	31	94	62	33	33
7	18	11	8.6	5.8	4.8	4.2	4.8	43	88	59	30	30
8	21	11	8.4	5.8	5.4	4.1	5.6	50	82	50	29	27
9	19	11	8.4	5.8	5.2	3.9	4.9	52	75	44	29	25
10	21	10	8.4	6.3	4.8	3.7	5.1	42	70	46	30	25
11	19	11	8.2	5.6	4.7	3.8	4.9	38	66	46	27	23
12	19	14	8.5	5.1	4.7	3.8	5.1	43	64	45	27	24
13	19	12	8.4	6.2	4.6	3.7	5.2	50	60	44	34	25
14	17	12	7.6	6.0	4.5	3.6	5.9	56	57	42	47	29
15	17	11	8.6	5.6	4.4	3.5	6.1	59	52	44	50	30
16	18	11	8.4	5.6	4.6	3.6	6.3	61	49	46	39	26
17	17	11	8.1	5.6	4.6	3.6	7.5	73	46	43	35	22
18	19	11	7.7	6.1	4.4	3.7	8.4	78	48	41	33	22
19	17	12	7.8	5.8	4.2	3.9	10	86	48	40	36	22
20	17	11	7.7	5.7	4.1	4.1	13	92	51	39	50	21
21	15	10	7.2	5.4	3.9	4.0	18	92	47	39	45	23
22	15	10	7.1	5.1	4.4	3.9	27	89	46	38	39	23
23	15	11	7.0	5.1	4.0	4.2	37	92	43	36	32	21
24	14	11	6.5	5.2	4.2	4.1	43	87	50	37	28	20
25	14	9.5	6.3	5.2	4.4	4.2	39	76	40	35	27	19
26	14	8.9	6.3	5.9	4.0	4.4	25	75	36	33	25	18
27	12	9.8	6.0	5.8	3.9	4.1	20	74	33	32	23	18
28	12	9.3	6.5	5.2	4.1	3.6	15	79	29	30	24	18
29	14	9.4	5.9	5.3	--	4.1	15	86	28	29	27	17
30	12	9.2	5.5	5.3	--	3.6	15	88	68	30	26	17
31	12	---	5.6	4.9	---	3.6	---	96	---	30	24	---
TOTAL	504	337.1	238.9	176.5	129.6	121.0	368.4	1862	1899	1417	1054	801
MEAN	16.3	11.2	7.71	5.69	4.63	3.90	12.3	60.1	63.3	45.7	34.0	26.7
MAX	21	14	9.3	7.1	5.8	4.4	43	96	109	75	52	60
MIN	12	8.9	5.5	4.9	3.9	3.5	3.1	13	28	29	23	17
AC-FT	1000	669	474	350	257	240	731	3690	3770	2810	2090	1590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	MEAN	19.3	14.0	10.5	7.72	5.83	5.40	12.7	59.5	105	67.3	38.8	25.5
	MAX	32.2	26.5	18.9	14.3	8.11	7.96	21.9	114	254	217	111	44.3
	(WY)	1985	1985	1985	1985	1985	1985	1989	1984	1984	1984	1984	1984
	MIN	13.5	8.62	6.98	4.98	4.12	3.68	5.53	33.6	63.1	23.0	18.0	14.2
	(WY)	1992	1992	1993	1993	1991	1993	1993	1990	1992	1991	1986	1986

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	11242.4	8908.5	
ANNUAL MEAN	30.8	24.4	31.1
HIGHEST ANNUAL MEAN			70.1
LOWEST ANNUAL MEAN			20.5
HIGHEST DAILY MEAN	175	Jun 1	404
LOWEST DAILY MEAN	3.1	Mar 13	3.1
ANNUAL SEVEN-DAY MINIMUM	3.3	Mar 17	3.2
INSTANTANEOUS PEAK FLOW			506
INSTANTANEOUS PEAK STAGE			2.84
ANNUAL RUNOFF (AC-FT)	22300	17670	22510
10 PERCENT EXCEEDS	109	60	77
50 PERCENT EXCEEDS	12	14	15
90 PERCENT EXCEEDS	3.9	4.1	5.3

a-Also occurred Mar 13, 1993, and Apr 3, 1994.

b-Also occurred Jun 4.

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°33'58", long 106°02'56", in SW¹/4SE¹/4 sec.31, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi upstream from Dillon Reservoir and 5.0 mi south of Dillon.

DRAINAGE AREA.--121 mi².

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,030 ft above sea level, from topographic map. Prior to Aug. 6, 1992, gage site 1.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 20-29, and Nov. 18 to May 22. Records fair except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	35	33	28	23	21	18	62	313	156	68	58
2	42	37	33	27	23	21	18	55	334	156	78	65
3	40	37	33	27	23	21	18	55	333	161	90	90
4	37	36	33	27	23	21	20	56	339	155	86	96
5	35	36	33	27	23	21	23	70	329	145	78	87
6	33	36	33	27	23	21	26	90	310	139	73	75
7	32	34	33	27	23	21	29	100	297	132	69	67
8	33	33	33	27	23	21	31	120	282	129	67	62
9	34	32	33	27	22	21	29	110	263	120	67	59
10	33	32	33	27	22	20	28	105	248	111	67	56
11	33	32	33	27	21	20	27	96	235	109	67	55
12	32	33	33	27	21	19	26	110	229	108	64	54
13	33	34	33	27	21	19	26	120	219	104	63	55
14	33	35	33	27	21	19	31	125	214	101	68	54
15	33	34	33	27	21	18	37	135	203	99	87	54
16	33	33	33	27	21	19	43	142	195	101	92	49
17	34	31	33	27	21	19	50	152	187	100	78	43
18	33	31	33	26	21	19	58	175	184	95	72	38
19	34	32	32	26	21	19	70	195	186	90	72	35
20	35	32	32	25	21	20	80	230	195	88	83	35
21	35	33	31	24	21	20	94	230	186	85	89	35
22	35	33	31	23	21	20	110	240	187	83	82	34
23	35	33	30	23	21	20	120	242	181	82	75	33
24	35	33	30	23	21	21	132	235	174	82	69	35
25	36	33	29	23	21	21	145	222	168	81	63	34
26	36	33	29	23	21	21	125	217	156	79	60	30
27	37	33	29	23	21	21	110	220	146	75	58	26
28	37	33	29	23	21	21	95	225	139	73	56	24
29	38	33	29	23	---	20	85	251	132	72	55	23
30	38	33	28	23	---	20	75	259	132	71	58	22
31	36	---	28	23	---	19	---	275	---	70	61	---
TOTAL	1093	1005	981	791	606	624	1779	4919	6696	3252	2215	1483
MEAN	35.3	33.5	31.6	25.5	21.6	20.1	59.3	159	223	105	71.5	49.4
MAX	43	37	33	28	23	21	145	275	339	161	92	96
MIN	32	31	28	23	21	18	18	55	132	70	55	22
AC-FT	2170	1990	1950	1570	1200	1240	3530	9760	13280	6450	4390	2940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	MEAN	51.6	38.6	31.1	26.3	24.2	23.6	39.7	169	326	193	102	66.6
MAX	101	74.4	54.0	40.3	36.0	32.5	77.7	333	641	477	241	143	
(WY)	1985	1985	1984	1984	1983	1983	1985	1984	1983	1983	1984	1983	
MIN	30.6	23.8	21.7	17.0	17.2	18.3	23.0	65.1	72.0	73.7	55.1	40.5	
(WY)	1978	1978	1978	1993	1992	1992	1964	1981	1963	1966	1977	1962	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1958 - 1994

	ANNUAL TOTAL	35920	25444	a 104	
ANNUAL MEAN	98.4	69.7		168	1984
HIGHEST ANNUAL MEAN				45.8	1963
LOWEST ANNUAL MEAN				1160	Jun 26 1983
HIGHEST DAILY MEAN	511	Jun 18	339	Jun 4	
LOWEST DAILY MEAN	16	Feb 12	18	Mar 15	
ANNUAL SEVEN-DAY MINIMUM	17	Feb 10	19	Mar 12	
INSTANTANEOUS PEAK FLOW			353	Jun 4	e 1250 Jun 17 1965
INSTANTANEOUS PEAK STAGE			4.87	Jun 4	5.38 Jun 17 1965
ANNUAL RUNOFF (AC-FT)	71250	50470	66020		
10 PERCENT EXCEEDS	337	177	240		
50 PERCENT EXCEEDS	35	35	44		
90 PERCENT EXCEEDS	17	21	22		

a-Adjusted for diversions to Hoosier Pass tunnel.

b-Also occurred Feb 13-14.

c-Also occurred Apr 1-3.

d-Also occurred Feb 13-14, 1993.

e-From rating curve extended above 800 ft³/s.

09047500 SNAKE RIVER NEAR MONTEZUMA, CO

LOCATION.--Lat 39°36'20", long 105°56'33", in NW1/4 sec.19, T.5 S., R.76 W. (projected), Summit County, Hydrologic Unit 14010002, on right bank 200 ft downstream from North Fork and 4.5 mi northwest of Montezuma.

DRAINAGE AREA.--57.7 mi².

PERIOD OF RECORD.--July 1942 to September 1946, October 1951 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,320 ft above sea level, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 2 to Apr. 18. Records good except for estimated daily discharges, and flows greater than 400 ft³/s, which are poor. Small diversions upstream from station for irrigation and domestic use. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	19	17	13	11	9.6	12	20	433	98	46	31
2	31	20	17	13	11	9.6	11	20	397	97	43	64
3	30	20	17	12	11	9.0	11	19	379	96	38	41
4	30	20	17	12	10	8.6	11	20	386	86	35	36
5	29	19	17	11	10	8.4	11	26	351	81	34	33
6	29	18	17	11	10	8.4	11	37	319	76	33	32
7	32	18	17	11	10	8.4	11	50	299	75	31	30
8	33	18	17	11	10	8.6	11	62	277	70	32	30
9	33	18	17	11	10	9.0	11	67	253	65	32	30
10	33	17	16	11	10	9.0	11	63	232	62	34	32
11	31	17	16	11	10	9.0	11	83	228	60	32	30
12	33	17	16	11	10	9.0	11	120	212	61	31	31
13	32	17	15	11	10	9.0	12	129	202	56	33	32
14	32	17	15	11	10	9.5	12	117	200	55	36	37
15	33	17	14	11	10	10	13	121	194	57	35	31
16	33	17	14	11	10	10	14	147	187	53	31	30
17	32	17	13	11	10	10	15	195	179	51	33	28
18	33	17	13	11	10	10	16	209	184	49	30	27
19	29	17	13	11	10	10	18	230	196	47	43	27
20	29	17	13	11	10	10	21	259	182	45	43	29
21	31	17	13	11	10	10	29	234	178	43	35	33
22	29	17	13	11	10	10	39	232	233	41	33	29
23	28	17	13	11	10	10	46	210	186	41	31	27
24	27	17	13	11	9.7	10	49	199	163	44	30	26
25	27	17	13	11	9.6	10	41	213	150	40	29	25
26	26	17	13	11	9.6	10	32	213	139	39	28	25
27	26	17	13	11	9.6	10	28	207	128	37	28	24
28	23	17	13	11	9.6	11	25	224	119	37	30	24
29	23	17	13	11	---	12	22	226	111	36	30	24
30	22	17	13	11	---	11	21	290	104	37	29	25
31	21	---	13	11	---	13	---	348	---	35	28	---
TOTAL	912	527	454	347	281.1	302.1	586	4590	6801	1770	1036	923
MEAN	29.4	17.6	14.6	11.2	10.0	9.75	19.5	148	227	57.1	33.4	30.8
MAX	33	20	17	13	11	13	49	348	433	98	46	64
MIN	21	17	13	11	9.6	8.4	11	19	104	35	28	24
AC-FT	1810	1050	901	688	558	599	1160	9100	13490	3510	2050	1830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

	MEAN	27.1	19.6	15.2	11.8	10.5	10.5	18.1	97.4	277	142	64.8	37.6
MAX	66.9	39.5	25.9	18.0	16.0	14.9	35.4	216	465	378	177	90.7	
(WY)	1985	1985	1985	1985	1987	1985	1946	1958	1952	1957	1984	1984	
MIN	16.1	11.8	9.90	7.03	7.00	7.40	8.34	34.0	101	50.9	24.4	18.0	
(WY)	1945	1965	1978	1963	1946	1973	1973	1968	1966	1977	1977	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1943 - 1994
ANNUAL TOTAL	26931.4	18529.2	
ANNUAL MEAN	73.8	50.8	61.1
HIGHEST ANNUAL MEAN			94.6
LOWEST ANNUAL MEAN			35.1
HIGHEST DAILY MEAN	480	433	804
LOWEST DAILY MEAN	8.4	8.4	5.0
ANNUAL SEVEN-DAY MINIMUM	8.6	8.6	6.0
INSTANTANEOUS PEAK FLOW		538	1250
INSTANTANEOUS PEAK STAGE		2.82	3.51
ANNUAL RUNOFF (AC-FT)	53420	36750	44260
10 PERCENT EXCEEDS	245	180	172
50 PERCENT EXCEEDS	19	24	22
90 PERCENT EXCEEDS	10	10	10

a-Also occurred Mar 13-14.

b-Also occurred Mar 6-7.

c-Maximum gage height, 3.88 ft, Jun 6, 1972.

09047700 KEYSTONE GULCH NEAR DILLON, CO

LOCATION.--Lat 39°35'40", long 105°58'19", in NE1/4NE1/4 sec.26, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.7 mi upstream from mouth and 4.7 mi southeast of Dillon.

DRAINAGE AREA.--9.10 mi².

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,350 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27, Oct. 30 to Apr. 18, and Apr. 21 to May 6. Records good except for estimated daily discharges, which are poor. No known diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.1	3.5	2.9	2.4	2.3	3.0	3.4	18	5.4	3.2	2.8
2	3.6	3.8	3.5	2.8	2.4	2.3	3.0	3.1	16	5.5	3.5	5.1
3	3.4	3.6	3.5	2.8	2.4	2.3	3.0	2.9	16	5.9	3.2	3.1
4	3.4	3.5	3.5	2.7	2.4	2.3	3.0	2.8	16	5.4	3.1	2.8
5	3.6	3.5	3.5	2.7	2.4	2.3	3.0	3.0	15	4.9	2.9	2.6
6	3.6	3.5	3.5	2.7	2.4	2.3	3.0	3.2	15	4.8	2.8	2.5
7	4.3	3.5	3.5	2.7	2.4	2.3	3.0	3.4	14	4.7	2.8	2.5
8	4.2	3.5	3.5	2.7	2.4	2.3	3.0	3.6	13	4.7	2.8	2.4
9	3.8	3.5	3.5	2.7	2.4	2.3	3.0	3.2	13	4.4	2.8	2.5
10	3.9	3.5	3.5	2.7	2.4	2.3	3.0	3.2	12	4.4	2.9	2.6
11	3.8	3.5	3.5	2.7	2.4	2.4	3.1	5.7	11	4.3	2.8	2.4
12	3.9	3.5	3.5	2.7	2.4	2.5	3.2	7.0	11	4.3	2.7	2.6
13	3.9	3.5	3.5	2.7	2.4	2.6	3.2	6.3	11	4.3	3.1	2.7
14	3.8	3.5	3.5	2.7	2.4	2.6	3.3	8.6	10	4.2	3.7	3.0
15	4.0	3.5	3.5	2.7	2.4	2.7	3.4	12	9.7	4.1	3.4	2.6
16	4.0	3.5	3.5	2.7	2.4	2.8	3.5	14	9.1	4.0	3.0	2.5
17	4.2	3.5	3.5	2.7	2.4	2.8	3.6	17	8.5	4.0	2.9	2.4
18	4.4	3.5	3.5	2.7	2.4	2.9	3.6	18	8.1	3.8	2.8	2.3
19	4.5	3.5	3.5	2.7	2.4	3.0	3.9	19	8.5	3.6	4.1	2.2
20	4.8	3.5	3.5	2.7	2.4	3.0	4.3	19	8.8	3.5	3.8	2.3
21	4.7	3.5	3.5	2.7	2.4	3.0	5.4	17	8.4	3.4	2.9	2.6
22	4.3	3.5	3.5	2.7	2.4	3.0	6.2	17	11	3.4	2.8	2.4
23	3.7	3.5	3.5	2.7	2.4	3.0	7.2	16	8.8	3.4	2.6	2.3
24	3.7	3.5	3.5	2.6	2.4	3.0	7.8	16	7.4	3.4	2.5	2.3
25	3.6	3.5	3.4	2.5	2.4	3.0	7.0	16	6.8	3.3	2.5	2.2
26	3.5	3.5	3.3	2.4	2.3	3.0	6.4	16	6.5	3.2	2.5	2.4
27	4.5	3.5	3.2	2.4	2.3	3.0	5.5	16	6.3	3.1	2.5	2.5
28	4.3	3.5	3.2	2.4	2.3	3.0	4.7	16	6.2	3.1	2.5	2.2
29	4.5	3.5	3.2	2.4	---	3.0	4.2	17	6.0	3.0	2.6	2.2
30	4.1	3.5	3.2	2.4	---	3.0	3.7	18	5.9	3.0	2.6	2.3
31	4.1	---	3.0	2.4	---	3.0	---	17	---	3.0	2.6	---
TOTAL	123.8	106.0	106.5	82.0	66.9	83.3	123.2	340.4	317.0	125.5	90.9	77.3
MEAN	3.99	3.53	3.44	2.65	2.39	2.69	4.11	11.0	10.6	4.05	2.93	2.58
MAX	4.8	4.1	3.5	2.9	2.4	3.0	7.8	19	18	5.9	4.1	5.1
MIN	3.4	3.5	3.0	2.4	2.3	2.3	3.0	2.8	5.9	3.0	2.5	2.2
AC-FT	246	210	211	163	133	165	244	675	629	249	180	153

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	3.36	2.93	2.48	2.14	2.00	2.03	3.10	12.0	23.1	9.65	5.23	3.74
MEAN	3.36	2.93	2.48	2.14	2.00	2.03	3.10	12.0	23.1	9.65	5.23	3.74
MAX	6.12	4.33	3.68	2.85	2.80	3.00	6.19	31.0	56.5	25.9	15.5	7.97
(WY)	1985	1985	1966	1971	1991	1986	1986	1984	1984	1984	1984	1984
MIN	2.02	1.77	1.37	1.39	1.40	1.40	1.44	5.49	4.49	2.55	2.19	1.83
(WY)	1982	1964	1964	1964	1961	1973	1973	1981	1963	1963	1977	1977

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1958 - 1994		
ANNUAL TOTAL	2929.3			1642.8					
ANNUAL MEAN	8.03			4.50			5.99		
HIGHEST ANNUAL MEAN							13.1		
LOWEST ANNUAL MEAN							3.10		
HIGHEST DAILY MEAN	47			a 19			81		
LOWEST DAILY MEAN	b 1.5			c 2.2			1.1		
ANNUAL SEVEN-DAY MINIMUM	1.6			2.3			d 1.3		
INSTANTANEOUS PEAK FLOW				27			118		
INSTANTANEOUS PEAK STAGE				2.49			3.01		
ANNUAL RUNOFF (AC-FT)	5810			3260			4340		
10 PERCENT EXCEEDS	26			8.7			14		
50 PERCENT EXCEEDS	3.5			3.4			3.0		
90 PERCENT EXCEEDS	1.8			2.4			1.8		

a-Also occurred May 20.

b-Also occurred Mar 14-15.

c-Also occurred Sep 25, 28-29.

d-From rating curve extended above 65 ft³/s.

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO

LOCATION.--Lat 39°34'31", long 106°06'36", in SE1/4NW1/4 sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 220 ft upstream from bridge on U.S. Highway 6, 160 ft downstream from North Tenmile Creek, and 0.6 mi west of Frisco.

DRAINAGE AREA.--93.3 mi².

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as "below North Fork, at Frisco."

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above sea level, from topographic map. Prior to Apr. 21, 1981 at site 720 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 14, and Aug. 13-29. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by a few small diversions upstream from station for irrigation and municipal use and transbasin diversion from Robinson Reservoir, capacity, 2,520 acre-ft, in Eagle River basin. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	29	35	34	34	30	27	71	651	129	48	36
2	36	30	35	34	33	29	27	67	652	124	57	86
3	36	33	35	34	32	28	27	72	544	122	47	65
4	36	35	35	34	31	27	27	72	526	111	42	53
5	36	37	35	34	31	27	27	90	515	103	39	45
6	36	39	35	34	31	27	27	117	473	96	38	39
7	36	40	35	34	31	27	27	151	431	91	35	35
8	39	41	35	34	31	27	27	171	392	84	33	34
9	39	42	35	34	31	27	27	185	352	79	35	33
10	39	41	35	34	31	27	27	175	328	76	41	33
11	39	39	35	34	31	27	27	205	326	74	36	32
12	41	38	35	34	31	27	27	240	317	74	34	36
13	41	37	35	34	31	27	27	264	314	70	34	39
14	41	36	35	34	31	27	29	280	296	66	34	44
15	41	35	35	34	30	27	31	295	271	67	33	42
16	44	34	34	34	30	27	34	327	248	66	32	38
17	40	34	34	34	30	27	42	392	237	61	31	36
18	39	35	34	34	30	27	50	421	255	57	31	36
19	38	36	34	34	30	27	58	433	254	57	33	39
20	40	37	34	34	30	27	66	468	249	54	37	39
21	39	42	34	34	30	26	75	432	241	52	41	46
22	39	41	34	34	30	27	97	416	251	50	38	46
23	35	39	34	34	30	27	110	393	232	48	35	46
24	33	38	34	34	30	27	128	380	205	46	32	45
25	35	37	34	34	30	27	121	406	189	44	30	42
26	37	36	34	34	30	27	87	423	177	46	29	42
27	34	35	34	34	30	27	79	399	166	43	31	39
28	34	35	34	34	30	27	76	453	157	42	32	36
29	31	35	34	34	---	27	75	467	146	41	35	33
30	30	35	34	34	---	27	75	538	138	41	37	33
31	30	---	34	34	---	27	---	588	---	39	33	---
TOTAL	1150	1101	1069	1054	860	842	1584	9391	9533	2153	1123	1248
MEAN	37.1	36.7	34.5	34.0	30.7	27.2	52.8	303	318	69.5	36.2	41.6
MAX	44	42	35	34	34	30	128	588	652	129	57	86
MIN	30	29	34	34	30	26	27	67	138	39	29	32
AC-FT	2280	2180	2120	2090	1710	1670	3140	18630	18910	4270	2230	2480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	31.9	24.8	19.2	16.5	16.6	18.2	37.3	249	463	186	71.9	42.9
MAX	77.7	76.2	34.5	34.0	33.8	46.0	95.0	468	805	484	251	127
(WY)	1985	1985	1994	1994	1983	1983	1962	1970	1983	1984	1984	1984
MIN	13.0	9.83	11.7	11.0	9.55	9.20	13.7	114	156	44.9	25.3	21.8
(WY)	1978	1978	1978	1963	1978	1976	1973	1981	1963	1977	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994

	1993	1994	1958-1994
ANNUAL TOTAL	45506	31108	
ANNUAL MEAN	125	85.2	98.3
HIGHEST ANNUAL MEAN			183
LOWEST ANNUAL MEAN			47.0
HIGHEST DAILY MEAN	727	652	1480
LOWEST DAILY MEAN	19	26	7.0
ANNUAL SEVEN-DAY MINIMUM	20	27	7.9
INSTANTANEOUS PEAK FLOW		743	1910
INSTANTANEOUS PEAK STAGE		3.89	6.15
ANNUAL RUNOFF (AC-FT)	90260	61700	71200
10 PERCENT EXCEEDS	466	252	312
50 PERCENT EXCEEDS	37	35	30
90 PERCENT EXCEEDS	21	27	13

a-Also occurred Jan 8-9.

b-Also occurred Mar 14, 1960.

c-Also occurred Jun 1.

d-From rating curve extended above 750 ft³/s.

BLUE RIVER BASIN

09050700 BLUE RIVER BELOW DILLON, CO

LOCATION.--Lat 39°37'32", long 106°03'57", in SE¹/₄SE¹/₄ sec.12, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi downstream from Dillon Dam, 0.1 mi upstream from Straight Creek, and 1.1 mi west of Dillon.

DRAINAGE AREA.--335 mi².

PERIOD OF RECORD.--January 1960 to current year. Statistical summary computed for 1963 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 8,760 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions upstream from station for irrigation of about 400 acres of hay meadows. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	101	101	100	71	98	98	99	104	374	104	102
2	101	100	101	101	71	98	98	99	103	376	104	103
3	101	101	101	101	71	98	98	98	104	390	104	103
4	101	101	101	100	71	97	98	99	103	392	104	103
5	101	101	101	88	71	97	97	100	104	388	104	103
6	101	101	101	74	71	97	98	100	94	359	104	103
7	101	101	101	74	71	98	98	100	116	315	104	101
8	101	94	101	74	72	98	98	99	118	294	104	101
9	101	102	101	73	72	98	98	99	156	291	104	101
10	99	100	101	73	72	98	98	99	236	294	104	102
11	101	101	101	74	75	98	98	98	345	279	104	103
12	101	101	101	73	82	98	98	99	445	253	104	102
13	101	101	101	72	88	98	98	101	496	255	103	103
14	101	101	101	72	98	98	98	101	531	255	103	104
15	101	101	100	73	104	98	97	101	564	255	103	103
16	101	101	101	74	103	98	98	101	505	245	103	103
17	101	100	101	73	101	98	98	101	457	226	104	104
18	101	101	101	72	100	98	81	101	421	206	103	104
19	101	101	101	71	99	98	98	101	406	142	104	104
20	101	101	101	71	98	98	98	101	411	105	104	103
21	101	101	101	71	98	98	98	101	416	102	104	104
22	101	101	101	71	98	98	98	101	462	104	102	104
23	101	101	101	71	100	98	98	101	507	105	102	104
24	101	101	101	71	99	98	98	101	499	106	103	103
25	101	101	101	71	98	98	100	101	447	105	104	104
26	101	101	100	71	98	98	100	101	392	104	104	104
27	101	101	101	71	98	98	100	102	346	103	103	104
28	101	101	101	71	98	98	100	103	310	104	103	104
29	101	101	101	71	---	98	99	104	347	104	103	104
30	100	101	101	71	---	98	100	104	384	104	104	104
31	101	---	100	71	---	98	---	103	---	104	100	---
TOTAL	3128	3021	3128	2364	2448	3035	2932	3119	9929	6839	3207	3094
MEAN	101	101	101	76.3	87.4	97.9	97.7	101	331	221	103	103
MAX	101	102	101	101	104	98	100	104	564	392	104	104
MIN	99	94	100	71	71	97	81	98	94	102	100	101
AC-FT	6200	5990	6200	4690	4860	6020	5820	6190	19690	13570	6360	6140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
MEAN	111	90.3	82.1	73.0	74.8	74.8	110	298	670	416	242	160
MAX	243	268	193	158	136	126	217	1101	1813	1476	999	348
(WY)	1987	1985	1985	1966	1984	1983	1985	1984	1984	1984	1984	1983
MIN	.000	23.2	44.6	31.0	47.6	48.6	39.3	24.0	32.3	51.5	51.7	18.6
(WY)	1964	1964	1989	1984	1986	1986	1965	1965	1965	1981	1981	1963

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1963 - 1994
ANNUAL TOTAL	68666	46244	
ANNUAL MEAN	188	127	201
HIGHEST ANNUAL MEAN			538
LOWEST ANNUAL MEAN			65.5
HIGHEST DAILY MEAN	^a 1140	564	1940
LOWEST DAILY MEAN	71	71	.00
ANNUAL SEVEN-DAY MINIMUM	93	71	.00
INSTANTANEOUS PEAK FLOW		618	2010
INSTANTANEOUS PEAK STAGE		2.21	3.88
ANNUAL RUNOFF (AC-FT)	136200	91720	145300
10 PERCENT EXCEEDS	413	240	445
50 PERCENT EXCEEDS	102	101	101
90 PERCENT EXCEEDS	101	75	51

a-Also occurred Jun 25.

b-Also occurred Jan 20 to Feb 7.

c-Also occurred Sep 5 to Nov 19, 1963.

d-Maximum gage height for period of record, 3.95 ft, Jun 22, 1983.

09051050 STRAIGHT CREEK BELOW LASKEY GULCH, NEAR DILLON, CO

LOCATION.--Lat 39°38'23", long 106°02'23", in SW¹/4SW¹/4 sec.5, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank, 120 ft upstream from culverts on Deer Trail Drive, in the community of Dillon Valley, 0.9 mi north of Dillon, 1.1 mi downstream of Laskey Gulch, and 1.8 mi upstream from mouth.

DRAINAGE AREA.--18.3 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,070 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 4 to Apr. 14. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for municipal purposes downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	9.0	5.1	4.0	3.5	4.0	4.5	6.5	61	22	12	5.9
2	7.8	8.9	5.0	4.0	3.5	4.0	4.5	6.8	61	21	11	19
3	7.6	9.0	5.0	3.9	3.5	4.0	4.5	6.4	60	21	10	9.9
4	7.7	8.3	4.9	3.9	3.5	4.0	4.5	7.2	62	19	9.1	8.8
5	7.7	8.0	4.8	3.8	3.5	4.0	4.5	8.5	62	18	9.0	8.0
6	7.6	7.6	4.7	3.7	3.5	4.1	4.5	11	59	16	8.4	7.5
7	9.0	7.3	4.7	3.6	3.5	4.2	4.5	13	56	16	8.1	6.9
8	8.9	7.0	4.6	3.5	3.5	4.3	4.5	14	55	15	8.2	6.8
9	8.6	6.7	4.6	3.5	3.5	4.5	4.5	15	52	14	8.6	6.9
10	8.8	6.4	4.5	3.5	3.5	4.5	4.5	16	49	13	11	7.2
11	8.7	6.2	4.5	3.5	3.5	4.5	4.5	21	48	13	9.6	6.9
12	8.9	6.1	4.5	3.5	3.5	4.5	4.5	23	47	12	8.6	7.0
13	8.9	6.0	4.5	3.5	3.5	4.5	4.5	22	45	12	8.9	8.8
14	8.8	6.0	4.5	3.5	3.5	4.5	4.7	22	41	12	10	9.0
15	9.5	6.0	4.5	3.5	3.4	4.5	4.9	21	38	12	8.7	7.6
16	9.4	6.0	4.5	3.5	3.5	4.5	5.5	26	37	11	8.1	7.4
17	9.1	6.0	4.4	3.5	3.5	4.5	5.5	33	37	10	9.3	7.0
18	9.2	6.0	4.4	3.5	3.5	4.5	5.7	35	36	9.3	8.0	6.9
19	8.5	6.2	4.4	3.5	3.6	4.5	6.0	39	41	8.5	12	7.1
20	8.7	6.6	4.3	3.5	3.6	4.5	6.8	40	44	7.6	11	7.5
21	8.5	6.2	4.2	3.5	3.7	4.5	8.6	42	44	7.1	8.6	9.0
22	8.6	5.8	4.1	3.5	3.7	4.5	9.9	44	49	6.8	8.4	8.0
23	8.5	5.6	4.1	3.5	3.7	4.5	11	46	40	7.5	7.8	7.6
24	8.4	5.4	4.1	3.5	3.7	4.5	12	40	35	8.3	7.5	7.4
25	8.4	5.4	4.1	3.5	3.7	4.5	11	42	32	7.7	7.1	7.0
26	8.2	5.4	4.1	3.5	3.8	4.5	8.2	45	30	7.5	6.9	6.9
27	7.3	5.4	4.1	3.5	3.9	4.5	7.4	45	28	7.2	6.7	6.7
28	8.9	5.3	4.1	3.5	3.9	4.5	6.8	46	27	6.8	8.1	6.9
29	7.6	5.2	4.1	3.5	---	4.5	6.5	44	25	6.9	7.5	6.7
30	7.7	5.2	4.1	3.5	---	4.5	6.6	53	23	6.5	5.6	7.0
31	8.8	---	4.1	3.5	---	4.5	---	62	---	6.6	5.2	---
TOTAL	262.3	194.2	137.6	110.9	100.2	136.1	185.6	895.4	1324	361.3	269.0	235.3
MEAN	8.46	6.47	4.44	3.58	3.58	4.39	6.19	28.9	44.1	11.7	8.68	7.84
MAX	9.5	9.0	5.1	4.0	3.9	4.5	12	62	62	22	12	19
MIN	7.3	5.2	4.1	3.5	3.4	4.0	4.5	6.4	23	6.5	5.2	5.9
AC-FT	520	385	273	220	199	270	368	1780	2630	717	534	467

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1994, BY WATER YEAR (WY)

	MEAN	6.63	5.67	4.45	3.75	3.42	3.99	6.51	23.7	56.7	23.7	10.8	7.19
MAX	9.62	7.79	5.14	4.63	4.30	5.40	9.99	28.9	85.5	50.2	15.8	10.3	
(WY)	1987	1989	1989	1989	1990	1989	1989	1994	1993	1993	1993	1993	
MIN	4.08	3.86	3.80	2.43	2.39	3.14	5.33	11.6	36.2	11.7	8.68	4.31	
(WY)	1990	1990	1988	1992	1992	1992	1992	1990	1987	1994	1994	1989	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1987 - 1994

ANNUAL TOTAL	6742.2	4211.9	
ANNUAL MEAN	18.5	11.5	13.0
HIGHEST ANNUAL MEAN			18.2
LOWEST ANNUAL MEAN			10.9
HIGHEST DAILY MEAN	130	a 62	130
LOWEST DAILY MEAN	2.5	3.4	1.8
ANNUAL SEVEN-DAY MINIMUM	2.6	3.5	1.9
INSTANTANEOUS PEAK FLOW		81	168
INSTANTANEOUS PEAK STAGE		4.89	c 5.30
ANNUAL RUNOFF (AC-FT)	13370	8350	9450
10 PERCENT EXCEEDS	56	35	35
50 PERCENT EXCEEDS	7.8	6.9	6.1
90 PERCENT EXCEEDS	2.9	3.5	3.5

a-Also occurred Jun 4-5.

b-Also occurred Mar 13-14.

c-Maximum gage height, 5.71 ft, Mar 5, 1989, backwater from ice.

09052000 ROCK CREEK NEAR DILLON, CO

LOCATION---Lat 39°43'23", long 106°07'41", in NE1/4 sec.9, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 500 ft upstream from bridge on State Highway 9, 1,100 ft upstream from mouth, 1,200 ft downstream from confluence of North and South Rock Creeks, and 8 mi northwest of Dillon.

DRAINAGE AREA--15.8 mi².

PERIOD OF RECORD---July 1942 to September 1956, October 1966 to September 1994 (Discontinued).

GAGE---Water-stage recorder. Datum of gage is 8,502.52 ft above sea level, (Colorado Highway Department datum). Prior to Apr. 21, 1943, nonrecording gage, and Apr. 21, 1943 to Sept. 13, 1950, water-stage recorder, at site 500 ft downstream at datum 28.76 ft, lower.

REMARKS---Estimated daily discharges: Oct. 30 to May 4, and Sept. 6-30. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation of hay meadows upstream and downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.6	5.8	4.6	4.2	4.0	4.1	12	100	35	17	10
2	7.5	6.1	5.5	4.5	4.2	4.0	4.4	11	97	36	16	30
3	7.5	6.0	5.5	4.5	4.2	4.0	4.8	10	92	36	14	22
4	7.4	6.0	5.6	4.5	4.2	4.0	5.0	10	94	32	13	20
5	7.1	6.0	5.6	4.5	4.2	4.0	5.4	11	88	30	13	17
6	7.2	6.0	5.7	4.5	4.2	4.1	5.6	11	81	28	13	15
7	8.6	5.8	5.8	4.5	4.1	4.1	5.8	15	73	26	12	11
8	9.0	6.0	5.8	4.5	4.1	4.2	5.9	21	66	20	12	9.6
9	8.7	6.1	5.9	4.4	4.1	4.2	6.0	30	59	20	12	9.0
10	8.9	6.0	5.8	4.3	4.1	4.0	5.9	36	53	21	14	8.6
11	8.7	5.9	5.8	4.4	4.1	4.1	5.6	41	57	21	12	9.4
12	9.3	5.9	5.7	4.4	4.1	4.1	5.6	52	60	21	12	8.8
13	8.9	5.8	5.7	4.4	4.1	4.1	5.8	54	61	19	13	8.6
14	9.2	5.7	5.6	4.4	4.1	4.1	5.9	52	61	18	13	8.6
15	9.7	5.8	5.6	4.3	4.1	4.1	6.0	49	58	19	12	8.9
16	9.5	6.0	5.6	4.4	4.1	4.2	6.2	53	57	18	11	8.8
17	9.4	6.0	5.6	4.4	4.1	4.4	7.0	61	55	17	12	7.0
18	9.2	6.0	5.4	4.3	4.2	4.6	7.0	62	60	18	11	6.4
19	8.5	5.8	5.4	4.3	4.3	4.7	7.4	62	67	17	14	6.1
20	8.1	6.0	5.5	4.3	4.5	4.8	8.0	66	66	17	18	6.0
21	8.1	6.1	5.4	4.3	4.6	5.0	9.0	61	62	18	14	6.2
22	8.1	6.0	5.3	4.3	4.5	5.0	10	57	92	17	13	7.2
23	8.0	6.1	5.2	4.3	4.3	5.1	13	57	77	17	12	7.0
24	7.9	6.0	5.2	4.2	4.1	5.0	15	52	58	20	10	6.6
25	7.8	6.2	5.0	4.2	4.1	5.0	19	54	54	18	9.9	6.0
26	7.8	6.0	5.0	4.2	4.1	4.7	18	58	51	17	9.5	5.6
27	8.5	6.0	4.9	4.2	4.0	4.4	15	48	50	15	9.3	5.4
28	8.4	5.9	4.6	4.2	4.0	4.2	12	63	44	14	9.7	5.0
29	7.7	5.7	4.6	4.2	---	4.0	13	57	39	14	11	4.8
30	7.5	5.8	4.7	4.2	---	4.0	12	69	38	14	9.8	4.7
31	7.5	---	4.7	4.2	---	4.1	---	81	---	14	9.3	---
TOTAL	257.1	180.3	167.5	134.9	117.0	134.3	253.4	1376	1970	647	381.5	289.3
MEAN	8.29	6.01	5.40	4.35	4.18	4.33	8.45	44.4	65.7	20.9	12.3	9.64
MAX	9.7	7.6	5.9	4.6	4.6	5.1	19	81	100	36	18	30
MIN	7.1	5.7	4.6	4.2	4.0	4.0	4.1	10	38	14	9.3	4.7
AC-FT	510	358	332	268	232	266	503	2730	3910	1280	757	574

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

	MEAN	7.71	5.93	4.76	4.05	3.68	3.83	9.29	46.9	93.9	55.3	23.0	11.9
MAX	15.9	9.83	8.40	7.08	5.34	5.68	28.4	81.8	143	96.5	50.0	25.8	
(WY)	1985	1948	1948	1948	1985	1986	1943	1948	1952	1984	1984	1984	
MIN	4.21	3.77	3.21	2.58	2.29	1.99	3.44	24.2	38.9	17.1	9.50	5.48	
(WY)	1945	1945	1977	1988	1991	1989	1983	1968	1954	1977	1954	1956	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1943 - 1994
ANNUAL TOTAL	9415.0	5908.3	
ANNUAL MEAN	25.8	16.2	22.6
HIGHEST ANNUAL MEAN			32.4
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	142	Jun 14	203
LOWEST DAILY MEAN	2.8	Mar 15	1.5
ANNUAL SEVEN-DAY MINIMUM	3.0	Mar 9	1.6
INSTANTANEOUS PEAK FLOW			123
INSTANTANEOUS PEAK STAGE			3.73
ANNUAL RUNOFF (AC-FT)	18670	11720	16360
10 PERCENT EXCEEDS	90	54	69
50 PERCENT EXCEEDS	7.5	7.2	7.2
90 PERCENT EXCEEDS	3.2	4.2	3.5

a-Also occurred Feb 28 to Mar 5, Mar 10, 29-30.

b-From rating curve extended above 154 ft³/s.

c-Maximum gage height, 4.36 ft, Jun 24, 1971.

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°43'41", long 106°10'22", in SW¹/4SW¹/4 sec.6, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank 1.2 mi downstream from Boulder Lake, 3.2 mi upstream from mouth, and 9.4 mi northwest of Dillon.

DRAINAGE AREA.--8.56 mi².

PERIOD OF RECORD.--October 1966 to September 1994 (Discontinued).

REVISED RECORDS.--WDR CO-89-2: 1988 (M).

GAGE.--Water-stage recorder. Elevation of gage is 9,460 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 28 to May 13. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.2	2.6	2.3	1.7	1.6	2.0	8.0	79	38	13	8.5
2	5.0	3.8	2.6	2.2	1.7	1.6	2.0	7.0	76	37	13	24
3	5.0	3.9	2.6	2.2	1.7	1.6	2.0	6.0	73	38	13	19
4	4.9	4.1	2.6	2.2	1.7	1.6	2.1	6.9	74	34	12	17
5	4.8	4.3	2.6	2.2	1.7	1.6	2.1	10	72	31	11	14
6	4.7	4.0	2.5	2.1	1.7	1.6	2.1	14	70	27	11	12
7	5.2	3.7	2.5	2.1	1.7	1.6	2.0	15	65	24	10	10
8	5.9	3.5	2.5	2.1	1.7	1.6	2.0	18	60	19	9.8	9.3
9	5.9	3.5	2.5	2.1	1.7	1.6	2.0	18	55	18	9.3	8.5
10	6.1	3.4	2.5	2.0	1.7	1.6	2.1	25	51	19	9.3	8.5
11	5.7	3.4	2.5	2.0	1.6	1.6	2.1	28	55	19	9.3	8.0
12	5.9	3.4	2.5	2.0	1.6	1.6	2.1	34	57	19	9.3	7.7
13	5.7	3.3	2.5	2.0	1.6	1.6	2.1	39	59	18	11	7.5
14	5.7	3.2	2.5	1.9	1.6	1.6	2.3	37	59	17	11	8.0
15	5.9	3.1	2.4	1.9	1.6	1.6	2.4	39	56	17	10	7.9
16	6.2	3.1	2.4	1.9	1.6	1.7	2.8	44	56	16	9.6	7.3
17	5.8	3.0	2.4	1.9	1.7	1.7	3.7	52	55	15	9.3	6.7
18	5.9	3.0	2.4	1.9	1.7	1.8	4.4	50	57	15	9.2	6.1
19	5.3	3.0	2.4	1.9	1.8	1.9	5.2	52	65	15	11	5.9
20	5.1	3.0	2.4	1.8	1.8	1.9	7.3	56	61	15	15	5.8
21	4.8	2.9	2.4	1.8	1.7	2.0	9.4	54	56	15	12	7.4
22	4.7	2.7	2.4	1.8	1.7	2.1	13	51	80	15	11	7.4
23	4.7	2.6	2.4	1.8	1.7	2.2	17	49	65	15	10	6.9
24	4.6	2.7	2.4	1.8	1.6	2.2	18	46	54	18	9.4	6.3
25	4.7	2.7	2.3	1.8	1.6	2.2	15	46	52	16	8.7	5.8
26	4.7	2.7	2.3	1.8	1.5	2.1	14	48	50	15	8.1	5.5
27	4.3	2.7	2.3	1.8	1.5	2.0	14	44	49	14	7.7	5.2
28	4.3	2.6	2.3	1.8	1.5	2.0	12	53	44	14	8.3	4.9
29	4.5	2.6	2.3	1.7	---	2.0	10	51	39	13	9.3	4.8
30	4.3	2.6	2.3	1.7	---	2.0	9.0	63	39	12	9.1	4.6
31	4.2	---	2.3	1.7	---	2.0	---	71	---	12	8.6	---
TOTAL	159.6	96.7	75.6	60.2	46.4	55.8	186.2	1134.9	1783	610	318.3	260.5
MEAN	5.15	3.22	2.44	1.94	1.66	1.80	6.21	36.6	59.4	19.7	10.3	8.68
MAX	6.2	4.3	2.6	2.3	1.8	2.2	18	71	80	38	15	24
MIN	4.2	2.6	2.3	1.7	1.5	1.6	2.0	6.0	39	12	7.7	4.6
AC-FT	317	192	150	119	92	111	369	2250	3540	1210	631	517

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	5.04	3.28	2.57	2.05	1.91	2.01	4.74	28.8	76.9	48.7	18.0	9.20
MAX	12.1	7.27	5.00	3.28	3.14	5.00	10.4	59.8	111	91.8	39.2	18.0	
(WY)	1985	1985	1985	1984	1988	1988	1992	1974	1991	1984	1984	1984	
MIN	2.77	1.89	1.31	.93	1.06	1.11	1.75	11.2	42.0	16.6	7.04	4.00	
(WY)	1974	1978	1977	1977	1977	1977	1973	1968	1992	1977	1981	1974	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1967 - 1994
ANNUAL TOTAL	7111.7	4787.2	
ANNUAL MEAN	19.5	13.1	17.0
HIGHEST ANNUAL MEAN			26.1
LOWEST ANNUAL MEAN			9.50
HIGHEST DAILY MEAN	129	80	210
LOWEST DAILY MEAN	a 1.4	b 1.5	.80
ANNUAL SEVEN-DAY MINIMUM	1.4	1.6	.88
INSTANTANEOUS PEAK FLOW		c 91	316
INSTANTANEOUS PEAK STAGE		c 2.64	d 3.42
ANNUAL RUNOFF (AC-FT)	14110	9500	12300
10 PERCENT EXCEEDS	72	49	55
50 PERCENT EXCEEDS	3.7	4.8	4.5
90 PERCENT EXCEEDS	1.5	1.7	1.7

a-Also occurred Jan 23-30.

b-Also occurred Feb 27-28.

c-Also occurred Jun 22.

d-Maximum gage height, 3.70 ft, May 15, 1993, backwater from ice.

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¹/₄NW¹/₄ sec.25, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 0.2 mi upstream from unnamed tributary, 2.7 mi upstream from mouth, and 12 mi northwest of Dillon.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--October 1966 to September 1994 (Discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 9,040 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30, and Nov. 4 to Apr. 20. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	5.9	4.2	3.0	2.4	2.5	4.1	12	119	50	23	14
2	7.8	5.8	4.2	3.0	2.4	2.5	4.2	12	112	50	25	37
3	7.7	5.4	4.2	3.0	2.4	2.5	4.4	11	104	52	22	31
4	7.5	4.8	4.2	3.0	2.4	2.5	4.5	11	109	46	20	28
5	7.4	4.4	4.2	3.0	2.4	2.5	4.5	14	101	43	19	23
6	7.2	4.4	4.1	2.8	2.4	2.5	4.5	25	98	37	18	18
7	7.7	4.4	4.1	2.8	2.4	2.5	4.5	34	88	34	17	15
8	8.7	4.4	4.1	2.8	2.4	2.5	4.5	37	82	28	15	14
9	9.3	4.4	4.1	2.8	2.4	2.5	4.5	38	73	27	15	12
10	9.7	4.4	4.1	2.8	2.4	2.5	4.5	38	66	29	15	12
11	9.1	4.4	4.0	2.7	2.4	2.5	4.5	41	71	28	15	12
12	9.3	4.2	4.0	2.7	2.4	2.5	4.6	51	73	27	15	11
13	9.4	4.2	4.0	2.7	2.4	2.5	4.8	61	78	26	17	11
14	9.1	4.2	4.0	2.7	2.4	2.5	5.2	61	81	25	17	12
15	9.5	4.2	4.0	2.7	2.4	2.5	5.2	60	78	25	15	12
16	10	4.2	3.7	2.6	2.4	2.5	6.0	62	76	24	14	11
17	9.9	4.2	3.7	2.6	2.4	2.6	7.0	74	74	23	14	9.3
18	9.9	4.2	3.7	2.6	2.4	2.7	9.0	70	76	23	14	8.7
19	9.5	4.2	3.7	2.6	2.4	2.9	13	70	91	24	18	7.6
20	8.9	4.2	3.7	2.6	2.4	3.0	18	81	112	24	29	8.2
21	8.2	4.2	3.5	2.5	2.4	3.2	23	78	84	25	22	12
22	7.9	4.2	3.5	2.5	2.4	3.3	25	71	119	23	22	12
23	7.7	4.2	3.5	2.5	2.4	3.5	32	69	107	22	19	10
24	7.4	4.2	3.5	2.5	2.4	3.7	41	61	78	24	17	9.2
25	7.3	4.2	3.5	2.5	2.4	3.9	39	61	73	24	14	8.3
26	7.3	4.2	3.2	2.4	2.4	4.1	26	64	71	23	13	7.5
27	6.6	4.2	3.2	2.4	2.4	4.1	20	57	69	22	13	7.0
28	6.7	4.2	3.2	2.4	2.4	4.1	16	76	60	21	14	6.6
29	6.4	4.2	3.2	2.4	---	4.1	13	71	52	19	17	6.2
30	6.3	4.2	3.2	2.3	---	4.1	13	88	50	19	15	6.5
31	6.3	---	3.2	2.4	---	4.1	---	105	---	19	13	---
TOTAL	253.7	132.5	116.7	82.3	67.2	93.4	369.5	1664	2525	886	536	392.1
MEAN	8.18	4.42	3.76	2.65	2.40	3.01	12.3	53.7	84.2	28.6	17.3	13.1
MAX	10	5.9	4.2	3.0	2.4	4.1	41	105	119	52	29	37
MIN	6.3	4.2	3.2	2.3	2.4	2.5	4.1	11	50	19	13	6.2
AC-FT	503	263	231	163	133	185	733	3300	5010	1760	1060	778

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	8.28	4.99	3.74	2.90	2.65	3.04	8.35	45.8	108	75.9	29.4	14.6
MAX	18.1	8.33	6.25	5.41	3.84	5.14	15.1	85.9	152	143	66.6	30.9	
(WY)	1985	1985	1984	1984	1971	1990	1989	1974	1980	1984	1983	1984	
MIN	4.12	2.73	1.82	1.26	1.49	1.46	3.04	20.0	55.4	26.0	12.3	5.41	
(WY)	1979	1988	1974	1977	1975	1974	1975	1968	1992	1977	1977	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	11714.0	7118.4	
ANNUAL MEAN	32.1	19.5	25.7
HIGHEST ANNUAL MEAN			40.2
LOWEST ANNUAL MEAN			14.3
HIGHEST DAILY MEAN	193	Jun 30	292
LOWEST DAILY MEAN	2.8	Mar 1	1.0
ANNUAL SEVEN-DAY MINIMUM	2.9	Feb 23	1.1
INSTANTANEOUS PEAK FLOW			151
INSTANTANEOUS PEAK STAGE			4.59
ANNUAL RUNOFF (AC-FT)	23230	14120	18650
10 PERCENT EXCEEDS	116	69	81
50 PERCENT EXCEEDS	7.4	7.5	6.9
90 PERCENT EXCEEDS	3.0	2.5	2.5

a-Also occurred Jun 22.

b-Also occurred Jan 12, 1977.

c-From rating curve extended above 170 ft³/s.

d-Maximum gage height, 6.56 ft, May 2, 1975, backwater from beaver dam and ice.

09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO

LOCATION.--Lat 39°47'57", long 106°16'04", in SW¹/4SW¹/4 sec.8, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 600 ft upstream from bridge, 0.3 mi downstream from Black Lake, 4.5 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi northwest of Dillon.

DRAINAGE AREA.--15.0 mi².

PERIOD OF RECORD.--July 1942 to September 1949, October 1966 to September 1994 (Discontinued).

REVISED RECORDS.--WSP 2124: Drainage area, WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above sea level, from topographic map. July 17, 1942 to May 27, 1943, nonrecording gage, and May 28, 1943 to Sept. 30, 1949, water-stage recorder at site 550 ft downstream at different datums. Oct. 1, 1949 to Oct. 2, 1989 water-stage recorder at site 50 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 8, May 10-11, Sept. 16-21, and Sept. 24-30. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	4.0	2.7	2.2	2.1	2.0	2.6	12	138	72	44	22
2	6.7	3.8	2.7	2.2	2.1	2.0	2.7	10	132	72	48	48
3	6.2	3.7	2.7	2.2	2.1	2.0	2.8	8.9	123	73	42	50
4	5.8	3.6	2.6	2.2	2.1	2.0	2.9	8.6	117	67	38	43
5	5.6	3.5	2.6	2.3	2.1	2.0	3.0	10	114	64	35	36
6	5.5	3.3	2.6	2.3	2.1	2.0	3.0	26	112	58	33	30
7	6.2	3.4	2.5	2.2	2.1	2.0	3.0	41	105	53	32	26
8	8.3	3.5	2.5	2.2	2.1	2.0	3.2	44	99	44	30	23
9	10	3.7	2.5	2.2	2.1	2.1	3.3	44	91	42	28	18
10	11	3.5	2.5	2.2	2.1	2.1	3.3	48	86	46	28	13
11	9.7	3.4	2.4	2.2	2.0	2.1	3.3	54	92	48	28	12
12	10	3.3	2.4	2.3	2.0	2.1	2.9	74	100	47	29	11
13	11	3.2	2.4	2.3	2.0	2.1	2.9	82	106	45	29	11
14	11	3.3	2.4	2.2	2.0	2.1	3.0	74	106	43	29	15
15	11	3.4	2.4	2.2	1.9	2.1	3.1	74	98	43	29	16
16	11	3.3	2.4	2.2	1.9	2.1	3.2	74	97	41	26	15
17	11	3.2	2.4	2.2	2.0	2.1	3.5	89	96	39	24	15
18	9.7	3.1	2.4	2.2	2.0	2.1	4.0	89	98	41	25	14
19	8.8	3.0	2.3	2.2	2.1	2.1	5.4	89	108	42	30	13
20	8.0	3.0	2.3	2.3	2.1	2.2	7.9	105	110	44	54	12
21	6.9	2.9	2.3	2.2	2.1	2.2	14	95	102	44	42	12
22	6.0	2.8	2.3	2.2	2.2	2.2	26	86	124	42	36	15
23	5.6	2.6	2.3	2.2	2.2	2.3	41	81	118	40	33	14
24	5.3	2.6	2.3	2.2	2.3	2.3	46	79	97	41	30	13
25	5.4	2.6	2.3	2.2	2.2	2.4	38	80	94	42	27	12
26	5.5	2.7	2.2	2.2	2.2	2.5	27	87	92	42	25	12
27	4.7	2.7	2.2	2.2	2.1	2.4	20	81	90	41	23	11
28	5.1	2.6	2.2	2.2	2.1	2.4	17	97	83	40	23	11
29	4.7	2.6	2.2	2.2	---	2.3	15	89	73	37	27	10
30	4.1	2.6	2.2	2.1	---	2.4	14	100	70	34	28	10
31	4.0	---	2.2	2.1	---	2.4	---	118	---	34	24	---
TOTAL	231.4	94.9	74.4	68.5	58.4	67.1	327.0	2049.5	3071	1461	979	563
MEAN	7.46	3.16	2.40	2.21	2.09	2.16	10.9	66.1	102	47.1	31.6	18.8
MAX	11	4.0	2.7	2.3	2.3	2.5	46	118	138	73	54	50
MIN	4.0	2.6	2.2	2.1	1.9	2.0	2.6	8.6	70	34	23	10
AC-FT	459	188	148	136	116	133	649	4070	6090	2900	1940	1120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

	MEAN	8.55	4.99	3.59	2.69	2.40	2.74	9.74	56.1	131	99.1	40.1	18.2
MAX		17.7	8.46	5.83	4.57	4.08	4.74	33.8	98.4	183	181	88.0	37.2
(WY)		1985	1948	1988	1988	1988	1986	1946	1974	1980	1983	1984	1984
MIN		2.83	2.70	1.89	1.42	1.40	1.46	2.78	26.1	78.6	40.6	22.9	5.71
(WY)		1943	1989	1977	1977	1979	1976	1983	1983	1992	1977	1977	1944

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1943 - 1994

ANNUAL TOTAL	13875.1	9045.2	
ANNUAL MEAN	38.0	24.8	
HIGHEST ANNUAL MEAN			31.7
LOWEST ANNUAL MEAN			46.7
HIGHEST DAILY MEAN	237	Jun 30	1984
LOWEST DAILY MEAN	2.0	Feb 13	1977
ANNUAL SEVEN-DAY MINIMUM	2.1	Feb 9	1977
INSTANTANEOUS PEAK FLOW		156	1.3
INSTANTANEOUS PEAK STAGE		2.97	1.4
ANNUAL RUNOFF (AC-FT)	27520	17940	555
10 PERCENT EXCEEDS	138	86	4.74
50 PERCENT EXCEEDS	5.3	6.0	2290
90 PERCENT EXCEEDS	2.3	2.1	104

a-Also occurred Feb 16.

b-Also occurred Jun 10, 1977.

c-Site and datum then in use, from rating curve extended above 240 ft³/s.

d-Maximum gage height, 5.64 ft, Jun 30, 1984, site and datum then in use.

09055300 CATARACT CREEK NEAR KREMMLING, CO

LOCATION.--Lat 39°50'07", long 106°18'57", in SW¹/4NE¹/4 sec.35, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on right bank 70 ft downstream from lower Cataract Lake, 2.8 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi south of Kremmling.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--October 1966 to September 1994 (Discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 8,605 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.3	1.7	.97	.83	.84	1.7	11	122	26	8.4	5.2
2	3.5	2.2	1.7	.94	.84	.84	1.8	9.5	116	25	9.0	6.2
3	3.3	1.9	1.7	.90	.84	.84	1.8	8.6	95	27	8.7	7.6
4	3.1	1.6	1.6	.90	.84	.84	2.0	8.4	92	24	8.0	7.6
5	3.0	1.6	1.6	.88	.84	.84	2.1	12	87	21	7.4	7.0
6	2.9	1.5	1.6	.91	.81	.84	2.1	25	83	18	6.9	6.5
7	2.9	1.6	1.5	.94	.78	.84	2.1	31	74	17	6.4	6.0
8	2.9	1.6	1.4	.94	.78	.86	2.2	32	67	15	6.2	5.6
9	2.9	1.6	1.4	.94	.81	.87	2.2	33	59	13	6.0	5.3
10	2.9	1.6	1.4	.96	.81	.87	2.2	35	51	12	5.8	5.0
11	2.9	1.6	1.3	.98	.83	.87	2.2	40	54	12	5.7	4.8
12	2.9	1.6	1.3	.98	.94	.87	2.1	51	57	11	5.6	4.6
13	3.0	1.6	1.3	.98	.97	.87	2.1	59	60	11	5.6	4.4
14	3.2	1.7	1.2	.96	.98	.87	2.1	56	60	10	5.7	4.3
15	3.8	1.7	1.2	.94	.98	.87	2.2	55	56	9.9	5.7	4.3
16	4.5	1.7	1.2	.91	.95	.87	2.4	61	53	9.5	5.5	4.3
17	4.3	1.7	1.2	.90	.92	.89	2.9	78	50	9.2	5.3	4.3
18	4.1	1.7	1.2	.90	.92	.91	4.0	77	48	8.7	5.3	4.0
19	3.9	1.7	1.2	.88	.94	.97	5.4	77	48	8.6	5.4	3.8
20	3.6	1.7	1.2	.87	.94	1.1	7.7	101	45	8.4	7.0	3.7
21	3.4	1.7	1.2	.86	.94	1.2	11	76	51	8.4	7.7	3.9
22	3.2	1.7	1.2	.87	.94	1.3	18	66	63	8.4	7.5	4.3
23	3.1	1.7	1.2	.85	.95	1.4	27	63	68	8.3	6.8	4.6
24	2.9	1.7	1.2	.82	.99	1.5	31	55	51	8.1	6.4	4.7
25	2.9	1.7	1.1	.81	.92	1.7	28	55	44	8.1	5.8	4.5
26	2.8	1.7	1.1	.81	.87	1.8	20	70	40	8.1	5.5	4.2
27	2.6	1.7	1.1	.81	.87	1.8	15	61	38	7.8	5.2	3.9
28	2.4	1.7	1.1	.81	.84	1.8	17	74	34	7.7	5.0	3.6
29	2.4	1.7	1.0	.81	---	1.8	17	72	30	7.4	5.1	3.4
30	2.3	1.7	1.0	.81	---	1.8	13	85	27	7.2	5.2	3.2
31	2.3	---	1.0	.81	---	1.7	---	108	---	7.1	5.2	---
TOTAL	97.5	51.2	40.1	27.65	24.87	35.37	250.3	1645.5	1823	382.9	195.0	144.8
MEAN	3.15	1.71	1.29	.89	.89	1.14	8.34	53.1	60.8	12.4	6.29	4.83
MAX	4.5	2.3	1.7	.98	.99	1.8	31	108	122	27	9.0	7.6
MIN	2.3	1.5	1.0	.81	.78	.84	1.7	8.4	27	7.1	5.0	3.2
AC-FT	193	102	80	55	49	70	496	3260	3620	759	387	287

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	3.97	2.48	1.77	1.27	1.12	1.27	5.96	46.4	105	51.0	13.0	6.45
MAX	11.0	4.97	2.96	2.11	1.89	2.33	14.5	75.2	147	128	29.7	17.1	
(WY)	1985	1985	1971	1985	1985	1986	1989	1974	1988	1983	1983	1972	
MIN	.97	1.07	.80	.44	.42	.56	1.88	17.8	56.5	12.4	4.07	1.25	
(WY)	1980	1980	1977	1977	1977	1977	1975	1983	1989	1994	1981	1990	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1967 - 1994

ANNUAL TOTAL	9391.45	4718.19		
ANNUAL MEAN	25.7	12.9	20.0	
HIGHEST ANNUAL MEAN			28.7	1983
LOWEST ANNUAL MEAN			10.8	1977
HIGHEST DAILY MEAN	192	Jun 30	298	Jun 25 1983
LOWEST DAILY MEAN	.96	Mar 9	.28	Oct 7 1971
ANNUAL SEVEN-DAY MINIMUM	1.0	Mar 4	.38	Feb 12 1977
INSTANTANEOUS PEAK FLOW			353	Jun 25 1983
INSTANTANEOUS PEAK STAGE		4.27	5.20	Jun 25 1983
ANNUAL RUNOFF (AC-FT)	18630	9360	14490	
10 PERCENT EXCEEDS	107	52	68	
50 PERCENT EXCEEDS	2.9	2.9	3.3	
90 PERCENT EXCEEDS	1.1	.87	1.0	

a-Also occurred Feb 8.

b-Maximum gage height, 5.43 ft, Jun 21, 1967.

RESERVOIRS IN BLUE RIVER BASIN

09050600 DILLON RESERVOIR.--Lat 39°37'14", long 106°03'53", in NE¹/₄ sec.13, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, in gatehouse at dam, 0.8 mi upstream from Straight Creek, about 1.3 mi southwest of Dillon, and 3.5 mi northeast of Frisco. DRAINAGE AREA, 335 mi². PERIOD OF RECORD, September 1963 to current year. GAGE, nonrecording gage read once daily. Datum of gage is above sea level, (levels by Denver Board of Water Commissioners); gage readings have been reduced to elevations above sea level.

Reservoir is earth and rockfill dam. Dam completed and storage began Sept. 3, 1963; dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft between elevations 8,829.00 ft, invert of outlet valve, and 9,017.00 ft, crest of spillway. Dead storage, 3,270 acre-ft. Figures given represent usable contents. Reservoir stores water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel for municipal use by city of Denver. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 262,200 acre-ft, June 30, 1983, elevation, 9,019.46 ft; minimum since appreciable storage was attained in July 1964, 45,310 acre-ft, Apr. 20, 1965, elevation, 8,904.16 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 257,400 acre-ft, June 13, elevation, 9,018.01 ft; minimum, 202,900 acre-ft, Apr. 19, elevation, 8,999.57 ft.

09057000 GREEN MOUNTAIN RESERVOIR.--Lat 39°52'42", long 106°19'45", in NE¹/₄ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, in hoist house at right end of dam, 0.6 mi upstream from Elliott Creek, and 13 mi southeast of Kremmling. DRAINAGE AREA, 598 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal. PERIOD OF RECORD, November 1942 to current year. REVISED RECORDS, WSP 2124: Drainage area. GAGE, Water-stage recorder. Datum of gage is above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

Reservoir is formed by an earth and rockfill dam. Dam completed and storage began November 1942. Capacity, 146,900 acre-ft between elevations 7,800 ft, sill of outlet gate, and 7,950 ft, top of radial spillway gates. Dead storage, 6,860 acre-ft. Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin. Water released to fill decrees during late irrigation season when flow of Colorado River is deficient. Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 148,900 acre-ft, July 10, 1947, elevation, 7,950.95 ft; minimum since appreciable storage was attained, 388 acre-ft, Jan. 12, 1963, elevation, 7,801.70 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 134,200 acre-ft, Oct. 1, elevation, 7,943.93 ft; minimum, 58,740 acre-ft, Apr. 19, 20, elevation, 7,895.62 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation a (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Gage height a (feet)	Contents (acre-feet)	Change in contents (acre-feet)
09050600 DILLON RESERVOIR				09057000 GREEN MOUNTAIN RESERVOIR		
Sept. 30.....	9,009.72	231,400	-	7,944.11	134,600	-
Oct. 31.....	9,009.61	231,100	-300	7,939.00	124,600	-10,000
Nov. 30.....	9,008.20	227,000	-4,100	7,934.43	116,000	-8,600
Dec. 31.....	9,006.25	221,300	-5,700	7,926.94	102,700	-13,300
CAL YR 1993....			-5,000			+26,100
Jan. 31.....	9,004.79	217,200	-4,100	7,917.04	87,000	-15,700
Feb. 28.....	9,002.99	212,200	-5,000	7,907.46	73,480	-13,520
Mar. 31.....	9,000.66	205,800	-6,400	7,898.82	62,510	-10,970
Apr. 30.....	9,000.11	204,400	-1,400	7,897.93	61,440	-1,070
May 31.....	9,012.05	238,500	+34,100	7,915.57	84,830	+23,390
June 30.....	9,017.32	255,100	+16,600	7,940.37	127,200	+42,370
July 31.....	9,015.48	249,100	-6,000	7,938.65	123,900	-3,300
Aug. 31.....	9,013.20	242,000	-7,100	7,925.00	99,480	-24,420
Sept. 30.....	9,010.77	234,600	-7,400	7,916.30	85,900	-13,580
WTR YR 1994....			+3,200			-48,700

a-Above sea level.

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 39°52'49", long 106°20'00", in SW¹/₄NE¹/₄ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Elliott Creek, 0.3 mi downstream from Green Mountain Dam, and 13 mi southeast of Kremmling.

DRAINAGE AREA.--599 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1943, published as Blue River below Green Mountain Reservoir, near Kremmling. Statistical summary computed for 1943 to current year. Water-quality data available, January 1986 to September 1987.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,682.66 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Feb. 3-17. Records good except for estimated daily discharge, which are poor. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000). Diversions for irrigation of about 5,000 acres upstream from station. Transmountain diversions upstream from station (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	123	340	378	383	374	294	206	104	112	518	496
2	339	90	351	377	380	378	292	205	105	134	501	500
3	339	90	350	381	381	376	292	205	105	116	497	495
4	341	87	340	379	384	378	293	204	111	103	515	471
5	342	145	340	378	388	383	292	205	111	134	578	449
6	340	310	355	376	388	382	291	167	114	202	600	448
7	336	340	361	380	386	380	292	151	92	285	600	446
8	335	347	359	384	385	379	291	150	69	426	597	450
9	335	339	346	375	380	381	292	150	69	455	587	455
10	345	351	347	373	376	382	289	151	70	453	593	444
11	335	348	344	373	375	373	288	150	70	455	596	442
12	340	348	344	372	368	366	244	129	70	428	654	445
13	339	345	346	381	366	368	245	106	71	407	703	444
14	336	344	341	381	364	370	246	107	71	371	701	416
15	338	342	350	378	361	375	265	104	71	370	672	368
16	343	336	329	377	368	343	289	106	71	483	649	370
17	343	341	370	375	368	294	289	104	71	513	681	370
18	346	350	378	370	374	297	291	102	71	551	683	370
19	340	350	382	375	376	298	244	105	71	588	644	379
20	341	356	380	377	378	294	243	104	71	568	629	399
21	345	350	380	374	378	298	247	103	71	543	598	399
22	343	340	377	374	377	298	236	103	71	542	598	395
23	343	346	377	372	380	298	200	101	71	539	596	391
24	343	351	372	374	377	302	197	103	71	539	622	393
25	347	353	368	372	372	295	195	104	71	517	671	392
26	354	349	373	370	370	293	194	106	71	517	696	395
27	341	342	373	381	369	295	193	110	71	569	694	404
28	342	344	372	383	370	301	192	108	71	620	648	397
29	342	344	373	382	---	298	195	109	91	591	597	396
30	346	337	377	381	---	294	205	107	108	545	597	397
31	295	---	378	384	---	295	---	105	---	542	555	---
TOTAL	10531	9138	11173	11687	10522	10438	7616	4070	2425	13218	19070	12616
MEAN	340	305	360	377	376	337	254	131	80.8	426	615	421
MAX	354	356	382	384	388	383	294	206	114	620	703	500
MIN	295	87	329	370	361	293	192	101	69	103	497	368
AC-FT	20890	18130	22160	23180	20870	20700	15110	8070	4810	26220	37830	25020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

	MEAN	379	294	309	304	291	313	384	540	715	774	611	498
MAX	1258	800	580	566	559	864	802	1557	2134	2536	1547	846	
(WY)	1963	1963	1947	1948	1962	1962	1962	1952	1984	1984	1984	1990	
MIN	144	82.5	.72	.46	.19	.61	47.2	55.7	54.4	131	270	192	
(WY)	1950	1943	1943	1943	1943	1943	1943	1969	1981	1981	1964	1946	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1943 - 1994
ANNUAL TOTAL	147769	122504	
ANNUAL MEAN	405	336	
HIGHEST ANNUAL MEAN			946
LOWEST ANNUAL MEAN			200
HIGHEST DAILY MEAN	1400	703	a 3370
LOWEST DAILY MEAN	87	b 69	c, d .00
ANNUAL SEVEN-DAY MINIMUM	163	70	e .00
INSTANTANEOUS PEAK FLOW		e 720	f 3520
INSTANTANEOUS PEAK STAGE		5.40	10.13
ANNUAL RUNOFF (AC-FT)	293100	243000	
10 PERCENT EXCEEDS	731	542	832
50 PERCENT EXCEEDS	341	351	363
90 PERCENT EXCEEDS	197	104	120

a-Maximum daily discharge for period of record, 3620 ft³/s, Jun 22, 1938.

b-Also occurred Jun 9.

c-No flow at times in 1943.

d-Minimum daily discharge (prior to Green Mountain Reservoir), 80 ft³/s, Feb 18-24, 1938, Feb 18 and 19, 1940.

e-Also occurred Aug 25.

f-Maximum discharge and stage for period of record 4000 ft³/s, Jun 4, 1938, gage height, 5.93 ft, site and datum then in use, from rating curve extended above 3000 ft³/s.

09057520 BLUE RIVER BELOW SPRUCE CREEK NEAR KREMMLING, CO

LOCATION.--Lat 39°57'49", long 106°21'35", in NW¹/4SW¹/4 sec.16, T.1 S., R.80 W., Grand County, Hydrologic Unit 14010002, on right bank 3,400 ft upstream of Camp Creek, 1.4 mi downstream from Spruce Creek, 6.5 mi southeast of Kremmling, 7.7 mi downstream from Green Mountain Reservoir, and 7.8 mi upstream from mouth.

DRAINAGE AREA.--645 mi².

PERIOD OF RECORD.--October 1989 to January 1994 (Discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,425 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 18 to Jan. 2. Records good except for estimated daily discharges, which are poor. Flow is regulated by Green Mountain Reservoir 7.7 mi upstream and the Trans Mountain Hydro Corporation Diversion 0.5 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	137	315	348	---	---	---	---	---	---	---	---
2	328	91	325	347	---	---	---	---	---	---	---	---
3	327	90	325	351	---	---	---	---	---	---	---	---
4	326	87	318	349	---	---	---	---	---	---	---	---
5	326	123	316	348	---	---	---	---	---	---	---	---
6	325	265	329	346	---	---	---	---	---	---	---	---
7	323	309	334	350	---	---	---	---	---	---	---	---
8	321	314	332	344	---	---	---	---	---	---	---	---
9	321	309	323	345	---	---	---	---	---	---	---	---
10	330	319	323	343	---	---	---	---	---	---	---	---
11	319	319	322	343	---	---	---	---	---	---	---	---
12	322	320	322	351	---	---	---	---	---	---	---	---
13	321	317	322	351	---	---	---	---	---	---	---	---
14	320	316	317	351	---	---	---	---	---	---	---	---
15	322	315	320	348	---	---	---	---	---	---	---	---
16	327	309	304	347	---	---	---	---	---	---	---	---
17	325	314	340	345	---	---	---	---	---	---	---	---
18	325	320	348	340	---	---	---	---	---	---	---	---
19	320	319	352	345	---	---	---	---	---	---	---	---
20	320	325	350	349	---	---	---	---	---	---	---	---
21	323	320	350	346	---	---	---	---	---	---	---	---
22	321	315	347	346	---	---	---	---	---	---	---	---
23	321	317	347	344	---	---	---	---	---	---	---	---
24	320	323	342	346	---	---	---	---	---	---	---	---
25	321	326	338	344	---	---	---	---	---	---	---	---
26	327	322	343	342	---	---	---	---	---	---	---	---
27	315	318	343	351	---	---	---	---	---	---	---	---
28	317	317	342	353	---	---	---	---	---	---	---	---
29	315	319	343	352	---	---	---	---	---	---	---	---
30	316	314	347	351	---	---	---	---	---	---	---	---
31	290	---	348	354	---	---	---	---	---	---	---	---
TOTAL	9959	8409	10327	10770	---	---	---	---	---	---	---	---
MEAN	321	280	333	347	---	---	---	---	---	---	---	---
MAX	330	326	352	354	---	---	---	---	---	---	---	---
MIN	290	87	304	340	---	---	---	---	---	---	---	---
AC-FT	19750	16680	20480	21360	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1990	1991	1992	1993	1994
MEAN	338	195	195	199	163	160	266	193	225	291
MAX	602	280	333	347	194	208	362	477	540	708
(WY)	1990	1994	1994	1994	1992	1990	1990	1993	1993	1990
MIN	200	121	94.0	106	130	96.0	224	75.7	37.2	80.9
(WY)	1991	1991	1991	1991	1991	1991	1992	1992	1992	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

WATER YEARS 1990 - 1994

ANNUAL TOTAL	123320	
ANNUAL MEAN	338	250
HIGHEST ANNUAL MEAN		308
LOWEST ANNUAL MEAN		186
HIGHEST DAILY MEAN	^a 1090	1180
LOWEST DAILY MEAN	87	11
ANNUAL SEVEN-DAY MINIMUM	133	12
INSTANTANEOUS PEAK FLOW		^b 1210
INSTANTANEOUS PEAK STAGE		^c 5.25
ANNUAL RUNOFF (AC-FT)	244600	181400
10 PERCENT EXCEEDS	587	499
50 PERCENT EXCEEDS	319	197
90 PERCENT EXCEEDS	142	90

a-Also occurred Jul 3.

b-Also occurred Sep 4, 1990.

c-Maximum gage height for period of record, 5.59 ft, Jul 3, 1993.

09058000 COLORADO RIVER NEAR KREMMLING, CO

LOCATION.--Lat 40°02'12", long 106°26'22", in NE¹/4SW¹/4 sec.23, T.1 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank at upstream end of Gore Canyon, 3.0 mi southwest of Kremmling and 3.8 mi downstream from Blue River.

DRAINAGE AREA.--2,382 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year. Statistical summary computed for 1962 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,320 ft above sea level, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

REMARKS.--Estimated daily discharges: Dec. 15 to Mar. 3, and May 5 to June 13. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres upstream from station, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659	595	679	660	660	680	668	878	1210	566	1020	871
2	657	464	691	665	660	695	705	862	1190	582	997	866
3	657	449	692	660	660	715	719	887	1110	674	947	834
4	656	447	668	662	660	752	734	917	1100	588	916	833
5	654	445	656	660	670	774	753	953	1050	581	954	788
6	639	575	672	650	675	803	724	1020	934	625	996	780
7	649	670	692	650	670	817	688	1180	857	630	1010	763
8	691	661	696	660	660	809	681	1310	951	788	1000	748
9	706	667	687	645	660	778	672	1230	784	850	1000	739
10	719	660	682	640	660	781	677	1170	591	826	1010	792
11	710	708	669	643	660	766	664	1190	501	846	998	824
12	708	719	657	650	657	739	630	1230	451	832	1000	837
13	734	714	650	650	650	753	623	1290	467	822	1030	837
14	748	706	624	660	645	765	689	1350	508	795	1040	826
15	741	703	620	660	640	785	764	1320	458	745	1050	781
16	776	680	615	660	648	798	802	1270	423	839	984	772
17	767	672	622	660	655	787	889	1280	432	892	978	775
18	769	698	632	660	660	757	994	1320	438	912	1010	760
19	795	690	665	660	660	769	1030	1290	458	967	974	768
20	759	678	680	665	660	861	1080	1260	539	1020	983	749
21	737	671	680	660	655	856	1150	1630	824	992	958	731
22	702	679	680	660	660	805	1240	1070	812	980	946	726
23	712	707	680	660	670	843	1260	1010	883	1050	929	712
24	705	706	680	660	675	771	1290	913	764	1040	928	714
25	701	655	675	660	665	760	1340	827	637	1040	966	706
26	735	645	675	660	660	721	1240	760	533	980	1000	697
27	759	654	670	660	660	685	1070	743	472	1000	1000	704
28	742	674	665	660	670	661	953	775	427	1040	1010	694
29	751	653	660	660	---	677	898	940	414	1040	947	687
30	736	666	660	660	---	651	903	923	514	988	950	693
31	718	---	660	660	---	657	---	1100	---	981	949	---
TOTAL	22192	19311	20634	20380	18485	23471	26530	33898	20732	26511	30480	23007
MEAN	716	644	666	657	660	757	884	1093	691	855	983	767
MAX	795	719	696	665	675	861	1340	1630	1210	1050	1050	871
MIN	639	445	615	640	640	651	623	743	414	566	916	687
AC-FT	44020	38300	40930	40420	36660	46550	52620	67240	41120	52580	60460	45630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1962	748	1413	1963	547	1989
1963	653	1029	1985	352	1978
1964	577	1067	1985	277	1964
1965	556	1000	1985	278	1964
1966	547	1025	1962	294	1964
1967	637	1394	1962	331	1977
1968	1001	3297	1962	536	1964
1969	1886	6200	1984	477	1977
1970	1968	7160	1984	379	1966
1971	1489	5840	1983	539	1963
1972	1054	2321	1984	630	1963
1973	853	1366	1984	733	1969

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1962 - 1994

	ANNUAL TOTAL	ANNUAL MEAN	HIGHEST ANNUAL MEAN	LOWEST ANNUAL MEAN	HIGHEST DAILY MEAN	LOWEST DAILY MEAN	ANNUAL SEVEN-DAY MINIMUM	INSTANTANEOUS PEAK FLOW	INSTANTANEOUS PEAK STAGE	ANNUAL RUNOFF (AC-FT)	10 PERCENT EXCEEDS	50 PERCENT EXCEEDS	90 PERCENT EXCEEDS
1993	395788	1084											
1994	285631	783											
1962			1000										
1963			2378										
1964			568										
1965			12700										
1966			250										
1967			264										
1968			13600										
1969			16.60										
1970													
1971													
1972													
1973													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992													
1993													
1994													

a-Maximum daily discharge for period of record, 20000 ft³/s, Jun 7, 1912.

b-Also occurred Jan 19, 20, and Feb 3-8.

c-Minimum discharge observed for period of record, 166 ft³/s, Dec 19, 1907.

d-Not determined.

e-Maximum discharge observed for period of record, 21500 ft³/s, Jun 7, 1912, gage height, 21.8 ft, datum then in use, from rating curve extended above 14000 ft³/s.

09058000 COLORADO RIVER NEAR KREMMLING, CO--Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 06...	1545	640	203	8.2	12.0	8.8	K1	K4	80	25	4.1
NOV 22...	1500	675	194	8.4	1.5	10.8	K3	K3	81	25	4.5
APR 18...	1615	1090	213	7.9	9.0	8.2	150	--	82	25	4.7
JUN 13...	1630	524	337	8.0	18.0	8.1	26	K15	140	40	9.3
JUL 25...	1630	1080	330	8.0	16.5	8.4	--	--	140	40	9.3
SEP 12...	1630	837	196	7.9	15.0	8.1	K10	K11	85	27	4.3

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT 06...	7.7	0.4	3.3	64	29	2.8	0.4	8.2	130	120
NOV 22...	7.2	0.3	1.4	65	30	2.6	0.3	7.1	110	118
APR 18...	7.9	0.4	2.1	71	30	3.0	0.3	7.8	144	124
JUN 13...	14	0.5	2.3	111	57	2.8	0.3	14	220	207
JUL 25...	13	0.5	1.7	96	67	2.5	0.3	11	222	203
SEP 12...	6.5	0.3	1.8	64	37	3.5	0.4	8.4	115	128

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 06...	0.18	225	<0.01	0.08	0.03	--	<0.20	<0.01	<0.01	<0.01
NOV 22...	0.15	200	<0.01	0.09	0.01	0.03	0.04	0.02	0.01	<0.01
APR 18...	0.20	423	0.01	0.09	0.04	0.36	0.40	0.03	<0.01	<0.01
JUN 13...	0.30	311	<0.01	<0.05	0.03	0.47	0.50	0.07	<0.01	0.02
JUL 25...	0.30	646	<0.01	0.06	0.02	0.28	0.30	0.03	0.01	0.01
SEP 12...	0.16	260	<0.01	0.10	0.03	--	<0.20	0.01	0.02	<0.01

K-Based on non-ideal colony count.

COLORADO RIVER MAIN STEM

09058000 COLORADO RIVER NEAR KREMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 06...	35	<0.5	<1	<5	<3	<10	37	<10
NOV 22...	35	<0.5	<1	<5	<3	<10	21	<10
APR 18...	35	<0.5	<1	<5	<3	<10	67	<10
JUN 13...	51	<0.5	<1	<5	<3	<10	160	<10
JUL 25...	39	<0.5	<1	<5	4	<10	51	<10
SEP 12...	34	0.5	<1	<5	<3	10	28	<10

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 06...	5	20	10	<10	<1	150	<6	5
NOV 22...	7	18	20	<10	2	150	<6	13
APR 18...	6	31	20	<10	2	160	<6	<3
JUN 13...	11	92	<10	<10	<1	280	<6	<3
JUL 25...	15	44	10	<10	<1	270	<6	10
SEP 12...	8	17	20	<10	<1	140	<6	11

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from Dickson Creek, 2.0 mi downstream from Piney Lake, and 8.5 mi north of Minturn.

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.--October 1947 to September 1954, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,145.25 ft above sea level, levels by U.S. Bureau of Reclamation. Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 1 to Apr. 12. Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	5.7	4.6	3.3	1.8	2.2	2.8	16	155	26	5.0	4.1
2	3.3	6.0	4.5	3.2	1.9	2.3	2.8	15	158	25	5.9	15
3	3.2	6.0	4.4	3.3	2.0	2.4	2.9	15	131	28	5.1	14
4	3.0	6.0	4.3	3.5	2.1	2.5	3.0	15	138	23	4.3	10
5	2.9	5.9	4.1	3.6	2.1	2.5	3.0	21	128	19	3.8	7.4
6	2.9	5.6	4.1	3.7	2.1	2.5	2.9	36	117	17	3.8	5.5
7	3.4	5.4	4.0	3.6	2.1	2.5	2.8	50	102	15	3.7	4.7
8	4.6	5.4	3.9	3.5	2.1	2.4	2.7	55	94	14	3.3	4.0
9	5.3	5.4	3.9	3.5	2.1	2.5	2.9	62	83	11	3.1	3.7
10	5.8	5.4	3.8	3.3	2.0	2.6	2.9	62	74	10	3.1	3.8
11	5.3	4.6	3.6	3.2	2.0	2.7	2.8	75	78	10	3.1	3.5
12	5.9	5.7	3.5	3.1	2.0	2.8	2.8	102	77	9.9	3.1	3.4
13	6.7	5.8	3.3	3.0	1.9	2.8	2.9	93	81	9.6	3.1	3.5
14	7.0	5.9	3.2	3.1	2.0	2.9	2.9	73	85	9.5	3.1	3.9
15	7.0	6.0	3.1	3.2	2.1	3.0	3.0	74	80	9.0	3.1	4.0
16	7.3	6.2	3.1	3.1	2.1	3.1	3.5	74	74	8.4	2.9	3.7
17	6.9	6.0	3.2	3.0	2.1	3.1	5.1	99	70	7.6	2.9	3.4
18	6.7	5.6	3.2	2.9	2.1	3.1	6.9	101	67	7.0	2.9	2.8
19	6.5	5.3	3.1	2.7	2.1	3.1	13	99	65	6.7	4.6	2.7
20	6.0	5.2	3.0	2.6	1.9	3.2	21	125	67	6.7	11	3.1
21	5.5	5.0	2.9	2.6	1.9	3.3	28	111	59	5.8	6.4	7.0
22	6.0	5.0	2.9	2.6	1.9	3.1	43	98	84	5.5	5.8	6.9
23	5.8	5.4	2.8	2.5	1.9	3.3	58	93	81	5.2	5.1	5.4
24	5.8	5.3	2.9	2.4	1.9	3.3	60	78	59	5.7	4.1	4.0
25	6.0	4.9	3.0	2.4	1.9	3.2	52	78	51	5.8	3.5	3.6
26	6.3	4.6	3.1	2.4	2.0	3.0	36	106	47	5.2	3.4	3.3
27	5.3	4.4	3.2	2.3	2.2	3.0	26	91	43	5.0	3.2	3.2
28	5.3	4.1	3.4	2.2	2.2	3.0	21	102	38	4.3	3.3	3.0
29	5.3	4.2	3.5	2.1	---	3.0	19	91	31	4.0	4.1	2.8
30	7.2	4.6	3.4	2.1	---	3.0	17	121	29	4.0	4.1	2.9
31	5.6	---	3.4	2.0	---	2.9	---	151	---	4.0	3.8	---
TOTAL	167.5	160.6	108.4	90.0	56.5	88.3	452.6	2382	2446	326.9	127.7	148.3
MEAN	5.40	5.35	3.50	2.90	2.02	2.85	15.1	76.8	81.5	10.5	4.12	4.94
MAX	7.3	6.2	4.6	3.7	2.2	3.3	60	151	158	28	11	15
MIN	2.9	4.1	2.8	2.0	1.8	2.2	2.7	15	29	4.0	2.9	2.7
AC-FT	332	319	215	179	112	175	898	4720	4850	648	253	294

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

	MEAN	5.86	3.79	2.69	2.11	1.87	2.36	11.1	65.5	124	56.7	14.3	7.08
MAX	15.1	8.40	5.41	4.00	3.60	5.04	23.0	107	202	139	45.3	14.8	
(WY)	1985	1985	1986	1952	1952	1986	1952	1984	1952	1983	1984	1984	
MIN	1.71	1.23	1.04	.79	.83	.84	2.12	26.6	52.1	8.70	3.69	2.16	
(WY)	1980	1980	1980	1975	1975	1975	1973	1968	1954	1977	1954	1974	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1948 - 1994
ANNUAL TOTAL	11951.9	6554.8	
ANNUAL MEAN	32.7	18.0	24.8
HIGHEST ANNUAL MEAN			41.2
LOWEST ANNUAL MEAN			12.9
HIGHEST DAILY MEAN	210	May 22	362
LOWEST DAILY MEAN	1.7	Mar 2	.40
ANNUAL SEVEN-DAY MINIMUM	1.8	Feb 28	.62
INSTANTANEOUS PEAK FLOW			560
INSTANTANEOUS PEAK STAGE			5.12
ANNUAL RUNOFF (AC-FT)	23710	13000	17960
10 PERCENT EXCEEDS	129	74	85
50 PERCENT EXCEEDS	5.5	4.1	4.5
90 PERCENT EXCEEDS	2.2	2.4	1.5

a-Also occurred Mar 14.

b-Maximum gage height for period of record, 6.44 ft, Apr 13, 1977.

09058610 DICKSON CREEK NEAR VAIL, CO

LOCATION.--Lat 39°42'14", long 106°27'25", Eagle County, Hydrologic Unit 14010001, on right bank 0.6 mi upstream from Freeman Creek, 1.0 mi upstream from mouth, and 6 mi northwest of Vail.

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn."

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 22. Records good except for estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream for irrigation of hay meadows downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.5	1.1	1.0	.72	.92	.96	.78	8.4	2.3	1.6	1.4
2	1.8	1.4	1.1	1.0	.72	.92	.98	.80	8.1	2.3	1.5	2.4
3	1.8	1.4	1.1	1.0	.72	.90	1.0	.79	7.5	2.6	1.5	1.4
4	1.8	1.5	1.1	1.0	.78	.92	1.0	.99	7.0	2.1	1.3	1.2
5	1.8	1.4	1.1	1.0	.82	.92	1.1	1.9	6.5	2.0	1.4	1.1
6	1.8	1.4	1.1	1.0	.86	.92	1.1	3.2	6.0	2.0	1.3	1.0
7	2.2	1.4	1.1	1.0	.88	.94	1.1	4.1	5.5	2.0	1.3	1.1
8	2.2	1.4	1.1	1.0	.88	.94	1.1	4.8	4.9	2.0	1.3	1.1
9	2.1	1.4	1.1	1.0	.88	.92	1.1	5.2	4.5	1.9	1.3	1.0
10	2.1	1.3	1.0	1.0	.88	.92	1.1	5.3	4.2	1.8	1.3	1.1
11	2.0	1.3	1.0	.98	.86	.90	1.1	5.8	4.0	1.8	1.2	1.1
12	2.2	1.4	1.0	.98	.86	.90	1.2	6.2	3.7	1.8	1.2	1.1
13	2.1	1.3	1.0	.98	.86	.90	1.2	6.0	3.5	1.8	1.3	1.2
14	2.0	1.3	.96	.98	.82	.90	1.2	6.8	3.4	1.9	1.3	1.4
15	2.0	1.3	.90	1.0	.84	.92	1.2	6.7	3.2	1.8	1.2	1.3
16	2.1	1.3	.90	.98	.90	.94	1.2	6.8	3.0	1.7	1.2	1.2
17	2.0	1.2	.88	.96	.92	.96	1.2	7.3	2.9	1.7	1.3	1.2
18	1.9	1.2	.88	.96	.94	.98	1.3	7.4	2.9	1.5	1.4	3.1
19	1.8	1.2	.88	.96	.90	1.0	1.4	7.8	3.0	1.5	2.2	1.3
20	1.7	1.1	.88	.94	.86	1.0	1.6	8.9	3.1	1.6	1.8	1.5
21	1.6	1.1	.90	.94	.84	1.0	1.8	8.9	3.1	1.4	1.4	1.5
22	1.7	1.2	.92	.94	.84	1.0	2.0	8.9	3.9	1.4	1.6	1.3
23	1.6	1.2	.94	.96	.80	1.0	2.3	8.8	3.3	1.5	1.2	1.3
24	1.6	1.1	.96	.94	.80	1.0	2.3	8.5	2.9	1.8	1.2	1.2
25	1.6	1.1	1.0	.92	.82	1.0	1.8	8.2	2.7	1.7	1.2	1.3
26	1.6	1.0	1.0	.90	.84	1.0	1.1	8.3	2.6	1.5	1.2	1.3
27	1.4	1.0	1.1	.88	.88	.98	.94	8.2	2.5	1.3	1.1	1.3
28	1.5	1.0	1.1	.86	.92	.92	.88	8.7	2.4	1.3	1.3	1.2
29	1.5	1.0	1.1	.82	---	.88	.87	8.4	2.4	1.4	1.3	1.3
30	1.3	1.1	1.0	.74	---	.90	.84	8.3	2.4	1.5	1.2	1.4
31	1.5	---	1.0	.72	---	.96	---	8.5	---	1.4	1.2	---
TOTAL	56.1	37.5	31.20	29.34	23.64	29.26	38.02	191.26	123.5	54.3	41.8	40.3
MEAN	1.81	1.25	1.01	.95	.84	.94	1.27	6.17	4.12	1.75	1.35	1.34
MAX	2.2	1.5	1.1	1.0	.94	1.0	2.3	8.9	8.4	2.6	2.2	3.1
MIN	1.3	1.0	.88	.72	.72	.88	.84	.78	2.4	1.3	1.1	1.0
AC-FT	111	74	62	58	47	58	75	379	245	108	83	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

	1985	1985	1985	1985	1985	1985	1979	1979	1993	1993	1991	1991
MEAN	1.08	.92	.75	.67	.64	.74	1.50	6.56	9.36	2.94	1.44	1.22
MAX	1.83	1.56	1.36	1.06	1.07	1.23	6.10	14.3	22.0	7.18	3.04	2.30
(WY)	1985	1985	1985	1985	1985	1985	1979	1979	1993	1993	1991	1991
MIN	.007	.002	.000	.000	.000	.000	.000	1.22	.91	.73	.17	.042
(WY)	1984	1984	1984	1984	1984	1984	1984	1977	1977	1977	1982	1972

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1972 - 1994
ANNUAL TOTAL	1682.11	696.22	
ANNUAL MEAN	4.61	1.91	2.32
HIGHEST ANNUAL MEAN			4.48
LOWEST ANNUAL MEAN			.58
HIGHEST DAILY MEAN	29 Jun 17	a 8.9 May 20	42 May 6 1979
LOWEST DAILY MEAN	.56 Jan 5	b .72 Jan 31	c .00 Aug 12 1972
ANNUAL SEVEN-DAY MINIMUM	.70 Feb 22	.75 Jan 29	.00 Sep 12 1972
INSTANTANEOUS PEAK FLOW		22 Sep 18	48 May 6 1979
INSTANTANEOUS PEAK STAGE		3.18 Sep 18	c 2.75 May 6 1979
ANNUAL RUNOFF (AC-FT)	3340	1380	1680
10 PERCENT EXCEEDS	17	3.9	5.4
50 PERCENT EXCEEDS	1.6	1.2	1.1
90 PERCENT EXCEEDS	.80	.88	.43

a-Also occurred May 21-22.

b-Also occurred Feb 1-3.

c-No flow at times some years.

d-Maximum gage height, 4.89 ft, May 9, 1984, backwater from ice.

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,335 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 19 to May 4. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.25	.23	.15	.09	.08	.04	1.9	2.8	.38	.19	.20
2	.22	.26	.22	.16	.10	.07	.04	1.9	2.5	.43	.17	.61
3	.22	.27	.22	.16	.10	.07	.04	2.0	2.3	.50	.15	.31
4	.22	.25	.21	.17	.10	.07	.05	2.2	2.0	.40	.09	.19
5	.22	.26	.22	.17	.10	.08	.05	2.7	1.8	.29	.08	.12
6	.21	.25	.22	.17	.10	.08	.05	4.2	1.6	.33	.08	.10
7	.28	.25	.21	.16	.10	.08	.04	5.6	1.4	.29	.09	.11
8	.37	.24	.21	.16	.10	.07	.04	7.7	1.3	.28	.08	.09
9	.26	.24	.21	.15	.10	.07	.04	8.7	1.2	.24	.09	.09
10	.25	.24	.21	.15	.09	.06	.04	9.5	1.1	.25	.11	.13
11	.26	.25	.20	.15	.08	.06	.04	12	1.0	.22	.09	.13
12	.29	.27	.20	.14	.07	.06	.04	13	.93	.21	.09	.13
13	.31	.27	.19	.13	.08	.06	.04	10	.87	.26	.10	.22
14	.26	.26	.19	.14	.09	.06	.05	13	.81	.28	.10	.20
15	.28	.26	.18	.14	.09	.06	.06	11	.76	.26	.08	.18
16	.32	.26	.19	.13	.09	.06	.10	12	.70	.23	.06	.13
17	.32	.25	.19	.12	.09	.06	.15	11	.63	.21	.09	.13
18	.30	.24	.18	.12	.08	.06	.25	9.9	.60	.18	.11	.13
19	.30	.23	.17	.12	.08	.06	.40	9.3	.63	.17	.36	.13
20	.29	.23	.16	.12	.08	.06	.50	8.7	.76	.17	.29	.18
21	.27	.21	.16	.12	.08	.05	.70	7.3	.76	.13	.17	.32
22	.26	.23	.17	.11	.07	.05	.90	6.4	1.1	.11	.25	.19
23	.26	.24	.17	.11	.07	.05	1.5	5.7	.78	.11	.12	.15
24	.27	.25	.16	.11	.07	.05	2.5	5.1	.58	.24	.09	.13
25	.27	.23	.15	.12	.07	.05	2.2	4.6	.52	.26	.08	.14
26	.27	.22	.15	.11	.08	.04	2.1	4.5	.47	.17	.06	.12
27	.27	.21	.16	.11	.08	.04	2.0	4.1	.45	.11	.07	.12
28	.26	.21	.17	.11	.08	.03	1.9	4.3	.42	.09	.15	.11
29	.30	.22	.17	.10	---	.04	1.9	3.9	.42	.11	.17	.11
30	.26	.23	.15	.09	---	.04	1.9	3.3	.42	.11	.13	.23
31	.22	---	.15	.08	---	.04	---	3.1	---	.14	.09	---
TOTAL	8.31	7.28	5.77	4.08	2.41	1.81	19.66	208.6	31.61	7.16	3.88	5.13
MEAN	.27	.24	.19	.13	.086	.058	.66	6.73	1.05	.23	.13	.17
MAX	.37	.27	.23	.17	.10	.08	2.5	13	2.8	.50	.36	.61
MIN	.21	.21	.15	.08	.07	.03	.04	1.9	.42	.09	.06	.09
AC-FT	16	14	11	8.1	4.8	3.6	39	414	63	14	7.7	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	.26	.17	.12	.092	.083	.12	.65	6.63	6.25	.90	.32	.24
MAX	.78	.45	.26	.24	.21	.29	1.73	18.0	23.2	3.26	1.25	.70	
(WY)	1985	1985	1983	1983	1983	1986	1971	1984	1983	1983	1983	1984	
MIN	.083	.030	.000	.000	.000	.000	.000	1.26	.30	.15	.065	.079	
(WY)	1993	1965	1965	1965	1965	1991	1991	1977	1977	1977	1981	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	881.28	305.70	
ANNUAL MEAN	2.41	.84	1.32
HIGHEST ANNUAL MEAN			3.54
LOWEST ANNUAL MEAN			.31
HIGHEST DAILY MEAN			
LOWEST DAILY MEAN	33 ^b	May 28	63 ^c May 25 1984
ANNUAL SEVEN-DAY MINIMUM	.05	Jan 1	.00 Nov 10 1964
INSTANTANEOUS PEAK FLOW	.05	Jan 1	.04 Mar 26
INSTANTANEOUS PEAK STAGE			21 May 11
ANNUAL RUNOFF (AC-FT)	1750		2.05 May 11
10 PERCENT EXCEEDS	9.4		959
50 PERCENT EXCEEDS	.26		3.2
90 PERCENT EXCEEDS	.05		.20
			.05

a-Also occurred May 14.

b-Occurred many days.

c-No flow some days some years.

d-Maximum gage height, 3.51 ft, May 18, 1973, backwater from ice.

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°43'54", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 24 to Apr. 19, and July 9-12. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.1	.95	.80	.60	.80	.85	1.2	18	2.7	1.4	1.2
2	1.3	1.1	.95	.80	.65	.75	.90	1.3	17	2.4	1.2	3.7
3	1.2	1.2	.95	.85	.65	.75	.90	1.6	16	3.0	1.1	1.8
4	1.2	1.2	.95	.85	.70	.75	.95	1.8	16	2.4	.99	1.5
5	1.1	1.2	.90	.85	.70	.80	.95	3.0	15	2.1	.99	1.2
6	.95	1.2	.90	.80	.70	.80	.90	4.5	15	2.0	1.1	1.1
7	1.4	1.2	.90	.80	.75	.80	.90	5.7	13	1.9	.92	1.1
8	1.8	1.1	.90	.80	.75	.80	.95	6.7	12	1.8	.91	1.0
9	1.7	1.1	.90	.80	.70	.75	.95	7.6	11	1.7	1.0	1.0
10	1.6	1.1	.90	.80	.70	.75	.90	9.0	9.9	1.6	1.0	.99
11	1.5	1.1	.85	.80	.70	.75	.85	11	9.6	1.6	1.0	.79
12	1.8	1.1	.85	.75	.70	.75	.80	12	9.5	1.5	1.0	.74
13	1.9	1.2	.85	.75	.70	.80	.80	12	8.8	1.4	1.1	.91
14	1.9	1.2	.85	.80	.70	.80	.80	13	8.0	1.3	1.1	.85
15	1.8	1.1	.80	.80	.70	.80	.85	13	7.4	1.1	1.0	.84
16	1.7	1.1	.80	.80	.75	.80	.95	15	6.8	.97	.94	.78
17	1.6	1.0	.75	.75	.75	.85	1.0	17	6.4	.90	1.1	.68
18	1.7	1.0	.75	.75	.80	.85	1.2	18	6.0	.92	.89	.68
19	1.4	1.1	.70	.75	.80	.90	2.0	21	6.1	.94	2.1	.71
20	1.3	1.1	.70	.75	.75	.90	2.7	22	5.8	.92	1.8	1.1
21	1.2	1.1	.70	.75	.75	.95	4.6	20	5.8	.77	1.2	2.1
22	1.2	1.0	.70	.75	.70	.95	7.8	20	8.8	.80	1.3	1.3
23	1.2	1.0	.75	.80	.70	.95	6.8	19	6.8	.85	1.1	.96
24	1.2	1.0	.75	.80	.75	.95	6.6	18	5.4	.96	.98	.85
25	1.2	.95	.75	.80	.75	.90	4.5	18	4.5	1.0	.95	.73
26	1.1	.90	.80	.80	.75	.90	3.0	18	3.9	1.0	.89	.62
27	1.1	.85	.80	.75	.80	.85	2.7	16	3.6	1.0	.85	.62
28	1.1	.80	.85	.70	.80	.85	2.6	17	3.3	1.0	1.2	.61
29	1.1	.85	.85	.60	---	.80	2.4	16	3.2	1.1	1.2	.60
30	1.2	.90	.80	.55	---	.80	2.0	17	3.0	.99	1.1	.72
31	1.2	---	.80	.60	---	.80	---	17	---	1.0	.94	---
TOTAL	43.05	31.85	25.65	23.75	20.25	25.65	64.10	392.4	265.6	43.62	34.35	31.78
MEAN	1.39	1.06	.83	.77	.72	.83	2.14	12.7	8.85	1.41	1.11	1.06
MAX	1.9	1.2	.95	.85	.80	.95	7.8	22	18	3.0	2.1	3.7
MIN	.95	.80	.70	.55	.60	.75	.80	1.2	3.0	.77	.85	.60
AC-FT	85	63	51	47	40	51	127	778	527	87	68	63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	1.25	.97	.78	.67	.63	.72	1.66	10.9	22.2	7.98	2.20	1.40
MAX	2.78	2.00	1.50	1.11	1.04	1.16	3.75	26.3	45.7	28.8	5.85	3.09	
(WY)	1966	1966	1966	1983	1983	1983	1987	1986	1983	1983	1983	1965	1984
MIN	.73	.55	.44	.35	.40	.40	.66	2.97	7.55	1.28	.68	.75	
(WY)	1978	1979	1979	1979	1965	1965	1975	1975	1977	1977	1977	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1965 - 1994
ANNUAL TOTAL	1837.07	1002.05	
ANNUAL MEAN	5.03	2.75	4.32
HIGHEST ANNUAL MEAN			8.05
LOWEST ANNUAL MEAN			1.83
HIGHEST DAILY MEAN	33 Jun 30	22 May 20	81 Jun 20 1983
LOWEST DAILY MEAN	.50 Feb 6	.55 Jan 30	.32 Jan 7 1979
ANNUAL SEVEN-DAY MINIMUM	.66 Feb 5	.62 Jan 28	.33 Jan 6 1979
INSTANTANEOUS PEAK FLOW		26 May 19	81 Jun 30 1984
INSTANTANEOUS PEAK STAGE		1.34 May 19	a 1.71 Jun 30 1984
ANNUAL RUNOFF (AC-FT)	3640	1990	3130
10 PERCENT EXCEEDS	19	8.3	15
50 PERCENT EXCEEDS	1.2	.99	1.1
90 PERCENT EXCEEDS	.70	.75	.58

a-Maximum gage height, 2.22 ft, May 12, 1970, backwater from ice.

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW¹/₄NE¹/₄ sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at downstream side of private bridge 1.2 mi downstream from Rock Creek and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,272.35 ft above sea level. Prior to July 29, 1944, nonrecording gage, and July 29, 1944, to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 2, Nov. 5 to Jan. 12, Jan. 30 to Feb. 11, Mar. 9-11, Mar. 20-25, and Mar. 28 to Apr. 1. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 400 acres of hay meadows upstream and downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	15	12	9.5	9.7	13	53	302	59	20	15
2	17	24	14	12	9.4	10	14	55	294	54	21	35
3	17	26	14	13	9.5	11	15	55	268	56	20	32
4	17	23	13	13	10	12	16	59	257	52	17	24
5	16	22	13	13	11	11	13	85	237	44	16	19
6	16	22	15	12	11	11	12	135	217	40	16	16
7	17	20	15	11	11	11	12	180	197	38	16	15
8	22	20	14	11	12	10	12	197	192	37	15	14
9	23	19	14	11	12	10	11	212	179	34	15	13
10	26	19	14	12	11	10	11	222	162	30	15	13
11	24	18	14	13	11	10	10	257	156	30	15	13
12	25	19	14	12	11	10	9.8	326	151	30	14	13
13	28	19	12	12	11	12	11	284	151	30	14	12
14	29	19	11	12	11	13	12	264	150	30	15	13
15	29	17	10	12	11	13	12	272	136	29	14	13
16	32	16	11	12	11	15	18	269	127	27	13	13
17	31	15	13	11	11	15	36	306	119	26	13	13
18	30	15	12	11	11	14	55	307	113	24	13	12
19	29	16	10	11	11	15	72	325	109	22	18	13
20	28	15	11	11	10	15	95	358	110	21	31	11
21	25	14	11	12	10	15	113	306	109	20	21	18
22	25	14	10	12	9.6	14	140	287	126	18	19	18
23	25	15	10	13	9.7	15	166	276	140	18	17	16
24	24	16	12	13	9.6	15	173	243	106	18	15	14
25	25	14	11	13	9.8	15	153	235	93	20	15	12
26	25	13	11	13	9.9	15	115	264	85	18	13	12
27	25	12	12	12	10	13	90	250	78	16	13	11
28	25	11	13	12	9.8	13	77	255	72	16	13	11
29	24	12	13	12	---	12	66	262	68	16	14	10
30	24	13	12	11	---	13	57	279	64	16	15	10
31	23	---	11	10	---	12	---	297	---	16	15	---
TOTAL	742	520	385	370	293.8	389.7	1609.8	7175	4568	905	501	454
MEAN	23.9	17.3	12.4	11.9	10.5	12.6	53.7	231	152	29.2	16.2	15.1
MAX	32	26	15	13	12	15	173	358	302	59	31	35
MIN	16	11	10	10	9.4	9.7	9.8	53	64	16	13	10
AC-FT	1470	1030	764	734	583	773	3190	14230	9060	1800	994	901

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

	MEAN	19.2	17.4	15.0	13.4	13.0	15.1	52.9	257	340	108	30.8	17.3
MAX	62.9	34.1	24.6	20.0	24.5	35.3	167	495	656	379	94.9	46.1	
(WY)	1962	1985	1985	1966	1986	1986	1962	1958	1957	1983	1983	1984	
MIN	6.72	8.68	7.19	7.44	7.86	9.18	16.8	99.0	74.1	14.8	6.22	4.00	
(WY)	1978	1980	1980	1980	1980	1980	1961	1977	1954	1977	1954	1944	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1944 - 1994

ANNUAL TOTAL	31912.8	17913.3	
ANNUAL MEAN	87.4	49.1	75.0
HIGHEST ANNUAL MEAN			127
LOWEST ANNUAL MEAN			27.2
HIGHEST DAILY MEAN	541	May 18	358
LOWEST DAILY MEAN	9.8	Feb 16	9.4
ANNUAL SEVEN-DAY MINIMUM	10	Feb 13	9.8
INSTANTANEOUS PEAK FLOW			406
INSTANTANEOUS PEAK STAGE			4.74
ANNUAL RUNOFF (AC-FT)	63300	35530	54350
10 PERCENT EXCEEDS	331	164	254
50 PERCENT EXCEEDS	22	15	19
90 PERCENT EXCEEDS	11	11	10

a-Also occurred Sep 18-19, 1954.

b-Maximum daily discharge for period of record.

c-Maximum discharge and stage, (recorded), 1220 ft³/s, Jun 27, 1983, gage height 5.82 ft, from peak stage indicator, but may have been higher May 25, 1984.

PINEY RIVER BASIN

09059500 PINEY RIVER NEAR STATE BRIDGE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
NOV 03...	1255	22	322	8.4	2.0	10.5	<1	<1
MAR 22...	1100	14	354	8.0	0.5	11.3	<1	<1
JUN 07...	1530	197	116	8.2	13.0	8.0	K7	K2
AUG 25...	1400	15	363	8.6	18.5	8.3	K8	K2

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 03...	<1	<1	120	<1	10	<10	<0.1	<1	<0.2	<10
MAR 22...	<1	<1	20	<1	<10	<10	<0.1	<1	<0.2	<10
JUN 07...	<1	13	350	<1	20	10	-	<1	<0.2	<10
AUG 25...	<1	2	80	<1	10	<10	<0.1	<1	<0.2	<10

K-Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	0925	16	354	5.0	JUL 06...	1254	42	254	16.5
JAN 12...	1500	16	364	0.0	AUG 09...	0904	15	374	14.0
MAY 05...	1020	76	242	5.0					

09060550 ROCK CREEK AT CRATER, CO

LOCATION.--Lat 39°58'42", long 106°42'34", in NW¹/4NE¹/4 sec. 17, T.1 S., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 250 ft downstream from county bridge crossing, 2 miles downstream from Kayser Mutual Ditch diversion, and 0.8 miles northwest of Crater.

DRAINAGE AREA.--72.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,185 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 16 to May 11. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of approximately 1,025 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	12	9.1	8.2	7.9	9.0	12	64	47	1.6	3.3	2.7
2	2.2	9.9	9.1	8.4	7.7	9.3	13	56	39	1.7	3.4	2.7
3	2.2	11	9.2	8.4	7.8	9.4	12	55	32	1.6	3.2	2.7
4	2.0	9.6	9.3	8.5	7.7	9.7	14	56	28	1.6	3.0	2.7
5	2.0	8.3	9.3	8.6	7.8	9.9	12	60	23	1.6	2.8	2.5
6	2.1	8.8	9.3	8.6	7.8	9.6	12	64	21	2.5	2.8	2.4
7	3.6	6.5	9.3	8.5	7.9	9.5	12	70	19	4.6	2.9	2.2
8	8.0	8.3	9.3	8.6	7.9	9.5	11	76	17	5.0	2.9	2.2
9	5.0	7.5	9.3	8.9	8.1	7.0	11	80	15	5.1	3.0	2.1
10	3.9	8.5	9.3	8.8	8.1	9.9	11	94	12	5.1	3.1	2.1
11	3.3	10	9.0	8.8	8.2	9.6	11	120	8.4	5.1	3.1	2.0
12	4.4	10	9.0	8.5	8.1	9.4	11	150	6.9	5.1	3.0	2.0
13	5.4	11	9.1	8.4	8.2	9.6	13	143	6.4	4.4	3.0	2.0
14	3.6	10	9.2	8.5	8.3	10	18	160	4.9	2.9	2.9	1.9
15	3.9	9.5	9.3	8.6	8.2	11	19	148	4.6	2.9	2.7	1.8
16	4.9	9.1	9.3	8.6	8.1	11	38	151	3.7	2.9	2.6	1.8
17	5.3	9.0	9.3	8.4	8.1	11	45	154	3.5	2.9	2.8	1.8
18	5.8	9.5	8.9	8.5	8.3	12	56	144	3.4	2.9	2.7	1.8
19	9.7	9.3	8.6	8.5	8.4	12	64	132	5.1	2.9	3.0	1.8
20	14	9.8	8.6	8.5	8.4	12	72	125	7.1	2.9	3.1	1.8
21	12	9.2	8.4	8.4	8.4	13	90	108	13	2.9	3.0	2.5
22	12	9.3	8.4	8.4	8.5	13	120	99	12	2.8	2.9	2.0
23	12	9.5	8.4	8.4	8.4	14	130	89	12	2.7	2.7	1.9
24	11	9.5	8.4	8.4	8.0	13	120	80	5.9	2.7	2.7	1.8
25	11	9.2	8.2	8.4	7.6	13	120	78	5.4	2.8	2.6	1.8
26	11	9.2	8.3	8.4	8.4	11	110	75	5.2	2.9	2.6	1.8
27	9.3	9.1	8.4	8.4	9.1	9.6	100	64	3.8	2.9	2.6	1.8
28	10	8.9	8.5	8.2	9.3	12	82	65	1.7	2.8	2.8	1.8
29	9.4	9.0	8.6	8.1	---	10	72	65	1.7	2.7	3.0	1.8
30	6.6	9.1	8.4	8.1	---	11	66	49	1.7	2.8	3.2	1.8
31	9.6	---	8.4	7.9	---	11	---	44	---	2.9	2.7	---
TOTAL	207.5	279.6	275.2	261.9	228.7	331.0	1477	2918	369.4	96.2	90.1	62.0
MEAN	6.69	9.32	8.88	8.45	8.17	10.7	49.2	94.1	12.3	3.10	2.91	2.07
MAX	14	12	9.3	8.9	9.3	14	130	160	47	5.1	3.4	2.7
MIN	2.0	6.5	8.2	7.9	7.6	7.0	11	44	1.7	1.6	2.6	1.8
AC-FT	412	555	546	519	454	657	2930	5790	733	191	179	123

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	8.83	11.3	10.2	9.79	9.62	12.2	57.1	158	57.7	9.58
MAX	20.4	16.9	14.1	13.9	12.8	20.0	95.1	262	115	25.7
(WY)	1987	1987	1985	1985	1985	1986	1986	1985	1986	1986
MIN	1.60	7.95	7.74	7.91	7.66	8.77	16.4	73.2	12.3	2.18
(WY)	1993	1993	1991	1991	1990	1991	1993	1990	1994	1992

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1985 - 1994
ANNUAL TOTAL	12022.7	6596.6	
ANNUAL MEAN	32.9	18.1	29.6
HIGHEST ANNUAL MEAN			50.2
LOWEST ANNUAL MEAN			17.8
HIGHEST DAILY MEAN	408	May 21	410
LOWEST DAILY MEAN	1.9	Jul 20	1.2
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 30	1.3
INSTANTANEOUS PEAK FLOW		191	534
INSTANTANEOUS PEAK STAGE		3.36	3.99
ANNUAL RUNOFF (AC-FT)	23850	13080	21480
10 PERCENT EXCEEDS	86	64	86
50 PERCENT EXCEEDS	9.2	8.4	9.8
90 PERCENT EXCEEDS	3.0	2.3	2.8

a-Also occurred Jul 3-5.

b-Maximum gage height, 4.03 ft, May 4, 1986.

ROCK CREEK BASIN

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1986 to September 1987.

WATER TEMPERATURES: April 1986 to September 1987.

INSTRUMENTATION.--Water-quality monitor April 1986 to September 1987.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Water-quality monitor was not operated during winter.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 187 microsiemens Aug. 28, 1986; minimum, 46 microsiemens several days during May and June 1986.

WATER TEMPERATURE: Maximum, 18.9°C July 26, 1987; minimum, 0.0°C many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
MAR 22...	1620	13	138	7.7	5.0	10.2	58	17	3.8	3.6
MAY 04...	1600	58	98	8.1	7.5	9.0	42	12	2.9	2.8
JUN 07...	1055	18	83	--	10.5	8.7	37	11	2.4	2.6
AUG 25...	0855	2.6	178	8.3	12.5	10.0	81	24	5.1	3.9

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
MAR 22...	0.2	1.0	61	8.2	0.9	0.1	14	86	0.12	3.04
MAY 04...	0.2	0.7	43	5.4	0.7	<0.1	12	63	0.09	9.83
JUN 07...	0.2	0.6	38	4.2	0.3	<0.1	12	56	0.08	2.74
AUG 25...	0.2	1.0	82	9.1	0.5	0.1	10	103	0.14	0.72

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
MAR 22...	0.02	0.10	<0.01	--	<0.2	<0.01	0.01	3.5	3.0
MAY 04...	0.01	0.07	0.04	0.26	0.3	0.02	<0.01	7.1	6.7
JUN 07...	<0.01	<0.05	0.01	0.19	0.2	<0.01	<0.01	5.6	5.0
AUG 25...	<0.01	0.05	0.01	--	<0.2	<0.01	0.01	2.4	2.2

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
MAR 22...	--	--	--	--	20	--	--	--	--	--	--
MAY 04...	--	--	--	--	<10	--	--	--	--	--	--
JUN 07...	100	<1	<100	<10	10	<10	<1	1	<1	<1	410
AUG 25...	--	--	--	--	20	--	--	--	--	--	--

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
MAR 22...	250	--	--	--	--	--	--	--	--	--
MAY 04...	360	--	--	--	--	--	--	--	--	--
JUN 07...	190	<1	20	<0.1	<1	<1	<1	<1	50	<10
AUG 25...	7	--	--	--	--	--	--	--	--	--

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	1155	2.1	177	8.0	APR 12...	1055	6.0	149	4.0
NOV 16...	1105	6.6	137	1.0	MAY 11...	1315	117	59	8.0
JAN 12...	1140	8.7	132	1.0	JUL 06...	0927	1.5	183	11.0
MAR 02...	1115	8.6	137	2.0	AUG 09...	1315	2.8	183	14.0

09060770 ROCK CREEK AT MCCOY, CO

LOCATION.--Lat 39°54'44", long 106°43'30", in SE¹/4NE¹/4 sec.6, T.2 S., R.83 W., Eagle County, Hydrologic Unit 14010001, on right bank 1,900 ft downstream from bridge on State Highway 131 and 0.25 mi south of McCoy.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1982 to September 1983 (measurements only), October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,660 ft above sea level, from topographic map. Prior to Oct. 1, 1989, at datum 1.0 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 3 to Feb. 24. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of approximately 5,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	24	17	10	9.0	21	27	100	48	2.7	2.8	5.3
2	14	24	17	11	9.5	21	34	95	42	2.3	4.1	6.2
3	12	23	17	11	10	21	36	99	35	5.9	4.9	6.8
4	10	21	17	12	11	21	46	118	29	7.1	5.4	6.8
5	9.8	19	16	12	12	22	38	121	24	3.5	5.6	6.5
6	9.2	19	16	12	12	22	34	132	20	3.2	5.1	6.4
7	10	19	16	11	13	22	31	143	15	7.2	4.6	6.5
8	17	18	16	11	13	21	27	147	14	7.3	3.4	6.2
9	16	17	15	10	14	22	29	154	14	8.7	3.8	5.8
10	17	16	15	10	14	24	30	160	14	7.8	5.0	5.9
11	16	16	15	9.5	15	22	33	165	11	6.0	4.5	5.6
12	17	17	14	10	15	22	26	188	9.7	6.9	4.8	6.0
13	18	18	14	10	15	22	35	176	8.5	7.3	4.7	6.4
14	17	18	14	11	14	22	61	193	5.2	6.0	4.7	6.7
15	16	16	14	11	14	23	70	180	2.9	5.0	3.1	6.9
16	18	15	14	11	15	24	77	161	2.0	4.9	1.9	6.5
17	18	15	13	11	16	27	95	162	1.8	4.3	1.9	6.2
18	19	16	13	11	16	28	113	150	1.5	8.5	2.0	5.8
19	20	16	12	11	17	31	119	137	2.2	7.4	2.3	5.6
20	26	15	12	11	17	37	133	129	9.0	7.0	2.7	6.4
21	25	15	12	11	17	42	150	113	28	5.8	2.9	7.1
22	24	16	12	11	17	42	179	103	22	5.5	2.9	7.6
23	24	17	12	11	18	45	199	93	27	8.6	2.2	8.0
24	24	17	12	11	19	39	192	85	17	9.9	2.7	8.7
25	23	16	12	11	20	36	175	75	13	8.1	4.9	8.4
26	23	15	12	11	21	32	138	80	9.3	6.0	4.9	6.2
27	21	14	13	11	21	27	122	69	6.7	5.2	4.1	4.7
28	21	14	13	10	21	30	112	68	5.7	4.8	5.2	3.9
29	23	16	12	10	---	27	109	72	5.4	3.3	5.7	5.0
30	19	17	11	9.5	---	27	108	55	3.8	2.7	5.6	7.2
31	20	---	10	8.5	---	26	---	48	---	2.2	5.3	---
TOTAL	562.0	519	428	331.5	425.5	848	2578	3771	446.7	181.1	123.7	191.3
MEAN	18.1	17.3	13.8	10.7	15.2	27.4	85.9	122	14.9	5.84	3.99	6.38
MAX	26	24	17	12	21	45	199	193	48	9.9	5.7	8.7
MIN	9.2	14	10	8.5	9.0	21	26	48	1.5	2.2	1.9	3.9
AC-FT	1110	1030	849	658	844	1680	5110	7480	886	359	245	379

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	MEAN	26.2	28.5	23.5	21.8	23.2	33.1	132	295	105	26.7	19.3	19.2
	MAX	50.0	46.0	38.8	31.1	35.8	68.5	272	618	299	72.1	59.0	48.2
	(WY)	1987	1987	1986	1986	1986	1986	1986	1984	1984	1984	1984	1984
	MIN	11.0	17.3	13.8	10.7	15.2	19.1	57.0	89.3	14.9	5.84	3.99	5.93
	(WY)	1993	1994	1994	1994	1994	1991	1993	1990	1994	1994	1994	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1984 - 1994

ANNUAL TOTAL	22439.2	10405.8	
ANNUAL MEAN	61.5	28.5	63.0
HIGHEST ANNUAL MEAN			115
LOWEST ANNUAL MEAN			28.5
HIGHEST DAILY MEAN	714	May 21	1270
LOWEST DAILY MEAN	3.9	Jul 21	1.5
ANNUAL SEVEN-DAY MINIMUM	4.4	Jul 28	2.4
INSTANTANEOUS PEAK FLOW			235
INSTANTANEOUS PEAK STAGE			a 2.73
ANNUAL RUNOFF (AC-FT)	44510	20640	45650
10 PERCENT EXCEEDS	201	94	150
50 PERCENT EXCEEDS	17	15	26
90 PERCENT EXCEEDS	11	4.8	11

a-Maximum gage height, 3.26 ft, Feb 2, backwater from ice.

b-Datum then in use, from outside high-water mark.

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'20", long 106°19'23", in SE¹/4SW¹/4 sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.15 mi upstream from mouth and 2.25 mi east of Red Cliff.

DRAINAGE AREA.--9.53 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,280 ft above sea level, from topographic map. Prior to Aug. 7, 1992, at site 0.25 mile upstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 22 to Apr. 14. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.2	2.1	1.7	1.2	1.5	1.2	2.7	32	15	5.1	3.0
2	3.4	2.3	2.0	1.9	1.2	1.4	1.3	2.7	37	14	4.9	4.7
3	3.3	2.4	2.0	2.0	1.3	1.4	1.4	2.8	40	14	4.7	3.2
4	3.4	2.4	1.9	2.0	1.4	1.4	1.4	2.8	43	13	4.4	2.9
5	3.5	2.3	1.8	2.0	1.5	1.5	1.5	3.4	44	12	4.3	2.7
6	3.5	2.2	1.9	2.0	1.6	1.5	1.5	4.3	45	11	4.2	2.6
7	3.6	2.1	1.9	2.0	1.6	1.5	1.4	5.0	44	11	4.1	2.5
8	3.7	2.1	1.9	1.9	1.6	1.5	1.4	5.7	43	10	4.0	2.5
9	3.5	2.0	1.9	1.9	1.6	1.4	1.5	6.3	41	9.7	4.0	2.5
10	3.5	2.0	1.8	1.8	1.5	1.3	1.5	6.6	39	9.0	3.9	2.5
11	3.3	2.1	1.8	1.8	1.5	1.3	1.4	7.4	37	8.6	3.7	2.4
12	3.5	2.2	1.8	1.9	1.5	1.3	1.3	9.2	36	8.3	3.8	2.5
13	3.3	2.3	1.8	1.9	1.4	1.3	1.3	10	35	7.9	3.8	2.6
14	3.3	2.2	1.6	1.7	1.4	1.3	1.3	11	34	7.7	3.7	2.6
15	3.4	2.1	1.6	1.7	1.5	1.4	1.3	11	32	7.7	3.5	2.5
16	3.5	2.0	1.5	1.6	1.5	1.4	1.7	11	31	7.3	3.4	2.4
17	3.4	2.0	1.5	1.6	1.6	1.5	2.0	13	29	6.9	3.3	2.4
18	3.4	2.0	1.5	1.6	1.6	1.6	2.2	14	27	6.7	3.4	2.4
19	3.1	2.0	1.5	1.6	1.5	1.6	2.4	15	26	6.5	4.4	2.6
20	3.1	1.9	1.4	1.5	1.5	1.6	2.4	16	26	6.3	3.8	2.6
21	2.5	1.9	1.4	1.5	1.5	1.6	2.6	17	24	6.1	3.3	2.7
22	2.4	2.0	1.5	1.5	1.5	1.6	3.0	18	24	5.9	3.3	2.5
23	2.4	2.1	1.5	1.5	1.5	1.6	3.5	18	22	5.9	3.0	2.4
24	2.4	2.2	1.5	1.5	1.5	1.6	3.9	19	20	5.9	2.9	2.4
25	2.3	2.0	1.6	1.6	1.5	1.6	3.8	19	20	5.7	2.9	2.4
26	2.3	1.8	1.9	1.6	1.6	1.6	3.4	20	19	5.5	2.7	2.3
27	2.3	1.7	2.1	1.5	1.5	1.5	3.1	21	18	5.3	2.7	2.2
28	2.3	1.7	2.2	1.4	1.6	1.4	3.1	22	17	5.1	3.0	2.1
29	2.3	2.0	2.2	1.4	---	1.3	2.9	23	16	5.2	2.9	2.1
30	2.3	2.1	2.0	1.2	---	1.2	2.8	25	15	5.2	2.8	2.3
31	2.2	---	1.8	1.1	---	1.2	---	28	---	4.8	2.8	---
TOTAL	93.9	62.3	54.9	51.9	41.7	44.9	63.5	389.9	916	253.2	112.7	77.5
MEAN	3.03	2.08	1.77	1.67	1.49	1.45	2.12	12.6	30.5	8.17	3.64	2.58
MAX	3.7	2.4	2.2	2.0	1.6	1.6	3.9	28	45	15	5.1	4.7
MIN	2.2	1.7	1.4	1.1	1.2	1.2	1.2	2.7	15	4.8	2.7	2.1
AC-FT	186	124	109	103	83	89	126	773	1820	502	224	154

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	2.77	1.94	1.56	1.31	1.21	1.30	2.12	12.3	45.0	20.6	6.77	3.82
MAX	5.02	2.86	2.48	1.95	1.80	2.28	4.66	34.4	90.2	46.3	17.4	9.57
(WY)	1985	1985	1985	1985	1985	1985	1985	1984	1984	1983	1984	1984
MIN	1.65	1.27	1.06	.87	.45	.80	1.13	5.33	16.7	5.13	2.71	2.16
(WY)	1989	1970	1989	1992	1967	1965	1968	1981	1977	1977	1977	1977

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1965 - 1994

ANNUAL TOTAL	4150.3	2162.4	
ANNUAL MEAN	11.4	5.92	8.40
HIGHEST ANNUAL MEAN			17.4
LOWEST ANNUAL MEAN			3.61
HIGHEST DAILY MEAN	112	45	140
LOWEST DAILY MEAN	^a 1.0	1.1	.30
ANNUAL SEVEN-DAY MINIMUM	1.0	1.3	.40
INSTANTANEOUS PEAK FLOW		47	^b 155
INSTANTANEOUS PEAK STAGE		2.12	^b 3.61
ANNUAL RUNOFF (AC-FT)	8230	4290	6080
10 PERCENT EXCEEDS	36	18	24
50 PERCENT EXCEEDS	2.3	2.4	2.4
90 PERCENT EXCEEDS	1.2	1.4	1.1

a-Also occurred Mar 4-8, and Mar 24.

b-Site and datum then in use.

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¹/4SW¹/4 sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Red Cliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.8 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,918 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 28 to Apr. 26, Apr. 28-29, and July 13 to Aug. 7. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	4.7	4.8	3.2	2.5	3.4	3.6	8.9	94	26	7.5	6.4
2	6.5	4.9	4.8	3.3	2.8	3.4	3.7	8.7	92	26	7.6	10
3	6.5	5.0	4.7	3.3	3.0	3.5	4.0	8.5	91	25	7.7	6.5
4	6.5	5.0	4.5	3.3	3.3	3.6	4.2	8.9	91	23	7.7	6.1
5	6.5	5.0	4.4	3.3	3.5	3.7	4.3	12	88	22	7.8	5.7
6	6.4	5.0	4.4	3.3	3.5	3.7	4.2	17	87	21	7.6	5.5
7	6.8	4.7	4.3	3.2	3.5	3.7	4.0	21	80	20	7.2	5.4
8	6.9	4.6	4.3	3.2	3.5	3.7	4.0	22	74	19	6.8	5.3
9	6.6	4.6	4.2	3.1	3.5	3.6	4.1	23	76	18	7.3	5.4
10	6.6	4.5	4.2	3.1	3.4	3.5	4.0	23	85	18	7.2	5.4
11	6.4	4.6	4.0	3.1	3.4	3.5	3.5	24	76	17	6.7	5.2
12	6.5	4.9	4.0	3.2	3.3	3.5	3.2	28	70	16	6.7	5.4
13	6.4	5.0	4.0	3.6	3.0	3.5	3.2	32	67	14	6.8	5.7
14	6.3	5.0	3.8	3.6	3.0	3.5	3.5	35	65	13	6.7	5.6
15	6.6	4.8	3.6	3.5	3.3	3.6	4.0	37	61	12	6.3	5.4
16	6.5	4.5	3.5	3.5	3.5	3.7	4.5	39	57	12	6.1	5.1
17	6.4	4.9	3.5	3.5	3.5	3.8	5.0	51	56	11	6.2	5.0
18	6.5	4.9	3.4	3.4	3.4	3.8	5.5	65	53	11	6.4	4.9
19	6.0	4.7	3.2	3.4	3.3	3.9	6.6	70	49	10	9.6	5.1
20	6.0	4.6	3.0	3.4	3.2	4.0	8.0	70	49	10	7.8	5.3
21	6.0	4.7	3.0	3.4	3.2	4.1	9.0	78	46	10	6.8	5.2
22	5.9	4.8	3.0	3.4	3.2	4.2	10	77	46	9.8	6.6	4.6
23	5.7	5.0	3.0	3.4	3.3	4.3	12	76	41	9.4	6.3	4.4
24	5.7	5.0	3.1	3.5	3.4	4.3	15	71	37	9.0	6.2	4.2
25	5.7	4.8	3.2	3.5	3.5	4.2	16	73	35	8.7	6.1	4.2
26	5.2	4.5	3.4	3.3	3.5	4.0	14	72	33	8.6	6.0	4.2
27	5.1	4.2	3.7	3.0	3.5	3.7	12	71	31	8.7	5.9	4.1
28	4.8	4.2	3.8	2.8	3.5	3.6	11	73	30	8.5	6.4	4.1
29	4.6	4.5	3.7	2.6	---	3.5	10	77	29	8.4	6.3	4.0
30	4.5	4.8	3.3	2.5	---	3.5	9.5	82	28	8.0	6.1	4.7
31	4.5	---	3.2	2.4	---	3.6	---	96	---	7.6	6.0	---
TOTAL	187.1	142.4	117.0	100.3	92.5	115.6	205.6	1450.0	1817	440.7	212.4	158.1
MEAN	6.04	4.75	3.77	3.24	3.30	3.73	6.85	46.8	60.6	14.2	6.85	5.27
MAX	6.9	5.0	4.8	3.6	3.5	4.3	16	96	94	26	9.6	10
MIN	4.5	4.2	3.0	2.4	2.5	3.4	3.2	8.5	28	7.6	5.9	4.0
AC-FT	371	282	232	199	183	229	408	2880	3600	874	421	314

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	MEAN	6.20	4.63	3.65	3.15	2.93	3.45	7.60	47.3	117	46.1	13.8	7.96
MAX	12.1	9.19	5.76	4.96	4.39	6.36	23.1	103	274	123	39.1	19.8	
(WY)	1985	1985	1985	1985	1985	1985	1985	1984	1984	1984	1984	1984	
MIN	3.77	2.84	2.68	1.92	1.00	2.10	2.66	21.5	40.9	11.0	6.34	4.23	
(WY)	1978	1978	1982	1987	1964	1981	1973	1968	1977	1977	1977	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

ANNUAL TOTAL	10330.3	5038.7	22.0	
ANNUAL MEAN	28.3	13.8	49.4	1984
HIGHEST ANNUAL MEAN			9.46	1977
LOWEST ANNUAL MEAN			a 1.0	Jan 21 1964
HIGHEST DAILY MEAN	214	Jun 28	415	Jun 17 1965
LOWEST DAILY MEAN	2.7	Mar 7	b 1.0	Jan 21 1964
ANNUAL SEVEN-DAY MINIMUM	2.8	Mar 2	c 2.87	Jun 8 1985
INSTANTANEOUS PEAK FLOW			556	
INSTANTANEOUS PEAK STAGE			2.13	May 31
ANNUAL RUNOFF (AC-FT)	20490	9990	15960	
10 PERCENT EXCEEDS	106	46	69	
50 PERCENT EXCEEDS	5.2	5.0	5.8	
90 PERCENT EXCEEDS	3.3	3.3	2.8	

a-Also occurred Jan 21 to Feb 29, 1964.

b-From rating curve extended above 325 ft³/s.

c-Maximum gage height for period of record, 3.22 ft, Jun 24, 1983, backwater from debris.

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.39 mi².

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,980 ft, above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 19 to May 1. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.5	2.0	.70	.70	.70	1.1	5.6	40	23	6.6	2.5
2	2.8	3.5	2.0	.80	.70	.80	1.2	5.3	30	22	7.0	8.1
3	2.7	4.0	2.0	.80	.70	.80	1.3	4.5	29	21	7.6	5.9
4	2.7	4.0	1.5	.80	.70	.80	1.4	4.6	30	19	6.6	4.7
5	2.7	3.5	1.5	.80	.70	.80	1.4	6.3	25	17	6.1	3.8
6	2.6	3.0	1.5	.80	.70	.80	1.3	9.1	21	15	5.8	3.1
7	2.8	3.0	1.5	.80	.70	.80	1.3	11	18	13	5.3	2.6
8	3.6	2.5	1.5	.80	.70	.80	1.2	11	15	10	4.9	2.4
9	3.6	2.5	1.5	.80	.70	.80	1.2	11	13	11	5.1	2.2
10	4.4	2.5	1.5	.80	.70	.80	1.2	10	14	12	5.4	2.1
11	4.3	3.0	1.5	.80	.70	.80	1.2	13	14	11	5.0	1.8
12	4.1	3.0	1.0	.80	.70	.80	1.2	16	15	12	5.2	2.1
13	4.0	2.5	1.0	.90	.70	.90	1.3	15	16	10	6.3	2.7
14	3.8	2.5	1.0	.90	.70	.90	1.5	15	14	9.9	5.6	2.7
15	4.2	2.5	1.0	.80	.70	.90	1.9	15	12	10	4.6	2.2
16	5.0	2.0	1.0	.80	.70	.90	2.3	18	12	9.5	4.2	2.0
17	4.8	2.0	1.0	.80	.70	.90	2.6	21	11	9.6	3.9	1.7
18	4.8	2.0	1.0	.80	.70	.90	3.0	19	11	9.3	3.6	1.7
19	5.2	2.0	1.0	.80	.70	1.0	3.5	22	11	9.1	4.3	1.6
20	4.0	2.0	1.0	.80	.70	1.0	4.0	22	12	9.0	4.7	1.9
21	3.5	2.0	.90	.80	.70	1.0	5.0	18	11	8.6	3.8	2.8
22	3.0	2.0	.90	.70	.70	1.1	6.0	16	17	8.2	3.1	2.2
23	3.0	2.5	.90	.70	.70	1.2	7.0	17	12	8.0	2.7	1.8
24	3.5	2.5	.90	.70	.70	1.2	8.0	17	10	8.1	2.5	1.7
25	3.5	2.0	.90	.70	.70	1.1	9.0	17	9.9	7.8	2.4	1.5
26	3.5	2.0	1.0	.70	.70	1.1	8.0	17	9.3	7.5	2.2	1.4
27	3.5	1.5	1.0	.70	.70	1.0	7.0	18	8.9	7.2	2.1	1.3
28	3.0	1.5	1.0	.70	.70	.90	6.3	23	8.2	6.6	2.6	1.2
29	3.0	2.0	.90	.70	---	.90	6.0	23	13	6.4	3.0	1.1
30	3.5	2.0	.80	.70	---	.90	5.8	29	23	6.0	2.7	1.6
31	3.0	---	.70	.60	---	1.0	---	36	---	6.2	2.3	---
TOTAL	111.1	75.5	36.90	23.80	19.60	28.30	103.2	485.4	485.3	343.0	137.2	74.4
MEAN	3.58	2.52	1.19	.77	.70	.91	3.44	15.7	16.2	11.1	4.43	2.48
MAX	5.2	4.0	2.0	.90	.70	1.2	9.0	36	40	23	7.6	8.1
MIN	2.6	1.5	.70	.60	.70	.70	1.1	4.5	8.2	6.0	2.1	1.1
AC-FT	220	150	73	47	39	56	205	963	963	680	272	148

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

	MEAN	2.89	1.72	1.03	.71	.62	.73	2.73	15.1	32.1	21.7	9.68	4.52
MAX	7.29	3.58	1.73	1.30	1.30	1.45	7.02	41.7	79.0	78.6	29.1	9.46	
(WY)	1985	1986	1986	1991	1991	1991	1974	1984	1984	1984	1983	1984	
MIN	.84	.61	.35	.31	.28	.37	.71	4.00	12.7	9.32	3.55	1.65	
(WY)	1980	1977	1977	1976	1977	1979	1983	1983	1977	1988	1977	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1972 - 1994

ANNUAL TOTAL	2906.78	1923.70	
ANNUAL MEAN	7.96	5.27	
HIGHEST ANNUAL MEAN			7.83
LOWEST ANNUAL MEAN			20.6
HIGHEST DAILY MEAN	59	Jun 14	4.35
LOWEST DAILY MEAN	.70	Dec 31	172
ANNUAL SEVEN-DAY MINIMUM	.90	Jan 24	a .24
INSTANTANEOUS PEAK FLOW			b .69
INSTANTANEOUS PEAK STAGE			c 300
ANNUAL RUNOFF (AC-FT)	5770	3820	d 3.19
10 PERCENT EXCEEDS	22	15	
50 PERCENT EXCEEDS	3.0	2.5	
90 PERCENT EXCEEDS	.95	.70	

a-Also occurred Feb 13, 1977.

b-Also occurred Jun 1.

c-From rating curve extended above 35 ft³/s.

d-Maximum gage height, 3.83 ft, Jul 30, 1983.

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft downstream from ford, at Gold Park Campground, 0.5 mi downstream from French Creek, and 8 mi southwest of Red Cliff.

DRAINAGE AREA.--36.0 mi².

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year. Statistical summary computed for 1973 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,200 ft above sea level, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft above sea level (river-profile survey).

REMARKS.--Estimated daily discharges: Oct. 27 to Apr. 28. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft, since June 7, 1966. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel since June 6, 1967. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	11	7.0	5.0	7.0	7.0	21	106	59	20	11
2	12	14	10	7.5	5.5	7.0	7.5	19	77	57	25	29
3	12	13	10	7.5	5.5	7.0	7.5	19	77	63	25	21
4	11	14	10	7.5	6.0	7.0	7.5	21	75	61	19	18
5	11	14	9.5	7.5	6.0	7.0	7.5	35	58	56	19	15
6	11	13	9.5	7.0	6.5	7.0	7.0	52	47	52	18	13
7	12	13	9.5	7.0	6.5	7.0	7.0	76	41	48	17	12
8	13	13	9.5	6.5	6.5	7.0	7.0	86	38	41	16	11
9	14	12	9.0	6.5	7.0	7.0	7.5	69	34	39	16	11
10	15	12	9.0	6.5	7.0	6.5	7.5	48	33	39	16	10
11	15	13	9.0	6.5	6.5	6.5	8.0	53	32	38	15	9.4
12	16	14	9.0	6.5	6.5	6.5	9.0	66	33	40	16	9.8
13	15	14	8.5	6.5	6.5	7.0	9.5	74	34	37	20	14
14	15	13	8.0	7.0	6.0	7.0	10	108	30	35	17	22
15	16	13	8.0	7.0	6.0	7.0	11	106	28	35	15	21
16	18	12	7.5	7.0	6.0	7.5	12	118	26	33	14	20
17	17	13	7.0	7.0	6.5	7.5	13	140	25	32	13	20
18	18	13	6.5	7.0	6.5	7.5	15	105	27	30	13	19
19	16	12	6.0	7.0	6.5	7.5	17	78	27	29	17	19
20	16	12	6.0	7.0	6.5	8.0	19	93	32	29	17	17
21	17	13	6.0	7.0	6.5	8.0	21	69	39	28	15	12
22	15	13	6.5	7.0	6.5	8.0	24	56	35	26	14	10
23	15	13	6.5	7.0	6.5	8.0	28	54	30	25	12	9.3
24	15	12	6.5	6.5	6.5	7.5	32	57	25	25	11	8.8
25	15	12	7.0	6.5	6.5	7.5	35	51	23	24	11	8.3
26	14	11	7.0	6.0	7.0	7.5	33	52	22	22	10	8.1
27	13	12	7.0	6.0	7.0	7.0	30	50	24	21	9.8	7.7
28	14	12	7.0	5.5	7.0	7.0	27	68	29	19	11	7.5
29	13	12	7.0	5.0	---	7.0	23	72	34	18	12	7.2
30	12	11	7.0	5.0	---	7.0	23	77	60	17	12	8.0
31	12	---	7.0	4.5	---	7.0	---	94	---	17	11	---
TOTAL	440	381	247.0	205.0	178.5	223.0	472.5	2087	1201	1095	476.8	409.1
MEAN	14.2	12.7	7.97	6.61	6.37	7.19	15.7	67.3	40.0	35.3	15.4	13.6
MAX	18	14	11	7.5	7.0	8.0	35	140	106	63	25	29
MIN	11	11	6.0	4.5	5.0	6.5	7.0	19	22	17	9.8	7.2
AC-FT	873	756	490	407	354	442	937	4140	2380	2170	946	811

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	13.8	10.0	7.50	6.00	5.67	6.58	15.0	65.7	93.4	57.4	31.2	16.6										
MAX	31.3	15.2	13.8	10.9	10.3	12.4	33.8	211	310	239	121	34.8										
(WY)	1985	1991	1986	1986	1986	1989	1989	1984	1984	1984	1983	1984										
MIN	6.15	4.37	2.78	2.16	1.98	2.56	5.50	29.7	38.0	24.4	12.9	8.36										
(WY)	1990	1990	1976	1976	1976	1976	1983	1977	1992	1988	1977	1977										

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1973 - 1994
ANNUAL TOTAL	11578.0	7415.9	
ANNUAL MEAN	31.7	20.3	a 27.5
HIGHEST ANNUAL MEAN			79.2
LOWEST ANNUAL MEAN			15.3
HIGHEST DAILY MEAN	203	May 27	b 602
LOWEST DAILY MEAN	c 6.0	Dec 19	1.8
ANNUAL SEVEN-DAY MINIMUM	6.3	Dec 18	d 930
INSTANTANEOUS PEAK FLOW			e 4.91
INSTANTANEOUS PEAK STAGE			f 6.21
INSTANTANEOUS LOW FLOW			1.8
ANNUAL RUNOFF (AC-FT)	22960	14710	19930
10 PERCENT EXCEEDS	90	50	61
50 PERCENT EXCEEDS	13	12	12
90 PERCENT EXCEEDS	8.1	6.5	4.5

a-Average discharge for 7 years (water years 1948-54), 63.4 ft³/s, 45,930 acre-ft/yr, prior to diversion through Homestake Tunnel.

b-Maximum daily discharge for period of record, 755 ft³/s, Jun 21, 1951.

c-Also occurred Dec 20-21.

d-Maximum discharge and stage for period of record, 1080 ft³/s, Jun 13, 1953, gage height, 6.84 ft, site and datum then in use, from rating curve extended above 700 ft³/s.

e-Maximum gage height, 4.92 ft, Oct 30, backwater from ice.

f-Maximum gage height for statistical period, 6.31 ft, Apr 5, 1978, backwater from ice.

EAGLE RIVER BASIN

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¹/4NE¹/4 sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.2 mi².

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916. Statistical summary computed for 1967 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft above sea level (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Estimated daily discharges: Oct. 28 to Apr. 28. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions upstream from station through Homestake Tunnel (see elsewhere in this report) since June 6, 1967. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	12	9.5	7.0	9.0	8.5	47	162	73	27	19
2	14	18	12	9.5	7.5	8.5	9.0	46	140	72	37	65
3	14	19	11	9.5	7.5	8.5	9.0	46	119	74	44	51
4	14	19	11	9.5	8.0	8.5	9.0	48	132	71	31	39
5	14	19	11	9.5	8.5	8.5	9.0	64	109	66	26	29
6	13	19	11	9.5	8.5	8.5	9.0	91	93	61	28	21
7	14	19	11	9.0	8.5	8.5	9.0	125	81	57	24	18
8	17	18	11	9.0	8.5	9.0	9.0	138	75	49	21	18
9	17	18	10	9.0	8.5	9.0	9.0	127	67	44	22	17
10	21	17	10	9.0	8.5	8.5	9.0	93	63	43	25	17
11	22	17	10	9.0	8.5	8.5	8.5	101	61	42	22	15
12	24	16	10	8.5	8.5	8.5	8.5	118	62	42	19	16
13	24	15	10	8.0	8.0	8.5	8.5	128	62	41	32	20
14	22	15	10	9.0	7.5	9.0	9.0	167	60	43	29	45
15	24	14	10	9.5	8.0	9.0	9.5	159	53	47	22	45
16	27	12	10	9.0	8.5	9.0	10	163	52	47	21	44
17	29	12	10	9.0	8.5	9.0	11	200	50	45	17	42
18	29	12	9.5	9.0	9.0	9.5	12	181	50	43	16	42
19	25	12	9.5	9.0	9.0	9.5	16	139	51	43	25	42
20	25	12	9.0	9.0	8.5	10	24	164	52	43	32	42
21	22	11	9.0	9.0	8.5	9.5	32	128	84	42	25	28
22	24	11	8.5	9.0	8.0	9.5	38	105	65	39	23	22
23	23	12	8.5	9.0	7.5	9.5	44	97	66	37	18	18
24	21	12	8.5	9.0	7.5	9.5	50	102	52	39	16	16
25	22	12	8.5	9.0	8.0	9.5	55	92	47	38	15	14
26	23	11	9.0	9.0	8.0	9.5	62	96	43	33	14	13
27	17	11	9.0	8.5	8.5	9.0	60	90	39	30	13	12
28	17	10	9.5	8.0	9.0	8.5	58	112	45	29	14	11
29	18	10	9.5	7.5	---	8.5	51	138	41	27	20	9.4
30	18	12	10	7.0	---	8.5	49	123	68	25	22	12
31	18	---	9.5	6.5	---	8.5	---	140	---	23	18	---
TOTAL	627	433	307.5	273.5	230.0	277.0	705.5	3568	2144	1408	718	802.4
MEAN	20.2	14.4	9.92	8.82	8.21	8.94	23.5	115	71.5	45.4	23.2	26.7
MAX	29	19	12	9.5	9.0	10	62	200	162	74	44	65
MIN	13	10	8.5	6.5	7.0	8.5	8.5	46	39	23	13	9.4
AC-FT	1240	859	610	542	456	549	1400	7080	4250	2790	1420	1590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	19.0	13.5	10.4	8.35	8.18	10.5	35.7	123	142	70.0	35.0	22.1
MAX	45.1	31.0	19.7	15.9	14.0	22.5	73.1	358	439	313	136	42.3	
(WY)	1985	1985	1985	1969	1984	1989	1986	1984	1984	1984	1983	1984	
MIN	8.59	5.30	4.66	3.19	2.93	3.60	10.8	53.6	55.2	27.8	8.54	8.29	
(WY)	1976	1967	1989	1987	1987	1981	1983	1990	1992	1967	1990	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	19603.5	11493.9	
ANNUAL MEAN	53.7	31.5	a 41.6
HIGHEST ANNUAL MEAN			116
LOWEST ANNUAL MEAN			20.3
HIGHEST DAILY MEAN	333	May 27	831
LOWEST DAILY MEAN	7.5	Mar 3	b 1.8
ANNUAL SEVEN-DAY MINIMUM	8.2	Mar 1	7.3
INSTANTANEOUS PEAK FLOW			244
INSTANTANEOUS PEAK STAGE			2.86
ANNUAL RUNOFF (AC-FT)	38880	22800	30130
10 PERCENT EXCEEDS	171	73	110
50 PERCENT EXCEEDS	19	17	17
90 PERCENT EXCEEDS	9.5	8.5	6.0

a-Average discharge for 30 years (water years 1911-18, 1945-66), 86.6 ft³/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel.

b-Minimum observed for period of record, 0.60 ft³/s, Jan 25, 1915 (discharge measurement).

c-Maximum discharge and stage for period of record, 1300 ft³/s, Jun 24, 1918, gage height, 6.20 ft, site and datum then in use.

09064600 EAGLE RIVER NEAR MINTURN, CO

LOCATION.--Lat 39°33'14", long 106°24'07", in SW¹/4SE¹/4 of unsurveyed sec. T.6 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on left bank 500 ft upstream from U.S. Highway 24 bridge and 2.5 miles southeast of White River National Forest Headquarters in Minturn.

DRAINAGE AREA.--186 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 8,078.37 ft above sea level, from levels by private engineering firm.

REMARKS.--Estimated daily discharges: Nov. 15 to Apr. 14. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz ditches. Transmountain diversion from Robinson Reservoir, capacity 2,520 acre-ft, for use in Tenmile creek basin. Several small diversions for irrigation upstream from station. No regulation. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	62	39	24	21	24	30	104	543	168	56	40
2	38	51	39	26	21	25	32	100	522	164	68	89
3	38	50	37	26	23	26	33	102	492	169	73	72
4	38	52	35	26	24	25	33	106	504	157	61	59
5	37	49	36	27	27	24	34	143	472	145	54	49
6	37	49	36	27	29	24	33	216	439	134	55	42
7	42	54	37	27	28	24	31	287	403	128	50	39
8	48	51	37	26	28	24	32	320	371	116	47	36
9	47	44	37	26	28	24	32	323	337	106	51	34
10	50	42	36	25	28	23	32	271	312	103	56	35
11	49	50	35	24	27	23	31	296	298	100	49	33
12	52	53	36	24	27	23	32	339	291	98	46	33
13	51	52	31	25	25	24	33	364	282	96	59	37
14	50	51	25	27	26	25	33	416	268	91	57	47
15	55	43	24	26	25	26	35	414	245	91	54	48
16	61	42	26	25	27	27	47	423	232	90	46	46
17	60	41	32	26	28	30	69	491	220	84	45	43
18	62	41	25	26	29	30	84	503	219	79	43	43
19	54	43	25	27	27	33	98	467	212	78	56	44
20	52	40	27	27	26	36	113	508	219	73	63	44
21	47	39	24	27	26	35	140	463	264	71	51	43
22	50	43	23	27	25	34	186	428	246	67	51	37
23	48	45	24	28	23	34	232	412	235	66	44	33
24	46	45	26	28	22	33	312	411	196	68	40	31
25	45	42	25	28	23	34	297	395	177	66	38	29
26	47	38	23	28	25	33	183	400	165	62	36	28
27	36	36	21	28	26	32	143	385	153	58	34	26
28	49	33	27	27	25	30	122	413	152	55	37	25
29	55	35	28	26	---	29	114	467	142	53	42	25
30	42	38	27	22	---	31	109	452	166	52	43	27
31	60	---	25	21	---	30	---	497	---	51	39	---
TOTAL	1485	1354	928	807	719	875	2735	10916	8777	2939	1544	1217
MEAN	47.9	45.1	29.9	26.0	25.7	28.2	91.2	352	293	94.8	49.8	40.6
MAX	62	62	39	28	29	36	312	508	543	169	73	89
MIN	36	33	21	21	21	23	30	100	142	51	34	25
AC-FT	2950	2690	1840	1600	1430	1740	5420	21650	17410	5830	3060	2410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	MEAN	39.3	37.6	28.5	26.0	24.0	27.5	78.2	367	430	145	65.6	50.4
MAX	50.5	45.1	32.9	29.1	29.9	32.8	108	582	749	265	88.6	62.3	
(WY)	1991	1994	1992	1991	1993	1993	1992	1993	1993	1993	1993	1993	1993
MIN	27.6	25.3	21.2	17.9	18.4	23.5	50.4	219	263	94.8	49.8	40.6	
(WY)	1990	1990	1990	1990	1990	1991	1991	1990	1992	1994	1990	1994	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1990 - 1994

ANNUAL TOTAL	61780	34296	110	
ANNUAL MEAN	169	94.0		
HIGHEST ANNUAL MEAN			168	1993
LOWEST ANNUAL MEAN			87.9	1990
HIGHEST DAILY MEAN	1030	543	1030	Jun 1 1993
LOWEST DAILY MEAN	21	21	13	Jan 4 1990
ANNUAL SEVEN-DAY MINIMUM	24	23	16	Jan 4 1990
INSTANTANEOUS PEAK FLOW		615	1120	Jun 1 1993
INSTANTANEOUS PEAK STAGE		5.07	5.92	Jun 1 1993
ANNUAL RUNOFF (AC-FT)	122500	68030	79790	
10 PERCENT EXCEEDS	675	293	311	
50 PERCENT EXCEEDS	48	43	43	
90 PERCENT EXCEEDS	28	25	23	

a-Also occurred Jan 31 to Feb 2.

EAGLE RIVER BASIN

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in SW¹/4SW¹/4 sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--34.2 mi².

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WDR CO-81-2: 1980 (M). WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,992 ft above sea level, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Feb. 4, Feb. 12-25, and Mar. 8 to Apr. 1. Records good except for estimated daily discharges, which are poor. Bolts ditch exports water upstream from station to tailings ponds and recreation lake along Eagle River. Diversion 0.5 mi upstream from station for water supply of school and for municipal supply of Minturn. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.0	6.0	4.5	3.0	1.4	4.0	37	336	83	24	18
2	10	8.0	5.5	4.5	3.0	1.5	4.4	34	325	79	31	47
3	10	7.5	5.5	4.5	2.5	1.9	4.9	34	283	83	34	45
4	9.7	7.5	5.0	4.0	2.5	2.3	5.7	34	287	76	29	37
5	9.5	7.0	5.0	4.0	2.7	2.7	5.2	49	282	65	23	29
6	8.6	6.5	5.0	4.0	2.3	1.6	6.0	84	260	56	23	23
7	10	6.0	5.0	4.0	1.6	1.5	5.4	106	238	51	20	19
8	13	5.5	5.0	4.0	2.3	1.5	6.6	114	218	43	19	17
9	13	5.0	4.5	4.0	2.9	1.5	5.4	114	194	40	18	15
10	15	5.0	4.5	4.0	2.8	1.5	4.8	104	174	41	18	15
11	13	5.0	4.5	3.5	2.7	1.5	4.9	120	199	40	17	13
12	15	5.5	4.5	3.5	2.5	1.5	5.8	151	227	38	17	13
13	14	6.0	4.5	4.0	2.5	1.5	6.5	165	219	36	21	16
14	13	6.0	4.5	4.5	2.5	2.0	8.3	158	212	34	21	18
15	15	6.0	4.5	4.5	3.0	2.0	9.2	145	188	35	19	15
16	17	6.5	4.5	4.5	3.0	2.5	14	147	185	35	17	13
17	17	6.5	4.5	4.5	3.5	3.0	21	185	176	34	16	12
18	17	6.5	4.0	4.5	3.5	3.0	30	191	174	32	15	11
19	15	6.0	4.0	4.5	3.0	3.0	44	195	178	29	20	11
20	14	5.5	4.0	4.5	3.0	3.0	52	217	187	30	27	11
21	12	5.5	4.0	4.5	3.0	3.0	62	177	218	31	21	15
22	13	5.5	4.5	4.5	2.5	3.5	83	177	238	29	21	15
23	13	5.0	4.5	4.0	2.5	3.5	99	183	223	28	18	12
24	12	5.0	4.5	4.0	2.5	3.5	108	174	167	29	14	10
25	12	5.0	5.0	4.0	2.5	3.5	98	180	150	29	14	8.8
26	12	5.0	5.5	4.0	2.2	3.5	67	207	141	27	13	8.2
27	8.4	4.5	5.5	4.0	1.8	3.5	52	183	130	25	12	7.4
28	9.9	4.5	6.0	4.0	1.4	4.0	45	209	112	23	15	6.5
29	9.7	5.0	5.5	3.5	---	4.0	41	191	90	22	23	5.3
30	8.0	6.0	5.0	3.5	---	4.0	38	217	87	21	23	6.9
31	8.0	---	4.5	3.0	---	4.0	---	283	---	21	19	---
TOTAL	377.8	176.5	149.0	127.0	73.2	80.4	941.1	4565	6098	1245	622	493.1
MEAN	12.2	5.88	4.81	4.10	2.61	2.59	31.4	147	203	40.2	20.1	16.4
MAX	17	8.0	6.0	4.5	3.5	4.0	108	283	336	83	34	47
MIN	8.0	4.5	4.0	3.0	1.4	1.4	4.0	34	87	21	12	5.3
AC-FT	749	350	296	252	145	159	1870	9050	12100	2470	1230	978

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

	MEAN	13.0	6.89	3.98	2.76	2.61	3.45	21.3	120	251	132	42.3	21.5
MAX	49.5	15.6	8.99	5.09	6.19	9.42	57.6	221	360	355	122	65.0	
(WY)	1962	1962	1985	1986	1982	1986	1962	1970	1980	1957	1983	1961	
MIN	3.39	1.99	.99	.17	.48	1.09	6.35	59.5	134	38.5	14.4	6.68	
(WY)	1957	1957	1963	1963	1977	1977	1973	1968	1977	1977	1977	1974	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1957 - 1994

ANNUAL TOTAL	25176.1	14948.1	
ANNUAL MEAN	69.0	41.0	51.8
HIGHEST ANNUAL MEAN			83.2
LOWEST ANNUAL MEAN			25.4
HIGHEST DAILY MEAN	450	Jun 17	618
LOWEST DAILY MEAN	1.6	Mar 19	1.10
ANNUAL SEVEN-DAY MINIMUM	1.9	Mar 15	.13
INSTANTANEOUS PEAK FLOW			754
INSTANTANEOUS PEAK STAGE			5.45
ANNUAL RUNOFF (AC-FT)	49940	29650	37530
10 PERCENT EXCEEDS	272	174	175
50 PERCENT EXCEEDS	10	10	10
90 PERCENT EXCEEDS	3.9	3.0	2.1

a-Also occurred Mar 20-21.

b-Also occurred Mar 1.

c-Also occurred Dec 28-31, 1962, Jan 6-8, 11-15, 1963.

d-Maximum gage height, 6.14 ft, Aug 6, 1983.

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE¹/4NW¹/4 sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 10 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek, 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.4 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,600 ft above sea level, from topographic map. Oct. 1, 1947 to Sept. 30, 1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about 1200 ft upstream at different datums. See WDR CO-80-2, for history of changes prior to Oct. 1, 1980.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 19. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	6.4	3.8	2.5	2.7	3.7	2.6	13	180	47	10	7.0
2	6.1	6.4	3.2	2.3	2.7	3.5	2.8	12	177	45	9.9	27
3	5.9	6.4	3.2	2.5	2.7	3.3	3.0	12	170	42	9.4	17
4	5.8	5.8	3.2	2.5	2.7	3.2	3.2	13	173	37	8.8	13
5	5.7	5.8	3.2	2.5	2.7	2.9	3.0	20	165	34	8.4	11
6	5.6	5.6	3.2	2.5	2.7	2.9	2.9	35	157	31	8.1	9.3
7	6.7	5.4	3.2	2.5	2.7	2.9	3.0	52	146	28	7.7	8.4
8	7.9	5.4	3.2	2.5	2.7	2.9	3.1	59	137	24	7.6	7.6
9	7.7	5.4	3.2	2.5	2.7	2.9	3.0	63	126	23	8.1	7.3
10	7.3	5.0	3.2	2.6	2.9	2.8	3.0	59	119	22	13	7.5
11	7.7	5.0	3.2	2.7	2.9	2.5	3.0	75	123	21	9.4	6.6
12	7.8	4.8	3.2	2.7	2.9	2.5	3.0	97	118	19	8.8	6.6
13	7.8	4.5	3.2	2.7	2.9	2.5	3.3	94	118	18	9.4	7.2
14	7.9	3.8	3.2	2.7	3.0	2.5	3.7	88	119	17	9.0	7.2
15	8.4	3.8	3.2	2.7	3.0	2.6	4.5	90	115	17	8.1	6.5
16	8.4	3.8	2.9	2.7	3.0	2.7	7.0	100	109	16	7.7	6.0
17	8.1	3.8	2.9	2.7	3.0	2.7	10	120	104	15	7.8	5.4
18	8.3	3.8	2.9	2.7	3.2	2.6	12	127	108	14	7.9	5.2
19	7.6	3.8	2.9	2.7	3.2	2.9	18	131	109	13	15	4.9
20	7.4	3.8	2.9	2.7	3.2	3.0	22	140	108	13	16	5.1
21	7.1	3.8	2.9	2.7	3.2	2.7	29	134	99	13	11	8.7
22	7.4	3.8	2.9	2.7	3.2	2.8	42	129	116	12	10	7.7
23	7.3	3.8	2.9	2.7	3.4	3.0	51	125	102	12	8.9	6.4
24	7.5	3.8	2.7	2.7	3.4	2.6	57	113	88	14	8.2	5.8
25	7.5	3.8	2.6	2.7	3.4	2.5	46	119	82	12	7.6	5.3
26	7.6	3.8	2.6	2.7	3.5	2.4	32	124	76	11	7.0	4.8
27	6.7	3.8	2.6	2.7	3.6	2.6	24	117	70	11	6.6	4.3
28	7.6	3.8	2.6	2.7	3.7	3.0	19	128	62	10	7.1	4.1
29	7.0	3.8	2.5	2.7	---	2.4	15	132	56	9.9	7.3	3.9
30	7.0	3.8	2.5	2.7	---	2.9	14	162	51	9.6	7.1	4.4
31	6.6	---	2.5	2.7	---	2.6	---	173	---	9.6	6.5	---
TOTAL	223.6	136.5	92.4	81.6	84.9	87.0	445.1	2856	3483	620.1	277.4	231.2
MEAN	7.21	4.55	2.98	2.63	3.03	2.81	14.8	92.1	116	20.0	8.95	7.71
MAX	8.4	6.4	3.8	2.7	3.7	3.7	57	173	180	47	16	27
MIN	5.6	3.8	2.5	2.3	2.7	2.4	2.6	12	51	9.6	6.5	3.9
AC-FT	444	271	183	162	168	173	883	5660	6910	1230	550	459

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

	MEAN	7.25	4.93	3.70	3.17	3.04	3.60	11.8	68.4	153	68.4	19.9	9.51
MAX	19.8	15.3	9.23	9.75	10.6	12.6	22.5	121	245	198	83.7	22.9	
(WY)	1985	1985	1986	1986	1986	1985	1969	1974	1978	1983	1983	1984	
MIN	3.12	2.50	1.94	1.86	1.55	1.57	3.81	23.4	59.2	17.2	7.37	3.52	
(WY)	1976	1976	1964	1964	1977	1977	1973	1968	1954	1977	1954	1956	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1948 - 1994
ANNUAL TOTAL	13873.7	8618.8	
ANNUAL MEAN	38.0	23.6	29.7
HIGHEST ANNUAL MEAN			48.3
LOWEST ANNUAL MEAN			17.4
HIGHEST DAILY MEAN	234	180	455
LOWEST DAILY MEAN	2.1	2.3	1.2
ANNUAL SEVEN-DAY MINIMUM	2.2	2.5	1.3
INSTANTANEOUS PEAK FLOW		a 209	b 662
INSTANTANEOUS PEAK STAGE		a 3.28	c 2.60
ANNUAL RUNOFF (AC-FT)	27520	17100	21550
10 PERCENT EXCEEDS	147	103	98
50 PERCENT EXCEEDS	6.6	6.4	6.8
90 PERCENT EXCEEDS	2.3	2.7	2.4

a-Also occurred Jun 4.

b-From rating curve extended above 140 ft³/s.

c-Maximum gage height, 6.65 ft, Jun 18, 1951, datum then in use.

EAGLE RIVER BASIN

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION---Lat 39°35'47", long 106°15'52", T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA. - 12.6 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,150 ft above sea level, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 19. Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Natural regulation by two small recreation lakes upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.4	3.3	3.3	3.8	4.1	3.2	7.5	96	13	5.6	4.5
2	3.0	3.4	3.3	3.3	3.8	4.1	3.2	7.5	89	13	5.5	9.6
3	3.0	3.4	3.3	3.3	3.8	4.0	3.2	7.5	83	12	5.2	5.5
4	3.0	3.4	3.3	3.3	3.8	3.8	3.2	8.2	77	11	4.7	4.5
5	2.9	3.4	3.3	3.3	3.8	3.7	3.2	11	71	11	4.6	3.9
6	2.9	3.3	3.3	3.3	3.8	3.4	3.2	17	65	10	4.3	3.5
7	3.8	3.3	3.3	3.3	3.8	3.2	3.3	23	58	9.9	4.2	3.4
8	4.1	3.3	3.3	3.3	3.8	3.2	3.3	26	53	9.5	4.1	3.2
9	3.9	3.3	3.3	3.3	3.8	3.2	3.3	27	47	8.9	5.5	3.2
10	4.5	3.3	3.3	3.3	3.8	3.2	3.3	28	43	8.7	5.3	3.0
11	4.3	3.3	3.3	3.5	3.8	3.2	3.3	34	40	8.5	4.4	2.9
12	4.4	3.3	3.3	3.6	3.8	3.2	3.3	41	37	8.3	4.4	3.1
13	4.4	3.3	3.3	3.8	3.8	3.2	3.4	40	34	8.0	4.5	3.3
14	4.2	3.3	3.3	3.8	3.8	3.2	3.4	42	32	7.8	4.5	3.3
15	5.0	3.3	3.3	3.8	3.8	3.2	3.5	44	30	7.8	4.1	3.2
16	5.1	3.3	3.3	3.8	3.8	3.2	4.0	58	28	7.6	4.0	3.0
17	5.0	3.3	3.3	3.8	3.8	3.2	5.4	77	26	7.2	4.0	2.9
18	5.7	3.3	3.3	3.8	3.8	3.2	7.0	82	26	6.8	4.2	2.8
19	4.6	3.3	3.3	3.8	3.8	3.2	11	88	25	6.5	7.9	2.8
20	4.3	3.3	3.3	3.8	3.8	3.2	13	97	27	6.2	5.9	3.4
21	4.1	3.3	3.3	3.8	3.8	3.2	17	91	24	6.0	4.9	3.8
22	3.9	3.3	3.3	3.8	3.8	3.2	18	87	26	5.8	4.4	3.2
23	3.7	3.3	3.3	3.8	3.8	3.2	21	81	23	6.1	4.0	3.0
24	3.7	3.3	3.3	3.8	3.9	3.2	21	77	20	6.9	3.7	2.9
25	3.6	3.3	3.3	3.8	3.9	3.2	18	78	19	6.1	3.5	2.8
26	3.3	3.3	3.3	3.8	4.1	3.2	13	77	17	5.7	3.3	2.6
27	3.1	3.3	3.3	3.8	4.1	3.2	10	75	16	5.3	3.3	2.5
28	3.6	3.3	3.3	3.8	4.1	3.2	9.4	77	15	5.1	4.0	2.5
29	3.5	3.3	3.3	3.8	---	3.2	8.2	80	14	5.0	3.8	2.4
30	3.1	3.3	3.3	3.8	---	3.2	8.5	88	14	4.8	3.6	2.9
31	3.4	---	3.3	3.8	---	3.2	---	92	---	4.8	3.4	---
TOTAL	120.1	99.5	102.3	112.3	107.5	103.1	233.8	1668.7	1175	243.3	138.8	103.6
MEAN	3.87	3.32	3.30	3.62	3.84	3.33	7.79	53.8	39.2	7.85	4.48	3.45
MAX	5.7	3.4	3.3	3.8	4.1	4.1	21	97	96	13	7.9	9.6
MIN	2.9	3.3	3.3	3.3	3.8	3.2	3.2	7.5	14	4.8	3.3	2.4
AC-FT	238	197	203	223	213	204	464	3310	2330	483	275	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

MEAN	3.90	3.41	2.80	2.40	2.32	2.86	7.59	55.8	89.1	21.4	7.22	4.31
MAX	10.7	10.7	9.57	8.08	9.09	14.5	22.8	130	160	54.5	21.4	12.0
(WY)	1985	1985	1985	1986	1986	1986	1985	1948	1978	1984	1984	1984
MIN	1.90	1.84	1.35	1.01	.91	1.40	2.86	21.7	21.8	6.09	2.56	2.43
(WY)	1951	1964	1970	1979	1979	1971	1973	1968	1954	1954	1954	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1948 - 1994

ANNUAL TOTAL	8248.5		4208.0				
ANNUAL MEAN	22.6		11.5		16.9		
HIGHEST ANNUAL MEAN					30.3		1984
LOWEST ANNUAL MEAN					8.16		1954
HIGHEST DAILY MEAN	195	Jun 16	97	May 20	253 ^a		Jun 17 1965
LOWEST DAILY MEAN	1.7	Feb 4	2.4	Sep 29	.90		Feb 22 1968
ANNUAL SEVEN-DAY MINIMUM	1.8	Jan 29	2.7	Sep 24	.90		Feb 4 1979
INSTANTANEOUS PEAK FLOW			114	May 19	365 ^b		Jun 7 1952
INSTANTANEOUS PEAK STAGE			4.18	May 19	5.42		Jun 7 1952
INSTANTANEOUS LOW FLOW					.90		Feb 22 1968
ANNUAL RUNOFF (AC-FT)	16360		8350		12270		
10 PERCENT EXCEEDS	90		29		53		
50 PERCENT EXCEEDS	3.7		3.8		3.8		
90 PERCENT EXCEEDS	1.8		3.2		1.9		

a-Also occurred Jan 30, 1970, Feb 4 to Mar 6, 1979.

b-Maximum gage height, 6.00 ft, Mar 30, 1968, backwater from ice.

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N¹/₂ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.54 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,625 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Apr. 19, Sept. 12-13, 17-19, and Sept. 23-30. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.9	1.3	.80	.82	1.0	1.1	5.3	62	13	4.3	4.5
2	3.2	2.6	1.2	.70	.82	.94	1.1	5.1	59	12	4.1	3.9
3	3.3	2.4	1.2	.82	.82	.90	1.1	5.2	56	12	3.7	3.5
4	3.3	2.4	1.2	.82	.82	.80	1.1	5.5	57	11	3.6	3.2
5	3.3	2.3	1.2	.82	.82	.78	1.1	7.3	53	10	3.5	3.2
6	3.3	2.2	1.1	.82	.82	.72	1.1	13	51	9.7	3.3	3.0
7	3.4	2.0	1.1	.82	.82	.72	1.2	18	45	8.6	3.3	2.8
8	3.6	2.0	1.0	.82	.82	.72	1.2	21	40	7.6	3.1	2.7
9	3.6	2.0	1.0	.82	.82	.72	1.2	22	35	7.8	3.2	3.0
10	3.5	1.9	1.0	.82	.82	.72	1.2	20	32	7.8	3.2	2.8
11	3.6	1.7	1.0	.82	.82	.72	1.2	28	33	7.7	3.1	2.2
12	3.6	1.7	1.0	.82	.84	.80	1.2	37	32	7.3	3.2	2.2
13	3.6	1.7	.94	.82	.84	.80	1.2	35	32	6.8	3.8	2.2
14	3.5	1.7	.92	.82	.84	.80	1.2	28	32	6.5	3.7	3.0
15	3.7	1.7	.90	.82	.84	.80	1.2	27	31	6.2	3.1	3.0
16	3.9	1.7	.90	.82	.84	.80	2.0	34	30	5.7	2.7	2.3
17	3.9	1.6	.90	.82	.84	.80	3.2	45	28	5.4	3.0	2.0
18	3.9	1.6	.90	.82	.86	.80	4.5	46	28	5.3	3.1	2.0
19	3.0	1.5	.90	.82	.88	.90	7.0	45	28	5.2	4.2	2.0
20	2.9	1.5	.90	.82	.90	.96	7.8	48	25	5.5	4.2	2.3
21	3.2	1.5	.90	.82	.90	1.0	9.1	45	22	5.4	3.4	2.3
22	3.4	1.5	.90	.82	.90	1.0	14	43	34	5.0	3.3	2.4
23	3.6	1.5	.90	.82	.90	1.0	19	41	29	5.0	3.0	2.4
24	3.5	1.5	.84	.82	.90	1.0	21	33	24	5.6	2.8	2.1
25	3.5	1.5	.80	.82	.90	1.0	17	36	22	4.9	2.6	1.9
26	3.5	1.4	.80	.82	.94	1.0	13	40	20	4.8	2.6	1.9
27	3.4	1.3	.80	.82	.98	1.1	9.6	36	19	4.4	2.7	1.9
28	3.3	1.3	.80	.82	1.0	1.1	7.2	41	16	4.2	3.4	1.8
29	3.3	1.3	.80	.82	---	1.1	6.2	42	14	3.9	3.0	1.8
30	3.3	1.3	.80	.82	---	1.1	5.8	56	13	3.8	2.7	2.0
31	3.1	---	.80	.82	---	1.1	---	59	---	3.9	2.6	---
TOTAL	106.5	53.2	29.70	25.28	24.12	27.70	163.8	967.4	1002	212.0	101.5	76.3
MEAN	3.44	1.77	.96	.82	.86	.89	5.46	31.2	33.4	6.84	3.27	2.54
MAX	3.9	2.9	1.3	.82	1.0	1.1	21	59	62	13	4.3	4.5
MIN	2.9	1.3	.80	.70	.82	.72	1.1	5.1	13	3.8	2.6	1.8
AC-FT	211	106	59	50	48	55	325	1920	1990	421	201	151

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	MEAN	2.74	1.70	1.04	.85	.84	.97	4.01	24.3	49.2	22.3	7.31	3.64
MAX	8.03	4.65	2.53	2.04	2.54	2.97	10.0	52.5	85.2	61.2	22.6	9.94	
(WY)	1986	1985	1985	1986	1986	1986	1985	1984	1978	1983	1984	1984	
MIN	1.01	.84	.63	.45	.30	.32	.86	9.55	17.7	5.61	3.27	1.12	
(WY)	1964	1980	1977	1967	1964	1981	1964	1968	1966	1977	1994	1975	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

ANNUAL TOTAL	4870.16	2789.50	
ANNUAL MEAN	13.3	7.64	9.92
HIGHEST ANNUAL MEAN			18.6
LOWEST ANNUAL MEAN			5.15
HIGHEST DAILY MEAN	87 Jun 14	62 Jun 1	170 Jun 26 1983
LOWEST DAILY MEAN	.68 Mar 5	.70 Jan 2	a .10 Feb 8 1967
ANNUAL SEVEN-DAY MINIMUM	.71 Feb 27	.73 Mar 5	.20 Mar 4 1981
INSTANTANEOUS PEAK FLOW		76 Jun 1	b 338 Jun 8 1985
INSTANTANEOUS PEAK STAGE		3.62 Jun 1	c 4.10 Jun 8 1985
INSTANTANEOUS LOW FLOW			.10 Feb 8 1967
ANNUAL RUNOFF (AC-FT)	9660	5530	7190
10 PERCENT EXCEEDS	54	28	33
50 PERCENT EXCEEDS	3.3	2.4	2.3
90 PERCENT EXCEEDS	.80	.82	.60

a-Also occurred Jan 30, 1970.

b-From rating curve extended above 82 ft³/s.

c-Maximum gage height, 4.26 ft, Jun 8, 1985, backwater from debris.

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¹/₄SW¹/₄ sec.1, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.32 mi².

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water years 1965-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above sea level, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft lower, at site 300 ft downstream.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 1, Nov. 11-12, 14, 16-18, 20-21, and Nov. 25 to Apr. 19. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.6	2.0	1.4	1.4	2.2	1.6	6.3	55	14	5.2	4.1
2	2.7	3.5	1.9	1.1	1.4	2.1	1.7	5.9	56	13	5.1	12
3	2.7	3.5	1.8	1.3	1.4	2.0	1.8	5.8	52	14	4.8	8.3
4	2.7	3.2	1.8	1.3	1.4	1.9	1.9	5.6	54	12	4.5	7.4
5	2.7	3.2	1.8	1.3	1.4	1.8	1.8	7.9	50	11	4.3	6.2
6	2.7	3.1	1.8	1.3	1.5	1.7	1.8	12	47	10	4.1	5.5
7	3.3	3.0	1.8	1.3	1.5	1.5	1.8	16	42	9.3	3.9	4.9
8	3.8	3.0	1.8	1.4	1.5	1.4	1.9	18	38	8.4	3.7	4.5
9	3.6	3.0	1.8	1.4	1.6	1.3	1.8	20	35	8.4	3.9	4.2
10	3.5	2.9	1.8	1.5	1.7	1.4	1.8	21	33	8.3	3.9	4.1
11	3.5	2.8	1.8	1.5	1.7	1.3	1.8	27	33	8.1	3.6	3.8
12	3.5	2.7	1.8	1.5	1.7	1.2	1.8	34	33	7.8	3.6	3.8
13	3.7	2.6	1.8	1.5	1.7	1.2	1.9	32	33	7.6	4.8	4.1
14	3.7	2.3	1.8	1.5	1.8	1.2	2.1	26	34	7.4	4.4	4.0
15	3.9	2.1	1.8	1.5	1.8	1.3	2.7	26	33	7.2	3.9	3.7
16	4.1	2.1	1.8	1.4	1.8	1.4	3.4	33	31	6.9	3.7	3.3
17	3.8	2.0	1.7	1.3	1.8	1.6	4.0	44	30	6.6	3.9	3.1
18	4.0	2.0	1.7	1.3	1.9	1.5	5.2	44	29	6.5	3.7	3.0
19	3.9	2.0	1.7	1.3	1.9	1.6	7.2	44	30	6.4	6.0	2.9
20	3.8	2.0	1.7	1.3	1.9	1.8	8.0	48	28	6.2	6.1	3.1
21	3.8	1.9	1.7	1.3	1.9	1.6	10	46	27	6.0	5.0	4.6
22	4.0	1.9	1.7	1.4	1.9	1.7	18	41	42	5.9	4.8	3.9
23	4.1	1.9	1.7	1.4	2.0	1.8	20	37	34	5.7	4.3	3.5
24	4.4	1.9	1.7	1.4	2.0	1.6	20	32	28	6.6	4.0	2.9
25	4.6	1.9	1.5	1.3	2.0	1.5	16	35	25	5.9	3.8	2.7
26	4.5	2.0	1.5	1.3	2.1	1.4	12	37	24	5.5	3.5	2.7
27	4.2	2.0	1.5	1.3	2.2	1.5	9.8	35	21	5.3	3.4	2.5
28	4.1	2.0	1.5	1.3	2.2	1.9	8.2	38	17	5.1	4.3	2.5
29	3.8	2.0	1.4	1.3	---	1.4	7.4	40	15	4.9	4.3	2.5
30	3.8	2.0	1.4	1.3	---	1.7	6.9	52	14	4.9	3.8	2.9
31	3.7	---	1.4	1.4	---	1.6	---	53	---	4.6	3.4	---
TOTAL	113.3	74.1	52.9	42.1	49.1	49.1	184.3	922.5	1023	239.5	131.7	126.7
MEAN	3.65	2.47	1.71	1.36	1.75	1.58	6.14	29.8	34.1	7.73	4.25	4.22
MAX	4.6	3.6	2.0	1.5	2.2	2.2	20	53	56	14	6.1	12
MIN	2.7	1.9	1.4	1.1	1.4	1.2	1.6	5.6	14	4.6	3.4	2.5
AC-FT	225	147	105	84	97	97	366	1830	2030	475	261	251

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	3.95	2.49	1.77	1.42	1.33	1.42	4.04	24.2	53.1	29.1	9.55	5.10
MAX	9.43	3.84	3.28	3.84	3.94	3.85	6.98	44.8	101	94.5	31.1	11.2	
(WY)	1985	1982	1986	1986	1986	1985	1992	1974	1978	1984	1983	1984	
MIN	1.49	1.26	.94	.58	.70	.87	1.44	9.66	23.2	7.73	4.15	2.78	
(WY)	1967	1980	1967	1967	1981	1981	1973	1968	1989	1994	1969	1988	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	5545.5	3008.3	
ANNUAL MEAN	15.2	8.24	11.5
HIGHEST ANNUAL MEAN			22.7
LOWEST ANNUAL MEAN			6.77
HIGHEST DAILY MEAN	102	56	186
LOWEST DAILY MEAN	1.1	1.1	a .24
ANNUAL SEVEN-DAY MINIMUM	1.2	1.3	.26
INSTANTANEOUS PEAK FLOW		b 65	265
INSTANTANEOUS PEAK STAGE		b 2.53	c 2.85
ANNUAL RUNOFF (AC-FT)	11000	5970	8310
10 PERCENT EXCEEDS	58	30	38
50 PERCENT EXCEEDS	3.2	3.4	3.2
90 PERCENT EXCEEDS	1.3	1.4	1.1

a-Also occurred Oct 30 to Nov 1, 1972.

b-Also occurred Jun 1, 4.

c-Maximum gage height, 3.60 ft, Jun 21, 1983, backwater from debris.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION---Lat 39°38'54", long 106°19'21", in NE¹/4SE¹/4 of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, near center of span on downstream side of old Highway 6 bridge pier, 100 ft upstream from frontage road to I-70, 0.2 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA---6.02 mi².

PERIOD OF RECORD---October 1964 to current year.

REVISED RECORDS---WDR CO-89-2: Drainage area.

GAGE---Water-stage recorder. Elevation of gage is 8,325 ft above sea level, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS---Estimated daily discharges: Oct. 30 to Mar. 7. Records fair except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.8	1.4	.94	.94	1.3	1.8	6.5	76	8.5	1.8	1.6
2	1.9	2.6	1.3	.86	.94	1.3	1.9	6.3	70	8.4	1.7	6.5
3	1.9	2.5	1.2	.94	.94	1.2	1.8	6.1	65	8.3	1.5	3.4
4	1.8	2.3	1.2	.94	1.0	1.0	1.9	6.2	65	7.1	1.4	2.9
5	1.8	2.5	1.2	.94	1.0	1.0	1.8	8.8	63	6.4	1.3	2.3
6	1.8	2.7	1.2	.94	1.0	1.0	1.7	14	59	5.7	1.3	1.9
7	2.3	2.5	1.2	.94	1.0	1.0	1.7	20	52	5.4	1.2	1.7
8	2.8	1.6	1.2	1.0	1.0	1.0	1.7	25	46	4.6	1.1	1.5
9	2.7	1.6	1.2	1.1	1.1	1.0	1.7	27	39	4.4	1.3	1.5
10	2.8	1.5	1.1	1.1	1.1	1.1	1.7	28	37	4.1	1.3	1.4
11	2.7	1.5	1.1	1.1	1.1	1.0	1.6	33	36	3.9	1.2	1.3
12	2.9	1.5	1.2	1.1	1.2	.99	1.7	39	36	3.7	1.2	1.3
13	3.0	1.5	1.2	1.1	1.2	1.1	1.7	36	35	3.5	2.0	1.5
14	3.1	1.4	1.2	1.1	1.2	1.3	1.9	31	35	3.3	1.5	1.6
15	3.4	1.4	1.2	1.1	1.2	1.6	1.9	31	31	2.9	1.3	1.4
16	3.8	1.4	1.2	1.0	1.2	2.0	2.9	36	28	2.6	1.2	1.3
17	3.7	1.4	1.1	1.0	1.2	2.0	5.7	42	26	2.5	1.3	1.2
18	3.8	1.4	1.1	1.0	1.2	1.8	7.9	43	24	2.4	1.2	1.1
19	3.5	1.4	1.1	1.0	1.2	2.0	8.6	48	23	2.3	2.6	1.1
20	3.2	1.4	1.1	1.0	1.2	2.1	11	58	21	2.2	2.4	1.2
21	3.3	1.4	1.1	1.0	1.3	2.0	14	54	21	2.1	1.7	2.0
22	3.5	1.4	1.1	1.0	1.3	2.1	21	48	33	2.0	1.7	1.6
23	3.5	1.4	1.1	1.1	1.3	2.4	24	44	24	2.0	1.4	1.4
24	3.7	1.4	1.1	1.1	1.3	2.0	27	37	18	2.4	1.3	1.3
25	3.8	1.4	1.1	1.0	1.4	1.9	21	43	17	2.1	1.2	1.2
26	3.8	1.4	1.0	.94	1.4	1.8	14	50	15	2.0	1.1	1.1
27	3.4	1.4	1.0	.94	1.4	1.5	11	45	14	1.8	1.0	1.1
28	3.4	1.4	.94	.94	1.4	1.3	9.3	43	11	1.7	1.6	1.0
29	3.2	1.4	.94	.94	---	1.1	7.9	51	10	1.7	1.5	1.0
30	3.9	1.4	.94	.94	---	1.1	7.2	69	9.4	1.6	1.4	1.3
31	3.7	---	.94	.94	---	1.4	---	69	---	1.6	1.2	---
TOTAL	94.1	50.9	34.96	31.04	32.72	45.39	219.0	1097.9	1039.4	113.2	44.9	50.7
MEAN	3.04	1.70	1.13	1.00	1.17	1.46	7.30	35.4	34.6	3.65	1.45	1.69
MAX	3.9	2.8	1.4	1.1	1.4	2.4	27	69	76	8.5	2.6	6.5
MIN	1.8	1.4	.94	.86	.94	.99	1.6	6.1	9.4	1.6	1.0	1.0
AC-FT	187	101	69	62	65	90	434	2180	2060	225	89	101

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	2.77	2.04	1.27	1.01	.96	1.33	5.59	31.2	64.3	24.9	5.74	3.02
MAX	8.30	7.17	3.54	2.48	2.97	5.72	14.2	57.8	123	70.4	14.4	7.29	
(WY)	1985	1985	1985	1985	1985	1986	1986	1974	1982	1983	1984	1984	
MIN	.88	.66	.67	.37	.39	.41	1.39	15.2	23.5	3.65	1.45	.97	
(WY)	1975	1965	1975	1977	1981	1981	1973	1983	1966	1994	1994	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	5779.52	2854.21	
ANNUAL MEAN	15.8	7.82	12.0
HIGHEST ANNUAL MEAN			19.0
LOWEST ANNUAL MEAN			6.66
HIGHEST DAILY MEAN	125	Jun 29	21
LOWEST DAILY MEAN	.72	Jan 24	.86
ANNUAL SEVEN-DAY MINIMUM	.74	Jan 18	.93
INSTANTANEOUS PEAK FLOW			122
INSTANTANEOUS PEAK STAGE			3.28
ANNUAL RUNOFF (AC-FT)	11460	5660	8710
10 PERCENT EXCEEDS	65	31	40
50 PERCENT EXCEEDS	2.7	1.6	2.3
90 PERCENT EXCEEDS	.74	1.0	.70

a-Also occurred Jan 29, 1970, Feb 10, 11, 1981.

b-Maximum gage height, 4.62 ft, Jun 18, 1963, backwater from debris.

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.94 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,200 ft above sea level, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 30-31, and Nov. 4 to Apr. 20. Records good except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	1.8	.63	.54	.40	.60	.47	2.7	35	5.2	1.4	.78
2	.86	1.6	.63	.54	.40	.58	.58	2.5	36	5.0	1.2	3.4
3	.89	1.5	.63	.54	.40	.58	.60	2.4	34	5.3	1.0	1.4
4	.93	1.4	.63	.54	.40	.54	.60	2.3	34	4.5	.90	1.1
5	.91	1.3	.63	.54	.40	.52	.60	3.0	34	4.0	.82	.83
6	.91	1.4	.63	.54	.42	.45	.58	4.4	31	3.6	.79	.69
7	1.6	1.3	.63	.54	.42	.40	.57	5.3	29	3.5	.71	.61
8	1.8	.90	.63	.54	.42	.31	.54	6.0	27	3.3	.69	.55
9	1.6	.90	.63	.54	.42	.31	.54	6.9	24	3.0	.81	.52
10	1.5	.90	.63	.54	.47	.33	.54	7.3	22	2.8	.88	.57
11	1.4	.80	.63	.50	.47	.35	.54	8.6	21	2.6	.75	.47
12	1.8	.90	.63	.50	.47	.32	.52	10	20	2.6	.65	.51
13	1.7	1.1	.63	.50	.47	.33	.54	11	19	2.5	.84	.71
14	1.7	.98	.63	.50	.49	.37	.56	11	18	2.4	.99	.75
15	1.8	.90	.60	.50	.49	.41	.60	11	17	2.2	.68	.68
16	1.8	.80	.60	.50	.49	.47	.60	13	15	2.0	.57	.56
17	1.7	.70	.60	.50	.49	.64	.90	15	14	1.8	.78	.45
18	1.7	.63	.60	.50	.52	.64	1.5	18	13	1.6	.60	.37
19	1.5	.63	.60	.50	.50	.60	2.0	20	12	1.6	1.6	.44
20	1.5	.63	.60	.45	.50	.64	2.5	21	13	1.5	1.8	.53
21	1.3	.63	.60	.45	.52	.69	2.8	21	12	1.4	.99	1.4
22	1.6	.63	.60	.45	.52	.67	3.5	21	16	1.4	1.1	.84
23	1.5	.63	.60	.40	.54	.69	4.2	20	13	1.3	.76	.56
24	1.5	.63	.60	.40	.56	.74	4.9	18	11	1.6	.65	.47
25	1.5	.63	.60	.40	.56	.66	5.1	19	9.4	1.5	.59	.42
26	1.5	.63	.60	.40	.56	.62	4.4	22	8.4	1.2	.52	.36
27	.95	.63	.60	.40	.60	.56	4.0	21	7.5	1.2	.46	.31
28	1.6	.63	.60	.40	.60	.50	3.7	22	6.8	1.1	1.1	.28
29	1.1	.63	.60	.40	---	.42	3.3	23	6.2	1.1	.97	.28
30	1.9	.63	.60	.40	---	.36	3.0	27	5.8	1.0	.70	.48
31	1.8	---	.60	.40	---	.42	---	31	---	1.2	.57	---
TOTAL	44.71	27.37	19.02	14.85	13.50	15.72	54.78	426.4	564.1	75.0	26.87	21.32
MEAN	1.44	.91	.61	.48	.48	.51	1.83	13.8	18.8	2.42	.87	.71
MAX	1.9	1.8	.63	.54	.60	.74	5.1	31	36	5.3	1.8	3.4
MIN	.86	.63	.60	.40	.40	.31	.47	2.3	5.8	1.0	.46	.28
AC-FT	89	54	38	29	27	31	109	846	1120	149	53	42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1.20	.83	.49	.40	.37	.40	1.32	11.8	34.4	13.0	3.23	1.74																		
MAX	3.90	3.10	1.75	2.45	2.34	2.16	6.53	25.5	53.1	31.5	14.0	7.18																		
(WY)	1985	1983	1986	1986	1986	1985	1985	1984	1984	1984	1983	1979																		
MIN	.36	.030	.000	.000	.000	.000	.26	3.85	14.3	2.30	.86	.36																		
(WY)	1965	1965	1965	1965	1965	1965	1976	1968	1966	1977	1977	1977																		

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1965 - 1994
ANNUAL TOTAL	2679.05	1303.64	
ANNUAL MEAN	7.34	3.57	5.76
HIGHEST ANNUAL MEAN			11.3
LOWEST ANNUAL MEAN			2.52
HIGHEST DAILY MEAN	59 Jun 22	36 ^a Jun 2	93 ^b Jun 22 1983
LOWEST DAILY MEAN	.27 Feb 26	.28 Sep 28	.00 Nov 10 1964
ANNUAL SEVEN-DAY MINIMUM	.28 Feb 20	.33 Mar 8	.00 Nov 10 1964
INSTANTANEOUS PEAK FLOW		45 Jun 1	116 Jun 20 1974
INSTANTANEOUS PEAK STAGE		2.41 Jun 1	2.65 Jun 20 1974
ANNUAL RUNOFF (AC-FT)	5310	2590	4180
10 PERCENT EXCEEDS	29	13	20
50 PERCENT EXCEEDS	.98	.71	.90
90 PERCENT EXCEEDS	.31	.43	.20

a-Also occurred Sep 29.

b-No flow at times most years.

c-Maximum gage height, 3.28 ft, Jun 25, 1983, backwater from debris.

d-Datum then in use.

09066310 GORE CREEK AT LOWER STATION, AT VAIL, CO

LOCATION.--Lat 39°38'28", long 106°23'37", in NW¹/4NW¹/4 sec.7, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 40 ft south of the water treatment plant at Vail, 0.1 mi upstream from Red Sandstone Creek, and 0.6 mi downstream from Middle Creek.

DRAINAGE AREA.--77.1 mi².

PERIOD OF RECORD.--August 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,060 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16-22, 24-30, Dec. 4-5, 7, 11-12, 14-27, Dec. 29 to Jan. 1, Jan. 7-9, 11-13, 15, 19-23, and Jan. 28 to Mar. 7. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	16	12	13	16	16	53	682	109	32	22
2	26	26	16	11	13	15	18	52	643	108	33	73
3	25	25	15	12	13	14	18	51	609	105	30	46
4	24	26	15	12	13	13	20	52	602	92	28	39
5	24	24	15	12	13	13	19	71	563	85	27	31
6	24	26	15	12	13	13	18	113	531	78	26	27
7	28	27	15	12	13	13	18	154	478	72	24	24
8	32	28	15	13	13	13	19	178	428	64	22	21
9	31	25	15	13	13	13	19	197	382	62	22	20
10	32	25	14	14	13	14	18	193	352	59	31	21
11	30	21	14	14	13	13	18	240	343	57	25	20
12	33	22	15	14	14	12	18	310	329	55	23	21
13	33	22	15	14	14	12	20	308	322	53	27	23
14	33	22	15	14	14	12	22	281	317	52	26	23
15	36	20	15	14	14	14	21	292	301	53	23	21
16	38	20	15	13	14	16	26	332	282	51	21	19
17	36	20	14	13	14	16	40	427	261	48	21	18
18	37	20	14	13	15	15	53	459	260	45	20	16
19	35	19	14	13	15	16	61	476	258	43	39	16
20	33	19	14	13	15	18	75	528	252	42	44	16
21	30	19	14	13	15	16	93	500	235	40	31	25
22	32	19	14	13	15	17	131	482	304	38	27	22
23	31	19	14	14	15	18	156	459	253	38	24	20
24	31	19	14	14	15	17	176	408	215	44	22	19
25	32	19	13	14	15	16	149	430	188	40	20	17
26	32	18	14	13	15	15	107	459	172	37	19	15
27	27	18	13	12	16	14	83	430	157	35	18	14
28	31	18	13	12	16	20	69	468	139	33	21	14
29	29	18	12	13	---	14	62	472	126	32	22	14
30	24	18	12	13	---	18	59	583	118	31	21	17
31	29	---	12	13	---	15	---	633	---	30	19	---
TOTAL	944	650	441	402	394	461	1622	10091	10102	1731	788	694
MEAN	30.5	21.7	14.2	13.0	14.1	14.9	54.1	326	337	55.8	25.4	23.1
MAX	38	28	16	14	16	20	176	633	682	109	44	73
MIN	24	18	12	11	13	12	16	51	118	30	18	14
AC-FT	1870	1290	875	797	781	914	3220	20020	20040	3430	1560	1380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	MEAN	21.3	17.3	13.0	10.6	9.89	13.2	50.4	323	538	164	47.6	28.5
MAX	30.5	21.7	14.2	13.0	14.1	17.0	87.0	422	906	414	88.4	40.9	
(WY)	1994	1994	1994	1994	1994	1989	1989	1993	1993	1993	1993	1993	
MIN	16.8	12.9	11.1	9.02	7.73	9.74	25.5	181	337	55.8	25.4	19.3	
(WY)	1990	1989	1989	1991	1990	1991	1991	1990	1994	1994	1994	1988	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1988 - 1994

ANNUAL TOTAL	61219.6	28320	
ANNUAL MEAN	168	77.6	103
HIGHEST ANNUAL MEAN			166
LOWEST ANNUAL MEAN			77.6
HIGHEST DAILY MEAN	1200	Jun 22	1200
LOWEST DAILY MEAN	9.6	Feb 26	7.2
ANNUAL SEVEN-DAY MINIMUM	9.9	Mar 1	7.4
INSTANTANEOUS PEAK FLOW			1470
INSTANTANEOUS PEAK STAGE			10.96
ANNUAL RUNOFF (AC-FT)	121400	56170	74870
10 PERCENT EXCEEDS	646	281	366
50 PERCENT EXCEEDS	29	22	21
90 PERCENT EXCEEDS	11	13	9.8

a-Also occurred Feb 13, 1990.

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", in sec.25, T.4 S., R.81 W., (projected), Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.32 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder, and concrete control. Elevation of gage is 9,212 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 21 to Apr. 12. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.8	1.6	1.3	.96	1.2	1.4	4.6	53	6.2	2.7	2.1
2	1.7	1.9	1.6	1.4	1.1	1.2	1.5	4.5	48	6.2	2.4	4.9
3	1.7	2.0	1.6	1.4	1.1	1.2	1.6	4.7	46	6.4	2.2	2.5
4	1.7	2.0	1.5	1.3	1.1	1.3	1.7	4.9	44	5.4	2.1	2.1
5	1.6	1.9	1.5	1.3	1.2	1.3	1.8	8.5	39	5.0	2.0	1.9
6	1.6	1.9	1.5	1.3	1.2	1.3	1.7	14	35	4.7	2.0	1.7
7	2.2	1.8	1.5	1.3	1.2	1.3	1.6	18	32	4.6	1.9	1.7
8	2.6	1.8	1.5	1.3	1.3	1.3	1.7	20	29	4.3	1.9	1.6
9	2.4	1.7	1.5	1.3	1.2	1.2	1.8	23	26	4.1	2.0	1.6
10	2.3	1.7	1.4	1.3	1.2	1.2	1.9	26	24	3.8	2.0	1.7
11	2.3	1.8	1.4	1.3	1.2	1.2	1.8	33	22	3.7	1.9	1.6
12	2.7	1.9	1.4	1.2	1.2	1.3	1.6	37	21	3.6	1.8	1.6
13	2.7	1.9	1.4	1.2	1.2	1.3	1.5	35	21	3.5	2.0	1.8
14	2.6	1.8	1.3	1.3	1.2	1.3	1.7	37	19	3.4	1.9	1.8
15	2.6	1.7	1.3	1.3	1.2	1.3	1.6	35	18	3.3	1.8	1.7
16	2.6	1.6	1.2	1.2	1.2	1.4	2.2	42	16	3.2	1.7	1.6
17	2.4	1.6	1.2	1.2	1.3	1.4	3.6	47	15	3.1	1.9	1.5
18	2.4	1.8	1.2	1.2	1.3	1.4	4.6	50	14	2.9	1.8	1.5
19	2.2	1.8	1.1	1.2	1.3	1.5	5.4	54	13	2.9	3.3	1.4
20	2.1	1.7	1.1	1.2	1.3	1.5	6.3	57	14	2.8	2.8	1.7
21	2.0	1.6	1.1	1.2	1.2	1.5	7.4	53	13	2.6	2.1	2.7
22	1.9	1.6	1.2	1.2	1.1	1.6	9.5	50	19	2.5	2.4	1.8
23	1.9	1.7	1.2	1.3	1.2	1.6	11	47	14	2.5	2.0	1.6
24	1.9	1.8	1.2	1.3	1.3	1.5	12	42	11	2.7	1.8	1.4
25	1.9	1.6	1.3	1.3	1.3	1.5	11	44	10	2.5	1.8	1.4
26	1.9	1.4	1.3	1.2	1.3	1.5	8.2	46	9.1	2.4	1.7	1.3
27	1.8	1.3	1.4	1.2	1.3	1.4	6.8	43	8.3	2.3	1.7	1.3
28	1.9	1.3	1.4	1.1	1.3	1.4	5.8	45	7.6	2.2	2.2	1.3
29	1.9	1.5	1.3	1.1	---	1.3	5.2	45	7.2	2.2	2.1	1.3
30	1.9	1.6	1.3	1.0	---	1.3	4.8	50	6.8	2.2	1.9	1.6
31	1.8	---	1.3	.90	---	1.4	---	52	---	2.3	1.8	---
TOTAL	64.9	51.5	41.8	38.30	33.96	42.1	128.7	1072.2	655.0	109.5	63.6	53.7
MEAN	2.09	1.72	1.35	1.24	1.21	1.36	4.29	34.6	21.8	3.53	2.05	1.79
MAX	2.7	2.0	1.6	1.4	1.3	1.6	12	57	53	6.4	3.3	4.9
MIN	1.6	1.3	1.1	.90	.96	1.2	1.4	4.5	6.8	2.2	1.7	1.3
AC-FT	129	102	83	76	67	84	255	2130	1300	217	126	107

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1.99	1.53	1.22	1.04	.98	1.09	3.51	28.8	49.7	12.3	3.66	2.21																			
MAX	5.14	3.80	2.60	2.14	2.14	1.90	6.60	53.0	92.0	44.0	15.0	5.57																			
(WY)	1985	1985	1985	1985	1985	1985	1971	1974	1983	1983	1983	1984																			
MIN	.92	.57	.51	.52	.48	.46	1.47	11.2	16.3	3.22	1.59	.98																			
(WY)	1989	1977	1977	1987	1987	1987	1973	1968	1966	1977	1987	1987																			

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

ANNUAL TOTAL	4807.05	2355.26	
ANNUAL MEAN	13.2	6.45	9.00
HIGHEST ANNUAL MEAN			14.9
LOWEST ANNUAL MEAN			4.31
HIGHEST DAILY MEAN	112	Jun 14	164
LOWEST DAILY MEAN	.76	Mar 3	.20
ANNUAL SEVEN-DAY MINIMUM	.84	Feb 27	.34
INSTANTANEOUS PEAK FLOW			215
INSTANTANEOUS PEAK STAGE			a 4.66
ANNUAL RUNOFF (AC-FT)	9530	4670	6520
10 PERCENT EXCEEDS	59	20	29
50 PERCENT EXCEEDS	1.9	1.8	1.8
90 PERCENT EXCEEDS	1.1	1.2	.80

a-Maximum gage height, 5.18 ft, Apr 17, 1987, backwater from ice.

09066980 LAKE CREEK NEAR EDWARDS, CO

LOCATION.--Lat 39°38'51", long 106°36'31", in SE¹/4NE¹/4 sec.6, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft upstream from U.S. Highway 6, and 1.0 mi west of Edwards.

DRAINAGE AREA.--49.0 mi².

PERIOD OF RECORD.--October 1993 to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 7,160 ft above sea level, from topographic map.

REMARKS---Estimated daily discharges: Nov. 25-29, Dec. 10-25, and Jan. 9 to Feb. 22. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	25	13	9.7	7.0	9.3	11	26	403	75	32	26
2	25	23	13	9.7	7.5	9.5	12	25	343	73	36	45
3	24	23	12	10	8.0	9.7	11	24	308	75	35	40
4	24	23	13	11	8.5	10	13	22	309	69	33	35
5	24	21	12	11	9.0	10	11	26	307	65	33	31
6	23	21	13	11	9.0	10	11	40	271	60	30	27
7	26	20	14	10	9.5	10	11	56	246	56	27	24
8	28	20	14	10	9.5	9.8	12	67	220	48	26	24
9	27	20	13	10	10	9.6	11	72	197	47	27	24
10	28	20	12	9.5	10	9.8	11	69	186	46	26	23
11	27	21	12	9.5	10	9.5	11	76	204	42	25	22
12	27	21	11	9.0	9.5	9.7	11	105	218	42	25	21
13	26	21	10	9.5	9.0	9.8	12	136	193	40	24	24
14	25	20	10	10	9.0	10	14	125	199	39	24	28
15	28	20	10	10	9.5	10	14	120	176	41	21	27
16	31	17	9.5	10	9.5	11	15	131	167	41	17	23
17	30	17	9.5	9.5	10	11	17	189	169	39	17	20
18	30	18	9.5	9.5	9.5	11	21	198	170	38	17	20
19	29	17	9.0	9.5	9.5	13	23	209	177	35	23	19
20	28	18	9.0	9.5	9.5	13	27	258	190	35	30	18
21	27	19	9.5	9.5	9.5	11	31	218	211	34	26	23
22	27	18	10	9.5	9.5	13	37	212	279	34	25	23
23	26	18	9.5	9.5	9.7	12	48	206	216	34	23	21
24	25	17	9.5	10	9.4	12	58	159	154	36	21	20
25	26	15	10	10	9.7	12	53	182	133	37	18	18
26	25	13	10	9.5	9.6	11	43	216	121	35	16	17
27	22	11	10	9.5	9.5	9.8	36	182	112	33	15	16
28	26	12	10	9.0	9.3	11	32	202	99	32	17	15
29	26	12	10	9.0	---	11	30	204	85	31	25	15
30	21	12	9.5	8.5	---	10	28	256	82	30	24	15
31	24	---	9.3	7.5	---	11	---	370	---	30	23	---
TOTAL	810	553	335.8	299.4	259.2	329.5	675	4381	6145	1372	761	704
MEAN	26.1	18.4	10.8	9.66	9.26	10.6	22.5	141	205	44.3	24.5	23.5
MAX	31	25	14	11	10	13	58	370	403	75	36	45
MIN	21	11	9.0	7.5	7.0	9.3	11	22	82	30	15	15
AC-FT	1610	1100	666	594	514	654	1340	8690	12190	2720	1510	1400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	26.1	18.4	10.8	9.66	9.26	10.6	22.5	141	205	44.3	24.5	23.5
MAX	26.1	18.4	10.8	9.66	9.26	10.6	22.5	141	205	44.3	24.5	23.5
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MIN	26.1	18.4	10.8	9.66	9.26	10.6	22.5	141	205	44.3	24.5	23.5
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	16624.9
ANNUAL MEAN	45.5
HIGHEST DAILY MEAN	403 Jun 1
LOWEST DAILY MEAN	7.0 Feb 1
ANNUAL SEVEN-DAY MINIMUM	8.0 Jan 29
INSTANTANEOUS PEAK FLOW	549 Jun 1
INSTANTANEOUS PEAK STAGE	2.68 Jun 1
ANNUAL RUNOFF (AC-FT)	32980
10 PERCENT EXCEEDS	168
50 PERCENT EXCEEDS	21
90 PERCENT EXCEEDS	9.5

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE¹/4SW¹/4 sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highway 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--14.8 mi².

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914, gage heights and discharge measurements only, May 1974 to February 1988. October 1988 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,453 ft above sea level, from topographic map. Prior to May 1, 1974, nonrecording gage near present site, at different datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 1, Nov. 6-9, 16-17, 19-21, 25-29, Dec. 12-16, 18-19, Jan. 11-12, Jan. 31 to Feb. 3, Mar. 10, 28, 30, and July 29 to Aug. 8. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation upstream and downstream from station. Slight natural regulation by several small lakes in headwaters. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.8	4.0	2.9	2.0	2.2	2.7	6.7	68	17	5.0	7.3
2	4.0	4.0	3.7	3.2	2.1	2.3	2.8	6.8	68	17	5.8	8.5
3	4.0	4.2	3.1	3.6	2.3	2.4	3.0	7.0	65	17	6.0	6.4
4	3.5	4.2	4.0	3.2	2.5	2.5	3.2	8.0	65	15	5.8	5.5
5	3.7	4.0	3.2	3.6	2.3	2.5	2.9	11	63	13	5.2	4.9
6	4.0	3.9	3.2	3.5	2.1	2.5	2.7	17	60	13	5.0	4.4
7	4.5	3.9	3.5	3.1	2.1	2.6	2.7	23	57	11	4.8	3.6
8	5.1	3.7	3.7	3.2	2.3	2.5	3.0	28	52	11	4.7	3.6
9	4.9	3.7	3.9	3.6	2.3	2.5	2.9	31	48	10	4.4	3.3
10	5.5	3.7	3.4	3.4	2.4	2.4	2.8	29	45	9.3	4.4	3.8
11	4.6	3.7	3.6	3.2	2.4	2.4	2.7	32	43	9.4	4.6	3.6
12	4.9	3.6	3.5	3.1	2.3	2.5	2.8	37	42	9.6	7.3	3.9
13	4.5	4.2	3.5	3.1	2.6	2.6	3.1	36	40	8.3	7.1	4.5
14	5.0	4.1	3.1	3.3	2.3	2.8	3.3	40	38	8.4	7.1	5.0
15	5.3	3.7	2.8	2.8	2.3	2.9	3.5	38	36	8.5	6.7	4.7
16	5.8	4.3	3.0	2.9	2.3	3.1	4.0	39	33	8.1	5.9	4.2
17	5.2	4.5	3.1	2.9	2.3	3.1	5.0	43	32	7.9	6.5	4.1
18	5.3	4.6	3.0	3.2	2.3	3.1	5.8	44	30	7.3	6.2	4.3
19	4.6	4.2	2.8	2.9	2.3	3.5	6.4	50	29	7.0	9.5	4.3
20	4.4	4.0	2.9	2.5	2.3	3.5	7.3	48	28	6.9	11	3.9
21	4.2	4.2	3.2	2.6	2.3	3.0	9.6	43	29	6.6	10	5.1
22	4.2	4.1	3.2	2.7	2.1	3.2	11	41	34	6.6	8.6	5.3
23	4.1	3.7	3.2	2.5	2.1	3.3	14	40	34	6.2	7.4	4.9
24	4.0	3.7	3.1	2.5	2.1	3.0	15	37	27	6.4	7.3	4.6
25	3.7	3.4	3.1	2.5	2.2	3.0	14	37	25	6.5	6.4	4.0
26	4.0	3.5	3.4	2.6	2.2	2.9	9.6	38	23	5.9	6.9	4.2
27	3.9	3.5	4.0	2.6	2.2	2.6	8.2	36	21	5.8	5.8	3.4
28	4.0	3.6	3.7	2.5	2.2	2.4	7.4	38	20	5.4	7.8	3.7
29	4.3	3.9	3.0	2.5	--	2.5	6.7	41	19	5.0	8.6	3.5
30	4.2	3.9	3.2	2.6	--	2.5	7.2	47	18	4.8	8.7	3.6
31	4.0	--	3.2	2.4	--	2.6	--	54	--	4.7	8.1	--
TOTAL	138.0	117.5	103.3	91.2	63.2	84.9	175.3	1026.5	1192	278.6	208.6	136.1
MEAN	4.45	3.92	3.33	2.94	2.26	2.74	5.84	33.1	39.7	8.99	6.73	4.54
MAX	5.8	4.6	4.0	3.6	2.6	3.5	15	54	68	17	11	8.5
MIN	3.5	3.4	2.8	2.4	2.0	2.2	2.7	6.7	18	4.7	4.4	3.3
AC-FT	274	233	205	181	125	168	348	2040	2360	553	414	270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	MEAN	4.09	3.39	2.92	2.47	2.27	2.79	5.91	26.5	60.9	29.2	9.52	5.43
MAX	8.27	5.54	5.01	4.17	3.99	3.88	9.94	51.7	114	79.5	25.6	10.6	
(WY)	1985	1984	1984	1986	1986	1986	1989	1974	1983	1983	1984	1984	
MIN	2.28	2.07	1.80	1.44	1.51	1.49	2.48	11.5	22.6	4.81	2.34	1.41	
(WY)	1981	1980	1981	1981	1977	1977	1975	1977	1977	1977	1977	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	6446.1	3615.2	
ANNUAL MEAN	17.7	9.90	12.9
HIGHEST ANNUAL MEAN			22.7
LOWEST ANNUAL MEAN			4.94
HIGHEST DAILY MEAN	132	68	242
LOWEST DAILY MEAN	2.0	2.0	.55
ANNUAL SEVEN-DAY MINIMUM	2.2	2.2	.75
INSTANTANEOUS PEAK FLOW		76	249
INSTANTANEOUS PEAK STAGE		2.71	3.46
ANNUAL RUNOFF (AC-FT)	12790	7170	9350
10 PERCENT EXCEEDS	64	34	38
50 PERCENT EXCEEDS	4.3	4.1	4.2
90 PERCENT EXCEEDS	2.3	2.5	2.0

a-Also occurred Jun 2.

b-Also occurred Jan 20, 27, and 28.

09067005 EAGLE RIVER AT AVON, CO

LOCATION.--Lat 39°37'54", long 106°31'19", in SE¹/₄NW¹/₄ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft downstream from bridge, 300 ft north of Highway 6 and 24, and 350 ft downstream from Beaver Creek, in the City of Avon.

DRAINAGE AREA.--395 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,410 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 21-22, 26-30, Dec. 14 to Feb. 18, Mar. 16-26, June 8, July 5-7, Aug. 5-9, and Sept. 13-14. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation and municipal use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	120	90	64	43	56	70	281	1930	437	160	258
2	101	110	86	64	44	57	77	270	1890	406	132	183
3	101	105	83	68	47	61	74	272	1800	376	125	152
4	98	113	83	66	56	65	87	272	1820	345	108	124
5	100	101	84	66	59	64	78	354	1730	330	94	105
6	98	98	79	66	62	63	70	540	1720	330	92	94
7	108	90	83	64	60	60	76	711	1560	290	94	88
8	127	87	83	64	62	56	77	804	1270	280	96	88
9	121	91	85	64	64	53	77	847	1110	264	100	87
10	129	83	83	66	64	49	74	772	1070	256	114	84
11	120	88	80	64	64	54	66	864	1080	244	100	87
12	128	93	83	58	61	56	70	1020	1070	236	99	95
13	126	93	81	58	56	54	80	1070	1050	223	117	106
14	126	91	70	66	56	60	98	1080	1020	215	107	108
15	139	77	56	69	58	64	92	1090	950	213	94	96
16	152	69	70	66	62	64	117	1130	928	213	93	92
17	146	79	72	66	62	65	180	1370	823	210	99	88
18	152	85	68	68	62	65	237	1450	800	195	154	83
19	138	79	52	64	64	65	282	1600	786	190	145	83
20	130	81	55	65	64	66	329	1740	791	184	118	82
21	117	74	55	64	65	71	386	1630	859	174	110	95
22	124	78	50	64	63	69	513	1560	900	167	96	90
23	119	91	52	64	63	66	603	1520	887	167	89	82
24	117	86	58	66	63	68	722	1450	713	180	86	75
25	117	79	56	64	63	68	689	1440	639	164	80	69
26	120	74	60	63	62	66	482	1530	589	145	79	65
27	92	70	68	62	63	62	389	1440	548	135	93	61
28	112	66	74	62	60	61	336	1520	504	127	103	58
29	126	74	74	58	---	73	312	1560	448	120	99	55
30	78	82	70	56	---	58	296	1660	444	144	88	58
31	103	---	64	52	---	64	---	1820	---	167	119	---
TOTAL	3669	2607	2207	1971	1672	1923	7039	34667	31729	7127	3283	2891
MEAN	118	86.9	71.2	63.6	59.7	62.0	235	1118	1058	230	106	96.4
MAX	152	120	90	69	65	73	722	1820	1930	437	160	258
MIN	78	66	50	52	43	49	66	270	444	120	79	55
AC-FT	7280	5170	4380	3910	3320	3810	13960	68760	62930	14140	6510	5730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	MEAN	92.8	74.8	58.7	51.8	49.2	59.1	220	1169	1447	530	182	125
MAX	118	86.9	71.2	63.6	59.7	73.4	349	1850	2450	1119	269	162	162
(WY)	1994	1994	1994	1994	1994	1993	1989	1993	1993	1993	1993	1993	1993
MIN	67.5	47.6	43.6	38.3	39.2	47.6	124	719	936	230	106	94.0	94.0
(WY)	1989	1990	1990	1992	1992	1991	1991	1990	1992	1994	1994	1990	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	198484	100785	
ANNUAL MEAN	544	276	339
HIGHEST ANNUAL MEAN			542 1993
LOWEST ANNUAL MEAN			276 1994
HIGHEST DAILY MEAN	3680	1930	3680 May 28 1993
LOWEST DAILY MEAN	^a 50	43	^b 32 Nov 29 1989
ANNUAL SEVEN-DAY MINIMUM	52	51	35 Jan 4 1992
INSTANTANEOUS PEAK FLOW		2050	3860 May 31 1993
INSTANTANEOUS PEAK STAGE		4.11	5.14 May 31 1993
ANNUAL RUNOFF (AC-FT)	393700	199900	245600
10 PERCENT EXCEEDS	2210	911	1090
50 PERCENT EXCEEDS	119	92	97
90 PERCENT EXCEEDS	57	60	46

a-Also occurred Dec 22.

b-Also occurred Jan 5-6, 1990.

09067005 EAGLE RIVER AT AVON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 03...	0905	89	297	8.2	0.0	12.0	63
MAR 23...	0930	89	386	8.0	1.0	--	K3
JUN 08...	1345	1220	105	8.0	8.5	9.0	K3
AUG 24...	1600	84	296	8.8	15.0	8.2	K5

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 03...	67	<0.01	0.33	0.02	<0.2	<0.01	<0.01
MAR 23...	K7	<0.01	0.41	0.02	<0.2	0.03	0.02
JUN 08...	K2	<0.01	0.08	<0.01	<0.2	0.03	<0.01
AUG 24...	90	0.01	0.15	0.02	<0.2	<0.01	0.02

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 03...	<1	1	540	<1	380	360	<0.1	<1	<0.2	170
MAR 23...	<1	2	80	<1	1200	1000	<0.1	<1	<0.2	410
JUN 08...	<1	5	210	<1	50	40	<0.1	<1	<0.2	<10
AUG 24...	<1	2	520	<1	210	130	<0.1	<1	<0.2	80

K-Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 06...	0945	99	330	7.0	MAY 17...	1205	1330	114	6.0
NOV 03...	1030	88	297	0.0	JUN 08...	1133	1210	101	7.0
JAN 06...	1400	68	423	0.5	JUL 07...	1203	320	169	9.5
MAR 03...	1200	46	334	3.0	AUG 09...	1530	102	287	15.5
APR 11...	1537	52	416	4.0					

09069000 EAGLE RIVER AT GYPSUM, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--944 mi², at gaging station.

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1947 to current year.

WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft, downstream from Eagle River at Gypsum (station 09069000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,200 microsiemens March 9, 1990; minimum daily, 130 microsiemens June 9, 10, 1976.

WATER TEMPERATURES: Maximum daily, 24°C Aug. 24, 1949, several days in August, 1988, and July 27, 1990; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,050 microsiemens Jan. 25 (may have been higher during February and March); minimum daily, 200 microsiemens on several days in May and June.

WATER TEMPERATURES: Maximum daily, 21°C on several days in July and August; minimum daily, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
NOV 02...	1430	282	794	8.5	4.5	--	11.1	300	92	17
MAR 21...	1430	190	847	8.2	8.5	4.7	10.2	300	90	18
JUN 08...	0945	1800	199	8.2	9.5	--	10.0	76	23	4.6
AUG 24...	1230	150	827	8.5	19.0	--	8.3	310	96	17

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 02...	48	1	2.2	126	180	67	0.2	8.3	492	0.67
MAR 21...	49	1	2.7	128	190	68	0.2	7.4	505	0.69
JUN 08...	7.5	0.4	0.70	51	29	9.6	<0.1	5.0	110	0.15
AUG 24...	49	1	2.8	128	190	66	0.3	7.6	507	0.69

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 02...	375	9	<0.01	0.41	0.02	0.20	<0.2	0.02	<0.01	0.02
MAR 21...	259	15	0.02	0.59	0.02	<0.2	<0.2	0.07	0.05	0.06
JUN 08...	537	7	<0.01	0.09	0.01	<0.2	<0.2	<0.01	<0.01	<0.01
AUG 24...	205	63	0.02	0.33	0.03	0.20	<0.2	0.09	0.03	0.03

EAGLE RIVER BASIN

09069000 EAGLE RIVER AT GYPSUM, CO-Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
NOV 02...	<1	<1	<1	43	<0.5	<1	<1	<1	<1
MAR 21...	<1	<1	<1	45	<0.5	<1	<1	<1	<1
JUN 08...	2	<1	1	30	<0.5	<1	<1	8	2
AUG 24...	<1	<1	<1	61	<0.5	<1	<1	<1	<1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 02...	1	<1	24	<1	<1	70	<0.1	<0.1
MAR 21...	2	1	12	<1	<1	180	<0.1	<0.1
JUN 08...	2	1	43	2	<1	16	<0.1	<0.1
AUG 24...	3	1	21	1	<1	21	<0.1	<0.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 02...	--	<1	<1	<1	<1	<1	50	43
MAR 21...	1	<1	<1	<1	<1	<1	100	46
JUN 08...	<1	<1	<1	<1	<1	<1	40	6
AUG 24...	4	<1	<1	<1	<1	<1	40	7

09069000 EAGLE RIVER AT GYPSUM, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	800	---	850	---	---	860	580	400	280	800	---
2	800	800	---	850	---	---	860	580	350	300	800	---
3	800	850	---	850	---	---	860	580	280	320	850	---
4	800	850	---	900	---	---	880	580	220	380	800	---
5	850	850	---	900	---	---	880	420	200	380	850	---
6	850	800	---	900	---	---	900	360	200	400	800	---
7	900	800	---	950	---	---	900	360	200	440	800	---
8	950	750	---	950	---	---	900	360	220	440	800	---
9	950	750	---	900	---	---	900	360	220	440	750	---
10	950	800	---	950	---	---	900	360	280	500	750	---
11	950	800	---	900	---	---	880	320	300	500	800	---
12	850	800	---	900	---	---	900	240	340	560	850	---
13	900	750	---	900	---	---	900	260	360	560	850	---
14	900	750	---	900	---	---	900	260	300	540	850	---
15	850	750	---	950	---	---	840	260	340	560	800	---
16	900	750	---	950	---	---	840	260	320	580	750	---
17	850	800	---	950	---	---	620	240	300	600	850	---
18	850	800	---	1000	---	---	580	240	300	625	800	---
19	850	850	---	1000	---	---	560	220	280	625	800	---
20	800	800	---	1000	---	---	560	220	260	600	850	---
21	800	800	---	1000	---	---	560	220	200	600	800	---
22	800	750	---	1000	---	---	560	220	200	625	800	---
23	800	750	---	1000	---	---	560	200	220	625	850	---
24	800	750	---	1000	---	---	540	200	200	625	800	---
25	850	750	---	1050	---	---	560	200	240	625	850	---
26	800	800	---	1000	---	---	580	200	220	625	800	---
27	750	800	---	1000	---	---	580	200	200	650	750	---
28	750	750	---	950	---	---	580	200	200	650	750	---
29	800	750	---	1000	---	---	560	200	240	625	800	---
30	800	750	---	1000	---	---	580	200	280	650	800	---
31	---	---	---	1000	---	---	---	200	---	625	800	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	---	1	---	---	10	12	13	17	20	---
2	16	13	---	2	---	---	10	12	12	17	20	---
3	15	12	---	2	---	---	10	12	13	17	21	---
4	15	12	---	2	---	---	9	12	13	16	20	---
5	17	11	---	1	---	---	9	13	12	17	19	---
6	16	11	---	1	---	---	9	15	13	17	20	---
7	16	11	---	2	---	---	8	15	12	17	20	---
8	14	10	---	2	---	---	8	15	13	18	21	---
9	15	10	---	1	---	---	9	15	13	18	21	---
10	15	10	---	2	---	---	9	14	14	18	21	---
11	14	10	---	2	---	---	9	14	14	18	21	---
12	14	9	---	.0	---	---	10	14	15	18	20	---
13	13	---	---	.0	---	---	12	12	16	18	21	---
14	12	10	---	.0	---	---	13	12	15	18	21	---
15	12	11	---	.0	---	---	13	11	16	19	20	---
16	12	11	---	.0	---	---	13	11	15	19	20	---
17	12	11	---	.0	---	---	12	11	15	19	18	---
18	13	11	---	.0	---	---	13	10	16	20	16	---
19	13	10	---	1	---	---	14	10	16	20	17	---
20	13	9	---	1	---	---	14	10	16	19	17	---
21	12	9	---	.0	---	---	14	10	16	19	19	---
22	12	9	---	.0	---	---	14	10	16	20	19	---
23	12	10	---	.0	---	---	14	11	16	20	20	---
24	11	10	---	.0	---	---	13	11	16	20	20	---
25	11	10	---	1	---	---	13	11	16	20	19	---
26	11	10	---	.0	---	---	13	11	16	19	18	---
27	12	11	---	1	---	---	12	11	16	20	17	---
28	11	11	---	.0	---	---	12	12	17	21	18	---
29	12	11	---	.0	---	---	12	12	17	21	19	---
30	12	10	---	.0	---	---	13	11	17	20	19	---
31	---	---	---	.0	---	---	---	11	---	20	19	---

EAGLE RIVER BASIN

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¹/4NW¹/4 sec.5, T.5 S., R.85 W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

DRAINAGE AREA.--945 mi².

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,275.11 ft, above sea level.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions upstream from station, see elsewhere in this report. Transbasin diversions upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft, to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	269	225	171	111	162	181	418	2400	594	191	145
2	235	272	217	184	116	163	193	395	2390	578	220	264
3	232	260	210	177	129	166	194	390	2180	595	229	338
4	225	266	196	179	162	173	207	384	2160	561	219	267
5	220	259	210	182	165	178	208	426	2120	510	196	233
6	209	244	203	178	165	177	194	621	1980	462	186	203
7	219	239	198	176	165	176	192	866	1820	436	180	172
8	247	231	201	172	168	176	203	1050	1700	401	171	157
9	253	240	202	172	165	167	205	1120	1550	362	176	150
10	266	227	197	174	161	164	208	1040	1410	349	184	158
11	260	243	189	162	163	168	194	1070	1390	334	178	154
12	252	262	196	153	160	170	182	1310	1420	327	159	157
13	263	252	191	180	141	173	186	1450	1340	329	162	168
14	263	250	133	188	147	176	203	1440	1310	317	180	195
15	277	240	138	173	169	179	210	1470	1210	314	176	207
16	315	218	205	170	170	182	212	1410	1130	313	154	195
17	307	212	186	177	171	191	256	1740	1070	303	139	177
18	307	226	127	165	169	189	321	1870	1020	282	142	169
19	296	225	136	167	161	190	365	1820	1030	271	204	161
20	278	198	148	165	153	212	413	2010	1050	256	261	158
21	262	205	120	168	155	196	462	1870	1170	240	220	184
22	262	233	123	167	154	195	600	1750	1230	232	185	184
23	275	251	158	169	137	206	717	1730	1360	225	170	169
24	273	239	150	175	150	203	909	1580	1030	235	148	152
25	272	195	141	170	163	207	979	1560	896	243	138	149
26	273	188	177	167	172	196	717	1690	826	218	129	143
27	264	165	197	162	171	185	579	1590	760	205	126	139
28	249	186	199	156	170	161	496	1630	702	197	134	136
29	274	224	184	148	---	183	463	1710	641	191	149	132
30	248	221	162	145	---	177	441	1840	611	180	152	147
31	229	---	171	111	---	175	---	2150	---	176	147	---
TOTAL	8050	6940	5490	5203	4383	5616	10890	41400	40906	10236	5405	5363
MEAN	260	231	177	168	157	181	363	1335	1364	330	174	179
MAX	315	272	225	188	172	212	979	2150	2400	595	261	338
MIN	209	165	120	111	111	161	181	384	611	176	126	132
AC-FT	15970	13770	10890	10320	8690	11140	21600	82120	81140	20300	10720	10640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	MEAN	258	241	199	181	173	186	350	1318	2271	996	376	267
MAX	526	382	277	243	252	297	862	2722	4134	2989	1096	625	
(WY)	1962	1985	1985	1984	1986	1986	1962	1984	1984	1957	1984	1984	
MIN	129	169	150	139	125	138	183	528	742	251	150	141	
(WY)	1957	1990	1992	1990	1992	1965	1983	1977	1954	1977	1977	1956	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1947 - 1994
ANNUAL TOTAL	279368	149882	
ANNUAL MEAN	765	411	568
HIGHEST ANNUAL MEAN			1082
LOWEST ANNUAL MEAN			264
HIGHEST DAILY MEAN	4250	2400	6580
LOWEST DAILY MEAN	107	111	93
ANNUAL SEVEN-DAY MINIMUM	128	131	99
INSTANTANEOUS PEAK FLOW		2620	7020
INSTANTANEOUS PEAK STAGE		6.47	9.46
ANNUAL RUNOFF (AC-FT)	554100	297300	411800
10 PERCENT EXCEEDS	2780	1220	1560
50 PERCENT EXCEEDS	259	204	240
90 PERCENT EXCEEDS	144	151	158

a-Also occurred Feb 1.

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¹/4SE¹/4 sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi².

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,130 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 27 to Feb. 26. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	1160	1050	920	760	1070	961	1630	4240	1300	1350	1260
2	1040	1030	1000	900	780	1070	1010	1580	4380	1330	1420	1310
3	1040	889	1000	880	820	1080	1050	1550	4120	1400	1390	1400
4	1030	883	960	880	860	1120	1080	1630	3990	1460	1310	1270
5	1020	856	1000	900	900	1130	1100	1700	3890	1300	1270	1210
6	1010	814	980	900	900	1120	1080	1990	3620	1220	1290	1130
7	996	954	960	860	900	1140	1070	2390	3320	1240	1320	1090
8	1050	1020	960	840	880	1110	1040	2750	3060	1230	1310	1050
9	1130	1020	980	840	860	1060	1030	2980	2850	1360	1330	1030
10	1150	1010	980	820	860	1040	1040	2970	2610	1400	1360	1020
11	1170	1060	960	800	880	1050	1020	2930	2440	1350	1340	1080
12	1150	1160	960	860	860	1040	988	3310	2420	1360	1310	1110
13	1170	1160	960	860	800	1020	963	3540	2260	1330	1320	1130
14	1220	1140	880	900	840	1040	996	3590	2180	1320	1370	1150
15	1240	1120	880	840	920	1050	1120	3760	2030	1280	1360	1150
16	1290	1070	980	820	940	1080	1190	3640	1880	1230	1330	1120
17	1330	1030	980	840	940	1100	1310	3940	1760	1320	1270	1090
18	1300	1050	820	820	940	1060	1520	4100	1720	1360	1270	1080
19	1280	1080	840	820	900	1060	1710	4080	1740	1360	1380	1070
20	1280	1070	880	820	900	1120	1820	4250	1820	1400	1440	1080
21	1230	1160	800	820	880	1190	1980	4020	2080	1420	1380	1090
22	1190	1090	880	820	860	1150	2260	3710	2450	1380	1300	1090
23	1180	1180	800	880	860	1150	2550	3590	2680	1360	1260	1060
24	1180	1150	860	880	880	1180	2800	3330	2300	1450	1220	1040
25	1170	1070	900	900	900	1130	2910	3190	1990	1450	1220	1030
26	1160	1090	940	880	980	1090	2610	3240	1750	1410	1240	1010
27	1190	920	980	840	1090	1020	2180	3060	1560	1340	1260	998
28	1180	980	980	840	1080	938	1910	3080	1430	1350	1290	1010
29	1200	1000	960	820	---	971	1760	3290	1310	1390	1300	1000
30	1160	1050	900	800	---	955	1680	3500	1230	1360	1250	1020
31	1110	---	860	780	---	935	---	3860	---	1320	1240	---
TOTAL	35996	31266	28870	26380	24970	33269	45738	96180	75110	41780	40700	33178
MEAN	1161	1042	931	851	892	1073	1525	3103	2504	1348	1313	1106
MAX	1330	1180	1050	920	1090	1190	2910	4250	4380	1460	1440	1400
MIN	996	814	800	780	760	935	961	1550	1230	1220	1220	998
AC-FT	71400	62020	57260	52320	49530	65990	90720	190800	149000	82870	80730	65810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	MEAN	1191	1081	950	904	915	1025	1856	4825	6290	3073	1680	1278
MAX	2038	1664	1503	1473	1603	1961	5601	10770	13440	9354	4055	2616	
(WY)	1963	1963	1985	1985	1962	1962	1962	1984	1984	1983	1984	1984	
MIN	759	677	521	504	529	610	1039	1436	1373	1021	1050	737	
(WY)	1943	1978	1943	1941	1943	1964	1964	1977	1954	1963	1958	1942	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1941 - 1994
ANNUAL TOTAL	867950	513437	
ANNUAL MEAN	2378	1407	2091
HIGHEST ANNUAL MEAN			4173
LOWEST ANNUAL MEAN			1117
HIGHEST DAILY MEAN	11000	May 29	20800
LOWEST DAILY MEAN	660	Jan 5	350
ANNUAL SEVEN-DAY MINIMUM	711	Feb 27	417
INSTANTANEOUS PEAK FLOW			22200
INSTANTANEOUS PEAK STAGE			14.20
ANNUAL RUNOFF (AC-FT)	1722000	1018000	1515000
10 PERCENT EXCEEDS	7240	2640	4910
50 PERCENT EXCEEDS	1190	1130	1250
90 PERCENT EXCEEDS	786	860	756

a-Maximum gage height, 6.40 ft, Nov 29, backwater from ice.

GRIZZLY CREEK BASIN

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°43'00", long 107°18'35", in NE¹/4SW¹/4 sec.7, T.4 S., R.88 W., Garfield County, Hydrologic Unit 14010001, on left bank 0.5 mi west of Grizzly Cow Camp and 14 mi north of Glenwood Springs.

DRAINAGE AREA.--5.73 mi².

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,435 ft above sea level, from topographic map. Prior to Oct. 19, 1978, at site 600 ft upstream, at datum, 25.33 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 30 to May 17, June 1-5, and July 13 to Sept. 30. Records fair except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.1	.99	.86	.74	.84	1.0	1.6	145	3.4	1.5	1.4
2	1.3	1.1	.98	.88	.76	.87	1.0	1.7	135	3.2	1.5	1.5
3	1.3	1.2	.98	.89	.80	.90	1.0	1.8	120	3.5	1.4	1.6
4	1.4	1.1	.94	.90	.86	.90	1.0	2.0	105	3.2	1.4	1.7
5	1.5	1.1	.92	.88	.86	.92	.98	3.0	90	3.0	1.3	1.5
6	1.6	1.1	.91	.85	.86	.92	.98	4.0	77	2.8	1.3	1.4
7	1.9	1.1	.91	.84	.84	.90	.98	5.0	62	2.5	1.4	1.5
8	1.8	1.1	.88	.84	.84	.92	.98	8.0	52	2.5	1.4	1.3
9	1.8	1.1	.84	.85	.87	.96	.98	11	45	2.5	1.5	1.3
10	1.8	1.1	.84	.87	.88	.98	.98	15	38	2.3	1.5	1.2
11	1.6	1.1	.84	.90	.88	.98	1.0	20	34	2.1	1.4	1.2
12	1.7	1.1	.84	.90	.88	.98	1.0	25	29	2.0	1.4	1.3
13	1.8	1.1	.84	.88	.86	.96	1.0	32	25	1.9	1.4	1.4
14	1.7	1.1	.85	.86	.80	.96	1.0	40	23	1.9	1.5	1.6
15	1.7	1.1	.84	.84	.77	.95	1.1	48	21	1.8	1.5	1.5
16	1.7	1.1	.84	.87	.80	.95	1.2	56	18	1.8	1.4	1.4
17	1.7	1.1	.84	.90	.84	.95	1.2	65	15	1.7	1.4	1.3
18	1.7	1.0	.84	.88	.86	.94	1.2	70	14	1.7	1.3	1.2
19	1.7	1.0	.84	.88	.86	.94	1.3	89	13	1.7	1.3	1.3
20	1.5	1.1	.86	.85	.85	.94	1.4	84	13	1.6	1.3	1.4
21	1.5	1.1	.86	.84	.84	.96	1.6	87	12	1.6	1.4	1.5
22	1.5	1.1	.87	.82	.80	.98	1.8	91	12	1.6	1.4	1.4
23	1.4	1.1	.87	.82	.76	.98	1.9	109	9.6	1.5	1.3	1.4
24	1.4	1.1	.86	.83	.75	.98	1.9	135	6.5	1.5	1.3	1.3
25	1.4	1.1	.86	.86	.80	.98	1.9	129	6.3	1.5	1.4	1.2
26	1.4	1.1	.84	.86	.84	.98	1.8	123	5.6	1.5	1.3	1.2
27	1.4	1.1	.84	.86	.85	1.0	1.7	116	4.8	1.5	1.3	1.2
28	1.3	1.0	.85	.84	.86	1.0	1.6	121	4.3	1.5	1.2	1.1
29	1.2	1.0	.86	.83	---	1.0	1.4	125	4.0	1.5	1.2	1.5
30	1.1	1.0	.86	.80	---	1.1	1.5	138	3.6	1.4	1.3	2.0
31	1.1	---	.86	.76	---	1.1	---	151	---	1.4	1.3	---
TOTAL	47.2	32.6	27.05	26.54	23.21	29.72	38.38	1907.1	1142.7	63.6	42.5	41.8
MEAN	1.52	1.09	.87	.86	.83	.96	1.28	61.5	38.1	2.05	1.37	1.39
MAX	1.9	1.2	.99	.90	.88	1.1	1.9	151	145	3.5	1.5	2.0
MIN	1.1	1.0	.84	.76	.74	.84	.98	1.6	3.6	1.4	1.2	1.1
AC-FT	94	65	54	53	46	59	76	3780	2270	126	84	83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	2.25	1.59	1.01	.58	.43	.39	2.01	41.1	90.3	13.6	2.40	1.81							
MAX	7.42	5.07	3.12	2.21	1.90	1.87	10.9	75.9	206	49.4	5.78	5.35							
(WY)	1985	1983	1983	1985	1985	1985	1987	1986	1986	1983	1984	1984							
MIN	.44	.25	.14	.000	.000	.000	.000	3.85	13.0	1.33	.55	.55							
(WY)	1993	1978	1978	1978	1980	1991	1993	1977	1977	1977	1977	1977							

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	4381.07	3422.40	
ANNUAL MEAN	12.0	9.38	13.1
HIGHEST ANNUAL MEAN			23.8
LOWEST ANNUAL MEAN			5.79
HIGHEST DAILY MEAN	154 Jun 16	151 May 31	290 Jun 8 1986
LOWEST DAILY MEAN	.02 Feb 9	.74 Feb 1	a .00 Apr 7 1977
ANNUAL SEVEN-DAY MINIMUM	.03 Feb 5	.79 Jan 28	.00 Apr 7 1977
INSTANTANEOUS PEAK FLOW		162 Jun 1	364 Jun 5 1986
INSTANTANEOUS PEAK STAGE		4.73 Jun 1	b 4.99 Jun 5 1986
ANNUAL RUNOFF (AC-FT)	8690	6790	9500
10 PERCENT EXCEEDS	37	19	38
50 PERCENT EXCEEDS	1.1	1.3	1.2
90 PERCENT EXCEEDS	.04	.84	.04

a-No flow many days most years.

b-Maximum gage height observed, 8.64 ft, May 4, 1982, backwater from ice.

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°33'38", long 107°17'59", Garfield County, Hydrologic Unit 14010001, 100 yards downstream from No Name Creek and 2.0 mi above Glenwood Springs.

DRAINAGE AREA.--4,556 mi².

PERIOD OF RECORD.--December 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.

WATER TEMPERATURE: December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1985.

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs (station 09085100). Water-quality data collection was moved downstream to this site from previous site 09071100 on Dec. 12, 1985. Water-quality data collected at this site are considered equivalent to data collected at old site. Daily maximum and minimum specific-conductance data available in district office. Daily records are fair except for temperature records during the period Mar. 24 to Sept. 30, which are poor. Interruptions in the daily record are due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,740 microsiemens Aug. 21, 1990; minimum, 203 microsiemens May 12, 1991.

WATER TEMPERATURE: Maximum, 22.5°C July 26, 1987; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 992 microsiemens, Sept 2 (may have been higher during periods of missing record); minimum, 254 microsiemens, June 2.

WATER TEMPERATURE: Maximum, 21.1°C Aug. 13; minimum, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 28...	1430	1320	615	8.3	5.5	10.2	180	54	11	54
NOV 19...	1410	1150	660	8.2	0.5	12.4	190	56	11	57
DEC 09...	1050	1240	590	8.1	0.5	11.7	170	52	10	55
JAN 14...	1420	1160	603	8.1	0.0	12.4	160	49	9.7	57
FEB 25...	1300	1110	600	8.1	1.5	12.1	160	48	9.3	56
MAR 23...	1130	1270	610	8.1	7.5	10.9	160	47	11	54
MAY 24...	1520	3880	299	8.0	10.5	9.0	98	29	6.3	18
JUN 06...	1725	3930	287	8.2	14.0	8.4	100	30	6.2	19
30...	1640	1490	663	7.9	18.5	7.5	180	53	11	59
JUL 29...	0900	1530	594	7.8	19.5	6.5	160	49	9.4	51
AUG 26...	0750	1480	620	8.3	18.5	7.6	160	51	8.6	53
SEP 28...	1040	1430	689	8.5	13.5	9.2	170	53	10	64

COLORADO RIVER MAIN STEM

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 28...	2	2.3	106	86	74	0.3	9.1	354	0.48	1260
NOV 19...	2	2.3	109	91	81	0.3	9.4	373	0.51	1150
DEC 09...	2	2.2	103	80	73	0.2	9.5	344	0.47	1150
JAN 14...	2	2.3	102	78	83	0.3	9.0	349	0.48	1100
FEB 25...	2	2.3	96	73	82	0.3	9.6	338	0.46	1020
MAR 23...	2	2.8	102	85	75	0.3	9.1	345	0.47	1190
MAY 24...	0.8	1.1	75	28	24	0.1	7.7	159	0.22	1670
JUN 06...	0.8	1.1	71	30	23	0.1	6.9	159	0.22	1690
JUN 30...	2	2.5	115	79	85	0.2	8.8	367	0.50	1480
JUL 29...	2	2.6	100	79	70	0.3	7.9	329	0.45	1360
AUG 26...	2	2.7	95	84	76	0.4	7.6	340	0.46	1360
SEP 28...	2	2.6	105	87	92	0.3	7.6	379	0.52	1460

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	652	646	614	---	619	682	484	254	648	578	600
2	---	660	626	582	---	614	670	501	246	613	579	---
3	---	714	625	566	---	620	652	522	257	619	581	---
4	---	761	631	561	---	612	641	524	269	580	582	593
5	---	768	637	559	---	606	639	501	278	592	581	609
6	---	785	661	573	---	604	631	484	288	634	575	633
7	728	783	655	582	---	608	648	429	307	640	559	655
8	723	714	644	595	---	623	645	379	324	648	547	666
9	703	677	632	596	---	643	660	348	342	635	542	680
10	679	673	633	582	---	658	659	334	363	598	535	684
11	686	669	640	582	---	655	656	332	383	600	536	683
12	677	644	642	594	---	647	667	319	394	599	535	680
13	676	637	655	613	---	657	679	295	411	604	532	648
14	663	637	692	577	---	647	692	292	443	612	518	646
15	646	641	720	556	---	633	664	289	457	615	515	642
16	636	641	701	562	---	630	621	295	479	638	510	643
17	626	651	652	548	---	626	601	291	497	631	516	652
18	620	662	673	---	---	628	563	276	508	600	523	655
19	625	667	650	---	---	634	515	275	505	596	510	661
20	616	671	650	---	---	632	484	276	505	595	---	662
21	627	688	644	---	---	614	463	278	504	577	---	655
22	634	690	675	---	---	591	436	---	476	578	---	667
23	652	655	660	---	---	610	410	---	494	580	---	667
24	649	635	618	---	---	600	383	---	524	573	---	671
25	646	644	627	---	616	598	358	342	560	589	646	674
26	651	716	615	---	626	614	356	379	592	610	620	680
27	641	726	584	---	622	625	368	384	617	605	607	690
28	626	707	567	---	618	654	393	403	628	608	596	694
29	635	653	547	---	---	677	442	366	632	587	593	699
30	635	628	577	---	---	669	465	304	654	577	607	697
31	634	---	607	---	---	675	---	271	---	577	603	---

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	3.6	2.7	.0	.0	.0	.0	---	---	2.5	1.5
2	---	---	3.8	2.8	.0	.0	.0	.0	---	---	2.6	1.4
3	---	---	3.8	3.3	.0	.0	.0	.0	---	---	3.1	1.6
4	---	---	4.1	3.5	.0	.0	.0	.0	---	---	3.3	1.8
5	---	---	3.5	2.4	.0	.0	.0	.0	---	---	3.5	2.0
6	---	---	2.5	1.4	.0	.0	.0	.0	---	---	3.8	2.8
7	12.0	11.1	2.0	1.1	.0	.0	.0	.0	---	---	5.3	3.2
8	11.4	10.3	1.8	.5	.0	.0	.0	.0	---	---	5.5	3.8
9	11.4	10.1	1.3	.5	.0	.0	.0	.0	---	---	4.4	2.9
10	10.6	9.2	1.7	.8	.0	.0	.0	.0	---	---	4.6	3.2
11	10.0	8.5	2.2	1.1	.0	.0	.0	.0	---	---	4.9	3.7
12	9.5	8.9	3.2	2.0	.0	.0	.0	.0	---	---	5.8	4.3
13	9.8	8.9	3.9	3.2	.0	.0	.0	.0	---	---	6.7	5.1
14	10.2	8.3	4.1	3.6	.0	.0	.0	.0	---	---	7.2	5.7
15	10.2	9.0	4.1	3.0	.0	.0	.0	.0	---	---	7.6	5.9
16	9.5	7.4	3.5	1.8	.0	.0	.0	.0	---	---	7.9	6.4
17	9.7	8.9	2.4	1.2	.0	.0	.0	.0	---	---	7.7	6.3
18	9.0	8.0	1.5	.9	.0	.0	---	---	---	---	6.8	5.5
19	8.9	6.0	1.0	.0	.0	.0	---	---	---	---	6.8	6.0
20	8.4	7.1	.0	.0	.0	.0	---	---	---	---	8.1	6.6
21	8.3	6.7	.0	.0	.0	.0	---	---	---	---	7.8	6.1
22	7.6	5.9	.0	.0	.0	.0	---	---	---	---	7.8	6.1
23	7.4	6.3	.0	.0	.0	.0	---	---	---	---	7.3	5.5
24	7.5	6.4	.0	.0	.0	.0	---	---	---	---	6.8	5.6
25	7.6	6.4	.0	.0	.0	.0	---	---	2.0	1.4	6.6	5.4
26	7.6	6.3	.0	.0	.0	.0	---	---	2.3	1.3	6.6	5.5
27	6.7	4.8	.0	.0	.0	.0	---	---	2.7	1.5	6.3	3.8
28	5.5	4.7	.0	.0	.0	.0	---	---	2.3	1.5	4.9	3.3
29	5.4	4.6	.0	.0	.0	.0	---	---	---	---	6.3	3.8
30	5.0	2.7	.0	.0	.0	.0	---	---	---	---	6.0	4.4
31	3.4	2.3	---	---	.0	.0	---	---	---	---	7.3	5.3
MONTH	---	---	4.1	.0	.0	.0	---	---	---	---	8.1	1.4
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	6.2	8.8	8.3	13.5	11.0	19.4	18.1	19.9	18.0	17.4	15.2
2	9.1	7.4	10.7	8.6	13.9	12.0	19.5	18.1	18.8	17.5	17.1	15.5
3	9.5	8.2	11.2	10.1	13.9	12.2	18.6	17.6	19.2	18.2	17.9	16.6
4	9.8	8.0	10.8	9.4	14.1	12.3	18.7	17.9	19.6	18.6	17.3	16.2
5	8.9	6.9	12.8	10.8	14.1	12.1	19.2	18.0	20.0	19.0	17.6	15.9
6	7.7	6.5	13.4	12.0	14.3	12.4	19.1	17.3	19.9	18.3	17.0	15.7
7	7.8	5.9	13.5	12.6	14.3	12.4	17.5	15.6	18.7	17.4	17.3	15.5
8	6.6	5.5	13.1	11.3	14.2	12.4	17.5	15.7	19.0	17.1	17.4	15.1
9	7.1	5.9	12.9	11.5	14.2	12.5	18.8	17.0	17.8	16.6	16.9	15.1
10	7.8	6.1	12.7	10.7	14.6	12.9	19.2	18.4	18.6	16.5	16.5	14.9
11	8.0	6.8	12.9	11.3	15.2	13.6	19.6	18.3	20.5	18.6	16.3	15.4
12	8.0	6.3	12.9	11.2	15.9	14.1	18.9	17.3	20.8	19.5	17.0	15.4
13	9.5	7.5	12.4	10.5	15.9	14.5	18.1	17.0	21.1	19.4	16.3	15.3
14	10.0	8.8	11.8	9.1	15.6	14.6	18.0	17.1	20.0	18.8	15.9	14.0
15	10.9	9.1	11.8	10.4	15.6	14.7	18.2	16.4	20.1	17.3	14.7	12.5
16	11.3	9.6	11.8	9.7	15.9	15.0	18.0	16.4	19.9	17.9	13.9	12.9
17	11.7	10.9	11.8	10.3	16.2	15.5	18.1	17.1	19.0	18.1	14.6	12.6
18	12.2	11.3	11.7	10.2	16.9	16.2	18.5	17.5	19.4	17.8	14.6	13.9
19	12.2	11.2	11.6	9.8	17.2	16.3	18.6	17.6	18.9	17.5	14.7	13.7
20	12.2	11.4	11.7	10.1	17.4	16.6	19.0	18.1	18.1	15.8	15.2	12.7
21	12.4	10.5	11.7	9.4	17.9	17.0	19.5	18.5	18.0	14.9	14.7	13.7
22	12.5	11.5	11.9	9.7	17.4	16.2	19.9	18.9	18.2	16.9	14.4	12.8
23	12.0	10.9	11.9	10.4	16.7	15.5	20.1	18.7	18.5	17.3	13.7	12.9
24	11.8	10.4	11.2	9.6	18.4	16.4	19.8	18.4	18.6	17.3	13.4	12.3
25	11.1	9.0	11.4	9.9	18.8	17.9	18.7	18.0	18.9	17.8	13.8	12.0
26	9.0	6.9	12.2	10.3	19.0	18.2	19.2	18.5	19.4	18.3	14.1	12.6
27	8.2	5.9	12.3	10.5	19.3	18.4	19.4	18.1	19.5	17.6	13.9	12.3
28	6.9	5.3	12.5	11.3	19.4	18.1	20.1	18.8	18.5	17.0	14.0	12.2
29	7.5	6.9	12.5	9.9	19.3	17.6	20.0	18.5	17.9	16.8	13.5	12.1
30	8.7	7.3	13.5	11.0	19.4	17.7	19.6	18.1	18.0	16.0	12.7	12.1
31	---	---	13.5	11.8	---	---	19.5	18.7	16.9	15.9	---	---
MONTH	12.5	5.3	13.5	8.3	19.4	11.0	20.1	15.6	21.1	14.9	17.9	12.0

ROARING FORK RIVER BASIN

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi upstream from Difficult Creek tributary and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,120 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30 to Mar. 2, Mar. 27-28, and Mar. 31 to May 17. Records fair except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (42,400 acre-ft diverted, during current year, provided by U.S. Bureau of Reclamation). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	19	14	13	9.5	12	14	33	236	62	42	30
2	22	17	14	13	10	11	16	32	228	59	43	33
3	22	18	13	12	10	11	18	31	217	58	44	28
4	21	18	13	12	11	12	20	30	219	54	44	27
5	21	17	13	13	11	12	20	31	219	50	45	27
6	20	16	14	14	12	12	18	35	202	48	44	56
7	22	15	14	12	12	12	20	40	177	46	42	50
8	23	15	13	13	11	12	18	45	164	45	40	35
9	23	16	13	13	11	12	17	60	154	42	41	19
10	24	17	13	14	12	13	15	55	146	41	41	19
11	37	18	12	15	12	12	14	70	142	38	40	18
12	45	19	12	15	11	12	16	85	140	38	40	18
13	41	18	12	15	10	11	17	105	137	37	41	18
14	36	15	12	14	10	12	14	125	133	36	41	20
15	34	14	11	14	11	12	15	120	126	35	41	30
16	35	14	12	13	11	13	16	125	119	33	42	30
17	34	14	12	13	11	14	18	135	113	31	41	30
18	28	15	11	12	11	13	20	145	106	30	42	30
19	26	15	11	12	11	14	25	139	106	41	42	29
20	25	16	11	12	12	14	30	146	112	43	40	60
21	24	15	10	13	12	14	40	136	123	46	38	89
22	25	15	11	13	11	14	60	130	113	49	40	36
23	24	14	12	13	11	14	62	127	108	55	43	33
24	24	14	11	12	11	13	64	128	96	65	37	30
25	24	15	11	12	11	13	60	127	88	65	32	28
26	24	14	11	12	11	12	50	127	80	51	31	26
27	22	13	11	11	12	11	45	127	74	42	26	26
28	25	14	12	11	12	10	40	129	71	40	26	23
29	21	14	12	11	---	13	37	142	71	40	25	21
30	15	14	11	10	---	13	35	150	66	40	25	21
31	17	---	13	9.0	---	13	---	189	---	41	26	---
TOTAL	807	468	375	391.0	310.5	386	854	3099	4086	1401	1185	940
MEAN	26.0	15.6	12.1	12.6	11.1	12.5	28.5	100	136	45.2	38.2	31.3
MAX	45	19	14	15	12	14	64	189	236	65	45	89
MIN	15	13	10	9.0	9.5	10	14	30	66	30	25	18
AC-FT	1600	928	744	776	616	766	1690	6150	8100	2780	2350	1860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

	MEAN	29.4	21.4	17.4	15.3	14.5	15.1	30.9	150	372	149	58.1	38.6
MAX	53.3	43.3	31.0	24.4	20.6	22.6	53.8	512	939	542	133	83.7	
(WY)	1987	1985	1985	1985	1985	1986	1985	1984	1984	1984	1984	1986	
MIN	16.4	15.5	12.1	11.7	10.8	9.60	14.9	64.2	103	41.8	21.2	17.7	
(WY)	1982	1980	1994	1980	1981	1981	1983	1981	1989	1981	1981	1981	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1980 - 1994
ANNUAL TOTAL	25575	14302.5	
ANNUAL MEAN	70.1	39.2	a 127
HIGHEST ANNUAL MEAN			194
LOWEST ANNUAL MEAN			35.7
HIGHEST DAILY MEAN	520	Jun 17	1930
LOWEST DAILY MEAN	10	Dec 21	8.0
ANNUAL SEVEN-DAY MINIMUM	11	Dec 18	9.2
INSTANTANEOUS PEAK FLOW			b 2350
INSTANTANEOUS PEAK STAGE			c 2.80
ANNUAL RUNOFF (AC-FT)	50730	28370	a 92010
10 PERCENT EXCEEDS	235	113	170
50 PERCENT EXCEEDS	22	21	26
90 PERCENT EXCEEDS	13	11	13

a-Includes Twin Lakes tunnel.

b-From rating curve extended above 910 ft³/s.

c-Maximum gage height, 3.32 ft, Nov 27, backwater from ice.

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,014.01 ft above sea level. Prior to Apr. 25, 1968, at site 85 ft upstream, at datum 1.16 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 25-30, Dec. 14 to Jan. 1, and Jan. 20 to Feb. 18. Records good except for estimated daily discharges, which are poor. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935, (42,400 acre-ft diverted during current year, provided by U.S. Bureau of Reclamation). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	39	30	26	19	24	28	56	439	96	66	45
2	42	35	30	27	20	24	31	53	412	91	71	51
3	42	34	29	27	21	25	29	52	402	93	69	46
4	41	37	30	27	21	26	33	51	394	84	66	43
5	42	33	30	28	22	26	30	65	391	79	59	40
6	42	32	29	27	22	25	27	95	379	75	55	63
7	45	31	31	27	22	25	30	121	338	71	52	61
8	50	31	29	28	22	25	28	128	305	70	51	48
9	50	32	29	28	23	24	27	137	287	66	51	33
10	50	32	29	27	23	25	28	130	272	64	51	31
11	57	32	29	29	23	25	26	142	275	61	50	29
12	73	33	29	28	22	25	28	181	268	60	49	29
13	67	31	27	27	22	24	28	192	270	60	52	29
14	60	31	25	26	22	25	33	195	255	57	54	32
15	59	29	24	27	22	26	33	190	239	55	56	47
16	60	29	25	27	23	27	37	205	219	53	54	49
17	61	32	25	26	23	28	47	249	206	50	52	47
18	54	31	24	26	24	27	55	262	195	49	50	46
19	47	30	24	27	24	30	62	257	191	66	51	42
20	48	32	24	25	24	31	74	283	200	73	51	63
21	44	33	23	24	24	26	93	259	210	73	47	142
22	46	30	23	23	24	29	117	252	202	75	51	52
23	45	31	23	23	24	31	117	255	196	81	54	47
24	43	28	23	23	24	29	123	258	167	93	48	44
25	44	26	23	23	24	29	109	265	149	89	43	42
26	44	25	24	23	24	28	86	255	139	72	42	41
27	37	24	25	22	24	25	76	256	127	58	38	39
28	41	24	25	21	24	24	68	279	117	56	37	38
29	40	26	25	21	---	27	65	293	110	55	39	35
30	30	28	26	20	---	26	60	315	103	55	40	40
31	34	---	26	18	---	26	---	370	---	57	40	---
TOTAL	1481	921	818	781	636	817	1628	6101	7457	2137	1589	1394
MEAN	47.8	30.7	26.4	25.2	22.7	26.4	54.3	197	249	68.9	51.3	46.5
MAX	73	39	31	29	24	31	123	370	439	96	71	142
MIN	30	24	23	18	19	24	26	51	103	49	37	29
AC-FT	2940	1830	1620	1550	1260	1620	3230	12100	14790	4240	3150	2760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	43.1	34.4	29.6	26.5	25.2	26.7	48.6	198	401	179	65.0	49.1
MAX	80.0	61.6	47.5	37.0	35.9	41.7	79.7	554	1017	647	184	87.1	
(WY)	1966	1985	1987	1985	1989	1986	1985	1984	1984	1984	1984	1986	
MIN	23.5	20.7	18.6	17.0	15.4	16.6	26.2	97.0	119	48.4	29.3	23.8	
(WY)	1978	1978	1977	1977	1977	1977	1973	1983	1977	1977	1977	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	39577	25760	
ANNUAL MEAN	108	70.6	a ₁₄₈
HIGHEST ANNUAL MEAN			229
LOWEST ANNUAL MEAN			42.1
HIGHEST DAILY MEAN	717	439	1790
LOWEST DAILY MEAN	b ₂₃	18	12
ANNUAL SEVEN-DAY MINIMUM	23	20	15
INSTANTANEOUS PEAK FLOW		509	2230
INSTANTANEOUS PEAK STAGE		3.03	5.29
ANNUAL RUNOFF (AC-FT)	78500	51090	a ₁₀₇₂₃₀
10 PERCENT EXCEEDS	344	198	243
50 PERCENT EXCEEDS	43	40	39
90 PERCENT EXCEEDS	29	24	22

a-Includes Twin Lakes tunnel.

b-Also occurred Dec 22-25.

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi².

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year. Statistical summary computed for 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,610 ft above sea level, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum, Sept. 1, 1969 to July 10, 1991 at datum 1.0 ft lower.

REMARKS.--Estimated daily discharges: Oct. 25 to Feb. 17, and Mar. 29 to Apr. 2. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Charles H. Boustead tunnel by feeder conduit. Several small diversions upstream from station for irrigation of hay meadows upstream from and downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	10	7.0	6.4	3.9	4.8	5.8	31	317	42	14	8.8
2	12	10	6.6	6.4	4.2	5.2	6.6	30	226	41	16	15
3	12	10	6.4	6.6	4.7	6.0	7.2	29	224	47	14	14
4	11	9.8	6.2	6.2	5.4	6.0	7.2	29	207	42	13	14
5	11	9.8	6.0	6.2	5.2	6.1	6.8	43	165	40	12	10
6	11	9.0	5.8	6.0	5.0	6.1	6.8	67	144	41	13	8.9
7	13	8.8	5.7	5.8	5.0	5.6	6.2	87	128	42	12	8.1
8	20	9.0	5.6	5.4	5.0	5.4	5.6	91	115	42	11	7.2
9	19	9.0	5.6	5.6	4.8	4.4	5.7	91	101	43	11	6.9
10	21	9.0	5.5	5.8	4.8	4.8	5.7	88	95	42	13	6.5
11	19	9.0	5.4	5.5	5.0	5.3	5.5	101	93	40	10	6.0
12	24	9.4	5.4	5.3	5.0	5.0	5.8	115	82	40	9.4	5.5
13	22	9.6	5.6	5.4	4.4	4.8	6.0	118	81	37	12	6.7
14	19	9.4	5.6	5.7	4.2	5.6	5.0	120	79	34	17	8.1
15	20	9.0	5.6	5.5	4.7	5.7	5.9	113	67	33	20	9.8
16	22	8.8	5.8	5.8	4.9	6.3	6.8	118	62	31	12	7.6
17	25	8.8	5.6	5.4	5.0	7.0	7.8	145	57	29	12	7.0
18	23	9.2	5.6	5.2	5.2	7.3	8.3	135	57	28	10	5.0
19	18	9.4	5.6	5.2	5.3	7.0	14	124	79	27	17	6.2
20	20	9.0	5.6	5.0	5.3	7.8	21	136	72	26	22	7.0
21	15	8.6	5.6	5.0	5.2	7.8	28	125	67	24	14	7.5
22	19	9.2	5.2	5.1	5.1	7.7	36	120	68	21	12	9.6
23	18	9.4	6.0	5.0	5.0	7.7	45	116	60	19	9.3	8.1
24	16	9.6	5.4	5.3	5.0	8.4	51	115	54	20	7.7	6.4
25	15	9.0	5.8	5.4	5.1	8.0	56	117	51	19	8.1	5.7
26	12	7.6	6.0	5.2	5.0	7.5	57	112	50	17	7.7	4.9
27	10	7.0	6.4	5.2	4.9	7.1	49	110	49	16	7.1	5.0
28	9.8	6.6	6.8	5.2	4.8	6.9	42	127	47	14	7.8	5.4
29	9.5	7.6	6.6	4.5	---	6.0	37	143	46	14	13	6.1
30	9.0	7.5	5.6	4.7	---	5.8	33	181	45	15	13	5.3
31	10	---	6.0	4.0	---	5.2	---	267	---	15	9.4	---
TOTAL	497.3	268.1	181.6	169.0	137.1	194.3	583.7	3344	2988	941	379.5	232.3
MEAN	16.0	8.94	5.86	5.45	4.90	6.27	19.5	108	99.6	30.4	12.2	7.74
MAX	25	10	7.0	6.6	5.4	8.4	57	267	317	47	22	15
MIN	9.0	6.6	5.2	4.0	3.9	4.4	5.0	29	45	14	7.1	4.9
AC-FT	986	532	360	335	272	385	1160	6630	5930	1870	753	461

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	15.9	10.8	7.29	6.12	5.59	6.38	20.0	115	199	69.8	29.4	18.8			
MAX	32.7	25.1	14.4	11.3	9.21	9.86	40.8	195	296	194	71.4	39.8			
(WY)	1985	1985	1985	1987	1985	1989	1989	1987	1984	1984	1983	1984			
MIN	5.35	3.32	2.33	2.74	2.89	3.66	7.68	58.4	72.6	30.4	10.6	7.03			
(WY)	1990	1990	1981	1981	1990	1990	1983	1983	1989	1994	1980	1980			

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1980 - 1994

ANNUAL TOTAL	19510.5	9915.9	
ANNUAL MEAN	53.5	27.2	a 42.0
HIGHEST ANNUAL MEAN			69.3 1984
LOWEST ANNUAL MEAN			27.2 1994
HIGHEST DAILY MEAN	541 Jun 17	317 Jun 1	786 Jun 6 1988
LOWEST DAILY MEAN	4.0 Feb 22	3.9 Feb 1	b 1.8 Dec 20 1980
ANNUAL SEVEN-DAY MINIMUM	4.9 Feb 16	4.5 Jan 28	c 1.9 Dec 20 1980
INSTANTANEOUS PEAK FLOW		605 May 31	c 1170 Jun 8 1985
INSTANTANEOUS PEAK STAGE		2.77 May 31	d 2.33 Jun 8 1985
ANNUAL RUNOFF (AC-FT)	38700	19670	30450
10 PERCENT EXCEEDS	169	84	111
50 PERCENT EXCEEDS	12	9.0	12
90 PERCENT EXCEEDS	5.6	5.1	4.9

a-Average discharge for 16 years (water years 1951-1956, 1970-1979), 50.7 ft³/s; 36730 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.

b-Also occurred Dec 21-22, 1980.

c-From rating curve extended above 300 ft³/s.

d-Maximum gage height for period of record, 4.30 ft, Nov 30, 1984, backwater from ice.

09074800 CASTLE CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°05'15", long 106°48'42", Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Forest Service bridge, 0.4 mi upstream from Sandy Creek, and 7 mi south of Aspen.

DRAINAGE AREA.--32.2 mi².

PERIOD OF RECORD.--September 1969 to September 1994 (Discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14 to Feb. 25. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	20	15	12	8.0	9.5	6.6	21	214	98	39	25
2	25	19	14	12	8.5	9.5	6.5	20	192	90	41	28
3	25	19	14	11	9.0	9.5	6.5	20	196	86	37	38
4	24	19	14	11	9.0	9.5	6.5	21	201	83	35	35
5	24	18	13	12	9.0	9.4	6.5	24	195	77	35	30
6	24	18	14	11	8.5	9.0	6.8	27	193	73	35	27
7	26	17	13	11	9.0	9.0	6.5	35	182	67	34	26
8	26	17	13	11	9.0	9.0	6.5	44	165	63	32	25
9	26	17	13	11	9.5	8.9	6.6	47	161	62	36	24
10	26	17	13	11	10	8.8	6.9	43	164	61	35	24
11	25	17	13	10	10	8.6	6.9	45	185	59	33	24
12	26	17	13	10	9.0	8.6	6.8	56	212	56	35	24
13	25	17	12	10	8.5	8.6	6.5	59	217	53	40	24
14	25	17	11	11	8.5	8.6	6.6	56	201	52	37	26
15	25	16	11	11	9.0	8.2	6.9	59	196	52	35	26
16	25	16	12	11	9.5	8.1	8.0	66	185	49	33	25
17	25	16	11	11	10	8.1	9.0	77	183	50	31	24
18	24	16	11	10	10	8.1	10	79	192	47	30	24
19	23	15	11	10	10	8.0	11	70	178	47	32	24
20	23	15	10	10	10	7.7	14	73	173	48	32	24
21	22	16	10	10	10	7.9	17	71	192	46	30	24
22	22	16	11	10	10	7.7	21	76	215	45	29	24
23	22	16	12	9.5	9.5	7.7	23	81	193	45	27	23
24	21	15	11	10	9.5	7.5	29	91	180	43	27	22
25	21	13	11	10	9.5	7.3	28	99	167	43	26	22
26	21	12	11	10	9.5	7.3	25	86	155	42	25	22
27	20	13	12	10	9.5	7.5	24	93	143	42	25	21
28	21	15	12	9.5	9.5	7.8	22	116	126	40	25	21
29	20	17	12	8.5	---	7.2	22	110	109	39	25	21
30	18	15	12	8.0	---	7.7	21	144	102	37	25	23
31	19	---	13	7.5	---	7.2	---	220	---	37	25	---
TOTAL	724	491	378	320.0	261.0	257.5	383.6	2129	5367	1732	986	750
MEAN	23.4	16.4	12.2	10.3	9.32	8.31	12.8	68.7	179	55.9	31.8	25.0
MAX	26	20	15	12	10	9.5	29	220	217	98	41	38
MIN	18	12	10	7.5	8.0	7.2	6.5	20	102	37	25	21
AC-FT	1440	974	750	635	518	511	761	4220	10650	3440	1960	1490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

	MEAN	20.8	15.9	13.0	10.9	9.96	9.79	13.8	64.8	178	109	45.4	29.2
	MAX	29.9	23.2	20.4	17.7	14.9	14.8	23.3	131	298	267	95.0	56.6
	(WY)	1971	1985	1985	1985	1985	1986	1987	1984	1984	1984	1984	1970
	MIN	11.5	8.63	8.03	7.47	6.97	6.63	8.72	34.8	64.8	24.1	17.6	14.4
	(WY)	1978	1978	1978	1990	1978	1978	1980	1977	1977	1977	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1970 - 1994

ANNUAL TOTAL	21169.5	13779.1	
ANNUAL MEAN	58.0	37.8	43.4
HIGHEST ANNUAL MEAN			77.8
LOWEST ANNUAL MEAN			19.2
HIGHEST DAILY MEAN	^a 369	Jun 22	456
LOWEST DAILY MEAN	9.5	Jan 4	5.5
ANNUAL SEVEN-DAY MINIMUM	10	Mar 4	6.4
INSTANTANEOUS PEAK FLOW			559
INSTANTANEOUS PEAK STAGE		2.67	May 31
ANNUAL RUNOFF (AC-FT)	41990	27330	31450
10 PERCENT EXCEEDS	171	95	119
50 PERCENT EXCEEDS	19	21	18
90 PERCENT EXCEEDS	10	8.4	9.0

a-Also occurred Jun 23.

b-Also occurred Apr 3-5, 7-8, 13.

c-Maximum gage height, 3.88 ft, Jun 23, 1970.

ROARING FORK RIVER BASIN

09075700 MAROON CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, Hydrologic Unit 14010004, on left bank 0.3 mi upstream from Silver Queen Forest Service campground, 1.2 mi downstream from confluence of East and West Maroon Creeks, and 7.2 mi southwest of Aspen.

DRAINAGE AREA.--35.4 mi².

PERIOD OF RECORD.--September 1969 to September 1994 (Discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 8,720 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13 to Mar. 30. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Natural regulation by Maroon Lake. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	45	36	28	19	19	17	36	157	203	82	44
2	56	44	34	29	20	19	18	37	137	197	83	44
3	56	44	33	28	20	19	17	37	169	186	81	44
4	55	43	32	27	21	18	18	38	195	182	79	45
5	54	43	33	27	21	18	18	40	246	178	77	44
6	53	43	32	26	22	18	18	42	295	175	75	43
7	53	42	32	24	22	17	18	44	292	168	72	43
8	53	42	32	23	21	17	19	46	288	157	69	41
9	53	42	31	25	21	17	19	49	273	151	70	41
10	53	42	30	24	22	16	19	52	297	146	70	39
11	52	43	31	23	22	16	19	52	301	140	67	39
12	53	43	32	22	21	17	19	53	306	134	65	38
13	51	41	31	23	20	17	19	56	279	127	66	39
14	51	40	28	25	19	17	19	58	284	121	65	39
15	50	39	29	26	19	18	20	66	292	116	62	39
16	51	38	29	25	20	17	20	69	286	113	60	39
17	50	38	27	24	21	17	21	81	292	109	56	39
18	49	39	27	24	21	17	22	95	312	106	55	37
19	49	38	28	23	21	17	23	98	311	102	55	37
20	48	36	28	23	21	16	24	117	313	99	54	37
21	47	37	26	23	20	16	26	125	304	97	52	36
22	47	38	26	23	20	16	29	129	310	93	50	36
23	47	39	27	23	19	16	32	136	297	90	49	36
24	46	37	26	23	19	15	34	141	276	89	48	35
25	46	35	26	22	18	15	36	151	265	88	47	35
26	46	33	27	21	18	16	36	165	255	88	46	35
27	46	32	28	21	19	16	36	177	244	87	46	34
28	46	33	29	20	19	17	36	192	231	85	46	34
29	46	35	28	19	---	17	36	178	212	83	46	34
30	45	36	26	18	---	17	36	157	195	83	45	35
31	45	---	27	18	---	17	---	156	---	82	44	---
TOTAL	1554	1180	911	730	566	525	724	2873	7914	3875	1882	1161
MEAN	50.1	39.3	29.4	23.5	20.2	16.9	24.1	92.7	264	125	60.7	38.7
MAX	57	45	36	29	22	19	36	192	313	203	83	45
MIN	45	32	26	18	18	15	17	36	137	82	44	34
AC-FT	3080	2340	1810	1450	1120	1040	1440	5700	15700	7690	3730	2300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

	MEAN	38.7	28.7	22.3	18.8	17.5	16.2	19.8	73.5	248	191	85.6	51.1
MAX	67.0	44.5	36.0	31.3	27.0	28.5	41.4	174	372	352	164	89.5	
(WY)	1985	1985	1985	1985	1985	1988	1984	1984	1993	1984	1983	1984	
MIN	18.0	15.0	12.1	10.4	10.8	11.0	11.6	28.7	91.9	37.3	26.8	22.2	
(WY)	1978	1978	1978	1978	1978	1977	1975	1975	1977	1977	1977	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1969 - 1994
ANNUAL TOTAL	37807	23895	
ANNUAL MEAN	104	65.5	67.7
HIGHEST ANNUAL MEAN			112
LOWEST ANNUAL MEAN			29.0
HIGHEST DAILY MEAN	a 500	313	570
LOWEST DAILY MEAN	b 22	c 15	9.0
ANNUAL SEVEN-DAY MINIMUM	23	16	10
INSTANTANEOUS PEAK FLOW		334	d 836
INSTANTANEOUS PEAK STAGE		2.89	e 3.39
ANNUAL RUNOFF (AC-FT)	74990	47400	49080
10 PERCENT EXCEEDS	283	171	194
50 PERCENT EXCEEDS	41	39	30
90 PERCENT EXCEEDS	25	18	14

a-Estimated during period of indefinite stage-discharge relationship, Jun 11 to Jul 18.

b-Also occurred Jan 5.

c-Also occurred Mar 25.

d-From rating curve extended above 350 ft³/s, but may have been higher during period of indefinite stage-discharge relationship in Jun, 1984.

e-Maximum gage height, 4.53 ft, Feb 3, 1972, backwater from ice.

09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO

LOCATION.--Lat 39°20'41", long 106°40'23", in NW¹/4NW¹/4 sec.21, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on right bank 400 ft upstream from private bridge, 400 ft downstream from North Fork, 1.6 mi southeast of Thomasville, and 1.7 mi northwest of Norrie.

DRAINAGE AREA.--134 mi².

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,210 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 26 to Dec. 1. Records good. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	53	29	24	20	20	31	103	470	123	59	37
2	45	45	30	24	23	20	31	100	411	109	65	59
3	45	43	29	24	22	20	32	101	385	116	65	51
4	44	43	29	24	20	22	36	106	374	99	58	49
5	44	38	29	25	19	22	33	146	317	108	53	43
6	43	36	29	24	19	22	33	218	279	112	51	36
7	50	35	29	23	19	22	32	258	247	103	49	35
8	62	34	28	23	20	21	32	264	227	127	47	33
9	62	36	28	24	20	20	30	262	208	104	48	32
10	64	38	28	23	20	20	30	260	193	112	50	31
11	60	42	27	23	20	22	29	287	201	98	46	30
12	72	40	28	24	20	21	31	333	214	112	44	31
13	67	38	28	23	20	21	36	346	202	100	52	34
14	63	36	27	22	21	23	43	383	209	97	53	40
15	70	33	29	21	22	24	44	328	198	97	48	35
16	79	32	28	22	22	27	63	317	193	93	43	32
17	75	34	27	21	21	29	98	357	202	88	42	31
18	74	34	26	21	20	29	128	353	202	85	40	29
19	64	32	27	21	20	30	145	331	223	84	60	30
20	64	32	26	21	20	30	171	337	222	82	58	30
21	57	36	26	21	20	30	206	294	206	78	47	38
22	62	39	25	21	20	34	231	278	229	76	45	35
23	59	37	25	21	19	34	258	268	197	73	40	31
24	58	34	24	21	19	33	287	255	210	73	38	29
25	59	30	24	21	19	31	255	252	208	71	37	28
26	59	30	24	21	20	31	181	263	235	68	37	27
27	44	30	25	21	20	27	145	246	208	65	34	27
28	52	31	25	21	20	29	125	283	219	61	37	26
29	48	30	24	20	---	27	115	328	206	58	44	25
30	25	29	24	19	---	30	109	311	210	57	41	30
31	47	---	24	18	---	30	---	371	---	55	36	---
TOTAL	1763	1080	831	682	565	801	3020	8339	7305	2784	1467	1024
MEAN	56.9	36.0	26.8	22.0	20.2	25.8	101	269	243	89.8	47.3	34.1
MAX	79	53	30	25	23	34	287	383	470	127	65	59
MIN	25	29	24	18	19	20	29	100	193	55	34	25
AC-FT	3500	2140	1650	1350	1120	1590	5990	16540	14490	5520	2910	2030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	MEAN	44.6	33.9	26.2	21.8	21.2	26.5	85.6	294	404	158	73.6	53.5
MAX	77.8	53.9	45.1	34.5	29.6	54.9	131	531	647	332	112	103	
(WY)	1987	1985	1985	1984	1984	1986	1985	1984	1978	1984	1983	1986	
MIN	26.3	19.8	13.7	12.0	13.6	13.3	38.4	160	187	71.0	40.6	31.2	
(WY)	1990	1977	1977	1977	1977	1977	1983	1977	1977	1977	1977	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	45789	29661	
ANNUAL MEAN	125	81.3	104
HIGHEST ANNUAL MEAN			164
LOWEST ANNUAL MEAN			54.6
HIGHEST DAILY MEAN	725	Jun 17	1200
LOWEST DAILY MEAN	22	Feb 22	10
ANNUAL SEVEN-DAY MINIMUM	23	Feb 17	11
INSTANTANEOUS PEAK FLOW		662	1550
INSTANTANEOUS PEAK STAGE		3.49	4.50
ANNUAL RUNOFF (AC-FT)	90820	58830	75170
10 PERCENT EXCEEDS	423	233	266
50 PERCENT EXCEEDS	50	37	43
90 PERCENT EXCEEDS	24	21	20

a-Also occurred Jan 2, 1979.

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW¹/₄ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7766.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,900 acre-ft, July 15, 1973, elevation, 7,767.56 ft; minimum after first filling, 48,000 acre-ft, May 13, 1971, elevation, 7,698.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 98,600 acre-ft, July 21, 22, elevation, 7,762.14 ft; minimum contents, 62,400 acre-ft, April 18, elevation, 7,719.38 ft.

MONTHEND ELEVATION IN FEET ABOVE SEA LEVEL AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,762.88	99,300	-
Oct. 31.	7,758.73	95,300	-4,000
Nov. 30.	7,755.12	91,900	-3,400
Dec. 31.	7,750.04	87,300	-4,600
CAL YR 1993.			+12,900
Jan. 31.	7,744.39	82,300	-5,000
Feb. 28.	7,737.22	76,200	-6,100
Mar. 31.	7,725.26	66,700	-9,500
Apr. 30.	7,721.58	64,000	-2,700
May 31.	7,741.36	79,700	+15,700
June 30.	7,760.23	96,700	+17,000
July 31.	7,761.58	98,000	+1,300
Aug. 31.	7,752.62	89,600	-8,400
Sept. 30.	7,740.02	78,500	-11,100
WTR YR 1994.			-20,800

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¹/4SE¹/4 sec.12, T.8 S., R.85 W., Eagle County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1969 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 7,473.25 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe Tunnel since June 1925 and Charles H. Boustead Tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 09080190) since May 18, 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	161	128	131	131	187	211	197	164	114	185	265
2	166	152	128	131	131	209	211	196	166	111	176	275
3	164	133	128	131	131	211	211	179	162	110	140	275
4	164	133	128	131	131	211	211	172	147	108	140	275
5	164	135	128	131	131	211	211	172	145	108	167	275
6	165	137	128	131	131	211	211	168	139	107	214	275
7	167	132	128	131	131	211	211	152	126	108	214	273
8	167	131	128	131	131	211	211	154	122	108	214	272
9	163	131	128	131	131	211	211	158	118	108	205	268
10	164	131	128	131	131	211	211	159	115	106	167	268
11	164	131	128	131	131	211	211	160	112	106	167	268
12	165	131	128	131	131	211	197	164	112	108	178	268
13	167	131	128	131	136	211	188	169	111	108	211	268
14	167	131	128	131	161	211	188	169	109	108	211	268
15	166	101	128	131	161	211	188	168	107	108	206	252
16	164	62	128	131	161	211	188	167	112	108	197	208
17	164	62	128	131	170	211	188	177	114	108	220	208
18	164	62	128	131	185	211	176	217	114	108	238	208
19	164	97	128	131	185	211	176	220	114	107	256	208
20	164	124	128	131	185	211	180	223	117	110	258	208
21	160	124	128	131	185	211	180	223	112	118	258	208
22	159	126	128	131	185	211	181	223	111	118	258	211
23	159	126	128	131	185	211	182	214	110	118	258	211
24	159	126	128	131	185	211	184	180	108	118	258	211
25	159	126	129	131	185	211	185	178	114	118	253	211
26	159	126	131	131	185	211	185	178	112	118	252	211
27	159	126	131	131	185	211	187	170	112	118	252	211
28	159	126	131	131	185	211	194	146	110	118	252	211
29	159	126	131	131	---	211	199	150	109	133	252	211
30	159	126	131	131	---	211	199	155	108	185	252	214
31	161	---	131	131	---	211	---	160	---	185	252	---
TOTAL	5052	3666	3987	4061	4396	6515	5866	5518	3632	3614	6761	7195
MEAN	163	122	129	131	157	210	196	178	121	117	218	240
MAX	167	161	131	131	185	211	211	223	166	185	258	275
MIN	159	62	128	131	131	187	176	146	107	106	140	208
AC-FT	10020	7270	7910	8050	8720	12920	11640	10940	7200	7170	13410	14270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	141	127	138	133	136	144	162	272	365	260	154	136														
MAX	366	185	198	195	209	234	370	669	950	596	242	240														
(WY)	1970	1985	1986	1986	1986	1986	1971	1970	1984	1983	1983	1994														
MIN	54.8	44.0	38.2	36.8	36.3	33.6	39.1	116	115	95.9	57.1	49.1														
(WY)	1978	1969	1969	1969	1969	1977	1969	1990	1992	1977	1977	1977														

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1969 - 1994

ANNUAL TOTAL	77453	60263	
ANNUAL MEAN	212	165	a 181
HIGHEST ANNUAL MEAN			288
LOWEST ANNUAL MEAN			83.9
HIGHEST DAILY MEAN	1070	Jun 1	b 275
LOWEST DAILY MEAN	c 62	Nov 16	c 62
ANNUAL SEVEN-DAY MINIMUM	90	Nov 15	90
INSTANTANEOUS PEAK FLOW			275
INSTANTANEOUS PEAK STAGE			2.15
ANNUAL RUNOFF (AC-FT)	153600	119500	f 3.50
10 PERCENT EXCEEDS	413	214	295
50 PERCENT EXCEEDS	164	161	152
90 PERCENT EXCEEDS	92	112	82

a-Subsequent to completion of Ruedi Reservoir.

b-Also occurred Sep 3-6.

c-Also occurred Nov 17, 18.

d-Minimum daily discharge for period of record, 16 ft³/s, Feb 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft³/s, Mar 4, 1966.

e-Maximum discharge and stage for period of record, 2690 ft³/s, Jun 18, 1965, gage height, 5.16 ft, site and datum then in use.

f-Maximum gage height for statistical period, 3.89 ft, Jun 24, 1983.

ROARING FORK RIVER BASIN

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¹/4SW¹/4 sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,905 ft above sea level, from river-profile map.

REMARKS.--No estimated daily discharges. Records good. A few small diversions for irrigation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	100	81	66	44	51	80	223	1680	475	145	95
2	118	93	76	69	47	52	85	217	1670	439	158	100
3	118	93	71	66	54	56	85	228	1660	402	144	115
4	118	95	70	65	58	63	94	233	1690	393	136	123
5	118	91	77	65	57	67	89	316	1600	358	132	104
6	111	83	73	63	54	67	83	471	1510	329	131	94
7	117	87	72	58	56	64	84	579	1390	305	127	88
8	130	85	72	54	53	64	82	597	1310	274	123	84
9	138	85	71	61	53	60	82	613	1220	270	137	82
10	140	84	69	61	58	59	81	594	1170	260	147	81
11	129	87	69	52	59	61	83	665	1200	257	133	82
12	147	92	72	53	54	61	79	834	1190	252	130	79
13	140	90	66	62	43	64	86	877	1220	224	130	95
14	128	88	55	60	55	69	99	796	1170	213	138	112
15	131	83	61	58	57	76	102	822	1170	210	141	102
16	147	80	68	63	60	84	121	859	1070	196	122	90
17	151	83	61	55	58	87	164	951	1020	201	116	83
18	149	83	52	58	60	82	212	1020	998	199	114	79
19	136	76	62	52	57	91	257	1020	987	193	120	78
20	131	73	61	53	55	100	316	1080	1090	193	121	77
21	123	75	52	55	56	87	418	1010	984	185	110	81
22	123	84	59	53	54	89	486	1020	1120	179	105	78
23	120	97	64	55	48	93	490	1070	1020	172	101	75
24	117	86	57	59	52	86	507	1060	885	176	99	72
25	116	75	60	56	49	86	455	1130	802	170	98	70
26	115	68	63	57	52	86	367	1100	738	170	94	68
27	104	63	69	55	53	80	315	1090	687	165	91	66
28	106	72	71	53	52	74	276	1240	615	155	103	66
29	108	82	66	48	---	76	255	1290	538	151	102	66
30	91	80	58	52	---	71	236	1400	501	146	99	105
31	98	---	67	42	---	74	---	1580	---	145	94	---
TOTAL	3837	2513	2045	1779	1508	2280	6169	25985	33905	7457	3741	2590
MEAN	124	83.8	66.0	57.4	53.9	73.5	206	838	1130	241	121	86.3
MAX	151	100	81	69	60	100	507	1580	1690	475	158	123
MIN	91	63	52	42	43	51	79	217	501	145	91	66
AC-FT	7610	4980	4060	3530	2990	4520	12240	51540	67250	14790	7420	5140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1994, BY WATER YEAR (WY)

	MEAN	71.1	55.7	49.1	48.3	64.2	194	761	1283	622	191	123
MAX	220	152	95.9	85.3	89.9	184	464	1223	2019	1872	531	253
(WY)	1987	1987	1986	1985	1986	1986	1962	1984	1957	1957	1957	1986
MIN	49.7	39.5	36.3	34.1	28.3	32.4	83.4	288	375	96.9	74.6	59.8
(WY)	1978	1978	1978	1978	1964	1964	1964	1977	1977	1977	1977	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1956 - 1994

ANNUAL TOTAL	163640	93809	
ANNUAL MEAN	448	257	
HIGHEST ANNUAL MEAN			297
LOWEST ANNUAL MEAN			468
HIGHEST DAILY MEAN	2600	Jun 17	107
LOWEST DAILY MEAN	33	Jan 24	1977
ANNUAL SEVEN-DAY MINIMUM	38	Feb 27	3500
INSTANTANEOUS PEAK FLOW			a
INSTANTANEOUS PEAK STAGE			22
ANNUAL RUNOFF (AC-FT)	324600	186100	27
10 PERCENT EXCEEDS	1560	985	4180
50 PERCENT EXCEEDS	121	94	6.12
90 PERCENT EXCEEDS	45	56	43

a-Also occurred Feb 15, 1964, Jan 2, and Feb 17-18, 1978.

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW¹/4SE¹/4 sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft upstream from mouth.

DRAINAGE AREA.--1,451 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs. Statistical summary computed for 1972 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,720.73 ft above sea level. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	723	776	651	504	434	533	580	937	4040	1570	657	693
2	708	786	617	516	480	543	626	901	4030	1500	691	753
3	697	747	587	506	490	578	622	881	4020	1440	644	750
4	683	745	580	508	500	599	628	863	4070	1390	591	777
5	672	726	615	512	492	618	628	943	3940	1280	562	745
6	682	697	585	510	473	617	601	1230	3770	1200	615	718
7	706	700	592	488	481	608	605	1500	3470	1120	617	736
8	750	689	582	461	488	599	631	1580	3220	1060	606	715
9	742	690	573	487	480	570	619	1600	3010	1010	635	699
10	778	686	562	506	478	561	610	1490	2820	985	635	695
11	771	711	560	466	482	575	603	1480	2880	949	590	685
12	805	780	587	454	475	571	581	1760	2860	907	578	679
13	832	732	563	501	431	578	575	1930	2890	864	614	681
14	846	717	495	500	475	582	607	1840	2840	811	649	701
15	843	688	520	495	487	590	619	1890	2750	790	635	709
16	923	605	553	496	491	602	643	1920	2590	768	584	650
17	914	597	528	492	493	629	728	2140	2510	775	590	609
18	893	626	482	493	517	611	818	2340	2470	710	598	595
19	855	613	497	484	499	622	878	2290	2480	703	676	595
20	834	593	525	483	496	683	982	2460	2730	723	715	587
21	821	612	504	484	496	630	1170	2320	2600	721	688	659
22	816	694	555	481	493	620	1350	2280	2840	700	685	617
23	816	719	547	486	486	646	1420	2390	2850	696	674	567
24	802	701	504	491	510	629	1550	2340	2490	728	653	555
25	796	642	486	490	528	630	1540	2440	2310	721	649	552
26	795	600	520	491	544	626	1310	2410	2180	701	650	541
27	783	571	548	489	564	601	1180	2390	2050	675	648	539
28	781	575	548	479	549	557	1080	2620	1920	649	679	533
29	790	661	519	471	---	606	1020	2890	1770	615	708	530
30	755	650	471	478	---	557	989	2990	1650	625	700	553
31	751	---	478	437	---	572	---	3540	---	637	693	---
TOTAL	24363	20329	16934	15139	13812	18543	25793	60585	86050	28023	19909	19418
MEAN	786	678	546	488	493	598	860	1954	2868	904	642	647
MAX	923	786	651	516	564	683	1550	3540	4070	1570	715	777
MIN	672	571	471	437	431	533	575	863	1650	615	562	530
AC-FT	48320	40320	33590	30030	27400	36780	51160	120200	170700	55580	39490	38520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	713	667	572	507	477	530	809	2160	3996	2313	920	702											
MAX	1159	969	790	665	689	861	1602	4663	7383	5223	1801	1151											
(WY)	1985	1985	1985	1986	1986	1986	1985	1984	1984	1984	1984	1984											
MIN	384	411	382	371	315	298	352	593	1139	422	316	363											
(WY)	1978	1978	1978	1978	1977	1977	1977	1977	1977	1977	1977	1977											

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1972 - 1994

ANNUAL TOTAL	567642	348898		
ANNUAL MEAN	1555	956		
HIGHEST ANNUAL MEAN			a	1199
LOWEST ANNUAL MEAN				2092
HIGHEST DAILY MEAN	6670	May 28	4070	Jun 4
LOWEST DAILY MEAN	395	Feb 22	431	Feb 13
ANNUAL SEVEN-DAY MINIMUM	421	Feb 12	467	Jan 27
INSTANTANEOUS PEAK FLOW			4550	Jun 2
INSTANTANEOUS PEAK STAGE			5.19	Jun 2
ANNUAL RUNOFF (AC-FT)	1126000	692000		8.06
10 PERCENT EXCEEDS	4650	2310		2880
50 PERCENT EXCEEDS	778	650		661
90 PERCENT EXCEEDS	453	491		427

a-Average discharge for 65 years (water years 1906-09, 1911-71), 1368 ft³/s; 991100 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.

b-Maximum daily discharge for period of record, 16600 ft³/s, Jun 30, 1957.

c-Minimum daily discharge for period of record, 179 ft³/s, Jan 21, 1935; minimum discharge, 145 ft³/s, Jan 21, 1935, gage height, 0.65 ft.

d-Also occurred Aug 12, 1977.

e-Maximum discharge and stage for period of record, 19000 ft³/s, Jul 1, 1957, gage height, 8.65 ft.

f-Maximum gage height for period of record, 8.7 ft, Jun 14, 1921, from floodmarks.

ROARING FORK RIVER BASIN

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
NOV 02...	1045	796	556	8.5	5.0	12.2	K12	<1
MAR 21...	1130	633	555	8.0	5.0	11.2	<1	<1
JUN 06...	1445	3660	230	8.2	10.5	8.9	K40	K27
AUG 26...	0940	658	592	8.4	13.5	8.6	120	65

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 02...	<1	<1	70	<1	<10	<10	<0.1	<1	<0.2	<10
MAR 21...	<1	<1	<10	<1	<10	<10	<0.1	<1	<0.2	<10
JUN 06...	3	3	840	<1	40	<10	<0.1	<1	<0.2	<10
AUG 26...	<1	<1	80	<1	20	<10	<0.1	<1	<0.2	<10

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 06...	1311	660	592	11.5	MAY 18...	1050	2410	269	8.0
JAN 13...	1555	529	558	1.5	JUN 09...	0814	3120	255	8.0
FEB 23...	1113	486	573	2.0	JUL 08...	0810	1110	481	11.5
APR 14...	0916	623	563	7.5	AUG 10...	1512	611	597	18.5

K-Based on non-ideal colony count.

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¹/₄NW¹/₄ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,700.75 ft above sea level, Colorado State Highway Department benchmark.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2060	2110	1880	1570	1280	1690	1660	2760	8690	3050	2110	2100
2	1920	2110	1870	1710	1350	1690	1730	2660	8810	3030	2180	2240
3	1890	1920	1850	1720	1330	1740	1780	2630	8550	3020	2140	2290
4	1870	1740	1790	1710	1400	1800	1840	2640	8420	3030	2040	2260
5	1860	1620	1820	1670	1550	1840	1880	2810	8150	2790	1920	2140
6	1860	1670	1740	1700	1580	1860	1800	3410	7710	2610	1970	2010
7	1870	1740	1770	1610	1570	1870	1770	4040	7060	2490	2010	1990
8	1980	1860	1780	1540	1630	1860	1790	4490	6530	2430	2010	1950
9	2060	1870	1820	1580	1620	1780	1750	4780	6090	2430	2060	1880
10	2150	1860	1720	1630	1590	1720	1730	4710	5680	2540	2100	1890
11	2130	1900	1740	1550	1620	1750	1720	4630	5560	2480	2050	1940
12	2160	2130	1760	1480	1580	1750	1660	5290	5500	2460	2050	1990
13	2200	2020	1700	1580	1480	1720	1600	5760	5380	2410	2060	2010
14	2250	2020	1450	1690	1470	1740	1670	5700	5220	2360	2150	2090
15	2280	1930	1470	1670	1530	1770	1810	5940	5000	2340	2150	2100
16	2410	1810	1670	1650	1560	1810	1960	5860	4680	2260	2100	2010
17	2430	1750	1680	1590	1600	1860	2070	6310	4460	2250	2040	1880
18	2380	1790	1440	1620	1690	1840	2420	6710	4390	2320	2020	1890
19	2330	1820	1470	1580	1670	1830	2710	6690	4380	2320	2200	1880
20	2300	1730	1540	1570	1620	1940	2970	7040	4770	2350	2350	1870
21	2250	1760	1400	1560	1640	1980	3330	6760	4820	2390	2280	1980
22	2180	1880	1380	1550	1630	1950	3750	6430	5410	2330	2190	1920
23	2170	2040	1530	1550	1540	1950	4110	6430	5740	2280	2100	1860
24	2150	1990	1520	1580	1580	1980	4490	6170	5020	2370	2030	1810
25	2130	1850	1440	1570	1640	1940	4630	6130	4510	2380	1980	1800
26	2130	1540	1520	1650	1680	1880	4120	6140	4140	2320	2040	1810
27	2130	1560	1720	1610	1720	1780	3610	5960	3820	2210	2040	1740
28	2130	1640	1810	1540	1720	1640	3230	6200	3570	2150	2130	1780
29	2140	1880	1800	1520	---	1680	3000	6650	3330	2140	2150	1770
30	2100	1890	1590	1500	---	1700	2870	6940	3140	2140	2110	1800
31	2030	---	1560	1280	---	1610	---	7840	---	2110	2080	---
TOTAL	65930	55430	51230	49330	43870	55950	75460	166510	168530	75790	64840	58680
MEAN	2127	1848	1653	1591	1567	1805	2515	5371	5618	2445	2092	1956
MAX	2430	2130	1880	1720	1720	1980	4630	7840	8810	3050	2350	2290
MIN	1860	1540	1380	1280	1280	1610	1600	2630	3140	2110	1920	1740
AC-FT	130800	109900	101600	97850	87020	111000	149700	330300	334300	150300	128600	116400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	2085	1903	1603	1499	1487	1694	2690	6940	10170	5512	2787	2241
MAX	3082	2703	2487	2192	2209	2814	4823	15570	20710	13610	5975	3716	
(WY)	1985	1985	1985	1985	1986	1986	1985	1984	1984	1983	1984	1984	1984
MIN	1394	1186	1162	1147	1023	1018	1571	2146	2781	1755	1674	1647	
(WY)	1978	1978	1967	1990	1981	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	1475000	931550											
ANNUAL MEAN	4041	2552											
HIGHEST ANNUAL MEAN										3389			
LOWEST ANNUAL MEAN										1638			1984
HIGHEST DAILY MEAN	17100	May 28	8810	Jun 2	30200	May 25	1984						
LOWEST DAILY MEAN	1020	Jan 5	1280	Jan 31	870	Feb 11	1981						
ANNUAL SEVEN-DAY MINIMUM	1090	Jan 24	1380	Jan 29	978	Mar 10	1977						
INSTANTANEOUS PEAK FLOW			9180	Jun 2	31500	May 25	1984						
INSTANTANEOUS PEAK STAGE			6.96	Jun 2	12.49	May 25	1984						
ANNUAL RUNOFF (AC-FT)	2926000	1848000								2455000			
10 PERCENT EXCEEDS	12400	5100								7870			
50 PERCENT EXCEEDS	2170	1970								2070			
90 PERCENT EXCEEDS	1230	1570								1330			

a-Also occurred Feb 1.

09086000 WEST ELK CREEK NEAR NEW CASTLE, CO

LOCATION.--Lat 39°39'59", long 107°37'35", Garfield County, Hydrologic Unit 14010005, on left bank 1.9 mi downstream from West Elk Reservoir and just inside White River National Forest boundary.

DRAINAGE AREA.--9.55 mi².

PERIOD OF RECORD.--1911, October 1990 to current year. Published as West Fork Elk Creek near New Castle, 1911.

REVISED RECORDS.--WDR CO-92-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,760 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 4. Records fair except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.5	1.3	.90	.74	.85	.97	1.3	1.1	.81	.65	.50
2	1.9	1.5	1.3	.88	.72	.85	1.1	1.3	1.1	.80	.52	.90
3	1.9	1.5	1.3	.88	.74	.86	1.0	1.3	1.0	.81	.34	.00
4	1.9	1.5	1.2	.88	.76	.86	1.1	1.3	.96	.62	.06	.00
5	1.9	1.4	1.1	.88	.78	.88	.99	1.3	.95	.49	.06	.00
6	1.8	1.4	1.1	.90	.78	.93	.94	1.5	.95	.28	.00	.00
7	2.0	1.4	1.1	.90	.78	.94	.99	1.6	.93	.21	.50	.00
8	2.0	1.4	1.1	.82	.76	.93	1.1	1.7	.93	.24	.46	.00
9	2.1	1.4	1.1	.80	.78	.90	1.3	1.9	1.0	.15	.91	.00
10	2.0	1.4	1.0	.80	.78	.84	1.3	1.8	1.2	.00	.87	.00
11	2.0	1.5	1.0	.82	.74	.66	1.3	1.9	1.2	.00	.74	.00
12	2.1	1.5	1.0	.82	.72	.66	1.2	1.7	1.2	.00	.65	.00
13	1.9	1.5	1.0	.82	.86	.79	1.3	1.7	1.1	.00	.54	.00
14	1.9	1.4	1.0	.82	.86	.86	1.3	1.4	.98	.00	.51	.00
15	1.8	1.5	1.0	.84	.80	.93	1.3	1.4	.94	.00	.53	.00
16	1.6	1.5	1.1	.86	.84	.95	1.3	1.4	.93	.00	.40	.00
17	1.6	1.4	1.1	.86	.84	.94	1.3	1.3	.93	.00	.33	.00
18	1.6	1.4	1.0	.88	.84	.93	1.3	1.2	.93	.00	.21	.00
19	1.6	1.3	.98	.88	.84	.93	1.3	1.1	.93	.00	.45	.00
20	1.5	1.3	.98	.88	.82	.95	1.3	1.1	.93	.00	.29	.00
21	1.5	1.3	1.0	.88	.82	.93	1.3	1.1	.94	.00	.17	.00
22	1.5	1.3	1.0	.86	.82	.94	1.3	1.2	1.0	.00	.20	.00
23	1.5	1.3	.96	.86	.84	.94	1.4	1.2	.96	.00	.00	.00
24	1.5	1.3	.92	.88	.86	.93	1.5	1.1	.93	.00	.00	.00
25	1.5	1.3	.90	.86	.90	.98	1.6	1.1	.93	.00	.00	.00
26	1.5	1.2	.88	.86	.90	.96	1.5	1.1	.93	.00	.00	.00
27	1.5	1.2	.88	.86	.88	.94	1.4	1.1	.89	.40	.00	.00
28	1.5	1.2	.88	.86	.86	.95	1.3	1.2	.90	.32	.00	.00
29	1.5	1.2	.88	.80	---	.93	1.3	1.2	.89	.21	.00	.00
30	1.4	1.2	.88	.78	---	.92	1.3	1.1	.85	.44	.29	.26
31	1.5	---	.88	.76	---	.94	---	1.1	---	.43	.29	---
TOTAL	53.4	41.2	31.82	26.38	22.66	27.80	37.59	41.7	29.41	6.21	9.97	1.66
MEAN	1.72	1.37	1.03	.85	.81	.90	1.25	1.35	.98	.20	.32	.055
MAX	2.1	1.5	1.3	.90	.90	.98	1.6	1.9	1.2	.81	.91	.90
MIN	1.4	1.2	.88	.76	.72	.66	.94	1.1	.85	.00	.00	.00
AC-FT	106	82	63	52	45	55	75	83	58	12	20	3.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	MEAN	.69	.54	.42	.36	.36	.47	.89	2.14	1.87	1.21	.86	.77
MAX	1.72	1.37	1.03	.85	.81	.90	1.25	5.76	5.38	3.53	2.07	2.03	
(WY)	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993	1993	
MIN	.32	.22	.20	.18	.17	.18	.57	.66	.47	.20	.32	.055	
(WY)	1992	1992	1991	1993	1991	1991	1991	1992	1991	1994	1994	1994	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1991 - 1994
ANNUAL TOTAL	756.34	329.80	
ANNUAL MEAN	2.07	.90	.88
HIGHEST ANNUAL MEAN			1.81
LOWEST ANNUAL MEAN			.38
HIGHEST DAILY MEAN	9.6 May 22	a 2.1 Oct 9	9.6 May 22 1993
LOWEST DAILY MEAN	.13 Jan 12	b .00 Jul 10	.00 Jul 10 1994
ANNUAL SEVEN-DAY MINIMUM	.16 Jan 8	.00 Jul 10	.00 Jul 10 1994
INSTANTANEOUS PEAK FLOW		2.5 Oct 9	11 May 21 1993
INSTANTANEOUS PEAK STAGE		.49 Oct 9	1.35 May 21 1993
ANNUAL RUNOFF (AC-FT)	1500	654	640
10 PERCENT EXCEEDS	4.8	1.5	1.9
50 PERCENT EXCEEDS	1.5	.93	.53
90 PERCENT EXCEEDS	.19	.00	.18

a-Also occurred Oct 12.

b-No flow many days.

c-No flow many days, Jul to Sep, 1994.

09086470 MAIN ELK CREEK NEAR NEW CASTLE, CO

LOCATION.--Lat 39°40'41", long 107°34'21", Garfield County, Hydrologic Unit 14010005, on right bank about 500 ft upstream from bridge and 9.5 miles northeast of New Castle.

DRAINAGE AREA.--91.0 mi².

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 9, Dec. 21 to Jan. 13, Jan. 30, Feb. 3, 13-14, and Apr. 18 to May 12. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	13	8.8	9.0	10	9.9	18	278	39	17	16
2	18	14	13	9.0	9.0	11	10	19	256	39	17	17
3	17	14	13	9.0	9.2	11	11	21	222	39	17	17
4	17	14	13	9.0	10	11	11	24	199	37	17	17
5	17	14	13	8.8	9.9	12	12	33	177	36	17	16
6	17	13	12	9.0	9.6	11	12	64	159	36	17	15
7	19	13	12	8.8	9.3	12	12	120	140	34	16	15
8	20	14	12	8.6	9.7	12	12	160	122	31	16	15
9	21	14	12	8.8	9.8	11	12	190	109	30	17	15
10	19	14	12	9.0	9.7	11	12	240	102	30	18	16
11	19	15	12	9.0	9.6	11	11	270	93	29	19	16
12	19	15	11	9.2	8.9	11	10	330	89	27	18	15
13	18	15	11	9.8	9.4	11	10	348	82	26	17	14
14	18	15	11	10	9.4	11	11	334	78	26	17	15
15	18	15	11	10	9.8	11	11	359	73	26	17	15
16	18	13	11	10	9.4	11	12	397	67	26	17	15
17	18	14	10	10	9.5	11	14	452	63	26	16	15
18	18	15	10	10	9.5	11	16	435	60	23	15	14
19	17	13	10	11	9.1	11	20	412	57	21	15	14
20	17	13	10	11	9.2	11	22	390	57	21	15	14
21	16	14	9.8	11	10	11	28	352	56	21	15	14
22	15	15	9.8	11	9.1	11	34	332	56	20	15	15
23	16	14	9.2	11	10	12	38	333	56	20	15	15
24	16	12	9.0	11	9.8	12	37	302	56	20	16	15
25	16	13	8.8	11	9.8	12	34	271	52	20	16	15
26	16	13	8.8	11	9.7	11	29	278	50	20	16	15
27	15	13	8.8	11	9.0	10	26	257	48	19	16	15
28	15	13	9.0	10	9.2	12	23	259	45	18	16	14
29	15	13	8.8	9.9	---	12	21	259	41	17	16	13
30	13	13	8.8	9.2	---	10	19	270	39	17	16	15
31	16	---	8.8	9.0	---	11	---	279	---	17	16	---
TOTAL	531	415	331.6	303.9	265.6	346	539.9	7808	2982	811	508	452
MEAN	17.1	13.8	10.7	9.80	9.49	11.2	18.0	252	99.4	26.2	16.4	15.1
MAX	21	15	13	11	10	12	38	452	278	39	19	17
MIN	13	12	8.8	8.6	8.9	10	9.9	18	39	17	15	13
AC-FT	1050	823	658	603	527	686	1070	15490	5910	1610	1010	897

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	1991	1992	1993	1994
MEAN	13.0	11.1	9.79	8.97
MAX	17.1	13.8	10.9	9.87
(WY)	1994	1994	1992	1993
MIN	11.2	10.0	8.52	7.05
(WY)	1993	1993	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1991 - 1994
ANNUAL TOTAL	44407.2	15294.0	
ANNUAL MEAN	122	41.9	69.2
HIGHEST ANNUAL MEAN			121
LOWEST ANNUAL MEAN			41.9
HIGHEST DAILY MEAN	1100	452	1100
LOWEST DAILY MEAN	8.3	8.6	5.8
ANNUAL SEVEN-DAY MINIMUM	8.7	8.8	6.2
INSTANTANEOUS PEAK FLOW		474	1230
INSTANTANEOUS PEAK STAGE		5.52	7.26
INSTANTANEOUS LOW FLOW			5.8
ANNUAL RUNOFF (AC-FT)	88080	30340	50140
10 PERCENT EXCEEDS	548	91	208
50 PERCENT EXCEEDS	18	15	14
90 PERCENT EXCEEDS	9.4	9.5	8.6

09086970 EAST ELK CREEK ABOVE BOILER CREEK, NEAR NEW CASTLE, CO

LOCATION---Lat 39°40'05", long 107°31'28", Garfield County, Hydrologic Unit 14010005, on left bank 45 ft downstream from Forest Service footbridge and 6 miles northeast of New Castle.

DRAINAGE AREA---23.4 mi².

PERIOD OF RECORD---October 1990 to current year.

GAGE---Water-stage recorder. Elevation of gage is 6,800 ft above sea level, from topographic map.

REMARKS---No estimated daily discharges. Records good. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	9.8	6.6	4.7	4.0	4.1	6.3	14	194	26	12	11
2	9.2	8.2	6.6	4.7	3.9	4.1	6.3	15	180	27	11	12
3	9.2	8.8	6.3	4.7	4.1	4.1	6.3	16	178	30	11	11
4	8.9	8.6	6.0	4.7	4.1	4.6	6.6	16	164	26	10	11
5	8.8	8.2	5.9	4.7	4.1	5.0	6.6	22	143	23	10	11
6	8.8	7.8	5.9	4.7	4.1	5.3	6.6	32	129	21	10	10
7	10	8.4	5.9	4.3	4.1	5.3	6.6	44	115	21	10	10
8	11	8.0	5.9	4.4	4.1	5.3	6.8	49	102	20	9.6	10
9	11	8.0	5.7	4.4	4.1	5.1	6.7	56	92	19	13	10
10	9.8	8.6	5.6	4.4	4.1	5.2	6.6	65	81	19	11	10
11	9.5	8.7	5.6	4.4	3.7	5.4	6.6	77	75	18	10	10
12	11	8.5	5.6	4.4	4.6	5.3	6.5	88	70	17	9.9	10
13	11	8.9	5.3	4.4	4.4	5.3	6.9	81	64	17	9.6	9.4
14	10	8.4	5.4	4.6	4.4	5.4	8.0	79	60	17	9.6	8.8
15	9.7	8.1	5.6	4.7	4.4	5.7	8.0	89	55	16	9.5	7.9
16	9.6	7.1	5.6	4.7	4.4	6.2	8.6	110	53	16	9.6	8.0
17	9.6	7.6	5.3	4.7	4.4	6.6	11	155	49	16	9.8	7.9
18	9.6	7.7	5.3	4.7	4.4	6.6	13	152	45	15	9.7	7.7
19	9.7	7.3	5.3	4.7	4.4	6.6	16	183	44	15	10	7.7
20	9.9	7.4	5.3	4.7	4.3	6.6	19	172	44	14	9.5	7.7
21	9.0	7.3	5.3	4.7	4.1	6.5	21	189	45	14	9.2	7.6
22	9.3	7.3	5.1	4.7	4.1	6.7	25	205	45	13	9.1	7.3
23	9.7	7.3	4.9	4.7	4.1	6.6	29	214	40	14	10	7.0
24	9.4	7.0	4.7	4.7	4.1	6.6	29	195	36	13	11	7.0
25	9.4	6.4	4.7	4.7	4.1	6.6	25	198	34	13	11	7.1
26	9.2	6.4	4.7	4.7	4.1	6.2	21	191	32	13	11	7.1
27	8.1	6.4	4.7	4.7	4.1	5.1	19	181	30	12	11	7.0
28	9.3	6.3	4.7	4.2	4.1	5.9	17	209	28	12	11	7.0
29	8.8	6.4	4.7	4.1	---	6.0	16	202	27	12	11	7.0
30	6.1	6.6	4.7	4.0	---	5.6	14	198	27	12	11	8.8
31	9.6	---	4.7	4.0	---	6.1	---	201	---	12	11	---
TOTAL	293.4	231.5	167.6	140.9	116.9	175.7	385.0	3698	2281	533	321.1	264.0
MEAN	9.46	7.72	5.41	4.55	4.17	5.67	12.8	119	76.0	17.2	10.4	8.80
MAX	11	9.8	6.6	4.7	4.6	6.7	29	214	194	30	13	12
MIN	6.1	6.3	4.7	4.0	3.7	4.1	6.3	14	27	12	9.1	7.0
AC-FT	582	459	332	279	232	349	764	7330	4520	1060	637	524

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	MEAN	7.35	6.09	5.14	4.63	4.35	5.50	13.8	134	185	38.7	14.2	10.5
MAX	9.46	7.72	5.49	5.10	4.67	6.28	21.6	157	354	85.5	19.9	13.7	
(WY)	1994	1994	1992	1992	1992	1993	1992	1992	1993	1993	1993	1991	
MIN	5.89	5.26	4.61	4.42	4.11	4.58	9.62	109	66.2	17.2	9.58	8.79	
(WY)	1991	1991	1991	1991	1991	1991	1991	1991	1992	1994	1992	1992	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1991 - 1994

ANNUAL TOTAL	20380.5	8608.1	
ANNUAL MEAN	55.8	23.6	
HIGHEST ANNUAL MEAN			35.8
LOWEST ANNUAL MEAN			55.4
HIGHEST DAILY MEAN	592	214	592
LOWEST DAILY MEAN	2.7	3.7	2.7
ANNUAL SEVEN-DAY MINIMUM	4.0	4.0	4.0
INSTANTANEOUS PEAK FLOW		246	741
INSTANTANEOUS PEAK STAGE		4.75	5.84
ANNUAL RUNOFF (AC-FT)	40420	17070	25960
10 PERCENT EXCEEDS	265	58	109
50 PERCENT EXCEEDS	9.3	8.8	8.2
90 PERCENT EXCEEDS	4.4	4.4	4.4

LOCATION.--Lat 39°19'52", long 107°34'46", in NE¹/4SW¹/4 sec.29, T.8 S., R.91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft downstream from private road bridge, 0.8 mi upstream from Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.

PERIOD OF RECORD.--October 1955 to current year. Water-quality data available, May 1986 to September 1990.
Sediment data available, October 1989 to September 1990.

GAGE.--Water-stage recorder. Elevation of gage is 7.050 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16-17, and Nov. 22 to Mar. 21. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Roaring Fork basin), Muddy Creek (Muddy Creek basin), and Buzzard Creek (Plateau Creek basin). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	4.1	3.5	3.7	2.5	3.6	9.6	43	134	11	.40	.28
2	.81	4.0	3.8	3.7	2.6	4.0	12	45	122	11	.53	.56
3	.83	5.2	3.8	3.8	2.8	4.1	15	51	113	12	.58	.55
4	.83	3.5	3.5	3.6	3.1	4.2	17	51	110	8.6	.46	.73
5	.83	3.8	3.5	3.6	3.0	4.3	14	81	100	6.1	.41	.65
6	.87	4.4	3.4	3.6	3.0	4.4	12	136	91	5.3	.36	.36
7	1.4	3.6	3.4	3.5	3.0	4.5	13	162	89	4.8	.34	.35
8	3.3	3.4	3.5	3.3	2.9	4.4	12	164	83	4.5	.30	.30
9	3.9	2.8	3.6	3.0	2.9	4.3	12	164	75	4.0	.34	.26
10	4.1	3.3	3.6	3.3	3.1	4.2	12	162	67	3.4	.39	.31
11	3.2	2.8	3.7	3.3	3.1	4.1	12	172	62	3.1	.47	.26
12	3.0	3.4	3.9	3.0	2.9	4.2	10	187	60	2.7	.41	.26
13	3.6	3.3	4.0	3.1	2.6	4.1	15	182	56	2.5	.32	.32
14	2.7	3.3	3.4	3.3	2.8	4.1	22	178	50	2.5	.25	.44
15	2.7	3.6	3.5	3.3	3.1	4.2	24	183	44	2.3	.22	.73
16	8.2	3.4	3.7	3.3	3.2	4.7	31	181	38	2.1	.46	.63
17	11	3.3	3.7	3.4	3.2	5.4	44	182	34	1.8	.41	.51
18	11	3.1	3.4	3.4	3.2	6.4	50	189	31	1.7	.22	.42
19	7.0	3.3	3.0	3.3	3.0	7.6	60	171	28	1.5	.27	.43
20	5.6	3.5	3.4	3.2	3.0	9.0	70	161	29	1.3	.79	.49
21	4.5	2.9	3.2	2.9	3.0	10	84	156	29	1.1	.85	.62
22	4.6	3.0	3.0	3.0	3.0	12	99	150	37	.92	.54	.69
23	4.5	3.1	3.3	3.0	2.7	13	113	147	33	.75	.39	.61
24	4.1	3.3	3.5	3.1	2.8	11	131	138	25	.99	.30	.52
25	4.0	3.2	3.4	3.2	3.0	9.8	122	127	21	.90	.23	.47
26	3.9	3.0	3.5	3.1	3.1	9.2	81	122	18	.71	.19	.42
27	3.3	2.9	3.7	3.0	3.2	7.7	63	118	16	.56	.18	.44
28	3.4	3.0	3.9	2.9	3.1	10	53	128	16	.46	.42	.38
29	3.8	2.9	4.0	2.8	---	7.5	47	130	14	.41	.57	.36
30	3.3	3.1	3.7	2.4	---	7.5	47	122	13	.39	.54	.61
31	4.9	---	3.4	2.4	---	7.5	---	120	---	.37	.38	---
TOTAL	119.97	101.5	109.9	99.5	82.9	201.0	1306.6	4303	1638	99.76	12.52	13.96
MEAN	3.87	3.38	3.55	3.21	2.96	6.48	43.6	139	54.6	3.22	.40	.47
MAX	11	5.2	4.0	3.8	3.2	13	131	189	134	12	.85	.73
MIN	.80	2.8	3.0	2.4	2.5	3.6	9.6	43	13	.37	.18	.26
AC-FT	238	201	218	197	164	399	2590	8530	3250	198	25	28

MEAN	3.12	3.15	2.67	2.43	2.50	6.05	47.0	196	124	25.8	3.99	2.31
MAX	15.3	13.1	9.05	8.07	7.76	29.3	146	491	389	73.1	24.8	10.4
(WY)	1985	1987	1985	1985	1986	1986	1985	1984	1983	1983	1983	1970
MIN	.097	.28	.002	.000	.000	.81	9.32	18.4	5.37	.075	.000	.000
(WY)	1957	1957	1977	1977	1977	1977	1968	1977	1977	1977	1977	1956

ANNUAL TOTAL	24216.72		8088.61				
ANNUAL MEAN	66.3		22.2			35.0	
HIGHEST ANNUAL MEAN						76.2	1984
LOWEST ANNUAL MEAN						3.38	1977
HIGHEST DAILY MEAN	655	May 15	189	May 18		932	May 14 1984
LOWEST DAILY MEAN	.79	Sep 24	.18	Aug 27		.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	.83	Sep 29	.29	Sep 7		.00	Jul 21 1956
INSTANTANEOUS PEAK FLOW			218	May 18		b ¹ 410	May 14 1984
INSTANTANEOUS PEAK STAGE			3.88	May 18		5.83	May 14 1984
ANNUAL RUNOFF (AC-FT)	48030		16040			25390	
10 PERCENT EXCEEDS	221		90			117	
50 PERCENT EXCEEDS	3.7		3.5			3.7	
90 PERCENT EXCEEDS	1.8		.42			.60	

b-From rating curve extended above 670 ft³/s.

09093700 COLORADO RIVER NEAR DE BEQUE, CO

LOCATION.--Lat 39°21'45", long 108°09'07", in NE¹/₄SW¹/₄ sec.7, T.8 S., R.96 W., Mesa County, Hydrologic Unit 14010006, on left bank 3.0 mi downstream from Alkali Creek and 3.8 mi northeast of DeBeque.

DRAINAGE AREA.--7,370 mi².

PERIOD OF RECORD.--Streamflow records, October 1966 to current year. Water-quality data available, August 1973 to September 1982. Sediment data available, October 1974 to September 1976.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 5-6, and Dec. 25. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	2180	2020	1740	1400	1930	1760	2910	9010	3030	2020	2030
2	2100	2220	2030	1780	1470	1890	1910	2800	9430	2960	2070	2140
3	1980	2230	1990	1890	1480	1920	1930	2710	9140	2960	2130	2210
4	1970	1950	1990	1860	1450	1970	1950	2700	8920	2960	2040	2250
5	1950	1820	1930	1860	1670	2020	2010	2770	8670	2830	1940	2140
6	1950	1800	1950	1800	1740	2050	2000	3140	8240	2600	1900	2040
7	2010	1800	1880	1790	1730	2040	1940	3960	7650	2440	1940	1940
8	2080	1970	1910	1700	1770	2050	1960	4630	7040	2370	1980	1930
9	2190	1980	1940	1690	1820	1980	1950	5060	6540	2280	2060	1870
10	2230	2010	1930	1760	1770	1910	1900	5240	6110	2330	2100	1820
11	2280	2000	1880	1730	1780	1880	1880	5060	5830	2340	2050	1820
12	2280	2260	1890	1630	1770	1890	1860	5570	5710	2260	2000	1920
13	2320	2300	1890	1640	1690	1890	1790	6280	5650	2230	1980	1920
14	2330	2170	1730	1780	1600	1880	1780	6380	5430	2160	2040	2030
15	2380	2150	1580	1810	1670	1910	1870	6520	5250	2120	2080	2040
16	2500	2070	1730	1780	1700	1940	2000	6550	4930	2080	2070	1990
17	2580	1950	1900	1750	1730	1990	2100	6930	4650	2000	2000	1880
18	2600	1920	1670	1730	1870	2020	2300	7410	4520	2050	1960	1830
19	2520	1970	1580	1750	1950	1980	2700	7530	4470	2090	2000	1840
20	2450	1950	1690	1710	1860	2040	2990	7660	4720	2110	2240	1820
21	2420	1890	1610	1700	1810	2100	3310	7600	4770	2140	2240	1850
22	2340	1950	1500	1690	1800	2100	3770	7200	5130	2120	2190	1930
23	2320	2080	1600	1680	1770	2070	4220	7130	5990	2080	2080	1840
24	2290	2180	1730	1690	1710	2090	4690	6940	5350	2100	2020	1810
25	2270	2080	1550	1710	1770	2140	5000	6730	4790	2190	1960	1760
26	2250	1860	1610	1720	1890	2060	4770	6750	4350	2150	1930	1760
27	2250	1690	1800	1790	1950	1990	4090	6640	4020	2090	1980	1740
28	2260	1720	1980	1700	1970	1870	3620	6660	3680	2030	2030	1690
29	2250	1900	1990	1650	---	1780	3240	7220	3390	2010	2120	1740
30	2260	2070	1860	1620	---	1820	3070	7470	3180	2020	2090	1800
31	2170	---	1700	1510	---	1800	---	8190	---	2030	2030	---
TOTAL	69930	60120	56040	53640	48590	61000	80360	180340	176560	71160	63270	57380
MEAN	2256	2004	1808	1730	1735	1968	2679	5817	5885	2295	2041	1913
MAX	2600	2300	2030	1890	1970	2140	5000	8190	9430	3030	2240	2250
MIN	1950	1690	1500	1510	1400	1780	1760	2700	3180	2000	1900	1690
AC-FT	138700	119200	111200	106400	96380	121000	159400	357700	350200	141100	125500	113800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	2174	2002	1729	1627	1624	1850	2970	8148	11550	5819	2811	2263
MAX	3537	3092	2855	2512	2353	2953	6449	19450	25230	16030	6420	4072	
(WY)	1985	1985	1985	1985	1986	1986	1985	1984	1984	1983	1984	1984	
MIN	1474	1289	1257	1176	1182	1178	1643	2273	2890	1862	1732	1685	
(WY)	1978	1978	1978	1990	1981	1977	1977	1977	1977	1977	1977	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1967 - 1994
ANNUAL TOTAL	1668790	978390	
ANNUAL MEAN	4572	2681	3719
HIGHEST ANNUAL MEAN			7310
LOWEST ANNUAL MEAN			1785
HIGHEST DAILY MEAN	22000	May 29	37400
LOWEST DAILY MEAN	1050	Jan 5	914
ANNUAL SEVEN-DAY MINIMUM	1170	Jan 25	1090
INSTANTANEOUS PEAK FLOW			38200
INSTANTANEOUS PEAK STAGE			14.83
ANNUAL RUNOFF (AC-FT)	3310000	1941000	2694000
10 PERCENT EXCEEDS	14100	5290	8780
50 PERCENT EXCEEDS	2310	2020	2110
90 PERCENT EXCEEDS	1330	1720	1440

09095500 COLORADO RIVER NEAR CAMEO, CO

LOCATION.--Lat 39°14'20", long 108°16'00", in SW¹/4SW¹/4 sec.30, T.9 S., R.97 W., Mesa County, Hydrologic Unit 14010006, on left bank 100 ft north of Interstate 70, 0.5 mi upstream from Jackson Canyon, 5.9 mi upstream from Grand Valley project diversion dam, and 7 mi northeast of Cameo.

DRAINAGE AREA.--8,050 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1970.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,813.73 ft above sea level, (Levels by Colorado Department of Highways). Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on Highline Canal, about 10 mi downstream at different datum. Oct. 10, 1934 to Feb. 27, 1958, water-stage recorder at site 3.0 mi downstream at datum 22.55 ft, lower.

REMARKS.--Estimated daily discharges: Dec. 25-30. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2370	2340	2130	1910	1430	2000	2060	3250	9860	3160	2070	2270
2	2340	2380	2150	1980	1440	1950	2190	3210	11000	3050	2090	2390
3	2220	2380	2130	2100	1500	1980	2170	3090	10100	3030	2140	2460
4	2190	2160	2140	2040	1500	2040	2170	3020	9730	3000	2160	2500
5	2170	2030	2060	2040	1720	2100	2190	3070	9450	2920	2120	2420
6	2150	1980	2060	1950	1790	2130	2180	3280	8910	2650	2100	2290
7	2200	1980	1990	1920	1770	2120	2100	3900	8260	2470	2190	2190
8	2340	2110	2010	1850	1800	2130	2100	4690	7540	2400	2270	2190
9	2470	2150	2030	1820	1820	2090	2090	5290	6910	2320	2400	2130
10	2410	2160	2040	1900	1800	2020	2040	5380	6330	2350	2450	2100
11	2450	2170	1980	1860	1790	1980	1950	5200	6070	2400	2420	2100
12	2450	2360	1970	1770	1810	1990	1890	5840	5940	2330	2310	2200
13	2490	2460	1980	1800	1730	2000	1830	6740	5820	2310	2320	2230
14	2490	2320	1860	1890	1640	1990	1810	7460	5600	2240	2360	2430
15	2520	2300	1710	1950	1690	2010	1950	7080	5230	2220	2390	2390
16	2630	2240	1830	1890	1640	2040	2130	6880	5000	2210	2360	2370
17	2670	2110	1980	1840	1750	2080	2300	7390	4820	2130	2300	2270
18	2710	2090	1820	1840	1930	2120	2540	8080	4680	2150	2260	2190
19	2660	2120	1680	1870	2000	2100	2950	8010	4600	2230	2250	2200
20	2590	2120	1760	1820	1880	2120	3220	8120	4770	2270	2490	2170
21	2570	2050	1690	1790	1840	2180	3210	8350	4830	2320	2560	2180
22	2520	2090	1580	1760	1820	2180	3900	7650	5130	2310	2490	2220
23	2490	2200	1690	1790	1790	2170	4730	7510	6100	2280	2400	2130
24	2460	2320	1750	1770	1710	2170	4600	7360	5500	2250	2280	2060
25	2440	2240	1690	1780	1790	2150	4960	7100	4880	2360	2230	1990
26	2420	2050	1600	1800	1910	2080	5050	7130	4430	2300	2180	1950
27	2420	1880	1800	1850	2000	2060	4410	7060	4110	2210	2190	1900
28	2400	1880	1900	1770	2040	1970	3740	7000	3800	2110	2240	1850
29	2400	2020	1900	1720	---	1880	3500	7620	3550	2070	2360	1860
30	2400	2180	1850	1700	---	1920	3390	7880	3330	2080	2330	1940
31	2350	---	1870	1550	---	1900	---	8660	---	2080	2270	---
TOTAL	75390	64870	58630	57320	49330	63650	85350	192300	186280	74210	70980	65570
MEAN	2432	2162	1891	1849	1762	2053	2845	6203	6209	2394	2290	2186
MAX	2710	2460	2150	2100	2040	2180	5050	8660	11000	3160	2560	2500
MIN	2150	1880	1580	1550	1430	1880	1810	3020	3330	2070	2070	1850
AC-FT	149500	128700	116300	113700	97850	126200	169300	381400	369500	147200	140800	130100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

	MEAN	2100	1924	1685	1566	1576	1773	3176	9197	12490	5816	2781	2153
MAX	3732	3253	3002	2621	2775	3365	8615	20290	25830	17430	6571	4271	
(WY)	1985	1985	1985	1985	1986	1986	1962	1984	1984	1957	1984	1984	
MIN	1084	1037	1004	940	941	1020	1730	2536	2959	1515	1332	1243	
(WY)	1935	1935	1935	1964	1935	1935	1961	1977	1977	1934	1940	1934	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1934 - 1994

ANNUAL TOTAL	1738760	1043880	
ANNUAL MEAN	4764	2860	3870
HIGHEST ANNUAL MEAN			7605
LOWEST ANNUAL MEAN			1937
HIGHEST DAILY MEAN	22200	May 28	11000
LOWEST DAILY MEAN	1150	Jan 5	1430
ANNUAL SEVEN-DAY MINIMUM	1250	Jan 25	1550
INSTANTANEOUS PEAK FLOW			12600
INSTANTANEOUS PEAK STAGE			7.86
ANNUAL RUNOFF (AC-FT)	3449000	2071000	2804000
10 PERCENT EXCEEDS	14400	5430	9570
50 PERCENT EXCEEDS	2470	2190	2100
90 PERCENT EXCEEDS	1390	1800	1350

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1933 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1935 to current year.

WATER TEMPERATURE: April 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Daily maximum and minimum specific conductance data are available in district office. Daily record of water temperature is good. Daily record of specific conductance is good. Daily specific conductance data missing in December and February were deleted because of slush ice in the sensor. Other missing daily data were due to instrument problems.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,970 microsiemens Jan. 19, 1940; minimum, 190 microsiemens June 17, 18, 1993.

WATER TEMPERATURE: Maximum, 28.5°C July 22, 1989; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,600 microsiemens Aug. 21-22; minimum, 365 microsiemens May 21, may have been lower during periods of missing record May 19-20, and May 26 to June 16.

WATER TEMPERATURE: Maximum 24.6°C July 30 and Aug. 11,13; minimum 0.0°C on many days Nov. to Feb.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
OCT											
22...	0955	2530	924	8.6	8.0	9.8	240	67	17	97	3
NOV											
16...	1215	2230	976	8.6	4.5	11.2	250	70	18	110	3
DEC											
08...	1140	1950	1030	8.6	1.0	12.3	250	71	17	110	3
JAN											
20...	1150	1780	1030	8.5	0.0	13.0	230	64	16	120	3
FEB											
25...	1355	1840	1040	8.4	5.0	11.6	230	65	17	130	4
MAR											
31...	1000	2030	1020	8.4	6.5	10.2	230	67	16	110	3
APR											
21...	1440	3420	727	--	16.0	--	--	--	--	--	--
28...	1225	3740	589	8.3	8.5	9.8	160	46	10	57	2
MAY											
26...	1355	7040	421	8.2	13.5	9.2	130	38	7.7	33	1
JUN											
24...	0925	5370	530	8.3	16.0	7.5	160	48	9.6	41	1
28...	1000	3710	630	--	19.5	--	--	--	--	--	--
JUL											
05...	1200	2950	760	--	20.0	--	--	--	--	--	--
18...	1545	2170	965	--	--	--	--	--	--	--	--
21...	1330	2360	942	8.6	22.0	7.9	220	66	14	110	3
26...	0915	2340	911	--	20.5	--	--	--	--	--	--
AUG											
03...	1330	2170	952	--	22.0	--	--	--	--	--	--
08...	1415	2270	983	--	21.5	--	--	--	--	--	--
15...	1600	2400	954	--	22.5	--	220	64	14	110	3
25...	1105	2250	1070	--	19.0	--	--	--	--	--	--
29...	1250	2440	1030	--	20.0	--	--	--	--	--	--
SEP											
02...	1935	2460	995	8.5	20.5	--	220	67	14	110	3
03...	0740	2460	1010	8.1	18.5	--	230	70	13	110	3
03...	1930	2470	989	--	20.0	--	--	--	--	--	--
04...	0715	2460	1090	8.2	17.5	--	--	--	--	--	--
05...	1115	2440	976	--	18.0	--	--	--	--	--	--
07...	1505	2190	996	8.7	20.0	8.9	240	74	14	110	3
12...	1430	2290	1080	--	19.5	--	--	--	--	--	--
19...	1345	2180	1080	--	17.5	--	--	--	--	--	--
26...	1330	1970	1070	--	15.0	--	--	--	--	--	--

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)
OCT											
22...	3.2	147	130	120	0.3	8.4	--	531	0.72	3630	--
NOV											
16...	2.9	149	140	140	0.3	8.3	--	579	0.79	3490	--
DEC											
08...	3.5	145	140	150	0.3	8.7	--	587	0.80	3090	--
JAN											
20...	3.5	155	130	160	0.3	8.5	--	595	0.81	2860	--
FEB											
25...	3.5	139	130	170	0.3	9.0	--	608	0.83	3020	--
MAR											
31...	3.7	138	140	160	0.3	9.3	--	589	0.80	3230	--
APR											
21...	--	--	--	--	--	--	--	--	--	--	--
28...	2.2	106	75	76	0.2	9.2	--	339	0.46	3420	--
MAY											
26...	1.5	92	46	43	0.1	7.9	--	232	0.32	4420	--
JUN											
24...	1.9	100	75	50	0.2	8.3	--	294	0.40	4260	--
28...	--	--	--	--	--	--	356	--	--	--	--
JUL											
05...	--	--	--	--	--	--	443	--	--	--	--
18...	--	--	--	--	--	--	566	--	--	--	--
21...	3.5	134	110	140	0.3	7.2	535	531	0.73	3410	--
26...	--	--	--	--	--	--	514	--	--	--	--
AUG											
03...	--	--	--	--	--	--	550	--	--	--	--
08...	--	--	--	--	--	--	534	--	--	--	--
15...	3.5	125	120	150	0.3	8.4	534	545	0.73	3460	--
25...	--	--	--	--	--	--	612	--	--	--	--
29...	--	--	--	--	--	--	589	--	--	--	--
SEP											
02...	3.7	128	120	160	0.3	8.6	--	560	0.76	3720	94
03...	4.6	143	120	150	0.3	8.7	--	563	0.77	3740	824
03...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	228
05...	--	--	--	--	--	--	--	--	--	--	--
07...	3.9	130	120	150	0.3	8.4	577	559	0.78	3410	48
12...	--	--	--	--	--	--	630	--	--	--	--
19...	--	--	--	--	--	--	620	--	--	--	--
26...	--	--	--	--	--	--	619	--	--	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP								
02...	<0.01	<0.05	0.02	<0.20	<0.01	<0.01	5.7	1.1
03...	<0.01	0.14	0.03	0.30	0.05	0.03	73	5.5
03...	--	--	--	--	--	--	17	4.3
04...	<0.01	0.14	0.07	<0.20	0.01	0.01	14	3.3
07...	<0.01	<0.05	0.01	<0.20	<0.01	<0.01	3.6	2.2

DATE	ALUM- NUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)
SEP										
02...	--	<1	--	<1	--	<100	--	<10	<1	<1
03...	--	<1	--	1	--	96	--	<0.5	<1	<1
03...	3100	--	--	--	100	--	<10	--	<1	--
04...	--	<1	--	<1	--	80	--	<0.5	<1	<1
05...	1800	--	--	--	<100	--	<10	--	<1	--
07...	--	<1	<1	1	--	54	--	<0.5	<1	<1

COLORADO RIVER MAIN STEM

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
SEP										
02...	1	<1	--	3	<1	--	10	2	<1	--
03...	13	<1	--	13	<1	--	19	27	<1	--
03...	4	--	2	4	--	3300	--	6	--	170
04...	5	<1	--	7	<1	--	--	5	<1	--
05...	3	--	2	4	--	2500	--	4	--	100
07...	<1	<1	--	2	<1	--	17	1	<1	--

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP										
02...	<10	--	2	<1	--	<1	<1	<1	10	<10
03...	2	--	15	<1	--	<1	<1	<1	100	<3
03...	--	8	4	--	--	--	<1	--	30	--
04...	--	--	6	<1	--	<1	<1	<1	30	<3
05...	--	6	4	--	--	--	<1	--	30	--
07...	3	--	1	<1	<2	<1	<1	<1	<10	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. DIS- SIEVE DIAM. % FINER THAN .062 MM
SEP					
02...	1935	2460	53	352	90
03...	0740	2460	940	6240	99
03...	1930	2470	271	1810	97
04...	0715	2460	244	1620	95
05...	1115	2440	151	995	96
07...	1505	2190	49	290	--

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	970	977	995	1060	---	973	1030	723	---	763	967	1000
2	974	976	1000	1070	---	979	1030	747	---	782	973	982
3	986	969	990	1040	---	990	1030	771	---	782	953	1000
4	1030	988	996	993	---	978	1000	783	---	793	952	1050
5	1040	1070	997	995	1170	965	987	788	---	753	958	981
6	1040	1100	1020	994	1090	953	970	767	---	803	982	1010
7	1040	1110	1010	1010	1040	946	967	675	---	846	990	1030
8	1040	1120	1040	1020	1030	949	983	568	---	889	984	1060
9	1030	1110	1060	1050	1020	952	984	512	---	902	988	1070
10	1010	1050	984	1060	1050	975	1000	482	---	922	985	1080
11	983	1040	1010	1040	985	1000	1010	491	---	900	956	1100
12	973	992	1020	1050	1010	1010	1010	481	---	897	965	1090
13	976	981	1020	1080	1020	1000	1020	437	---	918	976	1070
14	994	971	1030	1080	1040	1000	1080	416	---	926	970	1030
15	934	980	1050	1040	1070	1010	1030	417	---	953	921	1020
16	933	984	1140	1010	1070	995	1020	411	---	968	899	956
17	915	1010	1080	1010	1060	985	972	410	549	978	909	971
18	904	1040	1030	1020	1030	972	927	388	568	998	923	997
19	899	1050	1080	1030	988	963	862	---	577	978	947	1020
20	911	1040	1140	1030	974	967	772	---	578	963	958	1050
21	913	1040	1110	1040	993	959	711	377	555	961	1060	1050
22	925	1050	---	1050	1010	943	656	390	561	939	1330	1030
23	951	1040	1170	1050	1010	935	590	403	523	939	1090	1050
24	957	998	1170	1060	1020	935	546	408	538	944	1050	1070
25	967	964	---	1060	1040	928	507	424	573	937	1080	1080
26	967	988	---	1040	1020	923	494	---	606	906	1100	1090
27	966	1070	1120	1040	986	945	534	---	636	943	1070	1090
28	967	1130	1060	1020	976	960	590	---	664	961	1010	1100
29	965	1110	984	1040	---	1000	644	---	693	992	980	1110
30	955	1050	975	1060	---	1030	691	---	730	997	951	1090
31	960	---	1010	1090	---	1020	---	---	---	983	974	---
MONTH	970	1030	---	1040	---	972	855	---	---	911	995	1040

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	11.6	6.2	3.8	3.2	1.6	.0	.0	.0	.0	7.3	4.4
2	15.2	11.7	5.9	3.7	2.9	1.6	.0	.0	.0	.0	7.6	4.2
3	15.5	12.1	5.3	3.6	2.3	.7	.3	.0	.0	.0	8.2	4.6
4	15.5	12.1	5.2	3.5	1.6	.0	.3	.0	.0	.0	8.6	5.0
5	15.3	12.1	5.2	3.5	1.7	.0	1.0	.0	.6	.0	8.9	5.3
6	14.5	13.1	4.3	2.1	2.5	.7	.9	.0	.6	.0	8.7	6.4
7	14.3	13.0	4.4	2.0	2.2	.7	.4	.0	.8	.0	8.8	5.5
8	13.5	12.0	4.0	1.7	2.3	.9	.1	.0	2.3	.7	8.0	5.4
9	13.0	11.3	3.9	1.5	1.8	.9	.0	.0	3.5	1.2	7.4	4.3
10	13.3	10.9	3.2	1.4	2.0	.2	.5	.0	3.7	1.3	7.7	4.3
11	12.6	10.6	3.8	2.0	1.8	.5	.6	.0	3.2	1.9	8.4	5.0
12	12.8	11.1	4.5	3.7	2.9	1.2	.0	.0	2.7	.7	9.2	6.0
13	12.3	10.2	4.5	3.9	2.2	.7	.7	.0	2.1	.0	9.5	6.0
14	13.1	10.6	5.3	4.0	.7	.0	.9	.0	2.3	.0	10.4	6.6
15	12.4	11.0	5.4	3.5	.0	.0	.9	.0	2.8	.0	10.5	7.0
16	12.4	10.7	5.4	3.7	.0	.0	1.3	.0	2.6	.7	10.8	7.4
17	11.8	10.7	4.2	2.8	.4	.0	.7	.0	2.6	1.5	10.8	8.3
18	11.6	10.1	2.9	2.0	.0	.0	.7	.0	3.7	2.5	9.1	7.1
19	11.7	9.5	2.7	1.1	.0	.0	.9	.0	3.3	2.2	9.1	7.8
20	11.8	9.3	2.4	.5	.0	.0	1.0	.0	3.1	1.4	10.5	8.0
21	10.6	8.3	1.8	.1	.0	.0	1.3	.0	3.9	2.2	10.8	7.2
22	10.2	7.9	2.3	1.0	.0	.0	1.1	.0	3.9	2.0	10.7	7.6
23	10.8	8.0	3.8	1.6	.0	.0	1.5	.0	4.0	1.5	9.9	7.2
24	10.6	8.1	3.0	1.5	.0	.0	2.6	.5	4.4	1.5	9.5	7.1
25	10.5	7.8	1.5	.1	.0	.0	2.3	.7	5.8	2.5	9.1	7.5
26	9.8	7.8	.2	.0	.0	.0	2.3	1.5	7.0	3.9	9.1	6.5
27	8.6	6.3	.0	.0	.0	.0	3.2	1.3	6.4	4.9	7.7	5.1
28	7.6	5.9	.3	.0	.3	.0	2.6	1.1	6.6	4.8	8.3	4.0
29	6.9	5.5	1.2	.0	.4	.0	1.6	.1	---	---	8.5	5.2
30	5.7	3.7	2.0	.0	.0	.0	.3	.0	---	---	9.4	5.3
31	5.6	3.1	---	---	.0	.0	.0	.0	---	---	10.5	5.9
MONTH	15.5	3.1	6.2	.0	3.2	.0	3.2	.0	7.0	.0	10.8	4.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.2	6.8	11.7	9.6	---	---	21.2	18.7	23.5	20.9	20.1	17.1
2	11.5	8.2	14.3	10.1	---	---	21.0	19.1	23.4	19.8	20.5	16.9
3	12.1	8.6	12.9	11.2	---	---	21.0	17.6	23.4	19.5	20.1	18.1
4	12.1	9.7	14.4	10.3	---	---	21.2	18.2	23.7	19.4	20.6	17.0
5	11.7	8.0	16.1	12.1	---	---	21.5	18.3	23.9	19.8	20.7	16.9
6	10.8	8.3	16.7	13.3	---	---	20.9	18.2	24.2	20.2	19.8	16.5
7	9.8	8.0	15.4	13.7	---	---	20.6	16.6	23.3	20.0	20.6	16.6
8	9.4	6.6	15.1	12.2	---	---	21.3	17.1	22.4	20.1	20.4	16.7
9	9.5	7.3	14.5	13.0	---	---	22.3	17.9	21.0	19.4	19.4	16.6
10	9.1	7.6	14.9	12.2	---	---	22.5	18.6	22.7	18.1	19.5	16.3
11	9.1	7.3	15.6	12.6	---	---	23.0	19.0	24.6	20.1	20.0	16.7
12	11.1	6.7	15.0	13.7	---	---	22.2	19.0	24.0	20.9	20.2	17.4
13	12.8	8.1	14.1	12.4	---	---	21.8	18.2	24.6	21.1	19.0	16.5
14	12.6	10.2	14.2	11.1	---	---	21.7	18.1	23.8	21.1	18.0	15.8
15	13.5	9.3	13.6	11.7	---	---	21.5	18.1	23.8	19.6	17.7	14.1
16	15.0	10.1	14.2	11.3	---	---	21.9	17.9	23.1	19.3	17.8	13.8
17	15.4	11.1	13.5	11.5	18.5	15.5	22.6	18.3	23.3	19.1	17.2	13.9
18	15.2	12.0	---	---	18.4	16.1	23.3	19.5	22.7	20.2	17.8	14.3
19	16.2	12.6	---	---	18.3	16.4	23.5	19.2	21.9	20.1	18.9	15.1
20	16.2	13.5	---	---	19.7	16.8	23.7	19.6	22.3	18.6	18.4	16.1
21	16.5	13.2	14.1	10.7	19.1	17.2	23.7	19.4	22.3	19.0	17.9	14.6
22	15.2	14.0	14.3	10.9	18.7	17.2	23.6	19.8	21.6	18.7	16.8	13.5
23	14.3	12.9	14.2	11.7	18.6	16.4	24.2	20.3	22.0	18.2	16.7	13.1
24	13.4	11.7	14.4	11.3	18.9	15.8	23.4	20.6	21.3	17.8	16.7	13.1
25	11.7	10.1	13.8	11.7	20.2	17.2	23.6	20.3	22.0	18.6	17.0	13.2
26	10.1	8.8	---	---	20.5	17.9	24.0	20.0	22.8	18.7	16.8	13.2
27	9.3	8.2	---	---	20.9	18.3	23.9	20.0	21.5	18.8	16.6	13.0
28	9.7	8.0	---	---	21.2	18.7	24.0	20.0	21.2	18.4	16.5	13.0
29	9.9	7.8	---	---	21.2	18.9	24.3	20.1	22.0	18.0	15.6	13.3
30	11.9	8.7	---	---	21.6	17.8	24.6	20.1	21.4	17.8	14.1	13.2
31	---	---	---	---	---	---	23.7	20.5	21.3	17.6	---	---
MONTH	16.5	6.6	---	---	---	---	24.6	16.6	24.6	17.6	20.7	13.0

LOCATION.--Lat 39°11'00", long 108°16'02", in SW¹/4SW¹/4 sec.18, T.10 S., R.97 W., Mesa County, Hydrologic Unit 14010005, on left bank 300 ft from State Highway 65, 1.15 mi upstream from mouth, and 4.0 mi northeast of Cameo.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,840 ft above sea level, from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

REMARKS.--Estimated daily discharges: Nov. 11 to Jan. 6, and Jan. 25 to Feb. 21. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres. return flow from irrigated areas, and for power development.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	145	102	95	78	184	108	180	534	65	52	65
2	149	132	107	99	80	172	144	171	451	65	50	67
3	147	128	108	99	82	173	147	177	352	69	49	65
4	138	135	107	99	84	174	158	176	308	73	47	67
5	138	127	105	100	83	173	155	199	255	68	47	66
6	140	116	102	100	82	171	127	303	213	66	46	66
7	163	122	100	99	80	162	126	397	170	60	45	67
8	255	116	100	107	80	152	135	425	148	59	46	65
9	258	115	101	114	82	124	129	429	128	55	61	64
10	212	117	101	118	83	125	138	391	120	54	67	75
11	186	115	100	98	85	132	142	388	112	52	60	63
12	193	117	100	101	83	127	126	460	106	53	56	65
13	184	114	98	107	68	122	135	495	100	54	55	65
14	180	110	95	96	74	126	164	473	93	54	55	80
15	180	110	95	97	77	133	184	477	87	56	57	78
16	254	109	94	96	80	140	188	487	87	55	56	72
17	275	109	97	94	83	163	234	610	82	54	52	71
18	323	110	97	96	85	148	279	542	86	54	53	74
19	257	106	96	98	85	152	292	465	82	54	56	70
20	191	102	96	98	83	189	305	447	90	52	83	73
21	179	100	94	95	91	162	329	309	97	50	66	77
22	172	103	92	94	95	152	369	269	151	49	61	70
23	166	110	90	94	89	167	410	306	139	50	60	71
24	164	110	89	93	88	152	446	372	116	50	59	73
25	164	104	90	91	122	151	432	374	97	51	60	72
26	160	100	92	90	164	138	330	394	84	47	62	72
27	153	96	94	86	207	125	258	428	78	46	60	72
28	152	91	92	84	201	106	219	431	75	49	71	72
29	152	99	91	78	- - -	122	204	500	71	49	74	73
30	135	100	90	79	- - -	101	187	563	72	51	69	107
31	136	- - -	88	80	- - -	103	- - -	576	- - -	52	67	- - -
TOTAL	5697	3368	3003	2975	2674	4521	6600	12214	4584	1716	1802	2137
MEAN	184	112	96.9	96.0	95.5	146	220	394	153	55.4	58.1	71.2
MAX	323	145	108	118	207	189	446	610	534	73	83	107
MIN	135	91	88	78	68	101	108	171	71	46	45	63
AC - FT	11300	6680	5960	5900	5300	8970	13090	24230	9090	3400	3570	4240

MEAN	112	101	85.5	76.4	81.3	104	240	663	492	113	76.8	89.9
MAX	333	207	148	116	148	202	759	1825	2975	761	328	241
(WY)	1942	1987	1942	1972	1958	1986	1942	1942	1983	1983	1983	1986
MIN	25.2	37.3	42.1	41.4	42.7	58.3	71.9	33.8	19.8	16.6	13.4	17.4
(WY)	1978	1978	1991	1961	1978	1964	1990	1977	1977	1977	1977	1977

ANNUAL TOTAL	141279		51291			
ANNUAL MEAN	387		141		187	
HIGHEST ANNUAL MEAN					542	1983
LOWEST ANNUAL MEAN					48.8	1977
HIGHEST DAILY MEAN	3020	May 28	610	May 17	4100	Jun 25 1983
LOWEST DAILY MEAN	71	Feb 14	45	Aug 7	8.2	Aug 15 1977
ANNUAL SEVEN-DAY MINIMUM	79	Feb 27	47	Aug 2	9.1	Aug 10 1977
INSTANTANEOUS PEAK FLOW			820	Oct 18	4550	Jun 15 1973
INSTANTANEOUS PEAK STAGE			3.79	Oct 18	7.99	Jun 15 1973
ANNUAL RUNOFF (AC-FT)	280200		101700		135700	
10 PERCENT EXCEEDS	1220		304		417	
50 PERCENT EXCEEDS	145		100		94	
90 PERCENT EXCEEDS	89		56		45	

a-Maximum gage height, 8.59 ft, May 28, 1983.

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1968 to August 1979, November 1993 to September 1994.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1994 to September 1994.

WATER TEMPERATURE: June 1994 to September 1994.

INSTRUMENTATION.--Water-quality monitor since June 1994.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Daily record of water temperature is good. Daily record of specific conductance is good.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not determined.

WATER TEMPERATURE: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	HARD-NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 04...	1015	132	698	8.7	3.5	11.4	K33	46	280	55	34
DEC 08...	1405	110	685	8.8	2.5	12.9	--	--	280	57	33
JAN 20...	1005	93	682	8.6	0.0	12.7	--	--	260	54	31
FEB 25...	1030	91	684	8.7	2.5	11.3	--	--	260	53	31
MAR 17...	1115	172	663	8.6	7.0	9.7	K10	K13	230	50	26
APR 28...	1415	214	471	8.6	8.5	9.8	--	--	190	49	17
MAY 20...	1400	420	274	8.4	13.5	8.7	--	--	110	29	9.7
JUN 09...	1250	133	485	8.7	17.0	9.0	K35	45	190	43	20
JUL 21...	1515	49	619	8.8	26.0	6.6	--	--	230	31	38
AUG 19...	1315	55	699	8.7	21.0	8.3	K31	K19	270	44	40
SEP 28...	1445	76	726	8.7	15.5	10.2	--	--	270	47	37

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CAC03)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV 04...	54	1	4.1	318	79	6.6	0.6	29	453	0.62	161
DEC 08...	52	1	4.0	293	78	6.9	0.4	27	434	0.59	129
JAN 20...	52	1	4.1	314	79	6.9	0.5	28	444	0.60	111
FEB 25...	57	2	4.6	306	83	7.9	0.5	23	443	0.60	109
MAR 17...	51	1	3.6	277	80	7.4	0.4	20	405	0.55	188
APR 28...	30	0.9	2.4	211	45	4.2	0.3	17	291	0.40	168
MAY 20...	13	0.5	1.8	123	18	1.8	0.2	15	162	0.22	184
JUN 09...	31	1	3.7	224	43	3.9	0.4	22	301	0.41	108
JUL 21...	58	2	6.1	261	67	6.4	0.6	23	387	0.53	51.1
AUG 19...	56	1	6.2	305	62	6.0	0.5	32	430	0.58	63.8
SEP 28...	53	1	5.1	313	71	6.2	0.6	30	438	0.60	89.8

K-Based on non-ideal colony count.

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 04...	<1	<1	810	<1	60	12	<0.1	<1	<0.2	<3
MAR 17...	<1	<1	3200	<1	240	7	<0.1	<1	<0.2	13
JUN 09...	<1	2	380	<1	30	6	<0.1	<1	<0.2	7
AUG 19...	<1	<1	220	<1	20	6	<0.1	<1	<0.2	<3

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	621	690	736
2	---	---	---	---	---	---	---	---	---	607	694	737
3	---	---	---	---	---	---	---	---	---	607	697	737
4	---	---	---	---	---	---	---	---	---	604	697	745
5	---	---	---	---	---	---	---	---	---	592	693	732
6	---	---	---	---	---	---	---	---	---	587	682	725
7	---	---	---	---	---	---	---	---	---	611	687	727
8	---	---	---	---	---	---	---	---	---	633	699	718
9	---	---	---	---	---	---	---	---	---	633	722	717
10	---	---	---	---	---	---	---	---	---	642	758	715
11	---	---	---	---	---	---	---	---	---	645	741	703
12	---	---	---	---	---	---	---	---	---	632	728	743
13	---	---	---	---	---	---	---	---	---	637	703	752
14	---	---	---	---	---	---	---	---	---	647	703	780
15	---	---	---	---	---	---	---	---	---	655	709	769
16	---	---	---	---	---	---	---	---	---	652	687	707
17	---	---	---	---	---	---	---	---	---	643	688	712
18	---	---	---	---	---	---	---	---	---	651	686	720
19	---	---	---	---	---	---	---	---	---	640	683	721
20	---	---	---	---	---	---	---	---	---	646	710	722
21	---	---	---	---	---	---	---	---	631	647	718	728
22	---	---	---	---	---	---	---	---	586	656	712	727
23	---	---	---	---	---	---	---	---	578	662	698	731
24	---	---	---	---	---	---	---	---	575	662	689	730
25	---	---	---	---	---	---	---	---	598	671	691	729
26	---	---	---	---	---	---	---	---	614	670	694	726
27	---	---	---	---	---	---	---	---	627	669	720	729
28	---	---	---	---	---	---	---	---	628	675	734	714
29	---	---	---	---	---	---	---	---	627	683	780	714
30	---	---	---	---	---	---	---	---	627	680	751	739
31	---	---	---	---	---	---	---	---	---	683	740	---

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	25.5	18.3	25.9	20.6	21.9	16.1
2	---	---	---	---	---	---	23.4	18.9	27.1	18.8	23.1	16.3
3	---	---	---	---	---	---	24.9	17.3	25.6	18.2	20.6	17.4
4	---	---	---	---	---	---	24.5	17.1	26.7	18.2	22.4	15.0
5	---	---	---	---	---	---	24.4	16.6	25.9	19.3	22.1	14.7
6	---	---	---	---	---	---	23.2	16.8	27.3	19.8	19.5	13.6
7	---	---	---	---	---	---	23.4	14.1	26.3	18.7	21.9	14.6
8	---	---	---	---	---	---	24.9	16.2	23.0	19.7	21.1	14.3
9	---	---	---	---	---	---	25.4	16.7	22.0	18.7	19.6	14.6
10	---	---	---	---	---	---	25.3	17.4	25.6	16.4	19.7	14.2
11	---	---	---	---	---	---	26.0	18.0	27.1	19.6	22.2	15.8
12	---	---	---	---	---	---	24.6	18.3	24.8	20.3	21.0	16.0
13	---	---	---	---	---	---	24.8	17.1	25.8	20.0	18.3	14.7
14	---	---	---	---	---	---	24.1	16.8	26.1	19.7	18.4	14.1
15	---	---	---	---	---	---	23.2	17.3	25.1	17.9	18.2	11.9
16	---	---	---	---	---	---	25.8	17.3	25.4	18.2	18.4	11.6
17	---	---	---	---	---	---	25.8	17.5	26.9	18.4	18.3	11.7
18	---	---	---	---	---	---	25.2	18.5	25.3	19.7	18.5	12.7
19	---	---	---	---	---	---	25.9	18.2	22.2	19.5	20.3	13.8
20	---	---	---	---	---	---	27.2	18.9	23.7	17.0	18.9	14.8
21	---	---	---	---	---	---	27.1	17.8	24.5	17.8	18.3	12.5
22	---	---	---	---	21.9	17.7	26.1	18.5	24.7	17.6	17.3	11.5
23	---	---	---	---	23.6	16.4	26.8	19.5	24.0	16.6	17.0	9.9
24	---	---	---	---	23.8	16.7	26.7	20.2	21.4	16.2	17.1	10.2
25	---	---	---	---	25.0	16.9	27.0	20.7	24.0	17.1	17.3	10.4
26	---	---	---	---	24.9	17.3	27.3	19.0	24.7	17.1	16.8	10.3
27	---	---	---	---	25.2	17.7	26.1	18.5	21.2	17.0	16.3	10.0
28	---	---	---	---	25.1	17.2	26.7	18.4	22.0	17.1	16.6	10.1
29	---	---	---	---	25.4	17.9	25.1	19.1	23.5	16.6	14.5	10.9
30	---	---	---	---	25.4	17.4	26.6	18.9	22.8	16.2	13.7	12.2
31	---	---	---	---	---	---	26.1	20.4	22.8	15.8	---	---
MONTH	---	---	---	---	---	---	27.3	14.1	27.3	15.8	23.1	9.9

09106150 COLORADO RIVER BELOW GRAND VALLEY DIVERSION, NEAR PALISADE, CO

LOCATION.--Lat 39°05'55", long 108°21'16", in NW¹/4SE¹/4 sec.18, T.1 S., R.2 E., Mesa County, Hydrologic Unit 14010005, on right bank 0.25 mile downstream of intake structure for Grand Valley Diversion Canal, and 0.25 mile south of Palisade.

DRAINAGE AREA.--8,753 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,670 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 230,000 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	1360	2150	1760	1380	2300	1080	1840	7830	1550	456	637
2	995	1410	2120	1790	1380	2210	1260	1810	8930	1440	483	718
3	907	1420	2100	1970	1480	2240	1270	1720	8370	1450	563	834
4	844	1340	2080	1930	1490	2450	1220	1650	7770	1430	528	889
5	821	1230	2030	1970	1700	2310	1270	1630	7490	1380	436	846
6	815	1120	2070	1940	1880	2340	1230	1940	7060	1150	342	743
7	887	1180	1970	1900	1870	2320	1100	2810	6470	977	351	655
8	1160	1290	2000	1780	1960	2280	1140	3500	5790	870	400	624
9	1400	1440	2020	1730	2070	2180	1150	4170	5250	797	503	592
10	1240	1680	2020	1820	1970	2110	1090	4250	4830	757	649	553
11	1260	1820	1980	1830	1930	1970	1020	4040	4480	824	591	544
12	1260	2240	1980	1710	1940	2130	1000	4410	4350	743	504	605
13	1290	2440	2030	1720	1840	2130	929	5270	4290	714	485	647
14	1290	2280	1880	1820	1740	2120	868	5500	4050	639	508	837
15	1320	2240	1710	1900	1770	2140	891	5530	3840	573	627	811
16	1520	2150	1710	1910	1840	2140	1010	5960	3550	535	588	791
17	1630	2150	1900	1860	1880	2200	1130	6560	3260	471	524	691
18	1710	2020	1810	1750	2180	2230	1240	6980	3100	452	481	602
19	1710	2020	1610	1750	2260	2210	1580	7290	3040	518	469	609
20	1520	2020	1620	1730	2080	2250	1900	5640	3180	535	752	591
21	1470	1980	1650	1730	2010	2340	2300	5450	3360	539	814	597
22	1420	2000	1570	1720	2010	2320	2810	6610	3600	530	747	667
23	1360	2140	1620	1720	1970	2310	3420	6800	4470	502	674	633
24	1350	2260	1570	1740	1880	2260	3730	6700	4110	444	585	592
25	1330	2190	1650	1790	1950	2220	4220	6000	3500	540	531	542
26	1310	2020	1580	1790	2150	2150	3960	6080	2970	533	482	517
27	1290	1710	1760	1860	2320	2020	3230	5660	2610	492	522	514
28	1300	1810	2040	1810	2360	1600	2830	5530	2250	436	609	467
29	1390	1980	2060	1710	---	1350	2260	6110	1990	410	721	492
30	1430	2170	1970	1640	---	1310	1920	6410	1750	417	709	661
31	1400	---	1800	1520	---	1250	---	7240	---	435	647	---
TOTAL	39639	55110	58060	55600	53290	65390	54058	151090	137540	23083	17281	19501
MEAN	1279	1837	1873	1794	1903	2109	1802	4874	4585	745	557	650
MAX	1710	2440	2150	1970	2360	2450	4220	7290	8930	1550	814	889
MIN	815	1120	1570	1520	1380	1250	868	1630	1750	410	342	467
AC-FT	78620	109300	115200	110300	105700	129700	107200	299700	272800	45790	34280	38680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	MEAN	825	1727	1501	1475	1554	1778	1816	7174	8016	2703	991	930
MAX	1279	1918	1873	1794	1903	2109	2540	14160	15830	6702	1788	1287	
(WY)	1994	1992	1994	1994	1994	1994	1993	1993	1993	1993	1993	1993	1993
MIN	538	1525	1209	1280	1297	1302	1148	4603	3164	745	557	650	
(WY)	1991	1991	1991	1991	1991	1991	1991	1992	1992	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1991 - 1994

ANNUAL TOTAL	1595249	729642	
ANNUAL MEAN	4371	1999	2542
HIGHEST ANNUAL MEAN			4260
LOWEST ANNUAL MEAN			1764
HIGHEST DAILY MEAN	25900	May 29	25900
LOWEST DAILY MEAN	815	Oct 6	342
ANNUAL SEVEN-DAY MINIMUM	897	Oct 1	443
INSTANTANEOUS PEAK FLOW			11600
INSTANTANEOUS PEAK STAGE			8.06
ANNUAL RUNOFF (AC-FT)	3164000	1447000	1841000
10 PERCENT EXCEEDS	13300	4190	5240
50 PERCENT EXCEEDS	1890	1730	1510
90 PERCENT EXCEEDS	1260	540	650

COLORADO RIVER BASIN

09106150 COLORADO RIVER BELOW GRAND VALLEY DIVERSION, NEAR PALISADE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 04...	1445	1340	946	8.6	5.5	11.8	K4	K3	240	67	18	100
MAR 17...	1440	2240	985	8.3	10.5	10.1	K30	K49	220	58	18	110
JUN 09...	1530	5250	421	8.3	15.5	9.0	K21	K8	120	36	7.6	32
30...	1545	1840	704	--	23.0	--	--	--	--	--	--	--
JUL 06...	1045	1180	744	--	22.0	--	--	--	--	--	--	--
15...	1300	562	928	--	22.5	--	--	--	--	--	--	--
19...	1215	506	973	--	23.0	--	--	--	230	66	15	110
26...	1300	540	921	--	25.0	--	--	--	--	--	--	--
AUG 02...	1230	473	972	--	23.5	--	--	--	--	--	--	--
09...	1115	494	981	--	21.5	--	--	--	--	--	--	--
15...	1315	627	997	8.3	23.5	6.9	K100	K110	220	63	14	110
24...	1445	591	1030	--	21.0	--	--	--	--	--	--	--
30...	1325	682	1000	--	21.5	--	--	--	--	--	--	--
SEP 06...	1300	728	985	--	20.0	--	--	--	220	67	14	100
13...	1100	617	1100	--	19.5	--	--	--	--	--	--	--
20...	1130	591	1080	--	18.5	--	--	--	--	--	--	--
27...	1205	508	1070	--	16.5	--	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 04...	3	3.1	157	140	120	0.30	9.4	--	552	0.75	2000
MAR 17...	3	3.7	150	140	140	0.30	9.4	--	569	0.77	3440
JUN 09...	1	1.5	91	48	41	0.20	7.5	--	228	0.31	3240
30...	--	--	--	--	--	--	--	411	--	--	--
JUL 06...	--	--	--	--	--	--	--	431	--	--	--
15...	--	--	--	--	--	--	--	544	--	--	--
19...	3	3.3	136	110	140	0.30	8.6	554	535	0.75	757
26...	--	--	--	--	--	--	--	530	--	--	--
AUG 02...	--	--	--	--	--	--	--	554	--	--	--
09...	--	--	--	--	--	--	--	557	--	--	--
15...	3	3.7	131	130	140	0.30	7.3	573	547	0.78	970
24...	--	--	--	--	--	--	--	618	--	--	--
30...	--	--	--	--	--	--	--	574	--	--	--
SEP 06...	3	3.5	133	120	150	0.30	10	552	545	0.75	1090
13...	--	--	--	--	--	--	--	634	--	--	--
20...	--	--	--	--	--	--	--	612	--	--	--
27...	--	--	--	--	--	--	--	630	--	--	--

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 04...	<1	<1	310	<1	20	7	<0.1	<1	<0.2	<3
MAR 17...	<1	<1	580	<1	50	20	<0.1	<1	<0.2	<3
JUN 09...	<1	1	980	<1	60	9	<0.1	<1	<0.2	<3
AUG 15...	<1	1	8900	<1	270	2	<0.1	<1	<0.2	<3

K-Based on non-ideal colony count.

09106150 COLORADO RIVER BELOW GRAND VALLEY DIVERSION, NEAR PALISADE, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 22...	1615	1350	885	10.0	APR 29...	1525	2130	612	10.5
JAN 18...	1210	1960	1000	0.5	JUN 02...	1100	8860	323	14.5
MAR 10...	1315	2000	941	7.0					

09107000 TAYLOR RIVER AT TAYLOR PARK, CO

LOCATION.--Lat 38°51'37", long 108°33'58", in NW¹/4NE¹/4 sec.5, T.14 S., R.82 W., Gunnison County, Hydrologic Unit 14020001, on left bank 0.2 mi upstream from Taylor Park Reservoir waterline, 2.7 mi north of Taylor Park, and 21 mi northeast of Almont.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--June 1929 to September 1934, October 1987 to current year. Records for 1929-1934 provided by Colorado Division of Water Resources, published in WSP 1313. Statistical summary computed for 1988 to current year.

REVISED RECORDS.--WSP 1313: Drainage area.

GAGE.--Satellite data-collection platform. Elevation of gage is 9,340 ft above sea level, from topographic map. June 1929 to September 1934 water-stage recorder at different datum at site flooded by waters of Taylor Park Reservoir since 1937.

REMARKS.--Estimated daily discharges: Oct. 31 to Feb. 8, Feb. 13-17, and Feb. 23. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	52	41	36	24	33	39	78	690	150	62	46
2	58	51	41	36	25	33	38	79	687	144	59	70
3	58	49	39	37	27	33	39	81	656	151	55	71
4	57	47	38	36	27	34	39	99	662	134	51	68
5	57	43	38	35	27	34	35	147	639	124	50	54
6	57	44	40	35	26	32	35	194	606	117	54	47
7	63	45	39	34	25	32	34	219	553	113	52	46
8	68	45	39	34	25	31	33	216	496	106	49	45
9	65	43	40	36	27	36	33	214	442	102	53	44
10	77	42	38	36	28	37	33	196	421	99	63	44
11	76	43	38	35	27	33	34	216	431	94	53	44
12	81	44	39	34	28	31	36	278	421	97	52	50
13	79	43	38	34	26	33	40	277	413	92	59	54
14	70	39	35	37	25	34	46	278	386	87	72	74
15	78	36	34	37	26	35	47	288	346	85	69	68
16	81	34	38	36	27	37	60	322	326	82	53	56
17	84	34	37	38	29	38	81	370	308	76	53	53
18	81	37	36	37	30	36	85	360	292	74	52	52
19	72	35	36	37	32	38	94	318	284	74	64	54
20	70	35	38	36	29	40	112	347	284	75	64	69
21	63	37	40	36	29	38	174	334	349	71	53	73
22	68	40	38	35	29	39	179	339	309	65	56	60
23	66	43	38	33	30	37	197	337	286	64	49	54
24	64	41	39	30	33	35	195	339	253	64	46	52
25	65	39	38	30	30	34	139	330	227	62	46	51
26	64	36	37	28	31	33	100	316	205	59	45	51
27	54	34	39	27	29	32	80	344	189	57	43	48
28	59	35	40	26	29	35	78	409	182	56	43	49
29	61	43	41	26	---	34	74	420	166	54	45	49
30	52	42	39	27	---	39	81	493	159	56	46	60
31	51	---	36	27	---	37	---	571	---	57	45	---
TOTAL	2058	1231	1187	1041	780	1083	2290	8809	11668	2741	1656	1656
MEAN	66.4	41.0	38.3	33.6	27.9	34.9	76.3	284	389	88.4	53.4	55.2
MAX	84	52	41	38	33	40	197	571	690	151	72	74
MIN	51	34	34	26	24	31	33	78	159	54	43	44
AC-FT	4080	2440	2350	2060	1550	2150	4540	17470	23140	5440	3280	3280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	50.2	41.8	37.4	33.9	32.9	38.6	75.2
MAX	66.4	50.9	41.2	39.0	37.6	47.0	117
(WY)	1994	1991	1988	1988	1988	1989	1993
MIN	39.6	34.5	30.0	28.6	27.9	34.4	48.8
(WY)	1989	1989	1989	1990	1994	1992	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	52426	36200	
ANNUAL MEAN	144	99.2	97.3
HIGHEST ANNUAL MEAN			141
LOWEST ANNUAL MEAN			79.4
HIGHEST DAILY MEAN	812	Jun 16	812 Jun 16 1993
LOWEST DAILY MEAN	29	Jan 4	24 Feb 7 1989
ANNUAL SEVEN-DAY MINIMUM	31	Jan 1	26 Feb 3 1989
INSTANTANEOUS PEAK FLOW			904 Jun 17 1993
INSTANTANEOUS PEAK STAGE			3.56 Jun 17 1993
ANNUAL RUNOFF (AC-FT)	104000	71800	70490
10 PERCENT EXCEEDS	506	290	237
50 PERCENT EXCEEDS	58	49	49
90 PERCENT EXCEEDS	35	32	33

a-Minimum daily discharge for period of record, 23 ft³/s, Jan 1-19, 1931.

b-Maximum discharge and stage for period of record, 1020 ft³/s, May 31, 1933, gage height 2.80 ft, from rating curve extended above 480 ft³/s, site and datum then in use.

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, CO

LOCATION.--Lat 38°49'07", long 106°36'24", Gunnison County, Hydrologic Unit 14020001, at dam on Taylor River just downstream from Taylor Park, 16 mi northeast of Almont.

DRAINAGE AREA.--254 mi².

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

REVISED RECORDS.--WSP 1089: 1940(M), 1942(M), 1945-46. WSP 1924: Drainage area.

GAGE.--Nonrecording gage, read once daily. Datum of gage is 9,187 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by U. S. Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 ft, bottom of outlet gates, and 9,330 ft, crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records provided by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 111,000 acre-ft, July 1, 1957, elevation, 9,332.35 ft; minimum after first filling, 8,780 acre-ft, Oct. 19-20, 1956, elevation, 9,240.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 100,800 acre-ft, June 24-26, elevation, 9,327.30 ft; minimum contents, 46,000 acre-ft, Mar. 31, elevation, not available.

MONTHEND ELEVATION AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	9,316.00	79,840	-
Oct. 31.	9,311.50	72,300	-7,540
Nov. 30.	9,310.20	70,210	-2,090
Dec. 31.		*66,900	-3,310
CAL YR 1993.	-	-	-4,410
Jan. 31.		*59,400	-7,500
Feb. 28.		*52,000	-7,400
Mar. 31.		*46,000	-6,000
Apr. 30.	9,306.50	64,470	+18,470
May 31.	9,317.80	82,990	+18,520
June 30.	9,327.00	100,220	+17,230
July 31.	9,321.30	89,330	-10,890
Aug. 31.	9,317.10	81,760	-7,575
Sept. 30.	9,311.50	72,300	-9,460
WTR YR 1994.	-	-	-7,540

a-Estimate, provided by Uncompahgre Valley Water Users Association.

GUNNISON RIVER BASIN

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR. CO

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, Hydrologic Unit 14020001, on bridge 1,000 ft downstream from Taylor Park Reservoir Dam. 3.4 mi upstream from Lottis Creek, and 17 mi northeast of Almont.

DRAINAGE AREA. - - 254 mi².

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharges only, published in WSP 1313), October 1938 to current year. Statistical summary computed for 1939 to current year.

REVISID RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 9,169.67 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Nov. 11, 1952, at site 1,600 ft downstream, at datum 1.00 ft, lower. Oct. 15, 1946, to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek upstream from reservoir. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	109	104	106	102	97	96	140	247	367	237	230
2	291	108	104	106	100	97	96	140	261	364	237	230
3	291	108	104	106	100	97	96	140	262	363	237	230
4	291	108	105	106	101	97	96	172	263	362	237	230
5	290	108	105	106	100	97	96	193	263	363	237	230
6	295	106	105	106	100	98	96	194	263	363	236	229
7	298	106	105	106	101	98	96	194	264	361	237	229
8	295	106	105	105	100	98	95	194	265	360	238	228
9	293	106	106	104	100	98	95	194	267	358	237	229
10	294	104	106	104	100	98	95	195	268	357	237	229
11	291	104	106	104	100	98	94	195	268	357	236	228
12	289	104	106	104	100	98	95	195	268	359	235	228
13	288	104	106	104	100	98	94	195	268	358	235	234
14	287	103	107	104	99	98	95	195	269	358	235	240
15	285	102	107	104	99	97	94	195	300	359	235	240
16	283	102	107	104	99	96	94	196	345	327	234	240
17	282	102	106	104	99	96	94	198	367	310	234	240
18	268	102	106	104	99	96	94	197	368	307	232	240
19	213	103	107	104	99	96	96	197	371	308	233	240
20	165	102	108	104	99	96	97	198	397	308	232	240
21	129	102	107	102	99	96	97	197	436	308	232	240
22	113	103	107	102	99	96	98	197	450	307	232	239
23	113	103	107	102	99	96	98	198	424	308	232	237
24	112	104	107	102	99	96	98	199	406	307	231	237
25	111	102	107	102	99	96	118	198	406	307	231	237
26	111	102	107	102	98	96	140	199	407	308	231	237
27	112	102	107	102	97	96	140	200	383	307	230	237
28	109	102	106	102	97	96	140	200	366	305	231	237
29	109	104	106	102	- - -	96	140	201	366	305	230	237
30	109	104	106	102	- - -	96	140	201	367	305	231	238
31	109	- - -	105	102	- - -	96	- - -	202	- - -	259	230	- - -
TOTAL	6816	3125	3287	3217	2784	3000	3113	5909	9855	10295	7252	7040
MEAN	220	104	106	104	99.4	96.8	104	191	328	332	234	235
MAX	298	109	108	106	102	98	140	202	450	367	238	240
MIN	109	102	104	102	97	96	94	140	247	259	230	228
AC - FT	13520	6200	6520	6380	5520	5950	6170	11720	19550	20420	14380	13960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	191	95.7	72.7	60.5	58.5	85.4	150	169	318	383	362	405
MAX	586	438	353	195	196	320	655	550	931	1249	646	809
(WY)	1969	1968	1966	1966	1971	1986	1970	1962	1948	1957	1950	1956
MIN	11.4	10.0	6.00	4.02	4.00	4.19	9.44	.000	.000	147	183	99.5
(WY)	1962	1941	1964	1964	1964	1964	1964	1940	1940	1964	1977	1961

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1939 - 1994
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ANNUAL TOTAL	85796		65693				
ANNUAL MEAN	235		180			196	
HIGHEST ANNUAL MEAN						317	1986
LOWEST ANNUAL MEAN						94.8	1941
HIGHEST DAILY MEAN	521	Jun 29	450	Jun 22		2180	Jul 1 1957
LOWEST DAILY MEAN	95	Jan 1	94	Apr 11		.00	May 1 1940
ANNUAL SEVEN-DAY MINIMUM	95	Jan 1	94	Apr 11		.00	May 1 1940
INSTANTANEOUS PEAK FLOW			460	Jun 22		2270	Jul 1 1957
INSTANTANEOUS PEAK STAGE			4.55	Jun 22		7.56	Jul 1 1957
INSTANTANEOUS LOW FLOW						.00	May 1 1940
ANNUAL RUNOFF (AC-FT)	170200		130300			142300	
10 PERCENT EXCEEDS	445		308			480	
50 PERCENT EXCEEDS	249		112			107	
90 PERCENT EXCEEDS	98		97			14	

a-Also occurred Jan 2-14.

b-Also occurred Apr 13, 15-18.

c-Also occurred May 2 to Jul 3, 1940, May 7-22, 1942, May 5-21, 1943.

09110000 TAYLOR RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'41", in NW¹/₄SE¹/₄ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 15 ft downstream from bridge on State Highway 306, and 800 ft upstream from confluence with East River.

DRAINAGE AREA.--477 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1911. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,010.76 ft above sea level. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. 8. Records good except for estimated daily discharges, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi upstream from station. Diversions for irrigation of about 360 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	187	150	132	110	138	148	260	738	501	324	297
2	336	188	142	140	112	138	153	259	766	489	324	297
3	332	187	138	140	120	140	146	257	748	489	327	301
4	331	190	140	140	125	145	148	278	740	486	326	309
5	331	187	148	134	130	145	148	365	716	477	320	302
6	331	191	148	130	128	145	143	400	682	469	320	301
7	331	218	140	128	125	148	149	430	660	464	318	302
8	339	203	140	122	125	150	148	430	624	453	313	303
9	339	215	140	125	128	150	148	439	591	453	315	297
10	339	207	140	130	128	168	146	423	572	454	320	297
11	340	186	140	128	125	150	140	433	556	459	313	297
12	343	197	138	128	122	148	143	473	548	458	313	294
13	343	189	132	130	126	146	146	479	535	447	313	295
14	343	187	125	138	130	148	148	468	517	447	304	308
15	343	186	136	136	136	148	149	497	507	447	305	309
16	343	190	140	136	138	148	155	518	540	428	305	303
17	344	190	138	138	140	148	165	567	570	389	305	301
18	348	185	132	130	140	148	174	604	570	381	306	301
19	299	175	132	128	138	148	181	589	570	381	309	301
20	250	170	132	128	138	148	208	611	578	381	311	302
21	212	175	130	128	135	146	248	586	614	381	312	309
22	188	183	130	128	132	148	302	585	630	381	305	306
23	185	180	130	128	130	148	329	568	620	381	305	302
24	181	170	132	130	132	148	334	554	588	384	305	301
25	181	158	130	135	135	148	313	545	577	380	305	301
26	181	150	130	130	138	148	294	545	564	370	303	301
27	178	138	135	130	138	143	284	536	539	370	303	301
28	175	145	140	128	138	148	271	557	513	363	297	301
29	176	152	140	122	---	149	269	590	501	359	297	301
30	176	152	132	118	---	150	264	627	501	362	297	301
31	185	---	130	112	---	147	---	681	---	351	297	---
TOTAL	8663	5431	4230	4030	3642	4570	5994	15154	17975	13035	9617	9041
MEAN	279	181	136	130	130	147	200	489	599	420	310	301
MAX	348	218	150	140	140	168	334	681	766	501	327	309
MIN	175	138	125	112	110	138	140	257	501	351	297	294
AC-FT	17180	10770	8390	7990	7220	9060	11890	30060	35650	25850	19080	17930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1994, BY WATER YEAR (WY)

	MEAN	244	156	120	108	107	133	248	597	919	560	413	393
MAX	699	518	424	240	288	456	784	1485	2419	1975	707	855	
(WY)	1969	1968	1966	1966	1971	1985	1970	1936	1914	1957	1960	1956	
MIN	60.3	53.3	39.8	40.8	35.2	34.6	55.8	129	109	168	83.2	91.6	
(WY)	1938	1938	1963	1941	1941	1938	1941	1940	1940	1931	1913	1937	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1910 - 1994

ANNUAL TOTAL	141301	101382	
ANNUAL MEAN	387	278	334
HIGHEST ANNUAL MEAN			545
LOWEST ANNUAL MEAN			155
HIGHEST DAILY MEAN	1320	Jun 16	766 Jun 2
LOWEST DAILY MEAN	108	Jan 4	110 Feb 1
ANNUAL SEVEN-DAY MINIMUM	112	Jan 19	117 Jan 29
INSTANTANEOUS PEAK FLOW			804 Jun 2
INSTANTANEOUS PEAK STAGE			3.02 Jun 2
ANNUAL RUNOFF (AC-FT)	280300	201100	242300
10 PERCENT EXCEEDS	946	542	738
50 PERCENT EXCEEDS	288	248	196
90 PERCENT EXCEEDS	123	130	80

a-Minimum discharge observed for period of record, before storage began in Taylor Park Reservoir, 50 ft³/s for several days in Aug 1913, gage height, 1.2 ft.

b-From rating curve extended above 2300 ft³/s.

c-Maximum gage height, 3.80 ft, Feb 2, backwater from ice.

d-Maximum gage height, 5.32 ft, Jul 1, 1957.

GUNNISON RIVER BASIN

09110000 TAYLOR RIVER AT ALMONT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
NOV 17...	1515	193	131	8.1	0.0	10.9	<1
MAR 24...	1345	150	150	8.4	3.5	9.9	<1
JUN 01...	1350	720	121	8.2	9.5	8.9	<1
AUG 18...	1515	305	126	8.3	12.0	7.9	<1

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV 17...	<1	<0.01	<0.05	<0.01	<0.2	<0.01	<0.01
MAR 24...	<1	<0.01	<0.05	0.01	<0.2	<0.01	<0.01
JUN 01...	<1	<0.01	<0.05	<0.01	<0.2	<0.01	<0.01
AUG 18...	K2	<0.01	<0.05	0.02	<0.2	0.02	<0.01

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 17...	<1	<1	120	<1	20	<10	<0.1	<1	<0.2	<10
MAR 24...	<1	<1	100	<1	<10	<10	<0.1	<1	<0.2	<10
JUN 01...	<1	2	350	<1	40	<10	<0.1	<1	<0.2	<10
AUG 18...	<1	<1	110	<1	20	<10	<0.1	<1	<0.2	<10

K-Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 06...	1215	329	118	9.5	MAY 24...	1040	566	130	6.0
JAN 19...	1400	142	140	0.0	JUN 23...	1005	659	115	8.0
MAR 15...	1450	150	149	5.5	JUL 28...	0910	358	119	9.0
APR 19...	1510	178	142	8.0	SEP 13...	1515	285	106	13.0

09111500 SLATE RIVER NEAR CRESTED BUTTE, CO

LOCATION.--Lat 38°52'11", long 106°58'08", in NW¹/4NE¹/4 sec.2, T.14 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, on right bank 400 ft downstream from Washington Gulch, 1 mi east of Crested Butte, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--68.9 mi².

PERIOD OF RECORD.--April 1940 to September 1951, October 1993 to September 1994. Monthly discharges only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 8,820 ft above sea level, from topographic map. Prior to Oct. 1, 1993, gage at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-14, and Nov. 16 to Apr. 20. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,300 acres upstream and downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	42	35	20	10	14	31	114	896	176	31	17
2	46	41	33	20	11	14	33	108	872	163	31	21
3	46	41	32	21	11	15	36	116	830	146	28	26
4	46	38	31	21	12	19	39	128	802	139	26	25
5	46	36	32	20	13	22	38	200	769	126	24	20
6	44	38	31	19	12	23	37	317	727	112	24	18
7	45	40	30	19	12	23	38	416	675	98	23	17
8	48	40	29	19	12	22	38	455	609	88	22	15
9	51	39	28	18	12	21	39	454	549	85	28	15
10	54	39	26	17	13	21	41	408	524	81	29	16
11	53	35	27	17	13	22	49	437	523	77	24	14
12	51	49	27	17	12	23	55	562	519	74	22	15
13	60	37	25	17	11	26	62	628	517	64	23	17
14	54	32	23	17	11	29	72	668	493	62	29	22
15	58	32	21	17	12	33	80	649	470	58	28	21
16	64	43	21	17	12	34	96	598	427	55	22	18
17	66	38	23	16	12	35	110	709	396	54	20	17
18	62	35	23	16	12	33	130	719	375	52	19	16
19	56	33	22	16	12	34	140	670	367	49	21	17
20	55	33	22	16	12	37	191	722	406	49	21	22
21	53	34	22	16	11	36	308	653	351	45	19	21
22	53	38	21	15	11	35	371	646	389	42	17	18
23	52	42	22	15	11	34	376	623	349	42	16	17
24	51	39	23	15	11	35	385	595	315	42	16	16
25	52	36	21	16	12	34	321	614	288	40	16	16
26	52	33	22	15	12	33	234	606	261	37	15	16
27	50	31	22	14	13	33	181	645	242	35	15	16
28	48	30	22	14	14	32	145	753	221	32	15	16
29	46	33	21	13	---	31	130	833	197	31	15	15
30	45	36	20	13	---	30	119	854	181	30	15	25
31	47	---	20	12	---	29	---	873	---	30	14	---
TOTAL	1599	1113	777	518	332	862	3925	16773	14540	2214	668	545
MEAN	51.6	37.1	25.1	16.7	11.9	27.8	131	541	485	71.4	21.5	18.2
MAX	66	49	35	21	14	37	385	873	896	176	31	26
MIN	44	30	20	12	10	14	31	108	181	30	14	14
AC-FT	3170	2210	1540	1030	659	1710	7790	33270	28840	4390	1320	1080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

	MEAN	29.0	22.3	15.2	11.1	9.69	13.9	124	533	584	182	42.7	22.5
MAX	63.9	37.9	25.1	16.7	13.4	27.8	303	778	726	293	89.1	37.6	
(WY)	1942	1942	1994	1994	1942	1994	1943	1941	1949	1947	1945	1947	
MIN	10.2	8.63	8.03	8.35	6.20	8.52	36.4	394	280	50.7	15.2	13.8	
(WY)	1943	1943	1943	1947	1945	1950	1944	1946	1940	1940	1940	1942	

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	43866		
ANNUAL MEAN	120	136	
HIGHEST ANNUAL MEAN		157	1948
LOWEST ANNUAL MEAN		120	1994
HIGHEST DAILY MEAN	896	1220	May 13 1941
LOWEST DAILY MEAN	10	3.9	Nov 26 1942
ANNUAL SEVEN-DAY MINIMUM	11	5.8	Nov 21 1942
INSTANTANEOUS PEAK FLOW	981	a-1240	May 13 1941
INSTANTANEOUS PEAK STAGE	4.79	b-3.98	May 13 1941
ANNUAL RUNOFF (AC-FT)	87010	98670	
10 PERCENT EXCEEDS	454	510	
50 PERCENT EXCEEDS	33	24	
90 PERCENT EXCEEDS	14	9.8	

a-Observed, site and datum then in use.

b-Maximum gage height, 4.79 ft, Jun 1, 1994, at present site and datum.

GUNNISON RIVER BASIN

09112200 EAST RIVER BELOW CEMENT CREEK, NEAR CRESTED BUTTE, CO

LOCATION.--Lat 38°47'03", long 106°52'13", in NE¹/4NE¹/4 sec.3, T.15 S., R.85 W., Gunnison County, Hydrologic Unit 14020001, on left bank 11 ft downstream from bridge on State Highway 135, 1.6 mi downstream from Cement Creek, and 8.5 mi southeast of Crested Butte.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--October 1963 to September 1972, October 1979 to September 1981, October 1993 to September 1994.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,440 ft above sea level, from topographic map. Prior to Oct. 1993, water-stage recorder 0.5 mi upstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 31 to Jan. 25, Jan. 29 to Feb. 4, Feb. 6, 13-16, and Feb. 23 to Mar. 6. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 4,500 acres upstream and downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	118	63	58	47	49	71	343	1800	452	142	86
2	138	110	63	59	48	48	79	329	1720	427	145	89
3	136	102	61	58	49	50	77	371	1660	399	137	92
4	133	99	60	58	52	51	81	394	1620	389	118	94
5	129	100	61	57	52	53	77	553	1530	363	110	80
6	128	94	61	56	50	56	73	758	1460	334	115	66
7	147	86	61	55	51	59	78	966	1390	314	115	63
8	163	87	60	54	52	58	73	1040	1280	289	112	60
9	160	85	60	55	48	58	73	1110	1200	274	110	60
10	174	82	60	55	51	61	71	1030	1160	265	110	59
11	165	84	59	55	52	60	66	1020	1160	249	105	57
12	195	81	58	54	51	62	67	1180	1150	241	111	60
13	186	77	57	55	49	58	77	1160	1160	231	114	60
14	174	75	57	54	49	62	95	1200	1090	217	116	67
15	187	70	59	55	48	61	99	1210	1040	213	120	64
16	198	68	58	57	49	66	122	1180	975	205	109	60
17	212	68	57	59	53	74	164	1240	929	194	105	58
18	201	66	57	60	53	70	204	1260	902	194	104	57
19	179	64	57	64	53	82	256	1210	871	187	106	60
20	174	60	59	60	53	80	354	1210	924	183	110	77
21	165	58	58	57	53	69	565	1220	850	171	112	74
22	171	62	57	56	52	75	748	1250	907	166	109	65
23	166	64	57	56	50	79	809	1240	847	166	91	59
24	160	60	58	58	49	77	874	1210	772	172	70	54
25	158	57	58	58	49	75	743	1180	710	170	66	53
26	158	57	57	57	49	73	562	1140	656	163	76	50
27	138	59	57	57	49	67	460	1190	610	153	83	49
28	150	62	60	58	49	67	394	1340	567	147	84	49
29	149	64	62	52	---	69	371	1440	506	145	84	48
30	118	64	59	52	---	65	343	1540	467	137	81	60
31	120	---	58	49	---	68	---	1700	---	136	80	---
TOTAL	4973	2283	1829	1748	1410	2002	8126	33214	31913	7346	3250	1930
MEAN	160	76.1	59.0	56.4	50.4	64.6	271	1071	1064	237	105	64.3
MAX	212	118	63	64	53	82	874	1700	1800	452	145	94
MIN	118	57	57	49	47	48	66	329	467	136	66	48
AC-FT	9860	4530	3630	3470	2800	3970	16120	65880	63300	14570	6450	3830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	114	86.0	72.0	62.3	57.9	64.9	231	972	1252	510	193	139																			
MAX	188	115	96.2	83.2	76.0	111	404	1432	1978	1345	396	271																			
(WY)	1966	1971	1966	1971	1971	1972	1971	1970	1980	1965	1965	1965																			
MIN	58.5	62.4	51.7	46.6	42.7	43.5	77.0	406	633	181	91.7	64.3																			
(WY)	1964	1964	1964	1964	1964	1964	1964	1981	1981	1981	1981	1994																			

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1964 - 1994

ANNUAL TOTAL	100024		
ANNUAL MEAN	274	313	
HIGHEST ANNUAL MEAN		465	1965
LOWEST ANNUAL MEAN		162	1981
HIGHEST DAILY MEAN	1800	2620	Jun 13 1980
LOWEST DAILY MEAN	47	38	Jan 14 1964
ANNUAL SEVEN-DAY MINIMUM	49	40	Feb 21 1964
INSTANTANEOUS PEAK FLOW	2000	3360	Jun 12 1980
INSTANTANEOUS PEAK STAGE	a 4.52	b 8.30	Jun 12 1980
ANNUAL RUNOFF (AC-FT)	198400	227000	
10 PERCENT EXCEEDS	1040	970	
50 PERCENT EXCEEDS	81	103	
90 PERCENT EXCEEDS	53	55	

a-Maximum gage height, 7.08 ft, Nov 9, backwater from ice.

b-From floodmarks, site and datum then in use.

09112500 EAST RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'51", in NW¹/4SE¹/4 sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 200 ft upstream from bridge on State Highway 135, and 400 ft upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,006.29 ft above sea level. Apr. 16 to Sept. 30, 1905, and July 27, 1910, to Apr. 30, 1922, nonrecording gages at bridge 200 ft downstream, at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 6. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 7,400 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	140	75	62	50	51	79	343	1770	456	165	107
2	140	121	71	63	51	51	90	315	1750	439	191	112
3	132	115	69	62	53	51	84	359	1660	412	184	113
4	126	131	68	62	58	52	91	360	1640	398	167	116
5	122	114	69	62	58	54	87	501	1570	376	153	105
6	119	98	69	60	57	58	77	701	1510	348	151	90
7	129	105	67	58	58	63	88	919	1460	319	152	85
8	149	102	67	56	57	63	80	987	1350	294	151	85
9	146	103	66	59	56	61	82	1080	1230	279	153	84
10	154	101	67	60	57	58	79	989	1180	273	149	86
11	152	118	64	58	57	63	74	955	1170	258	146	83
12	169	120	64	56	55	68	72	1160	1180	233	141	88
13	171	118	65	58	52	64	82	1230	1180	220	156	88
14	156	116	63	57	52	68	98	1280	1120	212	151	93
15	169	104	66	58	56	71	108	1310	1070	208	157	92
16	177	88	64	61	58	76	127	1170	1030	204	145	89
17	195	84	63	62	57	86	169	1340	973	186	141	85
18	189	82	62	62	58	81	212	1400	944	179	142	82
19	167	81	62	64	57	99	255	1240	922	182	144	82
20	161	83	65	62	55	102	341	1340	958	180	144	104
21	152	87	65	60	54	79	551	1230	889	171	140	104
22	159	94	61	58	53	88	751	1220	924	162	137	95
23	156	96	61	59	51	93	802	1220	882	158	127	86
24	151	85	64	62	52	89	881	1140	799	165	106	84
25	150	79	63	61	53	85	777	1130	738	167	102	82
26	151	73	62	60	51	80	594	1090	690	157	113	75
27	129	70	63	58	51	73	476	1120	638	153	126	52
28	143	72	65	58	51	68	399	1290	592	151	120	52
29	146	75	68	54	---	80	378	1410	529	150	116	53
30	110	76	67	55	---	64	339	1510	463	146	110	66
31	122	---	62	53	---	76	---	1640	---	140	105	---
TOTAL	4634	2931	2027	1840	1528	2215	8323	32979	32811	7376	4385	2618
MEAN	149	97.7	65.4	59.4	54.6	71.5	277	1064	1094	238	141	87.3
MAX	195	140	75	64	58	102	881	1640	1770	456	191	116
MIN	110	70	61	53	50	51	72	315	463	140	102	52
AC-FT	9190	5810	4020	3650	3030	4390	16510	65410	65080	14630	8700	5190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
MEAN	117	95.2	73.6	62.4	59.3	67.1	249	1020	1367	555	231	129
MAX	279	172	128	102	90.4	137	670	1978	2670	2037	621	271
(WY)	1912	1987	1985	1985	1962	1986	1936	1936	1920	1957	1957	1965
MIN	56.3	47.8	42.0	25.5	28.7	43.1	77.2	222	289	93.5	25.0	52.4
(WY)	1978	1978	1977	1940	1940	1976	1964	1977	1977	1977	1913	1977

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1911 - 1994
ANNUAL TOTAL	171361	103667	
ANNUAL MEAN	469	284	336
HIGHEST ANNUAL MEAN			573
LOWEST ANNUAL MEAN			104
HIGHEST DAILY MEAN	2570	1770	5000
LOWEST DAILY MEAN	43	50	19
ANNUAL SEVEN-DAY MINIMUM	47	51	21
INSTANTANEOUS PEAK FLOW		2050	a 6500
INSTANTANEOUS PEAK STAGE		5.91	b 6.60
ANNUAL RUNOFF (AC-FT)	339900	205600	243500
10 PERCENT EXCEEDS	1840	1050	1050
50 PERCENT EXCEEDS	142	105	106
90 PERCENT EXCEEDS	51	57	55

a-Site and datum then in use, from rating curve extended above 3000 ft³/s.

b-Maximum gage height, 8.03 ft, May 26, 1984, present datum.

GUNNISON RIVER BASIN

09112500 EAST RIVER AT ALMONT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 17...	1245	83	307	8.9	0.0	12.8	<1
MAR 24...	1300	83	298	8.7	3.0	10.8	K1
MAY 31...	1755	1540	166	8.2	10.5	8.0	84
AUG 18...	1330	142	336	8.5	15.5	8.6	12

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 17...	<1	<0.01	0.07	0.01	<0.2	<0.01	<0.01
MAR 24...	K6	<0.01	0.11	0.02	<0.2	<0.01	<0.01
MAY 31...	48	<0.01	0.06	<0.01	0.30	0.02	<0.01
AUG 18...	K6	<0.01	<0.05	0.03	<0.2	0.03	<0.01

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 17...	<1	<1	90	<1	<10	<10	<0.1	<1	<0.2	<10
MAR 24...	<1	<1	60	<1	<10	<10	<0.1	<1	<0.2	<10
MAY 31...	<1	3	700	<1	50	<10	<0.1	<1	<0.2	<10
AUG 18...	<1	<1	60	<1	20	<10	<0.1	<1	<0.2	<10

K-Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 06...	1405	120	303	10.5	MAY 26...	1010	1090	183	7.0
JAN 19...	1550	63	305	0.0	JUN 22...	1510	875	219	12.5
MAR 15...	1315	57	309	7.5	JUL 26...	0910	152	333	11.0
APR 20...	0925	308	253	3.5	SEP 15...	1425	95	327	14.0

09113100 CASTLE CREEK ABOVE MOUTH NEAR BALDWIN, CO

LOCATION.--Lat 38°46'09", long 107°05'02", T.15 S., R.87 W., Gunnison County, Hydrologic Unit 14020002, on left bank 1.5 mi upstream from mouth, and 25 mi northwest of Gunnison.

DRAINAGE AREA.--22.4 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder with satelliete telemetry. Elevation of gage is 8,820 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 4 to Apr. 20. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of a few acres of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	7.9	7.1	6.2	5.0	5.8	7.7	18	168	46	30	7.0
2	8.2	7.7	6.8	6.5	5.3	5.8	7.4	18	161	40	22	7.4
3	8.1	8.0	6.6	6.6	5.6	5.9	8.0	19	157	37	19	9.9
4	8.1	7.6	6.4	6.6	5.9	6.4	8.8	22	157	36	16	8.4
5	8.1	7.1	6.6	6.4	6.0	6.9	11	39	147	33	14	7.2
6	8.6	7.2	6.6	6.1	5.9	7.0	10	62	145	31	13	6.6
7	11	7.3	6.4	5.9	6.0	7.0	9.8	78	138	28	12	6.2
8	14	7.2	6.4	5.7	5.8	6.8	9.7	84	124	27	12	6.1
9	13	7.2	6.3	6.0	5.6	6.6	9.5	73	115	26	15	6.3
10	15	7.2	6.3	6.2	5.7	6.4	9.5	66	114	25	16	6.5
11	13	7.3	6.3	6.2	5.8	6.5	9.7	86	116	24	13	5.9
12	18	7.7	6.5	6.0	5.6	6.6	9.7	94	118	24	12	6.3
13	15	8.0	6.1	5.9	5.4	6.6	9.6	92	116	23	12	7.4
14	13	7.7	5.8	6.0	5.2	7.0	10	96	109	22	14	9.4
15	15	7.4	6.0	6.0	5.5	7.5	11	96	99	21	12	7.3
16	15	7.0	6.4	6.0	5.9	7.8	13	107	92	21	10	6.6
17	15	7.1	6.3	6.0	6.2	7.6	14	117	88	20	9.5	6.3
18	13	7.2	6.0	5.8	6.1	7.7	16	103	86	20	9.3	6.3
19	12	7.0	6.2	5.7	6.1	8.1	19	99	83	19	9.9	6.2
20	12	6.7	6.5	5.8	5.9	8.8	20	101	99	19	9.9	9.4
21	10	6.4	6.3	5.7	5.8	8.3	31	85	89	17	8.7	9.2
22	11	6.6	6.1	5.6	5.8	8.0	50	83	105	15	8.2	7.5
23	11	7.7	6.0	5.8	5.9	8.6	64	81	87	15	7.8	6.9
24	11	7.4	6.3	6.0	5.7	8.9	65	76	78	14	7.5	6.6
25	10	6.8	6.1	6.2	5.5	8.6	53	82	71	14	7.2	6.5
26	10	6.3	5.9	5.9	5.8	8.6	36	94	67	14	7.0	6.2
27	7.8	6.0	6.1	5.6	5.8	8.6	29	95	63	15	7.1	6.2
28	7.6	6.6	6.3	5.6	5.8	8.3	24	112	58	15	7.8	6.1
29	9.4	7.1	6.5	5.4	---	8.0	22	124	53	15	7.0	5.9
30	7.7	7.3	6.3	5.6	---	7.7	20	143	50	16	7.2	11
31	6.6	---	5.8	5.4	---	7.6	---	159	---	18	6.5	---
TOTAL	345.4	215.7	195.3	184.4	160.6	230.0	617.4	2604	3153	710	362.6	214.8
MEAN	11.1	7.19	6.30	5.95	5.74	7.42	20.6	84.0	105	22.9	11.7	7.16
MAX	18	8.0	7.1	6.6	6.2	8.9	65	159	168	46	30	11
MIN	6.6	6.0	5.8	5.4	5.0	5.8	7.4	18	50	14	6.5	5.9
AC-FT	685	428	387	366	319	456	1220	5170	6250	1410	719	426

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	MEAN	8.40	6.33	5.89	5.57	5.52	6.44	14.5	93.4	149	62.7	26.1	11.0
MAX	11.1	7.19	6.30	5.95	5.74	7.42	20.6	103	192	102	40.5	14.9	14.9
(WY)	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993	1993	1993
MIN	5.66	5.47	5.47	5.18	5.31	5.47	8.36	84.0	105	22.9	11.7	7.16	7.16
(WY)	1993	1993	1993	1993	1993	1993	1993	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1993 - 1994		
ANNUAL TOTAL	15327.1			8993.2					
ANNUAL MEAN	42.0			24.6			33.0		
HIGHEST ANNUAL MEAN							41.3		
LOWEST ANNUAL MEAN							24.6		
HIGHEST DAILY MEAN	246			168			246		
LOWEST DAILY MEAN	4.4			5.0			4.4		
ANNUAL SEVEN-DAY MINIMUM	4.8			5.4			4.8		
INSTANTANEOUS PEAK FLOW				187			429		
INSTANTANEOUS PEAK STAGE				4.78			5.33		
ANNUAL RUNOFF (AC-FT)	30400			17840			23890		
10 PERCENT EXCEEDS	147			86			114		
50 PERCENT EXCEEDS	8.6			8.1			7.6		
90 PERCENT EXCEEDS	5.0			5.9			5.2		

GUNNISON RIVER BASIN

09114500 GUNNISON RIVER NEAR GUNNISON, CO

LOCATION.--Lat 38°32'31", long 106°56'57", in NW¹/4NW¹/4 sec.2, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.7 mi downstream from Antelope Creek and 1.2 mi west of Gunnison.

DRAINAGE AREA. - - 1,012 mi².

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS. -- WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,655 ft above sea level, from topographic map. Nov. 25, 1910 to Dec. 31, 1928, nonrecording gages (supplementary water-stage recorder Apr. 28, 1916 to June 17, 1918) at bridge about 0.6 mi downstream at various datums. Oct. 1, 1944 to July 28, 1970, water-stage recorder at sites 0.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 18-20, 22-24, 26-29, Dec. 16 to Feb. 8, and Feb. 10 to Mar. 8. Records good except for estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi upstream from station. Diversions for irrigation of about 22,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	482	383	312	245	175	205	300	690	2610	921	585	366
2	482	351	280	250	180	210	331	666	2610	897	607	379
3	482	337	288	245	190	215	332	685	2490	858	581	397
4	482	375	272	245	210	220	347	680	2450	817	549	404
5	476	352	294	230	210	220	344	900	2360	793	522	381
6	467	310	261	220	215	220	306	1140	2270	758	511	359
7	483	317	273	215	195	215	312	1440	2150	734	492	349
8	516	312	266	210	195	215	305	1530	2010	702	484	347
9	522	311	277	220	186	218	298	1640	1860	667	480	341
10	533	308	272	225	200	213	298	1570	1760	668	499	330
11	532	343	269	215	200	220	283	1510	1730	671	484	300
12	544	361	293	205	190	217	266	1730	1730	653	474	327
13	566	356	256	205	175	220	285	1820	1740	645	492	329
14	552	361	240	215	190	232	331	1860	1670	641	509	346
15	557	323	244	210	205	248	380	1960	1600	630	516	340
16	591	303	260	215	210	259	397	1830	1580	621	496	365
17	662	310	265	210	205	283	451	2000	1540	564	481	357
18	679	320	230	200	215	289	495	2090	1520	553	483	352
19	596	330	240	200	210	315	514	1910	1500	570	509	358
20	523	325	230	200	205	356	660	2020	1600	578	496	428
21	475	300	230	200	200	311	921	1890	1580	587	467	431
22	432	310	235	195	190	305	1260	1850	1610	562	455	408
23	441	315	250	200	195	323	1340	1820	1580	551	431	391
24	432	305	240	210	200	312	1420	1740	1430	579	411	382
25	405	288	250	210	205	311	1320	1730	1320	643	402	374
26	396	290	255	205	205	301	1070	1710	1230	609	407	368
27	394	290	260	200	205	280	898	1700	1150	582	416	345
28	370	290	260	190	210	253	784	1860	1060	570	421	341
29	374	290	245	180	- - -	302	735	2050	1010	579	433	342
30	334	296	240	190	- - -	271	714	2180	942	585	400	367
31	343	- - -	250	170	- - -	288	- - -	2370	- - -	565	366	- - -
TOTAL	15123	9662	8037	6530	5571	8047	17697	50571	51692	20353	14859	10904
MEAN	488	322	259	211	199	260	590	1631	1723	657	479	363
MAX	679	383	312	250	215	356	1420	2370	2610	921	607	431
MIN	334	288	230	170	175	205	266	666	942	551	366	300
AC - FT	30000	19160	15940	12950	11050	15960	35100	100300	102500	40370	29470	21630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

MEAN	400	299	236	209	201	249	610	1830	2498	1256	733	545
MAX	805	614	616	395	365	582	1381	3605	6074	4621	1510	908
(WY)	1969	1968	1966	1966	1971	1986	1962	1914	1918	1957	1957	1985
MIN	186	162	128	119	111	117	214	283	425	288	317	221
(WY)	1978	1964	1963	1945	1955	1964	1964	1977	1977	1977	1977	1924

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1911 - 1994

ANNUAL TOTAL	361526		219046			
ANNUAL MEAN	990		600		757	
HIGHEST ANNUAL MEAN					1246	1984
LOWEST ANNUAL MEAN					256	1977
HIGHEST DAILY MEAN	4300	May 28	2610	Jun 1	11400	Jun 11 1918
LOWEST DAILY MEAN	200	Jan 5	170	Jan 31	80	Dec 27 1962
ANNUAL SEVEN-DAY MINIMUM	215	Jan 19	182	Jan 28	95	Dec 25 1962
INSTANTANEOUS PEAK FLOW			2840	Jun 2	^a 11400	Jun 13 1918
INSTANTANEOUS PEAK STAGE			3.21	Jun 2	^b 6.74	Jul 1 1957
ANNUAL RUNOFF (AC-FT)	717100		434500		548500	
10 PERCENT EXCEEDS	3030		1600		1890	
50 PERCENT EXCEEDS	480		366		390	
90 PERCENT EXCEEDS	230		208		176	

a-Site and datum then in use, from rating curve extended above 5000 ft³/s, gage height, 4.05 ft.

b-Site and datum then in use.

LOCATION.--Lat 38°24'42", long 106°25'20", in SW¹/4SW¹/4 sec.21, T.48 N., R.5 E., Saguache County, Hydrologic Unit 14020003, on right bank 300 ft from U.S. Highway 50, 0.5 mi downstream from Marshall Creek, and 0.8 mi south of Sargents.

PERIOD OF RECORD.--October 1916 to September 1922, October 1937 to September 1972, October 1992 to current year.
Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 8,416 ft above sea level, from topographic map. May 12 to Oct. 5, 1917, nonrecording gage. Oct. 6, 1917 to Sept. 30, 1922, water-stage recorder, at railroad bridge 1,000 ft upstream at different datum. Apr. 18, 1938 to Sept. 9, 1953, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Estimated daily discharges: Nov. 7 to Apr. 19. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,900 acres upstream from station. Larkspur ditch diverts water upstream from station to Arkansas River basin. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	44	37	31	20	25	34	66	242	32	32	24
2	29	38	34	32	22	27	36	61	236	32	33	24
3	29	39	33	32	23	29	38	60	226	34	32	29
4	28	39	32	31	25	30	39	62	216	33	33	30
5	28	37	34	29	24	31	41	77	201	32	31	25
6	28	33	32	29	24	31	39	97	186	32	32	26
7	33	33	32	27	25	29	39	119	170	32	31	25
8	39	35	32	26	24	29	38	133	153	32	32	24
9	38	36	31	28	25	28	38	144	139	32	32	24
10	39	37	31	29	26	28	36	132	126	31	32	24
11	38	41	30	27	25	27	36	140	121	32	31	23
12	38	40	31	26	24	28	37	171	115	32	32	26
13	38	39	31	26	23	29	38	190	106	32	32	30
14	38	39	29	28	24	31	39	194	96	32	43	33
15	38	42	28	28	25	34	40	210	88	33	43	29
16	40	41	29	29	26	37	41	224	81	30	37	27
17	44	39	29	27	26	36	42	244	77	31	35	25
18	41	37	28	26	26	37	45	257	75	33	35	25
19	38	35	29	25	26	41	58	252	75	29	35	26
20	37	35	29	25	25	43	73	252	86	29	36	33
21	36	36	29	24	25	40	84	237	112	30	35	33
22	37	40	27	24	24	41	93	234	84	29	36	29
23	36	44	28	25	22	40	94	223	70	28	34	28
24	36	42	29	26	24	38	105	216	59	29	34	28
25	36	40	28	27	24	38	94	214	51	28	35	28
26	37	36	28	26	25	38	78	219	47	27	31	27
27	34	33	30	25	25	37	73	220	43	26	29	27
28	40	35	33	25	25	35	69	220	40	27	30	26
29	37	36	32	24	- - -	35	68	240	36	31	31	26
30	29	38	31	23	- - -	34	67	238	32	31	31	30
31	42	- - -	28	23	- - -	32	- - -	244	- - -	32	25	- - -
TOTAL	1110	1139	944	833	682	1038	1652	5590	3389	953	1030	814
MEAN	35.8	38.0	30.5	26.9	24.4	33.5	55.1	180	113	30.7	33.2	27.1
MAX	44	44	37	32	26	43	105	257	242	34	43	33
MIN	28	33	27	23	20	25	34	60	32	26	25	23
AC - FT	2200	2260	1870	1650	1350	2060	3280	11090	6720	1890	2040	1610

MEAN	31.4	27.6	23.5	21.5	21.9	27.3	68.3	199	197	63.3	39.4	29.0
MAX	48.9	38.0	30.7	34.0	34.9	50.3	139	382	588	255	128	59.5
(WY)	1971	1994	1962	1962	1962	1972	1962	1958	1957	1957	1957	1957
MIN	18.8	17.6	13.3	10.7	10.9	15.0	34.4	50.4	19.8	19.5	13.7	13.5
(WY)	1956	1967	1967	1967	1967	1970	1967	1954	1954	1940	1950	1950

ANNUAL TOTAL	33120		19174				
ANNUAL MEAN	90.7		52.5		62.5		
HIGHEST ANNUAL MEAN					122		1921
LOWEST ANNUAL MEAN					26.8		1967
HIGHEST DAILY MEAN	625	May 27	257	May 18	792		Jun 9 1921
LOWEST DAILY MEAN	25	Jan 5	20	Feb 1	6.0		Nov 16 1920
ANNUAL SEVEN-DAY MINIMUM	28	Feb 26	23	Jan 28	8.5		Sep 5 1959
INSTANTANEOUS PEAK FLOW			288	May 18	804		Jun 6 1957
INSTANTANEOUS PEAK STAGE			2.07	May 18	a 3.66		Jun 6 1957
ANNUAL RUNOFF (AC-FT)	65690		38030		45310		
10 PERCENT EXCEEDS	268		117		154		
50 PERCENT EXCEEDS	39		33		30		
90 PERCENT EXCEEDS	29		25		18		

a-Maximum gage height for period of record, 4.05 ft, Jun 16, 1917, and Jun 9, 1921, site and datum then in use.

09118450 COCHETOPA CREEK BELOW ROCK CREEK, NEAR PARLIN, CO

LOCATION.--Lat 38°20'08", long 106°46'18", in SW¹/₄NE¹/₄ sec.17, T.47 N., R.2 E. Saguache County, Hydrologic Unit 14020003, on left bank 0.75 mi downstream from Rock Creek and 12 mi southeast of Parlin.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 5 to Jan. 19, and Mar. 2-17. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of hay meadows upstream from station. Transmountain diversion by Tarbell ditch exports water upstream from station to Saguache Creek, since 1913. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	27	16	18	15	22	30	30	37	15	18	20
2	24	28	16	18	16	22	32	31	40	15	20	23
3	24	28	16	18	16	22	32	29	39	19	20	42
4	23	26	17	19	16	25	34	30	40	21	20	44
5	22	24	18	19	16	29	33	32	38	20	21	32
6	23	22	18	18	16	31	29	38	35	25	22	28
7	24	22	18	17	16	32	32	41	31	27	15	25
8	25	23	17	17	16	31	32	39	27	26	18	24
9	25	21	16	18	16	31	32	33	26	21	27	23
10	25	20	17	18	16	32	31	38	24	18	26	23
11	24	19	17	18	16	33	30	32	23	17	22	23
12	24	19	17	17	17	35	34	31	24	19	23	28
13	25	18	16	17	16	39	46	36	24	23	25	32
14	24	18	16	17	15	43	46	35	23	25	25	33
15	24	16	16	18	15	49	42	33	21	27	31	33
16	26	17	17	18	15	55	41	36	24	28	27	29
17	27	17	17	17	15	54	41	38	24	27	24	28
18	29	17	17	17	15	54	44	33	21	26	21	27
19	27	17	17	18	16	52	42	33	24	21	23	27
20	25	18	17	18	16	50	41	35	32	20	23	32
21	24	18	18	17	16	43	42	33	31	19	24	35
22	24	18	18	17	17	37	41	26	30	17	22	30
23	24	18	17	16	17	35	46	23	30	18	20	26
24	24	18	17	19	16	28	57	24	25	21	20	25
25	24	18	17	20	16	27	48	24	27	25	20	25
26	25	19	17	18	17	28	37	27	25	25	19	24
27	25	18	17	17	18	27	34	23	20	21	18	24
28	25	18	17	18	21	24	31	21	17	17	21	24
29	26	18	17	17	---	26	31	29	16	16	25	23
30	30	17	17	17	---	28	32	33	15	17	24	24
31	30	---	17	16	---	27	---	32	---	16	21	---
TOTAL	777	597	525	547	453	1071	1123	978	813	652	685	836
MEAN	25.1	19.9	16.9	17.6	16.2	34.5	37.4	31.5	27.1	21.0	22.1	27.9
MAX	30	28	18	20	21	55	57	41	40	28	31	44
MIN	22	16	16	16	15	22	29	21	15	15	15	20
AC-FT	1540	1180	1040	1080	899	2120	2230	1940	1610	1290	1360	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

	MEAN	72.6	31.1	23.8	21.1	21.7	32.4	56.3	90.1	96.0	53.2	63.7	44.5
MAX	72.6	49.9	39.5	36.6	33.4	52.3	135	413	240	117	144	90.8	
(WY)	1983	1983	1985	1984	1986	1985	1987	1984	1984	1986	1984	1982	
MIN	17.7	15.0	10.3	11.1	10.5	12.5	27.9	18.4	21.5	21.0	22.1	16.8	
(WY)	1990	1993	1982	1982	1982	1982	1990	1989	1989	1994	1994	1981	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1981 - 1994

ANNUAL TOTAL	15083	9057	
ANNUAL MEAN	41.3	24.8	47.9
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			24.8
HIGHEST DAILY MEAN	167	May 28	954
LOWEST DAILY MEAN	12	Jan 5	8.4
ANNUAL SEVEN-DAY MINIMUM	14	Jan 2	8.9
INSTANTANEOUS PEAK FLOW			63
INSTANTANEOUS PEAK STAGE		2.17	1120
ANNUAL RUNOFF (AC-FT)	29920	17960	34700
10 PERCENT EXCEEDS	88	36	91
50 PERCENT EXCEEDS	29	24	34
90 PERCENT EXCEEDS	17	16	16

a-Also occurred Feb 14-18, Jun 30 to Jul 2, and Aug 7.

b-Maximum gage height, 3.57 ft, Mar 7, backwater from ice.

09119000 TOMICHI CREEK AT GUNNISON, CO

LOCATION.--Lat 38°31'18", long 106°56'25", in NE¹/4SW¹/4 sec.11, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020003, on right bank 300 ft downstream from highway bridge, 1.8 mi southwest of Post Office in Gunnison, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--1,061 mi².

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharges only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-86-2: 1985.

GAGE.--Satellite data-collection platform. Datum of gage is 7,628.58 ft above sea level. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 7 to Apr. 19, and July 7-9. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 24,000 acres upstream from station. Water diverted upstream from station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	112	88	64	50	68	114	164	412	49	102	59
2	88	118	83	66	52	68	118	167	422	48	122	56
3	87	106	80	65	55	70	126	158	427	48	99	70
4	86	118	80	65	57	75	132	147	416	45	93	103
5	77	105	80	64	58	82	135	133	400	50	90	93
6	73	83	82	61	58	88	132	141	374	47	87	76
7	68	81	80	58	58	87	132	158	331	35	82	66
8	73	85	80	58	58	86	132	171	284	17	70	62
9	81	91	79	60	58	89	130	144	255	37	84	56
10	87	95	79	62	58	90	128	173	221	38	104	54
11	90	95	77	62	57	95	128	165	177	38	93	53
12	92	98	74	62	56	103	130	161	182	39	80	56
13	95	98	69	63	56	115	130	190	173	47	77	64
14	99	97	64	63	58	130	128	235	161	64	132	71
15	107	94	68	63	58	135	130	240	145	74	140	77
16	106	90	67	62	60	140	134	252	125	75	109	73
17	121	90	66	61	62	143	140	265	90	76	90	69
18	132	95	65	60	62	140	150	295	76	80	84	67
19	128	93	62	57	61	150	160	291	89	81	87	64
20	119	90	63	56	60	158	169	308	122	79	88	78
21	107	88	65	56	59	155	172	312	121	72	82	88
22	106	95	65	57	60	150	189	294	130	71	77	90
23	112	99	63	58	58	153	219	288	146	71	67	80
24	116	95	64	59	56	150	231	267	133	77	64	72
25	113	88	64	59	57	148	243	274	102	85	62	71
26	113	83	65	59	59	145	224	288	82	85	59	69
27	105	78	67	60	63	140	198	295	76	77	56	65
28	101	83	69	58	64	133	180	279	64	73	56	64
29	108	85	68	57	---	127	171	301	53	74	69	65
30	97	86	64	56	---	120	170	342	49	78	69	69
31	87	---	62	53	---	116	---	383	---	83	67	---
TOTAL	3058	2814	2202	1864	1628	3649	4675	7281	5838	1913	2641	2100
MEAN	98.6	93.8	71.0	60.1	58.1	118	156	235	195	61.7	85.2	70.0
MAX	132	118	88	66	64	158	243	383	427	85	140	103
MIN	68	78	62	53	50	68	114	133	49	17	56	53
AC-FT	6070	5580	4370	3700	3230	7240	9270	14440	11580	3790	5240	4170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

	MEAN	93.5	102	77.0	66.2	68.9	111	246	471	191	159	91.1
MAX	209	158	117	116	98.0	279	564	2073	1481	859	440	318
(WY)	1970	1971	1987	1971	1986	1939	1942	1984	1984	1957	1957	1970
MIN	33.5	62.4	45.8	37.1	36.2	59.8	56.5	22.4	51.8	42.5	51.5	19.2
(WY)	1964	1951	1964	1979	1979	1981	1967	1977	1977	1955	1977	1956

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1938 - 1994
ANNUAL TOTAL	80869	39663	
ANNUAL MEAN	222	109	173
HIGHEST ANNUAL MEAN			478
LOWEST ANNUAL MEAN			60.4
HIGHEST DAILY MEAN	1450	427	4040
LOWEST DAILY MEAN	50	17	2.6
ANNUAL SEVEN-DAY MINIMUM	55	36	7.6
INSTANTANEOUS PEAK FLOW		452	4620
INSTANTANEOUS PEAK STAGE		2.62	5.49
ANNUAL RUNOFF (AC-FT)	160400	78670	125500
10 PERCENT EXCEEDS	597	181	389
50 PERCENT EXCEEDS	118	84	98
90 PERCENT EXCEEDS	62	57	53

09124500 LAKE FORK AT GATEVIEW, CO

LOCATION.--Lat 38°17'56", long 107°13'46", in SE¹/4NE¹/4 sec.29, T.47 N., R.3 W., Gunnison County, Hydrologic Unit 14020002, on left bank at old village of Gateview, 25 ft downstream from private bridge, 0.2 mi upstream from Indian Creek, and 6.3 mi upstream from waterline of Blue Mesa Reservoir, at elevation 7,519 ft.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,827.66 ft above sea level. Prior to Oct. 1, 1938, at datum 2.00 ft, higher, Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft, higher, and Oct. 1, 1945 to Sept. 3, 1991, at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 10-15, and Nov. 19 to Apr. 18. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	75	54	48	37	44	55	109	1410	354	110	83
2	83	70	51	47	39	46	59	107	1360	334	115	85
3	80	64	48	48	39	48	61	103	1400	307	111	95
4	81	70	50	47	42	51	65	102	1510	282	104	126
5	78	62	52	46	45	54	67	110	1330	250	99	124
6	75	52	51	44	44	53	63	150	1230	232	111	120
7	79	54	49	44	45	52	62	222	1090	215	104	110
8	83	56	49	46	45	49	62	250	963	200	100	101
9	84	51	49	46	44	48	60	281	915	187	106	96
10	85	53	49	45	44	48	59	262	913	177	104	92
11	83	55	48	44	43	48	58	224	922	171	106	88
12	88	56	47	43	42	48	59	249	844	161	105	101
13	85	55	46	44	41	49	58	344	869	152	106	125
14	87	54	45	44	40	52	59	353	903	148	110	174
15	85	54	47	43	41	57	64	446	816	143	112	178
16	86	52	49	47	44	60	69	537	766	140	106	159
17	87	52	48	46	47	59	74	646	711	135	95	144
18	85	49	47	44	46	58	84	635	696	132	93	139
19	80	54	47	43	46	62	86	639	660	131	97	135
20	78	53	48	42	46	66	102	674	694	141	105	139
21	74	50	47	42	45	65	113	608	792	135	103	146
22	77	52	45	42	46	62	146	622	783	128	97	141
23	75	56	45	42	46	63	181	772	731	126	89	136
24	72	60	43	42	45	64	190	837	659	125	86	130
25	74	54	44	44	44	61	177	881	605	123	87	126
26	73	51	47	45	44	59	154	669	565	119	83	120
27	66	47	49	43	44	56	137	592	516	115	78	115
28	73	49	50	42	44	54	120	763	474	111	86	111
29	78	55	48	41	---	54	118	947	422	109	91	110
30	62	55	45	42	---	53	112	1170	382	104	85	112
31	70	---	46	40	---	52	---	1380	---	100	80	---
TOTAL	2451	1670	1483	1366	1218	1695	2774	15684	25931	5287	3064	3661
MEAN	79.1	55.7	47.8	44.1	43.5	54.7	92.5	506	864	171	98.8	122
MAX	88	75	54	48	47	66	190	1380	1510	354	115	178
MIN	62	47	43	40	37	44	55	102	382	100	78	83
AC-FT	4860	3310	2940	2710	2420	3360	5500	31110	51430	10490	6080	7260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	92.7	67.8	52.3	46.1	43.5	55.6	133	536	983	479	202	128
MAX	242	143	75.7	66.5	71.0	102	339	1153	1586	1266	479	430
(WY)	1942	1942	1984	1984	1986	1939	1952	1984	1944	1957	1982	1970
MIN	40.3	42.7	34.6	32.5	30.4	30.5	53.3	205	263	107	82.5	45.5
(WY)	1957	1940	1940	1977	1990	1977	1990	1977	1977	1977	1956	1956

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR				FOR 1994 WATER YEAR				WATER YEARS 1938 - 1994			
ANNUAL TOTAL	92589				66284							
ANNUAL MEAN	254				182				235			
HIGHEST ANNUAL MEAN									413			
LOWEST ANNUAL MEAN									88.7			
HIGHEST DAILY MEAN	1760				Jun 1				2410			
LOWEST DAILY MEAN	32				Jan 5				22			
ANNUAL SEVEN-DAY MINIMUM	34				Jan 1				23			
INSTANTANEOUS PEAK FLOW					1740				a2720			
INSTANTANEOUS PEAK STAGE					4.22				4.37			
ANNUAL RUNOFF (AC-FT)	183700				131500				170500			
10 PERCENT EXCEEDS	942				627				683			
50 PERCENT EXCEEDS	79				78				85			
90 PERCENT EXCEEDS	38				44				40			

a-Datum then in use, gage height, 4.18 ft.

09125800 SILVER JACK RESERVOIR NEAR CIMARRON, CO

LOCATION.--Lat 38°13'58", long 107°32'28", in T.46 N., R. 6 W., Gunnison County, Hydrologic Unit 14020002, in gate house of Silver Jack Dam on Cimarron River, 14.5 mi south of Cimarron.

DRAINAGE AREA.--59 mi².

PERIOD OF RECORD.--October 1987 to current year.

REVISED RECORDS.--WDR CO-92-2: 1991 minimum contents.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8925.60 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in December 1970; dam completed December 1971. Capacity, 13,520 acre-ft, 1971 survey, between elevation 8,800.0 ft, streambed at dam, and 8,925.6 ft, crest of spillway. Dead storage below elevation 8,836.0, 520 acre-ft. Figures given are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 13,460 acre-ft, June 16 and 17, 1993, elevation, 8,927.15 ft; minimum contents, 1,180 acre-ft, Sept. 30, 1994, elevation, 8,865.26 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,370 acre-ft, June 4, elevation, 8,926.83 ft; minimum contents, 1,880 acre-ft, Sept. 30, elevation, 8,865.26 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,892.42	5,440	
Oct. 31.	8,893.02	5,540	+100
Nov. 30.	8,894.38	5,790	+250
Dec. 31.	8,896.43	6,160	+370
CAL YR 1993.	-	-	-40
Jan. 31.	8,897.83	6,420	+260
Feb. 28.	8,898.77	6,600	+180
Mar. 31.	8,900.59	6,950	+350
Apr. 30.	8,909.76	8,890	+1,940
May 31.	8,926.70	13,330	+4,440
June 30.	8,925.92	13,100	-230
July 31.	8,906.78	8,230	-4,870
Aug. 31.	8,878.82	3,380	-4,850
Sept. 30.	8,865.87	1,940	-1,440
WTR YR 1994.	-	-	-3,500

09126000 CIMARRON RIVER NEAR CIMARRON, CO

LOCATION.--Lat 38°15'36", long 107°32'43", in NW¹/4NE¹/4 sec.8, T.46 N., R.6 W., Gunnison County, Hydrologic Unit 14020002, on right bank 100 ft upstream from Forest Service bridge, 0.6 mi upstream from headgate on Cimarron ditch, 2.1 mi downstream from Silver Jack Dam, and 13 mi south of Cimarron.

DRAINAGE AREA.--66.6 mi².

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as Cimarron Creek near Cimarron. Statistical summary computed for 1971 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,631.48 ft above sea level. Prior to Oct. 12, 1972, at site 0.2 mi downstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 15 to Apr. 21. Records good except for estimated daily discharges, which are poor. Diversion upstream from station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, 2.1 mi upstream since Dec. 23, 1970, total capacity, 13,520 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	30	16	12	10	12	13	22	593	129	137	72
2	20	30	16	12	11	11	13	22	535	120	136	71
3	22	30	16	12	11	11	13	22	556	106	135	73
4	28	30	15	12	11	12	14	23	567	114	135	72
5	31	30	16	12	11	13	14	25	527	131	135	73
6	31	29	17	12	11	13	13	27	487	130	133	74
7	31	28	16	11	11	12	13	28	450	116	131	74
8	32	27	16	11	11	12	13	27	390	102	131	73
9	32	27	15	12	11	12	13	29	358	102	130	73
10	32	24	15	13	11	11	13	53	330	102	132	72
11	32	18	15	12	11	11	13	78	335	130	131	66
12	33	18	16	11	11	12	12	79	320	151	131	53
13	32	17	16	12	10	12	13	77	322	151	132	57
14	32	18	14	12	10	13	14	74	322	137	133	60
15	32	17	13	12	11	13	15	74	294	125	121	57
16	32	17	13	12	11	13	16	73	291	126	111	57
17	32	17	14	12	12	14	18	79	282	126	110	57
18	32	17	13	11	12	13	19	135	275	130	102	55
19	32	16	11	11	11	14	21	328	260	130	96	55
20	32	16	12	11	11	15	23	384	296	130	95	59
21	31	16	12	11	11	14	25	346	299	130	94	55
22	32	17	11	11	11	14	26	356	288	130	97	54
23	32	18	11	11	10	14	26	368	270	130	99	54
24	32	18	12	12	11	13	27	376	258	130	98	54
25	32	17	12	12	11	13	25	382	244	151	101	52
26	32	16	12	12	11	13	23	360	230	164	103	42
27	30	15	12	11	11	13	22	358	210	162	101	42
28	30	15	12	11	12	12	22	397	191	149	101	42
29	30	15	13	11	---	12	21	440	161	138	84	41
30	30	16	12	10	---	12	21	520	143	137	70	44
31	30	---	11	9.4	---	12	---	581	---	137	71	---
TOTAL	941	619	425	356.4	307	391	534	6143	10084	4046	3516	1783
MEAN	30.4	20.6	13.7	11.5	11.0	12.6	17.8	198	336	131	113	59.4
MAX	33	30	17	13	12	15	27	581	593	164	137	74
MIN	20	15	11	9.4	10	11	12	22	143	102	70	41
AC-FT	1870	1230	843	707	609	776	1060	12180	20000	8030	6970	3540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	50.6	23.2	16.7	14.9	14.9	16.3	23.6	161	422	214	114	70.8
MAX	135	46.9	31.7	30.0	29.4	35.3	46.5	421	799	605	239	116	
(WY)	1983	1986	1974	1974	1986	1986	1987	1984	1984	1983	1983	1984	
MIN	20.2	8.18	6.79	2.36	3.03	4.45	8.46	54.0	114	89.0	73.9	32.2	
(WY)	1991	1990	1978	1971	1971	1971	1977	1990	1977	1977	1981	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1971 - 1994
ANNUAL TOTAL	40338.0	29145.4	
ANNUAL MEAN	111	79.9	a95.3
HIGHEST ANNUAL MEAN			180
LOWEST ANNUAL MEAN			40.2
HIGHEST DAILY MEAN	759	May 28	1290
LOWEST DAILY MEAN	9.4	Jan 24	b,c
ANNUAL SEVEN-DAY MINIMUM	10	Jan 19	.00
INSTANTANEOUS PEAK FLOW			d1560
INSTANTANEOUS PEAK STAGE		4.48	e6.05
ANNUAL RUNOFF (AC-FT)	80010	57810	69070
10 PERCENT EXCEEDS	299	259	255
50 PERCENT EXCEEDS	22	27	30
90 PERCENT EXCEEDS	12	11	10

a-Average discharge for 16 years (water years 1955-70), 88.6 ft³/s; 64190 acre-ft/yr, prior to completion of Silver Jack Dam.

b-Also occurred Dec 25-31, 1970, and Jan 1-9, 1971. Result of storage in Silver Jack Dam.

c-Minimum daily discharge prior to construction of Silver Jack Dam, 8.0 ft³/s, Dec 27, 28, 1962, and Jan 13, 1963.

d-Maximum discharge and stage for period of record, 1790 ft³/s, Jun 28, 1957, gage height, 8.32 ft, site and datum then in use.

e-Maximum gage height for statistical period, 6.16 ft, Jun 25, 1971.

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO

LOCATION.--Lat 38°31'45", long 107°38'54", in NE¹/4NW¹/4 sec.10, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, on left bank 0.4 mi downstream from east portal of Gunnison tunnel, 4.7 mi downstream from Crystal Creek, and 12 mi northeast of Montrose.

DRAINAGE AREA.--3,965 mi².

PERIOD OF RECORD.--October 1903 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at east portal of Gunnison tunnel" 1905-6 and as "at River portal" 1907-11. Statistical summary computed for 1911 to current year.

REVISED RECORDS.--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area. WDR CO-77-2: 1926, 1941.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,526.06 ft above sea level. Apr. 9, 1905, to Aug. 20, 1915, nonrecording gage at site 300 ft upstream from diversion dam at east portal of Gunnison Tunnel, at different datum. Aug. 21, 1915, to Jan. 19, 1943, nonrecording gage at site 500 ft downstream from diversion dam at east portal of Gunnison Tunnel, at different datum. Jan. 20, 1943, to Sept. 30, 1956, water-stage recorder at present site at datum 1.0 ft, higher.

REMARKS.--Estimated daily discharges: Jan. 14 to Feb. 24. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison Tunnel for irrigation of about 75,000 acres in Uncompahgre Valley (see table below for figures of diversion), Taylor Park Reservoir (station 09108500), Blue Mesa Reservoir (station 09124600), Morrow Point Reservoir (station 09125400), Crystal Reservoir (station 09127600), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through Gunnison tunnel; provided by Uncompahgre Valley Water Users Association.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	636	1300	1310	1560	640	533	474	476	1120	907	318	767
2	645	1290	1310	1570	690	535	455	473	1100	906	346	758
3	648	1310	1340	1580	510	538	451	474	1120	918	412	789
4	642	1300	1350	1580	520	543	443	466	1110	951	408	776
5	651	1310	1360	1560	500	546	457	465	1110	948	402	765
6	652	1310	1340	1560	480	549	453	732	1110	936	398	766
7	641	1400	1320	1560	490	549	454	933	1070	944	404	798
8	649	1700	1340	1600	500	551	450	1110	988	953	415	775
9	651	1550	1340	1610	510	552	455	1170	987	972	540	776
10	647	1320	1430	1570	500	550	441	1180	953	934	686	762
11	648	1290	1560	1560	530	553	443	1210	922	923	714	755
12	651	1290	1570	1540	490	556	447	1190	935	898	712	732
13	653	1300	1570	1440	480	560	447	1200	907	916	725	765
14	652	1310	1570	1320	490	558	431	1220	885	938	726	729
15	649	1260	1570	1150	410	560	456	1220	895	942	739	634
16	581	927	1570	880	450	559	468	1210	885	928	736	615
17	517	611	1560	680	550	558	469	1420	876	954	746	618
18	519	784	1550	700	610	559	468	1670	875	945	732	610
19	560	1200	1560	710	550	561	463	1980	882	931	732	603
20	524	1310	1520	710	540	579	478	2370	877	922	764	600
21	526	1310	1500	705	540	585	489	2690	884	710	755	595
22	585	1310	1480	695	520	562	481	2940	887	685	754	602
23	798	1310	1530	695	500	575	496	3140	896	687	747	601
24	992	1300	1530	700	540	581	497	3160	890	689	745	604
25	1220	1310	1540	700	536	563	487	2820	887	684	741	599
26	1280	1310	1550	725	544	560	495	2310	894	573	748	598
27	1260	1310	1530	715	524	591	479	1850	883	465	784	597
28	1290	1310	1530	705	467	591	470	1490	889	369	796	594
29	1290	1310	1540	700	---	586	479	1120	910	312	774	589
30	1290	1300	1570	690	---	601	473	1090	913	306	788	598
31	1300	---	1550	650	---	562	---	1100	---	302	789	---
TOTAL	24247	38152	45890	34120	14611	17406	13949	45879	28540	24448	20076	20370
MEAN	782	1272	1480	1101	522	561	465	1480	951	789	648	679
MAX	1300	1700	1570	1610	690	601	497	3160	1120	972	796	798
MIN	517	611	1310	650	410	533	431	465	875	302	318	589
AC-FT	48090	75670	91020	67680	28980	34520	27670	91000	56610	48490	39820	40400
a	33990	0	0	0	0	0	46140	55650	59100	65110	60600	45970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

	MEAN	528	729	770	764	759	845	1295	3233	4130	1486	653	470
MAX	2114	1888	2165	2732	3153	3278	3282	8611	11670	8468	2237	2447	
(WY)	1912	1971	1987	1974	1971	1971	1930	1928	1957	1957	1957	1929	
MIN	17.0	116	141	143	155	248	177	216	123	61.1	34.4	8.37	
(WY)	1935	1935	1966	1966	1966	1966	1954	1967	1954	1940	1924	1937	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1911 - 1994
ANNUAL TOTAL	638591	327688	
ANNUAL MEAN	1750	898	1305
HIGHEST ANNUAL MEAN			2936
LOWEST ANNUAL MEAN			261
HIGHEST DAILY MEAN	4620	Jun 2	18600
LOWEST DAILY MEAN	463	Jan 12	18600
ANNUAL SEVEN-DAY MINIMUM	501	Jan 9	18600
INSTANTANEOUS PEAK FLOW			19000
INSTANTANEOUS PEAK STAGE		5.99	15.80
ANNUAL RUNOFF (AC-FT)	1267000	650000	945700
10 PERCENT EXCEEDS	3350	1540	3150
50 PERCENT EXCEEDS	1310	746	570
90 PERCENT EXCEEDS	642	470	181

a-Diversions, in acre-feet, through Gunnison tunnel, provided by Uncompahgre Valley Water Users Association.

b-Also occurred Sep 26, 1936, Oct 8, 1949, Sep 5, 6, 15, 16, 1950.

c-Present datum, from rating curve extended above 14000 ft³/s.

09128500 SMITH FORK NEAR CRAWFORD, CO

LOCATION.--Lat 38°43'40", long 107°30'22", in SW¹/4SE¹/4 sec.24, T.15 S., R.91 W., Delta County, Hydrologic Unit 14020002, on left bank 20 ft upstream from Forest Service bridge, 0.4 mi upstream from Second Creek, 6 mi northeast of Crawford, and 6.5 mi upstream from Iron Creek.

DRAINAGE AREA.--42.8 mi².

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1941. WDR CO-83-2: Drainage area. WDR CO-85-2: 1984, 1984 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,091 ft above sea level, from topographic map. Prior to Nov. 16, 1938, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 20 to Mar. 4. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of a few small hay meadows upstream from station. Saddle Mountain ditch diverts water upstream from station for irrigation of about 800 acres downstream. One small ditch diverts water from Virginia Creek to Iron Creek drainage. Head and Ferrier ditch imports water from Curecanti Creek drainage. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	20	9.8	7.2	6.0	9.6	29	85	185	15	6.6	4.5
2	10	19	10	7.3	6.4	11	34	91	171	14	6.8	4.3
3	10	19	9.8	7.4	7.0	13	36	93	159	14	6.0	4.4
4	10	19	9.0	7.2	7.6	15	38	93	146	13	3.9	4.4
5	9.9	18	8.6	7.0	8.0	22	36	127	132	12	3.3	4.2
6	9.8	14	8.0	6.9	8.0	24	33	186	119	12	3.7	3.7
7	14	16	7.8	6.8	8.0	22	32	229	105	11	3.3	3.6
8	19	15	7.8	6.8	7.8	24	28	232	89	11	3.3	3.7
9	21	15	7.6	6.9	8.0	22	28	239	80	10	4.6	3.8
10	23	15	7.6	6.9	8.4	21	28	236	72	9.9	5.5	4.2
11	21	16	7.6	6.8	8.6	21	29	238	68	9.8	5.9	4.2
12	30	18	7.6	6.4	8.4	21	29	274	66	9.9	5.8	4.5
13	29	18	7.4	6.2	7.4	23	34	275	63	9.6	6.8	4.8
14	27	17	7.0	6.4	7.8	26	43	247	58	9.2	6.8	5.2
15	25	16	7.4	6.8	8.4	29	48	259	53	8.9	8.7	5.3
16	27	15	8.0	7.0	9.0	33	58	240	47	8.6	8.2	5.7
17	29	16	8.4	7.0	9.4	35	71	255	42	8.1	7.1	6.0
18	29	15	8.2	7.0	9.6	32	78	242	39	7.9	6.2	6.3
19	29	13	7.8	6.4	9.4	32	88	246	37	7.8	6.3	6.5
20	28	12	7.6	6.2	9.0	36	123	256	36	6.6	6.3	6.9
21	27	11	7.4	6.6	8.8	33	160	221	34	6.1	7.0	7.1
22	27	11	7.6	7.0	8.6	33	192	203	33	5.3	6.1	6.4
23	26	12	8.0	7.4	8.4	34	207	195	29	5.7	5.1	5.7
24	25	14	8.0	7.6	8.0	32	225	188	27	5.2	4.5	5.6
25	25	12	7.8	7.8	7.8	30	216	188	25	5.4	4.6	5.1
26	25	10	8.0	8.0	7.8	28	170	176	23	6.2	4.4	4.8
27	23	9.8	8.6	7.8	8.0	27	131	168	21	6.0	5.4	4.7
28	23	9.6	8.5	7.7	8.6	23	104	180	19	6.0	6.0	4.5
29	23	9.4	7.6	7.0	---	26	90	183	18	6.0	5.8	4.5
30	18	9.6	6.6	6.5	---	23	86	183	16	5.9	4.9	6.3
31	19	---	6.8	5.6	---	27	---	183	---	5.7	5.0	---
TOTAL	671.7	434.4	247.9	215.6	228.2	787.6	2504	6211	2012	271.8	173.9	150.9
MEAN	21.7	14.5	8.00	6.95	8.15	25.4	83.5	200	67.1	8.77	5.61	5.03
MAX	30	20	10	8.0	9.6	36	225	275	185	15	8.7	7.1
MIN	9.8	9.4	6.6	5.6	6.0	9.6	28	85	16	5.2	3.3	3.6
AC-FT	1330	862	492	428	453	1560	4970	12320	3990	539	345	299

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1994, BY WATER YEAR (WY)

	MEAN	11.1	9.62	7.76	7.05	7.84	15.4	79.9	197	124	29.7	11.7	10.4
MAX	35.2	29.9	20.5	18.0	21.5	58.3	192	484	496	122	34.0	23.3	
(WY)	1942	1987	1987	1937	1987	1986	1962	1993	1957	1957	1957	1965	
MIN	4.76	4.85	4.32	4.14	4.73	5.97	23.5	23.1	19.5	7.33	3.43	3.66	
(WY)	1965	1977	1977	1977	1951	1954	1944	1977	1977	1963	1972	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1936 - 1994

ANNUAL TOTAL	31562.7	13909.0	
ANNUAL MEAN	86.5	38.1	42.8
HIGHEST ANNUAL MEAN			89.0
LOWEST ANNUAL MEAN			10.5
HIGHEST DAILY MEAN	882	May 28	1060
LOWEST DAILY MEAN	6.4	Jan 4	1.7
ANNUAL SEVEN-DAY MINIMUM	6.9	Feb 22	3.9
INSTANTANEOUS PEAK FLOW			293
INSTANTANEOUS PEAK STAGE			3.00
ANNUAL RUNOFF (AC-FT)	62600	27590	30980
10 PERCENT EXCEEDS	297	138	120
50 PERCENT EXCEEDS	17	10	11
90 PERCENT EXCEEDS	7.4	5.5	5.5

a-Also occurred Aug 7-8.

b-May have been higher during period of indefinite stage-discharge relationship, May 16-21, 1984.

c-Maximum gage height, 9.26 ft, May 30, 1983.

09131495 PAONIA RESERVOIR NEAR BARDINE, CO

LOCATION.--Lat 38°56'39", long 107°21'06", in NE¹/₄ sec.8, T.13 S., R.89 W., Gunnison County, Hydrologic Unit 14020004, in gate house of Paonia Dam on Muddy Creek, 16 mi east of Paonia.

DRAINAGE AREA.--246 mi².

PERIOD OF RECORD.--December 1961 to current year. Monthend active contents provided by U.S. Bureau of Reclamation from December 1961 to September 1987.

REVISED RECORD.--WDR CO-92-2; 1988-91.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,447.50 ft above sea level (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in December 1961; dam completed January 1962. Capacity 20,950 acre-ft, 1966 survey, between elevation 6,290.0 ft streambed at dam, and 6,447.5 ft, crest of spillway. Dead storage below elevation 6,358.0 ft, 2,440 acre-ft. Inactive storage below elevation 6360.0 ft, 2,620 acre-ft. Figures published prior to 1988 water year are active contents; figures given beginning 1988 water year are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,010 acre-ft, May 29 elevation, 6,448.42 ft; minimum contents, 565 acre-ft, September 21, elevation, 6,369.60 ft.

MONTH END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	6,427.01	10,440	-
Oct. 31.	6,406.98	5,470	-4,970
Nov. 30.	6,405.53	5,170	-300
Dec. 31.	6,404.38	4,940	-230
CAL YR 1993.	-	-	+3210
Jan. 31.	6,406.41	5,360	+420
Feb. 28.	6,410.91	6,340	+980
Mar. 31.	6,411.48	6,480	+140
Apr. 30.	6,436.19	13,130	+6,650
May 31.	6,448.41	17,010	+3,880
June 30.	6,447.66	16,760	-250
July 31.	6,428.32	10,810	-5,950
Aug. 31.	6,381.79	1,480	-9,330
Sept. 30.	6,372.75	760	-720
WTR YR 1994.	-	-	-9,690

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION.--Lat 38°55'33", long 107°26'01", in SE¹/4SW¹/4 sec.10, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on left bank 2.3 mi east of Somerset and 4.8 mi upstream from Hubbard Creek.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, October 1977 to September 1982. Sediment data available, November 1978 to September 1982.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-77-2: 1976.

GAGE.--Satellit data-collection platform. Elevation of gage is 6,280 ft above sea level, from topographic map. Prior to Oct. 1, 1982, at various sites 0.8 mi downstream, at different datums. See WDR CO-81-2, for history of changes.

REMARKS.--Estimated daily discharges: Nov. 26 to Mar. 9, and Sept. 17-30. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres upstream from station, storage in Overland Reservoir, capacity, 6,280 acre-ft, and storage in Paonia Reservoir, capacity, 18,300 acre-ft, since February 1962. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334	146	106	67	54	78	299	750	1980	277	226	201
2	338	124	104	68	56	93	332	738	1820	254	230	136
3	334	111	98	68	56	96	360	769	1730	256	230	84
4	289	122	99	67	56	97	384	832	1600	229	222	84
5	259	120	100	66	55	100	352	1190	1440	222	219	84
6	262	96	100	64	54	101	325	1750	1270	224	218	84
7	263	107	99	60	55	100	318	2230	1260	199	218	81
8	270	107	97	60	56	100	277	2230	1270	220	218	79
9	277	105	94	58	55	100	135	2240	1090	249	218	77
10	290	109	93	52	54	92	131	2210	1030	239	217	76
11	292	115	92	52	50	91	133	2270	986	242	209	76
12	311	113	91	54	50	91	126	2480	967	240	209	76
13	326	113	86	58	53	94	153	2580	947	228	209	76
14	305	113	80	59	55	108	209	2370	878	229	211	76
15	199	107	84	59	56	164	216	2090	826	230	218	102
16	133	96	87	60	56	212	302	1930	756	237	204	122
17	152	100	85	60	56	230	455	2090	747	235	205	122
18	182	117	78	54	54	223	562	2100	774	239	205	122
19	217	102	80	54	53	229	724	2030	682	240	208	122
20	210	82	78	54	53	280	972	2070	785	233	213	116
21	199	95	74	54	52	239	1170	1890	692	226	204	95
22	206	107	74	56	51	239	1390	1760	670	221	201	74
23	218	134	76	57	53	260	1450	1680	594	222	198	67
24	218	136	74	58	54	237	1480	1490	555	222	198	65
25	173	104	76	57	56	224	1350	1340	496	223	198	63
26	175	95	77	56	57	215	1110	1320	447	226	198	61
27	165	93	81	54	57	240	957	1470	404	222	198	59
28	154	102	74	51	67	264	863	1780	361	223	198	59
29	154	105	62	46	---	268	803	1930	328	226	198	60
30	137	107	67	42	---	258	761	1980	301	226	201	61
31	147	---	68	48	---	272	---	2020	---	226	201	---
TOTAL	7189	3283	2634	1773	1534	5395	18099	55609	27686	7185	6500	2660
MEAN	232	109	85.0	57.2	54.8	174	603	1794	923	232	210	88.7
MAX	338	146	106	68	67	280	1480	2580	1980	277	230	201
MIN	133	82	62	42	50	78	126	738	301	199	198	59
AC-FT	14260	6510	5220	3520	3040	10700	35900	110300	54920	14250	12890	5280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

	MEAN	117	91.7	76.6	65.1	68.7	143	721	1926	1470	439	193	147
MAX	466	318	271	166	180	721	1736	3993	4095	1817	438	319	
(WY)	1987	1987	1966	1966	1986	1986	1986	1984	1957	1957	1957	1986	
MIN	47.9	35.2	33.1	29.6	30.4	40.2	166	314	179	64.6	48.1	47.6	
(WY)	1957	1990	1978	1990	1978	1964	1977	1977	1934	1934	1977	1934	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1934 - 1994

ANNUAL TOTAL	287142	139547	
ANNUAL MEAN	787	382	456
HIGHEST ANNUAL MEAN			829
LOWEST ANNUAL MEAN			114
HIGHEST DAILY MEAN	6590	May 28	2580
LOWEST DAILY MEAN	40	Jan 5	42
ANNUAL SEVEN-DAY MINIMUM	46	Jan 1	50
INSTANTANEOUS PEAK FLOW			2910
INSTANTANEOUS PEAK STAGE			5.20
ANNUAL RUNOFF (AC-FT)	569500	276800	330500
10 PERCENT EXCEEDS	2390	1270	1500
50 PERCENT EXCEEDS	242	198	129
90 PERCENT EXCEEDS	62	56	52

a-From outside high-water mark.

09134000 MINNESOTA CREEK NEAR PAONIA, CO

LOCATION.--Lat 38°52'12", long 107°30'13", in SE¹/4NE¹/4 of sec.1, T.14 S., R.91 W., Delta County, Hydrologic Unit 14020004, on right bank 0.25 mi downstream from South Fork, 6 mi upstream from mouth, and 4.5 mi east of Paonia.

DRAINAGE AREA.--41.3 mi².

PERIOD OF RECORD.--April 1936 to September 1947, October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from topographic map. April 1936 to October 1941, staff gages at different datums. October 1941 to September 1947, water-stage recorder at different datum. December 1985 to present, water-stage recorder, at datum 2.0 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 25 to Mar. 8, and Apr. 12. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by two small storage reservoirs, one of which obtains water from the East Muddy Creek Basin. Small trans-basin diversion from Coal Creek into Minnesota Creek. Diversions upstream from station for irrigation of about 100 acres. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	6.3	4.3	3.6	2.5	3.6	12	19	91	24	16	8.2
2	5.7	5.9	4.2	3.6	2.7	3.7	13	21	87	24	16	8.0
3	5.8	6.4	4.1	3.6	2.8	3.9	14	25	84	24	16	7.8
4	5.7	6.0	4.0	3.6	2.9	5.1	14	25	80	23	15	7.8
5	5.7	5.9	4.1	3.6	3.0	6.0	13	27	76	21	15	7.2
6	5.9	6.5	4.2	3.5	2.9	6.2	12	34	73	21	15	6.3
7	7.3	6.7	4.1	3.3	2.9	6.2	13	42	70	20	14	5.8
8	9.4	6.7	4.1	3.2	2.8	6.2	13	45	70	20	14	5.4
9	10	6.5	4.0	3.0	2.9	5.8	13	46	66	20	14	5.0
10	9.1	6.6	4.0	3.1	3.0	5.6	13	45	63	20	13	4.9
11	7.8	5.9	4.1	3.1	3.1	5.5	14	46	52	20	13	4.2
12	13	6.4	4.2	2.9	3.1	6.2	13	53	28	20	13	4.2
13	11	6.1	4.0	2.6	2.9	6.8	15	61	32	20	13	4.5
14	8.7	6.6	3.8	2.9	2.7	7.6	16	71	36	20	13	5.1
15	7.3	6.4	3.7	3.0	2.7	8.1	16	86	34	20	13	4.8
16	9.3	6.3	4.0	3.0	2.9	8.8	18	89	33	19	12	3.9
17	9.8	6.8	3.9	2.9	3.1	8.9	21	96	31	19	12	1.8
18	9.8	6.4	3.8	2.8	3.1	8.6	21	96	29	19	12	1.7
19	8.9	5.7	3.7	2.7	3.1	11	21	94	33	22	12	1.7
20	8.6	6.5	3.9	2.7	3.1	16	24	97	34	20	12	1.7
21	8.2	6.4	3.7	2.7	3.1	13	24	93	31	19	11	2.0
22	7.7	5.2	3.5	2.8	3.1	13	25	93	30	19	11	1.9
23	7.7	6.7	3.6	2.9	3.0	13	25	94	26	19	11	1.8
24	7.6	4.7	3.5	3.0	2.8	12	25	92	23	18	11	1.8
25	7.6	4.5	3.5	3.1	2.9	11	24	91	22	18	11	1.8
26	7.4	4.3	3.6	3.0	3.1	11	21	88	21	18	10	1.8
27	7.3	4.1	3.7	3.0	3.5	10	20	86	20	18	10	2.1
28	7.4	4.0	3.8	2.9	3.7	9.8	20	88	20	17	10	2.6
29	7.4	4.2	3.4	2.6	---	10	20	89	23	17	10	3.6
30	7.0	4.3	3.4	2.5	---	9.9	18	90	24	17	9.6	4.0
31	7.1	---	3.5	2.5	---	11	---	91	---	16	8.9	---
TOTAL	247.2	175.0	119.4	93.7	83.4	263.5	531	2113	1342	612	386.5	123.4
MEAN	7.97	5.83	3.85	3.02	2.98	8.50	17.7	68.2	44.7	19.7	12.5	4.11
MAX	13	6.8	4.3	3.6	3.7	16	25	97	91	24	16	8.2
MIN	5.7	4.0	3.4	2.5	2.5	3.6	12	19	20	16	8.9	1.7
AC-FT	490	347	237	186	165	523	1050	4190	2660	1210	767	245

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	6.13	5.54	4.58	3.57	3.98	7.14	29.9	98.1	73.8	26.8	14.8	7.77
MEAN	6.13	5.54	4.58	3.57	3.98	7.14	29.9	98.1	73.8	26.8	14.8	7.77
MAX	16.6	12.9	9.08	5.80	8.62	19.2	89.6	199	194	58.1	29.7	19.8
(WY)	1942	1987	1987	1942	1986	1942	1993	1993	1993	1993	1993	1993
MIN	3.35	2.50	1.78	1.71	2.40	3.32	7.18	23.6	25.2	11.6	4.49	3.57
(WY)	1992	1941	1990	1990	1992	1991	1990	1990	1990	1939	1990	1946

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1937 - 1994

ANNUAL TOTAL	17348.5	6090.1	
ANNUAL MEAN	47.5	16.7	
HIGHEST ANNUAL MEAN			23.6
LOWEST ANNUAL MEAN			46.9
HIGHEST DAILY MEAN	340	May 28	7.97
LOWEST DAILY MEAN	2.6	Jan 4	1.0
ANNUAL SEVEN-DAY MINIMUM	2.8	Feb 12	1.4
INSTANTANEOUS PEAK FLOW			359
INSTANTANEOUS PEAK STAGE			3.24
ANNUAL RUNOFF (AC-FT)	34410	12080	17090
10 PERCENT EXCEEDS	180	38	71
50 PERCENT EXCEEDS	17	8.1	7.0
90 PERCENT EXCEEDS	3.0	2.9	3.0

a-Also occurred Sep 19 and 20.

b-Maximum gage height, 3.70 ft, May 22, 1942, site and datum then in use.

GUNNISON RIVER BASIN

09135900 LEROUX CREEK AT HOTCHKISS, CO

LOCATION.--Lat 38°47'53", long 107°43'53", in NW¹/4NE¹/4 sec.36, T.14 S., R.93 W., Delta County, Hydrologic Unit 14020004, on left bank at upstream side of culvert, 0.3 mi west of Hotchkiss city limits, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--66.7 mi².

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,315 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good except those for discharges above 12.0 ft³/s, which are fair, and those for the period July 15 to Sept. 30, which are poor. Natural flow of stream is affected by diversions upstream from station for irrigation and by return flow from irrigated area upstream from station. Mostly return flow after June. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	16	14	14	12	8.5	8.0	4.6	11	5.3	3.3	2.9
2	10	16	14	14	12	8.2	8.0	5.2	8.1	4.8	3.8	3.0
3	11	16	14	13	12	8.9	7.4	5.9	5.7	4.7	4.2	3.0
4	8.2	16	14	13	12	11	8.3	6.2	6.7	4.9	4.2	3.5
5	6.9	16	14	14	11	11	7.9	6.7	5.8	4.7	4.2	3.6
6	9.4	15	14	14	11	11	6.5	31	5.6	4.7	4.6	3.3
7	12	15	13	13	10	12	5.7	43	5.6	5.5	4.5	3.3
8	12	15	13	14	9.6	12	3.9	34	5.6	6.2	4.2	3.1
9	16	15	13	13	9.3	11	3.8	36	6.1	6.1	4.3	3.1
10	18	15	13	13	8.8	9.1	3.8	20	6.3	6.0	4.3	3.6
11	18	15	13	14	8.5	8.9	3.8	38	6.6	6.1	3.0	3.0
12	18	16	13	14	8.3	8.7	3.3	57	6.1	6.2	3.0	3.2
13	18	15	13	13	8.3	8.3	3.3	57	5.5	6.1	3.4	3.5
14	18	15	12	12	8.5	8.1	4.2	39	5.7	6.0	3.1	4.0
15	18	15	12	13	8.5	6.2	6.4	50	6.0	5.8	3.3	4.1
16	18	15	12	12	7.9	6.2	31	38	6.1	5.5	3.8	3.6
17	18	15	12	12	7.5	7.2	30	52	6.3	5.3	3.7	3.7
18	17	15	12	12	9.0	9.3	24	61	6.5	5.4	4.0	3.9
19	17	15	12	12	8.3	9.1	15	50	6.3	5.5	4.0	4.5
20	17	15	11	12	8.1	9.4	23	41	6.7	5.4	3.5	5.5
21	17	15	11	13	8.2	11	15	33	6.8	5.4	2.9	5.8
22	16	15	12	13	8.1	12	9.9	36	6.7	5.3	3.2	7.3
23	16	14	12	13	7.7	14	9.5	40	6.0	4.3	3.9	7.5
24	16	14	12	13	7.7	13	8.5	31	5.8	3.7	3.8	7.6
25	16	14	12	13	8.0	11	5.1	22	5.7	3.2	3.9	7.5
26	16	14	12	13	8.7	9.7	3.6	18	6.2	3.4	3.8	7.6
27	16	14	12	13	8.9	9.2	3.1	11	6.3	3.9	3.7	7.5
28	16	14	13	12	8.8	8.8	3.2	7.5	6.1	4.4	3.9	7.2
29	16	14	12	12	---	7.6	3.3	14	6.1	4.3	4.2	7.9
30	16	14	13	12	---	6.5	3.6	12	6.1	3.8	4.1	8.2
31	16	---	13	12	---	7.0	---	13	---	3.2	4.1	---
TOTAL	467.5	448	392	400	256.7	293.9	272.1	913.1	190.1	155.1	117.9	145.5
MEAN	15.1	14.9	12.6	12.9	9.17	9.48	9.07	29.5	6.34	5.00	3.80	4.85
MAX	18	16	14	14	12	14	31	61	11	6.2	4.6	8.2
MIN	6.9	14	11	12	7.5	6.2	3.1	4.6	5.5	3.2	2.9	2.9
AC-FT	927	889	778	793	509	583	540	1810	377	308	234	289

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	20.0	16.0	12.4	10.4	9.77	11.1	45.4	117	77.6	6.03	6.15	9.14							
MAX	84.2	51.6	25.2	21.2	28.3	47.7	165	340	290	19.3	9.11	35.9							
(WY)	1987	1987	1987	1987	1987	1986	1987	1993	1983	1983	1983	1982							
MIN	1.95	2.85	3.35	2.77	2.80	2.74	2.44	.96	.89	.85	1.32	1.10							
(WY)	1978	1978	1978	1978	1978	1990	1990	1977	1977	1977	1977	1977							

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1976 - 1994

ANNUAL TOTAL	19798.1	4051.9	
ANNUAL MEAN	54.2	11.1	28.8
HIGHEST ANNUAL MEAN			55.1
LOWEST ANNUAL MEAN			4.95
HIGHEST DAILY MEAN	690	61	1110
LOWEST DAILY MEAN	a 5.3	2.9	.55
ANNUAL SEVEN-DAY MINIMUM	5.4	3.2	.58
INSTANTANEOUS PEAK FLOW		b 95	1880
INSTANTANEOUS PEAK STAGE		8.14	11.82
ANNUAL RUNOFF (AC-FT)	39270	8040	20840
10 PERCENT EXCEEDS	138	17	60
50 PERCENT EXCEEDS	12	8.9	8.6
90 PERCENT EXCEEDS	5.7	3.7	3.1

a-Also occurred Feb 6, 15-16, and Mar 7.

b-From rating curve extended above 12.0 ft³/s.

09143000 SURFACE CREEK NEAR CEDAREDDGE, CO

LOCATION.--Lat 38°59'05", long 107°51'13", in NW¹/4NW¹/4 sec.25, T.12 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 5 ft downstream from private bridge, 1.4 mi downstream from Caesar Creek, and 7.0 mi northeast of Cedaredge.

DRAINAGE AREA.--27.4 mi².

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,261 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14 to Apr. 1. Records good except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs. Some water imported from Leon Lake in Plateau Creek drainage. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	5.4	4.4	3.8	2.8	5.2	8.0	21	171	64	38	55
2	36	5.6	3.7	4.0	3.0	5.3	8.0	25	164	63	31	53
3	35	6.8	3.7	4.1	3.1	5.5	8.5	28	155	62	39	54
4	43	4.3	3.9	4.2	3.4	6.0	9.6	36	147	55	40	53
5	44	7.9	3.9	4.2	3.5	6.6	8.8	74	137	54	45	40
6	30	7.9	4.1	4.1	3.5	7.4	9.6	113	126	64	45	37
7	32	6.5	4.1	3.9	3.5	7.8	8.8	120	114	62	44	49
8	37	7.6	4.0	3.5	3.6	8.0	9.2	122	105	69	42	50
9	38	8.7	3.9	3.6	3.8	7.8	8.1	118	96	74	50	52
10	33	7.5	3.9	3.7	3.9	7.6	7.5	105	93	72	51	48
11	11	5.5	3.8	3.6	3.5	7.6	7.3	130	86	85	49	47
12	15	5.4	3.8	3.7	3.2	7.8	9.3	143	82	78	38	36
13	14	4.6	4.0	3.7	3.0	8.0	11	127	94	67	39	35
14	12	5.0	4.0	3.8	3.2	8.6	12	120	85	65	37	35
15	9.4	5.4	3.7	4.0	3.5	9.0	13	116	94	67	43	28
16	9.7	5.6	3.8	4.2	3.7	9.8	18	132	91	65	43	25
17	11	6.0	4.0	3.9	3.6	9.6	28	146	96	64	53	25
18	10	6.3	3.8	3.8	3.5	9.0	36	141	93	50	54	25
19	5.7	6.7	3.8	3.7	3.5	8.4	44	138	90	49	73	20
20	5.5	6.6	4.0	3.8	3.5	8.6	49	133	73	66	77	18
21	5.9	6.5	4.0	3.8	3.3	8.8	62	128	84	65	74	9.3
22	7.8	6.4	3.8	3.9	3.2	8.4	74	132	94	59	48	6.9
23	8.0	6.3	4.0	4.0	3.3	8.0	80	137	76	56	44	6.5
24	8.1	6.2	4.2	4.0	3.4	7.6	79	147	57	56	60	6.0
25	7.9	6.0	4.0	4.0	3.6	8.0	60	162	51	59	61	5.5
26	7.4	5.8	3.8	3.9	4.0	7.6	39	165	47	58	56	3.8
27	7.3	5.6	3.7	3.7	4.8	7.4	31	161	42	64	55	3.4
28	7.5	5.3	3.8	3.4	5.0	7.2	26	158	40	64	55	28
29	6.9	5.0	3.9	3.3	---	7.0	23	165	64	78	46	33
30	8.3	4.7	3.9	2.9	---	7.4	21	176	63	78	46	28
31	9.9	---	3.7	2.7	---	7.8	---	176	---	76	55	---
TOTAL	552.3	183.1	121.1	116.9	98.9	238.8	808.7	3795	2810	2008	1531	915.4
MEAN	17.8	6.10	3.91	3.77	3.53	7.70	27.0	122	93.7	64.8	49.4	30.5
MAX	44	8.7	4.4	4.2	5.0	9.8	80	176	171	85	77	55
MIN	5.5	4.3	3.7	2.7	2.8	5.2	7.3	21	40	49	31	3.4
AC-FT	1100	363	240	232	196	474	1600	7530	5570	3980	3040	1820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

	MEAN	16.9	7.78	5.49	5.13	5.15	6.81	34.2	126	136	76.4	55.1	33.8
MAX	58.5	35.2	16.7	14.7	12.5	15.2	89.5	258	343	191	93.4	65.5	65.5
(WY)	1942	1942	1987	1987	1987	1972	1943	1952	1983	1983	1983	1983	1983
MIN	6.25	1.64	1.26	.92	1.11	1.57	9.13	29.2	16.0	12.2	15.9	11.0	11.0
(WY)	1978	1990	1977	1977	1977	1977	1964	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1939 - 1994

ANNUAL TOTAL	23062.1	13179.2	
ANNUAL MEAN	63.2	36.1	42.7
HIGHEST ANNUAL MEAN			75.7
LOWEST ANNUAL MEAN			10.6
HIGHEST DAILY MEAN	344	Jun 16	480
LOWEST DAILY MEAN	b 2.6	Jan 1	.80
ANNUAL SEVEN-DAY MINIMUM	2.8	Jan 1	.89
INSTANTANEOUS PEAK FLOW			c 824
INSTANTANEOUS PEAK STAGE			d 3.67
ANNUAL RUNOFF (AC-FT)	45740	26140	30940
10 PERCENT EXCEEDS	236	95	114
50 PERCENT EXCEEDS	11	9.7	16
90 PERCENT EXCEEDS	3.2	3.7	3.7

a-Also occurred May 31.

b-Also occurred Jan 2-4.

c-From rating curve extended above 310 ft³/s.

d-Maximum gage height, 5.10 ft, Apr 13, 1958, ice jam.

09143500 SURFACE CREEK AT CEDAREDDGE, CO

LOCATION.--Lat 38°54'06", long 107°55'14", in SW¹/4SE¹/4 sec.20, T.13 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank at Cedaredge, 700 ft east of State Highway 65, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--39.0 mi².

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD CO-83-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 6,220 ft above sea level, from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 31 to Mar. 12. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to and from nearby streams, many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	9.0	4.2	3.9	3.5	5.8	8.2	33	76	28	28	27
2	28	7.0	4.2	4.2	4.0	7.0	9.2	39	67	27	26	29
3	28	6.0	4.2	4.3	4.2	8.5	9.5	43	59	26	20	29
4	21	5.0	4.3	4.3	4.3	9.5	13	49	57	22	18	29
5	19	4.3	4.2	4.3	4.0	10	10	78	58	19	24	29
6	24	4.3	4.3	4.3	3.9	10	9.1	103	60	25	25	28
7	28	4.2	4.3	4.2	3.9	9.8	9.3	94	61	27	25	28
8	33	4.2	4.2	4.0	4.0	9.0	7.5	83	65	26	22	28
9	35	4.3	4.1	4.9	4.1	9.2	8.0	76	59	27	27	28
10	33	4.3	4.1	4.2	4.2	9.4	7.6	76	56	27	22	27
11	18	4.2	4.0	4.1	4.1	9.6	7.2	101	56	34	18	27
12	22	4.2	4.1	4.1	3.5	9.8	6.7	95	52	31	17	28
13	22	4.1	4.2	4.0	3.2	10	11	78	57	29	18	29
14	20	4.1	4.3	4.2	3.8	12	16	75	49	30	17	30
15	17	4.0	3.8	4.6	4.0	13	13	74	51	31	13	29
16	17	3.9	4.0	4.5	4.1	14	23	88	47	31	10	28
17	19	3.8	4.2	4.4	4.1	13	38	90	44	30	12	28
18	18	3.7	4.0	4.3	4.0	11	43	87	39	25	13	28
19	12	3.6	4.1	4.2	3.9	8.9	51	81	36	24	23	21
20	11	3.7	4.0	4.2	3.8	9.6	52	67	35	28	27	19
21	11	3.8	3.9	4.3	3.7	8.3	59	64	50	28	26	15
22	13	4.3	4.0	4.4	3.6	8.9	68	67	59	27	27	9.3
23	13	4.6	4.1	4.4	3.6	8.2	68	70	42	28	28	9.7
24	13	4.3	4.0	4.4	4.0	9.5	64	69	30	27	31	9.6
25	12	4.2	4.0	4.3	5.0	9.5	50	74	28	27	31	8.9
26	11	4.1	4.0	4.3	5.2	8.0	46	79	25	25	29	8.0
27	10	3.8	4.0	4.2	5.4	7.2	40	75	21	25	29	6.5
28	11	3.9	4.2	4.0	5.6	8.5	39	73	19	25	29	4.6
29	12	3.9	4.3	3.5	---	6.2	37	79	28	29	24	4.4
30	10	4.1	4.2	3.0	---	6.4	34	88	29	29	22	20
31	9.0	---	3.6	3.3	---	6.5	---	85	---	29	26	---
TOTAL	578.0	132.9	127.1	129.3	114.7	286.3	857.3	2333	1415	846	707	645.0
MEAN	18.6	4.43	4.10	4.17	4.10	9.24	28.6	75.3	47.2	27.3	22.8	21.5
MAX	35	9.0	4.3	4.9	5.6	14	68	103	76	34	31	30
MIN	9.0	3.6	3.6	3.0	3.2	5.8	6.7	33	19	19	10	4.4
AC-FT	1150	264	252	256	228	568	1700	4630	2810	1680	1400	1280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)

	MEAN	10.3	5.25	3.42	3.20	3.31	4.70	34.1	109	82.5	35.4	22.5	15.1
MAX	49.3	27.3	15.0	14.0	12.8	21.3	83.7	302	313	112	39.3	29.9	29.9
(WY)	1942	1942	1926	1987	1987	1986	1942	1920	1983	1983	1975	1982	1982
MIN	2.00	.95	.50	.40	.40	.65	1.00	28.4	8.83	5.95	8.77	3.37	3.37
(WY)	1919	1922	1934	1940	1940	1954	1920	1977	1977	1977	1977	1934	1934

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1918 - 1994

ANNUAL TOTAL	17979.1	8171.6	
ANNUAL MEAN	49.3	22.4	27.5
HIGHEST ANNUAL MEAN			62.5
LOWEST ANNUAL MEAN			7.87
HIGHEST DAILY MEAN	403	May 17	640
LOWEST DAILY MEAN	3.4	Jan 9	a.00
ANNUAL SEVEN-DAY MINIMUM	3.8	Nov 15	.11
INSTANTANEOUS PEAK FLOW			b.1190
INSTANTANEOUS PEAK STAGE			3.10
ANNUAL RUNOFF (AC-FT)	35660	16210	19950
10 PERCENT EXCEEDS	190	59	73
50 PERCENT EXCEEDS	16	13	9.3
90 PERCENT EXCEEDS	4.2	4.0	2.0

a-No flow at times some years.

b-From rating curve extended above 640 ft³/s.

09144250 GUNNISON RIVER AT DELTA, CO

LOCATION.--Lat 38°45'01", long 108°04'06", in SE¹/4NE¹/4 sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, on left bank near upstream side of U.S. Highway 50 bridge at north edge of Delta.

DRAINAGE AREA.--5,628 mi².

PERIOD OF RECORD.--May 1976 to current year. Gage-height records collected at this site 1912-77 (flood seasons only) are in reports of the National Weather Service.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,919.97 ft above sea level, National Weather Service Datum (levels by National Weather Service). Prior to May 1976 nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, and many diversions for irrigation. Auxiliary gage established 0.7 mi downstream to collect streamflow data during bridge construction at principal site, June 27, 1991 to September 30, 1992. Several measurements of specific conductance and water temperature were obtained during the year and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 13.5 ft, June 6, 1957, from National Weather Service wire-weight gage at present datum, (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1690	1600	1670	808	825	1150	1400	2960	1070	382	824
2	1060	1680	1610	1690	852	842	1160	1430	2860	983	394	853
3	1070	1650	1620	1710	896	892	1200	1420	2710	992	419	889
4	1070	1650	1610	1710	680	939	1240	1410	2610	1000	432	940
5	1040	1650	1610	1710	696	968	1200	1570	2520	976	462	927
6	1020	1640	1610	1700	663	993	1160	2350	2390	953	476	917
7	1070	1640	1600	1660	642	935	1150	3290	2250	892	498	924
8	1150	1860	1580	1650	646	934	1150	3530	2030	919	499	937
9	1230	1850	1600	1680	673	899	1070	3760	1870	926	551	923
10	1240	1680	1600	1690	682	855	1000	3640	1810	930	756	927
11	1220	1620	1730	1660	679	834	966	3600	1690	935	847	918
12	1240	1660	1780	1670	697	856	941	3950	1680	904	817	952
13	1380	1660	1810	1640	653	886	896	4150	1680	871	806	998
14	1290	1660	1780	1490	651	901	1020	3830	1570	885	859	1030
15	1280	1640	1760	1340	666	947	1010	3750	1490	957	887	941
16	1190	1460	1760	1090	594	1050	1000	3330	1390	963	829	881
17	1120	1050	1760	879	636	1080	1230	3580	1320	905	755	860
18	1110	921	1730	902	724	1070	1480	4030	1340	922	695	832
19	1120	1220	1710	909	775	1040	1480	4070	1340	923	714	814
20	1120	1560	1720	909	726	1130	1730	4600	1440	911	825	805
21	1090	1590	1630	907	716	1180	1950	4680	1540	797	863	805
22	1070	1640	1630	895	716	1110	2310	4860	1490	624	844	791
23	1170	1680	1630	893	691	1140	2390	5000	1480	617	780	785
24	1360	1680	1650	909	666	1160	2530	4830	1400	681	731	773
25	1650	1650	1660	907	710	1150	2400	4370	1330	714	737	767
26	1710	1590	1660	932	775	1100	2080	3740	1280	625	767	758
27	1700	1570	1670	915	837	1080	1790	3240	1180	505	790	761
28	1690	1570	1670	901	788	1100	1630	3090	1080	405	862	752
29	1690	1580	1670	887	---	1120	1510	3070	1110	373	863	745
30	1690	1600	1680	884	---	1100	1430	2850	1150	373	830	824
31	1670	---	1670	847	---	1110	---	2910	---	374	847	---
TOTAL	39570	47591	51800	39236	19938	31226	43253	105330	51990	24905	21817	25853
MEAN	1276	1586	1671	1266	712	1007	1442	3398	1733	803	704	862
MAX	1710	1860	1810	1710	896	1180	2530	5000	2960	1070	887	1030
MIN	1020	921	1580	847	594	825	896	1400	1080	373	382	745
AC-FT	78490	94400	102700	77820	39550	61940	85790	208900	103100	49400	43270	51280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1354	1520	1625	1687	1765	1951	2470	4532	4026	1940	1108	1173							
MAX	2833	3156	3103	3349	3381	3696	6641	11090	13520	6506	2752	2496							
(WY)	1987	1987	1987	1985	1985	1985	1985	1984	1984	1984	1984	1986							
MIN	398	467	440	480	491	506	366	411	331	275	269	335							
(WY)	1978	1978	1978	1990	1990	1990	1977	1977	1977	1977	1977	1977							

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	1069480	502509	
ANNUAL MEAN	2930	1377	2122
HIGHEST ANNUAL MEAN			4670
LOWEST ANNUAL MEAN			601
HIGHEST DAILY MEAN	15400	5000	20300
LOWEST DAILY MEAN	608	373	208
ANNUAL SEVEN-DAY MINIMUM	670	389	215
INSTANTANEOUS PEAK FLOW		5160	25500
INSTANTANEOUS PEAK STAGE		6.70	13.15
ANNUAL RUNOFF (AC-FT)	2121000	996700	1537000
10 PERCENT EXCEEDS	7320	2270	4030
50 PERCENT EXCEEDS	1650	1110	1500
90 PERCENT EXCEEDS	908	712	492

a-Also occurred Jul 30.

GUNNISON RIVER BASIN

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO

LOCATION.--Lat 38°11'02", long 107°44'43", in SW1/4NE1/4 sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from bridge, 0.2 mi downstream from Dry Creek, 0.5 mi upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi².

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,877.58 ft above sea level, (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 14 to Mar. 6. Records good except for estimated daily discharges, which are poor. Diversions for irrigation upstream from station. Water is imported upstream from station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	70	61	49	34	46	62	113	730	293	134	94
2	76	70	61	50	40	50	63	106	692	283	130	94
3	75	70	60	49	43	54	62	104	713	264	115	134
4	75	71	58	48	44	58	63	99	772	244	103	124
5	75	69	59	48	46	60	64	146	705	226	101	103
6	76	65	58	47	44	62	61	191	673	198	103	94
7	89	65	58	46	42	64	61	237	614	161	94	87
8	101	64	58	44	41	62	60	229	556	159	91	83
9	107	63	58	42	40	57	60	245	534	152	95	81
10	114	63	57	40	39	57	60	192	569	153	97	78
11	101	67	57	42	43	58	62	191	568	162	105	76
12	105	70	59	40	40	60	60	264	531	181	107	109
13	97	69	56	39	33	63	62	311	559	163	101	137
14	93	70	50	44	38	68	68	288	566	145	128	171
15	88	67	51	43	44	73	66	343	530	140	152	131
16	92	66	52	44	43	74	73	389	501	131	122	111
17	96	65	48	43	42	73	107	429	486	124	107	99
18	99	65	44	42	41	69	127	402	498	118	98	97
19	90	64	45	41	41	67	151	406	525	124	115	95
20	86	60	43	40	40	72	182	403	556	140	123	147
21	81	60	40	41	42	66	209	351	575	136	129	128
22	79	63	43	41	41	67	256	377	616	130	115	117
23	76	74	46	42	41	62	230	424	533	125	102	111
24	75	64	43	43	42	56	215	415	484	123	102	101
25	74	59	42	43	40	55	200	419	467	119	101	95
26	74	56	45	42	42	56	158	330	438	115	97	90
27	71	46	48	42	44	55	135	333	380	106	92	87
28	71	39	50	41	45	52	113	399	372	102	91	80
29	73	49	48	34	---	54	108	493	344	101	91	79
30	68	59	44	36	---	54	104	570	318	102	87	140
31	68	---	48	30	---	58	---	658	---	111	87	---
TOTAL	2621	1902	1590	1316	1155	1882	3302	9857	16405	4831	3315	3173
MEAN	84.5	63.4	51.3	42.5	41.2	60.7	110	318	547	156	107	106
MAX	114	74	61	50	46	74	256	658	772	293	152	171
MIN	68	39	40	30	33	46	60	99	318	101	87	76
AC-FT	5200	3770	3150	2610	2290	3730	6550	19550	32540	9580	6580	6290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1994, BY WATER YEAR (WY)

	MEAN	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
MEAN	86.5	67.1	51.2	43.5	44.3	58.2	112	323	590	332	155	105
MAX	153	94.4	67.3	52.9	59.9	81.0	188	765	914	848	301	250
(WY)	1985	1971	1971	1971	1963	1974	1985	1984	1984	1983	1982	1970
MIN	57.6	48.8	35.8	33.1	32.0	40.5	67.5	122	168	88.5	73.3	52.9
(WY)	1979	1990	1977	1977	1990	1964	1973	1977	1977	1977	1977	1959

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1959 - 1994
ANNUAL TOTAL	68804	51349	
ANNUAL MEAN	189	141	164
HIGHEST ANNUAL MEAN			270
LOWEST ANNUAL MEAN			72.6
HIGHEST DAILY MEAN	1010	772	1740
LOWEST DAILY MEAN	38	30	26
ANNUAL SEVEN-DAY MINIMUM	41	37	30
INSTANTANEOUS PEAK FLOW		914	a2100
INSTANTANEOUS PEAK STAGE		4.34	5.73
ANNUAL RUNOFF (AC-FT)	136500	101900	119000
10 PERCENT EXCEEDS	555	400	430
50 PERCENT EXCEEDS	76	76	78
90 PERCENT EXCEEDS	43	42	42

a-From rating curve extended above 1800 ft³/s.

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec.4 and 5, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 25 ft downstream from county road bridge, 1.5 mi upstream from mouth, and 1.5 mi northwest of Ridgway.

DRAINAGE AREA.--97.2 mi².

PERIOD OF RECORD.--March 1922 to October 1927, October 1955 to September 1971, October 1979 to current year.

REVISED RECORDS.--WSP 1924: 1960. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 6,980 ft above sea level, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 7 to Feb. 16, and Sept. 8-12. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 4,500 acres upstream from and 700 acres downstream from station. One small ditch imports water from Leopard Creek (Dolores River basin) to drainage upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	18	15	9.6	21	20	54	22	43	30	34
2	23	20	16	16	10	27	22	49	22	38	38	33
3	22	21	15	17	10	36	21	41	20	36	34	42
4	20	22	16	18	10	39	24	35	25	36	30	41
5	20	19	15	18	9.6	37	22	39	28	29	28	32
6	18	20	15	17	9.4	29	21	46	28	25	30	28
7	19	19	15	16	9.2	25	21	46	27	19	31	25
8	20	18	14	15	9.0	24	20	52	29	16	30	21
9	20	17	14	15	9.4	22	20	45	29	13	35	25
10	21	17	14	16	9.8	20	21	43	31	12	41	28
11	18	16	14	16	9.6	19	21	35	34	10	40	30
12	20	17	14	17	10	19	22	30	34	11	42	32
13	19	17	13	17	10	21	24	35	37	20	41	35
14	19	16	13	16	11	22	32	39	43	26	42	48
15	17	16	14	17	11	23	37	36	54	24	47	44
16	17	16	13	18	12	24	45	35	46	22	42	37
17	19	16	12	17	11	26	58	33	38	23	42	32
18	23	17	13	16	12	24	57	33	48	26	39	30
19	26	16	13	15	12	23	57	34	65	25	42	30
20	24	15	14	14	12	28	59	30	92	29	51	43
21	22	16	13	13	12	24	60	22	85	25	62	43
22	23	17	12	12	12	23	50	16	104	23	54	37
23	24	19	12	11	12	22	46	13	84	23	50	34
24	23	16	10	10	18	20	47	6.4	76	24	50	31
25	23	15	10	10	15	18	50	3.1	66	25	46	31
26	23	14	11	9.5	19	17	40	4.2	67	24	41	33
27	22	15	11	9.5	19	17	41	2.7	68	24	33	32
28	23	16	12	9.0	19	18	43	3.7	60	25	33	30
29	23	17	13	9.6	---	18	40	6.8	49	26	32	29
30	21	19	13	9.0	---	18	45	11	46	26	33	37
31	25	---	13	8.8	---	19	---	24	---	26	36	---
TOTAL	663	522	415	437.4	332.6	723	1086	902.9	1457	754	1225	1007
MEAN	21.4	17.4	13.4	14.1	11.9	23.3	36.2	29.1	48.6	24.3	39.5	33.6
MAX	26	23	18	18	19	39	60	54	104	43	62	48
MIN	17	14	10	8.8	9.0	17	20	2.7	20	10	28	21
AC-FT	1320	1040	823	868	660	1430	2150	1790	2890	1500	2430	2000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

	MEAN	23.9	24.3	20.2	17.8	18.8	25.0	59.1	51.9	61.6	74.3	58.9	38.2
MAX	65.1	39.1	33.9	32.0	32.0	59.4	183	249	171	230	141	117	
(WY)	1985	1926	1924	1924	1924	1985	1985	1984	1984	1983	1983	1927	
MIN	2.07	14.4	13.4	9.61	11.9	14.8	4.13	.67	2.45	16.7	6.25	2.58	
(WY)	1957	1957	1994	1980	1994	1980	1990	1981	1989	1959	1956	1956	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1922 - 1994

ANNUAL TOTAL	12536.8	9524.9	
ANNUAL MEAN	34.3	26.1	39.3
HIGHEST ANNUAL MEAN			86.4
LOWEST ANNUAL MEAN			13.8
HIGHEST DAILY MEAN	137	Jun 30	740
LOWEST DAILY MEAN	4.3	Jun 11	.21
ANNUAL SEVEN-DAY MINIMUM	6.4	Jun 7	.38
INSTANTANEOUS PEAK FLOW			a 1120
INSTANTANEOUS PEAK STAGE			4.40
ANNUAL RUNOFF (AC-FT)	24870	18890	28480
10 PERCENT EXCEEDS	69	46	90
50 PERCENT EXCEEDS	26	22	24
90 PERCENT EXCEEDS	12	11	11

a-Maximum discharge observed, datum then in use, from rating curve extended above 160 ft³/s.

b-Maximum gage height, 4.56 ft, Feb 15, backwater from ice.

-Maximum gage height, 6.13 ft, Jul 21, 1983.

GUNNISON RIVER BASIN

09147022 RIDGWAY RESERVOIR NEAR RIDGWAY, CO

LOCATION.--Lat 38°14'14", long 107°45'27", in NW¹/4SW¹/4 sec.16, T.46 N., R.8 W., Ouray County, Hydrologic Unit 14020006, in concrete gate house at base of Ridgway Reservoir on Uncompagre River, 0.5 mi upstream from Fisher Creek, and 5.3 mi north of Ridgway.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is above sea level, (levels by U.S. Bureau of Reclamation); gage readings published are to datum.

REMARKS.--Reservoir is formed by an earthfill dam. Dam completed Mar. 22, 1988. Capacity 84,590 acre-ft between 6,680.0 ft, streambed at dam axis and 6,871.3 ft, maximum water surface. Dead storage below elevation 6,720.0 ft, 1,430 acre-ft. Figures given are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 84,900 acre-ft, June 11, 1990, elevation, 6,872.93 ft; minimum contents, 49,990 acre-ft, May 11-12, 1993, elevation, 6835.16 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 82,470 acre-ft, June 27, elevation, 6,870.65 ft; minimum contents, 62,850 acre-ft, Aug. 31, and Sept. 1, elevation, 6,850.51 ft

MONTHEND ELEVATION AND CONTENTS, AT 2400 WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	6,860.61	72,310	-
Oct. 31.	6,862.30	73,960	+1,650
Nov. 30.	6,862.55	74,210	+250
Dec. 31.	6,862.23	73,890	-320
CAL YR 1993.	-	-	+9,400
Jan. 31.	6,861.52	73,200	-690
Feb. 28.	6,860.98	72,670	-530
Mar. 31.	6,861.21	72,900	+230
Apr. 30.	6,860.44	72,140	-760
May 31.	6,857.95	69,740	-2,400
June 30.	6,870.33	82,130	+12,390
July 31.	6,860.70	72,400	-9,730
Aug. 31.	6,850.51	62,850	-9,550
Sept. 30.	6,852.15	64,330	+1,480
WTR YR 1994	-	-	-7,980

09147025 UNCOMPAHGRE RIVER BELOW RIDGWAY RESERVOIR, CO

LOCATION.--Lat 38°14'17", long 107°45'31", in NE¹/4SE¹/4 sec.17, T.46 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 1,600 ft upstream from Fisher Creek, 800 ft downstream from Ridgway Reservoir gate house, and 5.4 mi north of Ridgway.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,650 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation by means of numerous canals downstream from station. Flow regulated by Ridgway Reservoir, capacity 84,591 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	74	79	64	75	77	103	269	443	439	549	128
2	68	74	79	64	75	77	103	269	411	442	515	128
3	68	75	79	65	75	78	103	264	427	443	515	128
4	69	75	79	70	75	79	103	265	435	428	506	128
5	71	75	80	74	75	79	103	319	439	367	447	128
6	71	75	82	74	75	79	103	345	443	332	427	126
7	72	75	85	73	75	79	103	345	446	332	440	125
8	73	73	90	73	76	92	103	334	454	316	440	125
9	74	73	90	73	77	100	103	343	428	293	384	125
10	75	73	85	73	77	100	101	345	410	299	292	125
11	75	73	85	71	76	100	100	352	400	302	249	125
12	77	72	85	71	75	102	103	348	402	295	255	124
13	77	71	85	71	75	103	103	383	393	280	264	122
14	78	71	83	72	76	104	103	406	377	272	255	120
15	79	69	83	73	76	104	103	399	391	259	220	118
16	79	68	83	73	77	103	103	395	379	260	200	118
17	79	68	83	74	77	103	103	414	371	260	223	118
18	78	73	83	74	78	103	134	432	379	271	260	118
19	77	77	83	73	77	103	211	471	393	298	277	118
20	77	77	83	73	77	103	249	498	388	296	280	118
21	77	77	83	73	78	100	264	520	392	296	280	118
22	78	77	83	73	79	101	272	531	405	292	254	118
23	79	77	83	73	78	103	277	513	434	302	227	120
24	79	77	83	73	77	103	277	514	452	308	201	120
25	78	75	86	73	77	104	274	501	452	313	200	122
26	74	73	86	73	77	103	269	491	446	313	203	122
27	75	73	72	73	77	103	269	460	467	325	203	122
28	75	73	64	73	77	103	269	454	480	421	203	122
29	75	73	64	73	---	103	265	463	463	552	164	122
30	75	76	64	74	---	103	267	473	446	602	128	123
31	75	---	64	75	---	103	---	485	---	588	128	---
TOTAL	2323	2212	2496	2234	2139	2997	5043	12601	12646	10796	9189	3674
MEAN	74.9	73.7	80.5	72.1	76.4	96.7	168	406	422	348	296	122
MAX	79	77	90	75	79	104	277	531	480	602	549	128
MIN	66	68	64	64	75	77	100	264	371	259	128	118
AC-FT	4610	4390	4950	4430	4240	5940	10000	24990	25080	21410	18230	7290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	MEAN	83.1	82.2	80.9	60.4	60.7	87.6	230	281	372	355	305	135
MAX	115	108	105	76.2	77.4	156	381	406	530	448	535	238	
(WY)	1993	1993	1993	1991	1991	1993	1991	1994	1990	1993	1992	1991	
MIN	55.4	43.1	41.9	41.3	40.5	39.3	36.8	159	199	186	188	68.1	
(WY)	1991	1990	1990	1992	1990	1990	1990	1989	1989	1989	1989	1993	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1989 - 1994		
ANNUAL TOTAL	72465			68350					
ANNUAL MEAN	199			187			178		
HIGHEST ANNUAL MEAN							222		
LOWEST ANNUAL MEAN							117		
HIGHEST DAILY MEAN	555			Jul 4			911		
LOWEST DAILY MEAN	58			Sep 19			34		
ANNUAL SEVEN-DAY MINIMUM	60			Sep 18			34		
INSTANTANEOUS PEAK FLOW				679			1160		
INSTANTANEOUS PEAK STAGE				3.06			3.56		
ANNUAL RUNOFF (AC-FT)	143700			135600			129200		
10 PERCENT EXCEEDS	431			439			415		
50 PERCENT EXCEEDS	88			103			103		
90 PERCENT EXCEEDS	68			73			43		

a-Also occurred Dec 29 to Jan 2.

b-Also occurred Apr 22-24, 1990.

09147500 UNCOMPAHGRE RIVER AT COLONA, CO

LOCATION.--Lat 38°19'53", long 107°46'44", in NW¹/4NW¹/4 sec.17, T.47 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 75 ft downstream from county highway crossing, 0.2 mi north of Colona, and 1.0 mi upstream from Beaton Creek.

DRAINAGE AREA.--448 mi².

PERIOD OF RECORD.--April 1903 to November 1905, April to June 1906 (gage heights and discharge measurements only), October 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Colona" 1904-6, 1922-34. Statistical summary computed for 1987 to current year. Water-quality data available 1990-93.

REVISED RECORDS.--WSP 1313: 1904. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,318.80 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Ridgway Reservoir, 7.7 mi upstream since 1986, total capacity, 84,590 acre-ft. Diversions upstream from station for irrigation of about 2,600 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	105	100	85	87	91	137	310	713	336	456	80
2	73	104	101	85	89	96	140	310	665	332	413	82
3	78	104	100	85	91	104	136	309	668	327	385	84
4	81	106	100	87	87	110	140	299	672	325	362	90
5	85	103	100	93	87	114	136	379	625	284	333	86
6	80	101	99	94	88	105	135	458	602	243	306	81
7	82	102	98	93	87	101	136	496	559	235	309	79
8	88	103	99	92	87	109	135	481	524	241	312	79
9	92	102	99	92	87	114	132	501	476	238	273	78
10	94	103	98	92	88	114	131	459	449	235	209	78
11	97	106	97	93	88	115	132	456	443	235	172	78
12	100	104	97	91	84	115	134	514	428	224	165	81
13	101	102	96	91	84	117	141	575	434	214	164	82
14	102	102	94	93	86	123	158	561	429	209	165	95
15	105	101	95	93	87	134	151	581	413	190	148	93
16	106	100	96	92	87	139	165	600	402	189	129	88
17	113	99	95	94	89	138	201	658	386	185	143	87
18	112	102	95	90	89	129	229	646	380	191	167	87
19	108	101	95	91	87	128	308	694	384	212	179	88
20	104	98	95	91	86	142	361	720	406	210	183	92
21	102	100	103	91	82	130	383	670	399	208	177	95
22	102	103	95	92	82	134	406	699	421	208	163	92
23	101	103	95	92	83	134	405	816	430	213	134	92
24	100	101	97	94	85	130	411	699	432	218	123	90
25	102	93	101	92	86	126	391	661	423	219	119	87
26	102	95	97	91	87	126	339	564	414	218	119	87
27	98	99	92	89	92	125	320	555	417	221	118	87
28	98	100	86	89	93	124	304	579	417	293	120	88
29	102	102	85	89	---	127	299	627	381	408	107	89
30	98	99	84	90	---	125	296	684	352	508	83	92
31	101	---	83	88	---	129	---	718	---	506	79	---
TOTAL	2980	3043	2967	2814	2435	3748	6892	17279	14144	8075	6315	2587
MEAN	96.1	101	95.7	90.8	87.0	121	230	557	471	260	204	86.2
MAX	113	106	103	94	93	142	411	816	713	508	456	95
MIN	73	93	83	85	82	91	131	299	352	185	79	78
AC-FT	5910	6040	5890	5580	4830	7430	13670	34270	28050	16020	12530	5130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1994, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	127	106	98.8	84.3	81.6	115	289	496	589
MAX	224	137	132	105	102	191	542	926	1052
(WY)	1988	1986	1993	1986	1986	1993	1992	1987	1986
MIN	51.6	50.2	53.0	51.4	51.0	58.2	62.6	160	229
(WY)	1990	1990	1990	1990	1990	1990	1990	1988	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1986 - 1994
ANNUAL TOTAL	104719	73279	
ANNUAL MEAN	287	201	^a 233
HIGHEST ANNUAL MEAN			327
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	^b 1150	816	1630
LOWEST DAILY MEAN	^c 73	^c 73	^d 25
ANNUAL SEVEN-DAY MINIMUM	78	79	29
INSTANTANEOUS PEAK FLOW		1010	^e 1740
INSTANTANEOUS PEAK STAGE		3.83	4.48
ANNUAL RUNOFF (AC-FT)	207700	145300	168600
10 PERCENT EXCEEDS	751	457	559
50 PERCENT EXCEEDS	108	106	123
90 PERCENT EXCEEDS	83	86	68

a-Average discharge for 76 years (water years 1904-05, 1913-86), 271 ft³/s, 196,300 acre-ft/yr, prior to completion of Ridgway Reservoir.

b-Also occurred May 28.

c-Also occurred Oct 2.

d-Minimum daily discharge for period of record, 12 ft³/s, Sep 19, 1956, and May 7, 1967.

e-Maximum discharge for period of record, 4080 ft³/s, Jun 13, 14, 1921, gage height unknown.

f-Maximum gage height for statistical period, 4.49 ft, May 16, 1987.

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

LOCATION.--Lat 38°44'31", long 108°04'49", in SW¹/4SW¹/4 sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020006, on right bank 525 ft downstream from 5th Street Bridge at west edge of Delta and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,115 mi².

PERIOD OF RECORD.--April 1903 to October 1931 (no winter records in most years), September 1938 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Delta" 1907-24. Statistical summary computed for 1939 to current year.

REVISED RECORDS.--WSP 1243: 1904. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,926.49 ft above sea level. Feb. 18, 1960, to Mar. 26, 1963, water-stage recorder at site 750 ft upstream at datum 3.43 ft, higher. Mar. 27, 1963, to May 12, 1965, water-stage recorder at site 1,050 ft upstream at datum 6.08 ft, higher. See WSP 1733 or 1924 for history of changes prior to Feb. 18, 1960.

REMARKS.--Estimated daily discharges: Oct. 12 and 13. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion through Gunnison tunnel published with station 09128000) and other adjacent basins, diversions for irrigation of about 90,000 acres upstream from station, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	423	339	204	140	203	101	186	540	135	395	280
2	434	440	342	194	140	210	257	219	471	132	295	307
3	448	449	298	197	164	210	283	191	444	152	293	320
4	448	464	305	193	181	219	272	188	427	155	261	344
5	462	471	313	206	189	248	201	193	394	138	233	321
6	465	492	296	202	196	256	156	291	364	117	214	317
7	512	499	304	180	204	238	121	365	296	108	220	389
8	585	477	314	190	199	202	101	368	252	118	230	379
9	657	413	288	218	211	202	107	410	239	115	279	387
10	667	357	322	191	190	199	111	499	205	122	258	322
11	675	323	272	177	190	195	137	420	220	143	174	307
12	750	374	316	169	190	199	162	422	214	135	163	344
13	850	333	310	204	158	195	138	495	209	131	156	400
14	923	340	271	209	164	195	102	530	206	133	150	434
15	915	337	297	203	178	204	97	520	183	138	160	409
16	929	328	293	212	180	205	99	561	181	137	130	388
17	583	323	256	191	177	163	128	561	177	125	122	391
18	502	300	233	195	188	119	147	555	151	124	129	381
19	488	295	269	202	188	122	116	514	162	114	142	351
20	477	271	261	189	177	121	189	500	212	107	200	348
21	469	261	206	194	180	145	154	443	288	99	231	358
22	465	270	227	190	194	169	146	418	381	99	225	356
23	463	292	250	188	187	382	156	411	380	102	184	342
24	483	277	197	207	176	236	147	370	341	104	201	338
25	483	261	214	200	193	235	219	373	289	116	209	326
26	460	265	234	211	214	192	185	398	261	107	197	322
27	422	313	251	207	243	182	172	331	214	111	204	321
28	411	334	237	199	240	167	169	342	191	116	240	309
29	437	352	238	192	---	148	185	385	182	197	238	309
30	413	341	206	196	---	124	202	419	157	327	229	345
31	410	---	190	158	---	98	---	456	---	368	236	---
TOTAL	17118	10675	8349	6068	5231	5983	4760	12334	8231	4325	6598	10445
MEAN	552	356	269	196	187	193	159	398	274	140	213	348
MAX	929	499	342	218	243	382	283	561	540	368	395	434
MIN	410	261	190	158	140	98	97	186	151	99	122	280
AC-FT	33950	21170	16560	12040	10380	11870	9440	24460	16330	8580	13090	20720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	394	246	160	133	129	154	307	509	570	319	283	369
MAX	831	373	269	220	208	305	1107	2542	1763	1170	808	944
(WY)	1942	1959	1994	1982	1948	1985	1985	1984	1984	1983	1943	1961
MIN	131	125	111	70.9	66.5	80.7	78.6	125	136	112	93.7	123
(WY)	1978	1950	1943	1943	1943	1951	1967	1954	1954	1955	1956	1956

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1939 - 1994

	1993	1994	1939-1994
ANNUAL TOTAL	149313	100117	
ANNUAL MEAN	409	274	298
HIGHEST ANNUAL MEAN			688
LOWEST ANNUAL MEAN			155
HIGHEST DAILY MEAN	2000	929	4520
LOWEST DAILY MEAN	143	97	20
ANNUAL SEVEN-DAY MINIMUM	174	105	42
INSTANTANEOUS PEAK FLOW		1040	5800
INSTANTANEOUS PEAK STAGE		5.04	8.85
ANNUAL RUNOFF (AC-FT)	296200	198600	216000
10 PERCENT EXCEEDS	759	462	595
50 PERCENT EXCEEDS	319	229	197
90 PERCENT EXCEEDS	186	132	106

a-Minimum daily discharge for period of record, no flow at times in 1908. Minimum daily determined since beginning of diversion through Gunnison tunnel, 7.0 ft³/s, Jul 10-15, 17, 21, 24-28, 1910.

b-From rating curve extended above 3400 ft³/s.

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE¹/4SW¹/4 of sec.14, T.2 S., R.1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mi downstream from Whitewater Creek, 0.5 mi south of Whitewater, and 8 mi southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-6.

REVISED RECORDS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,628.12 ft above sea level. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--No estimated daily discharges. Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft³/s diverted downstream from gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres upstream from station, storage reservoirs, and return flow from irrigated lands.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	2630	2190	2240	1080	1150	1410	2100	4270	1610	1100	1570
2	1880	2630	2180	2250	1050	1170	1580	2160	4150	1440	1040	1640
3	1890	2590	2170	2280	1220	1220	1690	2110	3880	1430	1020	1660
4	1890	2600	2140	2270	1140	1270	1730	2130	3750	1450	1050	1820
5	1870	2620	2170	2300	1070	1320	1730	2230	3590	1450	981	1810
6	1840	2620	2190	2280	1020	1360	1640	3040	3440	1400	950	1780
7	1940	2600	2160	2220	1000	1330	1550	4410	3260	1300	947	1790
8	2180	2740	2140	2210	1010	1280	1540	4860	2980	1310	964	1790
9	2450	2860	2160	2270	1050	1260	1480	5080	2770	1350	1050	1730
10	2450	2540	2170	2260	1030	1220	1390	5350	2630	1350	1350	1700
11	2430	2280	2250	2210	1010	1180	1350	5110	2480	1350	1410	1660
12	2460	2370	2380	2190	1030	1180	1380	5440	2420	1330	1360	1700
13	2640	2360	2420	2200	983	1160	1270	5790	2420	1320	1330	1840
14	2680	2320	2330	2050	971	1180	1280	5690	2340	1330	1340	1970
15	2630	2350	2320	1860	989	1200	1350	5630	2190	1370	1450	1950
16	2590	2240	2370	1660	972	1280	1280	5370	2110	1430	1380	1780
17	2390	1890	2370	1400	922	1350	1560	5380	1990	1370	1280	1730
18	2150	1540	2300	1300	1050	1350	1990	5660	1960	1390	1230	1720
19	2120	1700	2310	1330	1130	1330	2120	5660	1960	1390	1230	1710
20	2120	2100	2330	1310	1070	1330	2380	5930	2050	1370	1360	1640
21	2020	2160	2210	1300	1040	1500	2780	5960	2240	1340	1500	1690
22	2010	2210	2210	1280	1060	1470	3090	5990	2570	1130	1500	1650
23	2070	2260	2230	1260	1040	1560	3410	6040	2490	1060	1390	1640
24	2260	2250	2230	1290	1000	1690	3570	5920	2310	1080	1300	1640
25	2450	2170	2250	1290	1010	1650	3540	5560	2140	1140	1320	1620
26	2610	2070	2290	1320	1090	1570	3230	5100	1960	1090	1320	1590
27	2620	2090	2300	1330	1170	1490	2770	4510	1810	967	1340	1570
28	2600	2130	2280	1280	1210	1500	2480	4210	1620	871	1440	1550
29	2650	2170	2270	1250	---	1500	2300	4360	1570	838	1550	1490
30	2620	2200	2230	1230	---	1460	2210	4130	1680	880	1530	1600
31	2590	---	2240	1180	---	1420	---	4110	---	1020	1540	---
TOTAL	71000	69290	69790	54100	29417	41930	61080	145020	77030	39156	39552	51030
MEAN	2290	2310	2251	1745	1051	1353	2036	4678	2568	1263	1276	1701
MAX	2680	2860	2420	2300	1220	1690	3570	6040	4270	1610	1550	1970
MIN	1840	1540	2140	1180	922	1150	1270	2100	1570	838	947	1490
AC-FT	140800	137400	138400	107300	58350	83170	121200	287600	152800	77670	78450	101200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1897 - 1994, BY WATER YEAR (WY)

	MEAN	1404	1405	1309	1236	1243	1405	3090	7556	7165	2463	1339	1310
MAX	3479	3303	3225	3515	3844	3887	9184	18870	19630	11700	3639	4959	
(WY)	1987	1987	1987	1974	1974	1971	1942	1920	1957	1957	1957	1929	
MIN	268	497	500	500	500	500	580	698	577	165	153	267	
(WY)	1935	1899	1899	1899	1899	1903	1977	1977	1934	1934	1934	1934	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1897 - 1994

ANNUAL TOTAL	1442672	748395	
ANNUAL MEAN	3953	2050	2580
HIGHEST ANNUAL MEAN			5187
LOWEST ANNUAL MEAN			838
HIGHEST DAILY MEAN	20500	May 18	35200
LOWEST DAILY MEAN	900	Jan 7	106
ANNUAL SEVEN-DAY MINIMUM	923	Jan 7	116
INSTANTANEOUS PEAK FLOW			35700
INSTANTANEOUS PEAK STAGE		6.71	14.95
ANNUAL RUNOFF (AC-FT)	2862000	1484000	1869000
10 PERCENT EXCEEDS	8750	3150	6190
50 PERCENT EXCEEDS	2450	1790	1300
90 PERCENT EXCEEDS	1290	1080	694

a-Site and datum then in use, from rating curve extended above 22000 ft³/s.

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued
(Irrigation network station)
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1931 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.
WATER TEMPERATURES: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975, November, 1991 water-quality monitor with satellite telemetry.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Daily water temperature data are good. Daily specific conductance data are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens, several days during July and September 1974; minimum, 194 microsiemens, June 6, 1979.
WATER TEMPERATURE: Maximum, 30.0°C, Aug. 13, 1958; minimum, 0.0°C, on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,210 microsiemens, July 30, Aug. 13, 14; minimum, 395 microsiemens, May 22-24, may have been lower during period of missing record May 6-12.
WATER TEMPERATURES: Maximum, 26.3°C, July 27; minimum, 0.0°C on many days December to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH FIELD (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 23...	1025	2270	812	8.4	5.5	2.2	11.0	K3	59	330	84	29
FEB 24...	1105	977	1030	8.3	4.0	1.1	11.0	K2	K25	400	95	39
MAY 25...	1130	5510	423	8.0	13.5	38	8.5	K60	160	160	44	12
JUN 23...	1120	2460	865	8.3	20.5	--	7.3	--	--	360	98	27
AUG 17...	0925	1260	1120	8.3	20.0	59	7.1	89	98	470	130	36
SEP 07...	1230	1790	1110	8.3	16.5	--	9.6	--	--	470	130	36

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- ^a BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- ^b BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- ^c LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 23...	46	1	3.4	168	1	139	145	290	6.1	0.3	12
FEB 24...	68	1	4.1	184	8	163	--	380	11	0.4	11
MAY 25...	18	0.6	1.9	107	--	88	--	110	2.8	0.2	13
JUN 23...	44	1	3.2	--	--	--	138	300	6.3	0.4	15
AUG 17...	59	1	3.2	120	14	122	--	430	8.4	0.4	14
SEP 07...	59	1	4.2	--	--	--	167	410	7.9	0.5	16

a-Field dissolved bicarbonate, determined by incremetal titration method.

b-Field dissolved carbonate, determined by incremental titration method.

c-Field total dissolved alkalinity, determined by incremental titration method.

K-Based on non-ideal colony count.

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 23...	559	559	0.76	3430	<0.01	0.76	0.01	<0.20	<0.01	<0.01	<0.01
FEB 24...	734	711	1.0	1940	<0.01	0.84	0.04	0.30	0.01	<0.01	<0.01
MAY 25...	282	257	0.38	4200	0.01	0.38	0.01	0.40	0.10	<0.01	0.02
JUN 23...	--	577	0.78	3830	--	--	--	--	--	--	--
AUG 17...	827	762	1.12	2810	<0.01	1.50	0.03	0.60	0.16	0.02	<0.01
SEP 07...	--	764	1.04	3690	--	--	--	--	--	--	--

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 23...	20	41	<3	16	42	22	<10	<1	6	<1	840	<6
FEB 24...	30	43	<3	13	56	56	<10	<1	7	<1	1000	<6
MAY 25...	20	39	<3	15	16	5	<10	<1	2	<1	410	<6
AUG 17...	<10	46	<3	<3	58	15	10	1	6	<1	1300	<6

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 01...	0940	1890	990	13.5					
15...	1005	2630	938	13.0					
NOV 08...	1120	2640	767	6.5	MAY 13...	1140	6000	429	12.5
DEC 09...	1335	2180	801	3.5	JUN 27...	1035	1800	903	20.5
JAN 21...	1020	1360	794	0.5	JUL 22...	1030	1090	940	20.5
25...	1125	1300	917	2.5	28...	1215	862	1110	23.0
FEB 22...	1310	1070	994	4.5	AUG 02...	1110	1110	1200	21.5
MAR 16...	0955	1250	988	8.5	SEP 06...	1133	1800	1140	17.0
29...	1420	1500	762	7.5	21...	1025	1660	1160	16.5

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
15...	1005	2630	238	1690	89
NOV					
08...	1120	2640	29	207	90
23...	1025	2270	25	153	91
DEC					
09...	1335	2180	191	1120	98
JAN					
21...	1020	1360	8	29	--
25...	1125	1300	40	140	--
FEB					
22...	1310	1070	30	87	81
24...	1105	977	20	53	90
MAR					
16...	0955	1250	46	155	97
29...	1420	1500	114	462	96
APR					
29...	1020	2270	133	815	97
MAY					
13...	1140	6000	471	7630	66
25...	1130	5510	174	2590	65
JUN					
23...	1120	2460	274	1820	97
27...	1035	1800	62	301	95
JUL					
28...	1215	862	61	142	75
AUG					
02...	1110	1110	135	405	84
17...	0925	1260	159	541	98
SEP					
07...	1230	1790	144	696	96
21...	1025	1660	81	363	96

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	957	791	778	722	860	1070	747	687	---	858	1120	1060
2	967	790	783	725	872	1100	752	706	---	845	1100	1070
3	960	782	785	726	887	1080	762	730	---	865	1150	1070
4	959	780	788	728	868	1050	750	742	---	875	1170	1060
5	964	788	789	729	903	1000	747	756	---	886	1130	1050
6	972	776	786	733	938	987	748	---	---	904	1130	1040
7	975	770	787	735	954	969	752	---	---	---	1140	1040
8	995	767	788	736	969	961	767	---	---	---	1160	1020
9	1040	714	792	725	997	951	776	---	---	---	1150	1010
10	1060	695	794	714	1030	939	806	---	---	---	1150	1020
11	1010	698	793	713	1030	921	868	---	---	---	1150	1020
12	973	699	759	711	1010	912	888	---	---	---	1100	1020
13	960	703	756	708	1020	924	888	417	---	---	1180	1040
14	949	706	756	709	1000	918	894	411	---	947	1200	1100
15	917	710	741	710	979	910	898	417	---	939	1140	1070
16	909	715	726	712	990	909	904	418	---	923	1130	1070
17	931	717	729	713	1000	879	910	420	---	906	1150	1090
18	1060	719	730	715	1050	852	912	420	---	894	1160	1090
19	1080	741	726	722	1010	842	911	417	---	874	1150	1080
20	1070	908	723	730	1030	843	904	415	---	864	1140	1090
21	1030	823	726	778	1030	854	855	408	---	883	1140	1110
22	1040	808	721	830	1010	826	713	404	---	876	1130	1130
23	1030	811	711	831	1020	825	545	402	889	893	1130	1140
24	1010	816	720	840	1030	835	494	402	861	907	1130	1120
25	944	819	724	847	1020	774	518	404	851	930	1130	1110
26	917	804	720	853	999	792	552	404	853	952	1120	1100
27	836	778	718	869	997	789	584	406	872	1000	1120	1100
28	811	771	721	878	1040	784	613	409	881	1060	1110	1100
29	818	774	724	876	---	753	640	410	878	1120	1100	1100
30	804	775	728	870	---	741	661	413	872	1180	1080	1120
31	792	---	726	865	---	746	---	416	---	1150	1070	---
Month	959	765	750	766	984	895	759	---	---	---	1130	1070

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.3	13.3	7.0	4.8	5.9	4.0	1.6	.5	.3	.0	7.8	6.0
2	15.4	12.5	7.0	5.3	5.6	4.2	2.1	.5	.2	.0	8.3	5.9
3	15.4	12.5	6.5	5.5	4.3	2.8	3.0	1.5	.0	.0	8.5	6.2
4	15.4	12.5	6.8	5.2	3.7	2.4	2.8	1.6	.0	.0	9.0	6.7
5	14.9	12.5	6.7	5.3	3.6	1.7	4.2	2.2	.4	.0	8.8	7.2
6	14.7	13.0	5.6	4.3	3.4	1.8	3.6	2.4	.6	.0	8.9	7.5
7	14.9	13.8	5.3	3.7	4.1	2.2	2.4	1.0	2.9	.2	9.6	7.2
8	13.9	12.7	5.6	3.6	4.2	3.1	2.0	.4	5.0	2.7	8.7	6.9
9	13.2	11.7	5.7	4.0	4.4	3.0	2.1	.6	5.7	3.6	8.4	6.1
10	13.0	11.0	6.7	4.2	4.0	2.5	2.1	.5	5.6	3.9	7.9	5.8
11	12.7	11.5	7.1	5.6	3.9	2.6	2.1	.6	4.9	3.2	8.4	6.7
12	12.8	11.4	7.8	6.9	4.5	3.2	1.7	.0	4.0	1.8	9.5	6.9
13	13.4	11.8	8.0	7.4	4.4	3.2	2.1	.1	3.1	.6	10.0	7.5
14	13.3	11.8	7.4	6.9	3.4	2.1	2.4	.4	3.8	1.3	10.5	8.1
15	13.0	11.9	8.2	6.6	2.4	1.4	1.9	.2	3.8	1.5	10.7	8.5
16	12.5	11.4	7.6	6.1	2.6	1.5	2.2	.2	3.6	2.1	10.1	8.5
17	12.3	11.4	6.7	5.1	3.2	2.0	1.7	.6	4.4	3.0	10.0	8.6
18	11.7	10.7	5.6	4.5	2.9	1.7	1.6	.2	5.1	4.1	9.0	7.6
19	11.7	9.5	5.2	3.8	2.3	1.1	1.6	.0	4.7	3.7	9.6	7.5
20	11.4	9.4	5.3	3.5	1.7	.5	1.7	.2	3.9	3.1	10.3	8.3
21	10.8	8.7	5.1	3.2	1.7	.5	1.8	.3	4.5	3.5	10.6	8.0
22	10.4	8.3	6.6	4.1	.8	.0	1.5	.3	5.7	3.4	10.0	7.9
23	10.8	8.5	7.3	5.5	1.6	.2	1.8	.1	5.5	3.2	9.9	7.8
24	11.0	8.9	6.5	4.0	1.0	.0	3.0	1.3	5.0	2.7	9.5	7.7
25	10.9	8.9	4.0	2.0	.6	.0	3.4	2.3	6.5	3.8	8.7	7.7
26	10.0	8.7	2.0	.4	1.1	.0	3.4	2.7	7.6	5.0	10.2	7.1
27	9.5	7.9	2.1	.2	1.8	.5	4.2	2.9	7.8	6.8	8.1	5.8
28	8.3	7.3	2.6	.6	2.9	1.5	4.1	2.7	7.4	6.5	7.6	4.3
29	7.6	6.3	3.7	1.5	4.2	2.8	3.2	2.0	---	---	8.1	5.3
30	6.4	4.9	4.6	2.8	3.2	1.7	2.2	.4	---	---	9.1	5.4
31	6.2	4.5	---	---	1.7	.7	.4	.0	---	---	9.6	6.4
MONTH	15.4	4.5	8.2	.2	5.9	.0	4.2	.0	7.8	.0	10.7	4.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.9	7.4	12.1	10.2	15.8	14.2	23.3	20.1	23.1	20.7	19.5	17.4
2	10.4	7.7	14.2	10.7	17.3	15.0	22.4	20.1	23.7	20.6	19.7	17.1
3	11.5	8.4	13.2	11.9	17.7	15.6	22.0	19.0	23.9	21.0	19.3	17.5
4	11.6	9.4	14.2	10.6	17.7	15.7	21.7	18.7	24.0	21.3	20.1	17.2
5	10.7	8.0	16.0	12.6	17.4	15.4	21.9	18.4	23.2	21.3	20.3	17.1
6	9.7	7.8	15.6	13.6	17.0	15.3	21.2	18.2	24.4	21.2	19.0	16.6
7	9.3	7.6	14.2	11.9	17.3	15.2	20.6	16.6	24.3	21.3	19.6	16.2
8	8.9	7.5	12.3	10.8	17.6	15.4	22.1	17.2	22.6	20.9	19.7	16.6
9	9.2	7.3	12.1	10.5	18.0	15.3	22.4	18.6	20.9	20.0	18.6	16.4
10	10.2	8.3	11.5	9.5	18.5	15.5	22.0	19.0	22.8	19.0	18.9	16.5
11	10.4	8.9	13.7	11.3	19.3	16.2	21.9	18.8	23.7	20.8	19.9	17.0
12	11.8	8.4	14.0	12.8	19.2	16.4	22.0	18.6	23.2	21.2	19.1	17.3
13	12.6	9.2	12.9	11.5	18.9	16.6	20.7	17.8	23.0	21.2	18.4	16.9
14	13.0	11.2	12.4	10.6	19.6	16.4	20.1	17.1	22.7	20.9	18.2	15.9
15	13.2	10.4	13.5	12.3	19.7	16.7	19.8	17.6	22.9	20.0	16.9	14.6
16	14.5	11.1	13.3	11.7	20.1	16.5	21.1	17.2	22.7	19.5	17.2	14.2
17	14.9	12.0	13.3	12.0	20.9	17.0	21.9	17.8	23.1	20.0	17.1	14.4
18	14.2	12.2	13.6	11.8	20.4	17.6	21.4	19.3	23.0	21.4	17.5	14.6
19	13.3	11.3	13.6	11.8	20.1	18.1	21.6	18.8	22.5	20.6	17.3	15.4
20	14.0	11.2	13.1	11.9	21.0	17.7	22.2	18.7	22.2	19.6	17.9	16.1
21	14.6	12.0	12.8	11.5	21.5	19.3	23.1	18.8	22.3	19.9	19.0	16.2
22	13.9	12.6	13.3	11.8	20.5	19.4	22.2	20.0	22.4	19.6	17.4	15.1
23	13.1	11.4	13.5	12.6	21.8	18.6	23.2	20.3	22.1	19.2	16.6	14.0
24	12.3	11.0	13.4	12.3	22.5	19.0	24.3	20.9	21.4	19.3	16.7	13.8
25	11.5	9.9	13.5	11.9	23.1	19.1	24.2	20.9	20.7	18.9	16.8	13.7
26	9.9	9.1	13.6	11.6	23.2	19.3	24.9	21.2	22.0	18.9	16.7	13.9
27	9.4	8.4	14.8	13.0	23.2	19.6	26.3	20.9	21.6	19.5	16.3	13.7
28	9.5	8.1	15.1	13.9	23.2	19.4	25.4	19.8	21.0	19.1	16.3	13.6
29	10.5	8.2	15.5	13.5	23.3	19.8	25.4	22.0	21.1	18.6	15.7	13.8
30	11.2	9.0	17.3	14.7	23.5	20.0	25.5	22.0	20.9	18.4	14.5	13.5
31	---	---	16.6	15.6	---	---	24.6	21.5	20.1	18.2	---	---
MONTH	14.9	7.3	17.3	9.5	23.5	14.2	26.3	16.6	24.4	18.2	20.3	13.5
YEAR	26.3	.0										

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41", long 108°48'11", in SE¹/4SW¹/4 sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft upstream from unnamed tributary, 0.4 mi downstream from Peck and Beede Wash, and 3.5 mi east of Mack.

DRAINAGE AREA.--15.7 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 4,505 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is mostly return flow and waste water from irrigated lands under Government Highline and Grand Valley Canals. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	96	8.9	5.4	4.0	3.2	66	47	58	55	81	78
2	76	93	8.7	5.1	4.1	3.1	77	43	60	50	75	71
3	74	91	8.6	5.1	4.0	3.2	78	40	58	51	69	81
4	76	85	8.5	5.1	4.0	3.3	74	38	53	57	69	82
5	79	82	7.9	5.3	4.0	3.7	67	39	54	56	58	81
6	83	82	7.9	4.8	4.0	4.5	64	41	59	57	58	78
7	80	79	7.7	4.6	4.0	4.4	67	43	58	54	55	72
8	86	81	7.7	4.6	4.2	3.8	61	49	53	72	59	67
9	90	85	7.8	4.6	4.0	3.9	63	53	54	82	67	63
10	87	87	7.5	4.6	4.0	4.0	51	58	55	80	53	60
11	86	94	7.5	4.6	3.8	4.0	48	50	57	81	57	64
12	92	33	7.6	4.2	3.3	4.0	46	45	56	82	60	67
13	88	15	7.1	4.2	3.3	3.8	41	41	58	68	64	65
14	90	14	7.1	4.3	3.5	4.0	45	46	54	58	72	60
15	88	13	7.4	4.2	3.5	4.0	45	48	51	63	79	53
16	87	12	7.1	4.2	3.4	3.7	50	43	54	61	86	56
17	92	12	6.9	4.0	3.5	3.7	55	36	59	62	74	53
18	86	12	6.9	4.0	3.8	3.6	52	32	61	64	68	50
19	84	11	6.9	4.1	3.5	3.7	55	35	65	68	79	53
20	78	11	6.6	4.2	3.4	3.6	49	38	76	67	81	56
21	87	11	6.4	4.2	3.5	3.5	52	54	72	61	69	55
22	90	10	6.4	4.2	3.2	3.7	44	52	77	68	69	60
23	88	10	6.3	4.2	3.1	3.6	44	57	70	75	70	62
24	96	9.9	6.4	4.2	3.2	3.1	48	56	78	75	76	53
25	94	9.7	6.4	4.2	3.1	3.3	52	55	66	73	75	56
26	91	9.3	6.2	4.2	3.2	3.3	55	53	58	76	71	61
27	89	9.3	6.1	4.2	3.3	3.1	53	55	58	71	85	61
28	89	9.3	6.1	4.0	3.5	3.1	48	50	67	63	82	60
29	95	9.3	6.0	4.2	---	3.1	49	54	71	59	78	58
30	93	9.3	5.6	4.2	---	30	48	57	64	63	78	59
31	95	---	5.6	3.9	---	74	---	54	---	78	89	---
TOTAL	2690	1185.1	219.8	136.9	101.4	209.0	1647	1462	1834	2050	2206	1895
MEAN	86.8	39.5	7.09	4.42	3.62	6.74	54.9	47.2	61.1	66.1	71.2	63.2
MAX	96	96	8.9	5.4	4.2	74	78	58	78	82	89	82
MIN	74	9.3	5.6	3.9	3.1	3.1	41	32	51	50	53	50
AC-FT	5340	2350	436	272	201	415	3270	2900	3640	4070	4380	3760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	MEAN	78.7	20.4	13.6	6.05	4.63	7.99	46.1	68.2	68.1	73.4	78.1	79.4
MAX	99.4	39.5	29.0	15.3	6.67	26.8	65.3	112	95.9	98.1	96.3	115	
(WY)	1977	1994	1989	1986	1976	1981	1986	1980	1978	1981	1978	1978	1978
MIN	61.3	11.5	6.63	3.41	3.29	2.85	18.5	43.1	47.6	58.4	60.0	61.1	
(WY)	1992	1976	1977	1982	1983	1983	1979	1992	1992	1991	1991	1989	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1976 - 1994

ANNUAL TOTAL	16491.7	15636.2	
ANNUAL MEAN	45.2	42.8	45.6
HIGHEST ANNUAL MEAN			54.0
LOWEST ANNUAL MEAN			35.2
HIGHEST DAILY MEAN	99	Sep 1	150
LOWEST DAILY MEAN	4.1	Apr 12	2.0
ANNUAL SEVEN-DAY MINIMUM	4.2	Apr 7	2.5
INSTANTANEOUS PEAK FLOW			390
INSTANTANEOUS PEAK STAGE			6.21
ANNUAL RUNOFF (AC-FT)	32710	31010	33030
10 PERCENT EXCEEDS	87	82	88
50 PERCENT EXCEEDS	54	53	56
90 PERCENT EXCEEDS	5.4	3.8	4.1

a-Also occurred Nov 1.

b-Also occurred Feb 25, Mar 2, 24, 27-29.

c-Gage height unknown.

d-Maximum recorded gage height.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE¹/4NW¹/4 sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from McDonald Creek, 1.5 mi upstream from Colorado-Utah State line, and 12 mi southwest of Mack.

DRAINAGE AREA.--17,843 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,325 ft above sea level, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 10, and Mar. 7-22. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3860	5120	4650	4140	2990	3760	3380	5050	12300	4060	2380	3110
2	3790	5070	4570	4150	2780	3730	3590	4870	13100	3800	2530	3180
3	3660	4990	4570	4240	2870	3550	3740	4730	12700	3690	2430	3340
4	3520	5120	4510	4330	3130	3720	3820	4640	12100	3740	2460	3540
5	3490	5010	4490	4330	2940	3940	3830	4450	11700	3770	2360	3730
6	3520	4950	4440	4330	3170	3870	3760	4880	11200	3560	2210	3650
7	3720	4800	4440	4320	3200	3930	3630	6820	10400	3300	2050	3520
8	4250	4800	4390	4230	3210	3850	3350	8730	9500	3080	2120	3330
9	4980	5150	4380	4150	3360	3700	3500	9340	8720	3110	2310	3230
10	4710	5250	4360	4140	3340	3600	3600	9950	8130	3050	2820	3210
11	4690	5070	4360	4170	3260	3450	3430	9660	7600	3060	3070	3140
12	4730	5210	4440	4170	3240	3200	3130	9640	7450	3020	3000	3170
13	4840	5380	4610	3970	3230	3350	3050	10800	7370	2910	2920	3370
14	4990	5190	4590	4010	3080	3350	2940	11800	7140	2880	2880	3600
15	4950	5050	4260	4010	3020	3300	2830	12000	6730	2840	3010	3920
16	5060	4950	4230	3900	3100	3350	2860	12300	6450	2840	3050	3780
17	5150	4650	4350	3730	3060	3500	3000	12100	6080	2830	2850	3560
18	5000	4230	4440	3380	3220	3650	3410	13000	5790	2660	2660	3450
19	4930	4030	4230	3350	3730	3700	3870	12800	5690	2690	2590	3340
20	4730	4280	4090	3420	3560	3650	4310	12400	5700	2760	2690	3320
21	4630	4450	4160	3380	3380	3800	4980	12800	6130	2700	3090	3240
22	4590	4480	4000	3340	3310	3880	5600	12300	6470	2650	3140	3230
23	4530	4640	3890	3320	3300	3900	6460	12300	7040	2440	3130	3290
24	4640	4590	4070	3360	3220	4000	6960	12500	7550	2380	2940	3280
25	4900	4810	3970	3400	3130	3940	7630	11800	6750	2410	2850	3200
26	5040	4570	3980	3470	3290	3830	7740	11400	6200	2600	2760	3080
27	4990	4230	4060	3510	3610	3580	6940	10900	5660	2450	2750	3090
28	4930	4200	4290	3550	3820	3350	6200	10300	5100	2220	2880	3070
29	4900	4290	4400	3420	---	3170	5730	10700	4690	2030	3230	2970
30	4900	4470	4410	3290	---	3360	5310	11100	4270	2020	3260	3310
31	4990	---	4300	3140	---	3450	---	11200	---	2140	3170	---
TOTAL	141610	143030	133930	117650	90550	112410	132580	307260	235710	89690	85590	100250
MEAN	4568	4768	4320	3795	3234	3626	4419	9912	7857	2893	2761	3342
MAX	5150	5380	4650	4330	3820	4000	7740	13000	13100	4060	3260	3920
MIN	3490	4030	3890	3140	2780	3170	2830	4450	4270	2020	2050	2970
AC-FT	280900	283700	265700	233400	179600	223000	263000	609500	467500	177900	169800	198800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	3866	3956	3562	3346	3433	3818	5847	14130	17160	7511	3754	3539
MAX	7672	6925	5993	6129	5996	7486	15600	37960	43830	29590	10190	6767	
(WY)	1987	1987	1986	1985	1985	1986	1985	1984	1957	1957	1983	1984	
MIN	1916	2363	2048	1871	1815	1984	1631	2283	2688	1662	1350	1361	
(WY)	1957	1978	1964	1964	1964	1964	1977	1977	1977	1977	1977	1956	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1951 - 1994
ANNUAL TOTAL	3231710	1690260	
ANNUAL MEAN	8854	4631	6163
HIGHEST ANNUAL MEAN			13470
LOWEST ANNUAL MEAN			2559
HIGHEST DAILY MEAN	44000	May 28	68300
LOWEST DAILY MEAN	2200	Jan 6	960
ANNUAL SEVEN-DAY MINIMUM	2220	Jan 5	1110
INSTANTANEOUS PEAK FLOW			69800
INSTANTANEOUS PEAK STAGE			a 16.12
ANNUAL RUNOFF (AC-FT)	6410000	3353000	4465000
10 PERCENT EXCEEDS	23200	7610	13700
50 PERCENT EXCEEDS	4950	3870	3890
90 PERCENT EXCEEDS	2900	2860	2230

a-From high-water mark.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National stream-quality accounting network station)

PERIOD OF RECORD.--October 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--October 1979, water-quality data collection was moved 5.5 miles upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Data from the old site are stored with this station. Maximum and minimum specific conductance data available in district office. Daily records of water temperature and specific conductance are good. Interruptions in data are due to sensor fouling or malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens, Aug. 13, 1981; minimum, 277 microsiemens, June 11, 1985.

WATER TEMPERATURE: Maximum, 27.0°C, Aug. 7-9, 1981; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,520 microsiemens, Aug. 24 ; minimum, 434 microsiemens, May 21, 22.

WATER TEMPERATURE: Maximum, 26.5°C, July 26; minimum, 0.0°C, on many days November to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CaCO3)
OCT										
20...	1005	4960	1140	8.5	10.0	--	9.1	--	--	420
NOV										
24...	1115	4600	1040	8.5	4.0	9.6	11.4	30	67	370
DEC										
07...	1110	4440	985	8.6	1.5	--	12.6	--	--	330
JAN										
19...	1155	3300	1020	8.5	0.5	2.0	13.1	<1	580	300
MAR										
02...	1155	3770	1090	8.2	7.0	--	9.7	--	--	330
30...	1335	3400	987	8.1	8.0	84	10.0	99	130	310
MAY										
04...	1050	4530	910	8.3	13.5	--	9.0	--	--	300
24...	1300	12400	486	8.0	15.0	55	8.2	110	360	160
JUN										
22...	1200	6880	760	8.3	21.5	--	7.5	--	--	270
JUL										
22...	1045	2790	1210	8.4	23.0	34	7.7	K40	57	450
AUG										
16...	1330	3130	1330	8.3	24.0	63	7.1	110	290	470
SEP										
08...	0940	3360	1290	8.4	19.0	--	7.2	--	--	490

DATE	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO3	ALKA- LITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
20...	110	35	92	2	3.8	--	--	--	177	330
NOV										
24...	94	32	87	2	3.3	182	5	158	--	300
DEC										
07...	86	28	85	2	3.2	--	--	--	156	250
JAN										
19...	77	26	94	2	3.4	172	8	154	--	240
MAR										
02...	83	30	110	3	4.4	--	--	--	158	270
30...	81	26	87	2	3.6	176	--	144	--	230
MAY										
04...	81	24	70	2	2.3	--	--	--	140	230
24...	45	12	28	1	1.9	109	--	90	--	100
JUN										
22...	74	20	54	1	2.4	--	--	--	120	190
JUL										
22...	120	37	96	2	3.9	174	4	149	--	370
AUG										
16...	130	36	98	2	3.6	203	--	166	--	400
SEP										
08...	140	35	95	2	4.4	--	--	--	166	380

a-Field dissolved bicarbonate, determined by incremental titration method.

b-Field dissolved carbonate, determined by incremental titration method.

c-Field total dissolved alkalinity, determined by incremental titration method.

K-Based on non-ideal colony count.

COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 20...	71	0.4	13	--	761	1.04	10200	--	--
NOV 24...	74	0.3	11	696	700	0.95	8640	--	0.01
DEC 07...	77	0.3	11	--	634	0.86	7600	--	--
JAN 19...	93	0.3	9.7	592	639	0.81	5270	--	<0.01
MAR 02...	95	0.4	11	--	699	0.95	7110	--	--
MAR 30...	85	0.3	9.4	638	612	0.87	5860	--	0.04
MAY 04...	61	0.3	11	--	564	0.77	6890	--	--
MAY 24...	24	0.2	10	298	277	0.41	10000	--	0.01
JUN 22...	48	0.3	8.1	--	469	0.64	8710	--	--
JUL 22...	82	0.4	6.6	834	810	1.13	6280	--	0.02
AUG 16...	85	0.3	10	931	869	1.27	7870	--	0.01
SEP 08...	81	0.4	12	890	852	1.21	8070	117	0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT 20...	--	--	--	--	--	--	--	--	--
NOV 24...	0.64	0.02	<0.2	--	0.02	<0.01	<0.01	--	--
DEC 07...	--	--	--	--	--	--	--	--	--
JAN 19...	0.63	0.04	0.2	--	0.04	<0.01	<0.01	--	--
MAR 02...	--	--	--	--	--	--	--	--	--
MAR 30...	0.46	0.09	0.50	--	0.16	0.01	0.02	--	--
MAY 04...	--	--	--	--	--	--	--	--	--
MAY 24...	0.35	0.02	0.40	--	0.09	<0.01	0.02	--	--
JUN 22...	--	--	--	--	--	--	--	--	--
JUL 22...	1.00	0.03	0.60	--	0.09	<0.01	<0.01	--	--
AUG 16...	1.10	<0.01	0.50	--	0.14	0.02	<0.01	--	--
SEP 08...	1.10	0.02	--	<0.2	--	<0.01	<0.01	7.2	3.2

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV 24...	<10	--	--	--	50	--	--	--	--	--
MAR 30...	<10	--	--	--	43	--	--	--	--	--
MAY 24...	20	--	--	--	41	--	--	--	--	--
AUG 16...	10	--	--	--	54	--	--	--	--	--
SEP 08...	--	<1	2	2	52	<0.5	<1	<1	1	<1

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)
NOV 24...	<3	--	--	8	--	--	38	21	<10	--
MAR 30...	<3	--	--	6	--	--	34	19	<10	--
MAY 24...	<3	--	--	21	--	--	12	4	<10	--
AUG 16...	<3	--	--	<3	--	--	48	3	10	--
SEP 08...	--	4	1	3	3	<1	--	2	--	3

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 24...	<1	--	5	--	<1	970	<6	--	--
MAR 30...	<1	--	4	--	<1	790	<6	--	--
MAY 24...	<1	--	2	--	<1	400	<6	--	--
AUG 16...	1	--	7	--	<1	1300	<6	--	--
SEP 08...	<1	7	6	<1	<1	--	--	10	<3

MISCELLANEOUS FIELD MEASUREMENTS AND CROSS SECTION PROFILES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	STREAM WIDTH (FT)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV 24...	1116	4600	140	400	1090	4.0	11.6
24...	1118	4600	180	400	1090	4.0	11.2
24...	1120	4600	220	400	1090	4.0	11.3
24...	1122	4600	260	400	1090	4.0	11.3
24...	1124	4600	300	400	1090	4.0	11.4
24...	1126	4600	340	400	1090	4.0	11.4
24...	1128	4600	380	400	1090	4.0	11.4
24...	1130	4600	420	400	1090	4.0	11.4
24...	1132	4600	460	400	1090	4.0	11.4
24...	1134	4600	500	400	1090	4.0	11.4
24...	1136	4600	530	400	1090	4.0	11.2
JAN 19...	1157	3300	140	402	1050	0.5	13.1
19...	1159	3300	300	402	1050	0.5	12.9
19...	1201	3300	360	402	1050	0.0	13.1
19...	1203	3300	460	402	1050	0.0	13.1
19...	1205	3300	520	402	1050	0.5	12.9
MAR 22...	1400	3930	--	--	1030	10.5	--

COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	1115	4600	50	621	87
JAN 19...	1155	3300	23	205	87
MAR 30...	1335	3400	207	1900	98
MAY 24...	1300	12400	297	9980	59
JUL 22...	1045	2790	87	655	97
AUG 16...	1330	3130	145	1230	98
SEP 08...	0940	3360	144	1310	--

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	1050	1060	914	---	1070	1020	778	488	1000	1420	1360
2	1180	1050	1020	935	---	1090	1010	823	468	1030	1400	1350
3	1190	1050	1020	952	---	1120	1010	855	454	1070	1390	1350
4	1190	1050	1010	947	1180	1130	1010	881	460	1070	1380	1330
5	1200	1050	1000	929	1180	1110	1010	887	466	1060	1390	1320
6	1220	1080	998	916	1160	1090	985	883	472	1070	1400	1320
7	1240	1100	1010	920	1180	---	972	776	490	1060	1400	1290
8	1250	1110	1000	932	1130	---	1000	629	511	1080	1420	1280
9	1240	1060	1020	926	1100	---	996	557	536	1100	1430	1300
10	1210	1020	1010	920	1090	---	1020	523	563	1110	1410	1310
11	1220	1040	1010	941	1110	---	1040	533	591	1120	1370	1320
12	1190	1040	977	933	1140	---	1080	528	616	1140	1360	1320
13	1160	1030	969	921	1090	---	1100	506	632	1170	1350	1320
14	1140	1050	968	930	1120	---	1110	482	645	1190	1330	1310
15	1130	1060	974	956	1120	---	1120	485	668	1190	1330	1300
16	1110	1060	964	982	1130	---	1120	481	683	1200	1330	1290
17	1080	1060	988	989	1150	---	1090	488	---	1200	1390	1290
18	1100	1100	1010	1020	1140	---	1060	471	---	1220	1360	1280
19	1130	1150	981	1050	1140	---	976	450	---	1230	1340	1300
20	1150	1190	---	1080	1080	---	895	444	---	1240	1360	1310
21	1170	1140	---	1080	1090	---	830	442	753	1230	1340	1310
22	1150	1070	---	1070	1100	1000	755	440	755	1230	1320	1310
23	1160	1060	---	1080	1100	984	692	448	797	1260	1370	1330
24	1160	1070	---	1080	1110	962	630	455	739	1270	1480	1320
25	1150	1050	---	1080	1120	960	559	463	759	1310	1390	1290
26	1110	1030	---	1080	1130	948	519	481	803	1320	1380	1290
27	1080	1030	---	1080	1130	947	553	504	841	1320	1370	1290
28	1060	1030	981	1070	1080	956	607	521	885	1330	1410	1290
29	1060	1070	980	1080	---	996	666	530	932	1350	---	1300
30	1060	1080	944	1070	---	993	722	525	971	1390	1370	1340
31	1050	---	929	1090	---	1010	---	514	---	1420	1360	---
MEAN	1150	1070	---	998	---	---	905	574	---	1190	---	1310

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.6	13.8	6.7	5.3	3.5	2.3	1.2	.4	.0	.0	8.5	6.9
2	16.2	14.2	6.8	5.5	3.4	2.7	.7	.0	.0	.0	8.7	6.7
3	16.1	14.3	6.3	5.5	3.3	2.5	1.3	.0	.0	.0	9.3	7.3
4	16.0	14.2	6.4	5.4	2.6	1.9	1.7	.9	.0	.0	9.6	7.7
5	16.2	14.2	6.2	5.1	2.2	1.3	2.4	1.5	.4	.0	9.7	8.2
6	15.6	14.5	5.7	4.5	2.2	1.3	2.1	1.5	1.4	.4	9.4	8.5
7	15.0	14.3	5.0	4.0	2.5	1.5	1.5	.6	1.4	.7	---	---
8	14.5	13.7	4.9	3.6	2.9	2.1	1.0	.0	2.3	1.0	---	---
9	13.7	12.5	4.8	3.5	2.6	2.0	1.0	.1	3.2	1.7	---	---
10	13.6	12.4	4.6	3.7	2.6	1.6	1.1	.0	3.9	2.3	---	---
11	13.1	12.1	4.8	4.0	2.4	1.8	1.0	.1	3.6	2.9	---	---
12	13.9	12.6	5.2	4.6	3.0	2.2	.9	.0	3.8	2.1	---	---
13	13.7	12.4	5.6	4.9	2.9	2.2	1.0	.0	3.2	1.9	---	---
14	14.0	12.6	5.6	5.0	2.4	1.5	1.2	.0	3.2	1.3	---	---
15	13.5	12.6	5.8	4.6	1.6	1.2	1.1	.1	3.6	1.5	---	---
16	13.7	11.9	5.5	4.6	1.8	1.1	1.3	.2	3.4	2.2	---	---
17	13.1	12.0	5.0	4.3	1.7	1.0	1.2	.1	3.4	2.5	---	---
18	12.3	11.4	4.5	3.9	1.3	.5	1.3	.0	4.7	3.1	---	---
19	12.1	10.6	4.0	3.0	1.3	.5	1.3	.0	4.5	3.6	---	---
20	11.9	10.4	3.0	2.1	.8	.0	1.4	.0	4.1	3.3	---	---
21	11.5	10.3	2.8	1.8	.2	.0	1.5	.0	4.5	3.3	---	---
22	11.0	9.9	2.7	2.5	.2	.0	1.3	.1	4.7	3.1	---	---
23	11.4	10.0	4.0	2.7	.4	.0	1.4	.0	5.1	3.3	10.2	8.8
24	11.3	9.9	4.3	3.3	.0	.0	2.6	.8	5.2	3.1	10.5	9.2
25	11.3	9.9	3.3	1.7	.0	.0	2.3	1.3	6.4	3.9	10.8	9.0
26	10.8	9.8	1.7	.5	.0	.0	3.0	2.0	7.4	4.9	10.4	8.4
27	9.8	8.5	.5	.0	.1	.0	3.5	2.3	8.0	6.5	9.1	7.3
28	8.7	7.9	.8	.0	1.1	.0	3.6	2.6	8.5	7.0	8.5	6.0
29	8.3	7.2	1.9	.6	1.8	1.1	2.8	1.8	---	---	9.3	6.8
30	7.2	5.8	2.4	1.1	1.5	.9	1.9	.8	---	---	9.2	6.7
31	6.1	4.9	---	---	1.1	.8	.8	.0	---	---	10.3	7.3
MONTH	16.2	4.9	6.8	.0	3.5	.0	3.6	.0	8.5	.0	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.2	8.4	13.0	11.2	17.1	15.0	24.4	22.6	25.7	24.2	22.2	20.2
2	12.0	9.0	14.6	11.9	17.5	15.3	23.3	22.2	24.7	22.6	21.7	19.5
3	12.6	10.3	14.6	13.5	17.9	16.1	23.9	21.5	25.2	22.7	21.5	20.3
4	12.6	10.9	15.6	13.2	18.1	16.2	23.3	21.5	25.8	23.1	21.2	19.1
5	12.0	10.2	16.8	14.9	17.7	16.0	23.4	21.6	25.6	23.6	21.7	19.5
6	11.5	9.9	17.7	15.2	17.6	15.9	22.3	20.8	25.5	23.7	20.8	19.1
7	11.1	10.1	17.2	15.0	17.7	15.7	22.1	19.4	25.9	23.5	21.1	18.7
8	10.5	9.2	15.1	13.5	17.6	15.8	22.9	20.3	25.2	23.2	21.1	19.1
9	10.4	9.4	14.9	13.6	17.9	15.8	23.5	20.8	23.2	22.1	21.0	19.2
10	10.9	9.1	14.2	12.7	18.9	16.6	23.6	21.5	23.6	20.7	20.0	18.4
11	11.0	9.7	15.8	13.0	19.2	17.3	24.0	21.4	25.3	22.5	20.6	18.6
12	11.9	9.0	16.5	14.9	19.2	18.0	24.0	22.0	25.1	23.2	20.3	19.1
13	13.2	10.3	16.4	14.3	19.2	17.9	23.5	21.4	25.4	23.2	19.7	18.8
14	14.1	12.0	14.9	13.1	19.4	18.2	22.8	20.8	25.5	23.6	19.0	18.0
15	14.9	11.7	14.9	13.2	---	---	22.9	20.6	24.8	23.0	18.6	16.7
16	15.7	12.8	15.2	13.5	---	---	23.2	20.8	24.8	22.3	18.3	16.6
17	16.1	13.3	14.9	13.1	---	---	23.7	21.1	25.1	22.3	18.0	16.2
18	16.3	14.1	15.3	13.1	---	---	24.1	22.0	24.2	22.6	18.7	16.6
19	16.5	14.6	15.3	13.8	---	---	24.3	22.2	24.0	22.7	19.3	17.3
20	16.7	14.0	14.9	13.2	---	---	25.2	22.5	24.2	22.1	18.7	17.7
21	16.9	15.2	15.0	12.7	---	---	24.8	22.3	23.9	21.9	19.0	16.6
22	16.7	15.6	15.3	12.9	---	---	24.7	22.6	23.7	22.0	18.9	17.0
23	15.6	14.5	15.5	13.6	22.1	20.6	25.2	22.3	23.6	21.3	17.9	16.0
24	15.0	13.5	16.2	13.9	21.8	20.3	25.3	22.9	23.0	21.1	17.5	15.5
25	13.9	12.3	15.7	14.0	22.1	20.5	26.1	23.9	23.4	20.7	17.7	15.4
26	12.5	10.9	15.8	13.5	22.6	21.0	26.5	24.2	23.5	21.1	17.7	15.6
27	10.9	10.2	16.1	14.2	23.0	21.4	26.1	23.8	22.8	21.2	17.3	15.4
28	10.9	9.3	16.4	14.8	23.4	21.6	25.9	23.5	22.9	21.0	17.4	15.4
29	11.5	9.7	17.0	14.6	23.8	22.4	25.6	23.6	23.2	21.0	16.7	15.5
30	12.3	10.6	17.3	15.1	24.1	22.3	26.3	23.8	22.2	20.7	15.7	14.8
31	---	---	17.2	15.9	---	---	26.3	24.4	22.3	20.0	---	---
MONTH	16.9	8.4	17.7	11.2	---	---	26.5	19.4	25.9	20.0	22.2	14.8

DOLORES RIVER BASIN

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi upstream from Ryman Creek, and 4.0 mi southwest of Rico.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,422.23 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 4, 6-23, Nov. 26 to Jan. 5, Jan. 8-9, 11-15, 18, and Jan. 20 to Mar. 10. Records fair except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	16	9.2	7.0	10	43	91	835	113	39	28
2	28	21	14	9.2	6.0	9.0	45	89	782	106	36	28
3	28	20	13	9.2	7.0	10	51	102	773	97	34	59
4	27	18	12	9.0	8.0	13	53	102	793	91	32	52
5	27	16	13	9.6	8.0	17	49	154	706	84	31	38
6	26	15	12	8.1	7.8	23	43	224	654	77	31	34
7	35	14	12	6.8	7.6	28	43	277	601	73	30	32
8	36	15	13	7.2	7.2	25	38	282	564	67	28	29
9	38	14	13	7.6	6.4	22	38	290	545	65	32	28
10	38	13	13	7.7	7.0	21	36	221	528	63	33	27
11	35	12	13	7.8	8.5	21	32	228	501	61	34	26
12	39	15	13	7.8	9.0	21	34	349	445	59	39	46
13	36	16	12	7.8	7.4	22	45	411	444	56	39	56
14	34	15	9.0	7.8	6.0	28	57	420	420	54	54	101
15	32	15	10	7.8	7.6	32	62	479	372	52	53	69
16	34	14	11	8.0	7.4	39	75	519	336	50	37	52
17	38	14	12	6.0	7.8	42	105	602	303	49	32	46
18	37	14	10	6.4	8.4	35	129	604	281	47	29	45
19	31	14	10	6.8	8.0	35	135	608	284	52	34	47
20	32	13	10	7.5	7.6	37	145	616	305	58	37	52
21	30	12	9.2	7.8	7.6	32	149	569	304	53	37	54
22	33	14	9.0	8.0	7.6	37	187	584	303	49	36	46
23	30	16	9.0	9.0	7.0	37	214	604	258	47	30	41
24	29	21	9.2	8.6	5.9	34	210	561	223	46	27	38
25	29	17	9.2	8.4	6.6	33	181	544	203	45	26	36
26	30	10	10	8.4	7.2	30	146	470	185	42	25	34
27	22	8.6	10	8.4	8.4	30	121	476	165	40	25	32
28	26	11	11	8.4	9.6	29	101	546	149	38	29	31
29	27	14	10	8.2	---	29	92	677	137	36	33	31
30	19	16	9.6	7.4	---	31	83	745	123	37	29	52
31	22	---	9.0	8.0	---	37	---	805	---	37	27	---
TOTAL	957	451.6	346.2	247.9	209.6	849.0	2742	13249	12522	1844	1038	1290
MEAN	30.9	15.1	11.2	8.00	7.49	27.4	91.4	427	417	59.5	33.5	43.0
MAX	39	24	16	9.6	9.6	42	214	805	835	113	54	101
MIN	19	8.6	9.0	6.0	5.9	9.0	32	89	123	36	25	26
AC-FT	1900	896	687	492	416	1680	5440	26280	24840	3660	2060	2560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	44.6	29.5	21.9	18.9	18.4	30.4	128	458	564	167	80.0	61.5
MAX	133	65.9	42.6	37.7	33.7	72.2	242	1015	1288	646	255	224	224
(WY)	1973	1987	1958	1958	1984	1972	1962	1958	1957	1957	1957	1982	1982
MIN	14.5	12.1	7.81	7.74	7.49	11.0	42.9	98.9	70.7	37.1	31.0	17.1	17.1
(WY)	1957	1957	1990	1990	1994	1964	1975	1977	1977	1959	1972	1956	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	65258.8	35746.3	
ANNUAL MEAN	179	97.9	135
HIGHEST ANNUAL MEAN			230
LOWEST ANNUAL MEAN			40.1
HIGHEST DAILY MEAN	1320	Jun 16	1810
LOWEST DAILY MEAN	8.6	Nov 27	4.8
ANNUAL SEVEN-DAY MINIMUM	9.4	Dec 19	6.3
INSTANTANEOUS PEAK FLOW			a 2170
INSTANTANEOUS PEAK STAGE		4.86	b 5.95
ANNUAL RUNOFF (AC-FT)	129400	70900	98070
10 PERCENT EXCEEDS	700	317	403
50 PERCENT EXCEEDS	39	32	40
90 PERCENT EXCEEDS	13	8.0	15

a-From rating curve extended above 1620 ft³/s.

b-Maximum gage height, 6.15 ft, Jun 10, 1952.

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'21", long 108°29'49", in SW¹/4SW¹/4 sec.10, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 0.25 mi upstream from bridge on State Highway 184 in Dolores and 0.8 mi upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi².

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,940 ft above sea level, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952. Oct. 7, 1952 to Nov. 16, 1983, at site 0.4 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. 12. Records fair except estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	73	65	38	29	42	197	569	2320	262	125	102
2	62	66	56	38	30	42	238	620	2100	244	120	100
3	62	56	50	38	32	50	273	666	2010	226	110	122
4	60	58	47	40	36	70	307	607	2040	209	104	186
5	56	54	50	42	37	100	292	826	1790	192	105	146
6	57	44	50	40	36	130	240	1200	1610	175	104	126
7	79	49	55	34	35	120	246	1460	1430	163	103	120
8	106	49	50	32	33	110	225	1420	1310	149	101	111
9	106	49	55	36	30	100	219	1460	1180	138	106	103
10	110	48	55	38	34	95	203	1090	1090	125	115	105
11	103	65	55	35	40	90	184	993	1050	117	119	102
12	103	76	50	35	38	95	208	1380	912	107	139	116
13	107	63	46	34	32	103	287	1780	887	102	132	164
14	96	73	38	35	30	114	358	1670	855	97	133	224
15	89	62	40	36	33	129	379	1940	765	126	149	220
16	87	55	48	36	34	138	446	1970	664	127	139	175
17	101	55	48	33	36	151	577	2310	599	125	123	152
18	115	54	40	33	38	141	696	2260	566	131	115	139
19	106	52	42	34	36	146	785	2200	559	135	119	136
20	98	50	42	34	35	237	817	2210	618	145	135	143
21	90	54	40	36	35	207	814	1900	618	161	153	167
22	84	66	37	36	34	204	998	1870	680	147	136	150
23	86	96	37	38	28	206	1150	1980	566	152	125	137
24	83	90	40	40	29	189	1130	1820	487	149	115	125
25	77	50	40	40	32	175	927	1810	434	148	111	119
26	78	36	42	39	36	167	745	1590	398	144	108	113
27	78	46	46	39	42	164	628	1490	364	137	105	111
28	69	55	46	39	45	131	537	1580	335	132	105	108
29	75	60	42	39	---	148	509	1950	302	125	110	105
30	65	65	40	36	---	150	469	2160	282	120	111	114
31	51	---	38	36	---	167	---	2270	---	124	106	---
TOTAL	2597	1769	1430	1139	965	4111	15084	49051	28821	4634	3681	4041
MEAN	83.8	59.0	46.1	36.7	34.5	133	503	1582	961	149	119	135
MAX	115	96	65	42	45	237	1150	2310	2320	262	153	224
MIN	51	36	37	32	28	42	184	569	282	97	101	100
AC-FT	5150	3510	2840	2260	1910	8150	29920	97290	57170	9190	7300	8020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1994, BY WATER YEAR (WY)

	134	84.1	58.8	52.4	56.4	124	755	1744	1373	410	235	181
MEAN	134	84.1	58.8	52.4	56.4	124	755	1744	1373	410	235	181
MAX	1247	453	199	151	140	436	1955	3625	3470	1490	637	1354
(WY)	1942	1942	1987	1987	1987	1989	1942	1922	1957	1957	1957	1927
MIN	26.0	20.0	19.8	19.3	20.0	25.0	158	235	108	55.4	29.0	33.5
(WY)	1902	1902	1990	1990	1902	1899	1977	1977	1934	1934	1900	1899

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1896 - 1994

ANNUAL TOTAL	232073	117323	
ANNUAL MEAN	636	321	435
HIGHEST ANNUAL MEAN			790
LOWEST ANNUAL MEAN			87.0
HIGHEST DAILY MEAN	4760	May 28	6950
LOWEST DAILY MEAN	36	Nov 26	8.0
ANNUAL SEVEN-DAY MINIMUM	40	Dec 18	12
INSTANTANEOUS PEAK FLOW			10000
INSTANTANEOUS PEAK STAGE			10.20
INSTANTANEOUS LOW FLOW			8.0
ANNUAL RUNOFF (AC-FT)	460300	232700	315200
10 PERCENT EXCEEDS	2090	1090	1400
50 PERCENT EXCEEDS	152	110	120
90 PERCENT EXCEEDS	48	36	40

a-Site and datum then in use, from rating curve extended above 2800 ft³/s.

09166950 LOST CANYON CREEK NEAR DOLORES, CO

LOCATION.--Lat 37°26'46", long 108°28'07", in SE¹/4SE¹/4 sec.23, T.37N., R.15W., Montezuma County, Hydrologic Unit 14030002, on right bank 2.5 mi southeast of Dolores and 3.0 mi upstream from mouth.

DRAINAGE AREA.--71.3 mi².

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,030 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 10, Dec. 14 to Feb. 23, and Mar. 9-18. Records fair except for estimated daily discharges, which are poor. Several small storage reservoirs and diversions for irrigation of about 4,700 acres in the San Juan River basin and one diversion for irrigation of about 10 acres in Lost Canyon in the Dolores River basin. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.13	.19	.03	11	24	77	35	.18	.55	.00
2	.00	.00	.13	.20	.07	11	34	89	5.7	.14	.49	.00
3	.00	.00	.11	.18	.12	11	49	123	2.3	.14	.45	.00
4	.00	.00	.09	.19	.15	11	58	102	1.7	.17	.11	.00
5	.00	.00	.07	.20	.14	9.4	32	157	1.5	.17	.03	.00
6	.00	.00	.05	.21	.12	7.1	21	224	1.2	.18	.05	.00
7	.00	.00	.05	.14	.13	6.1	13	247	1.0	.19	.10	.00
8	.00	.00	.07	.13	.19	6.1	14	208	.99	.14	.08	.00
9	.00	.00	.12	.15	.33	6.0	13	199	.95	.11	.09	.00
10	.00	.00	.15	.15	.27	6.0	12	108	.61	.14	.05	.00
11	.00	.01	.16	.14	.25	6.0	13	63	.57	.07	.01	.00
12	.00	.02	.19	.13	.21	6.0	28	122	.56	.04	.00	.00
13	.00	.01	.20	.12	.15	6.5	62	119	.27	.03	.00	.00
14	.00	.01	.18	.12	.12	8.0	95	104	.26	.01	.00	.00
15	.00	.01	.13	.13	.14	9.5	84	124	.23	.01	.00	.00
16	.00	.01	.15	.14	.18	11	106	134	.19	.07	.00	.00
17	.01	.01	.18	.13	.22	11	155	216	.11	.10	.00	.00
18	.00	.01	.21	.10	.36	12	191	182	.11	.06	.00	.00
19	.00	.22	.26	.12	.46	16	269	111	.16	.10	.00	.00
20	.00	.34	.22	.13	.43	62	250	99	.13	.23	.00	.00
21	.00	.34	.16	.13	.37	55	228	65	.25	.20	.00	.00
22	.00	.55	.19	.13	.29	39	240	56	.37	.40	.00	.00
23	.00	1.1	.22	.14	1.0	34	229	55	.33	.22	.00	.00
24	.00	1.3	.19	.18	3.0	29	204	48	.14	.53	.00	.00
25	.00	.88	.21	.17	3.6	23	137	45	.21	.54	.00	.00
26	.00	.55	.22	.21	7.6	21	90	56	.16	.54	.00	.00
27	.00	.24	.21	.20	8.0	19	70	38	.07	.69	.00	.00
28	.00	.13	.21	.20	9.3	12	53	27	.06	.40	.00	.00
29	.00	.13	.22	.18	---	12	52	22	.15	.31	.00	.00
30	.00	.13	.18	.17	---	14	47	15	.28	.42	.00	.00
31	.00	---	.19	.10	---	17	---	16	---	.20	.00	---
TOTAL	0.01	6.00	5.05	4.81	37.23	507.7	2873	3251	55.56	6.73	2.01	0.00
MEAN	.000	.20	.16	.16	1.33	16.4	95.8	105	1.85	.22	.065	.000
MAX	.01	1.3	.26	.21	9.3	62	269	247	35	.69	.55	.00
MIN	.00	.00	.05	.10	.03	6.0	12	15	.06	.01	.00	.00
AC-FT	.02	12	10	9.5	74	1010	5700	6450	110	13	4.0	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	2.71	6.18	2.45	1.38	2.01	33.3	137	116	6.36	.26	.25
MAX	17.7	45.2	14.8	5.00	5.11	72.3	265	293	32.2	.87	1.62
(WY)	1987	1987	1987	1987	1987	1993	1987	1993	1993	1992	1988
MIN	.000	.000	.000	.000	.000	.87	.86	3.32	.005	.003	.000
(WY)	1990	1990	1990	1990	1990	1990	1990	1990	1990	1989	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	18197.04	6749.10	
ANNUAL MEAN	49.9	18.5	25.4
HIGHEST ANNUAL MEAN			49.9
LOWEST ANNUAL MEAN			.43
HIGHEST DAILY MEAN	a 482	269	555
LOWEST DAILY MEAN	b .00	b .00	b .00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW	.00	.00	.00
INSTANTANEOUS PEAK STAGE		358	744
ANNUAL RUNOFF (AC-FT)	36090	5.26	7.23
10 PERCENT EXCEEDS	201	13390	18410
50 PERCENT EXCEEDS	.40	62	85
90 PERCENT EXCEEDS	.00	.18	.90
		.00	.00

a-Also occurred May 18.

b-No flow many days each year.

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¹/4SW¹/4 sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi southeast of Bedrock, and 3.1 mi upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year. Statistical summary computed for 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,940 ft above sea level, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 27, Nov. 30 to Dec. 16, Dec. 19-20, 23-24, Dec. 27 to Jan. 16, Jan. 30-31, Feb. 6, and Feb. 9-10. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 5,000 acres upstream from station, and about 74,760 acres in the San Juan River basin. Flow regulated since Mar. 19, 1984, by McPhee Reservoir, capacity 381,000 acre-ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft, present datum, from floodmarks (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	60	45	39	36	84	120	405	753	68	58	56
2	68	61	46	40	33	94	138	934	731	71	58	103
3	70	61	46	40	34	98	183	1290	911	73	83	67
4	65	61	44	40	38	109	198	1210	1200	70	61	56
5	51	51	43	39	40	125	227	992	1270	65	63	59
6	84	48	42	39	41	126	210	869	1270	64	67	61
7	117	46	41	38	41	120	178	968	1150	63	67	56
8	82	47	41	36	46	116	144	1200	962	63	66	55
9	98	46	41	36	46	100	144	1200	780	64	66	52
10	101	46	42	38	46	96	140	1200	682	64	68	51
11	64	49	43	38	46	91	157	1190	673	63	70	42
12	62	59	41	38	43	74	141	1170	670	62	70	45
13	58	56	42	37	39	70	130	1170	584	62	71	49
14	57	65	42	37	41	68	181	1410	463	63	71	56
15	57	66	42	37	36	68	438	1570	423	63	123	55
16	57	57	42	39	38	69	340	1570	367	62	84	50
17	78	53	40	40	40	72	293	1560	209	59	77	49
18	134	51	40	42	49	72	295	1630	158	58	75	48
19	106	49	40	42	69	79	270	1990	112	58	130	47
20	92	48	39	42	114	78	234	2060	105	62	167	57
21	71	49	38	42	81	102	212	2060	101	67	120	111
22	65	51	35	43	60	201	194	2060	100	60	89	85
23	61	49	36	46	52	189	175	1740	101	61	81	63
24	60	52	37	48	52	184	168	1350	104	64	78	46
25	61	46	36	50	47	175	169	986	88	61	79	40
26	60	39	37	52	44	153	167	825	81	59	81	38
27	60	40	38	52	86	137	166	786	74	56	79	37
28	60	38	38	52	68	133	188	1100	70	53	72	38
29	60	38	38	50	---	137	197	1110	68	54	58	39
30	60	42	38	45	---	111	301	1110	66	58	62	71
31	60	---	38	40	---	107	---	959	---	57	56	---
TOTAL	2247	1524	1251	1297	1406	3438	6098	39674	14326	1927	2450	1682
MEAN	72.5	50.8	40.4	41.8	50.2	111	203	1280	478	62.2	79.0	56.1
MAX	134	66	46	52	114	201	438	2060	1270	73	167	111
MIN	51	38	35	36	33	68	120	405	66	53	56	37
AC-FT	4460	3020	2480	2570	2790	6820	12100	78690	28420	3820	4860	3340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	96.6	106	81.7	80.2	93.6	292	1092	1324	722	135
MAX	257	399	254	198	181	774	2551	3243	1647	337
(WY)	1987	1987	1987	1985	1987	1985	1993	1993	1986	1986
MIN	32.7	34.3	29.7	31.6	45.4	45.2	27.6	29.8	16.4	48.0
(WY)	1992	1991	1991	1991	1991	1990	1990	1990	1990	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1985 - 1994

ANNUAL TOTAL	264746	77320	a351
ANNUAL MEAN	725	212	724
HIGHEST ANNUAL MEAN			53.5
LOWEST ANNUAL MEAN			4.0
HIGHEST DAILY MEAN	4230	May 20	4690
LOWEST DAILY MEAN	35	Dec 22	37
ANNUAL SEVEN-DAY MINIMUM	37	Dec 21	37
INSTANTANEOUS PEAK FLOW			2080
INSTANTANEOUS PEAK STAGE		6.26	May 21
ANNUAL RUNOFF (AC-FT)	525100	153400	254300
10 PERCENT EXCEEDS	2880	782	1170
50 PERCENT EXCEEDS	93	64	84
90 PERCENT EXCEEDS	43	39	37

a-Average discharge for 17 years (water years 1918-22, 1972-83), 497 ft³/s; 360100 acre-ft/yr, prior to completion of McPhee Reservoir.

b-Also occurred May 21-22.

c-Minimum daily discharge for period of record, no flow, Sep 13, 1974, Aug 15-18, 1978.

d-Maximum discharge and stage for period of record, 9280 ft³/s, Apr 30, 1973, gage height, 12.09 ft, from floodmarks

DOLORES RIVER BASIN

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1979 to current year.

WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Specific conductance record is fair. Water temperature record is good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,970 microsiemens, Aug. 14, 1987; minimum, 140 microsiemens, May 25, 1983.

WATER TEMPERATURES: Maximum, 33.5°C, Aug. 7, 1981; minimum, -0.5°C, Dec. 3-8, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,220 microsiemens, Feb. 25, minimum recorded, 321 microsiemens, May 13-14, but may have been lower during period of deleted record, May 18 to June 23.

WATER TEMPERATURES: Maximum recorded, 29.3°C, July 25; minimum recorded, 0.0°C, many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
OCT 05...	1100	50	571	8.2	14.0	130	37	9.4	57	2
NOV 16...	1300	55	758	8.1	4.0	170	47	13	84	3
DEC 28...	1545	38	925	8.1	0.0	210	56	16	100	3
JAN 27...	0950	52	935	8.1	0.0	180	49	14	110	4
MAR 09...	1300	98	1180	8.3	8.0	340	88	29	93	2
APR 26...	1430	167	752	--	11.5	240	61	22	59	2
MAY 10...	1310	1210	332	8.2	11.5	130	38	9.0	14	0.5
22...	1235	2060	283	8.3	10.5	120	37	7.3	9.6	0.4
JUN 23...	0700	99	610	8.4	22.0	150	43	10	60	2
JUL 27...	0730	56	623	8.5	24.0	150	41	11	68	2
AUG 09...	1115	65	660	8.6	23.0	170	45	13	64	2
18...	1000	80	547	8.3	25.0	140	40	10	52	2

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 05...	3.4	114	31	84	0.2	1.1	291	0.40	39.3
NOV 16...	3.3	131	58	130	0.1	3.5	417	0.57	62.0
DEC 28...	4.6	151	67	160	0.1	5.1	499	0.68	51.2
JAN 27...	4.5	139	55	170	<0.1	4.6	490	0.67	68.9
MAR 09...	4.2	131	340	80	0.2	5.1	718	0.98	190
APR 26...	3.6	124	180	47	0.1	7.2	454	0.62	205
MAY 10...	1.9	103	55	8.7	0.1	4.7	193	0.26	631
22...	1.6	97	37	7.3	0.1	4.2	162	0.22	902
JUN 23...	3.5	118	48	86	0.1	3.4	325	0.44	86.8
JUL 27...	4.0	110	49	96	0.2	2.7	338	0.46	51.1
AUG 09...	3.6	108	99	74	0.1	3.2	367	0.50	64.3
18...	3.8	107	54	71	0.2	4.8	300	0.41	64.8

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	629	651	800	1000	1050	1000	773	609	---	879	641	---
2	581	666	810	964	1160	1040	772	463	---	787	600	493
3	565	646	830	969	1050	999	773	400	---	730	603	558
4	559	641	814	982	1020	937	683	403	---	685	552	442
5	585	663	797	990	962	991	605	435	---	664	561	478
6	617	677	809	957	987	1300	593	442	---	635	553	510
7	539	680	850	1100	1070	1240	577	393	---	628	539	464
8	586	686	873	1040	986	1210	585	396	---	617	918	506
9	564	697	867	1010	1000	1150	618	377	---	620	693	521
10	583	698	879	1000	946	1090	663	364	---	612	553	517
11	581	695	898	994	928	1100	711	355	---	609	542	522
12	600	701	861	970	918	1160	713	343	---	612	531	525
13	654	764	869	992	953	1060	730	336	---	605	---	532
14	621	742	897	1030	897	1130	726	333	---	603	---	536
15	646	734	930	1030	953	1240	636	341	---	608	---	548
16	671	751	861	1020	958	1160	494	389	---	605	---	517
17	722	750	878	1040	984	1170	504	426	---	602	---	518
18	766	752	932	1030	932	1160	521	---	---	603	---	523
19	649	742	926	1010	946	1180	545	---	---	611	---	546
20	577	745	928	1020	1110	1180	565	---	---	614	---	568
21	594	747	1020	1030	1030	1210	595	---	---	595	---	699
22	616	743	1030	1020	801	1200	624	---	---	587	---	407
23	629	765	1050	998	794	1090	654	---	---	595	---	471
24	652	801	1030	1010	1050	821	685	---	571	596	---	538
25	896	780	1040	972	1970	693	709	---	594	595	---	691
26	1030	823	1020	903	1700	697	738	---	609	637	---	764
27	819	824	966	911	1350	679	797	---	659	638	---	1390
28	681	849	917	894	875	711	811	---	1550	597	---	1750
29	660	833	974	875	---	726	797	---	1280	614	---	1500
30	675	833	1020	937	---	783	726	---	1030	616	---	1210
31	652	---	1060	983	---	811	---	---	---	687	---	---
MEAN	652	736	917	990	1050	1030	664	---	---	635	---	---

DOLORES RIVER BASIN

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.7	12.9	7.0	3.9	1.3	.0	.1	.0	.7	.1	4.8	.4
2	17.9	13.2	6.8	3.6	.6	.0	.1	.0	.6	.1	5.4	.3
3	18.0	13.4	5.7	2.9	.6	.0	.1	.0	.6	.1	7.8	2.1
4	17.7	13.4	6.8	3.2	.6	.0	.1	.0	.1	.1	9.1	4.0
5	16.8	13.5	5.9	3.0	.6	.0	.2	.0	.4	.1	9.8	5.1
6	17.1	14.5	4.8	1.6	.6	.0	.2	.0	.1	.1	10.5	6.4
7	16.0	14.5	4.1	1.3	.7	.0	.2	.0	.2	.1	10.7	6.4
8	15.6	13.4	4.1	.6	.8	.0	.3	.0	.7	.1	10.3	6.9
9	13.9	10.8	3.9	.6	.3	.0	.2	.0	1.1	.1	10.0	6.0
10	15.7	11.7	2.7	.6	.6	.0	.2	.0	1.4	.1	9.4	5.2
11	14.0	11.5	3.9	1.8	.1	.0	.3	.0	1.3	.1	9.1	6.1
12	14.6	12.0	5.4	3.6	.6	.0	.2	.0	1.8	.2	10.9	6.6
13	14.0	10.9	4.2	3.1	.6	.0	.3	.0	1.5	.2	11.4	6.8
14	14.3	11.4	4.9	3.0	.4	.0	.2	.0	1.8	.2	12.0	7.2
15	13.4	11.5	5.5	2.8	.2	.0	.2	.0	2.2	.2	11.9	7.7
16	12.9	10.8	4.8	2.1	.1	.0	.3	.0	1.9	.2	11.3	8.0
17	12.2	10.9	3.8	1.7	.5	.0	.2	.0	1.9	.4	11.8	9.0
18	11.7	9.5	3.6	1.8	.4	.0	.3	.0	3.1	1.2	10.5	8.6
19	11.8	8.4	4.2	1.5	.2	.0	.3	.0	1.5	.2	10.3	8.4
20	11.8	8.3	2.9	.5	.2	.0	.3	.0	1.0	.2	11.9	8.6
21	11.1	7.8	2.1	.0	.2	.0	.3	.0	1.2	.2	11.9	6.7
22	11.2	8.0	2.7	1.3	.2	.0	.2	.0	1.6	.2	11.0	8.4
23	12.2	8.3	5.9	2.7	.1	.0	.3	.0	1.9	.2	10.2	7.4
24	12.0	8.2	4.1	1.3	.2	.0	.6	.0	2.7	.2	9.2	8.1
25	11.8	8.3	1.3	.0	.2	.0	.2	.0	4.0	.2	10.6	7.2
26	11.0	8.5	.8	.0	.2	.0	.3	.1	4.4	.5	11.3	7.3
27	9.8	6.6	.6	.0	.0	.0	.5	.1	3.7	.9	9.1	6.0
28	8.3	5.9	.7	.0	.0	.0	.7	.1	3.9	1.0	9.2	4.1
29	8.9	6.6	1.0	.0	.0	.0	.4	.1	---	---	10.4	6.0
30	6.8	3.5	.7	.0	.0	.0	.7	.1	---	---	10.8	5.6
31	5.8	2.5	---	---	.1	.0	.4	.1	---	---	12.3	6.3
MONTH	18.0	2.5	7.0	.0	1.3	.0	.7	.0	4.4	.1	14.2	.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	7.5	11.9	10.0	19.2	14.3	27.5	23.3	28.4	23.8	---	---
2	12.4	8.3	12.8	9.9	19.7	15.4	26.9	24.1	27.9	23.2	23.2	19.6
3	12.3	9.5	11.3	9.5	19.9	16.3	25.1	22.6	28.5	23.6	23.8	19.9
4	12.1	9.3	12.3	9.1	18.4	15.7	25.6	20.4	27.2	23.3	22.5	20.3
5	11.7	8.7	13.4	10.1	16.9	15.3	25.8	20.3	28.0	22.9	23.3	18.9
6	10.8	7.6	15.0	11.0	15.9	14.8	25.6	20.6	27.7	23.1	24.0	19.1
7	11.7	8.6	15.8	11.8	16.7	14.2	26.2	20.3	27.2	22.7	21.8	18.6
8	10.4	8.6	13.0	10.0	18.3	14.4	26.8	20.4	25.5	23.2	23.4	18.1
9	9.4	8.0	11.3	9.7	19.4	14.5	27.6	21.5	24.7	22.3	23.5	18.4
10	9.2	7.4	12.5	9.5	20.2	15.4	26.2	21.9	26.8	21.5	22.8	19.2
11	10.9	7.6	13.4	10.1	20.8	16.7	27.5	21.8	26.7	22.6	22.4	18.3
12	13.0	8.2	13.6	11.0	20.1	17.1	25.3	21.9	27.5	23.1	23.3	18.8
13	14.7	9.8	12.9	11.4	20.0	16.5	23.8	21.0	---	---	22.3	19.3
14	13.5	11.1	13.0	10.4	20.9	17.5	23.9	20.1	---	---	21.1	18.6
15	14.3	10.5	13.1	11.2	21.0	17.1	25.2	20.4	---	---	21.5	17.6
16	14.8	10.2	13.7	12.0	21.4	17.4	25.2	20.6	---	---	20.2	15.7
17	15.1	11.3	13.1	11.6	23.5	18.1	26.7	20.6	---	---	19.6	15.6
18	14.5	12.3	14.1	12.1	24.5	20.2	27.4	21.4	---	---	19.4	16.7
19	15.5	12.3	13.8	12.1	24.4	22.0	26.5	23.1	---	---	21.6	16.6
20	15.4	12.5	13.2	11.1	26.4	21.5	26.8	22.6	---	---	21.8	17.9
21	17.1	12.5	13.0	10.4	25.2	22.6	26.8	22.2	---	---	21.1	17.5
22	16.3	13.8	13.4	10.5	26.3	22.0	28.5	22.5	---	---	20.7	16.9
23	15.5	12.0	14.6	11.7	27.6	21.9	27.8	23.3	---	---	20.0	15.2
24	14.4	12.7	14.9	13.6	28.3	22.9	29.0	24.1	---	---	19.2	15.0
25	13.1	10.9	14.2	12.4	28.8	22.7	29.3	24.8	---	---	19.3	14.7
26	11.4	9.6	16.3	11.6	28.5	23.2	28.7	24.0	---	---	19.3	14.9
27	10.0	8.8	15.7	13.0	28.9	23.2	27.5	23.7	---	---	19.6	14.8
28	10.5	7.8	16.8	13.7	28.8	23.7	28.4	23.3	---	---	19.4	15.0
29	10.7	8.1	17.9	13.1	28.3	24.0	28.3	23.3	---	---	17.6	15.8
30	13.1	8.9	18.0	12.8	28.5	23.2	27.2	23.9	---	---	17.9	15.1
31	---	---	17.3	15.0	---	---	27.5	23.6	---	---	---	---
MONTH	17.1	7.4	18.0	9.1	28.9	14.2	29.3	20.1	---	---	---	---

09170800 WEST PARADOX CREEK ABOVE BEDROCK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°19'54", long 108°53'59", in NE¹/₄NW¹/₄ sec.18, T.47 N, R.18 W, Montrose County. Site is 1,000 ft downstream from former surface water station, 1.3 mi northwest of Bedrock, and 2.6 mi upstream from mouth.

DRAINAGE AREA.-- 53.3 mi².

PERIOD OF RECORD.--Chemical analyses: August 1987 to current year.

REMARKS.--Natural flow affected by water imported from Rock Creek through Buckeye Reservoir. Diversion for irrigation of about 2,500 acres.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
NOV 16...	0800	1200	8.0	2.0	640	130	77	36	0.6
DEC 28...	1450	1130	8.1	0.0	570	120	65	31	0.6
JAN 27...	0800	1210	8.0	0.0	600	120	74	35	0.6
MAR 09...	1200	1140	8.4	7.0	550	110	66	31	0.6
APR 26...	1300	1280	--	12.5	630	130	75	35	0.6
MAY 10...	1230	1260	8.3	13.5	630	130	75	35	0.6
MAY 22...	1200	731	8.4	14.5	360	81	38	18	0.4
AUG 09...	0920	730	8.0	20.5	340	76	36	17	0.4

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 16...	2.7	237	410	29	0.3	12	839	1.14
DEC 28...	2.6	249	370	27	0.4	13	778	1.06
JAN 27...	3.7	231	410	29	0.3	13	824	1.12
MAR 09...	3.0	225	360	24	0.3	12	741	1.01
APR 26...	3.5	233	440	30	0.4	8.8	862	1.17
MAY 10...	3.8	252	430	29	0.4	10	864	1.18
MAY 22...	2.6	166	210	15	0.3	5.4	470	0.64
AUG 09...	2.7	153	210	14	0.2	9.6	457	0.62

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¹/₄NW¹/₄ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi downstream from West Paradox Creek and 4.3 mi northeast of Bedrock.

DRAINAGE AREA.--2,145 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year. Statistical summary computed for 1985 to current year.

REVISED RECORDS.--WDR CO-90-2: 1989.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,910 ft above sea level, from topographic map. Prior to Feb. 1, 1972, at site 400 ft upstream at datum 1.02 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 27 to Dec. 4, Dec. 7-10, 12, 14-16, 19-21, 23, 25, 27-31, Jan. 4-8, 10, 13, 14, 16, 18, and 19. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 80,000 acres, of which about 74,760 acres are in the San Juan River basin. Flow regulated by McPhee Reservoir, capacity 381,000 acre-ft, since Mar. 19, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft, site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s), by slope-area measurement at site 1,400 ft upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	64	50	47	52	88	112	404	783	70	58	58
2	69	63	50	47	53	95	132	855	752	71	58	86
3	68	64	50	47	51	97	170	1280	872	72	74	78
4	68	64	48	47	52	104	213	1260	1140	72	63	59
5	57	62	45	47	63	114	222	1050	1240	68	61	58
6	52	56	44	47	66	127	234	946	1240	67	63	59
7	104	53	44	44	59	122	202	944	1180	65	64	57
8	80	53	44	42	61	119	158	1220	1030	65	64	56
9	85	53	45	43	64	100	144	1260	880	65	63	55
10	96	53	45	45	65	99	143	1220	750	65	64	53
11	70	54	46	45	66	96	160	1220	696	64	64	49
12	70	60	46	45	59	89	150	1210	687	63	65	46
13	67	61	45	44	56	84	133	1200	644	63	65	47
14	65	64	46	45	57	82	144	1410	502	63	67	57
15	64	65	46	47	56	83	437	1640	447	63	109	55
16	63	60	46	48	56	81	367	1630	383	61	93	54
17	74	59	46	49	60	83	311	1630	247	60	73	52
18	126	58	44	50	65	85	308	1680	184	59	72	51
19	104	56	45	50	70	86	289	2000	111	59	79	51
20	92	53	42	50	111	88	258	2060	100	60	201	54
21	75	53	40	49	91	91	238	2020	98	62	107	100
22	70	55	41	50	75	206	219	1970	99	59	95	90
23	67	55	44	56	70	202	195	1730	98	59	78	68
24	65	52	44	57	68	201	178	1350	115	59	75	56
25	64	52	45	60	68	196	176	1030	92	60	73	49
26	64	41	45	62	67	172	174	842	84	58	74	46
27	63	42	46	61	89	149	171	805	78	58	75	46
28	63	42	46	61	81	136	192	1030	74	56	72	46
29	64	42	46	53	---	144	210	1090	72	55	59	44
30	64	45	46	56	---	119	267	1080	71	57	60	56
31	64	---	46	48	---	104	---	998	---	60	58	---
TOTAL	2265	1654	1406	1542	1851	3642	6307	40064	14749	1938	2346	1736
MEAN	73.1	55.1	45.4	49.7	66.1	117	210	1292	492	62.5	75.7	57.9
MAX	126	65	50	62	111	206	437	2060	1240	72	201	100
MIN	52	41	40	42	51	81	112	404	71	55	58	44
AC-FT	4490	3280	2790	3060	3670	7220	12510	79470	29250	3840	4650	3440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	105	116	87.0	88.6	106	305	1132	1338	731	140
MAX	269	430	262	208	207	811	2552	3219	1588	369
(WY)	1987	1987	1987	1985	1987	1985	1985	1993	1993	1986
MIN	33.3	38.8	33.1	34.5	48.2	46.6	27.3	30.4	16.0	44.9
(WY)	1992	1991	1991	1991	1991	1990	1990	1990	1990	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1985 - 1994

ANNUAL TOTAL	260304	79500	a363
ANNUAL MEAN	713	218	711
HIGHEST ANNUAL MEAN			55.3
LOWEST ANNUAL MEAN			1990
HIGHEST DAILY MEAN	4390	May 23	4550
LOWEST DAILY MEAN	38	Jan 1	7.1
ANNUAL SEVEN-DAY MINIMUM	43	Dec 18	10
INSTANTANEOUS PEAK FLOW			c5260
INSTANTANEOUS PEAK STAGE			10.82
INSTANTANEOUS LOW FLOW			7.1
ANNUAL RUNOFF (AC-FT)	516300	157700	262700
10 PERCENT EXCEEDS	2730	820	1210
50 PERCENT EXCEEDS	100	65	92
90 PERCENT EXCEEDS	46	46	38

a-Average discharge for 12 years (water years 1972-83), 502 ft³/s; 363700 acre-ft/yr, prior to completion of McPhee Dam.

b-Minimum daily discharge for period of record, 0.12 ft³/s, Jul 17, 18, 1977.

c-Maximum discharge and stage for period of record, 9500 ft³/s, Apr 30, 1973, gage height, 12.88 ft, from floodmarks.

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1987 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1987 to current year.

WATER TEMPERATURE: December 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1987.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Interruptions in daily record are the result of severe probe fouling or instrument malfunctions. Daily specific conductance record is fair. Daily water temperature record is good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 57,700 microsiemens, June 22, 1990 (may have been higher June 19-22 when probe was out of water); minimum recorded, 274 microsiemens, Apr. 22, 1993 (may have been lower during period of missing record Apr. 3-20).

WATER TEMPERATURE: Maximum, 33.3°C, July 1, 1990; minimum, 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded 23,400 microsiemens, Dec. 5 (may have been higher during periods of missing record Nov. 26-29, Dec. 20-29, and Jan. 19-25); minimum, 291 microsiemens, May 22, 23.

WATER TEMPERATURE: Maximum, 31.4°C, July 20; minimum, 0.0°C, many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
OCT 05...	1300	55	3380	8.5	16.0	310	74	31	520	13
NOV 15...	1545	68	4780	8.2	6.0	300	74	27	900	23
DEC 28...	1330	46	7500	8.0	0.0	410	82	49	1300	28
JAN 27...	1135	60	5710	7.9	1.0	400	87	45	1000	22
MAR 09...	1530	101	3670	8.2	12.0	390	91	40	530	12
APR 26...	1535	175	2360	--	14.0	280	63	29	360	9
MAY 10...	1600	1220	378	8.3	13.5	130	38	9.2	22	0.8
22...	1615	1990	304	8.2	12.5	120	37	7.4	14	0.5
JUN 23...	1000	98	2800	8.3	21.0	210	53	20	470	14
JUL 27...	0930	57	3170	8.4	21.0	230	55	22	520	15
AUG 09...	1230	63	2560	8.5	23.0	290	75	26	400	10
18...	0935	69	1900	8.2	21.5	220	57	19	270	8

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 05...	28	119	82	910	0.3	1.1	1720	2.34	255
NOV 15...	36	142	160	1500	0.3	4.0	2790	3.79	512
DEC 28...	64	167	190	2100	0.2	5.9	3890	5.29	483
JAN 27...	48	153	170	1600	0.1	5.5	3050	4.14	494
MAR 09...	27	136	260	730	0.1	4.2	1760	2.40	480
APR 26...	17	125	200	520	0.2	7.2	1270	1.73	601
MAY 10...	2.5	102	56	21	0.1	4.7	215	0.29	707
22...	1.9	97	38	13	0.1	4.2	174	0.24	934
JUN 23...	24	124	83	770	0.2	3.6	1500	2.04	396
JUL 27...	28	115	110	810	0.2	2.3	1620	2.20	249
AUG 09...	21	107	230	580	0.1	3.6	1400	1.90	238
18...	14	111	150	420	0.2	4.5	1000	1.36	187

DOLORES RIVER BASIN

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3070	4040	6060	10200	7130	3130	3500	976	392	4200	2900	2200
2	3010	3780	6560	10100	6890	3010	2960	776	408	3810	2740	1480
3	2890	3960	6590	10400	7110	3060	2340	521	390	3570	2180	1700
4	2580	4240	7980	10500	7050	2890	1840	392	329	3450	2470	2150
5	3260	4670	8850	10000	5320	2750	1570	391	308	3630	2550	2120
6	3340	5530	8480	8810	5320	2800	1430	403	307	3700	2340	2020
7	1400	6010	7600	9220	5570	3070	1770	424	308	3670	2300	2120
8	2060	5860	8850	11100	5860	3160	2270	409	324	3610	2400	2250
9	1880	5950	7710	10400	4650	3590	2560	391	354	3530	2650	2160
10	1780	6140	7390	7920	4810	3950	2650	382	397	3450	2290	2190
11	2630	6500	8180	8350	4760	4210	2340	376	407	3460	2240	2500
12	2940	5560	7190	8840	5640	4750	2510	361	403	3460	2080	2460
13	3070	5570	8110	8400	5370	5150	2920	358	424	3380	2150	2440
14	3440	5260	7580	8800	6690	5510	2780	361	554	3340	1950	2060
15	3350	4690	7180	7820	6130	5520	1110	337	582	3150	1650	2090
16	3640	5780	6090	7730	6290	5690	711	327	653	3130	1200	2170
17	3180	6520	8680	8370	5830	5540	778	325	1160	3290	1800	2250
18	1770	7020	8400	6850	5560	5370	833	323	1520	3360	1950	2280
19	1830	7050	7280	---	4260	5160	921	320	2330	3310	1590	2380
20	2120	7390	---	---	2220	4980	1050	305	2660	3140	1060	2310
21	2830	7420	---	---	2930	4780	1210	301	2770	2800	1090	1800
22	3490	7660	---	---	3850	2370	1420	300	2800	3060	1060	1140
23	3870	7800	---	---	4080	2070	1710	300	2970	3070	1420	1770
24	3940	7630	---	---	4740	1960	2040	312	2500	2930	1560	2380
25	3990	7520	---	---	5430	1880	2150	342	3100	2880	1600	2840
26	4200	---	---	5260	5850	2200	2300	385	3500	3030	1680	3230
27	4080	---	---	5510	4120	2440	2440	403	3830	3180	1610	3340
28	4200	---	---	5050	3360	2680	2090	380	4430	3260	1700	4160
29	4050	---	---	6420	---	2570	1930	344	4810	3200	2040	4040
30	3830	9300	6920	5530	---	3270	1710	340	4510	3010	1960	3560
31	3960	---	9600	7900	---	3800	---	348	---	2790	2070	---
MEAN	3090	---	---	---	5240	3660	1930	394	1650	3320	1940	2390

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.0	10.3	9.6	3.1	4.5	.0	.0	.0	.0	.0	8.6	1.4
2	20.9	10.6	9.4	2.2	1.5	.0	.0	.0	.0	.0	8.5	1.0
3	21.2	10.9	8.3	1.8	.8	.0	.0	.0	.0	.0	10.2	1.7
4	20.7	10.9	8.4	1.8	.3	.0	.0	.0	.0	.0	11.4	3.2
5	19.6	10.8	7.7	1.3	.2	.0	1.5	.0	.0	.0	11.5	4.5
6	18.6	12.9	7.5	.0	.7	.0	.0	.0	.0	.0	12.2	5.9
7	16.9	14.1	7.3	.0	1.2	.0	.0	.0	.7	.0	13.2	5.2
8	17.0	12.3	7.0	.0	2.1	.0	.0	.0	5.6	.7	12.9	5.7
9	15.5	10.2	6.8	.0	.1	.0	.0	.0	5.7	.0	12.4	4.2
10	17.4	10.9	5.1	.0	.8	.0	.0	.0	5.1	.0	11.7	3.5
11	15.8	9.8	5.2	1.5	.0	.0	.0	.0	3.8	.5	11.2	4.8
12	17.2	11.9	7.3	3.6	2.0	.0	.0	.0	5.3	.0	13.0	5.4
13	16.8	9.4	4.5	3.0	.5	.0	.0	.0	4.1	.0	14.6	4.9
14	16.8	10.2	6.2	2.9	.0	.0	.0	.0	5.2	.0	15.4	5.4
15	14.9	10.6	7.4	2.0	.0	.0	.0	.0	5.9	.0	15.3	5.7
16	14.7	9.5	7.5	.9	.0	.0	.0	.0	5.4	.0	14.0	6.2
17	12.7	10.2	5.9	.6	1.3	.0	.0	.0	4.2	.8	12.5	7.8
18	13.8	9.1	5.6	.9	.0	.0	.0	.0	5.9	2.5	10.8	6.1
19	13.9	7.7	6.1	.2	.0	.0	.0	.0	4.1	.7	12.0	8.2
20	14.5	7.4	5.4	.0	.0	.0	.0	.0	3.4	.0	13.8	8.1
21	13.8	6.4	4.4	.0	.0	.0	.0	.0	3.8	.0	15.3	5.1
22	13.6	6.6	3.2	1.5	.0	.0	.0	.0	4.2	.0	13.1	7.5
23	14.8	6.8	8.1	3.1	.0	.0	.0	.0	5.9	.0	12.3	7.0
24	14.9	6.5	4.2	.8	.0	.0	.3	.0	6.6	.0	11.0	8.0
25	14.7	6.7	.8	.0	.0	.0	1.1	.0	9.9	.0	13.6	6.6
26	12.5	7.3	.0	.0	.0	.0	2.1	.0	9.7	.5	14.2	6.2
27	12.5	4.8	.0	.0	.0	.0	4.2	.0	6.4	2.7	10.5	5.0
28	9.9	4.5	.0	.0	.0	.0	4.4	.0	7.9	2.0	12.5	2.8
29	10.4	4.6	.5	.0	.0	.0	1.1	.0	---	---	13.4	4.6
30	9.6	1.8	2.5	.0	.0	.0	2.3	.0	---	---	14.4	3.9
31	8.9	1.0	---	---	.0	.0	.0	.0	---	---	15.8	4.3
MONTH	21.2	1.0	9.6	.0	4.5	.0	4.4	.0	9.9	.0	15.8	1.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.2	6.1	14.6	11.4	18.6	13.5	27.9	20.0	29.0	21.2	25.3	16.9
2	15.4	7.8	15.0	11.3	19.2	15.1	26.2	20.9	29.4	20.3	25.8	17.6
3	15.6	8.3	12.6	11.0	19.2	15.7	24.7	19.3	29.8	20.1	23.3	18.9
4	14.3	9.7	14.4	10.1	18.4	15.0	26.4	17.3	29.0	19.5	26.6	16.9
5	14.4	9.1	14.9	11.3	17.2	14.2	26.8	16.8	29.2	19.6	26.2	15.3
6	13.0	7.6	16.3	12.1	16.3	13.6	25.6	17.0	30.8	20.8	23.4	14.9
7	14.2	9.1	15.4	12.6	16.8	13.1	26.9	15.9	28.6	19.6	25.3	15.3
8	13.1	8.2	15.0	10.9	17.9	13.5	28.9	17.5	25.5	21.2	25.9	14.9
9	11.5	8.6	12.8	10.8	18.7	13.6	29.8	17.9	26.3	20.9	24.4	16.1
10	11.1	7.6	13.3	10.0	19.5	14.7	26.5	18.6	29.4	19.7	23.8	14.9
11	13.4	7.4	14.2	10.3	20.1	16.0	28.4	18.4	29.4	20.7	25.0	16.8
12	17.4	7.2	14.6	11.2	19.6	16.8	26.1	18.2	29.5	20.8	23.8	16.6
13	18.5	8.9	13.6	11.7	19.4	15.7	25.1	17.7	30.0	21.6	22.2	16.1
14	15.9	10.0	14.3	10.8	20.9	16.2	24.3	17.0	27.7	21.5	22.7	15.5
15	16.1	10.9	13.5	11.4	20.8	16.1	28.7	17.7	28.7	20.0	22.8	12.9
16	17.0	10.8	13.9	11.8	21.6	16.4	28.0	17.2	29.7	19.7	22.6	12.4
17	17.7	11.8	13.1	11.3	24.3	16.5	29.7	17.4	29.6	19.8	22.0	12.4
18	16.4	12.7	14.1	11.6	25.5	18.5	27.0	20.3	26.4	21.3	20.8	14.6
19	18.2	12.7	13.6	12.0	26.0	19.6	28.2	19.8	25.3	20.1	24.4	14.4
20	18.2	12.9	12.9	11.1	28.8	18.8	31.4	19.1	25.3	19.9	24.2	15.9
21	20.6	12.6	12.6	10.4	25.7	19.7	29.8	19.2	27.9	19.0	23.9	15.2
22	19.5	14.4	12.8	10.4	28.1	20.1	29.7	20.5	27.2	19.7	22.2	14.3
23	18.2	13.4	14.1	11.5	29.2	19.1	29.1	20.5	27.7	18.1	22.5	12.2
24	16.2	12.3	15.1	12.9	30.2	19.6	31.2	21.1	24.9	18.9	21.6	11.9
25	14.7	11.2	13.8	12.1	28.2	19.3	31.0	21.9	27.1	18.5	22.2	11.2
26	14.3	10.2	15.6	10.9	27.9	18.9	30.5	20.5	28.0	18.0	21.8	11.1
27	11.6	9.2	15.5	12.7	28.3	18.9	29.3	19.7	26.0	18.8	21.9	10.9
28	14.0	8.6	16.0	13.2	29.6	19.9	30.6	19.6	25.0	20.1	22.1	11.1
29	14.0	8.7	17.4	12.4	29.1	20.5	30.6	19.6	28.1	18.3	17.4	12.3
30	15.9	9.4	18.0	13.8	29.6	19.6	28.2	20.3	27.3	14.4	19.6	13.4
31	---	---	17.4	14.2	---	---	29.3	20.7	24.1	18.2	---	---
MONTH	20.6	6.1	18.0	10.0	30.2	13.1	31.4	15.9	30.8	14.4	26.6	10.9

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'33", long 108°07'54", in NW¹/₄NE¹/₄ sec.25, T.44 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 1.5 mi downstream from Specie Creek in vicinity of mile marker 88.68 on State Highway 145 and 4.5 mi northwest of Placerville, CO.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,030 ft above sea level, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958. Oct. 22, 1958 to Mar. 4, 1986, gage located 0.8 mi upstream from present site, at different datum. Mar. 5, 1986, gage moved to present site, at present datum.

REMARKS.--Estimated daily discharges: Nov. 14-19, and Nov. 21 to Mar. 1. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saldado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake operated by the City of Telluride, Public Service of Colorado, Pacific Light and Power Company, and Tri State Power Company, combined capacity, 5,040 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	87	70	64	62	62	103	251	1160	427	121	76
2	81	78	70	64	62	62	110	252	1100	402	138	80
3	80	79	63	64	64	65	108	248	1080	377	123	116
4	81	82	70	64	68	69	125	242	1150	346	85	141
5	81	73	70	64	70	74	122	288	1070	322	82	104
6	80	67	70	64	64	73	110	339	1030	285	89	94
7	92	72	70	64	62	73	111	369	942	265	78	96
8	100	70	70	64	66	76	109	348	894	247	74	84
9	102	70	70	64	64	77	110	367	894	233	82	74
10	98	71	64	60	62	73	112	325	892	222	89	103
11	92	78	70	60	62	74	109	309	873	214	87	105
12	99	78	70	60	60	74	102	351	800	206	102	153
13	98	74	70	60	58	78	116	457	855	185	87	175
14	94	70	70	60	58	82	149	469	853	175	102	238
15	91	70	70	62	60	86	165	504	801	166	118	200
16	97	64	70	64	60	90	188	540	750	147	115	163
17	102	64	70	66	62	95	239	572	729	149	97	143
18	105	64	70	62	64	91	246	558	720	143	87	122
19	100	64	70	60	66	92	262	574	755	157	95	122
20	96	63	66	60	64	102	279	593	742	182	98	215
21	93	60	66	62	62	96	321	540	799	171	108	213
22	93	60	66	62	60	100	361	557	834	158	101	193
23	93	55	66	62	58	98	351	591	727	154	96	145
24	91	52	60	62	58	93	346	584	678	154	99	139
25	90	45	64	64	58	91	320	598	648	147	90	133
26	90	50	64	62	58	92	270	543	613	145	85	125
27	84	52	66	62	58	90	241	578	572	140	75	119
28	81	55	66	62	60	82	226	640	525	131	85	113
29	87	60	66	62	---	92	226	772	466	123	89	111
30	74	68	66	62	---	87	231	927	446	122	72	131
31	80	---	64	60	---	93	---	1070	---	116	66	---
TOTAL	2809	1995	2097	1932	1730	2582	5868	15356	24398	6411	2915	4026
MEAN	90.6	66.5	67.6	62.3	61.8	83.3	196	495	813	207	94.0	134
MAX	105	87	70	66	70	102	361	1070	1160	427	138	238
MIN	74	45	60	60	58	62	102	242	446	116	66	74
AC-FT	5570	3960	4160	3830	3430	5120	11640	30460	48390	12720	5780	7990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1994, BY WATER YEAR (WY)

	MEAN	109	82.6	67.7	62.0	61.8	74.2	230	563	792	440	210	138
MAX	399	138	104	92.1	94.2	129	593	1515	1528	1197	484	342	
(WY)	1912	1985	1987	1943	1987	1971	1942	1958	1983	1983	1983	1970	
MIN	50.9	51.4	40.8	38.3	37.1	46.4	79.6	136	186	104	83.4	63.8	
(WY)	1957	1990	1977	1977	1990	1980	1951	1977	1934	1977	1972	1956	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1911 - 1994
ANNUAL TOTAL	106405	72119	
ANNUAL MEAN	292	198	234
HIGHEST ANNUAL MEAN			414
LOWEST ANNUAL MEAN			88.8
HIGHEST DAILY MEAN	1520	Jun 2	2740
LOWEST DAILY MEAN	44	Jan 5	26
ANNUAL SEVEN-DAY MINIMUM	47	Jan 1	31
INSTANTANEOUS PEAK FLOW		1300	10000
INSTANTANEOUS PEAK STAGE		4.59	8.06
ANNUAL RUNOFF (AC-FT)	211100	143000	169800
10 PERCENT EXCEEDS	930	573	640
50 PERCENT EXCEEDS	95	93	104
90 PERCENT EXCEEDS	54	62	55

a-Result of failure of Trout and Middle Reservoir Dams.

b-Maximum gage height, 4.81 ft, Feb 1, backwater from ice.

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¹/4NE¹/4 sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft downstream from bridge on State Highway 141, 400 ft downstream from Taguache Creek, and 1.5 mi southeast of Uruvan.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft, from floodmarks, discharge, 8,910 ft³/s, by slope-area measurement at site 5.5 mi, downstream.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	88	80	70	70	100	232	694	1240	330	41	37
2	53	92	72	72	72	110	319	814	1190	306	35	43
3	42	88	70	72	78	130	385	775	1130	294	37	41
4	44	88	78	72	80	150	454	574	1190	273	35	47
5	44	92	80	72	70	195	431	640	1130	241	24	75
6	46	88	80	72	70	195	352	833	1060	213	24	59
7	70	85	80	72	74	175	295	928	972	195	24	49
8	99	88	80	72	72	168	303	865	895	173	22	47
9	142	88	76	70	70	150	288	872	859	168	22	42
10	110	85	80	68	70	100	297	865	844	130	23	34
11	96	92	80	68	68	85	297	715	851	129	25	38
12	96	122	80	68	66	88	271	759	769	125	25	49
13	94	103	80	68	64	90	270	846	767	112	28	86
14	94	96	80	68	66	94	503	858	794	89	25	128
15	92	102	80	70	68	109	700	879	740	81	30	172
16	92	95	78	74	70	188	779	927	679	68	33	132
17	124	90	76	72	72	202	973	966	619	55	30	114
18	152	87	76	70	76	198	1030	942	618	53	26	133
19	129	83	76	70	76	188	1010	908	647	47	30	142
20	110	63	74	70	70	248	991	914	660	56	97	162
21	103	60	74	70	70	317	990	822	696	73	62	189
22	98	60	74	70	68	289	946	775	834	72	55	161
23	98	58	66	72	66	288	949	778	748	64	52	140
24	94	54	66	72	66	250	915	780	624	63	52	108
25	94	54	72	72	66	211	859	767	565	70	51	96
26	94	58	74	70	68	190	721	856	529	60	47	90
27	94	62	76	70	70	190	634	707	471	54	42	83
28	92	68	76	70	80	166	461	766	436	48	40	74
29	92	74	76	70	---	158	574	877	379	40	39	72
30	92	78	72	70	---	172	570	996	351	37	40	98
31	87	---	70	70	---	187	---	1110	---	37	37	---
TOTAL	2821	2441	2352	2186	1976	5381	17799	25808	23287	3756	1153	2741
MEAN	91.0	81.4	75.9	70.5	70.6	174	593	833	776	121	37.2	91.4
MAX	152	122	80	74	80	317	1030	1110	1240	330	97	189
MIN	42	54	66	68	64	85	232	574	351	37	22	34
AC - FT	5600	4840	4670	4340	3920	10670	35300	51190	46190	7450	2290	5440

MEAN	133	116	92.6	87.0	107	182	848	1185	1021	440	184	125
MAX	333	385	188	139	225	459	2154	3420	2361	1306	603	416
(WY)	1987	1987	1987	1985	1958	1960	1985	1984	1957	1957	1983	1982
MIN	30.6	60.9	49.6	49.9	54.1	66.8	110	86.6	177	103	37.2	16.8
(WY)	1957	1956	1977	1977	1990	1977	1977	1977	1977	1959	1994	1956

ANNUAL TOTAL	190935		91701				
ANNUAL MEAN	523		251			377	
HIGHEST ANNUAL MEAN						758	1984
LOWEST ANNUAL MEAN						89.3	1977
HIGHEST DAILY MEAN	3370	May 17	1240	Jun 1		5440	May 16 1984
LOWEST DAILY MEAN	42	Oct 3	22	Aug 8		9.4	Aug 10 1977
ANNUAL SEVEN-DAY MINIMUM	47	Sep 30	23	Aug 5		14	Aug 8 1977
INSTANTANEOUS PEAK FLOW			1390	Jun 1		b 8050	May 10 1983
INSTANTANEOUS PEAK STAGE			5.42	Jun 1		10.14	May 10 1983
ANNUAL RUNOFF (AC-FT)	378700		181900			273400	
10 PERCENT EXCEEDS	1640		838			1070	
50 PERCENT EXCEEDS	132		88			132	
90 PERCENT EXCEEDS	73		45			58	

b-From rating curve extended above 4100 ft³/s.

09237450 YAMPA RIVER ABOVE STAGECOACH RESERVOIR, CO

LOCATION.--Lat 40°16'09", long 106°52'49", in SW1/4SW1/4 sec.36, T.4 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 1.4 mi downstream from Jack Creek and 4.0 mi east of Oak Creek, CO.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--October 1988 to current year. Water-quality data available, July 1984 to September 1992.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,240 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6-12, and Nov. 15 to Mar. 20. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and Yamcolo Reservoirs (total capacity, 15,820 acre-ft). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	53	39	37	37	38	44	72	42	37	56	41
2	36	48	39	36	38	36	51	69	42	38	54	41
3	36	51	40	35	39	36	55	67	39	49	48	41
4	34	52	40	38	40	38	75	74	39	55	47	43
5	35	51	40	38	41	38	53	69	35	46	43	39
6	36	50	40	40	38	38	45	88	36	43	41	38
7	40	50	40	38	39	39	43	93	36	43	39	36
8	48	50	39	39	40	39	43	77	33	45	40	28
9	43	48	38	40	37	40	51	55	32	51	50	28
10	42	46	36	40	38	40	47	41	30	44	51	22
11	43	45	38	36	38	42	48	34	29	48	46	16
12	46	45	40	36	36	42	40	31	30	54	46	19
13	47	44	37	36	35	42	50	37	30	51	44	23
14	44	42	35	36	36	42	83	53	25	47	43	24
15	49	42	37	38	36	45	79	44	17	51	41	28
16	53	42	40	38	37	50	83	42	17	51	40	27
17	52	41	38	36	38	55	95	40	19	59	41	23
18	56	41	36	35	38	58	110	33	26	58	40	23
19	53	42	36	35	37	60	96	35	43	62	42	24
20	50	42	38	37	36	65	99	31	48	58	45	26
21	46	41	36	39	34	77	98	29	52	56	43	27
22	45	43	36	39	32	87	124	27	97	51	41	26
23	46	41	35	40	26	75	140	25	92	52	38	25
24	43	40	35	40	28	44	158	26	59	60	37	26
25	43	40	35	38	32	46	158	30	52	62	37	26
26	42	40	36	36	36	42	129	31	39	55	36	27
27	44	40	36	35	38	34	105	29	35	49	35	27
28	46	40	37	36	40	32	96	30	35	47	39	27
29	50	40	36	36	---	39	86	37	37	47	45	26
30	41	40	34	36	---	32	82	35	37	46	46	28
31	53	---	36	36	---	37	---	32	---	46	41	---
TOTAL	1378	1330	1158	1155	1020	1428	2466	1416	1183	1561	1335	855
MEAN	44.5	44.3	37.4	37.3	36.4	46.1	82.2	45.7	39.4	50.4	43.1	28.5
MAX	56	53	40	40	41	87	158	93	97	62	56	43
MIN	34	40	34	35	26	32	40	25	17	37	35	16
AC-FT	2730	2640	2300	2290	2020	2830	4890	2810	2350	3100	2650	1700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	MEAN	40.2	44.2	36.6	32.3	34.8	53.8	92.0	75.8	77.8	85.0	62.4	38.3
MAX	48.0	48.1	44.7	38.0	38.0	79.7	136	148	112	118	77.8	51.9	
(WY)	1989	1989	1989	1992	1989	1989	1989	1993	1993	1993	1991	1989	1993
MIN	32.1	37.2	29.2	21.4	29.4	38.7	49.7	38.5	39.4	50.4	43.1	28.5	
(WY)	1993	1993	1990	1990	1991	1992	1990	1990	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	25393	16285	
ANNUAL MEAN	69.6	44.6	56.2
HIGHEST ANNUAL MEAN			67.6
LOWEST ANNUAL MEAN			44.6
HIGHEST DAILY MEAN	181	May 16	232
LOWEST DAILY MEAN	27	Jan 14	14
ANNUAL SEVEN-DAY MINIMUM	28	Jan 11	15
INSTANTANEOUS PEAK FLOW			277
INSTANTANEOUS PEAK STAGE			3.58
ANNUAL RUNOFF (AC-FT)	50370	32300	40700
10 PERCENT EXCEEDS	131	59	97
50 PERCENT EXCEEDS	53	40	44
90 PERCENT EXCEEDS	34	30	30

a-Also occurred Apr 25.

b-Also occurred Jan 25-26.

c-Maximum gage height, 6.61 ft, Nov 20, backwater from ice.

d-Maximum gage height, 6.61 ft, Nov 20, 1993, backwater from ice.

09237500 YAMPA RIVER BELOW STAGECOACH RESERVOIR, CO

LOCATION.--Lat 40°17'15", long 106°49'33", in SE¹/₄NE¹/₄ sec.29, T.4 N., R.84 W., Routt County, Hydrologic Unit 1405001, on left bank, 0.3 mi downstream from Stagecoach Reservoir, 1.0 mi downstream from Morrison Creek, and 6.5 mi east of Oak Creek.

DRAINAGE AREA.--278 mi².

PERIOD OF RECORD.--September 1939 to September 1944, monthly discharge only for some periods, published in WSP 1313; October 1956 to September 1972; October 1984 to current year. Water-quality data available, July 1984 to September 1992. Prior to October 1990, published as Yampa River near Oak Creek. Statistical summary computed for 1989 to current year.

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,050 ft above sea level, from topographic map. September 1939 to Nov. 15, 1939, nonrecording gage, Nov. 16 1939, to September 1944 and October 1956 to September 1972, water-stage recorder at site 0.5 mi upstream, at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since Dec. 20 1988, by Stagecoach Reservoir (capacity 33,275 acre-ft), 0.3 mi upstream. Diversions for irrigation of about 12,000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and Yamcolo Reservoirs (total capacity, 15,820 acre-ft). Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	35	69	66	74	68	61	45	41	46	52	57
2	75	35	72	60	73	74	56	50	43	46	53	59
3	74	35	72	74	75	80	55	50	43	40	53	43
4	79	35	61	75	73	80	55	50	43	39	53	50
5	91	34	59	73	64	78	54	50	43	49	52	59
6	80	26	72	72	65	67	53	50	43	45	51	59
7	79	26	71	82	64	72	57	45	43	45	50	61
8	81	55	73	77	69	67	53	45	44	45	51	61
9	70	68	73	67	72	68	49	50	42	45	45	61
10	70	66	78	73	75	69	54	50	44	44	52	53
11	79	67	64	50	78	68	52	51	44	45	52	53
12	78	67	61	51	62	58	53	53	44	44	52	62
13	79	59	73	76	61	58	52	51	45	43	63	63
14	83	52	58	72	74	64	52	51	46	43	33	63
15	85	67	76	58	77	65	52	46	46	45	40	55
16	76	64	75	58	78	64	49	50	46	45	53	57
17	78	66	72	71	80	63	49	50	46	45	45	52
18	88	62	59	71	79	64	52	51	44	45	42	49
19	86	61	59	67	70	58	51	50	44	45	51	55
20	82	48	72	70	69	56	51	51	42	45	51	55
21	84	48	72	67	83	62	51	46	43	45	50	55
22	83	51	71	58	85	62	55	46	45	46	50	55
23	74	59	76	58	74	62	49	52	45	46	49	55
24	74	84	77	71	65	61	45	47	46	46	48	50
25	52	81	59	67	68	62	49	45	45	46	48	50
26	33	84	59	69	55	55	50	45	45	46	54	56
27	34	68	72	64	55	55	50	45	45	46	48	57
28	35	68	80	69	68	61	50	42	47	46	48	58
29	35	79	77	59	---	60	50	39	46	47	49	57
30	35	68	75	59	---	60	45	46	54	47	46	57
31	35	---	75	72	---	61	---	45	---	46	56	---
TOTAL	2164	1718	2162	2076	1985	2002	1554	1487	1337	1396	1540	1677
MEAN	69.8	57.3	69.7	67.0	70.9	64.6	51.8	48.0	44.6	45.0	49.7	55.9
MAX	91	84	80	82	85	80	61	53	54	49	63	63
MIN	33	26	58	50	55	55	45	39	41	39	33	43
AC-FT	4290	3410	4290	4120	3940	3970	3080	2950	2650	2770	3050	3330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	MEAN	50.2	52.7	54.8	54.8	52.4	47.3	50.3	63.6	66.6	65.1	61.7	57.0
MAX	69.8	66.9	69.7	69.2	70.9	64.6	70.9	122	122	122	132	97.1	86.5
(WY)	1994	1992	1994	1993	1994	1994	1993	1993	1993	1993	1991	1993	1993
MIN	25.8	37.3	38.7	37.2	30.0	18.0	32.3	12.4	12.8	22.3	34.4	31.8	
(WY)	1991	1991	1989	1989	1989	1989	1989	1989	1989	1989	1989	1990	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1989 - 1994

ANNUAL TOTAL	29673	21098	
ANNUAL MEAN	81.3	57.8	^a 56.4
HIGHEST ANNUAL MEAN			79.1
LOWEST ANNUAL MEAN			32.1
HIGHEST DAILY MEAN	185	May 28	^b 251
LOWEST DAILY MEAN	26	Nov 6	^c 26
ANNUAL SEVEN-DAY MINIMUM	32	Nov 1	^d 7e
INSTANTANEOUS PEAK FLOW			^f 416
INSTANTANEOUS PEAK STAGE			3.34
INSTANTANEOUS LOW FLOW			26
ANNUAL RUNOFF (AC-FT)	58860	41850	40850
10 PERCENT EXCEEDS	106	77	85
50 PERCENT EXCEEDS	77	55	51
90 PERCENT EXCEEDS	58	44	30

a-Average discharge for 25 years (water years 1940-44, 1957-72, 1985-88), 89.4 ft³/s; 64770 acre-ft/yr, prior to completion of Stagecoach Reservoir.

b-Maximum daily discharge for period of record, 1020 ft³/s, Apr 16, 1962.

c-Also occurred Nov 7.

d-Also occurred Jun 2 and Jun 3, 1989.

e-Minimum daily discharge for period of record, 8.9 ft³/s, May 22, 1963.

f-Maximum discharge and stage for period of record, 1400 ft³/s, Apr 16, 1962, gage height, 7.56 ft, from rating curve extended above 570 ft³/s, site and datum then in use

g-Maximum gage height, 8.08 ft, Mar 8, 1987, backwater from ice.

09238705 LONG LAKE INLET NEAR BUFFALO PASS, CO

LOCATION---Lat 40°28'25", Long 106°40'46", in SE¹/4NW¹/4 sec.23, T.6 N., R.83 W., Routt County, Hydrologic Unit 14050001, on right bank 0.1 mi above Long Lake and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA--0.71 mi².

PERIOD OF RECORD--October 1986 to current year.

GAGE--Water-stage recorder. Elevation of gage is 9,875 ft above sea level, from topographic map.

REMARKS---No estimated daily discharges. Records good except for winter period, and those for period May 28 to July 5, which are fair. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.09	.08	.08	.05	.04	.04	.23	21	.84	.02	.04
2	.02	.08	.07	.08	.04	.06	.04	.26	16	1.4	.09	.05
3	.03	.09	.07	.08	.04	.06	.05	.27	16	.89	.08	.07
4	.08	.09	.07	.08	.04	.03	.03	.27	21	.71	.05	.06
5	.06	.09	.07	.08	.05	.03	.04	.51	14	.49	.05	.04
6	.09	.09	.06	.08	.04	.03	.04	.94	15	.35	.04	.04
7	.11	.09	.07	.08	.04	.03	.04	1.2	10	.34	.04	.04
8	.17	.09	.07	.08	.04	.05	.04	1.2	7.1	.34	.05	.04
9	.16	.08	.07	.08	.04	.03	.03	1.6	10	.34	.05	.05
10	.13	.08	.07	.08	.03	.03	.03	1.5	4.1	.23	.07	.05
11	.14	.07	.07	.08	.03	.03	.03	2.3	5.3	.23	.05	.04
12	.18	.08	.07	.08	.04	.03	.03	5.3	9.1	.20	.04	.05
13	.21	.08	.08	.08	.03	.03	.03	3.8	4.3	.24	.04	.04
14	.19	.08	.08	.08	.03	.03	.05	2.9	4.5	.19	.05	.07
15	.17	.09	.08	.08	.03	.02	.05	3.6	4.0	.19	.05	.04
16	.15	.08	.08	.08	.03	.02	.06	7.1	3.3	.19	.04	.04
17	.14	.09	.07	.08	.02	.03	.12	4.5	2.7	.13	.04	.03
18	.15	.07	.07	.08	.02	.03	.21	6.3	2.6	.08	.04	.03
19	.15	.08	.07	.07	.04	.02	.31	5.9	2.5	.06	.03	.04
20	.15	.09	.07	.07	.03	.03	.41	4.7	2.7	.22	.04	.05
21	.19	.08	.07	.07	.05	.03	.47	5.7	2.9	.13	.03	.05
22	.16	.07	.07	.06	.03	.02	.49	5.7	4.3	.12	.04	.04
23	.16	.08	.07	.05	.06	.03	.66	6.1	2.3	.15	.04	.04
24	.16	.08	.07	.04	.08	.03	.77	5.6	1.7	.18	.04	.04
25	.13	.08	.07	.05	.04	.03	.75	8.0	1.6	.18	.04	.05
26	.12	.08	.06	.05	.03	.03	.51	7.8	1.3	.13	.04	.04
27	.17	.08	.06	.05	.03	.03	.39	7.6	1.0	.12	.04	.03
28	.11	.08	.07	.05	.03	.03	.30	13	.87	.02	.05	.03
29	.11	.08	.07	.05	---	.03	.25	13	.90	.01	.06	.05
30	.11	.08	.07	.05	---	.03	.24	15	.81	.00	.05	.05
31	.09	---	.08	.05	---	.03	---	17	---	.00	.04	---
TOTAL	4.01	2.47	2.20	2.15	1.06	0.98	6.51	158.88	192.88	8.70	1.43	1.33
MEAN	.13	.082	.071	.069	.038	.032	.22	5.13	6.43	.28	.046	.044
MAX	.21	.09	.08	.08	.08	.06	.77	17	21	1.4	.09	.07
MIN	.02	.07	.06	.04	.02	.02	.03	.23	.81	.00	.02	.03
AC-FT	8.0	4.9	4.4	4.3	2.1	1.9	13	315	383	17	2.8	2.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1994, BY WATER YEAR (WY)

	MEAN	.14	.093	.085	.065	.063	.056	.44	4.33	10.5	1.26	.13	.10
MAX	.36	.15	.21	.13	.10	.11	1.37	8.67	19.3	4.37	.22	.15	.15
(WY)	1987	1987	1987	1987	1993	1989	1987	1992	1988	1993	1993	1991	1991
MIN	.060	.044	.026	.016	.010	.014	.048	.83	3.13	.28	.046	.044	.044
(WY)	1992	1990	1990	1990	1990	1990	1988	1988	1987	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1987 - 1994
ANNUAL TOTAL	725.88	382.60	
ANNUAL MEAN	1.99	1.05	1.43
HIGHEST ANNUAL MEAN			1.99
LOWEST ANNUAL MEAN			1.05
HIGHEST DAILY MEAN	58	Jun 16	58 Jun 16 1993
LOWEST DAILY MEAN	.01	Sep 23	.00 Jan 24 1988
ANNUAL SEVEN-DAY MINIMUM	.04	Aug 30	.03 Mar 13 1988
INSTANTANEOUS PEAK FLOW			53 Jun 4 1993
INSTANTANEOUS PEAK STAGE			3.09 Jun 4 1993
ANNUAL RUNOFF (AC-FT)	1440	759	1040
10 PERCENT EXCEEDS	5.6	3.1	4.3
50 PERCENT EXCEEDS	.11	.07	.10
90 PERCENT EXCEEDS	.07	.03	.04

a-Also occurred Jun 4.

b-Also occurred Jul 31.

c-Also occurred Jan 25-29, Mar 14-19, 26-30, 1988.

09238710 FISH CREEK TRIBUTARY BELOW LONG LAKE, NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°28'36", Long 106°41'13", in NE¹/4SE¹/4 Sec.22, T.6 N., R.83 W., Routt county, Hydrologic Unit 14050001, on right bank 0.1 mi below Long Lake Spillway and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--1.03 mi².

PERIOD OF RECORD.--August 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,860 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 9-24, and May 23-26. Records good except for estimated daily discharges, which are poor. Flow regulated by Long Lake Reservoir, capacity 397 acre-ft, 0.1 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.00	.00	.00	.00	.00	.00	.00	36	.31	.00	.00
2	.07	.00	.00	.00	.00	.00	.00	.00	26	.22	.00	.00
3	.07	.00	.00	.00	.00	.00	.00	.00	25	.18	.00	.00
4	.05	.00	.00	.00	.00	.00	.00	.00	28	.13	.00	.00
5	.03	.00	.00	.00	.00	.00	.00	.01	21	.08	.00	.00
6	.02	.00	.00	.01	.00	.00	.00	.01	17	.05	.00	.00
7	.02	.00	.00	.01	.00	.00	.00	.01	14	.04	.00	.00
8	.10	.00	.00	.00	.00	.00	.00	.01	10	.03	.00	.00
9	.08	.00	.00	.00	.00	.00	.00	.02	7.0	.02	.00	.00
10	.06	.00	.00	.00	.00	.00	.00	.02	5.1	.02	.00	.00
11	.07	.00	.00	.00	.01	.00	.00	.03	4.7	.02	.00	.00
12	.08	.01	.00	.00	.00	.00	.00	.03	5.0	.02	.00	.00
13	.09	.01	.01	.00	.00	.00	.00	.03	4.9	.02	.00	.00
14	.07	.01	.00	.00	.00	.00	.00	.03	5.1	.01	.00	.00
15	.06	.00	.00	.00	.00	.00	.00	.03	4.9	.01	.00	.00
16	.05	.00	.01	.00	.00	.00	.00	.04	4.1	.01	.00	.00
17	.04	.00	.00	.00	.00	.00	.00	.04	3.4	.01	.00	.00
18	.05	.00	.00	.00	.00	.00	.00	.04	2.9	.01	.00	.00
19	.05	.01	.00	.00	.00	.00	.00	.05	2.7	.00	.00	.00
20	.05	.00	.00	.00	.00	.00	.00	.07	2.5	.00	.00	.00
21	.06	.00	.00	.00	.00	.00	.01	.12	3.2	.00	.00	.00
22	.05	.00	.00	.00	.00	.00	.01	.55	3.6	.00	.00	.00
23	.04	.00	.00	.00	.00	.00	.01	1.2	3.5	.00	.00	.00
24	.03	.00	.00	.00	.00	.00	.01	10	2.3	.00	.00	.00
25	.02	.00	.00	.00	.00	.00	.00	15	1.6	.00	.00	.00
26	.01	.00	.00	.00	.00	.00	.00	20	1.2	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	19	.90	.00	.00	.00
28	.03	.00	.00	.00	.00	.00	.00	19	.64	.00	.00	.00
29	.04	.00	.00	.00	---	.00	.00	22	.48	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	25	.39	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	27	---	.00	.00	---
TOTAL	1.48	0.04	0.02	0.02	0.01	0.00	0.04	159.34	247.11	1.19	0.00	0.00
MEAN	.048	.001	.001	.001	.000	.000	.001	5.14	8.24	.038	.000	.000
MAX	.10	.01	.01	.01	.01	.00	.01	27	36	.31	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.39	.00	.00	.00
AC-FT	2.9	.08	.04	.04	.02	.00	.08	316	490	2.4	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

MEAN	.024	.031	.046	.031	.032	.022	.079	3.20	14.4	1.77	.10	.041
MAX	.061	.14	.34	.26	.29	.18	.68	9.23	31.2	5.26	.48	.20
(WY)	1985	1986	1986	1986	1986	1986	1986	1992	1986	1986	1993	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	4.30	.038	.000	.000
(WY)	1988	1988	1988	1985	1985	1985	1988	1988	1987	1994	1987	1987

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1984 - 1994

ANNUAL TOTAL	585.15	409.25	
ANNUAL MEAN	1.60	1.12	1.64
HIGHEST ANNUAL MEAN			3.69
LOWEST ANNUAL MEAN			.85
HIGHEST DAILY MEAN	33 ^a	36	52 ^a
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		53	81 ^b
INSTANTANEOUS PEAK STAGE		2.04	2.34 ^d
ANNUAL RUNOFF (AC-FT)	1160	812	1190
10 PERCENT EXCEEDS	4.0	.74	3.6
50 PERCENT EXCEEDS	.01	.00	.01
90 PERCENT EXCEEDS	.00	.00	.00

a-No flow many days each year.

b-From rating curve extended above 33 ft³/s.

c-Maximum gage height, 3.51 ft, May 24, backwater from ice.

d-maximum gage height 5.70 ft, May 30, 1991, backwater from ice.

09238750 MIDDLE FORK FISH CREEK NEAR BUFFALO PASS, CO

LOCATION---Lat 40°26'54", Long 106°41'30", in NE¹/4SE¹/4 sec.10, T.6 N., R.83 W., Routt County, Hydrologic Unit 14050001, 30 ft downstream from culvert on Forest Service Road 310, on right bank 0.25 mi upstream from Fish Creek Reservoir, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA--1.37 mi².

PERIOD OF RECORD--August 1984 to current year.

GAGE--Water-stage recorder. Elevation of gage is 9,955 ft above sea level, from topographic map.

REMARKS--Estimated daily discharges: Oct. 28, Apr. 18-29, May 25-30, and June 1-5. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.69	.54	.00	.00	.30	.27	1.4	34	.40	.15	.16
2	.35	.67	.54	.00	.00	.30	.28	1.3	33	.75	.15	.15
3	.35	.58	.54	.00	.04	.30	.27	1.4	36	.90	.12	.12
4	.33	.63	.54	.00	.03	.25	.27	1.4	30	.62	.13	.11
5	.31	.71	.55	.00	.02	.18	.27	1.8	28	.53	.13	.08
6	.32	.64	.55	.00	.03	.28	.26	3.1	26	.40	.12	.08
7	.61	.72	.55	.00	.15	.22	.26	5.9	17	.50	.12	.08
8	.78	.69	.54	.00	.24	.15	.26	10	13	.41	.12	.08
9	.64	.62	.53	.00	.32	.10	.26	10	9.9	.39	.43	.09
10	.67	.66	.52	.04	.35	.22	.26	9.8	8.1	.32	.20	.09
11	.69	.63	.52	.01	.35	.22	.26	8.8	7.4	.33	.15	.09
12	1.0	.64	.54	.00	.23	.16	.26	14	5.5	.23	.14	.10
13	1.1	.67	.56	.00	.17	.23	.27	18	5.9	.22	.13	.10
14	1.1	.69	.57	.00	.21	.21	.32	19	4.5	.23	.12	.30
15	1.1	.66	.54	.00	.22	.19	.29	22	3.7	.21	.11	.16
16	1.0	.66	.46	.05	.15	.12	.36	22	1.1	.20	.11	.13
17	1.0	.65	.39	.00	.26	.23	.80	26	1.2	.19	.11	.10
18	.91	.63	.51	.00	.31	.27	.90	23	2.2	.21	.10	.09
19	.87	.65	.52	.00	.31	.26	.90	21	2.1	.21	.12	.12
20	.91	.63	.53	.00	.31	.20	1.0	22	2.3	.20	.13	.16
21	.93	.60	.32	.01	.31	.08	1.0	20	2.5	.16	.11	.13
22	1.1	.60	.49	.10	.31	.12	1.1	21	4.3	.17	.10	.11
23	.91	.59	.22	.19	.31	.03	1.2	21	2.5	.17	.09	.10
24	1.1	.62	.18	.37	.31	.11	1.2	19	1.7	.19	.08	.10
25	1.0	.63	.20	.30	.30	.13	1.5	25	1.1	.18	.09	.10
26	.95	.61	.05	.37	.30	.14	1.5	30	.86	.15	.08	.09
27	.73	.60	.00	.23	.30	.17	1.6	31	1.1	.14	.07	.09
28	.72	.58	.14	.04	.30	.30	1.6	32	.84	.14	.11	.08
29	.70	.56	.10	.04	---	.29	1.6	29	.50	.15	.11	.09
30	.77	.55	.21	.16	---	.19	1.6	32	.57	.12	.10	.11
31	.75	---	.00	.02	---	.28	---	33	---	.14	.09	---
TOTAL	24.06	19.06	12.45	1.93	6.14	6.23	21.92	534.9	286.87	9.16	3.92	3.39
MEAN	.78	.64	.40	.062	.22	.20	.73	17.3	9.56	.30	.13	.11
MAX	1.1	.72	.57	.37	.35	.30	1.6	33	36	.90	.43	.30
MIN	.31	.55	.00	.00	.00	.03	.26	1.3	.50	.12	.07	.08
AC-FT	48	38	25	3.8	12	12	43	1060	569	18	7.8	6.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1985	.57	1.38	1987	.17	1989
1986	.45	.73	1987	.20	1989
1987	.32	.45	1987	.19	1989
1988	.21	.43	1987	.062	1994
1989	.19	.45	1987	.054	1988
1990	.23	.47	1985	.075	1989
1991	1.67	8.56	1987	.26	1986
1992	12.8	24.4	1992	2.05	1993
1993	25.5	42.1	1991	6.42	1987
1994	2.98	10.9	1993	.30	1994
1995	.45	.80	1985	.13	1994
1996	.37	.58	1985	.11	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1985 - 1994
ANNUAL TOTAL	1479.69	930.03	
ANNUAL MEAN	4.05	2.55	3.80
HIGHEST ANNUAL MEAN			4.94
LOWEST ANNUAL MEAN			2.55
HIGHEST DAILY MEAN	65	36	97
LOWEST DAILY MEAN	a .00	b .00	c .00
ANNUAL SEVEN-DAY MINIMUM	.10	d .00	e .00
INSTANTANEOUS PEAK FLOW		f 50	178
INSTANTANEOUS PEAK STAGE		g 2.61	93.09
ANNUAL RUNOFF (AC-FT)	2930	1840	2750
10 PERCENT EXCEEDS	12	5.9	12
50 PERCENT EXCEEDS	.54	.31	.35
90 PERCENT EXCEEDS	.26	.08	.14

a-Also occurred Dec 31.

b-Also occurred Dec 31, Jan 1-9, 12-15, 17-20, and Feb 1-2.

c-Also occurred Feb 19-20, 1988, Dec 31, 1993, Jan 1-9, 12-15, 17-20, and Feb 1-2, 1994.

d-May have been higher during estimated period.

e-From rating curve extended above 60 ft³/s.

f-Maximum gage height, 4.17 ft, Apr 26, backwater from snow.

g-Maximum gage height, 4.56 ft, Jun 6, 1986.

09238770 GRANITE CREEK NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°29'35", Long 106°41'31", NE¹/4NE¹/4 sec.15, T.6 N., R.83 W., Routt County, Hydrologic Unit 14050001, on left bank 0.1 mi upstream from Fish Creek Reservoir and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--2.82 mi².

PERIOD OF RECORD.--August 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,875 ft above sea level, from topographic map. Prior to Sept. 30, 1992, at site 300 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Apr. 17 to May 20. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report. At times it is not possible to determine peak flows at this site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.5	1.1	.79	.64	.64	.65	1.7	71	4.2	1.0	.61
2	1.1	1.3	1.1	.81	.65	.64	.69	1.6	62	5.1	.99	.69
3	1.0	1.2	1.0	.80	.66	.64	.65	1.7	59	5.6	.88	.63
4	1.0	1.3	1.0	.80	.66	.63	.69	1.7	61	4.3	.84	.57
5	1.0	1.2	1.1	.80	.64	.65	.66	2.1	51	3.3	.80	.50
6	.97	1.3	.95	.80	.63	.66	.64	3.4	47	3.0	.78	.50
7	1.7	1.3	.94	.78	.64	.66	.65	6.2	42	3.6	.75	.49
8	2.8	1.2	.96	.78	.67	.61	.63	10	36	3.1	.78	.47
9	2.7	1.2	.97	.77	.64	.59	.62	10	29	2.4	2.2	.52
10	2.5	1.1	.94	.77	.64	.61	.62	10	26	2.1	1.1	.52
11	2.3	1.1	.88	.72	.67	.62	.60	9.0	26	2.1	.88	.52
12	3.1	1.4	.98	.72	.62	.65	.60	16	25	2.0	.81	.51
13	3.0	2.0	.89	.72	.60	.62	.65	20	24	1.7	.83	.49
14	3.3	1.6	.87	.73	.61	.64	.74	21	24	1.6	.81	.79
15	2.9	1.3	.92	.72	.58	.65	.67	24	21	1.6	.76	.61
16	2.6	1.2	.90	.71	.63	.64	.83	22	18	1.6	.67	.53
17	2.5	1.3	.82	.69	.63	.67	1.2	24	16	1.5	.67	.48
18	2.4	1.5	.79	.71	.66	.64	1.2	24	15	1.3	.61	.46
19	2.4	1.8	.81	.72	.61	.65	1.2	26	15	1.2	.65	.51
20	2.2	1.4	.78	.72	.61	.65	1.3	28	15	1.2	.72	.56
21	2.6	1.2	.78	.68	.61	.64	1.3	33	16	1.1	.65	.53
22	2.6	1.2	.77	.68	.61	.66	1.4	37	19	1.0	.63	.46
23	2.5	1.6	.79	.69	.61	.67	1.5	35	14	1.1	.59	.46
24	2.3	1.2	.77	.71	.63	.65	1.5	34	11	1.2	.54	.45
25	2.2	1.3	.78	.69	.64	.68	1.8	41	8.9	1.1	.55	.44
26	1.8	1.2	.80	.71	.66	.65	1.8	47	7.3	1.0	.54	.43
27	1.4	1.1	.77	.70	.65	.63	1.9	50	6.4	.96	.53	.43
28	1.3	1.1	.77	.70	.64	.66	1.9	54	5.8	.99	.61	.43
29	1.7	1.1	.77	.69	---	.67	1.9	57	5.5	1.1	.62	.41
30	1.5	1.0	.76	.66	---	.64	1.9	62	5.0	1.0	.57	.46
31	1.5	---	.78	.62	---	.65	---	63	---	.98	.53	---
TOTAL	63.87	39.2	27.24	22.59	17.74	19.96	32.39	775.4	781.9	64.03	23.89	15.46
MEAN	2.06	1.31	.88	.73	.63	.64	1.08	25.0	26.1	2.07	.77	.52
MAX	3.3	2.0	1.1	.81	.67	.68	1.9	63	71	5.6	2.2	.79
MIN	.97	1.0	.76	.62	.58	.59	.60	1.6	5.0	.96	.53	.41
AC-FT	127	78	54	45	35	40	64	1540	1550	127	47	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

MEAN	1.21	.91	.64	.47	.47	.57	2.29	19.0	43.4	7.31	1.41	1.06
MAX	2.50	1.47	1.15	.73	.71	1.16	10.2	34.3	71.4	22.1	2.87	2.05
(WY)	1987	1987	1986	1994	1993	1986	1987	1989	1988	1993	1993	1993
MIN	.42	.39	.21	.20	.18	.19	.33	2.40	17.2	2.07	.75	.52
(WY)	1989	1991	1991	1985	1991	1991	1991	1991	1987	1994	1988	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1985 - 1994

ANNUAL TOTAL	2514.93	1883.67	
ANNUAL MEAN	6.89	5.16	6.55
HIGHEST ANNUAL MEAN			8.21
LOWEST ANNUAL MEAN			5.01
HIGHEST DAILY MEAN	78	71	126
LOWEST DAILY MEAN	.54	.41	.13
ANNUAL SEVEN-DAY MINIMUM	.56	.44	.14
INSTANTANEOUS PEAK FLOW		98	a ₁₂₆
INSTANTANEOUS PEAK STAGE		b _{3.99}	c _{10.92}
ANNUAL RUNOFF (AC-FT)	4990	3740	4750
10 PERCENT EXCEEDS	23	17	23
50 PERCENT EXCEEDS	1.2	.92	.80
90 PERCENT EXCEEDS	.67	.60	.32

a-Maximum daily discharge.

b-Maximum gage height 8.62 ft, Apr 23, backwater from snow.

c-Maximum gage height, backwater from ice.

09238900 FISH CREEK AT UPPER STATION, NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°28'30", long 106°47'11", in SE¹/4SE¹/4 sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--October 1966 to September 1972, May 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,150 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Diversions upstream from station by Mount Werner Recreation district and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoir, combined capacity, 2,237 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	15	10	7.2	7.0	6.1	13	44	513	16	2.1	.63
2	5.5	12	9.7	7.0	7.7	6.3	14	48	435	14	1.6	.88
3	5.6	12	9.8	6.9	8.8	6.8	14	47	410	18	1.9	.59
4	4.7	13	8.6	7.0	4.9	7.5	17	46	408	18	1.3	1.0
5	4.7	13	9.4	7.0	4.5	8.3	16	62	340	14	.84	.34
6	5.0	13	10	7.5	3.6	8.5	16	101	301	12	1.4	.24
7	7.6	12	10	7.7	3.2	8.5	15	130	255	22	.64	.41
8	14	12	9.8	7.4	2.9	8.6	15	130	212	35	.45	.19
9	13	11	9.5	7.2	2.9	11	15	135	169	34	4.9	.21
10	11	11	10	7.3	2.8	9.6	15	154	143	32	5.0	.49
11	11	12	9.7	6.8	2.8	7.8	14	180	134	32	1.2	.46
12	18	12	9.3	6.0	3.6	8.4	14	223	127	31	.65	.77
13	18	11	9.1	6.0	4.9	9.3	16	237	121	30	.50	.59
14	18	11	10	6.2	2.0	10	19	234	109	49	.19	2.2
15	19	12	11	6.1	2.5	12	19	239	97	66	.18	2.2
16	21	13	11	5.7	6.0	15	24	263	80	65	.19	1.1
17	19	11	11	5.7	6.3	17	35	292	70	64	.16	.76
18	20	11	10	5.7	6.4	15	48	291	61	61	.45	.55
19	19	12	10	6.0	6.1	16	61	272	56	59	.26	.57
20	17	11	9.4	5.6	7.0	16	77	247	54	56	.41	1.1
21	16	11	8.5	5.6	6.8	17	90	235	63	53	.15	.96
22	16	10	8.0	6.0	6.2	17	108	279	71	49	.19	.61
23	17	10	8.5	6.1	6.1	18	116	412	62	44	.13	.65
24	17	10	9.2	5.9	5.9	18	124	296	46	5.5	.10	.54
25	16	10	8.4	5.7	6.1	16	113	355	37	1.5	.13	.49
26	14	10	8.5	5.8	6.0	15	79	418	31	1.4	.14	.48
27	17	11	8.7	5.8	6.5	17	63	433	26	1.3	.08	.48
28	16	11	7.4	6.8	6.4	14	54	470	23	1.9	.14	.53
29	14	11	7.6	6.0	---	12	48	429	20	1.7	.54	.76
30	12	10	7.3	6.2	---	13	45	468	19	2.3	.52	1.0
31	14	---	6.3	6.4	---	13	---	465	---	1.5	.26	---
TOTAL	425.6	344	285.7	198.3	145.9	377.7	1317	7635	4493	891.1	26.70	21.78
MEAN	13.7	11.5	9.22	6.40	5.21	12.2	43.9	246	150	28.7	.86	.73
MAX	21	15	11	7.7	8.8	18	124	470	513	66	5.0	2.2
MIN	4.7	10	6.3	5.6	2.0	6.1	13	44	19	1.3	.08	.19
AC-FT	844	682	567	393	289	749	2610	15140	8910	1770	53	43
a	209	142	172	184	171	194	145	175	308	334	191	92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	MEAN	10.6	10.0	7.52	6.06	5.83	8.95	36.5	212	365	77.6	8.95	7.00
	MAX	27.7	19.5	12.0	10.7	9.37	16.1	59.0	358	570	263	19.5	18.0
	(WY)	1983	1983	1970	1970	1970	1986	1987	1969	1984	1983	1983	1992
	MIN	2.52	3.07	2.55	2.46	3.42	5.02	8.21	85.5	124	9.82	.86	.73
	(WY)	1993	1989	1989	1989	1989	1984	1983	1983	1987	1987	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	25115.6	16161.78	
ANNUAL MEAN	68.8	44.3	
HIGHEST ANNUAL MEAN			98.6 1984
LOWEST ANNUAL MEAN			41.6 1989
HIGHEST DAILY MEAN	600	513	814 Jun 21 1968
LOWEST DAILY MEAN	1.6 Jan 2	.08 Aug 27	.01 Aug 7 1972
ANNUAL SEVEN-DAY MINIMUM	1.7 Jan 9	.13 Aug 22	.11 Aug 7 1972
INSTANTANEOUS PEAK FLOW		630 May 31	1110 Jun 20 1968
INSTANTANEOUS PEAK STAGE		2.53 May 31	3.14 Jun 20 1968
INSTANTANEOUS LOW FLOW		.08 Aug 27	.01 Aug 7 1972
ANNUAL RUNOFF (AC-FT)	49820	32060	
10 PERCENT EXCEEDS	312	128	234
50 PERCENT EXCEEDS	11	11	9.8
90 PERCENT EXCEEDS	3.8	.60	3.8

a-Diversions, in acre-feet, by Mount Werner Water and Sanitation District, and City of Steamboat Springs.
b-Also occurred Jan 10-12, and 15.

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¹/₄NE¹/₄ sec.17, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft upstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,695.47 ft above sea level. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi upstream at datum 4.16 ft, higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft upstream at datum 0.44 ft, higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder on right bank, 60 ft downstream, at datum 0.44 ft, higher. Sept. 11, 1934, to Aug. 17, 1988, water-stage recorder on right bank, 60 ft downstream, at present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1994, BY WATER YEAR (WY)

MEAN	134	125	103	98.7	101	166	657	1726	1793	360	151	106
MAX	357	195	161	160	165	433	1675	3350	3771	1684	387	238
(WY)	1962	1947	1938	1938	1921	1910	1962	1984	1917	1957	1984	1961
MIN	49.6	69.3	56.6	45.0	50.0	73.5	270	702	141	16.2	40.5	19.5
(WY)	1935	1978	1916	1916	1916	1964	1944	1977	1934	1934	1931	1944

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1910 - 1994	
ANNUAL TOTAL	177688		102990			
ANNUAL MEAN	487		282		461	
HIGHEST ANNUAL MEAN					821	1984
LOWEST ANNUAL MEAN					169	1977
HIGHEST DAILY MEAN	2900	May 29	1980	May 18	5870 ^a	Jun 14 1921
LOWEST DAILY MEAN	80	Jan 13	53	Aug 16	4.0	Sep 8 1934
ANNUAL SEVEN-DAY MINIMUM	83	Jan 8	55	Aug 21	4.9	Sep 9 1944
INSTANTANEOUS PEAK FLOW			2140	May 17	6820 ^b	Jun 14 1921
INSTANTANEOUS PEAK STAGE			5.22	May 17	7.08 ^c	Jun 14 1921
ANNUAL RUNOFF (AC-FT)	352400		204300		333900	
10 PERCENT EXCEEDS	1820		769		1500	
50 PERCENT EXCEEDS	148		127		135	
90 PERCENT EXCEEDS	103		67		74	

c-Maximum gage height, 7.12 ft. Jun 25, 1984.

LOCATION.--Lat 40°30'53", long 106°57'12", in NW¹/4NW¹/4 sec.5, T.6 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on County Road 44, 2.5 mi upstream from mouth, and 3.2 mi east of Milner.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,590 ft above sea level, from topographic map. May 1904 to September 1909, nonrecording gage, at different datum, October 1910 to September 1927, water-stage recorder at different datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1994. BY WATER YEAR (WY)

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1905 - 1994	
ANNUAL TOTAL	212767		127375			
ANNUAL MEAN	583		349		559	
HIGHEST ANNUAL MEAN					886	1917
LOWEST ANNUAL MEAN					282	1992
HIGHEST DAILY MEAN	3720	May 22	2380	May 18	5350	Jun 15 1921
LOWEST DAILY MEAN	^a 48	Feb 5	17	Sep 12	^b 17	Sep 12 1994
ANNUAL SEVEN-DAY MINIMUM	50	Feb 24	21	Sep 7	21	Sep 7 1994
INSTANTANEOUS PEAK FLOW			2680	May 18	^c 5530	Jun 15 1921
INSTANTANEOUS PEAK STAGE			5.23	May 18	6.51	May 21 1993
ANNUAL RUNOFF (AC-FT)	422000		252600		405300	
10 PERCENT EXCEEDS	2260		1470		1870	
50 PERCENT EXCEEDS	115		86		134	
90 PERCENT EXCEEDS	52		45		65	

c-Site and datum then in use.

09242500 ELK RIVER NEAR MILNER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1975 to September 1976 and April 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
DEC 15...	1430	60	145	8.6	0.0	11.0	60	18	3.7	4.8
APR 21...	1030	1080	103	8.1	5.0	12.0	45	13	3.0	2.9
MAY 17...	1230	2280	53	8.8	7.5	10.7	23	6.8	1.4	1.5
AUG 31...	0830	26	153	8.2	11.5	7.2	66	20	3.8	4.0

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
DEC 15...	0.3	1.2	57	13	2.3	0.3	11	89	0.12	14.5
APR 21...	0.2	0.8	41	9.1	0.8	0.2	9.6	65	0.09	189
MAY 17...	0.1	0.6	22	3.5	0.3	0.1	6.5	34	0.05	206
AUG 31...	0.2	1.3	61	12	1.3	0.2	7.8	87	0.12	6.06

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
DEC 15...	<0.01	0.16	0.04	0.30	<0.01	<0.01
APR 21...	<0.01	0.15	0.03	0.30	0.01	0.01
MAY 17...	0.03	0.06	0.02	<0.20	<0.01	<0.01
AUG 31...	<0.01	<0.05	<0.01	<0.20	<0.01	<0.01

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 15...	<1	5	280	<1	20	11	<0.1	<1	<0.2	10
APR 21...	<1	1	2600	<1	140	31	<0.1	<1	<0.2	7
MAY 17...	<1	1	1400	<1	60	9	<0.1	<1	<0.2	16
AUG 31...	<1	<1	110	<1	20	13	0.1	<1	<0.2	<3

09242500 ELK RIVER NEAR MILNER, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT					MAY				
05...	1305	66	124	11.5	18...	0840	2450	51	4.5
NOV					JUN				
17...	0805	56	137	0.0	06...	1520	1640	39	12.0
DEC					JUL				
07...	0900	62	131	0.0	06...	0925	208	86	14.5
FEB					AUG				
10...	1125	58	142	0.0	03...	0715	101	105	15.5
MAR					SEP				
21...	1040	135	237	3.5	06...	1310	22	155	19.0
APR									
05...	1440	230	228	5.0					

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¹/4SW¹/4 sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi upstream from mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi².

PERIOD OF RECORD.--October 1975 to September 1981, April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18 to Mar. 8. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.24	.54	.50	.53	1.3	.97	3.2	2.4	.43	1.2	.00
2	.00	.21	.54	.50	.54	1.4	1.3	3.3	1.7	.94	.84	.00
3	.00	.17	.50	.50	.55	1.5	1.5	3.2	1.7	1.1	1.6	.00
4	.00	.18	.50	.50	.56	1.6	1.8	3.7	1.6	.93	2.1	.00
5	.00	.21	.50	.50	.57	1.6	1.8	3.3	1.3	.81	2.1	.00
6	.00	.19	.52	.50	.58	1.6	1.7	3.1	1.1	.62	2.1	.00
7	.00	.25	.52	.50	.59	1.7	1.8	3.1	1.3	.63	2.0	.00
8	.00	.28	.52	.50	.60	1.7	1.6	3.1	1.1	.35	1.9	.00
9	.10	.12	.52	.50	.62	2.0	1.5	2.9	1.2	.23	2.4	.00
10	.08	.12	.52	.50	.64	3.0	1.7	2.9	1.6	.29	2.4	.00
11	.06	.12	.52	.50	.66	3.9	1.7	2.7	1.9	.17	2.8	.00
12	.08	.31	.52	.50	.68	4.7	1.6	2.5	1.3	.10	2.7	.00
13	.12	.34	.52	.50	.70	5.5	2.0	2.7	.66	.10	2.8	.00
14	.12	.40	.52	.50	.72	5.0	2.0	3.2	.40	.63	2.3	.00
15	.14	.41	.50	.50	.72	4.6	2.0	2.7	.27	.63	2.1	.00
16	.20	.55	.50	.50	.72	4.7	2.0	2.4	.17	.87	1.8	.00
17	.21	.31	.50	.50	.72	5.3	2.1	2.0	.29	2.3	1.0	.00
18	.62	.50	.50	.50	.72	3.7	2.5	1.9	.25	2.7	.49	.00
19	.52	.50	.50	.50	.74	3.0	2.9	1.8	.29	2.8	.20	.00
20	.25	.50	.50	.50	.76	2.7	3.7	1.7	.65	3.0	.13	.00
21	.16	.46	.50	.50	.78	1.3	3.8	1.7	.81	2.9	.09	.00
22	.17	.46	.50	.50	.80	1.2	3.6	1.7	.95	3.0	.06	.00
23	.15	.46	.50	.50	.84	1.6	3.5	1.6	.95	2.8	.00	.00
24	.13	.46	.50	.50	.88	1.4	3.6	1.5	.80	2.9	.00	.00
25	.12	.46	.50	.50	.90	1.5	4.1	1.5	.45	2.3	.00	.00
26	.18	.50	.50	.50	1.0	1.5	4.0	1.5	.54	1.7	.00	.00
27	.13	.50	.50	.50	1.1	1.2	3.8	1.4	.38	1.6	.00	.00
28	.13	.50	.50	.50	1.2	.89	3.7	1.8	.34	1.1	.00	.00
29	.20	.50	.50	.50	---	1.0	3.8	3.0	.36	.51	.00	.00
30	.24	.50	.50	.51	---	1.1	3.5	2.9	.26	.66	.00	.06
31	.18	---	.50	.52	---	.99	---	2.2	---	1.3	.00	---
TOTAL	4.29	10.71	15.76	15.53	20.42	74.18	75.57	76.2	27.02	40.40	35.11	0.06
MEAN	.14	.36	.51	.50	.73	2.39	2.52	2.46	.90	1.30	1.13	.002
MAX	.62	.55	.54	.52	1.2	5.5	4.1	3.7	2.4	3.0	2.8	.06
MIN	.00	.12	.50	.50	.53	.89	.97	1.4	.17	.10	.00	.00
AC-FT	8.5	21	31	31	41	147	150	151	54	80	70	.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1976	.38	1.36	1986	.000	1978
1977	.61	1.98	1985	.000	1978
1978	.56	1.83	1985	.000	1978
1979	.53	1.85	1985	.000	1977
1980	.76	2.46	1986	.000	1978
1981	1.99	7.90	1986	.67	1991
1982	10.9	36.3	1985	1.01	1977
1983	22.2	98.2	1984	1.00	1981
1984	4.85	26.1	1984	.49	1990
1985	1.53	5.89	1984	.092	1989
1986	.61	3.42	1984	.000	1977
1987	.27	1.21	1985	.000	1976

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	1265.21	395.25	
ANNUAL MEAN	3.47	1.08	3.77
HIGHEST ANNUAL MEAN			13.2
LOWEST ANNUAL MEAN			.50
HIGHEST DAILY MEAN	39	5.5	297
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		6.5	329
INSTANTANEOUS PEAK STAGE		1.87	4.08
ANNUAL RUNOFF (AC-FT)	2510	784	2730
10 PERCENT EXCEEDS	11	2.9	8.8
50 PERCENT EXCEEDS	.48	.53	.70
90 PERCENT EXCEEDS	.00	.00	.00

a-No flow many days most years.

b-From rating curve extended above 77 ft³/s.

GREEN RIVER BASIN

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¹/4SW¹/4 sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi downstream from Reservoir No. 1, 6.9 mi upstream from mouth, and 8.7 mi northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi².

PERIOD OF RECORD.--October 1975 to October 1981, April 1982 to September 1983, October 1984 to current year. Water-quality data available September 1975 to September 1993.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 11 to Mar. 8. Records good except for estimated daily discharge, which are poor. Natural flow of stream effected by Reservoir No. 1, which is 2.3 mi upstream of the gage. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	1.1	1.0	1.0	.92	.90	1.1	1.6	1.4	.55	.31	.26
2	.51	1.2	1.0	1.0	.90	1.0	1.3	1.6	1.4	.52	.34	.26
3	.51	1.2	.98	1.0	.88	1.1	1.7	1.6	1.3	.55	.32	.30
4	.51	1.3	.98	1.0	.86	1.2	2.3	1.6	1.2	.52	.29	.31
5	.58	1.4	.98	1.0	.84	1.2	1.8	1.5	1.2	.52	.27	.29
6	.58	1.6	1.0	1.0	.82	1.3	1.5	1.5	1.2	.46	.25	.25
7	.68	1.5	1.0	1.0	.80	1.3	1.4	1.4	1.1	.44	.27	.24
8	.92	1.7	1.0	1.0	.78	1.2	1.7	1.4	1.1	.45	.39	.24
9	.88	1.6	1.0	1.0	.76	1.0	1.9	1.3	1.1	.44	.54	.24
10	.86	1.4	1.0	1.0	.75	.91	2.0	1.3	1.1	.42	.62	.22
11	.81	1.3	1.0	1.0	.74	1.0	1.8	1.3	.99	.41	.57	.24
12	.76	1.3	1.0	1.0	.73	1.1	1.7	1.3	.91	.41	.49	.23
13	.87	1.2	1.0	1.0	.72	1.2	1.7	1.3	.86	.40	.43	.23
14	.87	1.0	1.0	1.0	.71	1.3	2.4	1.4	.80	.38	.39	.27
15	1.1	1.0	1.0	1.0	.72	1.5	2.3	1.4	.71	.36	.36	.28
16	.92	1.0	1.0	1.0	.72	1.6	2.2	1.4	.69	.39	.32	.28
17	1.1	.90	1.0	1.0	.70	1.7	2.4	1.3	.69	.39	.38	.28
18	1.5	.86	1.0	1.0	.70	1.8	2.8	1.3	.73	.38	.37	.28
19	1.3	.86	1.0	1.0	.72	2.6	2.5	1.3	.70	.35	.36	.28
20	1.2	.86	1.0	1.0	.74	3.2	2.2	1.2	.70	.34	.36	.28
21	1.0	.84	1.0	1.0	.76	2.3	2.3	1.2	.83	.31	.36	.31
22	1.0	.84	1.0	1.0	.76	2.4	1.9	1.2	.95	.30	.34	.31
23	1.0	.84	1.0	1.0	.76	2.8	1.7	1.2	.92	.30	.31	.31
24	1.0	.84	1.0	1.0	.78	2.1	1.5	1.2	.91	.33	.30	.31
25	1.0	.84	1.0	1.0	.78	2.0	1.5	1.2	.82	.38	.28	.31
26	1.0	.90	1.0	1.0	.78	1.9	1.6	1.2	.69	.37	.27	.31
27	1.0	.90	1.0	1.0	.78	1.7	1.5	1.2	.58	.32	.26	.30
28	1.0	.90	1.0	1.0	.80	1.3	1.6	1.2	.51	.30	.27	.28
29	1.0	.90	1.0	.98	---	1.3	1.7	1.2	.52	.30	.29	.28
30	1.1	.90	1.0	.96	---	1.1	1.7	1.2	.60	.27	.27	.28
31	1.1	---	1.0	.94	---	1.1	---	1.3	---	.28	.26	---
TOTAL	28.22	32.98	30.94	30.88	21.71	48.11	55.7	41.3	27.21	12.14	10.84	8.26
MEAN	.91	1.10	1.00	1.00	.78	1.55	1.86	1.33	.91	.39	.35	.28
MAX	1.5	1.7	1.0	1.0	.92	3.2	2.8	1.6	1.4	.55	.62	.31
MIN	.51	.84	.98	.94	.70	.90	1.1	1.2	.51	.27	.25	.22
AC-FT	56	65	61	61	43	95	110	82	54	24	22	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	MEAN	.51	.50	.40	.42	.79	1.79	5.86	4.02	1.34	.65	.37	.25
MAX	3.37	2.24	1.11	1.13	6.34	7.90	14.7	13.0	4.44	1.86	1.43	.80	
(WY)	1986	1986	1986	1986	1986	1986	1985	1985	1993	1985	1985	1986	
MIN	.000	.000	.000	.000	.000	.000	.11	.077	.024	.000	.000	.000	
(WY)	1976	1976	1976	1976	1977	1978	1977	1977	1977	1977	1976	1976	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	899.72	348.29	
ANNUAL MEAN	2.46	.95	1.41
HIGHEST ANNUAL MEAN			3.69
LOWEST ANNUAL MEAN			.022
HIGHEST DAILY MEAN	17	3.2	33
LOWEST DAILY MEAN	.08	.22	a .00
ANNUAL SEVEN-DAY MINIMUM	.35	.23	.00
INSTANTANEOUS PEAK FLOW		3.6	55
INSTANTANEOUS PEAK STAGE		1.58	3.38
ANNUAL RUNOFF (AC-FT)	1780	691	1020
10 PERCENT EXCEEDS	7.9	1.6	3.8
50 PERCENT EXCEEDS	1.0	1.0	.51
90 PERCENT EXCEEDS	.60	.30	.00

a-No flow many days most years.

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¹/4SE¹/4 sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.0 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi².

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above sea level, from topographic map. Prior to Feb. 19, 1992, at site 600 ft downstream, at same datum.

REMARKS.--Estimated daily discharges: Nov. 14 to Apr. 6. Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	2.0	1.1	1.1	1.0	1.9	2.1	2.5	1.5	.33	.02	.11
2	.71	1.2	1.1	1.1	1.0	2.0	2.3	2.5	1.4	.29	.00	.15
3	.76	1.2	1.0	1.0	1.0	2.0	2.7	2.3	1.2	.37	.00	.08
4	.79	1.3	1.0	1.0	1.0	2.1	3.3	2.5	1.1	.34	.00	.11
5	.80	1.4	1.0	1.0	1.1	2.1	2.8	2.5	.97	.28	.00	.07
6	.88	1.1	1.0	1.0	1.0	2.2	2.6	2.3	.91	.23	.00	.01
7	1.3	1.1	1.0	1.0	1.0	2.2	2.6	2.1	.80	.26	.00	.00
8	1.5	1.5	1.0	1.0	1.0	2.2	2.9	1.8	.74	.26	.00	.00
9	1.4	1.4	1.0	1.0	1.0	2.1	4.0	1.6	.71	.22	.00	.00
10	1.3	1.4	1.0	1.0	1.1	2.0	4.0	1.6	.68	.17	.09	.00
11	1.2	1.4	1.0	1.0	1.0	2.0	3.6	1.5	.65	.16	.60	.00
12	1.2	1.5	1.0	1.0	1.0	2.2	3.3	1.5	.62	.21	.96	.00
13	1.4	1.6	1.0	1.0	1.0	2.4	2.9	1.6	.60	.15	.79	.00
14	1.3	1.5	1.0	1.1	1.0	2.5	3.4	2.0	.52	.10	.53	.01
15	1.6	1.4	1.0	1.1	1.0	3.0	3.5	1.8	.42	.09	.12	.01
16	1.6	1.3	1.0	1.0	1.0	3.2	3.3	1.6	.37	.16	.03	.02
17	1.6	1.2	1.0	1.0	1.0	3.4	3.2	1.4	.33	.20	.00	.03
18	2.8	1.2	1.0	1.0	1.0	3.6	3.3	1.3	.35	.15	.10	.00
19	3.0	1.2	1.0	1.0	1.0	3.6	3.3	1.3	.39	.11	.41	.00
20	2.4	1.2	1.0	1.0	1.0	3.8	3.1	1.2	.46	.08	.41	.00
21	2.0	1.1	1.0	1.0	1.1	3.3	3.1	1.2	.66	.03	.33	.10
22	1.7	1.1	1.0	1.0	1.2	3.4	2.8	1.1	.82	.00	.27	.13
23	1.6	1.1	1.0	1.0	1.3	3.8	2.5	1.1	1.1	.00	.08	.17
24	1.6	1.1	1.0	1.0	1.4	3.1	2.2	1.1	.89	.00	.00	.12
25	1.5	1.1	1.0	1.0	1.5	3.0	2.4	1.1	.75	.09	.01	.04
26	1.4	1.0	1.0	1.0	1.6	2.9	2.4	1.1	.64	.14	.10	.00
27	1.4	1.0	1.0	1.0	1.7	2.7	2.4	1.1	.52	.00	.04	.01
28	1.3	1.0	1.0	1.0	1.8	2.3	2.7	1.3	.42	.00	.09	.00
29	1.4	1.0	1.0	1.0	---	2.3	3.0	1.3	.43	.00	.08	.14
30	1.5	1.0	1.0	1.0	---	2.1	2.8	1.1	.37	.00	.09	.68
31	1.8	---	1.0	1.0	---	2.1	---	1.1	---	.00	.05	---
TOTAL	45.44	37.6	31.2	31.4	31.8	81.5	88.5	49.5	21.32	4.42	5.20	1.99
MEAN	1.47	1.25	1.01	1.01	1.14	2.63	2.95	1.60	.71	.14	.17	.066
MAX	3.0	2.0	1.1	1.1	1.8	3.8	4.0	2.5	1.5	.37	.96	.68
MIN	.70	1.0	1.0	1.0	1.0	1.9	2.1	1.1	.33	.00	.00	.00
AC-FT	90	75	62	62	63	162	176	98	42	8.8	10	3.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1976	.79	4.05	1986	.000	1976
1977	1.01	5.03	1986	.000	1977
1978	.93	5.96	1986	.000	1978
1979	.94	6.01	1986	.000	1979
1980	1.51	10.4	1986	.000	1980
1981	5.07	17.0	1986	.39	1981
1982	13.4	33.6	1986	.41	1982
1983	8.21	34.9	1984	.043	1983
1984	2.70	10.8	1984	.000	1984
1985	1.31	3.68	1984	.000	1985
1986	.68	2.84	1983	.000	1986
1987	.40	1.77	1984	.000	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	1332.52	429.87	
ANNUAL MEAN	3.65	1.18	3.07
HIGHEST ANNUAL MEAN			7.63
LOWEST ANNUAL MEAN			.070
HIGHEST DAILY MEAN	19 Apr 19	a 4.0 Apr 9	79 Apr 25 1984
LOWEST DAILY MEAN	.29 Aug 20	b .00 Jul 22	c .00 Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	.41 Aug 31	.00 Aug 2	.00 Oct 1 1975
INSTANTANEOUS PEAK FLOW		4.1 Apr 8	90 Apr 22 1980
INSTANTANEOUS PEAK STAGE		4.05 Apr 8	5.18 Apr 22 1980
ANNUAL RUNOFF (AC-FT)	2640	853	2230
10 PERCENT EXCEEDS	13	2.6	8.0
50 PERCENT EXCEEDS	1.1	1.0	.91
90 PERCENT EXCEEDS	.68	.02	.00

a-Also occurred Apr 10.

b-No flow many days.

c-No flow many days, most years.

GREEN RIVER BASIN

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

RAINFALL RECORDS

PERIOD OF RECORD.--July 19, 1978 to current year.

INSTRUMENTATION.--Belfort weighing bucket rain gage.

REMARKS.--Unpublished rainfall data for water years 1978-86, and 1989 are available in district office.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.70	.00
2	.00	.00	.26	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.10	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
4	.00	.00	.08	.04	.00	.00	.05	.00	.00	.00	.00	.00
5	.00	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.03	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.02	.00	.00	.15	.00	.00	.00	.20	.00
9	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.27	.01
10	.00	.00	.06	.00	.00	.00	.06	.00	.00	.13	.00	.00
11	.00	.00	.02	.06	.00	.00	.00	.00	.00	.06	.00	.00
12	.02	.18	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00
13	.18	.35	.00	.00	.13	.00	.00	.28	.00	.00	.00	.07
14	.32	.30	.10	.04	.00	.00	.14	.00	.00	.00	.00	.19
15	.55	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.42	.00	.04	.06	.00	.00	.00	.00	.00	.00	.13	.00
17	.34	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.22	.00	.00	.03	.13	.00	.00	.00	.00	.00	.00	.00
19	.10	.08	.00	.00	.03	.00	.00	.00	.01	.00	.04	.03
20	.10	.10	.00	.06	.07	.00	.00	.00	.37	.00	.00	.18
21	.00	.08	.20	.00	.00	.00	.00	.00	.06	.00	.00	.00
22	.00	.00	.38	.00	.03	.00	.00	.00	.19	.02	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00
25	.00	.00	.00	.00	.00	.10	.27	.00	.00	.00	.02	.00
26	.06	.00	.00	.01	.08	.19	.11	.00	.00	.00	.00	.00
27	.00	.00	.10	.00	.09	.00	.14	.08	.00	.00	.08	.00
28	.08	.00	.00	.00	.00	.00	.18	.05	.00	.00	.03	.00
29	.00	.00	.00	.07	---	.00	.01	.00	.00	.00	.03	.17
30	.00	.00	.00	.03	---	.02	.00	.00	.00	.00	.00	.04
31	.00	---	.00	.00	---	.00	---	.32	---	.06	.00	---
TOTAL	2.42	1.19	1.41	0.56	0.56	0.31	1.26	0.83	0.63	0.47	1.50	0.69

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¹/₄NE¹/₄ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi upstream from North Fork Elkhead Creek, 4.5 mi northwest of Elkhead, and 12 mi north of Hayden.

DRAINAGE AREA.--67.7 mi² (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,845 ft above sea level, from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 29 to Nov. 6, Nov. 15-16, Nov. 20 to Dec. 4, Dec. 6-9, Dec. 14-20, Jan. 9-11, Jan. 23 to Mar. 30, and Sept. 9-30. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.7	5.4	6.6	6.8	5.2	7.8	125	61	6.6	1.8	.90
2	3.6	4.7	5.5	6.4	6.6	5.3	9.6	184	53	6.1	1.8	1.0
3	3.5	4.6	5.3	6.6	6.4	5.3	13	208	45	7.0	1.9	1.1
4	3.4	4.7	5.1	7.1	6.4	5.5	22	176	40	6.7	1.9	1.2
5	3.2	4.6	4.8	7.9	6.2	6.0	22	239	35	5.9	1.9	1.2
6	3.4	4.5	4.9	8.5	6.0	5.5	19	345	31	5.2	1.9	1.0
7	4.3	4.6	5.2	8.2	5.8	5.8	16	409	28	4.7	1.9	.86
8	8.4	4.6	5.4	8.7	5.9	6.0	14	359	26	4.9	1.9	.77
9	7.8	4.8	5.5	8.4	5.6	5.7	13	319	23	4.5	2.5	.80
10	7.4	5.0	5.7	8.3	5.3	6.0	13	300	22	3.9	4.2	.83
11	7.6	4.8	5.8	8.1	5.2	6.0	12	274	20	3.4	4.0	.91
12	7.1	4.6	6.0	8.7	5.4	6.2	12	267	19	3.2	3.5	.89
13	11	4.9	6.2	7.9	4.9	6.4	24	255	18	3.1	3.5	.93
14	9.1	4.4	6.1	7.8	4.7	6.3	59	268	16	2.8	3.5	1.0
15	14	5.1	6.5	8.7	4.6	6.1	73	223	15	2.5	3.5	1.1
16	14	5.2	6.6	8.9	4.4	6.6	121	191	14	2.3	3.5	1.0
17	13	4.5	6.1	7.9	4.6	6.7	213	179	13	2.3	3.5	1.1
18	15	5.6	6.2	7.5	4.7	6.8	300	160	12	2.3	3.5	1.2
19	17	4.1	6.1	8.0	4.5	6.9	355	143	12	2.3	3.4	1.3
20	13	5.0	6.3	8.7	4.5	6.8	408	129	11	2.2	5.5	1.4
21	10	5.5	6.1	8.5	4.7	7.1	459	113	10	2.0	5.0	1.4
22	8.0	5.7	5.8	9.2	4.8	7.2	485	101	9.6	1.8	5.0	1.3
23	7.4	5.9	5.7	8.3	4.9	7.3	515	92	11	1.8	4.8	1.5
24	6.6	5.8	5.8	8.1	5.1	7.4	473	86	11	1.8	4.5	1.6
25	6.4	5.8	5.4	8.2	5.2	7.5	375	79	10	2.0	4.2	1.7
26	6.2	5.7	5.4	7.9	5.1	7.4	240	74	9.5	2.0	3.9	1.8
27	6.0	5.7	5.6	7.7	5.3	7.6	171	69	8.7	1.9	3.4	1.8
28	5.0	5.6	6.0	7.5	5.1	7.7	142	70	8.1	1.8	2.5	1.7
29	4.9	5.7	6.4	7.4	---	7.9	125	77	7.8	1.8	1.7	1.9
30	4.8	5.6	6.3	7.0	---	7.8	121	64	7.4	1.8	1.2	2.1
31	4.8	---	6.4	7.1	---	7.9	---	54	---	1.8	.85	---
TOTAL	239.6	152.0	179.6	245.8	148.7	203.9	4832.4	5632	607.1	102.4	96.15	37.29
MEAN	7.73	5.07	5.79	7.93	5.31	6.58	161	182	20.2	3.30	3.10	1.24
MAX	17	5.9	6.6	9.2	6.8	7.9	515	409	61	7.0	5.5	2.1
MIN	3.2	4.1	4.8	6.4	4.4	5.2	7.8	54	7.4	1.8	.85	.77
AC-FT	475	301	356	488	295	404	9590	11170	1200	203	191	74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

MEAN	6.57	6.77	5.84	5.33	5.62	10.8	114	357	114	13.9	4.49	3.58
MAX	25.6	21.9	14.8	13.3	13.4	40.8	316	830	357	50.0	14.4	15.5
(WY)	1987	1987	1987	1987	1974	1986	1962	1984	1957	1957	1984	1984
MIN	1.71	1.45	1.95	1.78	2.20	3.50	16.0	64.4	11.3	.94	.30	.22
(WY)	1978	1961	1992	1977	1959	1955	1970	1977	1977	1977	1961	1955

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1953 - 1994
ANNUAL TOTAL	27611.42	12476.94	
ANNUAL MEAN	75.6	34.2	54.6
HIGHEST ANNUAL MEAN			113
LOWEST ANNUAL MEAN			16.6
HIGHEST DAILY MEAN	1050	May 15	1890
LOWEST DAILY MEAN	.42	Sep 14	a .00
ANNUAL SEVEN-DAY MINIMUM	.58	Sep 10	.86
INSTANTANEOUS PEAK FLOW			b 2850
INSTANTANEOUS PEAK STAGE			7.58
ANNUAL RUNOFF (AC-FT)	54770	24750	39580
10 PERCENT EXCEEDS	264	106	172
50 PERCENT EXCEEDS	7.4	6.0	6.7
90 PERCENT EXCEEDS	3.7	1.8	2.2

a-Also occurred Sep 12-19, 24, 1955, Aug 27-29, 1961, and Aug 14-19, 1977.

b-From rating curve extended above 1500 ft³/s, on basis of slope-area determination of peak flow.

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
DEC 20...	1200	6.3	308	7.9	0.0	11.2	K7	K7
APR 22...	1130	389	143	7.6	4.0	11.3	2100	730
JUN 01...	1130	66	163	8.2	13.0	8.3	440	200
AUG 31...	1030	0.83	306	8.5	13.5	8.4	K18	K9

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P)
DEC 20...	<0.01	0.10	0.02	--	<0.20	<0.01	<0.01
APR 22...	<0.01	0.30	0.02	0.38	0.40	<0.01	0.02
JUN 01...	<0.01	0.07	<0.01	--	0.20	<0.01	<0.01
AUG 31...	<0.01	<0.05	<0.01	--	<0.20	<0.01	<0.01

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 20...	<1	3	300	<1	<10	<10	<0.1	<1	<0.2	<10
APR 22...	<1	2	2500	<1	70	30	<0.1	<1	<0.2	<10
JUN 01...	<1	1	830	<1	30	<10	<0.1	<1	<0.2	<10
AUG 31...	<1	<1	70	<1	<10	<10	0.1	<1	<0.2	<10

K-Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	1102	3.0	290	8.5	JUN 27...	1440	8.4	218	24.0
FEB 16...	1041	4.4	327	0.0	JUL 18...	1050	2.4	248	17.5
APR 01...	1045	3.1	426	4.0	AUG 11...	1027	3.9	236	18.5
MAY 06...	1150	308	139	8.5					
26...	1017	77	145	11.0					

09247600 YAMPA RIVER BELOW CRAIG, CO

LOCATION.--Lat 40°28'51", long 107°36'49", in SW¹/₄NW¹/₄ sec.16, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank 0.5 mi downstream from state highway 13-789 bridge and 3.3 mi southwest of Craig.

DRAINAGE AREA.--1,750 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to September 1980 (discharge measurements only), October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,100 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-24, Nov. 28 to Mar. 7, July 30 to Aug. 5, and Sept. 9. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, Colorado Ute Power Plants at Hayden and Craig, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	279	288	232	186	477	461	1810	4530	524	56	13
2	198	311	286	239	205	512	501	1820	4540	446	47	39
3	190	312	282	238	210	564	616	1980	3940	443	45	56
4	194	311	277	230	226	608	703	1990	3690	496	40	71
5	196	321	282	231	216	639	812	2040	3610	452	30	66
6	183	277	276	237	224	695	700	2510	3270	320	28	66
7	202	254	272	238	231	750	646	3250	2950	281	38	64
8	237	228	269	230	243	758	668	3570	2650	278	24	28
9	298	228	262	230	241	711	676	3720	2280	349	38	15
10	366	248	279	237	251	535	688	3850	1990	266	61	24
11	320	322	261	234	257	569	669	3940	1850	240	104	42
12	298	357	255	241	253	663	638	4280	1800	263	111	21
13	325	368	247	237	243	709	601	4570	1770	254	88	38
14	436	351	251	228	243	712	732	4720	1690	210	80	51
15	471	341	242	231	235	702	982	4770	1580	177	57	42
16	502	316	246	238	245	737	1010	4570	1420	182	48	52
17	488	275	237	231	255	856	1290	4910	1280	198	49	62
18	475	289	238	236	263	841	1670	4890	1120	212	28	64
19	519	257	234	242	278	767	2020	4690	1010	198	23	56
20	515	238	236	252	291	959	2450	4590	1040	185	33	48
21	464	256	232	247	308	896	2790	4200	1090	172	37	50
22	400	272	226	236	314	738	3320	3780	1160	169	33	68
23	405	284	233	224	333	856	3600	3850	1510	153	28	70
24	394	281	226	217	345	822	3870	3680	1260	158	31	68
25	376	284	228	203	351	700	3690	3500	1000	152	25	62
26	352	283	233	196	395	751	3120	3780	852	134	21	64
27	325	265	224	192	435	679	2490	3850	732	118	23	54
28	267	293	228	193	470	529	2210	3860	649	103	24	47
29	321	288	234	193	---	478	2060	4120	603	76	10	53
30	312	279	230	186	---	486	1940	4130	576	55	10	65
31	257	---	234	192	---	452	---	4230	---	50	11	---
TOTAL	10504	8668	7748	6991	7747	21151	47623	115450	57442	7314	1281	1519
MEAN	339	289	250	226	277	682	1587	3724	1915	236	41.3	50.6
MAX	519	368	288	252	470	959	3870	4910	4540	524	111	71
MIN	183	228	224	186	186	452	461	1810	576	50	10	13
AC-FT	20830	17190	15370	13870	15370	41950	94460	229000	113900	14510	2540	3010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	315	307	238	218	296	750	2316	4454	3489	793
MAX	607	505	407	336	841	1718	4835	7524	6274	1857
(WY)	1987	1985	1985	1985	1986	1986	1985	1985	1986	1986
MIN	144	167	146	114	111	229	1346	2172	1370	233
(WY)	1990	1989	1988	1989	1989	1988	1991	1990	1987	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1985 - 1994
ANNUAL TOTAL	569469	293438	
ANNUAL MEAN	1560	804	1134
HIGHEST ANNUAL MEAN			1910
LOWEST ANNUAL MEAN			734
HIGHEST DAILY MEAN	10300	4910	10300
LOWEST DAILY MEAN	178	10	1.3
ANNUAL SEVEN-DAY MINIMUM	197	16	13
INSTANTANEOUS PEAK FLOW		5490	10500
INSTANTANEOUS PEAK STAGE		7.36	9.41
ANNUAL RUNOFF (AC-FT)	1130000	582000	821300
10 PERCENT EXCEEDS	5320	3020	3660
50 PERCENT EXCEEDS	357	279	340
90 PERCENT EXCEEDS	227	50	141

a-Also occurred Aug 30.

b-Maximum gage height, 9.68 ft, May 6, 1985.

GREEN RIVER BASIN

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to September 1980. October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 20...	1400	236	415	7.8	0.0	11.6	K3	K5	150	36	14
MAR 29...	1500	518	564	8.2	4.5	10.2	28	21	190	44	19
MAY 19...	1030	4370	92	8.3	10.5	9.8	240	240	35	9.5	2.7
AUG 31...	1300	14	504	8.6	20.5	7.2	41	32	150	35	15

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC 20...	28	1	3.1	123	72	11	0.2	8.5	248	0.34	158
MAR 29...	33	1	2.2	135	140	11	0.2	8.3	340	0.46	476
MAY 19...	4.1	0.3	0.9	31	11	1.2	<0.1	7.4	56	0.08	657
AUG 31...	45	2	3.0	107	92	18	0.3	2.8	276	0.38	10.4

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
DEC 20...	<0.01	0.32	0.04	<0.20	0.04	0.02
MAR 29...	0.01	0.33	0.02	0.40	0.03	0.04
MAY 19...	<0.01	0.05	0.01	0.20	<0.01	0.01
AUG 31...	<0.01	0.11	0.01	0.80	0.08	0.04

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 20...	<1	1	200	<1	40	23	<0.1	<1	<0.2	<3
MAR 29...	<1	5	440	<1	150	65	<0.1	2	<0.2	10
MAY 19...	<1	2	1800	<1	70	8	<0.1	<1	<0.2	<3
AUG 31...	<1	3	1400	<1	70	2	<0.1	<1	<0.2	3

K-Based on non-ideal colony count.

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT					JUL				
13...	1323	377	351	14.0	14...	1245	224	261	21.0
DEC					25...	0910	184	281	20.5
28...	1143	230	405	0.0	AUG				
FEB					04...	1127	72	396	22.5
15...	1320	233	435	0.0	05...	1430	61	391	24.5
APR					11...	1237	134	375	23.5
01...	1415	455	561	8.0	22...	1315	63	458	22.0
JUN									
24...	1112	1300	138	18.0					

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO

LOCATION.--Lat 40°26'14", Long 107°38'50", in SE¹/₄NW¹/₄ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, 6.1 mi north-northeast of Hamilton, and 8 mi south-southwest of Craig.

DRAINAGE AREA.--419 mi².

PERIOD OF RECORD.--February 1984 to current year. Sediment data available June 1975 to September 1980, and April 1987 to September 1991.

GAGE.--Water stage recorder. Elevation of gage is 6,170 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1-5, 7-8, 10-15, 18-20, 22-25, and Nov. 28 to Feb. 28. Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	52	58	59	83	59	187	457	36	18	25
2	28	32	49	56	52	91	72	177	384	34	23	27
3	28	35	48	53	53	96	77	187	318	40	26	27
4	29	33	50	56	54	104	84	212	290	51	27	27
5	33	36	51	54	58	117	93	244	262	44	25	24
6	36	35	49	52	61	120	78	443	231	36	21	21
7	42	31	48	53	60	118	73	639	206	33	14	18
8	61	33	46	57	57	128	80	664	184	32	15	16
9	68	38	48	53	56	119	84	656	165	31	19	14
10	65	36	46	52	51	110	84	658	147	24	32	17
11	62	33	44	59	47	110	81	655	130	22	36	16
12	58	35	45	54	46	99	79	803	118	26	30	14
13	71	37	48	53	48	98	75	709	112	26	28	13
14	70	34	42	60	50	98	94	719	104	28	28	16
15	70	36	43	55	50	96	108	724	90	30	25	15
16	72	37	44	53	54	95	103	684	81	28	23	20
17	68	26	46	58	57	101	131	792	72	26	22	18
18	72	32	42	56	58	98	172	707	65	27	21	17
19	71	39	41	55	60	96	196	613	62	26	23	18
20	64	42	46	51	59	111	232	601	74	24	38	18
21	59	44	45	53	62	99	261	486	102	24	50	20
22	54	43	47	56	63	92	326	444	115	23	33	28
23	56	46	47	57	60	100	436	447	175	23	28	25
24	53	46	48	60	66	96	551	400	118	25	19	23
25	50	42	49	62	69	87	549	352	86	28	19	22
26	51	45	46	63	72	83	377	384	71	26	20	22
27	47	40	48	65	77	73	276	369	60	23	20	21
28	39	46	47	57	80	52	241	387	49	21	21	19
29	54	50	48	54	---	70	222	406	45	18	25	14
30	47	53	50	55	---	65	204	407	43	17	28	17
31	30	---	53	57	---	56	---	392	---	15	28	---
TOTAL	1637	1145	1456	1737	1639	2961	5498	15548	4416	867	785	592
MEAN	52.8	38.2	47.0	56.0	58.5	95.5	183	502	147	28.0	25.3	19.7
MAX	72	53	53	65	80	128	551	803	457	51	50	28
MIN	28	26	41	51	46	52	59	177	43	15	14	13
AC-FT	3250	2270	2890	3450	3250	5870	10910	30840	8760	1720	1560	1170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	MEAN	67.0	64.9	58.3	55.7	59.6	97.0	326	1009	607	153	71.0	51.0
MAX	140	117	106	79.5	108	165	680	2228	1720	494	220	113	
(WY)	1985	1985	1985	1985	1986	1986	1985	1984	1984	1984	1984	1984	1984
MIN	32.3	36.6	39.2	37.9	40.8	70.3	170	396	147	28.0	25.3	19.7	
(WY)	1993	1993	1990	1991	1991	1991	1991	1990	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	92943	38281	
ANNUAL MEAN	255	105	196
HIGHEST ANNUAL MEAN			357
LOWEST ANNUAL MEAN			105
HIGHEST DAILY MEAN	2490	May 22	3980
LOWEST DAILY MEAN	26	Nov 17	13
ANNUAL SEVEN-DAY MINIMUM	31	Sep 29	15
INSTANTANEOUS PEAK FLOW			990
INSTANTANEOUS PEAK STAGE			5.36
ANNUAL RUNOFF (AC-FT)	184400	75930	141900
10 PERCENT EXCEEDS	782	268	611
50 PERCENT EXCEEDS	52	53	74
90 PERCENT EXCEEDS	37	22	37

a-Also occurred Jul 18-19, 1934.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.

WATER TEMPERATURES: November 1950 to August 1973, July 1975 to current year.

SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1982.

INSTRUMENTATION:--Water-quality monitor since July 1975.

REMARKS:--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. Temperature record rated good. Specific conductance record is good. Periods of missing record are due to sensor fouling or instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1260 microsiemens, Nov. 17, 1985; minimum, 78 microsiemens, June 1, 2, 1994.

WATER TEMPERATURE: Maximum, 33.0°C, Aug. 29, 1976; minimum, 0.0°C, on many days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily, 6,180 mg/l, Aug. 16, 1981; minimum daily, 1 mg/l, several days during December 1975 to February 1976, Jan. 6, 1980.

SEDIMENT LOADS: Maximum daily, 47,100 tons, May 9, 1958; minimum daily, 0.04 ton, Oct. 2, 3, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 935 microsiemens, Sept. 5; minimum, 78 microsiemens, June 1-2.

WATER TEMPERATURES: Maximum recorded, 28.3°C, August 3; minimum recorded, 0.0°C, during the winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT										
27...	1433	367	431	8.1	6.0	--	150	35	16	27
NOV										
23...	1100	327	577	8.6	0.0	10.9	210	47	23	40
DEC										
07...	1600	320	559	8.4	0.0	11.5	210	45	23	41
JAN										
28...	1200	242	585	8.0	0.0	11.1	210	47	23	39
FEB										
16...	1400	299	587	7.7	0.0	10.9	210	45	23	41
MAR										
08...	1430	903	685	8.0	0.5	10.6	210	43	26	53
APR										
13...	1600	695	713	8.6	11.5	9.5	250	50	31	50
MAY										
09...	1400	4350	176	8.7	13.5	9.1	66	17	5.8	6.6
JUN										
25...	1430	1090	181	--	22.0	8.2	64	16	5.8	10
JUL										
28...	1400	96	466	8.8	26.5	7.7	140	32	15	42
SEP										
02...	1430	12	881	8.3	22.5	8.0	230	47	28	100

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT										
27...	0.9	2.0	124	82	9.6	0.30	3.3	250	0.34	247
NOV										
23...	1	2.5	166	130	14	0.20	6.0	362	0.49	320
DEC										
07...	1	2.4	153	120	15	0.20	7.3	346	0.47	299
JAN										
28...	1	2.5	165	130	14	0.20	9.9	365	0.50	238
FEB										
16...	1	2.9	165	120	15	0.20	11	357	0.49	288
MAR										
08...	2	3.9	124	200	15	0.20	8.4	427	0.58	1040
APR										
13...	1	2.4	146	210	13	0.20	2.0	446	0.61	837
MAY										
09...	0.4	1.1	62	24	1.6	0.10	9.6	104	0.14	1220
JUN										
25...	0.5	1.1	61	24	3.4	0.10	6.9	104	0.14	305
JUL										
28...	2	2.7	141	76	16	0.30	1.1	270	0.37	69.9
SEP										
02...	3	4.4	223	160	46	0.30	5.1	525	0.71	16.7

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
MAR 08...	0.01	0.68	0.15	0.50	0.07	0.04
MAY 09...	0.01	0.12	0.03	0.20	0.02	0.02
JUN 25...	<0.01	<0.05	0.02	0.30	0.01	<0.01
JUL 28...	<0.01	<0.05	0.05	0.40	<0.01	<0.01
SEP 02...	<0.01	<0.05	0.06	0.40	<0.01	<0.01

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 04...	1230	176	512	15.5	AUG 16...	1325	41	701	22.5
APR 06...	1120	881	582	8.0	SEP 12...	1035	18	655	21.0
						1347	5.9	848	20.5

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	464	---	525	586	611	644	241	90	296	529	900
2	481	472	---	533	587	619	632	242	90	313	546	886
3	486	484	---	537	588	609	639	229	92	326	563	892
4	---	486	---	533	590	---	633	206	100	339	575	901
5	---	479	---	530	586	---	586	199	98	346	595	921
6	---	471	---	534	584	---	563	199	94	356	619	845
7	---	480	---	539	579	---	547	---	99	361	658	796
8	---	473	545	540	574	---	572	---	106	372	667	823
9	---	486	541	543	561	---	605	---	114	384	668	838
10	---	499	541	545	548	---	626	172	127	399	722	833
11	---	508	533	547	548	---	652	164	140	400	735	836
12	---	507	531	550	564	---	701	156	147	405	723	846
13	489	491	527	553	571	---	710	142	150	397	669	859
14	458	477	553	551	569	---	684	136	150	394	692	878
15	440	474	---	548	566	726	687	139	150	409	750	876
16	418	---	---	546	565	726	581	133	149	430	710	806
17	394	---	---	546	568	779	485	130	153	448	690	752
18	388	---	---	546	569	776	454	117	164	476	676	727
19	398	---	---	549	594	805	373	108	175	502	652	720
20	395	---	---	548	585	763	306	105	187	506	640	724
21	384	---	---	549	691	731	258	102	197	488	643	759
22	396	---	---	554	688	757	226	108	208	475	639	780
23	405	---	---	563	630	734	198	109	207	473	655	781
24	419	---	---	563	612	672	175	102	202	461	676	766
25	422	---	---	567	592	629	149	107	192	463	696	731
26	418	---	---	568	535	628	139	107	221	460	724	716
27	424	---	---	566	510	643	150	96	242	464	751	719
28	432	---	---	567	586	643	161	94	261	470	779	719
29	428	---	---	567	---	666	175	100	273	470	820	717
30	443	---	---	561	---	668	211	101	285	494	861	723
31	533	---	---	563	---	673	---	97	---	513	912	---
MONTH	---	---	---	549	583	---	451	---	162	422	685	802

GREEN RIVER BASIN

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.1	10.6	5.0	1.5	.0	.0	---	---	---	---	---	---
2	16.0	10.7	4.0	1.0	.0	.0	---	---	---	---	---	---
3	15.8	10.6	3.0	1.5	.0	.0	---	---	---	---	---	---
4	---	---	3.0	1.5	.0	.0	---	---	---	---	---	---
5	---	---	3.0	.5	.0	.0	---	---	---	---	---	---
6	---	---	2.5	.0	.0	.0	---	---	---	---	---	---
7	---	---	2.0	.0	---	---	---	---	---	---	---	---
8	---	---	1.5	.0	---	---	---	---	---	---	---	---
9	---	---	1.5	.0	---	---	---	---	---	---	---	---
10	---	---	1.0	.0	---	---	---	---	---	---	---	---
11	---	---	2.0	.0	---	---	---	---	---	---	---	---
12	---	---	1.5	.5	---	---	---	---	---	---	---	---
13	11.5	9.4	2.0	.5	---	---	---	---	---	---	---	---
14	11.4	9.7	2.0	1.0	---	---	---	---	---	---	---	---
15	10.5	8.8	1.5	.0	---	---	---	---	---	---	---	---
16	10.0	8.0	1.0	.0	---	---	---	---	---	---	---	---
17	9.9	8.7	.5	.0	---	---	---	---	---	---	---	---
18	9.4	8.2	.0	.0	---	---	---	---	---	---	---	---
19	10.0	7.4	.0	.0	---	---	---	---	---	---	---	---
20	9.9	7.7	.0	.0	---	---	---	---	---	---	---	---
21	9.2	6.8	.0	.0	---	---	---	---	---	---	---	---
22	8.9	6.8	.0	.0	---	---	---	---	---	---	---	---
23	9.2	6.3	.0	.0	---	---	---	---	---	---	7.0	4.5
24	9.1	6.3	.0	.0	---	---	---	---	---	---	6.7	4.1
25	9.1	6.4	.0	.0	---	---	---	---	---	---	7.7	4.5
26	7.7	5.3	.0	.0	---	---	---	---	---	---	7.1	5.2
27	5.8	3.3	.0	.0	---	---	---	---	---	---	5.2	2.9
28	4.7	1.2	.0	.0	---	---	---	---	---	---	4.9	1.3
29	1.2	.2	.0	.0	---	---	---	---	---	---	5.7	2.8
30	.2	.0	.0	.0	---	---	---	---	---	---	7.2	2.8
31	2.9	.1	---	---	---	---	---	---	---	---	8.5	4.0
MONTH	---	---	5.0	.0	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	5.7	10.8	8.0	14.6	12.9	23.8	20.4	25.2	19.4	23.9	14.9
2	9.9	6.3	13.2	9.7	14.9	12.9	22.0	19.8	26.8	18.4	23.8	14.0
3	10.6	7.0	12.4	10.9	15.8	13.8	21.8	18.1	28.3	18.4	21.8	16.7
4	10.0	7.9	12.3	9.6	16.5	14.3	22.4	17.4	28.2	18.4	24.4	14.0
5	8.9	6.1	13.4	10.6	17.0	14.5	22.3	17.6	25.9	18.2	23.5	12.8
6	8.3	6.5	15.4	11.7	16.8	14.7	21.9	17.7	26.4	15.8	22.6	13.0
7	7.5	5.0	14.8	12.7	16.7	14.5	20.7	16.1	26.6	17.1	23.5	14.1
8	8.0	3.6	14.0	11.3	16.8	13.9	22.7	15.3	21.9	17.8	23.3	13.7
9	7.5	5.6	13.6	11.7	17.2	13.6	24.1	17.4	21.5	17.6	20.5	14.2
10	9.3	6.2	13.7	11.4	18.0	14.1	23.6	18.8	26.3	15.7	21.5	13.5
11	8.3	6.0	14.2	11.5	18.7	15.1	24.3	19.0	26.8	19.5	21.3	14.0
12	9.6	4.6	14.2	12.4	18.4	16.2	23.7	18.4	25.7	18.9	21.4	14.0
13	11.7	7.7	12.4	11.0	18.7	16.2	23.2	17.7	26.3	18.8	18.5	14.1
14	11.5	9.6	11.9	10.1	18.2	15.3	22.1	17.8	26.7	18.7	20.0	13.6
15	12.2	7.4	12.3	10.5	18.8	15.0	22.3	17.4	26.9	18.2	19.2	11.0
16	13.8	9.4	12.6	11.2	19.1	15.5	21.3	17.0	24.8	17.8	20.3	11.6
17	14.6	10.7	12.3	11.1	20.3	16.2	22.5	16.3	27.8	18.0	20.2	12.4
18	15.0	11.6	12.9	10.8	21.1	17.1	22.2	16.8	23.1	17.3	20.9	12.4
19	14.6	12.7	12.5	11.1	21.3	18.6	23.1	17.9	24.2	18.0	19.2	12.5
20	14.7	12.3	12.4	11.5	22.6	18.7	24.3	18.4	26.2	15.5	18.1	12.0
21	14.1	11.8	12.8	10.7	21.8	19.5	25.0	17.5	25.1	17.3	18.6	12.2
22	13.7	11.1	13.4	10.9	22.0	19.5	25.4	17.8	25.8	17.2	18.3	8.7
23	13.4	11.4	13.5	12.1	22.6	18.8	25.2	19.3	26.0	16.0	18.7	9.0
24	12.3	10.3	13.5	11.6	22.7	18.9	24.6	18.7	25.6	15.7	18.6	9.6
25	10.6	8.6	14.0	11.5	23.1	19.2	24.7	18.7	26.4	17.7	19.6	10.3
26	8.6	7.0	15.2	12.7	23.0	19.5	25.3	19.3	26.5	15.3	18.7	10.2
27	7.6	5.7	14.6	13.3	23.1	18.9	26.1	18.6	21.9	15.3	18.4	9.5
28	7.7	5.8	13.6	12.4	23.0	19.3	27.6	19.1	26.0	16.5	18.2	10.0
29	7.8	6.4	14.0	11.7	22.8	19.8	27.9	19.0	25.2	16.2	14.5	10.7
30	9.9	6.6	14.9	12.2	23.7	19.4	27.7	18.9	25.5	14.7	16.6	11.4
31	---	---	14.7	13.6	---	---	27.1	20.3	23.8	14.0	---	---
MONTH	15.0	3.6	15.4	8.0	23.7	12.9	27.9	15.3	28.3	14.0	24.4	8.7

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¹/4NW¹/4 sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi².

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 15 to Mar. 26. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	51	40	38	32	29	69	313	748	59	32	16
2	27	48	41	37	31	28	77	347	595	55	44	15
3	27	48	41	37	31	27	90	377	537	58	27	15
4	27	44	41	38	32	27	113	360	500	58	22	15
5	27	46	41	38	31	27	98	443	450	52	20	15
6	27	56	41	38	30	28	90	672	387	48	18	15
7	32	56	41	38	30	28	85	923	284	49	16	15
8	78	57	41	36	31	28	78	979	256	55	16	15
9	58	53	41	34	28	31	78	1050	225	47	27	15
10	51	49	38	32	27	30	79	1060	202	42	43	15
11	47	45	40	30	27	29	77	1110	183	40	30	15
12	60	41	39	29	27	28	74	1190	173	39	25	15
13	90	42	36	31	27	28	104	1090	160	37	23	15
14	82	44	36	31	29	29	147	1080	141	35	21	15
15	98	43	38	31	28	32	142	1030	133	33	19	14
16	87	44	36	31	28	35	187	1060	120	31	17	14
17	75	45	34	32	28	38	267	1130	111	30	16	15
18	86	44	32	32	29	42	341	1100	104	30	15	15
19	82	45	35	31	30	46	418	1040	108	28	21	15
20	70	46	34	32	29	50	505	990	106	27	27	15
21	56	44	34	33	29	52	622	857	102	27	26	14
22	57	43	35	33	29	54	778	783	111	26	27	14
23	51	42	35	34	28	56	928	741	108	26	23	14
24	50	43	35	34	28	58	928	679	88	28	19	14
25	50	42	34	34	26	60	772	661	74	28	16	14
26	46	41	34	33	28	62	541	673	66	25	14	14
27	34	41	35	32	30	63	431	691	59	23	13	14
28	47	41	35	30	31	64	377	726	55	23	15	14
29	44	40	34	31	---	66	351	669	55	24	19	15
30	36	40	34	32	---	62	330	612	61	26	19	17
31	48	---	36	31	---	57	---	619	---	24	18	---
TOTAL	1677	1364	1147	1033	814	1294	9177	25055	6302	1133	688	443
MEAN	54.1	45.5	37.0	33.3	29.1	41.7	306	808	210	36.5	22.2	14.8
MAX	98	57	41	38	32	66	928	1190	748	59	44	17
MIN	27	40	32	29	26	27	69	313	55	23	13	14
AC-FT	3330	2710	2280	2050	1610	2570	18200	49700	12500	2250	1360	879

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

	MEAN	37.9	35.4	31.6	31.2	32.2	49.1	261	1072	936	158	38.1	28.0
MAX	91.8	77.8	59.4	74.5	59.5	139	842	2122	2231	519	97.3	79.9	
(WY)	1962	1962	1983	1983	1962	1989	1974	1984	1983	1983	1945	1984	
MIN	17.6	18.4	14.8	16.3	20.4	23.8	77.6	405	178	33.4	17.0	11.0	
(WY)	1953	1959	1977	1945	1945	1977	1973	1977	1987	1977	1954	1944	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1944 - 1994

ANNUAL TOTAL	96669	50127		
ANNUAL MEAN	265	137		
HIGHEST ANNUAL MEAN			226	
LOWEST ANNUAL MEAN			423	1984
HIGHEST DAILY MEAN			86.6	1977
LOWEST DAILY MEAN	2250	May 22	3960	May 24 1984
ANNUAL SEVEN-DAY MINIMUM	19	Jan 30	4.2	Sep 9 1988
INSTANTANEOUS PEAK FLOW	20	Jan 30	6.2	Sep 4 1988
INSTANTANEOUS PEAK STAGE			4780	May 23 1984
ANNUAL RUNOFF (AC-FT)	191700	99430	6.26	May 11
10 PERCENT EXCEEDS	1140	502	164000	
50 PERCENT EXCEEDS	47	38	815	
90 PERCENT EXCEEDS	25	16	40	
			20	

a-Also occurred Feb 15.

b-Maximum gage height, 8.95 ft, Apr 25, 1974.

GREEN RIVER BASIN

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¹/₄NE¹/₄ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft above sea level, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 28, Nov. 1, 3-4, 12-13, 18, 23, and Mar. 11-17. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC-FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	24	22	24	25	38	104	177	6.0	.85	1.6
2	17	19	24	22	21	25	40	116	126	5.0	1.2	2.9
3	18	21	24	22	22	29	39	144	98	6.5	1.5	3.6
4	19	19	23	22	25	33	59	139	91	7.7	.90	3.6
5	20	14	22	22	23	33	48	192	81	7.1	.82	3.8
6	21	17	23	22	24	32	45	332	64	5.7	.63	3.6
7	27	18	23	21	24	28	46	423	58	6.8	.37	3.0
8	32	17	22	22	25	23	40	409	51	8.1	.33	3.3
9	29	18	23	23	23	20	42	383	44	6.9	.58	1.6
10	28	22	22	22	23	24	44	373	38	4.5	1.9	1.4
11	27	23	22	21	23	27	37	358	32	3.4	2.5	1.7
12	30	20	23	22	22	31	30	395	31	3.2	2.2	1.8
13	33	21	23	22	22	34	47	434	30	2.7	2.2	3.2
14	32	22	17	22	22	37	78	428	26	2.7	2.0	5.0
15	41	16	23	20	22	37	68	404	22	3.1	1.5	6.1
16	33	18	26	23	22	41	88	365	20	3.0	1.2	6.0
17	28	21	24	22	22	45	123	394	16	2.8	.96	6.0
18	28	20	21	22	26	47	158	363	15	2.7	1.0	5.9
19	27	17	22	21	25	57	196	323	15	2.0	.85	6.0
20	25	18	22	20	21	64	244	282	15	1.8	1.2	6.1
21	22	21	22	21	22	49	306	231	20	1.6	2.8	6.9
22	22	27	22	22	23	54	382	204	21	1.2	3.0	7.2
23	21	21	22	25	22	60	435	199	22	1.5	2.6	6.9
24	21	21	22	23	22	47	452	161	18	1.2	1.7	6.9
25	22	20	22	22	23	51	354	154	13	1.6	1.1	6.9
26	21	19	22	22	27	41	213	146	9.9	1.0	.66	6.9
27	17	21	22	20	31	33	152	134	7.8	.98	.57	6.9
28	21	24	22	18	28	34	126	161	6.3	.69	.49	7.4
29	23	25	22	21	---	53	112	183	7.2	.45	.89	9.8
30	10	24	21	21	---	31	110	146	6.3	.55	2.6	13
31	21	---	22	19	---	31	---	126	---	.46	1.9	---
TOTAL	752	604	694	669	659	1176	4152	8206	1181.5	102.93	43.00	155.0
MEAN	24.3	20.1	22.4	21.6	23.5	37.9	138	265	39.4	3.32	1.39	5.17
MAX	41	27	26	25	31	64	452	434	177	8.1	3.0	13
MIN	10	14	17	18	21	20	30	104	6.3	.45	.33	1.4
AC-FT	1490	1200	1380	1330	1310	2330	8240	16280	2340	204	85	307

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
MEAN	19.8	19.0	17.2	16.9	18.4	27.6	117	369	247	37.4	9.79	11.3	
MAX	62.4	49.2	44.1	36.9	46.5	79.2	323	801	630	189	38.4	55.0	
(WY)	1986	1985	1985	1985	1986	1986	1985	1984	1983	1983	1945	1984	
MIN	7.29	7.73	7.30	4.42	9.82	12.6	25.2	45.7	23.6	1.27	1.39	3.20	
(WY)	1934	1934	1932	1992	1981	1965	1933	1934	1977	1977	1994	1960	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1932 - 1994
ANNUAL TOTAL	35328.6	18394.43	
ANNUAL MEAN	96.8	50.4	76.1
HIGHEST ANNUAL MEAN			157
LOWEST ANNUAL MEAN			20.5
HIGHEST DAILY MEAN	924	452	1500
LOWEST DAILY MEAN	6.3	.33	.00
ANNUAL SEVEN-DAY MINIMUM	7.4	.71	.00
INSTANTANEOUS PEAK FLOW		582	a 2250
INSTANTANEOUS PEAK STAGE		6.51	b 11.78
ANNUAL RUNOFF (AC-FT)	70070	36490	55100
10 PERCENT EXCEEDS	333	145	248
50 PERCENT EXCEEDS	22	22	19
90 PERCENT EXCEEDS	11	1.8	7.0

a-From rating curve extended above 1000 ft³/s.

b-From floodmark.

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¹/₄ NW¹/₄ sec.8, T.12 N., R.90 W., Carbon County, Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi².

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year. No winter records since 1971. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M). WDR WY-85-1: 1984(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft above sea level. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft higher; Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 9,500 acres upstream from station. One diversion upstream from station for irrigation of about 3,000 acres downstream. Transbasin diversions upstream from station. National Weather Service satellite telemeter at station.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s and maximum (*) during period of operation:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 24	0400	*3,240	*7.98	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	195	804	1600	1.8	.72	.46
2	---	---	---	---	---	---	240	850	1230	2.3	.77	.58
3	---	---	---	---	---	---	270	982	1010	2.9	.82	.54
4	---	---	---	---	---	---	363	959	873	2.9	.88	.54
5	---	---	---	---	---	---	328	1110	782	2.5	.72	.50
6	---	---	---	---	---	---	287	1720	698	2.3	.72	.67
7	---	---	---	---	---	---	263	2180	541	2.9	.67	.88
8	---	---	---	---	---	---	230	2360	465	4.2	.58	.62
9	---	---	---	---	---	---	236	2430	382	2.9	.67	.50
10	---	---	---	---	---	---	230	2360	266	2.9	.88	.40
11	---	---	---	---	---	---	223	2310	193	1.4	.77	.37
12	---	---	---	---	---	---	198	2600	152	1.2	.62	.34
13	---	---	---	---	---	---	270	2550	146	1.1	.58	.34
14	---	---	---	---	---	---	444	2530	97	.94	.50	.40
15	---	---	---	---	---	---	450	2420	75	1.2	.50	.40
16	---	---	---	---	---	---	497	2280	67	1.6	.46	.43
17	---	---	---	---	---	---	775	2480	52	2.2	.43	.40
18	---	---	---	---	---	---	1170	2420	38	2.2	.58	.37
19	---	---	---	---	---	---	1450	2280	15	2.0	.54	.34
20	---	---	---	---	---	---	1710	2210	4.5	1.3	1.0	.34
21	---	---	---	---	---	---	1960	1950	4.0	.94	1.8	.37
22	---	---	---	---	---	---	2350	1740	4.8	.82	1.9	.37
23	---	---	---	---	---	---	2550	1590	5.0	.77	2.2	.37
24	---	---	---	---	---	---	2660	1490	4.2	.72	2.0	.40
25	---	---	---	---	---	---	2280	1410	4.2	.72	1.8	.40
26	---	---	---	---	---	---	1820	1450	4.8	.67	1.0	.40
27	---	---	---	---	---	---	1360	1440	3.7	.58	.72	.40
28	---	---	---	---	---	---	1170	1500	2.5	.62	.54	.43
29	---	---	---	---	---	---	1030	1470	1.9	.58	.50	.43
30	---	---	---	---	---	---	896	1290	1.8	.62	.46	.46
31	---	---	---	---	---	---	---	1240	---	.58	.50	---
TOTAL	---	---	---	---	---	---	27905	56405	8723.4	50.36	26.83	13.45
MEAN	---	---	---	---	---	---	930	1820	291	1.62	.87	.45
MAX	---	---	---	---	---	---	2660	2600	1600	4.2	2.2	.88
MIN	---	---	---	---	---	---	195	804	1.8	.58	.43	.34
AC-FT	---	---	---	---	---	---	55350	111900	17300	100	53	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1971, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1911	79.5	282	1917	6.18	1961
1912	94.3	245	1921	36.3	1956
1913	88.8	160	1921	45.0	1923
1914	85.4	130	1917	37.1	1963
1915	101	433	1962	47.8	1967
1916	215	744	1919	82.8	1965
1917	879	1991	1962	298	1961
1918	2559	5698	1920	1065	1954
1919	1827	4035	1917	217	1954
1920	175	1160	1917	5.17	1966
1921	27.6	198	1916	1.58	1966
1922	27.5	105	1965	.78	1962

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1911 - 1971
ANNUAL MEAN	---	514
HIGHEST ANNUAL MEAN	---	930
LOWEST ANNUAL MEAN	---	212
HIGHEST DAILY MEAN	2660	8960
LOWEST DAILY MEAN	.34	.00
ANNUAL SEVEN-DAY MINIMUM	---	.35
INSTANTANEOUS PEAK FLOW	3240	13000a
INSTANTANEOUS PEAK STAGE	7.98	13.56b
INSTANTANEOUS LOW FLOW	---	.00
ANNUAL RUNOFF (AC-FT)	---	372600
10 PERCENT EXCEEDS	---	1850
50 PERCENT EXCEEDS	---	100
90 PERCENT EXCEEDS	---	8.0

* During period of operation.

For period of record through 1994.

a From rating curve extended above 10,000 ft³/s, some increase in peak caused by dam failure.

b From floodmarks.

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

WATER-QUALITY RECORDS

LOCATION.--Lat 41o01'43", long 107o41'14", in SE1/4 NW1/4 NW1/4 sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN 16...	1500	44	326	8.1	20.0	23.0	605	8.9	124
AUG 27...	1215	0.51	750	8.4	22.5	25.0	650	9.4	128
27...	1230	0.51	750	8.4	22.5	25.0	650	9.4	128

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JUN 16...	130	35	10	19	0.7	1.9	141	27	3.4
AUG 27...	190	33	27	92	3	3.7	235	130	22
27...	200	35	27	94	3	3.7	235	130	22

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JUN 16...	0.3	15	196	0.27	23.3	6	0.71
AUG 27...	0.5	9.4	459	0.62	0.63	19	0.03
27...	0.5	9.3	462	0.63	0.64	--	--

09259990 SAND WASH NEAR SUNBEAM, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°37'12", long 108°22'06", in NW¹/₄NE¹/₄ sec.26, T.8 N, R.98 W, Moffat County, Hydrologic Unit 14050003, at triple box culvert on State Highway 318, 2.3 mi upstream from confluence with Little Snake River, and 10.5 mi northeast of Sunbeam.

DRAINAGE AREA.--239 mi².

PERIOD OF RECORD.--October 1987 to current year.

REMARKS.--No data published for the 1992 water year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAR 11...	1200	16	406	8.2	7.0	9.8	38	12	1.9	74

DATE	TIME	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
MAR 11...	5		0.6	107	78	3.2	0.2	12	247	.34	10.4

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
MAR 11...		<0.01	0.19	0.02	<0.2	0.09	0.08	50	48

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 11...	1200	16	2780	117	97

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¹/4NE¹/4 sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft downstream from highway bridge, 6.0 mi north of Lily, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,730 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISID RECORDS. - - WSP 1713: 1959.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,685 ft above sea level, from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

REMARKS.--Estimated daily discharges: Oct. 23 to Nov. 1, Nov. 4-9, Nov. 11 to Mar. 10, Aug. 25-29, Aug. 31 to Sept. 13, and Sept. 28-29. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 21,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	156	98	70	66	85	294	777	1030	34	.32	.00
2	53	126	92	80	70	85	267	760	1100	22	.41	.00
3	53	122	92	75	75	90	274	698	1250	12	71	.00
4	53	121	90	80	75	100	308	745	999	11	65	.00
5	53	120	93	77	80	150	331	793	865	8.4	30	.00
6	54	120	91	75	70	125	396	731	770	5.1	15	.00
7	76	119	88	75	80	200	460	925	678	4.2	10	.00
8	95	118	93	80	70	200	380	1490	619	3.3	6.3	.00
9	163	117	90	70	70	250	346	1680	507	2.2	20	.00
10	227	117	88	75	80	325	344	1730	424	1.0	23	.00
11	187	118	85	70	75	403	310	1800	369	1.1	11	.00
12	243	122	80	72	85	410	301	1810	317	1.2	4.3	.00
13	209	123	70	75	88	410	300	1950	259	.57	3.5	.00
14	190	115	75	75	90	432	283	2050	202	.68	1.8	8.3
15	191	100	70	80	85	405	254	2050	183	.84	1.3	20
16	231	105	70	75	88	420	365	2000	168	1.8	1.5	22
17	253	110	75	65	90	451	479	1850	153	3.2	1.2	75
18	315	100	70	70	85	473	491	1960	124	2.5	.67	49
19	315	105	70	70	80	558	721	1940	105	.86	.47	28
20	302	105	80	75	85	493	1050	1870	99	.51	.28	17
21	175	100	70	75	90	473	1310	1790	96	.44	.31	21
22	134	95	70	75	85	561	1560	1620	100	.69	.32	8.2
23	116	90	70	77	80	507	1880	1480	92	.17	1.5	3.1
24	110	90	75	77	90	454	2190	1360	69	1.0	.71	1.9
25	100	85	80	72	95	488	2400	1290	54	20	.00	1.2
26	95	85	77	66	85	426	2060	1190	55	.55	.00	.62
27	90	90	75	70	80	372	1250	1120	54	.44	.00	.40
28	85	95	80	66	75	375	1050	1150	47	.32	.00	.00
29	110	97	70	66	---	334	1010	1130	45	.32	.00	.00
30	105	95	70	66	---	283	793	1200	47	.32	.72	4.3
31	120	---	75	66	---	277	---	1140	---	.32	.00	---
TOTAL	4556	3261	2472	2260	2267	10615	23457	44079	10880	141.03	270.61	260.02
MEAN	147	109	79.7	72.9	81.0	342	782	1422	363	4.55	8.73	8.67
MAX	315	156	98	80	95	561	2400	2050	1250	34	71	75
MIN	53	85	70	65	66	85	254	698	45	.17	.00	.00
AC - FT	9040	6470	4900	4480	4500	21050	46530	87430	21580	280	537	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

MEAN	111	117	97.1	87.7	120	374	1088	2554	1857	290	69.0	53.3
MAX	385	363	244	205	595	1260	3259	5967	4601	1330	534	314
(WY)	1926	1928	1928	1932	1986	1962	1952	1984	1983	1983	1941	1965
MIN	.000	.000	25.0	16.0	18.0	80.5	320	477	36.7	.29	.000	.000
(WY)	1935	1935	1931	1933	1933	1964	1961	1934	1934	1934	1924	1934

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1922 - 1994

ANNUAL TOTAL	249996		104518.66				
ANNUAL MEAN	685		286		569		
HIGHEST ANNUAL MEAN					1252		1984
LOWEST ANNUAL MEAN					110		1934
HIGHEST DAILY MEAN	5470	May 24	2400	Apr 25	13400	May 18	1984
LOWEST DAILY MEAN	30	Sep 14	a.00	Aug 25	b.00	Jul 30	1924
ANNUAL SEVEN-DAY MINIMUM	34	Sep 12	.00	Aug 31	.00	Jul 30	1924
INSTANTANEOUS PEAK FLOW			2840	Apr 25	16700	May 18	1984
INSTANTANEOUS PEAK STAGE			4.52	Apr 25	c9.85	May 18	1984
ANNUAL RUNOFF (AC-FT)	495900		207300		412400		
10 PERCENT EXCEEDS	2340		1020		1930		
50 PERCENT EXCEEDS	118		85		122		
90 PERCENT EXCEEDS	43		.53		11		

a-Also occurred Aug 26 to Sep 13, and Sep 28-29.

b-Also occurred, Jul 31 to Sep 11, Sep 13-20, 1924, Aug 26-29, Aug 31 to Sep 13, and Sep 28-29, 1994.

c-Maximum gage height, 11.10 ft, Feb 13, 1962, backwater from ice.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to September 1985.

WATER TEMPERATURES: July 1975 to September 1985.

INSTRUMENTATION.--Water-quality monitor July 1975 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record is available in the District Office.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,020 microsiemens, Oct 11, 1977; minimum, 110 microsiemens, June 1, 1985.

WATER TEMPERATURES: Maximum, 32.0°C Aug. 6, 1981; minimum, freezing point on many days during winter months each year.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT					JUN				
12...	1041	248	717	8.5	22...	1310	105	626	27.5
NOV					28...	1330	52	759	26.5
01...	1025	157	557	3.0	JUL				
FEB					13...	1356	1.6	810	29.0
22...	1244	85	540	0.0	22...	1233	1.0	918	30.0
MAR					AUG				
28...	1242	387	606	5.0	03...	1503	121	2240	27.5
APR					SEP				
26...	1057	2070	177	9.0	19...	1300	25	1190	19.5
MAY									
10...	1425	1760	163	13.0					
21...	1205	1790	146	17.0					
24...	1340	1270	166	21.5					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
12...	1041	248	4590	3070	92
NOV					
01...	1025	157	400	170	56
FEB					
22...	1244	85	91	21	--
MAR					
28...	1242	387	625	653	67
APR					
26...	1057	2070	2160	12100	63
MAY					
10...	1425	1760	1320	6270	56
21...	1205	1790	483	2330	65
24...	1340	1270	568	1950	31
JUN					
22...	1310	105	96	27	25
28...	1330	52	46	6.5	--
JUL					
13...	1356	1.6	78	0.33	--
22...	1233	1.0	12	0.03	--
AUG					
03...	1503	121	35400	11600	99
SEP					
19...	1300	25	21400	1470	100

GREEN RIVER BASIN

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'06", long 108°31'28", in SE¹/4SW¹/4 sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 1405002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,250 ft upstream from Disappointment Draw and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to September 1994, (Discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,600 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 22-23, 25, Nov. 29 to Mar. 9, and July 27 to Aug. 3. Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions for irrigation of about 86,800 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	641	438	360	311	645	888	2980	5650	486	97	48
2	296	550	427	395	327	688	850	2780	6110	446	95	42
3	281	549	422	366	338	750	875	2770	6280	410	75	41
4	274	624	417	366	355	812	953	2960	5430	345	112	41
5	253	623	426	362	354	906	1070	3030	5040	330	80	39
6	248	622	416	364	355	940	1240	2920	4850	372	51	37
7	307	606	408	366	371	1070	1330	3600	4320	340	39	41
8	384	562	408	367	370	1100	1180	5250	3900	253	38	76
9	451	471	400	353	367	1060	1140	5660	3420	190	54	82
10	643	441	413	364	382	1180	1110	5750	2910	182	83	79
11	661	455	390	363	379	1120	1080	5920	2520	214	66	63
12	742	566	380	367	384	1140	1070	6040	2270	243	50	49
13	686	740	365	365	379	1170	1060	6620	2120	179	51	44
14	637	764	368	363	383	1200	1060	7110	1990	188	82	49
15	704	713	355	366	370	1220	1010	7060	1850	184	108	47
16	834	690	360	366	387	1330	1260	7060	1730	175	102	53
17	896	599	358	354	402	1370	1560	6720	1590	146	89	68
18	1040	542	350	362	406	1310	1640	7150	1400	121	78	97
19	1040	410	345	367	418	1440	2320	7270	1250	113	65	86
20	1020	330	362	378	435	1470	3100	6970	1090	114	64	82
21	1110	368	347	375	460	1510	3790	6780	1060	114	68	93
22	948	410	343	367	462	1740	4570	6130	1080	115	64	90
23	828	420	350	358	473	1400	5420	5500	1170	114	74	72
24	730	375	349	354	501	1350	6200	5390	1400	118	62	78
25	710	417	357	337	515	1490	6970	5120	1360	126	74	73
26	687	371	356	325	552	1290	6840	4810	1000	123	50	88
27	658	343	347	327	592	1170	5910	5040	797	112	40	90
28	643	402	355	316	625	1170	4710	5170	692	111	39	84
29	623	435	352	313	---	1030	3900	5230	591	106	40	80
30	581	427	350	307	---	886	3460	5510	531	104	39	80
31	631	---	362	315	---	909	---	5560	---	102	36	---
TOTAL	19856	15466	11676	11008	11653	35866	77566	165860	75401	6276	2065	1992
MEAN	641	516	377	355	416	1157	2586	5350	2513	202	66.6	66.4
MAX	1110	764	438	395	625	1740	6970	7270	6280	486	112	97
MIN	248	330	343	307	311	645	850	2770	531	102	36	37
AC-FT	39380	30680	23160	21830	23110	71140	153900	329000	149600	12450	4100	3950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	MEAN	587	612	451	404	580	1413	3785	8234	7060	1810	526	333
MAX	1084	1127	832	660	1811	3200	8211	18330	16120	5890	1537	928	
(WY)	1987	1986	1985	1986	1986	1986	1985	1984	1984	1983	1984	1984	
MIN	133	189	236	210	223	653	1965	3120	2117	202	66.6	66.4	
(WY)	1990	1990	1990	1989	1989	1988	1992	1990	1992	1994	1994	1994	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1983 - 1994

ANNUAL TOTAL	875368	434685	
ANNUAL MEAN	2398	1191	2153
HIGHEST ANNUAL MEAN			4286
LOWEST ANNUAL MEAN			1062
HIGHEST DAILY MEAN	15900	May 24	7270
LOWEST DAILY MEAN	244	Sep 14	36
ANNUAL SEVEN-DAY MINIMUM	267	Sep 10	41
INSTANTANEOUS PEAK FLOW			7670
INSTANTANEOUS PEAK STAGE			7.68
ANNUAL RUNOFF (AC-FT)	1736000	862200	1559000
10 PERCENT EXCEEDS	8290	4630	6380
50 PERCENT EXCEEDS	661	417	675
90 PERCENT EXCEEDS	347	75	214

09260050 YAMPA RIVER AT DEERLODGE PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1982. October 1993 to September 1994 (Discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1977 to September 1982.

WATER TEMPERATURES: November 1977 to September 1982.

INSTRUMENTATION:--Water-quality monitor November 1977 to September 1982.

REMARKS:--November 1977 to September 1981 published as "09260025, Yampa River below Little Snake River". November 1977 to April 1980, water-quality data collected approximately 3.5 mi upstream. May 1980 to April 1981, water quality data collected approximately 1 mi upstream at Deerlodge Park boat ramp. April 22, 1981 to present, water-quality data collected at present site. Water quality data are considered equivalent at all sampling sites.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,040 microsiemens, Oct. 4, 1979; minimum, 64 microsiemens, July 13, 1978.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 2, 1980; minimum, 0.0°C, many days during winter period.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT					JUL				
26...	1041	688	465	5.5	13...	1140	186	459	22.0
FEB					22...	1000	114	533	20.5
25...	1246	460	597	1.0	28...	1100	111	--	23.0
MAR					AUG				
28...	0940	1150	645	4.0	03...	1301	74	604	27.5
MAY					SEP				
02...	1315	2770	284	8.5	12...	1200	46	879	18.5
10...	1240	5500	185	11.5	19...	1140	83	962	18.0
24...	1038	5650	122	15.0					
JUN									
28...	0930	693	273	23.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
26...	1041	688	283	526	79
FEB					
25...	1246	460	311	386	98
MAR					
28...	0940	1150	166	517	86
MAY					
02...	1315	2770	420	3140	42
10...	1240	5500	828	12300	47
24...	1038	5650	592	9030	27
JUL					
13...	1140	186	20	10	--
22...	1000	114	16	4.9	--
28...	1100	111	21	6.3	64
AUG					
03...	1301	74	155	31	6
SEP					
12...	1200	46	42	5.2	--
19...	1140	83	6460	1450	100

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¹/4NW¹/4 sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft east of Buford and 1.2 mi upstream from South Fork White River.

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi upstream not equivalent because of inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 7,010 ft above sea level, from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Estimated daily discharges: Dec. 15-19, 26-28, Dec. 30 to Jan. 5, Jan. 8-24, and Feb. 2 to Mar. 9. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 900 acres upstream from, and 300 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	193	184	164	169	148	153	252	512	180	162	145
2	198	185	177	165	167	143	157	262	449	181	154	151
3	196	186	174	166	166	147	158	280	442	187	145	145
4	194	190	183	168	165	150	170	272	439	181	137	145
5	193	190	174	172	164	151	157	318	416	174	145	140
6	190	187	178	178	163	151	154	423	396	171	147	140
7	208	187	171	178	162	152	155	505	377	170	144	139
8	232	191	179	176	161	147	156	510	358	169	147	138
9	223	190	174	175	160	140	154	525	338	167	178	136
10	217	190	174	173	160	147	153	526	314	164	169	136
11	206	183	174	170	160	146	152	574	296	163	165	138
12	224	196	175	173	160	145	150	614	287	164	157	138
13	220	189	171	175	158	146	158	574	274	162	153	137
14	216	185	164	175	155	147	172	565	252	162	152	156
15	228	183	165	178	153	149	170	567	247	162	148	154
16	227	185	165	177	150	154	189	602	234	164	143	146
17	223	182	166	170	152	156	240	642	227	161	146	143
18	226	184	166	170	154	153	285	611	224	161	145	142
19	220	175	168	165	152	155	321	586	228	163	156	143
20	210	173	168	168	160	158	359	562	242	161	169	140
21	202	182	173	170	152	154	392	508	236	160	151	148
22	201	187	162	165	149	158	466	505	290	158	149	141
23	199	188	183	165	150	161	553	499	260	159	143	140
24	200	181	162	170	155	154	564	449	222	159	136	138
25	197	169	167	173	153	154	502	418	211	158	137	138
26	194	168	167	163	152	150	368	445	207	159	139	137
27	187	160	168	159	153	145	313	428	198	161	139	139
28	194	187	169	175	151	148	289	450	198	159	147	141
29	195	203	169	170	---	149	270	449	192	161	145	142
30	171	194	169	160	---	146	258	441	187	156	145	148
31	189	---	165	150	---	149	---	455	---	156	144	---
TOTAL	6375	5543	5304	5256	4406	4653	7738	14817	8753	5113	4637	4264
MEAN	206	185	171	170	157	150	258	478	292	165	150	142
MAX	232	203	184	178	169	161	564	642	512	187	178	156
MIN	171	160	162	150	149	140	150	252	187	156	136	136
AC - FT	12640	10990	10520	10430	8740	9230	15350	29390	17360	10140	9200	8460

MEAN	198	184	168	161	156	160	277	770	840	390	244	205
MAX	323	273	257	234	240	237	584	1749	1618	1131	447	357
(WY)	1985	1985	1985	1985	1985	1985	1985	1985	1984	1957	1984	1984
MIN	122	112	122	118	116	125	168	282	217	116	127	114
(WY)	1978	1978	1964	1964	1977	1973	1920	1977	1977	1977	1977	1977

ANNUAL TOTAL	124338		76859				
ANNUAL MEAN	341		211			313	
HIGHEST ANNUAL MEAN						523	1984
LOWEST ANNUAL MEAN						157	1977
HIGHEST DAILY MEAN	1650	Jun 3	642	May 17		3150	May 30 1912
LOWEST DAILY MEAN	134	Feb 14	136	Aug 24		90	Feb 21 1955
ANNUAL SEVEN-DAY MINIMUM	141	Jan 18	137	Sep 7		106	Jul 26 1977
INSTANTANEOUS PEAK FLOW			774	May 16		3550	May 24 1984
INSTANTANEOUS PEAK STAGE			4.93	May 16		6.76	May 24 1984
ANNUAL RUNOFF (AC-FT)	246600		152400			226900	
10 PERCENT EXCEEDS	917		394			712	
50 PERCENT EXCEEDS	194		169			195	
90 PERCENT EXCEEDS	149		145			140	

b-Maximum gage height, 7.22 ft, Jan 9, 1961, backwater from ice.

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION---Lat 39°50'36", long 107°20'03", in NW¹/₄NW¹/₄ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft upstream from Forest Service trail bridge, 0.2 mi upstream from Wagonwheel Creek, and 0.3 mi northeast of Budge's Resort.

DRAINAGE AREA--52.3 mi².

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

REVISED RECORDS--WDR CO-79-3: Drainage area.

GAGE---Water-stage recorder. Elevation of gage is 8,980 ft above sea level, from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft upstream at datum 1.3 ft, lower.

REMARKS--Estimated daily discharges: Oct. 30 to Feb. 26. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	50	48	47	33	42	45	53	479	59	45	47
2	52	52	48	47	34	44	43	55	417	58	44	53
3	52	52	49	48	37	44	44	56	410	59	43	46
4	52	51	49	47	40	44	44	55	389	57	43	44
5	52	50	49	47	41	44	43	66	314	53	43	42
6	52	50	49	46	41	43	44	81	253	53	44	42
7	56	49	48	45	40	43	43	90	207	53	43	42
8	58	49	48	42	40	45	43	96	169	52	43	42
9	58	48	48	44	39	47	42	103	143	51	51	42
10	58	47	48	46	39	47	42	109	129	51	47	41
11	57	49	47	45	40	46	42	121	119	50	46	42
12	60	50	47	43	39	44	44	137	113	50	45	42
13	59	49	47	44	37	45	44	134	104	48	46	42
14	58	49	47	45	35	43	44	135	97	48	45	45
15	59	47	46	43	37	44	45	148	91	47	44	42
16	60	45	48	44	40	44	48	167	86	47	43	42
17	59	45	45	45	41	44	56	199	81	47	43	42
18	59	46	42	42	40	44	58	221	78	46	43	42
19	57	46	45	44	39	43	60	241	79	46	49	43
20	56	45	47	40	38	43	64	250	87	45	47	44
21	52	46	46	40	38	45	69	245	85	44	45	45
22	53	47	42	40	38	43	77	253	101	44	44	43
23	53	49	46	39	36	43	83	267	91	45	43	42
24	53	49	45	41	37	43	83	244	78	46	42	42
25	52	48	44	43	38	43	77	242	73	45	42	42
26	52	45	46	41	40	46	67	266	69	44	42	42
27	54	44	47	41	43	43	64	242	67	43	42	41
28	52	44	48	40	42	47	61	277	61	43	44	41
29	52	45	49	38	---	44	57	293	60	43	44	41
30	50	48	46	39	---	47	54	385	59	44	43	44
31	48	---	46	36	---	48	---	447	---	44	43	---
TOTAL	1697	1434	1450	1332	1082	1375	1630	5678	4589	1505	1371	1290
MEAN	54.7	47.8	46.8	43.0	38.6	44.4	54.3	183	153	48.5	44.2	43.0
MAX	60	52	49	48	43	48	83	447	479	59	51	53
MIN	48	44	42	36	33	42	42	53	59	43	42	41
AC-FT	3370	2840	2880	2640	2150	2730	3230	11260	9100	2990	2720	2560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	MEAN	57.1	53.4	49.4	46.9	44.8	45.4	61.1	194	405	143	68.8	57.9
	MAX	101	81.8	71.7	69.8	63.6	67.8	91.6	327	1047	348	125	104
	(WY)	1985	1985	1987	1986	1985	1986	1989	1978	1978	1983	1984	1984
	MIN	45.0	42.7	38.8	35.7	33.0	31.0	39.4	84.5	68.3	48.5	40.0	26.4
	(WY)	1977	1978	1993	1993	1981	1981	1993	1977	1977	1994	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1975 - 1994

ANNUAL TOTAL	39419	24433	
ANNUAL MEAN	108	66.9	101
HIGHEST ANNUAL MEAN			172
LOWEST ANNUAL MEAN			49.4
HIGHEST DAILY MEAN		479	2020
LOWEST DAILY MEAN	680	33	21
ANNUAL SEVEN-DAY MINIMUM	34	37	22
INSTANTANEOUS PEAK FLOW		587	2750
INSTANTANEOUS PEAK STAGE		5.10	6.57
ANNUAL RUNOFF (AC-FT)	78190	48460	73280
10 PERCENT EXCEEDS	336	102	210
50 PERCENT EXCEEDS	52	46	55
90 PERCENT EXCEEDS	36	41	40

a-Also occurred Mar 2-3.

b-Also occurred Sep 30, 1977.

c-From rating curve extended above 850 ft³/s.

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION (REVISED).--Lat 39°52'00", long 107°32'10", in NW¹/₄SE¹/₄ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream end of the South Fork Campground, 10 mi above mouth, and about 10.5 mi southeast of Buford.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--May 1976 to current year. Water-quality data available November 1983 to May 1989.

REVISED RECORDS.--WDR CO-79-3: 1976 (M), 1977, 1978 (P), 1978.

GAGE.--Water-stage recorder. Elevation of gage is 7,600 ft above sea level, from topographic map. Prior to Feb. 7, 1994, at site 0.25 mi upstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 31 to Feb. 7. Records good except for estimated daily discharges, which are poor. No regulation or diversions upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	78	60	52	64	70	72	99	1040	144	79	80
2	79	74	60	53	66	70	73	102	925	144	78	91
3	79	76	60	53	66	71	72	104	855	143	75	77
4	75	68	62	54	68	71	76	102	801	133	75	75
5	75	70	62	56	68	72	72	120	701	128	74	73
6	76	66	60	58	70	72	71	156	602	124	74	71
7	82	64	59	58	71	71	73	182	524	121	73	70
8	89	66	59	60	71	69	71	194	451	119	72	69
9	90	68	60	62	69	66	71	217	396	114	85	68
10	90	70	60	62	72	71	72	234	358	112	81	68
11	85	70	59	62	71	70	71	278	336	108	79	69
12	94	68	58	62	70	69	71	335	316	107	76	71
13	93	62	56	63	71	69	74	346	295	105	74	71
14	91	60	53	64	70	70	77	340	274	104	74	77
15	94	60	56	58	70	70	76	382	254	101	72	73
16	94	62	54	63	71	72	82	457	233	100	72	70
17	92	64	53	61	72	73	94	536	220	98	72	68
18	92	62	52	58	71	71	100	590	209	95	71	69
19	89	60	50	57	69	72	106	621	208	93	85	70
20	86	62	50	55	68	72	117	634	224	91	81	71
21	81	62	50	58	70	70	126	617	231	89	76	74
22	83	61	52	60	68	73	147	626	271	87	75	70
23	82	60	52	62	65	73	168	664	235	86	72	69
24	79	60	50	60	70	71	168	605	200	87	70	68
25	80	62	50	59	75	72	151	590	185	86	69	67
26	77	64	48	63	74	69	131	672	173	83	67	66
27	70	65	46	61	73	64	118	670	164	80	68	65
28	79	64	50	60	72	73	110	742	158	79	72	64
29	78	59	50	62	---	72	106	759	154	79	71	65
30	78	62	50	62	---	69	101	861	149	78	71	70
31	78	---	52	64	---	71	---	958	---	76	71	---
TOTAL	2589	1949	1693	1842	1955	2188	2917	13793	11142	3194	2304	2129
MEAN	83.5	65.0	54.6	59.4	69.8	70.6	97.2	445	371	103	74.3	71.0
MAX	94	78	62	64	75	73	168	958	1040	144	85	91
MIN	70	59	46	52	64	64	71	99	149	76	67	64
AC-FT	5140	3870	3360	3650	3880	4340	5790	27360	22100	6340	4570	4220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	93.7	81.5	74.0	69.1	68.2	69.9	116	466	829	256	113	93.2							
MAX	172	131	113	101	106	116	221	704	1536	575	218	161							
(WY)	1985	1985	1985	1986	1985	1985	1985	1985	1978	1983	1984	1984							
MIN	58.6	48.4	52.1	45.8	40.0	43.7	75.5	231	202	68.8	58.8	60.5							
(WY)	1978	1978	1981	1980	1980	1980	1991	1983	1977	1977	1977	1977							

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	78522	47695	
ANNUAL MEAN	215	131	195
HIGHEST ANNUAL MEAN			301
LOWEST ANNUAL MEAN			97.0
HIGHEST DAILY MEAN	1290	1040	2660
LOWEST DAILY MEAN	45	46	40
ANNUAL SEVEN-DAY MINIMUM	49	49	40
INSTANTANEOUS PEAK FLOW		1360	3770
INSTANTANEOUS PEAK STAGE		2.92	a 6.18
ANNUAL RUNOFF (AC-FT)	155700	94600	141600
10 PERCENT EXCEEDS	827	261	528
50 PERCENT EXCEEDS	79	72	90
90 PERCENT EXCEEDS	58	59	59

a-Site and datum then in use.

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¹/4NE¹/4 sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 30 ft downstream from highway bridge, 0.8 mi upstream from mouth, and 1.0 mi south of Buford.

DRAINAGE AREA.--177 mi².

PERIOD OF RECORD.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,970 ft above sea level, from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 200 ft downstream, at different datum. Oct. 1951 to Apr. 1981, at site 50 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 31 to Feb. 18. Records good except for estimated daily discharges, which are poor. Diversions upstream for irrigation of about 1,100 acres. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	105	82	66	82	88	91	158	899	136	97	84
2	106	96	80	68	84	83	91	166	831	135	104	107
3	102	98	80	68	86	87	89	175	774	141	102	93
4	102	100	84	70	86	90	97	175	740	135	102	86
5	100	92	80	74	86	91	93	194	686	129	101	86
6	99	92	84	78	88	91	89	242	610	124	100	91
7	106	86	84	80	90	92	90	277	522	122	98	89
8	114	84	82	80	88	87	88	291	460	122	96	86
9	113	88	83	84	86	80	88	314	412	117	108	86
10	112	90	82	84	86	82	90	339	363	112	113	84
11	110	92	80	84	84	86	90	377	327	113	106	85
12	116	92	84	84	84	81	88	506	301	111	106	87
13	118	86	80	86	84	79	95	534	274	109	101	93
14	114	80	76	86	85	82	96	492	248	104	100	104
15	123	76	72	80	83	82	93	565	233	102	93	99
16	124	70	70	86	80	85	97	615	218	100	73	94
17	122	88	68	84	84	88	106	722	209	99	69	95
18	123	88	66	82	88	86	118	756	200	106	70	93
19	118	82	64	76	92	88	122	761	197	113	85	91
20	114	80	64	72	106	90	134	765	213	108	96	92
21	109	85	64	74	92	83	147	729	213	104	88	97
22	115	85	64	76	89	87	169	724	243	104	89	94
23	119	82	66	80	90	90	193	750	243	104	84	94
24	116	80	66	78	95	87	209	707	207	102	77	93
25	114	80	64	76	93	88	207	633	193	100	73	91
26	112	84	62	82	92	82	188	726	182	100	74	89
27	105	88	62	80	93	74	173	674	167	100	72	88
28	119	90	58	78	91	74	168	761	154	96	77	89
29	119	80	62	82	---	94	166	763	154	96	79	90
30	89	84	62	82	---	76	165	822	143	94	80	95
31	100	---	62	82	---	87	---	879	---	95	78	---
TOTAL	3463	2603	2237	2442	2467	2640	3730	16592	10616	3433	2791	2745
MEAN	112	86.8	72.2	78.8	88.1	85.2	124	535	354	111	90.0	91.5
MAX	124	105	84	86	106	94	209	879	899	141	113	107
MIN	89	70	58	66	80	74	88	158	143	94	69	84
AC-FT	6870	5160	4440	4840	4890	5240	7400	32910	21060	6810	5540	5440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1994, BY WATER YEAR (WY)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
MEAN	128	118	109	104	105	106	157	616	1002	303	159	130
MAX	240	209	170	150	150	167	287	1072	1889	1119	276	215
(WY)	1985	1985	1921	1987	1984	1986	1962	1969	1978	1957	1920	1984
MIN	90.1	84.9	72.2	70.4	77.7	77.3	104	328	194	92.2	88.9	85.0
(WY)	1978	1991	1994	1981	1991	1992	1968	1957	1977	1977	1977	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1919 - 1994

ANNUAL TOTAL	93503	55759	
ANNUAL MEAN	256	153	253
HIGHEST ANNUAL MEAN			363
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	1510	Jun 17	2970
LOWEST DAILY MEAN	58	Dec 28	47
ANNUAL SEVEN-DAY MINIMUM	62	Dec 25	62
INSTANTANEOUS PEAK FLOW			1000
INSTANTANEOUS PEAK STAGE		3.92	Jun 1
ANNUAL RUNOFF (AC-FT)	185500	110600	183500
10 PERCENT EXCEEDS	961	283	618
50 PERCENT EXCEEDS	108	92	127
90 PERCENT EXCEEDS	82	76	90

a-Maximum gage height, 7.07 ft, Jun 30, 1957, site and datum then in use.

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¹/4NW¹/4 sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.0 mi southeast of Meeker.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--October 1961 to current year. Water-quality data available, March 1970 to September 1992.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above sea level, from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft upstream at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 13 to Mar. 14. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 8,000 acres and about 4,000 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	355	329	280	271	303	314	446	1280	53	142	17
2	244	355	322	284	296	313	325	434	1190	51	88	44
3	232	350	315	272	314	326	316	446	980	59	39	51
4	231	367	318	285	312	334	344	433	921	53	33	48
5	227	348	314	290	325	316	323	461	848	49	36	42
6	228	353	311	295	328	336	311	601	732	50	33	39
7	254	343	319	295	323	317	319	724	643	48	28	49
8	307	336	323	296	319	334	319	746	564	51	27	66
9	312	342	309	299	314	276	313	750	490	54	64	96
10	310	342	306	301	305	271	312	748	425	66	78	121
11	308	365	305	307	300	307	313	829	352	65	71	125
12	316	373	306	304	293	298	298	946	369	65	65	132
13	345	371	300	297	284	296	313	966	322	60	59	113
14	338	360	299	306	272	299	337	908	267	71	55	156
15	371	351	312	304	267	300	333	965	254	90	51	163
16	367	326	309	308	278	306	351	1030	257	97	35	145
17	361	317	303	311	276	321	412	1160	181	97	28	122
18	368	340	298	306	284	313	454	1140	126	96	24	101
19	370	359	302	298	281	310	511	1060	129	114	21	106
20	354	333	296	292	284	330	561	1070	147	117	40	110
21	334	339	304	296	280	305	600	1000	145	115	41	119
22	327	355	295	300	285	316	689	1070	204	108	41	99
23	333	379	296	304	292	331	806	1080	238	161	38	93
24	329	346	290	314	295	315	889	1030	149	165	32	107
25	326	335	290	306	284	317	860	924	108	184	27	117
26	323	312	295	299	292	303	666	933	96	186	25	114
27	312	333	283	288	299	302	546	923	85	188	21	113
28	329	333	276	283	303	297	519	919	80	180	19	117
29	340	341	269	288	---	324	490	1020	73	178	18	130
30	295	341	270	277	---	302	467	987	66	141	18	133
31	303	---	273	258	---	325	---	1070	---	144	17	---
TOTAL	9626	10400	9337	9143	8256	9643	13611	26819	11721	3156	1314	2988
MEAN	311	347	301	295	295	311	454	865	391	102	42.4	99.6
MAX	371	379	329	314	328	336	889	1160	1280	188	142	163
MIN	227	312	269	258	267	271	298	433	66	48	17	17
AC-FT	19090	20630	18520	18140	16380	19130	27000	53200	23250	6260	2610	5930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	348	335	301	287	280	299	508	1486	1717	552	291	255
MAX	585	488	424	404	387	448	1034	2785	3526	1511	759	547	
(WY)	1985	1987	1986	1986	1986	1986	1985	1985	1984	1983	1984	1984	
MIN	141	229	184	181	208	225	319	397	194	29.3	42.4	71.7	
(WY)	1978	1978	1977	1977	1978	1977	1991	1977	1977	1977	1994	1977	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1962 - 1994

	ANNUAL TOTAL	243145	116014	
ANNUAL MEAN	666	318	555	
HIGHEST ANNUAL MEAN			966	1984
LOWEST ANNUAL MEAN			208	1977
HIGHEST DAILY MEAN	3660	May 22	1280	Jun 1
LOWEST DAILY MEAN	200	Jan 13	a 17	Aug 31
ANNUAL SEVEN-DAY MINIMUM	212	Sep 4	19	Aug 26
INSTANTANEOUS PEAK FLOW			1500	Jun 1
INSTANTANEOUS PEAK STAGE			3.71	Jun 1
ANNUAL RUNOFF (AC-FT)	482300		230100	402300
10 PERCENT EXCEEDS	2100		652	1330
50 PERCENT EXCEEDS	317		303	321
90 PERCENT EXCEEDS	233		53	212

a-Also occurred Sep 1.

b-Also occurred Jul 20-21, 1977.

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¹/4NE¹/4 sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi upstream from Curtis Creek and 2.5 mi east of Meeker.

DRAINAGE AREA.--755 mi².

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,300 ft above sea level, from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi downstream, at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft, higher, prior to Oct. 1, 1933, and at datum 2.00 ft, higher, thereafter.

REMARKS.--Estimated daily discharges: Dec. 15 to Mar. 14. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 12,000 acres upstream from station, and about 3,000 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	427	399	295	289	345	342	459	1450	214	218	139
2	337	405	385	299	315	352	358	445	1310	204	154	174
3	327	395	379	292	335	371	349	452	1100	221	93	187
4	327	413	367	300	332	380	367	450	1040	212	96	182
5	323	397	382	305	346	360	360	458	963	192	98	166
6	315	392	370	309	349	391	340	567	844	182	105	153
7	345	382	362	310	344	377	345	691	726	180	110	163
8	403	376	382	312	340	380	352	726	661	189	118	187
9	405	384	371	315	335	325	346	736	593	190	155	215
10	392	384	370	317	325	319	339	748	532	213	195	257
11	390	402	362	323	320	357	347	813	479	212	181	257
12	394	422	377	320	312	347	333	951	467	215	178	266
13	427	418	358	313	303	345	341	985	429	205	166	254
14	422	405	322	322	290	341	355	935	362	216	160	308
15	452	392	322	320	295	338	361	988	351	244	155	291
16	451	352	325	324	299	342	366	1050	356	255	124	263
17	448	372	319	328	297	356	416	1250	291	253	113	227
18	452	392	314	325	306	349	474	1270	246	245	118	208
19	446	375	318	317	303	344	516	1190	274	265	134	212
20	430	355	312	311	309	361	558	1190	299	256	163	216
21	414	385	317	315	312	341	595	1100	313	245	156	236
22	403	406	310	317	317	347	668	1150	386	239	154	209
23	408	419	312	324	325	363	784	1220	419	280	141	207
24	407	391	305	335	328	346	868	1100	339	276	131	216
25	403	364	302	326	320	345	846	947	290	284	131	208
26	401	342	307	319	329	335	686	987	268	271	133	202
27	387	331	297	307	337	313	559	948	246	266	106	203
28	406	378	290	302	341	295	528	1040	234	262	127	206
29	416	450	283	300	---	355	497	1070	226	262	140	206
30	367	415	285	295	---	305	477	1070	225	218	147	225
31	377	---	287	275	---	328	---	1220	---	216	140	---
TOTAL	12205	11721	10391	9672	8953	10753	14073	28206	15719	7182	4340	6443
MEAN	394	391	335	312	320	347	469	910	524	232	140	215
MAX	452	450	399	335	349	391	868	1270	1450	284	218	308
MIN	315	331	283	275	289	295	333	445	225	180	93	139
AC-FT	24210	23250	20610	19180	17760	21330	27910	55950	31180	14250	8610	12780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1994, BY WATER YEAR (WY)

	MEAN	389	368	331	312	307	340	546	1547	1886	673	387	356
MAX	652	648	460	410	420	522	1094	2829	4091	2524	866	716	
(WY)	1985	1929	1929	1929	1930	1986	1962	1985	1921	1957	1984	1929	
MIN	215	255	233	225	232	261	313	499	264	116	140	156	
(WY)	1978	1978	1978	1981	1935	1935	1944	1977	1934	1977	1994	1977	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1910 - 1994
ANNUAL TOTAL	264907	139658	
ANNUAL MEAN	726	383	621
HIGHEST ANNUAL MEAN			1044
LOWEST ANNUAL MEAN			274
HIGHEST DAILY MEAN	3670	May 22	1450 Jun 1
LOWEST DAILY MEAN	229	Jan 13	93 Aug 3
ANNUAL SEVEN-DAY MINIMUM	254	Jan 29	111 Aug 2
INSTANTANEOUS PEAK FLOW			1620 Jun 1
INSTANTANEOUS PEAK STAGE			3.88 Jun 1
ANNUAL RUNOFF (AC-FT)	525400	277000	449700
10 PERCENT EXCEEDS	2260	675	1450
50 PERCENT EXCEEDS	380	332	370
90 PERCENT EXCEEDS	288	182	270

a-Maximum gage height, 7.60 ft, Jun 16, 1921, present datum.

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in SW¹/4NE¹/4 sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from county bridge, 4.5 mi downstream from Strawberry Creek, and 10 mi west of Meeker.

DRAINAGE AREA.--1,024 mi².

PERIOD OF RECORD.--October 1961 to current year. Water-quality data available, April 1974 to September 1992.

REVISED RECORDS.--WDR CO-79-3: Drainage area. WDR CO-86-2: 1985.

GAGE.--Water-stage recorder. Elevation of gage is 5,928 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14 to Feb 27. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 22,000 acres upstream from station, and a few small hay meadows downstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	501	473	315	315	418	348	502	1360	252	232	211
2	423	468	434	320	340	406	386	479	1280	295	216	242
3	396	466	426	325	370	428	368	489	1110	352	135	254
4	388	481	422	330	370	443	389	494	1050	316	116	253
5	390	455	426	335	375	443	385	498	1020	286	100	236
6	393	445	404	335	380	449	354	600	917	250	95	222
7	455	432	393	340	380	461	370	728	816	249	101	232
8	575	421	432	340	375	405	378	756	735	231	128	239
9	590	432	410	345	375	347	368	772	663	188	177	237
10	551	432	404	350	370	338	361	776	578	206	240	278
11	531	461	384	355	365	370	376	804	520	200	222	260
12	528	512	422	360	360	354	350	898	530	206	223	269
13	564	497	384	355	350	349	355	948	467	181	223	277
14	538	475	370	355	340	349	372	940	388	200	226	357
15	563	454	365	360	320	353	379	976	347	235	221	372
16	570	397	360	360	325	358	383	1050	356	245	149	330
17	559	422	360	360	330	374	439	1180	303	256	131	299
18	564	463	355	365	340	364	508	1200	204	232	130	268
19	554	422	350	360	340	358	555	1130	248	258	147	287
20	526	385	350	355	345	388	605	1110	300	250	171	287
21	502	431	350	350	350	356	651	1030	323	247	206	334
22	493	479	350	350	350	357	722	1060	429	241	212	300
23	499	489	350	360	360	377	822	1100	512	277	207	294
24	492	436	345	365	370	355	911	1060	436	306	197	299
25	485	398	340	370	370	362	907	916	351	312	190	297
26	478	346	335	355	400	345	766	902	316	300	202	281
27	464	323	330	350	430	322	633	899	259	286	193	268
28	481	373	325	345	460	281	605	959	254	272	199	267
29	495	497	320	340	---	362	564	1090	242	278	211	276
30	427	482	320	335	---	305	536	1080	238	244	218	307
31	432	---	315	320	---	325	---	1150	---	226	215	---
TOTAL	15312	13275	11604	10760	10155	11502	15146	27576	16552	7877	5633	8333
MEAN	494	442	374	347	363	371	505	890	552	254	182	278
MAX	590	512	473	370	460	461	911	1200	1360	352	240	372
MIN	388	323	315	315	315	281	348	479	204	181	95	211
AC-FT	30370	26330	23020	21340	20140	22810	30040	54700	32830	15620	11170	16530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	449	411	366	337	336	389	590	1547	1854	725	419	387
MAX	793	637	536	493	457	586	1141	2979	3904	1960	837	712	
(WY)	1985	1985	1985	1986	1986	1986	1985	1985	1983	1983	1984	1984	
MIN	260	282	266	230	251	285	393	374	283	147	172	213	
(WY)	1978	1978	1964	1976	1977	1981	1977	1977	1977	1977	1990	1990	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1962 - 1994

ANNUAL TOTAL	294826	153725	
ANNUAL MEAN	808	421	651
HIGHEST ANNUAL MEAN			1069
LOWEST ANNUAL MEAN			290
HIGHEST DAILY MEAN	3870	May 22	1360 Jun 1
LOWEST DAILY MEAN	260	Jan 13	95 Aug 6
ANNUAL SEVEN-DAY MINIMUM	298	Jan 11	122 Aug 3
INSTANTANEOUS PEAK FLOW			1500 Jun 1
INSTANTANEOUS PEAK STAGE			2.50 Jun 1
ANNUAL RUNOFF (AC-FT)	584800	304900	471900
10 PERCENT EXCEEDS	2340	731	1440
50 PERCENT EXCEEDS	461	360	410
90 PERCENT EXCEEDS	325	223	280

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¹/4SE¹/4 sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft downstream from private bridge, 1,100 ft upstream from Stewart Gulch, and 14.3 mi west of Rio Blanco.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,366 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 7-8, Jan. 30 to Feb. 4, and Feb. 6. Records good except for estimated daily discharges, which are poor. Several diversions upstream from station for irrigation of hay meadows.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	13	8.4	7.0	11	12	5.9	11	5.5	7.7	1.4
2	5.6	12	12	8.7	7.0	12	13	7.0	11	7.0	8.1	1.7
3	6.9	12	12	8.3	7.0	13	13	6.4	10	6.6	7.6	1.3
4	8.4	13	12	7.5	7.1	13	14	6.3	10	6.0	5.9	1.4
5	9.8	12	12	7.4	7.7	15	14	4.9	9.7	6.2	4.7	1.4
6	11	12	12	7.1	7.1	14	14	4.8	9.0	6.2	1.2	1.6
7	14	12	11	7.0	7.2	15	14	2.9	8.9	5.9	1.1	2.0
8	15	11	11	6.8	7.5	15	14	3.7	9.1	6.1	1.2	2.6
9	15	14	11	6.3	7.4	15	15	4.0	9.3	6.1	1.8	2.4
10	15	17	11	6.4	7.1	13	15	1.6	9.3	5.8	1.9	2.5
11	15	16	11	8.0	7.5	14	15	1.2	7.9	5.8	2.0	3.1
12	15	17	11	8.2	8.5	15	15	1.1	8.9	6.4	2.4	3.2
13	15	16	12	6.4	11	17	14	1.2	8.7	6.7	2.3	2.8
14	14	16	14	6.8	15	20	13	1.1	8.7	6.1	1.8	3.6
15	14	15	11	7.0	8.4	18	12	1.0	8.3	6.1	1.2	3.5
16	14	15	10	6.4	7.9	16	12	3.9	7.9	5.9	1.1	3.5
17	14	15	10	7.1	8.7	17	11	7.7	7.1	5.6	1.0	3.1
18	13	15	11	7.3	14	14	12	9.8	7.9	5.5	1.1	3.3
19	13	15	11	7.1	9.7	13	9.8	12	8.8	5.6	1.1	3.3
20	12	14	10	6.8	9.1	14	7.6	12	9.1	5.6	1.1	4.1
21	12	14	11	6.7	9.0	12	7.4	12	8.8	5.4	1.1	3.3
22	12	14	13	7.6	9.0	11	8.2	11	8.4	5.7	1.1	2.7
23	12	14	10	7.6	9.3	12	5.7	11	7.8	5.9	1.1	2.4
24	12	14	11	7.4	9.1	13	4.3	11	7.4	6.6	1.0	2.5
25	12	13	9.2	6.1	11	13	4.5	12	6.9	6.5	1.0	2.5
26	11	14	9.2	6.8	14	13	2.3	12	6.6	6.1	1.0	2.7
27	11	17	9.2	7.1	13	14	2.9	12	6.4	6.2	1.1	3.4
28	11	13	9.0	7.1	11	13	4.6	12	6.4	6.2	1.1	3.1
29	11	14	9.0	7.1	---	13	6.2	12	5.7	6.5	1.1	2.4
30	12	13	8.3	7.0	---	12	4.9	11	6.1	6.4	1.8	4.3
31	12	---	8.8	7.0	---	13	---	11	---	6.9	1.3	---
TOTAL	378.7	421	335.7	222.5	257.3	433	310.4	225.5	251.1	189.1	69.0	81.1
MEAN	12.2	14.0	10.8	7.18	9.19	14.0	10.3	7.27	8.37	6.10	2.23	2.70
MAX	15	17	14	8.7	15	20	15	12	11	7.0	8.1	4.3
MIN	5.6	11	8.3	6.1	7.0	11	2.3	1.0	5.7	5.4	1.0	1.3
AC-FT	751	835	666	441	510	859	616	447	498	375	137	161

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	MEAN	23.2	25.4	24.0	27.0	37.2	73.4	165	230	126	68.5	49.8	28.4
MAX	9.43	10.8	9.53	8.67	9.23	15.9	40.7	64.9	27.1	16.1	15.4	9.84	
(WY)	1985	1986	1986	1986	1986	1986	1985	1983	1983	1984	1984	1984	
MIN	2.42	2.78	3.63	2.83	3.21	2.96	2.21	3.79	3.92	4.25	2.23	2.34	
(WY)	1978	1991	1991	1991	1991	1992	1977	1990	1989	1982	1994	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1975 - 1994

ANNUAL TOTAL	12613.4	3174.4	
ANNUAL MEAN	34.6	8.70	19.9
HIGHEST ANNUAL MEAN			55.0
LOWEST ANNUAL MEAN			5.02
HIGHEST DAILY MEAN	271	May 17	410
LOWEST DAILY MEAN	4.1	Mar 22	.06
ANNUAL SEVEN-DAY MINIMUM	4.5	Jan 29	.06
INSTANTANEOUS PEAK FLOW			520
INSTANTANEOUS PEAK STAGE			7.01
ANNUAL RUNOFF (AC-FT)	25020	6300	14380
10 PERCENT EXCEEDS	102	14	40
50 PERCENT EXCEEDS	16	8.7	9.6
90 PERCENT EXCEEDS	6.0	2.0	3.5

a-Also occurred Aug 17, 24-26.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1974 to September 1985.

pH: December 1974 to September 1984.

WATER TEMPERATURE: December 1974 to September 1985.

DISSOLVED OXYGEN: December 1974 to September 1984.

SUSPENDED SEDIMENT DISCHARGE: April 1974 to September 1985.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1985. Water-quality monitor December 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,690 microsiemens, June 21, 1976; minimum, 344 microsiemens, Apr. 13, 1976.

pH: Maximum, 9.0 units, June 21, 1976; minimum, 7.0 units, May 24, 1976.

WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.

DISSOLVED OXYGEN: Maximum, 15.7 mg/L, Oct. 8, 1975; minimum, 5.1 mg/L, July 17, 1979.

SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L, July 20, 1974; minimum daily, 6 mg/L, several days during September 1976.

SEDIMENT LOADS: Maximum daily, 18,600 tons May 16, 1984; minimum daily, 0.02 ton Apr. 20, 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 15...	1300	15	1190	8.4	5.5	9.9	430	86	52	120
MAR 31...	1500	13	1100	8.5	14.0	8.3	390	76	47	110
MAY 18...	1115	9.5	1290	8.2	18.0	9.8	410	81	51	120
SEP 07...	1015	1.6	1320	8.5	12.5	9.3	440	85	55	130

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 15...	3	2.3	364	260	18	0.7	15	779	1.06	32.4
MAR 31...	2	2.3	353	230	16	0.7	15	715	0.97	24.3
MAY 18...	3	2.8	379	250	18	0.9	14	770	1.05	19.7
SEP 07...	3	2.6	--	260	20	0.9	14	748	1.02	3.23

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 15...	0.04	1.10	0.04	0.2	<0.01	0.01
MAR 31...	0.03	0.99	0.06	0.2	0.02	<0.01
MAY 18...	0.01	0.54	0.04	0.3	0.03	0.03
SEP 07...	<0.01	<0.05	0.02	0.30	<0.01	<0.01

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 15...	--	--	170	--	--	--	--	--	--	1700	--
MAR 31...	--	--	160	--	--	--	--	--	--	1500	--
MAY 18...	2	98	190	<1	13	12	150	5	<1	1700	<3
SEP 07...	2	110	220	<1	20	13	56	5	<1	1800	<3

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	0940	9.5	1320	7.5	MAY 25...	1032	12	1180	13.0
28...	0930	11	1260	4.5	JUL 01...	1233	7.1	1130	18.5
JAN 11...	1110	15	1250	1.5	AUG 10...	1332	2.5	1220	24.0
FEB 22...	1240	9.0	1200	5.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 15...	1300	15	58	2.4
MAR 31...	1500	13	87	2.9
MAY 18...	1115	9.5	95	2.4
SEP 07...	1015	1.6	11	0.05

GREEN RIVER BASIN

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¹/₄NE¹/₄ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi upstream from mouth, about 300 ft above confluence with West Fork Stewart Gulch, and 14.2 mi west of Rio Blanco.

DRAINAGE AREA.--44.0 mi².

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1982.

pH: October 1974 to March 1982.

WATER TEMPERATURE: October 1974 to September 1982.

DISSOLVED OXYGEN: October 1974 to March 1982.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,200 microsiemens, Nov. 10, 1975; minimum, 583 microsiemens, Feb. 22, 1982.

pH: Maximum, 8.9 units, Dec. 9, 11, 1979; minimum, 7.6 units, Oct. 7, 1975.

WATER TEMPERATURES: Maximum, 20.5°C, July 3, 1976, June 3, 1977; minimum, 0.0°C, Jan. 9, Dec. 17, 1977, Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.

DISSOLVED OXYGEN: Maximum, 16.6 mg/L, Jan. 13, 1976; minimum, 3.6 mg/L, Aug. 19, 20, 1977.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/L, June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

SEDIMENT LOADS: Maximum daily, 10 tons estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 17...	1030	2.2	1380	8.4	8.0	11.6	550	95	74	120
MAR 31...	1230	3.0	1380	8.4	14.0	10.4	530	110	62	130
MAY 18...	0950	2.3	1440	8.2	11.5	8.7	530	90	73	130
SEP 07...	0900	0.03	1440	8.3	10.0	8.8	560	99	76	130

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 17...	2	1.2	361	400	8.9	0.3	16	942	1.28
MAR 31...	2	1.3	357	400	9.7	0.3	16	950	1.29
MAY 18...	2	1.1	357	390	9.3	0.3	15	931	1.27
SEP 07...	2	1.4	353	390	9.4	0.2	17	942	1.28

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
NOV 17...	5.64	0.03	1.50	0.02	<0.2	<0.01	<0.01	90	3000
MAR 31...	7.72	0.02	1.40	0.04	<0.2	<0.01	<0.01	80	770
MAY 18...	5.71	<0.01	1.20	0.02	<0.2	<0.01	0.01	90	2900
SEP 07...	0.07	<0.01	1.10	0.03	<0.2	<0.01	<0.01	90	2800

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO-Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 17...	1030	2.2	9	0.05	MAY 18...	0950	2.3	9	0.05
MAR 31...	1230	3.0	91	0.74	SEP 07...	0900	0.03	7	0.00

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¹/4NE¹/4 sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft upstream from mouth and 17.4 mi west of Rio Blanco.

DRAINAGE AREA.--48.4 mi².

PERIOD OF RECORD.--April 1974 to September 1985, October 1986 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1982.

pH: March 1976 to February 1982.

WATER TEMPERATURE: November 1974 to September 1982.

DISSOLVED OXYGEN: March 1976 to February 1982.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor November 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished daily maximum and minimum specific conductance data for period of daily record are available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,920 microsiemens July 14, 1976; minimum, 528 microsiemens Mar. 18, 1976.

pH: Maximum, 8.8 units Mar. 11, 1980; minimum, 7.4 units June 4, 6, 1980.

WATER TEMPERATURES: Maximum, 30.5°C July 4, 1982; minimum, 0.0°C on many days during winter months each year.

DISSOLVED OXYGEN: Maximum, 12.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.

SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.

SEDIMENT LOADS: Maximum daily, 61 tons July 29, 30, 1979; no flow many days during 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)
NOV 17...	1215	3.4	1320	8.5	3.5	12.0	540	98	71	110
MAR 31...	1120	3.0	1330	8.4	8.0	9.6	520	93	69	110
MAY 18...	1215	2.2	1330	8.3	17.5	7.9	500	85	69	110
SEP 07...	1130	0.17	1450	8.3	17.0	8.6	590	99	83	130

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 17...	2	1.3	354	360	12	0.4	16	886	1.21	8.04
MAR 31...	2	1.4	353	350	12	0.4	17	870	1.18	7.11
MAY 18...	2	1.5	319	340	12	0.4	15	828	1.13	4.90
SEP 07...	2	1.5	371	370	12	0.3	17	939	1.28	0.44

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
NOV 17...	0.03	0.55	0.02	--	<0.20	<0.01	<0.01	130	2900
MAR 31...	0.01	0.49	0.05	--	<0.20	<0.01	<0.01	120	2800
MAY 18...	<0.01	0.32	0.02	0.48	0.50	0.02	0.01	130	2700
SEP 07...	<0.01	0.05	0.02	0.28	0.30	<0.01	<0.01	140	3600

09306058 WILLOW CREEK NEAR RIO BLANCO CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV					MAY				
17...	1215	3.4	7	0.06	18...	1215	2.2	457	2.7
MAR					SEP				
31...	1120	3.0	402	3.3	07...	1130	0.17	8	0.00

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°5'16", long 108°7'49", in SE¹/₄NE¹/₄, sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft downstream from Ryan Gulch, and 23 mi northwest of Rio Blanco.

DRAINAGE AREA.--506 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977 (M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,070 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 15-17, 19-31, Jan. 8-9, and Jan. 31 to Feb. 8. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	32	34	33	24	37	29	13	12	9.3	4.5	2.4
2	17	31	34	29	25	36	34	15	12	9.4	4.0	3.1
3	17	32	33	29	26	37	33	16	12	9.3	3.6	3.6
4	17	32	33	29	28	38	32	19	13	9.0	3.5	3.7
5	17	32	34	29	29	39	31	15	13	8.0	3.0	3.6
6	20	31	33	28	31	40	32	16	11	7.9	2.9	4.3
7	23	31	33	28	28	38	32	16	10	8.4	2.8	5.1
8	33	30	33	27	26	37	33	16	11	8.1	2.7	5.5
9	36	30	33	27	26	36	33	15	9.7	7.6	2.9	6.0
10	31	34	32	27	25	34	32	15	11	7.5	2.3	5.2
11	25	39	32	28	25	34	33	11	9.7	8.0	2.1	3.9
12	22	41	33	28	27	35	32	9.6	9.8	8.5	2.0	3.8
13	24	42	33	27	24	35	30	10	12	8.0	2.1	4.0
14	27	41	33	27	26	38	28	11	9.1	6.9	2.2	4.6
15	29	39	33	27	27	37	25	7.5	8.1	6.6	2.2	4.4
16	31	38	34	27	26	35	23	6.2	7.8	8.5	2.3	4.6
17	34	38	35	27	28	35	18	11	7.9	8.8	2.5	4.8
18	36	39	35	27	53	34	19	12	7.2	8.5	3.1	4.2
19	37	38	35	27	39	32	18	16	7.5	6.2	2.4	4.8
20	34	37	35	27	30	32	18	12	8.4	6.7	3.0	5.0
21	32	37	40	27	29	32	17	13	8.5	6.8	2.6	5.4
22	32	37	44	27	29	29	17	13	9.4	6.7	2.6	5.4
23	32	37	36	27	27	30	15	12	9.0	5.6	2.6	5.8
24	32	37	35	27	28	30	14	11	8.1	4.3	2.5	7.2
25	32	35	32	26	40	32	16	12	8.5	5.4	2.5	7.1
26	32	38	31	26	65	32	15	11	8.9	5.6	2.3	7.2
27	31	39	31	26	57	31	15	12	8.2	5.6	2.3	7.3
28	31	41	30	26	44	30	15	12	7.9	5.6	2.8	6.8
29	31	34	30	27	---	29	15	13	8.7	6.0	2.6	6.9
30	31	34	32	25	---	28	14	13	9.1	5.6	2.5	8.2
31	31	---	32	24	---	29	---	13	---	6.1	2.1	---
TOTAL	876	1076	1043	846	892	1051	718	397.3	288.5	224.5	83.5	153.9
MEAN	28.3	35.9	33.6	27.3	31.9	33.9	23.9	12.8	9.62	7.24	2.69	5.13
MAX	37	42	44	33	65	40	34	19	13	9.4	4.5	8.2
MIN	17	30	30	24	24	28	14	6.2	7.2	4.3	2.0	2.4
AC-FT	1740	2130	2070	1680	1770	2080	1420	788	572	445	166	305

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	21.9	26.7	24.7	22.1	25.0	34.1	44.1	63.7	30.4	22.7	30.0	21.0
MAX	69.9	58.4	60.9	55.5	61.0	112	228	326	166	98.7	95.6	65.2	
(WY)	1986	1986	1984	1984	1986	1986	1986	1985	1983	1984	1984	1984	
MIN	2.75	7.98	8.10	8.90	13.3	11.5	2.94	3.65	3.51	3.95	2.69	3.94	
(WY)	1965	1968	1968	1979	1965	1972	1967	1967	1967	1967	1994	1981	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	19596	7649.7	
ANNUAL MEAN	53.7	21.0	30.6
HIGHEST ANNUAL MEAN			96.5
LOWEST ANNUAL MEAN			8.30
HIGHEST DAILY MEAN			534
LOWEST DAILY MEAN	316	May 18	May 5 1985
ANNUAL SEVEN-DAY MINIMUM	13	Jan 26	Jun 7 1981
INSTANTANEOUS PEAK FLOW			2.2
INSTANTANEOUS PEAK STAGE			Aug 10
ANNUAL RUNOFF (AC-FT)	38870	15170	550
10 PERCENT EXCEEDS	135	36	7.70
50 PERCENT EXCEEDS	33	25	May 5 1985
90 PERCENT EXCEEDS	17	4.0	6.3

a-Also occurred Jan 27 to Feb 1, and Feb 3-5.

b-Maximum gage-height, 7.81 ft, May 28, 1983.

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1979 to September 1982, November 1985 to current year.

WATER TEMPERATURE: December 1979 to September 1982, November 1985 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1983.

INSTRUMENTATION.--Automatic pumping sediment sampler October 1972 to September 1983. Water-quality monitor December 1979 to September 1982, November 1985 to current year.

REMARKS.--Unpublished maximum and minimum specific conductance data for the periods of daily record are available in the district office. Daily specific conductance records rated fair. Periods of missing or deleted record are due to instrument malfunction or sensor fouling. Daily water temperatures rated good except for mid-February to the end of March, which is poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 2,920 microsiemens July 18, 1981; minimum, 450 microsiemens July 15, 1992.

WATER TEMPERATURES: Maximum 28.0°C Sept. 4, 1990, minimum, 0.0°C many days during the winter period.

SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L, July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979, and several days in September 1981.

SEDIMENT LOADS: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton, Sept. 27, 30, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,690 microsiemens Aug. 8; minimum, not determined.

WATER TEMPERATURES: Maximum 27.0°C Aug. 20; minimum, 0.0°C, many days during the winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 15...	1415	39	1480	8.4	5.0	10.4	540	90	75	150
MAR 30...	1000	26	1410	8.6	4.0	10.9	530	90	73	130
MAY 18...	1455	11	1700	8.5	18.5	8.5	530	76	82	180
SEP 06...	1445	4.6	2120	8.3	19.5	7.7	700	82	120	290

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 15...	3	2.2	421	380	16	0.6	17	990	1.35
MAR 30...	2	2.2	412	360	15	0.6	17	942	1.28
MAY 18...	3	3.3	460	430	17	0.7	15	1080	1.47
SEP 06...	5	3.7	650	550	24	1.0	18	1480	2.02

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 15...	104	0.03	0.78	0.03	0.17	0.20	0.03	0.02	--
MAR 30...	66.9	0.02	0.83	0.05	--	<0.20	0.02	<0.01	--
MAY 18...	32.2	<0.01	0.09	0.02	0.28	0.30	0.01	0.02	--
SEP 06...	18.4	<0.01	0.06	0.02	0.48	0.50	0.08	0.07	8.8

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 15...	--	--	170	--	--	--	--	--	--	3000	--
MAR 30...	--	--	150	--	--	--	--	--	--	2800	--
MAY 18...	2	68	210	<1	7	<4	40	5	<1	3100	<3
SEP 06...	4	<100	320	<1	20	20	70	8	1	3900	<10

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	1230	18	1800	11.5	MAY 19...	1254	17	1610	15.0
JAN 11...	1246	31	1500	0.0	JUL 01...	0918	9.7	1790	17.0
FEB 22...	1500	28	1480	5.5	AUG 10...	0947	2.2	2410	16.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 15...	1415	39	179	19	MAY 18...	1455	11	63	1.9
MAR 30...	1000	26	436	31	SEP 06...	1445	4.6	16	0.20

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1610	---	---	---	---	1410	1660	1660	1770	2210	2290
2	---	1620	---	---	---	---	1390	1620	1670	1770	2350	2200
3	---	1580	---	---	---	---	1430	1610	1660	1790	2460	2190
4	---	1570	1470	---	---	---	1420	1560	1660	1790	2460	2190
5	---	1580	1500	---	1480	---	1400	1590	1660	1820	2510	2170
6	1820	1590	1510	---	1450	---	1390	1600	1720	1850	2510	2120
7	1780	1610	1520	---	1430	---	1370	1600	1780	1820	2460	2060
8	1690	1610	---	---	1360	---	1380	1600	1750	1820	2470	1990
9	1660	1600	---	---	---	---	1360	1600	1790	1840	2520	1970
10	1630	1560	---	---	---	---	1320	1610	1770	1820	2440	1980
11	1650	1530	---	1490	1410	---	1330	1720	1810	1800	2500	2050
12	1690	1510	---	---	1400	---	1360	1730	1820	1780	2490	2040
13	1670	1530	---	---	---	---	1390	1700	1760	1790	2480	2010
14	1660	1520	---	---	---	---	1340	1700	1770	1830	2470	1980
15	1660	1500	---	---	---	---	1380	---	1790	1910	2450	2030
16	1650	1480	---	---	---	---	1380	---	1860	1840	2420	2040
17	1640	1470	---	---	---	---	1400	---	1900	1830	2380	2010
18	1600	1450	---	---	---	---	1360	1650	1970	1820	2100	2030
19	1610	1480	---	---	---	---	1390	1580	1990	1940	2200	2010
20	1610	1490	---	---	---	---	1380	1590	1930	1890	2220	2030
21	1610	1510	---	---	---	---	1390	1580	1900	1870	2320	2030
22	1610	1440	---	---	---	---	1360	1590	1850	1820	2340	2040
23	1600	1480	---	---	---	---	1370	1610	1820	1910	2380	2040
24	1510	1500	---	---	1480	---	1470	1620	1770	2100	2380	1910
25	1500	1520	---	---	---	---	1570	1610	1740	2070	2370	1890
26	1480	1540	---	---	---	---	1570	1630	1730	2050	2380	1870
27	1470	1530	---	---	---	---	1570	1660	1770	2030	2350	1850
28	1540	1520	---	---	---	---	1600	1670	1780	2060	2280	1860
29	1630	---	---	---	---	---	1610	1660	1760	2040	2230	1870
30	1680	---	---	---	---	---	1630	1690	1750	2080	2240	1800
31	1650	---	---	---	---	1440	---	1670	---	2060	2340	---
MONTH	---	---	---	---	---	---	1420	---	1790	1890	2380	2020

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	7.4	7.6	3.7	5.1	2.0	1.5	.0	.0	.0	8.9	3.3
2	14.5	7.6	6.6	1.4	3.7	1.2	2.8	.0	.0	.0	9.5	2.5
3	14.5	6.9	5.1	2.0	2.7	.0	2.8	.0	.0	.0	10.1	3.1
4	14.1	7.4	6.0	2.8	2.9	.0	3.3	.0	.0	.0	10.2	3.4
5	13.5	7.1	5.5	2.0	3.2	.2	4.1	1.9	.0	.0	9.6	3.9
6	11.3	8.7	5.0	.0	3.8	1.2	1.9	.0	.0	.0	8.1	4.9
7	12.5	10.1	5.4	.1	2.8	.0	.0	.0	.0	.0	9.2	5.4
8	11.3	9.1	4.9	.0	3.7	.3	.2	.0	3.5	.0	6.7	2.6
9	10.9	7.4	5.0	.0	4.4	1.4	1.8	.0	4.0	.0	7.9	1.2
10	11.8	5.9	5.5	.5	4.5	.6	2.4	.0	4.5	.4	8.1	1.8
11	11.0	6.0	6.8	3.1	3.2	.2	.5	.0	3.2	.0	8.9	4.2
12	10.7	8.4	7.1	5.2	3.0	.9	.0	.0	2.1	.0	9.7	3.7
13	11.2	7.5	6.3	4.5	.9	.0	3.0	.0	1.1	.0	10.0	2.9
14	10.0	7.5	4.6	3.2	.0	.0	3.0	.0	1.8	.0	10.4	4.0
15	9.9	6.3	5.2	2.1	.0	.0	2.2	.0	3.3	.0	10.9	3.6
16	11.0	7.2	4.3	.0	.0	.0	3.3	.5	4.6	.0	11.0	4.1
17	10.1	7.5	4.1	.6	.0	.0	1.6	.0	5.7	2.1	11.0	6.6
18	9.6	7.8	4.1	1.2	.0	.0	2.9	.0	4.1	1.5	7.3	3.2
19	11.9	7.0	3.7	.1	.0	.0	3.1	.0	4.0	1.0	10.5	5.0
20	11.1	5.9	3.4	.0	.0	.0	3.2	.0	2.7	.0	9.8	5.1
21	10.3	4.7	3.5	.0	.0	.0	3.2	.0	3.4	.7	11.1	2.9
22	9.8	4.7	5.1	2.8	.0	.0	2.8	.0	5.7	.7	10.3	4.4
23	10.8	5.1	4.4	1.5	.0	.0	3.3	.0	4.1	.0	9.4	4.0
24	10.4	4.4	2.5	.3	.0	.0	4.3	.7	5.1	.0	8.8	3.3
25	10.1	4.7	.9	.0	.0	.0	4.0	.9	9.1	2.3	8.8	4.4
26	8.1	3.9	.0	.0	.0	.0	3.3	2.2	8.1	1.4	9.0	2.8
27	7.7	2.0	.0	.0	.0	.0	3.6	1.5	6.6	2.0	6.0	2.0
28	7.0	3.8	1.3	.0	.0	.0	2.7	.0	6.4	3.2	9.5	.0
29	6.2	2.9	4.5	.9	.6	.0	.3	.0	---	---	10.2	4.3
30	6.0	.1	3.9	.9	1.8	.0	.0	.0	---	---	11.1	1.3
31	6.9	.8	---	---	.7	.0	.0	.0	---	---	12.5	2.1
MONTH	14.5	.1	7.6	.0	5.1	.0	4.3	.0	9.1	.0	12.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	3.5	13.9	5.2	20.5	8.7	23.3	12.8	20.8	14.7	17.6	10.6
2	12.6	3.6	18.1	7.3	21.8	10.2	20.2	14.6	24.4	12.2	23.4	10.9
3	13.0	5.0	13.6	6.9	21.1	11.0	21.7	12.2	23.3	12.0	22.1	14.1
4	12.9	6.7	15.6	5.1	21.1	11.2	23.1	12.2	22.8	11.6	23.9	11.7
5	10.8	4.1	18.1	8.8	20.8	10.2	23.3	12.9	22.1	12.7	23.8	9.8
6	9.0	3.3	20.2	7.6	19.7	9.9	22.4	11.7	24.3	11.6	19.2	9.4
7	7.7	4.7	16.6	6.7	19.5	9.3	21.7	9.9	20.6	11.9	22.2	10.2
8	10.1	2.3	19.0	5.1	20.5	9.6	23.8	10.8	19.4	13.6	20.3	11.1
9	9.6	4.5	15.9	6.8	20.7	8.3	24.5	11.3	18.2	14.4	19.2	11.7
10	9.1	5.3	20.1	7.3	21.2	9.1	20.7	12.4	24.8	11.3	20.8	11.6
11	7.7	3.9	21.4	7.6	21.6	10.2	21.5	12.5	24.0	14.1	22.0	13.1
12	13.5	2.7	18.0	10.2	19.5	10.8	19.6	12.6	19.4	13.5	20.4	13.0
13	14.4	5.5	14.9	9.5	19.7	11.1	22.2	10.5	25.1	12.6	18.7	11.5
14	12.4	7.6	21.8	7.6	20.5	11.1	22.3	12.0	26.5	13.6	17.9	10.6
15	15.2	3.8	16.9	6.4	21.0	10.5	20.2	11.3	23.7	12.4	19.0	8.5
16	16.9	5.4	19.4	7.6	21.2	9.7	20.6	11.7	23.6	12.7	19.9	8.5
17	15.7	5.7	16.5	8.0	22.2	10.2	21.2	11.1	26.1	12.5	17.6	9.1
18	16.6	6.5	18.9	8.5	21.1	11.4	22.8	12.7	20.8	13.5	17.3	9.5
19	15.6	7.8	18.6	8.3	21.9	13.6	25.1	12.6	22.0	13.9	18.5	10.1
20	14.7	7.9	16.8	8.0	22.1	13.2	24.9	12.7	27.0	12.6	14.1	10.3
21	17.8	6.6	19.6	7.0	19.5	13.5	25.2	11.4	22.4	13.7	19.7	8.6
22	16.0	8.0	19.5	7.6	22.8	14.4	20.9	12.7	23.2	12.1	17.6	7.2
23	16.6	7.2	17.9	9.1	23.7	12.4	22.1	14.0	24.6	10.4	18.3	6.8
24	16.7	6.7	18.2	9.6	24.1	12.0	21.0	12.9	20.8	9.8	17.1	7.1
25	12.6	7.2	19.8	9.0	25.0	12.3	24.8	13.0	22.8	13.0	17.5	7.2
26	9.6	4.7	21.4	10.2	23.8	12.7	25.2	12.5	25.4	10.6	16.7	7.1
27	9.7	4.0	17.3	9.1	24.5	12.4	25.5	12.6	18.2	10.8	16.8	7.3
28	11.9	4.4	15.9	10.6	24.0	12.1	26.0	13.2	24.8	12.7	17.8	7.6
29	12.6	5.0	20.5	9.8	23.5	13.6	25.6	13.5	23.9	12.1	12.6	8.7
30	14.9	4.9	21.4	9.7	23.3	12.4	22.7	12.9	20.2	10.3	14.0	9.8
31	---	---	17.3	10.7	---	---	22.6	15.5	21.0	9.8	---	---
MONTH	17.8	2.3	21.8	5.1	25.0	8.3	26.0	9.9	27.0	9.8	23.9	6.8
YEAR	27.0	.0										

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'14", long 108°14'34", in SW¹/4NE¹/4 sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.9 mi downstream from county highway bridge, 1.0 mi southwest of White River City, 0.15 mi upstream from mouth, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR CO-82-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,705 ft above sea level, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 5-12, Nov. 30 to Apr. 28, and May 13-18. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 5,500 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	44	43	40	30	48	34	10	1.3	2.1	5.0	4.3
2	21	44	43	36	31	45	40	9.8	1.5	3.0	6.6	4.5
3	23	43	41	36	33	45	40	11	1.3	3.7	7.2	4.5
4	24	45	41	36	35	45	38	13	1.6	3.7	6.8	4.3
5	20	46	42	36	36	46	39	12	1.5	3.6	6.8	3.4
6	21	50	41	35	38	47	39	11	1.7	4.0	6.5	3.4
7	24	47	41	35	35	46	39	14	1.2	3.9	6.0	3.5
8	41	43	41	34	33	45	39	13	1.1	3.9	5.9	3.5
9	56	45	42	34	32	44	40	13	1.2	4.3	6.9	4.0
10	46	49	40	34	31	43	40	14	1.9	4.2	6.7	4.1
11	41	53	40	34	31	42	39	11	1.5	4.4	5.6	4.2
12	34	56	41	35	33	42	40	7.2	1.2	4.3	5.3	4.3
13	35	56	41	36	30	43	39	1.5	1.4	4.4	5.1	4.7
14	37	55	41	35	32	45	35	1.0	1.6	4.6	4.6	5.8
15	40	53	41	34	33	44	30	.90	1.4	4.6	4.5	4.8
16	41	50	41	34	33	43	27	.80	1.4	4.5	4.3	6.1
17	43	49	42	34	36	42	20	1.0	1.3	4.3	4.1	5.2
18	48	49	43	34	55	42	18	1.2	1.2	4.2	4.1	4.2
19	48	48	44	34	52	40	17	1.2	1.2	4.3	5.6	4.5
20	47	47	44	34	40	40	16	1.4	1.2	4.4	5.6	4.8
21	43	48	48	34	36	39	16	1.3	1.2	4.4	4.7	3.9
22	40	47	54	34	35	36	15	1.3	1.8	4.0	4.5	4.2
23	41	47	47	33	34	37	14	1.4	1.6	3.9	4.1	4.6
24	41	47	44	33	38	38	13	1.4	1.3	4.3	4.1	3.9
25	43	46	41	32	50	39	13	1.3	1.3	4.4	3.8	3.7
26	48	46	39	32	78	39	12	1.5	1.3	4.7	3.7	3.0
27	44	44	38	32	70	38	12	1.4	1.2	4.6	3.8	2.9
28	44	44	37	33	60	37	12	1.5	1.2	4.4	3.5	3.3
29	44	46	37	33	---	36	12	1.3	1.6	4.2	4.2	3.2
30	44	43	39	32	---	35	12	1.5	1.9	4.4	4.5	4.0
31	44	---	40	30	---	34	---	1.3	---	4.3	4.3	---
TOTAL	1188	1430	1297	1058	1110	1285	800	163.20	42.1	128.0	158.4	124.8
MEAN	38.3	47.7	41.8	34.1	39.6	41.5	26.7	5.26	1.40	4.13	5.11	4.16
MAX	56	56	54	40	78	48	40	14	1.9	4.7	7.2	6.1
MIN	20	43	37	30	30	34	12	.80	1.1	2.1	3.5	2.9
AC-FT	2360	2840	2570	2100	2200	2550	1590	324	84	254	314	248

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	34.2	29.7	26.8	30.8	46.5	57.6	76.7	37.2	27.3	33.5	24.4
MAX	86.1	76.9	72.0	64.9	86.6	123	245	343	247	125	109	75.4
(WY)	1986	1986	1986	1986	1986	1986	1986	1985	1983	1984	1984	1984
MIN	1.60	10.1	13.5	11.4	16.3	17.2	3.54	2.27	1.40	1.56	1.67	2.03
(WY)	1965	1965	1991	1973	1973	1972	1972	1972	1994	1972	1990	1966

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	24149	8784.50	
ANNUAL MEAN	66.2	24.1	37.8
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	378	May 18	525
LOWEST DAILY MEAN	14	Jan 24	14
ANNUAL SEVEN-DAY MINIMUM	14	Jan 24	14
INSTANTANEOUS PEAK FLOW			1.1
INSTANTANEOUS PEAK STAGE			1.80
ANNUAL RUNOFF (AC-FT)	47900	17420	27390
10 PERCENT EXCEEDS	172	46	77
50 PERCENT EXCEEDS	42	32	25
90 PERCENT EXCEEDS	19	1.5	3.7

a-Also occurred Jan 25 to Feb 1, and Feb 3-4.

b-Estimated during period of backwater from ice.

c-Also occurred Jul 22, 1966.

d-Also occurred Nov 13.

e-May have been exceeded during period of ice effect

f-On basis of slope-area measurement of peak flow.

g-Maximum gage height, 5.31 ft, Feb 19, backwater from ice.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to July 1986, March 1987, March 1990 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to September 1983.

WATER TEMPERATURES: January 1971 to September 1974, May 1975 to September 1983.

SUSPENDED-SEDIMENT DISCHARGE: March 1974 to September 1983.

INSTRUMENTATION.--Water-quality monitor May 1975 to September 1983. Pumping sediment sampler March 1974 to September 1983.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. The maximum extreme specific conductance value of 10,000 microsiemens represents a value of 10,000 microsiemens or higher due to instrument limitations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 10,000 microsiemens, June 18, 1981; minimum, 460 microsiemens, Feb. 28 and Mar. 2, 1983.

WATER TEMPERATURES: Maximum, 32.0°C, July 14, 1978; minimum, 0.0°C, many days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L, estimated, Sept. 7, 1978; 4 mg/L, Oct. 2, 1977.

SEDIMENT LOADS: Maximum daily, 6,095 tons, estimated, May 28, 1983; minimum daily, 0.10 ton, June 22, 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 16...	1610	52	1820	8.5	3.5	10.5	510	78	76	230
MAR 30...	1345	37	1820	8.6	9.0	9.8	480	70	74	250
MAY 18...	1630	1.3	4740	8.6	23.0	7.3	460	30	92	1000
SEP 08...	0905	3.5	3730	8.8	12.0	--	450	28	91	790

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 16...	4	2.4	554	400	29	0.8	17	1170	1.59	163
MAR 30...	5	2.8	572	400	35	0.8	17	1200	1.63	118
MAY 18...	20	5.0	1920	560	190	2.8	11	3040	4.14	10.7
SEP 08...	16	4.2	1490	500	130	2.6	12	2460	3.34	23.2

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
MAR 30...	0.03	0.79	0.08	0.30	0.03	0.03	--
MAY 18...	<0.01	<0.05	<0.01	0.50	0.04	0.04	5.9
SEP 08...	<0.01	0.73	0.01	0.60	0.04	0.03	8.4

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY DATA, OCTOBER 1993 TO SEPTEMBER 1994

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 16...	--	--	220	--	--	--	--	--	--	2800	--
MAR 30...	--	--	220	--	--	--	--	--	--	2600	--
MAY 18...	5	<100	870	<1	30	100	20	11	2	1800	<10
SEP 08...	4	200	620	<1	20	90	<10	8	2	2400	<10

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 06...	1035	20	2310	9.5	JUL 06...	1428	4.1	3490	25.0
JAN 13...	1413	37	1750	0.0	AUG 09...	1122	6.7	3190	20.0
FEB 23...	1515	34	1800	2.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEARS OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 16...	1610	52	463	65
MAR 30...	1345	37	405	40
MAY 18...	1630	>1.3	4	0.01
SEP 08...	0905	3.5	12	0.11

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¹/4NW¹/4 sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Boxelder Creek, and 3.5 mi upstream from confluence with Stake Springs Draw, and 21 mi southeast of Rangely.

DRAINAGE AREA.--31.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Elevation of gage is 6,580 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	.86	.90	.62	.61	.58	.60	.63	.60	.48	.35	.32
2	.89	.85	.90	.61	.61	.60	.63	.61	.58	.45	.34	.26
3	.87	.87	.90	.64	.61	.60	.63	.60	.60	.44	.33	.25
4	.86	.86	.90	.64	.61	.63	.64	.61	.61	.39	.32	.25
5	.83	.82	.90	.69	.62	.60	.65	.58	.61	.38	.34	.26
6	.81	.84	.90	.67	.61	.59	.66	.56	.61	.39	.35	.27
7	.91	.83	.90	.68	.64	.56	.66	.56	.64	.38	.33	.29
8	1.1	.81	.90	.69	.65	.55	.69	.56	.63	.37	.32	.30
9	1.1	.84	.92	.70	.67	.55	.70	.55	.63	.36	.33	.31
10	.84	.86	.93	.60	.71	.54	.68	.55	.64	.38	.32	.32
11	.83	.85	.94	.53	.73	.57	.69	.53	.64	.40	.31	.33
12	.81	.88	.93	.54	.72	.55	.67	.53	.64	.41	.30	.34
13	.81	.86	.93	.55	.67	.52	.68	.55	.65	.41	.31	.35
14	.88	.84	.93	.55	.64	.53	.70	.52	.65	.41	.32	.40
15	.89	.85	.85	.55	.62	.51	.69	.52	.63	.41	.31	.38
16	.93	.83	.83	.56	.58	.53	.70	.52	.64	.42	.28	.37
17	.87	.85	.81	.58	.58	.52	.71	.50	.65	.43	.26	.36
18	.90	.87	.76	.60	.61	.52	.71	.50	.63	.43	.27	.38
19	.85	.88	.77	.61	.59	.52	.72	.52	.64	.45	.28	.39
20	.84	.92	.76	.64	.57	.51	.73	.50	.65	.46	.29	.40
21	.86	.90	.77	.64	.53	.52	.71	.51	.63	.46	.30	.40
22	.87	.90	.80	.66	.56	.49	.70	.52	.65	.46	.31	.40
23	.90	.87	.80	.67	.55	.51	.70	.51	.64	.41	.31	.42
24	.92	.87	.80	.67	.55	.50	.67	.53	.62	.40	.31	.41
25	.93	.87	.76	.67	.61	.52	.68	.54	.60	.39	.31	.42
26	.91	.88	.73	.67	.79	.52	.69	.54	.60	.38	.31	.44
27	.90	.91	.73	.71	.77	.51	.68	.55	.58	.37	.30	.45
28	.93	.94	.73	.74	.57	.54	.69	.56	.57	.39	.30	.46
29	.89	.95	.70	.73	---	.54	.68	.57	.57	.36	.30	.48
30	.84	.95	.66	.71	---	.56	.64	.55	.54	.36	.30	.54
31	.88	---	.64	.64	---	.59	---	.58	---	.36	.29	---
TOTAL	27.56	26.11	25.68	19.76	17.58	16.88	20.38	16.96	18.57	12.59	9.60	10.95
MEAN	.89	.87	.83	.64	.63	.54	.68	.55	.62	.41	.31	.36
MAX	1.1	.95	.94	.74	.79	.63	.73	.63	.65	.48	.35	.54
MIN	.81	.81	.64	.53	.53	.49	.60	.50	.54	.36	.26	.25
AC-FT	55	52	51	39	35	33	40	34	37	25	19	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1.10	.89	.82	.79	.85	1.22	2.57	7.57	4.62	1.99	1.53	1.32									
MAX	2.88	1.99	2.07	2.40	2.22	4.62	12.8	41.7	33.4	8.98	5.56	3.39									
(WY)	1979	1984	1979	1979	1979	1979	1985	1984	1983	1984	1984	1978									
MIN	.30	.25	.27	.30	.30	.31	.22	.15	.094	.17	.29	.32									
(WY)	1991	1993	1992	1977	1993	1977	1992	1992	1992	1992	1977	1991									

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	798.56	222.62	
ANNUAL MEAN	2.19	.61	2.17
HIGHEST ANNUAL MEAN			7.75
LOWEST ANNUAL MEAN			.27
HIGHEST DAILY MEAN	a ₁₈	b _{1.1}	207
LOWEST DAILY MEAN	c _{.25}	d _{.25}	e _{.06}
ANNUAL SEVEN-DAY MINIMUM	.26	.27	.07
INSTANTANEOUS PEAK FLOW		g _{2.3}	f ₁₇₈₀
INSTANTANEOUS PEAK STAGE		1.54	6.12
ANNUAL RUNOFF (AC-FT)	1580	442	1570
10 PERCENT EXCEEDS	7.2	.88	4.1
50 PERCENT EXCEEDS	.91	.61	.82
90 PERCENT EXCEEDS	.30	.33	.30

a-Also occurred May 20-21.

b-Also occurred Oct 9.

c-Also occurred Mar 5-6, 23-26.

d-Also occurred Sep 4.

e-Also occurred Apr 11-14, 1974.

f-From rating curve extended above 70 ft³/s, on basis of slope-area measurements at gage heights, 3.89 ft, 4.08 ft, and 6.12 ft.

g-Maximum gage height, 1.95 ft, Sep 1.

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1975 to September 1989.

WATER TEMPERATURE: January 1975 to September 1989.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1985.

INSTRUMENTATION.--Water-quality monitor October 1974 to August 1989. Pumping sediment sampler October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens July 17, 1976; minimum, 271 microsiemens Feb. 18, 1980.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.

SEDIMENT CONCENTRATIONS: Maximum daily, 35,800 mg/L Aug. 2, 1982; minimum daily, 2 mg/L May 24, 1981.

SEDIMENT LOADS: Maximum daily, 43,600 tons August 18, 1984; minimum daily, 0.00 ton on many days during 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 17...	1410	0.88	1530	7.9	8.5	8.0	630	110	85	130
MAY 18...	1350	0.47	1560	7.7	13.5	7.2	570	100	78	120
SEP 07...	1330	0.30	1510	8.4	14.0	8.6	580	100	79	130

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 17...	2	1.3	462	440	14	0.4	22	1080	1.47	2.57
MAY 18...	2	1.0	442	410	13	0.4	22	1010	1.38	1.28
SEP 07...	2	3.5	446	390	14	0.3	22	1010	1.37	0.82

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
MAY 18...	<0.01	<0.05	<0.01	0.20	<0.01	0.01	--
SEP 07...	<0.01	0.08	0.02	0.30	<0.01	0.01	13

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 17...	--	--	120	--	--	--	--	--	--	2800	--
MAY 18...	4	52	130	<1	5	16	7	19	<1	2600	9
SEP 07...	4	57	120	<1	7	16	15	24	<1	2600	3

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 05...	1607	0.85	1290	9.0	MAR 30...	0830	0.55	1540	7.5
JAN 11...	1500	0.56	1560	7.5	JUL 05...	1330	0.38	1530	17.0
FEB 22...	1401	0.57	1560	8.5	AUG 10...	1222	0.31	1510	17.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 17...	1410	0.88	42	0.10	SEP 07...	1330	0.30	10	0.01
MAY 18...	1350	0.47	34	0.04					

GREEN RIVER BASIN

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¹/4SW¹/4 sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 160 ft downstream from bridge on State Highway 64, 0.3 mi upstream from mouth, and 10.0 mi northwest of White River City.

DRAINAGE AREA.--262 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to September 1982, May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,535 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 22 to Jan. 13, Jan. 15 to Feb. 23, and Mar. 5-29. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 300 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.4	4.6	2.9	2.8	7.5	2.7	2.9	2.2	1.1	1.1	1.6
2	3.9	4.4	4.5	2.9	2.7	5.9	3.1	2.8	2.1	1.2	1.2	1.7
3	4.1	4.4	4.4	2.9	2.7	5.1	2.7	2.9	2.0	1.4	1.2	1.8
4	4.1	4.4	4.5	2.9	2.7	4.0	2.8	2.8	1.8	1.3	1.1	1.8
5	4.1	4.4	4.5	3.0	2.7	3.0	2.7	2.7	1.8	1.3	1.1	1.6
6	4.4	4.3	4.4	3.2	2.7	3.0	2.8	2.6	1.7	1.1	1.0	1.4
7	5.0	4.4	4.4	3.1	2.7	2.9	3.2	2.6	1.8	1.2	.98	1.5
8	5.2	4.4	4.4	3.1	2.7	2.8	2.9	2.6	1.8	1.2	1.1	1.4
9	6.1	4.4	4.4	3.1	2.8	2.8	2.9	2.6	1.7	1.2	2.7	1.7
10	4.4	4.5	4.5	3.2	2.9	2.7	3.1	2.7	1.7	1.1	1.8	1.5
11	4.3	4.4	4.6	3.3	3.0	2.8	3.1	2.6	1.6	1.1	1.4	1.4
12	4.3	4.9	4.6	3.5	3.1	2.7	2.9	2.7	1.6	1.1	1.3	3.7
13	4.4	4.8	4.6	3.4	2.9	2.7	2.8	2.9	1.5	1.1	1.3	2.3
14	4.4	4.7	4.5	2.9	2.8	2.7	2.8	2.8	1.5	1.1	1.3	3.7
15	4.5	4.4	4.4	2.7	2.7	2.7	2.8	2.8	1.4	1.1	1.2	2.1
16	4.5	4.5	4.2	2.5	2.5	2.7	2.8	2.5	1.4	1.1	1.2	1.9
17	4.4	4.2	4.0	2.6	2.5	2.8	2.9	2.4	1.3	1.2	1.2	1.8
18	4.7	4.2	3.9	2.6	2.6	2.8	2.9	2.3	1.3	1.1	1.2	1.7
19	4.5	3.9	3.7	2.7	2.5	2.8	2.9	2.3	1.4	1.1	1.3	1.8
20	4.3	4.1	3.7	2.8	2.4	2.7	2.9	2.3	1.4	1.1	1.4	1.8
21	4.4	4.4	3.6	2.8	2.3	2.7	3.0	2.3	1.4	1.0	1.3	1.8
22	4.4	4.4	3.7	2.9	2.3	2.7	2.9	2.2	1.5	1.0	1.3	1.7
23	4.4	4.5	3.8	2.9	2.3	2.6	2.9	2.2	1.5	1.1	1.3	1.7
24	4.3	4.4	3.8	3.0	4.2	2.6	3.0	2.3	1.4	1.2	1.2	1.6
25	4.4	4.4	3.7	3.0	19	2.6	3.2	2.2	1.3	1.2	1.3	1.6
26	4.3	4.4	3.6	3.0	81	2.6	3.2	2.1	1.2	1.1	1.2	1.6
27	4.3	4.4	3.4	3.1	116	2.6	3.3	2.1	1.2	1.1	1.2	1.6
28	4.4	4.5	3.4	3.2	26	2.6	3.3	2.3	1.1	1.1	1.4	1.6
29	4.4	4.6	3.4	3.2	---	2.5	3.1	2.2	1.1	1.0	1.4	1.7
30	4.3	4.7	3.1	3.1	---	2.5	3.0	2.1	1.1	1.0	1.5	2.5
31	4.4	---	3.0	3.0	---	2.5	---	2.1	---	1.1	1.5	---
TOTAL	137.5	132.8	125.3	92.5	307.5	95.6	88.6	76.9	45.8	35.1	40.68	55.6
MEAN	4.44	4.43	4.04	2.98	11.0	3.08	2.95	2.48	1.53	1.13	1.31	1.85
MAX	6.1	4.9	4.6	3.5	116	7.5	3.3	2.9	2.2	1.4	2.7	3.7
MIN	3.9	3.9	3.0	2.5	2.3	2.5	2.7	2.1	1.1	1.0	.98	1.4
AC-FT	273	263	249	183	610	190	176	153	91	70	81	110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

	MEAN	2.01	2.36	2.03	1.89	4.15	3.76	2.65	4.27	3.16	2.88	1.98	2.85
MAX	5.30	5.94	4.76	4.63	12.7	8.92	5.24	24.1	19.9	18.5	6.16	17.1	17.1
(WY)	1989	1989	1989	1990	1980	1993	1989	1985	1985	1985	1988	1978	1978
MIN	.50	.78	.15	.008	.22	1.64	1.37	1.03	.68	.34	.30	.80	.80
(WY)	1979	1978	1979	1979	1979	1982	1978	1978	1977	1976	1978	1976	1976

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1973 - 1994

ANNUAL TOTAL	1478.5	1233.88	
ANNUAL MEAN	4.05	3.38	2.44
HIGHEST ANNUAL MEAN			4.80
LOWEST ANNUAL MEAN			1.28
HIGHEST DAILY MEAN	44	Mar 10	500
LOWEST DAILY MEAN	2.3	Jan 3	.00
ANNUAL SEVEN-DAY MINIMUM	2.3	Jan 24	.00
INSTANTANEOUS PEAK FLOW			240
INSTANTANEOUS PEAK STAGE			7.30
ANNUAL RUNOFF (AC-FT)	2930	2450	1770
10 PERCENT EXCEEDS	4.7	4.4	4.6
50 PERCENT EXCEEDS	3.6	2.7	2.0
90 PERCENT EXCEEDS	2.5	1.2	.76

a-Also occurred Jan 4, 25-29, 30, Feb 4-5, and Feb 15.

b-Also occurred Sep 12-16, 1978, and Dec 15, 1978 to Jan 14, 1979.

c-On basis of contracted-opening, and flow-over-road measurement of peak flow.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1982, March 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1975 to September 1982.

WATER TEMPERATURE: April 1975 to September 1982.

SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1982. Water-quality monitor April 1975 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for the period of daily record are available in the district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 5,790 microsiemens, Sept. 17, 1978; minimum, 457 microsiemens, July 21, 1979.

WATER TEMPERATURES: Maximum 35.0°C July 25, 1978; minimum, 0.0°C, on many days during the winter period.

SEDIMENT CONCENTRATIONS: Maximum daily, 24,000 mg/L, Sept. 07, 1978; minimum daily, no flow several days during Sept. 1978, many days during 1979.

SEDIMENT LOADS: Maximum daily, 290,000 tons, Sept. 07, 1978; minimum daily, no flow several days during Sept. 1978, many days during 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)
NOV 16...	0920	3.3	3140	8.6	0.0	11.8	790	65	150	460
MAR 29...	1545	2.6	3580	8.7	10.5	12.3	750	52	150	610
MAY 16...	1500	2.5	3560	8.5	20.0	11.2	720	39	150	620
SEP 06...	1200	1.4	3640	8.6	17.0	8.1	620	30	130	710

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 16...	7	2.7	947	810	82	1.5	16	2160	2.94	19.2
MAR 29...	10	3.3	1060	850	93	1.5	16	2430	3.30	16.9
MAY 16...	10	3.5	1110	840	97	1.7	11	2440	3.32	16.2
SEP 06...	13	3.4	1230	680	110	2.2	8.6	2430	3.30	9.18

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
MAR 29...	0.04	2.70	0.05	0.50	<0.02	<0.01	--
MAY 16...	0.12	2.40	0.02	0.50	<0.01	<0.01	9.2
SEP 06...	0.05	2.40	0.01	0.50	<0.01	<0.01	12

GREEN RIVER BASIN

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 16...	--	--	490	--	--	--	--	--	--	4400	--
MAR 29...	--	--	560	--	--	--	--	--	--	4400	--
MAY 16...	5	100	600	<1	13	100	10	28	1	4400	<9
SEP 06...	5	100	690	<1	10	140	<10	30	1	4100	<10

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 06...	1207	4.2	3010	10.0	JUL 06...	1302	1.2	3510	22.0
JAN 12...	1516	3.5	3200	0.0	AUG 09...	0952	1.7	3350	18.5
FEB 23...	1325	2.0	3360	0.5					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 16...	0920	3.3	354	3.2	MAY 16...	1500	2.5	16	0.11
MAR 29...	1545	2.6	158	1.1	SEP 06...	1200	1.4	30	0.11

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO

LOCATION.--Lat 40°10'47", long 108°33'53", in SW¹/4SE¹/4 sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank at bridge on County Road 73, 0.5 mi downstream from Boise Creek, and 16.4 mi east of Rangely.

DRAINAGE AREA.--2,530 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,395 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 25 to Mar. 7. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 31,500 acres. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	508	500	330	330	440	381	526	1310	231	243	232
2	441	531	470	335	355	430	404	485	1320	264	381	231
3	449	505	460	335	370	450	416	473	1150	330	235	268
4	426	519	455	340	380	465	408	494	1040	340	122	288
5	423	525	450	350	385	470	406	483	992	309	110	290
6	417	496	430	355	390	475	409	533	906	277	109	261
7	459	497	440	360	390	480	425	656	802	262	124	249
8	615	485	450	360	390	531	448	743	715	256	130	264
9	704	482	440	365	385	485	443	767	651	225	200	273
10	610	493	420	360	380	442	431	766	601	213	327	283
11	577	495	415	360	375	444	420	803	526	224	275	295
12	553	553	440	370	370	448	419	876	508	235	237	318
13	585	579	415	370	360	426	405	969	470	217	255	361
14	583	551	395	370	350	419	400	994	424	206	246	425
15	591	530	380	380	340	423	405	967	355	224	241	448
16	610	500	375	380	335	421	405	1020	344	251	231	425
17	603	468	370	385	340	426	411	1120	327	260	163	362
18	620	501	370	380	345	434	474	1190	246	256	141	325
19	613	520	370	375	350	430	546	1090	219	238	153	298
20	579	482	370	370	355	434	576	1040	258	244	174	330
21	553	487	365	365	360	443	640	996	291	233	200	349
22	536	527	365	365	360	414	693	981	323	219	232	341
23	537	521	360	370	370	419	771	1020	436	221	230	327
24	536	529	360	375	390	421	856	1010	424	270	200	321
25	531	415	355	380	390	417	858	899	344	280	170	321
26	530	360	350	380	415	420	825	801	303	289	172	309
27	517	360	350	360	450	404	690	894	268	274	218	306
28	514	400	340	355	470	378	605	866	244	267	197	302
29	535	520	335	350	---	390	555	1040	244	261	200	305
30	523	520	330	345	---	422	553	1070	232	266	238	322
31	469	---	330	335	---	383	---	1070	---	223	244	---
TOTAL	16667	14859	12255	11210	10480	13484	15678	26642	16273	7865	6398	9429
MEAN	538	495	395	362	374	435	523	859	542	254	206	314
MAX	704	579	500	385	470	531	858	1190	1320	340	381	448
MIN	417	360	330	330	330	378	381	473	219	206	109	231
AC-FT	33060	29470	24310	22240	20790	26750	31100	52840	32280	15600	12690	18700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	548	528	454	400	399	549	821	1825	2059	904	529	451
MAX	858	710	663	572	531	752	1511	3434	4572	2020	1117	849
(WY)	1985	1986	1986	1986	1986	1986	1985	1984	1984	1983	1984	1984
MIN	359	362	301	260	268	355	440	566	542	254	202	237
(WY)	1993	1991	1991	1991	1991	1991	1990	1990	1994	1994	1990	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1983 - 1994
ANNUAL TOTAL	308057	161240	
ANNUAL MEAN	844	442	790
HIGHEST ANNUAL MEAN			1345
LOWEST ANNUAL MEAN			428
HIGHEST DAILY MEAN	3770	May 23	6170
LOWEST DAILY MEAN	310	Jan 14	109
ANNUAL SEVEN-DAY MINIMUM	326	Jan 29	147
INSTANTANEOUS PEAK FLOW		1520	6440
INSTANTANEOUS PEAK STAGE		4.43	8.45
ANNUAL RUNOFF (AC-FT)	611000	319800	572200
10 PERCENT EXCEEDS	2320	708	1560
50 PERCENT EXCEEDS	505	395	519
90 PERCENT EXCEEDS	348	235	320

a-Maximum gage height, 7.09 ft, Feb 27, backwater from ice.

09306380 DOUGLAS CREEK AT RANGELY, CO

LOCATION---Lat 40°05'17", long 108°46'31", in SE¹/4NW¹/4 sec.6, T.1 N., R.101 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 200 ft upstream from Colorado Highway 64 bridge, 0.4 mi upstream from confluence with White River, and 1.0 mi east of Rangely.

DRAINAGE AREA---425 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD---October 1976 to September 1978, March to September 1994.

GAGE---Water-stage recorder. Elevation of gage is 5,235 ft above sea level, from topographic map.

REMARKS---Estimated daily discharges: June 7-21. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of hay meadows.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	7.6	26	7.5	.00	.00	.00
2	---	---	---	---	---	---	9.1	24	6.7	.00	.00	3.5
3	---	---	---	---	---	---	11	23	5.5	.00	.00	.43
4	---	---	---	---	---	---	11	20	4.5	.00	.00	.01
5	---	---	---	---	---	---	10	20	3.7	.00	.00	.00
6	---	---	---	---	---	---	9.4	19	3.1	.00	.00	.00
7	---	---	---	---	---	---	9.1	21	2.6	.00	.00	.00
8	---	---	---	---	---	---	8.7	25	2.3	.00	.00	.00
9	---	---	---	---	---	14	9.0	27	2.2	.00	50	.00
10	---	---	---	---	---	13	8.7	29	2.0	.00	11	.00
11	---	---	---	---	---	12	9.6	29	1.7	.00	.72	.00
12	---	---	---	---	---	12	10	28	1.3	.00	.42	.00
13	---	---	---	---	---	12	9.1	29	.82	.00	.00	.00
14	---	---	---	---	---	11	7.9	31	.50	.00	.00	.00
15	---	---	---	---	---	11	7.5	29	.30	.00	.00	.00
16	---	---	---	---	---	12	7.5	28	.17	.00	.00	.00
17	---	---	---	---	---	12	7.4	23	.10	.00	.00	.00
18	---	---	---	---	---	12	7.4	22	.05	.00	.00	.00
19	---	---	---	---	---	11	9.1	20	.03	.00	.00	.00
20	---	---	---	---	---	11	11	18	.02	.00	.00	.00
21	---	---	---	---	---	11	12	18	.01	.00	.00	.00
22	---	---	---	---	---	11	14	16	.00	.00	.00	.00
23	---	---	---	---	---	10	16	14	.00	.00	.00	.00
24	---	---	---	---	---	9.4	19	13	.00	.00	.00	.00
25	---	---	---	---	---	9.5	23	11	.14	.00	.00	.00
26	---	---	---	---	---	9.3	26	11	.00	.00	.00	.00
27	---	---	---	---	---	9.3	27	13	.00	.00	.00	.00
28	---	---	---	---	---	8.3	30	12	.00	.00	.00	.00
29	---	---	---	---	---	7.6	27	10	.00	.00	.00	.00
30	---	---	---	---	---	7.6	27	9.3	.00	.00	.00	14
31	---	---	---	---	---	7.6	---	8.0	---	.00	.00	---
TOTAL	---	---	---	---	---	---	401.1	626.3	45.24	0.00	62.14	17.94
MEAN	---	---	---	---	---	---	13.4	20.2	1.51	.000	2.00	.60
MAX	---	---	---	---	---	---	30	31	7.5	.00	50	14
MIN	---	---	---	---	---	---	7.4	8.0	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	796	1240	90	.00	123	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	MEAN	.56	.28	.000	.000	1.10	4.06	11.3	24.6	5.60	8.68	7.70	8.35
MAX	1.12	.49	.000	.001	2.20	4.77	16.5	53.3	15.2	25.6	20.5	24.3	
(WY)	1978	1978	1977	1977	1977	1977	1978	1978	1978	1977	1977	1977	
MIN	.002	.078	.000	.000	.000	3.36	3.88	.16	.099	.000	.58	.13	
(WY)	1977	1977	1977	1978	1978	1978	1977	1977	1977	1994	1978	1978	

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1977 - 1994

ANNUAL TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---
ANNUAL MEAN	---	---	---	---	---	---	---	---	---	---	---	---	---
HIGHEST ANNUAL MEAN	---	---	---	---	---	---	---	---	---	---	---	---	---
LOWEST ANNUAL MEAN	---	---	---	---	---	---	---	---	---	---	---	---	---
HIGHEST DAILY MEAN	---	---	---	---	---	---	---	---	---	---	---	---	---
LOWEST DAILY MEAN	---	---	---	---	---	---	---	---	---	---	---	---	---
ANNUAL SEVEN-DAY MINIMUM	---	---	---	---	---	---	---	---	---	---	---	---	---
INSTANTANEOUS PEAK FLOW	---	---	---	---	---	---	---	---	---	---	---	---	---
INSTANTANEOUS PEAK STAGE	---	---	---	---	---	---	---	---	---	---	---	---	---
ANNUAL RUNOFF (AC-FT)	---	---	---	---	---	---	---	---	---	---	---	---	---
10 PERCENT EXCEEDS	---	---	---	---	---	---	---	---	---	---	---	---	---
50 PERCENT EXCEEDS	---	---	---	---	---	---	---	---	---	---	---	---	---
90 PERCENT EXCEEDS	---	---	---	---	---	---	---	---	---	---	---	---	---

a-No flow many days.

b-No flow at times most years.

c-From rating curve extended above 60 ft³/s, on basis of slope-area measurements at gage heights, 7.70 ft, and 9.87 ft.

09306380 DOUGLAS CREEK AT RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to September 1978, March 1994 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO
MAR 29...	1130	8.4	2560	8.6	10.0	9.8	830	100	140	310	5
MAY 16...	1215	30	--	8.5	17.5	7.4	410	63	60	110	2

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	OIL AND GREASE, TOTAL RECOVERY GRAVIMETRIC (MG/L)
MAR 29...	4.6	365	1000	38	0.4	11	1820	2.48	41.3	<1
MAY 16...	3.2	296	340	12	0.4	14	781	1.06	63.3	<1

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM, DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR 29...	<1	<100	160	<1	15	50	30	7	2	1700	<10
MAY 16...	2	34	110	<1	<3	29	3	12	1	860	<3

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
MAR 01...	1130	41	1300	1.5	MAY 31...	1124	8.1	1730	18.5
MAR 09...	1125	15	2100	4.5	JUN 21...	0949	0.01	3120	21.5
APR 28...	1625	29	1370	10.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
MAR 01...	1130	41	7200	793	MAY 16...	1215	30	1860	151
MAR 09...	1125	15	2250	91	MAY 31...	1124	8.1	439	9.6
MAR 29...	1130	8.4	658	15	JUN 21...	0949	0.01	17	0.00
APR 28...	1625	29	1720	135					

SAN JUAN RIVER BASIN

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", in NE¹/₄ sec.4, T.36 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Elevation of gage is 7,940 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-21, and Nov. 25 to Apr. 10. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 500 acres of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	26	25	14	9.5	13	46	106	529	99	37	28
2	29	26	21	14	10	15	53	101	578	91	39	32
3	28	26	20	14	11	18	55	97	554	83	32	136
4	28	25	18	14	12	23	63	102	622	74	28	73
5	27	24	19	14	12	33	60	154	561	67	28	51
6	27	23	19	14	11	39	54	232	540	62	28	41
7	42	22	20	11	11	37	49	293	511	59	25	36
8	38	22	20	12	10	35	45	298	466	55	24	32
9	46	22	20	13	9.5	32	46	302	445	52	24	29
10	46	22	21	12	12	30	40	247	418	49	22	27
11	42	23	21	12	13	29	39	254	386	47	29	26
12	39	24	20	12	11	29	39	328	341	45	39	27
13	38	24	18	12	9.5	31	44	374	360	41	34	53
14	36	24	14	12	10	35	53	380	370	39	36	81
15	36	24	16	12	11	47	60	414	341	38	41	56
16	35	21	18	11	12	60	80	459	299	36	65	45
17	39	21	18	11	12	70	123	486	274	35	39	40
18	38	21	15	11	12	70	174	476	270	35	34	43
19	36	21	16	11	12	75	205	495	270	36	34	42
20	36	19	16	12	11	90	218	506	383	36	36	43
21	35	21	14	12	11	120	255	451	365	32	32	39
22	34	23	14	12	10	85	289	435	474	30	30	36
23	33	34	14	13	9.0	70	369	459	337	30	27	33
24	32	27	14	14	10	62	361	436	275	30	25	30
25	31	16	15	13	11	55	284	415	235	32	23	29
26	32	14	16	13	13	51	204	346	203	29	22	28
27	28	17	16	13	14	46	164	295	171	26	21	26
28	29	21	17	13	14	38	138	298	148	30	21	25
29	29	25	15	12	---	36	122	354	124	30	21	23
30	26	25	14	11	---	37	111	433	110	29	21	26
31	25	---	14	12	---	41	---	484	---	33	21	---
TOTAL	1050	683	538	386	313.5	1452	3843	10510	10960	1410	938	1236
MEAN	33.9	22.8	17.4	12.5	11.2	46.8	128	339	365	45.5	30.3	41.2
MAX	46	34	25	14	14	120	369	506	622	99	65	136
MIN	25	14	14	11	9.0	13	39	97	110	26	21	23
AC-FT	2080	1350	1070	766	622	2880	7620	20850	21740	2800	1860	2450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

	MEAN	35.2	22.5	14.2	11.9	12.6	26.0	106	301	339	114	53.9	43.6
MAX	107	74.9	30.3	21.7	23.6	62.9	248	520	788	395	143	207	
(WY)	1987	1987	1987	1973	1986	1986	1985	1984	1957	1957	1957	1970	
MIN	8.39	8.31	4.68	5.00	5.66	8.86	29.2	70.4	60.2	23.9	15.6	10.6	
(WY)	1957	1961	1959	1959	1990	1977	1977	1977	1977	1959	1972	1978	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1957 - 1994

ANNUAL TOTAL	45516.0	33319.5	
ANNUAL MEAN	125	91.3	
HIGHEST ANNUAL MEAN			90.2
LOWEST ANNUAL MEAN			155
HIGHEST DAILY MEAN	1180	May 27	1180
LOWEST DAILY MEAN	^a 8.5	Jan 11	3.4
ANNUAL SEVEN-DAY MINIMUM	9.3	Jan 20	3.7
INSTANTANEOUS PEAK FLOW			^b 2260
INSTANTANEOUS PEAK STAGE			6.75
ANNUAL RUNOFF (AC-FT)	90280	66090	65350
10 PERCENT EXCEEDS	482	341	274
50 PERCENT EXCEEDS	42	32	29
90 PERCENT EXCEEDS	11	12	10

a-Also occurred Jan 12, 25.

b-From rating curve extended above 460 ft³/s, on basis of slope-area measurement at gage height, 6.13 ft.

LOCATION---Lat 37°15'58", long 107°00'37", in NE¹/4SW⁴/4 sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,052.04 ft above sea level. Jan 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream, at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site, at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft downstream, at different datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft³/s, from information by local residents.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	108	108	62	43	61	243	569	2230	327	65	59
2	110	102	86	63	45	66	259	532	2210	290	104	79
3	106	93	88	59	50	81	268	505	2210	263	70	668
4	106	94	75	61	55	109	314	506	2310	238	57	413
5	97	86	83	65	56	160	300	716	2160	213	54	233
6	96	72	80	63	53	192	252	1060	1950	190	69	176
7	180	77	88	48	51	173	245	1290	1790	173	58	154
8	168	77	85	48	46	166	217	1240	1640	159	52	128
9	192	71	87	56	44	145	233	1290	1560	152	61	100
10	212	76	89	57	56	138	217	1100	1500	146	51	89
11	190	90	87	53	61	138	201	1070	1420	141	55	83
12	180	100	85	52	55	137	208	1450	1240	137	82	84
13	173	99	80	51	43	142	262	1670	1280	124	62	166
14	160	98	59	52	47	177	330	1730	1310	113	65	400
15	157	92	63	54	50	239	350	1770	1180	108	76	253
16	148	84	79	54	51	304	452	1810	1020	95	105	184
17	174	90	79	49	57	341	654	1900	943	89	65	160
18	187	89	63	50	58	327	850	1980	901	85	58	180
19	161	87	70	51	54	399	974	2040	876	96	55	209
20	163	77	70	51	52	580	1030	2160	1090	93	84	229
21	152	83	60	54	53	419	1150	1920	1080	84	68	238
22	149	103	60	54	52	360	1230	1850	1780	74	66	192
23	142	167	60	58	40	313	1560	1950	1150	71	55	163
24	131	157	63	62	44	270	1650	1850	919	70	48	145
25	123	71	62	60	47	255	1350	1790	796	77	46	130
26	130	55	68	59	57	234	993	1460	681	74	50	118
27	109	70	71	59	66	208	832	1270	592	63	39	108
28	128	89	75	59	68	172	708	1320	508	62	39	98
29	121	106	66	58	---	178	653	1560	436	68	37	92
30	92	103	60	51	---	180	582	1930	372	66	43	92
31	99	---	62	54	---	203	---	2100	---	101	39	---
TOTAL	4448	2766	2311	1727	1454	6867	18567	45388	39134	4042	1878	5423
MEAN	143	92.2	74.5	55.7	51.9	222	619	1464	1304	130	60.6	181
MAX	212	167	108	65	68	580	1650	2160	2310	327	105	668
MIN	92	55	59	48	40	61	201	505	372	62	37	59
AC - FT	8820	5490	4580	3430	2880	13620	36830	90030	77620	8020	3730	10760

MEAN	146	92.2	63.7	55.3	61.0	141	569	1293	1349	389	175	149
MAX	937	399	160	107	134	442	1210	2665	3066	1515	638	859
(WY)	1942	1987	1987	1986	1986	1986	1985	1941	1957	1941	1957	1970
MIN	23.3	33.6	27.5	26.8	29.2	50.3	141	253	163	62.8	28.9	18.8
(WY)	1957	1956	1990	1990	1964	1964	1977	1977	1977	1959	1972	1956

ANNUAL TOTAL	203187		134005				
ANNUAL MEAN	557		367			374	
HIGHEST ANNUAL MEAN						730	1941
LOWEST ANNUAL MEAN						115	1977
HIGHEST DAILY MEAN	3980	May 27	2310	Jun 4	4640		May 13 1941
LOWEST DAILY MEAN	^a 46	Jan 4	37	Aug 29	^b 9.7		Sep 20 1956
ANNUAL SEVEN-DAY MINIMUM	53	Jan 8	42	Aug 25	12		Sep 19 1956
INSTANTANEOUS PEAK FLOW			2790	Jun 22	25000		Oct 5 1911
INSTANTANEOUS PEAK STAGE			5.62	Jun 22	^c 17.80		Oct 5 1911
ANNUAL RUNOFF (AC-FT)	403000		265800		271000		
10 PERCENT EXCEEDS	1960		1290		1160		
50 PERCENT EXCEEDS	170		108		108		
90 PERCENT EXCEEDS	60		53		43		

c-From floodmarks.

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'13", long 106°48'38", in NE¹/₄NW¹/₄ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,858.04 ft above sea level, (levels by U. S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 9 to Jan. 3, Jan. 7-25, Jan. 27 to Feb. 2, Feb. 6-7, 23-25, 27, Mar. 1-5, May 21-29, and July 16-25. Records fair except for estimated daily discharges, which are poor. Flows controlled by diversion dam upstream.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	29	25	18	10	20	89	41	436	115	49	77
2	27	28	24	18	11	22	83	40	503	107	53	63
3	27	27	22	18	12	26	106	41	597	99	38	497
4	26	27	22	18	12	30	135	43	651	88	33	130
5	25	25	22	19	14	40	94	45	574	78	30	77
6	24	19	21	17	12	49	74	42	515	71	29	54
7	58	21	19	16	12	45	55	41	471	61	27	46
8	48	19	18	17	12	44	24	41	434	49	26	38
9	77	18	18	18	15	37	24	41	414	51	29	32
10	60	19	18	17	17	35	24	46	417	47	28	30
11	51	24	18	16	17	33	23	41	388	42	30	28
12	56	23	18	16	15	31	25	42	364	38	31	29
13	46	24	17	16	14	33	26	80	402	36	28	99
14	42	24	16	16	15	55	27	131	391	35	34	126
15	40	22	17	17	15	98	26	86	337	37	54	71
16	38	21	18	16	17	128	67	130	300	36	71	50
17	57	22	17	15	17	124	82	244	279	36	36	42
18	57	22	17	16	16	104	23	134	269	36	32	48
19	56	21	17	16	18	132	21	201	359	34	29	43
20	45	20	16	17	16	161	19	230	513	34	34	38
21	43	23	18	18	15	131	22	170	418	34	32	35
22	44	26	18	17	15	111	22	180	739	32	30	31
23	38	39	16	16	15	81	40	260	314	32	26	28
24	35	35	16	17	15	64	29	240	253	32	24	27
25	36	20	18	18	15	56	23	140	227	30	23	26
26	35	22	18	19	19	52	22	130	206	30	21	24
27	33	26	16	18	18	46	23	110	189	28	19	22
28	33	28	18	18	18	40	22	110	164	35	19	21
29	30	27	18	16	---	42	32	170	137	33	20	20
30	27	26	18	14	---	46	41	376	123	33	20	26
31	28	---	18	12	---	69	---	350	---	34	31	---
TOTAL	1270	727	572	520	417	1985	1323	3976	11384	1483	986	1878
MEAN	41.0	24.2	18.5	16.8	14.9	64.0	44.1	128	379	47.8	31.8	62.6
MAX	77	39	25	19	19	161	135	376	739	115	71	497
MIN	24	18	16	12	10	20	19	40	123	28	19	20
AC-FT	2520	1440	1130	1030	827	3940	2620	7890	22580	2940	1960	3730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	40.5	30.4	19.9	16.6	18.1	37.4	49.8	116	133	62.0	37.0	39.2
MAX	145	98.3	35.6	26.4	28.1	103	200	340	654	202	98.4	161	
(WY)	1987	1987	1987	1986	1991	1989	1989	1984	1985	1986	1982	1982	
MIN	16.1	13.5	8.52	7.58	10.0	17.5	20.4	40.5	18.9	19.7	15.0	15.8	
(WY)	1993	1990	1990	1990	1990	1981	1974	1990	1977	1972	1972	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	30591	26521	
ANNUAL MEAN	83.8	72.7	51.1
HIGHEST ANNUAL MEAN			135
LOWEST ANNUAL MEAN			19.5
HIGHEST DAILY MEAN	1130	May 27	739 Jun 22
LOWEST DAILY MEAN	10	Jan 13	10 Feb 1
ANNUAL SEVEN-DAY MINIMUM	13	Jan 21	12 Jan 31
INSTANTANEOUS PEAK FLOW			2520 Jun 22
INSTANTANEOUS PEAK STAGE			4.87 Jun 22
ANNUAL RUNOFF (AC-FT)	60680	52600	37040
10 PERCENT EXCEEDS	214	174	106
50 PERCENT EXCEEDS	46	31	22
90 PERCENT EXCEEDS	16	16	15

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in SE1/4NW1/4 sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Cutthroat Creek, 2.8 mi downstream from East Fork, and 11.2 mi northeast of Chromo.

DRAINAGE AREA.--69.8 mi².

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,939.3 ft above sea level, (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft, higher. Oct. 1, 1949 to Oct. 7, 1952, at site 40 ft upstream, at same datum. Oct. 8, 1952 to Aug. 31, 1957, at about the same site, at same datum. Sept. 20, 1957 to Sept. 30, 1974, station moved below bridge, at datum 0.4 ft, lower. Nov. 1, 1974 to present, at site 50 ft downstream, at datum 0.9 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 16 to Feb. 17, and Feb. 25. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 430 acres upstream from station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	43	32	28	20	31	84	153	672	182	54	55
2	44	43	32	30	22	32	90	142	676	166	53	50
3	43	41	32	30	26	36	96	134	651	152	48	223
4	46	41	32	30	28	40	103	152	660	137	48	103
5	48	39	32	34	28	44	92	227	637	119	46	67
6	46	37	32	30	22	46	78	317	586	105	46	52
7	67	37	34	26	24	47	77	359	551	97	41	45
8	58	37	34	28	22	46	72	358	532	86	37	43
9	65	37	34	32	24	42	73	350	519	75	38	41
10	60	37	34	30	22	41	68	300	521	73	37	40
11	57	39	34	26	26	41	64	323	510	71	56	38
12	57	36	36	26	24	39	64	440	495	73	60	39
13	55	36	34	26	24	40	79	506	514	72	48	59
14	53	36	32	26	26	46	99	502	505	70	52	71
15	52	35	34	28	28	57	119	490	458	69	59	59
16	52	34	36	24	30	71	159	532	408	65	63	53
17	62	34	34	22	30	79	215	569	385	61	48	51
18	60	32	34	24	29	77	279	582	373	62	44	52
19	57	34	34	24	31	90	307	634	404	60	42	50
20	55	32	32	26	30	109	330	633	584	57	42	49
21	53	32	32	30	30	100	343	557	445	54	48	47
22	51	34	28	26	30	95	353	551	669	50	44	45
23	50	36	26	22	30	84	399	570	452	48	37	44
24	49	30	26	28	28	76	396	572	397	47	34	42
25	48	26	28	30	28	73	326	534	340	51	34	40
26	48	24	28	30	31	70	252	439	300	51	32	39
27	44	28	26	30	32	63	209	398	271	50	32	38
28	45	30	28	30	31	55	184	433	242	63	31	38
29	45	30	28	28	---	56	166	511	221	60	31	38
30	42	30	28	26	---	59	162	593	198	57	32	41
31	43	---	28	24	---	72	---	611	---	54	40	---
TOTAL	1600	1040	974	854	756	1857	5338	13472	14176	2437	1357	1652
MEAN	51.6	34.7	31.4	27.5	27.0	59.9	178	435	473	78.6	43.8	55.1
MAX	67	43	36	34	32	109	399	634	676	182	63	223
MIN	42	24	26	22	20	31	64	134	198	47	31	38
AC-FT	3170	2060	1930	1690	1500	3680	10590	26720	28120	4830	2690	3280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	50.1	37.5	30.6	28.1	29.1	43.1	139	331	375	135	68.9	53.2
MAX	188	106	62.2	54.0	45.0	104	303	741	768	432	170	185	
(WY)	1942	1987	1942	1942	1942	1989	1985	1941	1973	1941	1957	1970	
MIN	21.4	17.8	18.2	17.4	16.4	23.7	58.1	113	60.6	40.4	25.7	20.6	
(WY)	1956	1956	1955	1960	1949	1964	1977	1977	1977	1977	1950	1953	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	54643	45513	
ANNUAL MEAN	150	125	110
HIGHEST ANNUAL MEAN			195
LOWEST ANNUAL MEAN			44.8
HIGHEST DAILY MEAN	829	May 27	1180
LOWEST DAILY MEAN	22	Jan 26	8.4
ANNUAL SEVEN-DAY MINIMUM	26	Jan 23	12
INSTANTANEOUS PEAK FLOW			1480
INSTANTANEOUS PEAK STAGE		3.62	4.55
ANNUAL RUNOFF (AC-FT)	108400	90280	79840
10 PERCENT EXCEEDS	510	439	305
50 PERCENT EXCEEDS	63	48	44
90 PERCENT EXCEEDS	31	28	24

a-Result of temporary blockage by channel alteration upstream.

b-From rating curve extended above 840 ft³/s, on basis of float-area measurement at gage height, 4.44 ft.

c-Maximum gage height, 7.02 ft, May 13, 1941, present datum.

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'49", long 106°44'14", in NE¹/₄ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.8 mi east of Chromo, and 6.1 mi upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Datum of gage is 7,665.30 ft above sea level, (levels by U. S. Bureau of Reclamation). Prior to Sept. 5, 1979, at same site, at different datum.

REMARKS.--Estimated daily discharges: Nov. 23-28, Dec. 17-28, Jan. 6-8, 11-18, 20, Jan. 27 to Feb. 7, and Feb. 9-16. Records good except for estimated daily discharges, which are poor. Flows controlled by diversion dam upstream.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	48	38	35	22	36	132	91	118	120	50	49
2	51	48	39	36	24	37	144	91	138	110	52	57
3	51	46	39	35	28	42	154	91	185	101	49	271
4	53	46	38	36	30	48	166	91	271	91	53	145
5	55	44	39	40	30	54	90	91	270	81	52	88
6	53	39	39	36	24	57	40	91	271	70	51	65
7	74	40	40	32	26	58	41	92	401	61	48	55
8	65	40	40	34	24	57	41	95	536	65	44	51
9	70	39	40	38	26	52	41	95	489	74	46	49
10	66	40	40	37	24	49	39	96	504	78	45	47
11	62	44	40	32	28	49	38	96	514	86	67	45
12	61	43	42	32	26	48	40	97	475	76	81	46
13	59	41	40	32	26	47	45	148	508	74	60	61
14	58	42	38	32	28	55	42	127	526	71	59	90
15	57	40	39	34	30	72	38	131	473	67	68	68
16	57	40	41	28	34	94	38	135	400	66	80	59
17	67	41	38	26	37	109	39	150	372	68	58	55
18	65	39	38	28	38	107	40	182	354	66	53	54
19	63	41	38	29	36	133	38	209	357	59	51	54
20	60	40	36	30	36	178	38	172	698	50	50	51
21	58	40	36	34	35	153	38	112	490	47	55	49
22	57	43	32	30	35	144	38	97	795	45	54	45
23	55	44	30	25	33	129	57	91	520	42	46	42
24	53	34	30	34	34	116	70	91	278	49	40	41
25	52	28	32	36	35	109	47	101	131	50	41	40
26	52	26	32	35	38	105	47	90	127	49	40	41
27	48	32	32	34	39	97	42	90	103	45	40	41
28	50	36	34	34	38	81	38	90	74	58	40	40
29	51	38	34	32	---	84	60	90	115	53	34	41
30	44	37	33	30	---	92	91	94	133	51	28	42
31	47	---	34	26	---	111	---	96	---	53	34	---
TOTAL	1765	1199	1141	1012	864	2603	1812	3413	10626	2076	1569	1882
MEAN	56.9	40.0	36.8	32.6	30.9	84.0	60.4	110	354	67.0	50.6	62.7
MAX	74	48	42	40	39	178	166	209	795	120	81	271
MIN	44	26	30	25	22	36	38	90	74	42	28	40
AC-FT	3500	2380	2260	2010	1710	5160	3590	6770	21080	4120	3110	3730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	54.7	46.7	38.8	35.3	36.3	58.9	58.1	135	153	83.9	64.1	59.7
MAX	161	132	71.9	51.3	52.7	135	183	271	720	219	124	146	
(WY)	1987	1987	1987	1985	1986	1989	1993	1984	1985	1985	1982	1982	
MIN	26.3	27.4	21.3	19.8	24.4	32.0	37.5	87.8	44.7	40.2	28.1	28.4	
(WY)	1981	1990	1977	1990	1990	1977	1973	1988	1977	1972	1972	1978	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	38445	29962	
ANNUAL MEAN	105	82.1	69.5
HIGHEST ANNUAL MEAN			158
LOWEST ANNUAL MEAN			41.5
HIGHEST DAILY MEAN	840	795	1160
LOWEST DAILY MEAN	26	22	10
ANNUAL SEVEN-DAY MINIMUM	31	25	13
INSTANTANEOUS PEAK FLOW		1260	1330
INSTANTANEOUS PEAK STAGE		4.89	4.92
ANNUAL RUNOFF (AC-FT)	76260	59430	50390
10 PERCENT EXCEEDS	230	136	120
50 PERCENT EXCEEDS	66	49	48
90 PERCENT EXCEEDS	34	32	31

a-Also occurred Oct 11, 1981.

b-Maximum gage height, 5.07 ft, Feb 13.

b-Maximum gage height, 5.07 ft, Feb 13, 1994, backwater from ice.

Streamflow data for water year 1994 for the following station
will be published in a subsequent report

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¹/₄ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi northeast of Chromo, and 4.0 mi upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft above sea level, (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¹/₄NW¹/₄ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft downstream from highway bridge, 0.2 mi southeast of Edith, 0.5 mi upstream from Colorado-New Mexico State line, and 1.3 mi upstream from Coyote Creek.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--Streamflow records, September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313. Water-quality data available, October 1969 to September 1974. Sediment data available October 1970 to September 1974. Statistical summary computed for 1971 to current year.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft upstream, at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream, at datum 2.0 ft. higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 20, 25-26, and Dec. 29 to Mar. 8. Records good except flows over 425 ft³/s, which are fair, and estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. Highwater diversions upstream from station into Heron Reservoir through Azotea tunnel began in March 1971. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	60	49	39	30	40	182	162	118	126	58	44
2	49	58	46	39	27	38	195	150	187	108	61	64
3	53	54	45	39	29	45	198	147	184	100	52	252
4	58	55	43	37	33	60	220	141	237	89	53	164
5	63	54	43	40	35	75	151	138	241	81	52	96
6	58	46	43	41	34	100	80	141	238	68	52	74
7	71	49	43	37	32	120	83	141	358	62	52	63
8	79	50	43	30	32	90	75	138	486	66	51	58
9	79	46	43	33	28	82	85	142	460	83	52	55
10	79	50	44	35	30	75	85	144	481	85	53	54
11	72	56	44	35	36	73	107	144	516	93	68	52
12	72	58	47	33	38	70	126	159	456	89	94	51
13	70	55	43	32	32	68	138	206	495	90	70	58
14	67	54	40	32	27	91	126	189	508	85	62	92
15	66	51	42	34	30	134	105	180	461	83	73	77
16	66	52	46	35	32	188	100	183	377	79	89	67
17	75	49	45	33	34	223	100	186	349	72	64	63
18	79	50	39	31	36	221	102	201	328	70	58	60
19	73	50	44	32	34	291	100	227	320	75	58	61
20	72	49	44	32	33	496	95	202	729	68	55	58
21	70	48	43	32	33	310	91	162	473	63	55	57
22	68	52	42	34	33	257	91	131	843	58	61	52
23	67	65	39	35	28	221	101	126	505	60	52	48
24	63	63	38	37	25	187	136	118	303	58	42	47
25	63	52	46	38	27	177	106	146	147	52	42	46
26	63	41	42	37	33	165	105	147	150	55	37	46
27	58	30	46	37	37	144	103	138	118	55	35	47
28	60	44	46	37	42	111	95	129	82	70	34	46
29	61	52	45	35	---	115	112	126	107	68	34	44
30	54	49	42	32	---	129	164	123	140	67	23	47
31	56	---	38	33	---	158	---	129	---	62	31	---
TOTAL	2038	1542	1343	1086	900	4554	3557	4796	10397	2340	1673	2043
MEAN	65.7	51.4	43.3	35.0	32.1	147	119	155	347	75.5	54.0	68.1
MAX	79	65	49	41	42	496	220	227	843	126	94	252
MIN	49	30	38	30	25	38	75	118	82	52	23	44
AC-FT	4040	3060	2660	2150	1790	9030	7060	9510	20620	4640	3320	4050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	64.6	54.7	40.8	35.8	40.4	95.5	132	176	162	88.7	69.7	65.3
MAX	204	179	81.7	59.5	71.5	214	319	419	648	222	139	165	
(WY)	1987	1987	1987	1985	1986	1985	1993	1973	1985	1986	1982	1982	
MIN	33.4	29.8	18.1	17.8	21.6	31.1	38.3	78.9	42.7	37.5	26.4	26.9	
(WY)	1979	1977	1977	1977	1977	1977	1977	1977	1977	1972	1972	1978	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1971 - 1994

	ANNUAL TOTAL	49173	36269	
ANNUAL MEAN	135	99.4		^a 85.6
HIGHEST ANNUAL MEAN				184
LOWEST ANNUAL MEAN				39.4
HIGHEST DAILY MEAN	1150	Aug 28	843	^b 1250 Jun 9 1985
LOWEST DAILY MEAN	29	Jan 12	23	^c 8.0 Aug 7 1977
ANNUAL SEVEN-DAY MINIMUM	32	Jan 21	30	^d 12 Aug 5 1977
INSTANTANEOUS PEAK FLOW			1460	^e 1800 Aug 28 1993
INSTANTANEOUS PEAK STAGE			5.27	^f 5.53 Aug 28 1993
ANNUAL RUNOFF (AC-FT)	97530		71940	62040
10 PERCENT EXCEEDS	320		191	180
50 PERCENT EXCEEDS	72		62	56
90 PERCENT EXCEEDS	40		34	31

a-Average discharge for 58 years (water years 1913-70), 155 ft³/s; 112300 acre-ft/yr, prior to diversions through Azotea tunnel.

b-Maximum daily discharge for period of record, 2830 ft³/s, Jun 15, 1921.

c-Also occurred Sep 25, 1953.

d-From rating curve extended above 1620 ft³/s.

e-Maximum discharge and stage for period of record, 2840 ft³/s, Apr 23, 1942, gage height, 6.55 ft, from rating curve extended above 1100 ft³/s.

f-Maximum gage height for statistical period, 5.76 ft, Dec 4, 1978, backwater from ice.

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¹/4SW¹/4 sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973. Statistical summary computed for 1971 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,090 ft above sea level, from river-profile map.

REMARKS.--Estimated daily discharges: Nov. 26 to Mar. 9 and June. 16-28. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	208	400	250	210	280	647	1100	2780	659	175	109
2	192	217	350	250	190	290	723	1010	2970	591	199	266
3	183	204	330	240	200	350	729	950	2960	534	209	825
4	183	192	300	250	220	520	822	873	3240	484	164	1170
5	187	191	300	250	230	760	797	1020	3070	431	153	598
6	187	176	310	250	230	860	579	1380	2870	375	145	384
7	195	153	330	220	220	780	563	1740	2760	339	156	317
8	394	163	330	190	210	750	492	1720	2780	292	139	274
9	328	160	330	210	190	710	508	1790	2660	281	142	231
10	409	156	330	230	210	673	584	1670	2540	283	149	204
11	386	171	330	220	260	638	585	1470	2580	266	138	196
12	339	238	320	210	240	641	701	1880	2230	273	198	187
13	344	209	310	210	210	629	828	2250	2300	254	196	239
14	311	243	270	210	190	757	840	2450	2380	240	164	620
15	294	205	230	210	210	960	806	2420	2240	230	187	670
16	284	208	270	220	220	1190	814	2420	2000	217	269	393
17	289	184	310	210	240	1510	1080	2480	1800	194	236	323
18	414	179	270	200	250	1610	1230	2690	1600	185	180	300
19	351	187	250	210	240	1670	1450	2550	1700	187	164	354
20	333	172	260	210	230	2320	1470	2790	2000	189	164	327
21	316	164	250	210	230	1990	1620	2490	2100	172	199	378
22	297	187	240	220	230	1470	1630	2240	3200	157	188	333
23	284	247	240	230	200	1180	2000	2460	2300	149	168	284
24	268	432	240	250	180	944	2160	2440	1700	149	142	254
25	249	272	240	250	200	813	1940	2350	1400	152	125	240
26	244	250	260	250	230	761	1570	2150	1300	154	118	222
27	248	210	280	250	270	700	1330	1780	1100	144	115	208
28	231	290	290	250	290	519	1180	1720	950	142	100	196
29	239	380	280	240	---	511	1100	1870	731	161	97	187
30	230	390	250	230	---	498	1120	2420	721	160	94	180
31	192	---	240	210	---	543	---	2720	---	175	97	---
TOTAL	8609	6638	8940	7040	6230	27827	31898	61293	64962	8219	4970	10469
MEAN	278	221	288	227	222	898	1063	1977	2165	265	160	349
MAX	414	432	400	250	290	2320	2160	2790	3240	659	269	1170
MIN	183	153	230	190	180	280	492	873	721	142	94	109
AC-FT	17080	13170	17730	13960	12360	55190	63270	121600	128900	16300	9860	20770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	320	245	175	158	193	601	1157	1800	1878	639	330	292												
MAX	932	983	406	296	481	1319	2524	3195	4080	1677	733	880												
(WY)	1987	1987	1987	1987	1986	1985	1979	1973	1985	1979	1993	1982												
MIN	106	104	72.9	74.7	85.0	134	233	395	251	132	69.0	61.2												
(WY)	1979	1990	1990	1990	1990	1977	1977	1977	1977	1972	1972	1978												

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	341040	247095	
ANNUAL MEAN	934	677	a 650
HIGHEST ANNUAL MEAN			1201
LOWEST ANNUAL MEAN			200
HIGHEST DAILY MEAN	5250	May 28	b 6700
LOWEST DAILY MEAN	150	Jan 4	c 28
ANNUAL SEVEN-DAY MINIMUM	167	Nov 5	d 39
INSTANTANEOUS PEAK FLOW			e 8200
INSTANTANEOUS PEAK STAGE			f 7.00
ANNUAL RUNOFF (AC-FT)	676500	490100	470700
10 PERCENT EXCEEDS	2390	2040	1750
50 PERCENT EXCEEDS	362	280	290
90 PERCENT EXCEEDS	190	172	110

a-Average discharge for 9 years (water years 1962-70), 632 ft³/s; 457900 acre-ft/yr, prior to completion of Azotea tunnel.

b-Also maximum daily discharge for period of record.

c-Minimum daily discharge for period of record, about 5 ft³/s, Dec 10, 1961, result of freezeup.

d-Maximum discharge and stage for period of record, 9730 ft³/s, Sep 6, 1970, gage height, 8.34 ft, from rating curve extended above 6000 ft³/s, on basis of slope-area measurement of peak flow.

e-Maximum gage height for statistical period, and period of record, 9.63 ft, Jan 4, 1994, backwater from ice.

SAN JUAN RIVER BASIN

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¹/4SW¹/4 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 mi².

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at elevation 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, July 1969 to August 1973, December 1988 to May 1989.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft above sea level, Colorado State Highway Department benchmark.

REMARKS.--Estimated daily discharges: Dec. 12 to Mar. 2, Mar. 30 to Apr. 13, July 8 to Aug. 3, and Aug. 15. Records fair except for estimated daily discharges, 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 elsewhere in this 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	108	102	75	55	80	460	710	1540	249	80	78
2	106	113	95	75	55	120	510	680	1550	223	55	108
3	104	109	89	75	60	151	540	666	1530	208	100	361
4	102	104	89	75	65	187	600	645	1590	188	89	403
5	102	102	85	80	70	218	640	729	1500	169	75	227
6	99	93	86	80	65	240	560	1000	1380	159	78	169
7	104	83	91	60	60	230	500	1240	1250	145	92	148
8	152	88	85	60	60	268	460	1240	1130	138	83	134
9	145	87	84	65	55	261	480	1270	1080	130	84	116
10	171	83	86	70	70	205	460	1100	1020	120	95	104
11	174	95	84	65	75	194	430	1000	984	120	95	97
12	162	108	84	65	65	191	440	1370	826	110	111	95
13	153	109	80	65	55	204	630	1580	807	110	100	173
14	145	120	70	65	60	236	701	1580	830	100	93	382
15	137	111	70	65	60	310	646	1580	785	95	99	310
16	131	102	80	65	65	406	658	1540	689	85	93	253
17	139	95	90	60	70	516	766	1550	619	80	83	207
18	165	93	80	60	70	677	919	1570	579	75	79	208
19	156	93	85	60	65	808	1070	1480	566	70	66	210
20	145	85	85	65	65	1310	1140	1560	684	75	99	218
21	142	79	75	65	65	1110	1250	1410	737	75	113	278
22	139	92	75	70	65	876	1290	1320	1380	70	113	249
23	136	120	75	70	50	741	1500	1400	1020	65	104	210
24	134	150	75	75	55	667	1630	1300	733	60	93	181
25	131	105	75	75	60	555	1440	1300	581	55	85	164
26	126	68	80	75	70	511	1200	1230	480	52	84	145
27	128	78	85	70	80	470	1040	1070	408	60	79	133
28	118	99	90	70	85	375	916	1050	361	52	73	121
29	128	108	80	70	---	340	841	1160	312	52	75	110
30	121	109	75	65	---	310	792	1350	278	55	75	107
31	104	---	75	65	---	400	---	1530	---	55	73	---
TOTAL	4110	2989	2560	2120	1795	13167	24509	38210	27229	3300	2716	5699
MEAN	133	99.6	82.6	68.4	64.1	425	817	1233	908	106	87.6	190
MAX	174	150	102	80	85	1310	1630	1580	1590	249	113	403
MIN	99	68	70	60	50	80	430	645	278	52	55	78
AC-FT	8150	5930	5080	4210	3560	26120	48610	75790	54010	6550	5390	11300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	178	125	91.3	75.7	92.3	309	914	1323	1066	341	211	211																				
MAX	618	517	257	153	244	706	2126	2926	2526	1133	551	943																				
(WY)	1973	1987	1987	1987	1986	1989	1979	1979	1979	1975	1968	1970																				
MIN	51.2	48.4	31.2	31.2	34.7	47.4	125	168	121	69.8	37.0	35.3																				
(WY)	1979	1968	1990	1990	1964	1964	1977	1977	1977	1972	1972	1978																				

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1963 - 1994
ANNUAL TOTAL	216015	128404	
ANNUAL MEAN	592	352	412
HIGHEST ANNUAL MEAN			822
LOWEST ANNUAL MEAN			94.0
HIGHEST DAILY MEAN	2760	May 17	5360
LOWEST DAILY MEAN	60	Jan 13	19
ANNUAL SEVEN-DAY MINIMUM	69	Jan 1	26
INSTANTANEOUS PEAK FLOW			a 8370
INSTANTANEOUS PEAK STAGE		3.83	b 6.38
ANNUAL RUNOFF (AC-FT)	428500	254700	298400
10 PERCENT EXCEEDS	1720	1150	1210
50 PERCENT EXCEEDS	168	113	151
90 PERCENT EXCEEDS	79	65	54

a-From rating curve extended above 4,400 ft³/s, on basis of slope-area measurement of peak flow.
b-Gage height, 6.38 ft., recorded, 7.55 ft., from floodmarks..

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¹/4NW¹/4 sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.08 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 22-25, Nov. 27 to Mar. 16, Apr. 13 to June 26 and Aug. 11 to Sept. 30. Records fair except for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	46	30	25	38	27	44	115	720	188	56	52
2	42	40	29	25	32	27	45	120	700	176	52	52
3	41	38	27	25	25	28	49	125	710	157	49	59
4	40	38	26	25	26	28	53	130	740	147	46	120
5	39	27	26	26	25	29	52	165	670	134	49	100
6	38	28	26	27	24	30	48	230	600	120	53	82
7	49	26	26	28	24	30	47	270	550	108	47	74
8	49	29	26	28	25	30	45	275	520	98	44	68
9	53	29	27	28	24	29	45	265	500	92	66	64
10	59	29	28	29	24	28	41	230	490	88	60	61
11	58	30	27	29	24	28	39	220	450	81	60	60
12	61	29	27	28	23	28	39	290	430	73	60	64
13	62	31	27	29	22	28	44	365	450	68	60	120
14	61	32	26	29	22	29	52	375	470	63	60	200
15	58	31	25	29	24	31	65	440	430	62	62	190
16	58	31	26	29	24	37	74	470	390	60	64	160
17	65	31	25	29	24	44	95	520	370	58	60	130
18	63	29	24	29	26	42	115	510	360	57	57	115
19	61	29	24	30	25	44	130	510	350	72	57	105
20	62	26	25	29	24	46	145	520	360	84	58	100
21	62	28	24	29	24	45	160	450	390	79	61	115
22	63	28	23	29	24	46	190	450	440	69	65	110
23	61	29	23	29	21	44	210	500	410	64	64	100
24	60	27	24	28	23	41	210	480	380	83	59	94
25	57	24	24	27	23	40	185	470	360	85	55	90
26	57	24	24	26	24	38	160	410	340	72	56	85
27	48	26	25	26	25	37	140	380	301	64	56	80
28	54	27	26	26	26	34	130	450	266	60	52	75
29	52	28	25	25	---	35	120	590	229	56	52	72
30	39	29	24	24	---	36	120	670	208	54	54	70
31	46	---	24	26	---	38	---	700	---	57	54	---
TOTAL	1663	899	793	851	695	1077	2892	11695	13584	2729	1748	2867
MEAN	53.6	30.0	25.6	27.5	24.8	34.7	96.4	377	453	88.0	56.4	95.6
MAX	65	46	30	30	38	46	210	700	740	188	66	200
MIN	38	24	23	24	21	27	39	115	208	54	44	52
AC-FT	3300	1780	1570	1690	1380	2140	5740	23200	26940	5410	3470	5690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	MEAN	79.3	44.0	27.2	21.1	19.8	32.9	112	402	527	242	131	117
MAX		280	104	52.0	42.5	44.5	80.8	226	629	927	548	233	455
(WY)		1973	1987	1986	1986	1986	1989	1989	1993	1980	1965	1968	1970
MIN		22.3	16.7	9.89	9.51	8.42	9.11	40.3	138	152	80.5	45.4	25.1
(WY)		1979	1976	1977	1977	1977	1977	1964	1977	1977	1972	1978	1978

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

ANNUAL TOTAL	65731	41493	
ANNUAL MEAN	180	114	147
HIGHEST ANNUAL MEAN			226
LOWEST ANNUAL MEAN			63.3
HIGHEST DAILY MEAN	1090	May 27	740
LOWEST DAILY MEAN	20	Jan 12	21
ANNUAL SEVEN-DAY MINIMUM	21	Jan 23	23
INSTANTANEOUS PEAK FLOW			b 1250
INSTANTANEOUS PEAK STAGE			d 2.93
ANNUAL RUNOFF (AC-FT)	130400	82300	e 6.51
10 PERCENT EXCEEDS	620	380	417
50 PERCENT EXCEEDS	62	52	61
90 PERCENT EXCEEDS	23	25	17

a-Also occurred Jan 25, and Feb 5.

b-Maximum discharge, 1250 ft³/s, from recorded range in stage sometime between May 18 and Jun 26.

c-From rating curve extended above 1400 ft³/s, on basis of slope-area measurement of peak flow.

d-Maximum gage height, 2.93 ft, from recorded range in stage sometime between May 18 and Jun 26.

e-Maximum gage height, 6.51 ft, from water-stage recorder, 6.76 ft, from floodmarks.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1962 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 20.0°C July 10, 1974; minimum, 0.0°C on many days during winter months each year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	
NOV 09...	1200	22	81	7.8	1.0	0.2	11.0	<1	K1	39	12	
MAR 29...	1100	32	75	7.8	1.0	1.0	10.8	<1	<1	33	10	
MAY 17...	1030	552	57	7.5	3.5	1.2	9.9	<1	<1	24	7.3	
JUL 25...	1350	82	49	7.6	12.0	0.3	7.8	K3	K7	22	6.6	
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR- ^A BONATE WATER DIS IT FIELD (MG/L AS HCO3	ALKA- ^B LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	
NOV 09...	2.3	1.2	0.1	0.6	39	32	8.3	0.4	0.2	4.2	46	
MAR 29...	2.0	1.1	0.1	0.6	33	27	7.1	0.3	0.2	4.4	45	
MAY 17...	1.4	0.6	0.0	0.5	25	21	5.7	0.5	0.2	3.0	29	
JUL 25...	1.3	0.6	0.1	0.3	22	18	5.1	0.2	0.3	2.9	30	
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	
NOV 09...	48	0.06	2.73	<0.01	0.12	0.12	<0.01	<0.20	<0.01	<0.01	<0.01	
MAR 29...	43	0.06	3.89	<0.01	0.15	0.15	<0.01	<0.20	<0.01	<0.01	<0.01	
MAY 17...	32	0.04	43.2	<0.01	0.15	0.15	<0.01	<0.20	<0.01	<0.01	<0.01	
JUL 25...	29	0.04	6.64	<0.01	0.11	0.11	0.02	<0.20	<0.01	<0.01	<0.01	
DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
NOV 09...	20	15	<3	<3	5	2	<10	<1	<1	<1	31	<6
MAR 29...	30	12	<3	14	<4	<1	<10	<1	<1	<1	27	<6
MAY 17...	40	10	<3	26	<4	15	<10	1	<1	<1	17	<6
JUL 25...	20	9	3	6	5	1	<10	<1	<1	<1	17	<6

A-Field dissolved bicarbonate, determined by incremental titration method.

B-Field total dissolved alkalinity, determined by incremental titration method.

K-Based on non-ideal colony count.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

RADIOCHEMICAL ANALYSIS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAR 29...	1100	0.05	0.45
MAY 17...	1030	0.06	0.39

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 25...	1510	54	64	5.0	JUL 07...	1355	106	49	10.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 09...	1200	22	0.4	0.02
MAR 29...	1100	32	0.2	0.02
MAY 17...	1030	552	2.2	3.3
JUL 25...	1350	82	1.1	0.24

SAN JUAN RIVER BASIN

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¹/4SW¹/4 sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,580 ft above sea level (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 125,640 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 3,395 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin and provide hydroelectric power.

COOPERATION.--Records provided by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24-25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 125,640 acre-ft, June 19, elevation, 7,665.00 ft; minimum, 54,820 acre-ft, Sept. 30, elevation, 7,635.29 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0900, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,649.18	85,200	
Oct. 31.	7,645.32	76,190	-9,010
Nov. 30.	7,645.13	75,760	-430
Dec. 31.	7,644.42	74,150	-1,610
CAL YR 1993.			+13,670
Jan. 31.	7,644.38	74,060	-90
Feb. 28.	7,645.13	75,760	+1,700
Mar. 31.	7,647.26	80,670	+4,910
Apr. 30.	7,653.44	95,550	+14,880
May 31.	7,661.12	115,230	+19,680
June 30.	7,663.50	121,570	+6,340
July 31.	7,651.36	90,440	-31,130
Aug. 31.	7,638.88	62,100	-28,340
Sept. 30.	7,635.29	54,820	-7,280
WTR YR 1994.			-30,380

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¹/₄NW¹/₄ 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.--510 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973, January 1988 to September 1991.

GAGE.--Water-stage recorder. Datum of gage is 6,143.59 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 23-29, Dec. 4-10, 12, Dec. 14 to Jan. 3, Jan. 5-24, Jan. 30 to Mar. 2, May 3-4, and June 13-28. Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911 has not yet been exceeded.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	126	140	120	44	320	99	174	437	140	189	161
2	147	115	138	120	45	200	107	167	577	140	199	167
3	138	113	137	120	46	268	115	150	615	150	182	417
4	130	122	140	120	50	279	120	130	717	148	164	269
5	130	125	140	120	56	252	122	251	808	140	167	184
6	130	118	140	120	58	225	113	263	810	152	202	161
7	160	120	140	120	62	175	105	224	803	138	206	158
8	182	122	140	120	80	179	112	171	582	130	216	148
9	195	125	140	120	115	164	130	179	241	142	251	147
10	171	125	140	120	90	126	147	129	292	147	210	147
11	155	142	135	120	90	110	161	125	773	152	206	158
12	202	188	135	120	70	110	182	256	619	148	209	173
13	192	188	135	120	60	103	226	235	370	155	192	301
14	185	206	135	120	56	120	227	407	320	164	199	287
15	179	189	130	120	64	137	193	657	540	176	209	204
16	176	170	130	120	70	150	179	677	520	139	199	206
17	226	153	130	54	90	167	182	704	300	147	174	177
18	230	150	130	54	300	161	195	671	290	167	192	176
19	183	150	130	54	340	170	247	652	290	185	192	176
20	212	148	130	54	200	257	286	658	290	164	189	153
21	282	145	130	56	120	255	287	969	1150	155	188	150
22	283	145	130	56	100	190	283	984	1350	155	176	138
23	295	150	130	57	84	165	308	968	1520	161	161	123
24	275	150	130	63	72	143	322	944	700	170	155	115
25	195	150	130	69	90	135	296	1110	310	202	173	105
26	179	150	130	75	150	130	235	1150	300	199	198	101
27	167	140	130	71	310	123	196	1070	300	185	167	95
28	164	140	130	69	260	99	195	850	290	182	167	99
29	176	140	130	67	---	99	189	582	203	176	167	93
30	161	140	130	60	---	95	199	296	151	229	167	124
31	150	---	130	48	---	95	---	283	---	200	164	---
TOTAL	5797	4345	4145	2827	3172	5202	5758	16086	16468	5038	5830	5113
MEAN	187	145	134	91.2	113	168	192	519	549	163	188	170
MAX	295	206	140	120	340	320	322	1150	1520	229	251	417
MIN	130	113	130	48	44	95	99	125	151	130	155	93
AC-FT	11500	8620	8220	5610	6290	10320	11420	31910	32660	9990	11560	10140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	197	141	105	76.7	99.7	206	347	451	504	305	217	206
MAX	672	709	396	182	362	972	1339	1719	1555	1381	878	706	
(WY)	1987	1987	1983	1985	1993	1993	1979	1958	1979	1957	1957	1970	
MIN	47.9	32.1	33.8	33.9	38.6	45.1	22.8	44.3	74.5	81.6	80.4	58.3	
(WY)	1978	1960	1964	1978	1978	1977	1951	1951	1977	1959	1977	1951	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1951 - 1994
ANNUAL TOTAL	138624	79781	
ANNUAL MEAN	380	219	242
HIGHEST ANNUAL MEAN			582
LOWEST ANNUAL MEAN			77.4
HIGHEST DAILY MEAN	1720	May 30	4560
LOWEST DAILY MEAN	70	Jan 4	6.1
ANNUAL SEVEN-DAY MINIMUM	74	Jan 8	8.3
INSTANTANEOUS PEAK FLOW		1960	6400
INSTANTANEOUS PEAK STAGE		6.32	8.95
INSTANTANEOUS LOW FLOW			6.1
ANNUAL RUNOFF (AC-FT)	275000	158200	175300
10 PERCENT EXCEEDS	976	321	529
50 PERCENT EXCEEDS	209	160	133
90 PERCENT EXCEEDS	90	95	50

a-Also occurred Jan 11-13.

b-From rating curve extended above 5100 ft³/s.

c-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 SE¹/4SW¹/4 sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974, January 1988 to September 1991.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 22-25, Nov. 1, 7-8, and Nov. 25 to Mar. 3. Records good except for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from 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 elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	7.0	6.8	6.0	2.2	16	3.0	28	61	70	69	41
2	45	7.2	6.8	6.0	2.3	11	3.0	24	61	79	59	48
3	45	6.4	6.8	6.0	2.4	14	3.1	18	58	86	64	143
4	46	6.3	7.0	6.0	2.5	18	3.0	28	57	76	56	85
5	45	6.3	7.0	6.0	2.8	13	3.1	23	57	68	55	56
6	49	6.0	7.0	6.0	2.9	11	3.1	24	55	70	61	56
7	61	6.0	7.0	6.0	3.3	9.1	3.0	34	55	65	64	64
8	60	6.4	7.0	6.0	4.1	16	3.1	32	59	68	58	61
9	60	6.4	7.0	6.0	5.5	16	6.9	32	57	69	68	72
10	53	6.7	7.0	6.0	4.5	8.8	9.9	33	59	77	58	70
11	50	6.7	6.8	6.0	4.4	6.6	8.2	33	64	81	50	77
12	58	9.9	6.8	6.0	3.7	6.2	8.6	55	60	78	53	82
13	46	22	6.8	6.0	3.1	5.8	10	49	63	80	48	144
14	42	19	6.6	6.0	2.8	5.8	10	48	61	74	45	124
15	36	33	6.4	6.0	3.2	6.5	9.1	42	68	76	50	59
16	38	19	6.4	5.0	3.6	7.3	7.0	41	70	66	47	50
17	74	12	6.4	2.7	4.5	8.2	5.9	38	66	63	45	48
18	67	9.5	6.4	2.7	14	8.2	5.2	39	77	77	45	55
19	39	7.6	6.4	2.7	16	8.6	4.8	43	94	80	50	57
20	36	7.6	6.4	2.7	10	14	4.5	38	127	70	50	49
21	28	6.8	6.4	2.8	6.6	10	4.3	48	82	73	56	50
22	21	6.4	6.4	2.8	5.2	7.0	4.3	51	129	75	49	51
23	14	6.7	6.4	2.9	4.3	5.9	4.8	48	78	73	44	44
24	10	7.2	6.4	3.2	3.8	5.5	5.5	45	75	85	43	43
25	7.8	7.4	6.4	3.5	4.6	4.8	4.5	104	81	97	40	42
26	7.6	7.0	6.4	3.7	7.0	4.5	4.5	82	76	94	44	41
27	7.2	6.8	6.4	3.5	15	4.3	31	71	69	70	36	37
28	7.2	6.8	6.4	3.3	13	4.0	25	64	67	66	35	34
29	7.2	6.8	6.4	3.2	---	3.6	21	58	66	66	34	37
30	6.8	6.8	6.4	2.8	---	3.0	21	53	67	72	41	46
31	6.7	---	6.4	2.3	---	3.0	---	56	---	73	47	---
TOTAL	1119.5	279.7	205.2	139.8	157.3	265.7	240.4	1382	2119	2317	1564	1866
MEAN	36.1	9.32	6.62	4.51	5.62	8.57	8.01	44.6	70.6	74.7	50.5	62.2
MAX	74	33	7.0	6.0	16	18	31	104	129	97	69	144
MIN	6.7	6.0	6.4	2.3	2.2	3.0	3.0	18	55	63	34	34
AC-FT	2220	555	407	277	312	527	477	2740	4200	4600	3100	3700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	35.5	10.6	5.51	4.58	10.2	18.5	14.0	39.7	57.6	66.0	65.8	58.7
MAX	87.9	29.6	20.4	19.3	54.8	89.7	41.1	64.5	79.3	90.1	105	92.0	
(WY)	1973	1956	1985	1980	1980	1979	1979	1992	1986	1987	1987	1987	1983
MIN	5.25	3.68	1.74	2.04	2.55	3.03	3.77	15.7	24.4	21.2	32.1	26.5	
(WY)	1978	1978	1960	1973	1960	1972	1978	1978	1977	1977	1977	1951	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1951 - 1994

ANNUAL TOTAL	14810.3	11655.6	
ANNUAL MEAN	40.6	31.9	32.6
HIGHEST ANNUAL MEAN			47.7
LOWEST ANNUAL MEAN			15.6
HIGHEST DAILY MEAN	301	Aug 28	144 Sep 13
LOWEST DAILY MEAN	2.5	Feb 16	2.2 Feb 1
ANNUAL SEVEN-DAY MINIMUM	5.8	Feb 13	2.5 Jan 30
INSTANTANEOUS PEAK FLOW			270 Sep 3
INSTANTANEOUS PEAK STAGE			2.07 Sep 3
INSTANTANEOUS LOW FLOW			4.62 Sep 6 1970
ANNUAL RUNOFF (AC-FT)	29380	23120	23650
10 PERCENT EXCEEDS	73	72	71
50 PERCENT EXCEEDS	37	18	24
90 PERCENT EXCEEDS	6.4	3.7	3.3

a-From rating curve extended above 160 ft³/s, on the basis of field estimate of peak flow.

b-Maximum gage height, 2.13 ft, sometime between Nov 27, and Mar 3, backwater from ice.

c-Maximum gage height, 5.98 ft, Mar 9, 1960, backwater from ice.

09359020 ANIMAS RIVER BELOW SILVERTON, CO

LOCATION.--Lat 37°47'25", long 107°40'01", in SW¹/4SW¹/4 sec.20, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank 500 feet upstream from Durango-Silverton Railroad, crossing Animas River, 0.7 mile downstream from Mineral Creek, and 1.1 miles south of Silverton.

DRAINAGE AREA.--146 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6, 9, 17-18, 20, 25, Jan. 26 to May 5, and June 4-5. Records good except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions from Animas River and Mineral Creek drainages through Red Mountain, Carbon Lake and Mineral Point ditches amount to 600 to 1100 acre feet per year. City of Silverton diverts some water for municipal use from Bear Creek and Boulder Creek, both tributaries upstream. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred October 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	86	76	59	92	61	82	215	1750	461	133	104
2	107	84	74	62	74	60	86	215	1720	427	141	107
3	105	83	69	60	58	62	90	220	1820	388	128	197
4	102	84	66	62	60	64	95	235	1900	354	122	184
5	101	80	65	62	58	66	100	260	1700	331	121	150
6	101	80	64	66	56	67	97	300	1530	309	130	135
7	111	78	64	68	56	67	94	370	1410	284	120	127
8	108	78	66	68	58	66	94	347	1330	265	118	119
9	112	76	68	68	56	65	94	358	1320	254	133	114
10	113	76	70	70	55	63	96	283	1330	247	126	110
11	109	80	68	68	55	62	92	285	1270	231	125	108
12	115	83	70	68	54	62	87	394	1150	223	123	175
13	113	77	68	70	52	63	90	499	1250	209	122	303
14	112	77	64	70	52	64	110	517	1240	199	128	418
15	109	78	62	70	54	67	125	624	1150	191	131	299
16	112	78	64	70	54	73	135	654	1070	183	118	245
17	115	80	63	68	57	77	165	724	1030	175	113	218
18	113	77	60	70	60	82	210	717	999	173	111	203
19	104	79	60	70	58	86	240	757	982	192	124	195
20	102	80	62	68	55	90	270	742	956	184	121	233
21	99	98	60	68	54	91	300	688	1020	171	125	235
22	99	81	58	68	53	90	330	791	1050	166	120	213
23	96	81	58	68	52	92	390	913	937	159	113	197
24	94	81	60	68	53	90	380	933	854	171	110	182
25	94	75	60	64	54	88	360	908	796	160	110	168
26	95	68	58	62	55	85	300	697	730	155	106	159
27	85	66	60	62	57	82	270	771	677	148	101	151
28	87	68	64	60	61	80	245	1010	605	143	107	143
29	89	71	62	58	---	80	230	1260	544	139	112	137
30	83	74	57	56	---	78	215	1530	498	135	105	186
31	84	---	58	72	---	80	---	1670	---	133	104	---
TOTAL	3177	2357	1978	2043	1613	2303	5472	19887	34618	6960	3701	5515
MEAN	102	78.6	63.8	65.9	57.6	74.3	182	642	1154	225	119	184
MAX	115	98	76	72	92	92	390	1670	1900	461	141	418
MIN	83	66	57	56	52	60	82	215	498	133	101	104
MED	104	78	64	68	55	73	130	654	1110	191	121	178
AC-FT	6300	4680	3920	4050	3200	4570	10850	39450	68660	13810	7340	10940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	MEAN	89.5	76.4	58.4	51.9	50.8	65.6	161	713	1165	441	197	168
MAX	102	79.7	63.8	65.9	57.6	74.3	182	834	1480	665	271	188	
(WY)	1994	1993	1994	1994	1994	1994	1994	1993	1993	1993	1993	1993	1993
MIN	82.0	70.9	52.5	40.2	46.1	59.7	122	642	859	225	119	133	
(WY)	1992	1992	1992	1992	1992	1992	1992	1993	1994	1992	1994	1994	1992

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1992 - 1994

ANNUAL TOTAL	120964	89624											
ANNUAL MEAN	331	246								270			
HIGHEST ANNUAL MEAN										329			
LOWEST ANNUAL MEAN										235			1993
HIGHEST DAILY MEAN	2160	Jun 16	1900	Jun 4	2160	Jun 16	1993						
LOWEST DAILY MEAN	45	Jan 4	52	Feb 13	35	Jan 2	1992						
ANNUAL SEVEN-DAY MINIMUM	47	Jan 21	54	Feb 10	39	Jan 18	1992						
INSTANTANEOUS PEAK FLOW			2400	Jun 3	2580	Jun 16	1993						
INSTANTANEOUS PEAK STAGE			4.75	Jun 3	4.87	Jun 16	1993						
ANNUAL RUNOFF (AC-FT)	239900	177800	195600										
10 PERCENT EXCEEDS	1100	735	795										
50 PERCENT EXCEEDS	101	104	95										
90 PERCENT EXCEEDS	50	60	50										

a-Also occurred Feb 14, 23.

SAN JUAN RIVER BASIN

09359020 ANIMAS RIVER BELOW SILVERTON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1993 to September 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO
NOV 10...	1130	86	590	6.6	1.0	270	100	5.4	3.7	0.1
MAY 18...	1130	603	190	6.8	8.0	73	26	1.9	1.4	0.1
JUN 02...	1100	1370	133	7.6	6.5	53	19	1.3	0.9	0.0
JUL 26...	1010	159	362	7.3	12.0	160	59	3.3	2.3	0.1

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	CYANIDE TOTAL (MG/L AS CN)
NOV 10...	0.9	5.9	280	0.9	0.7	15	412	0.56	95.6	<0.01
MAY 18...	0.5	12	66	0.5	0.3	6.9	112	0.15	182	--
JUN 02...	0.4	15	42	0.3	0.2	5.7	79	0.11	294	<0.01
JUL 26...	0.7	12	150	0.4	0.5	10	234	0.32	101	<0.01

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV 10...	100	<1	2.0	<1	6	3200	<1
MAY 18...	10	<1	2.0	<1	11	2600	<1
JUN 02...	50	<1	5.0	<1	9	3100	1
JUL 26...	20	<1	2.0	<1	3	5100	<1

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 10...	800	800	<0.1	<1	<0.2	520
MAY 18...	520	430	<0.1	<1	<0.2	500
JUN 02...	500	250	<0.1	<1	<0.2	300
JUL 26...	630	490	<0.1	<1	<0.2	360

09359020 ANIMAS RIVER BELOW SILVERTON, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT 21...	1500	88	534	8.0	JUL 08...	1125	273	271	6.5
MAY 05...	1055	195	375	6.0					

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¹/4SW¹/4 sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at abandoned power plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi².

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,501.57 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Estimated daily discharges: Dec. 21-22, 24-25, Jan. 7-8, and Jan. 31 to Feb. 2. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 4,000 acres upstream from station. Natural regulation by many lakes and regulation for power upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	269	230	182	150	195	263	678	4060	987	343	268
2	301	268	224	192	160	191	273	687	3990	932	342	278
3	291	258	205	187	180	196	284	713	3850	877	335	318
4	285	255	200	191	193	202	298	749	4160	823	321	636
5	275	256	196	188	185	208	324	886	3780	765	304	499
6	267	245	197	208	170	212	314	1240	3520	702	312	413
7	280	242	197	190	172	214	301	1590	3160	643	320	376
8	316	246	197	190	183	214	298	1580	2900	593	306	352
9	314	234	205	211	176	206	304	1610	2770	543	308	327
10	317	229	213	220	171	202	309	1440	2740	511	328	317
11	320	244	204	211	174	197	293	1250	2760	496	323	308
12	322	262	211	210	168	197	275	1610	2320	467	316	333
13	324	259	205	218	160	197	281	2080	2370	412	318	585
14	321	257	189	218	160	201	322	2080	2530	391	315	1070
15	314	253	185	218	171	213	401	2450	2320	378	331	988
16	308	243	196	219	168	227	427	2570	2120	363	336	777
17	318	238	191	213	176	245	523	2900	1970	352	308	642
18	333	234	177	214	192	266	668	2920	1930	346	292	576
19	331	236	183	217	181	269	767	2880	1870	344	292	533
20	311	233	188	213	173	289	852	2900	1880	360	315	524
21	307	226	170	212	170	295	927	2550	1990	371	331	608
22	303	233	170	211	169	287	1110	2530	2260	363	344	586
23	305	246	174	211	161	296	1250	2890	2110	352	326	526
24	303	247	170	212	161	290	1230	2830	1840	347	304	485
25	294	224	180	198	168	283	1120	2770	1660	347	285	452
26	286	205	178	190	171	272	975	2350	1560	348	296	428
27	285	196	187	192	180	263	851	2120	1420	334	283	404
28	270	208	196	190	192	258	756	2390	1340	319	269	384
29	282	216	186	184	--	252	726	3080	1200	324	278	372
30	277	221	174	174	--	250	675	3800	1110	336	283	369
31	262	--	180	180	--	250	--	4150	--	331	273	--
TOTAL	9328	7183	5958	6264	4835	7337	17397	66273	73490	15057	9637	14734
MEAN	301	239	192	202	173	237	580	2138	2450	486	311	491
MAX	333	269	230	220	193	296	1250	4150	4160	987	344	1070
MIN	262	196	170	174	150	191	263	678	1110	319	269	268
AC-FT	18500	14250	11820	12420	9590	14550	34510	131500	145800	29870	19110	29220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1994, BY WATER YEAR (WY)

	MEAN	410	285	220	202	205	291	846	2308	2885	1199	576	455
MAX	1866	814	412	326	352	844	1818	4791	5846	3003	1500	1709	
(WY)	1942	1942	1942	1973	1920	1916	1985	1920	1917	1975	1929	1970	
MIN	162	158	129	103	110	133	246	474	395	211	179	161	
(WY)	1957	1935	1990	1933	1933	1990	1977	1977	1934	1934	1900	1956	

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1898 - 1994

ANNUAL TOTAL	393229	237493	
ANNUAL MEAN	1077	651	
HIGHEST ANNUAL MEAN			822
LOWEST ANNUAL MEAN			1366
HIGHEST DAILY MEAN	6480	May 28	4160 Jun 4
LOWEST DAILY MEAN	160	Jan 13	150 Feb 1
ANNUAL SEVEN-DAY MINIMUM	176	Dec 21	167 Feb 10
INSTANTANEOUS PEAK FLOW			4720 Jun 4
INSTANTANEOUS PEAK STAGE			5.97 Jun 4
ANNUAL RUNOFF (AC-FT)	780000	471100	595700
10 PERCENT EXCEEDS	3380	2080	2240
50 PERCENT EXCEEDS	444	301	338
90 PERCENT EXCEEDS	200	183	180

a-Present site and datum, from rating curve extended above 13000 ft³/s.

09362800 LEMON RESERVOIR NEAR DURANGO, CO

LOCATION.--Lat 37°22'57", long 107°39'44", in SE¹/₄SW¹/₄ sec.17, T.36 N., R.7 W., LaPlata County, Hydrologic Unit 14080104, in gatehouse at Lemon Dam on Florida River, 2.3 mi upstream from True Creek, and 15 mi northeast of Durango.

DRAINAGE AREA.--68.3 mi².

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,948.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Estimated contents Mar. 18-27. Records good except for estimated daily contents, which are fair. Reservoir is formed by an earthfill dam. Dam was completed in 1963. Capacity, 40,100 acre-ft, between elevations 7,948.00 ft, sill of outlet gate, and 8,148.00 ft, normal reservoir water surface elevation. Dead storage below elevation 8,005.00 ft, 354 acre-ft. Figures given are total contents.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 40,130 acre-ft, June 14, elevation, 8,147.98 ft; minimum contents, 14,900 acre-ft, Sept. 30, elevation, 8,096.65

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,120.62	24,860	-
Oct. 31.	8,119.80	24,460	-400
Nov. 30.	8,119.24	24,190	-270
Dec. 31.	8,119.37	24,250	+60
CAL YR 1993.			+3,620
Jan. 31.	8,119.18	24,160	-90
Feb. 28.	8,119.16	24,150	-10
Mar. 31.	8,119.73	24,420	+270
Apr. 30.	8,125.25	27,190	+2,770
May 31.	8,145.90	38,850	+11,660
June 30.	8,145.85	38,820	-30
July 31.	8,124.61	26,860	-11,960
Aug. 31.	8,105.30	18,100	-8,760
Sept. 30.	8,096.66	14,900	-3,200
WTR YR 1994.			-9,960

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.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 5,960 ft above sea level, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft. higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 20,000 acres upstream from station. During water years 1944-49, Twin Rocks Canal diverted upstream from station for irrigation downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

MEAN	463	339	266	244	257	416	1096	2526	3012	1242	611	521
MAX	2479	1068	555	388	467	1043	2191	5686	6145	3710	1681	1922
(WY)	1942	1942	1987	1973	1987	1993	1985	1941	1957	1957	1957	1970
MIN	169	158	159	169	151	141	273	449	458	223	232	155
(WY)	1957	1934	1957	1954	1964	1977	1977	1977	1934	1934	1934	1956

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1934 - 1994	
ANNUAL TOTAL	475720		269549			
ANNUAL MEAN	1303		738		926	
HIGHEST ANNUAL MEAN					1713	1941
LOWEST ANNUAL MEAN					340	1977
HIGHEST DAILY MEAN	7130	May 28	3640	Jun 6	11800	Jun 19 1949
LOWEST DAILY MEAN	231	Dec 15	185	Jan 31	.00	Nov 1 1933
ANNUAL SEVEN-DAY MINIMUM	241	Dec 14	217	Feb 10	.00	Nov 1 1933
INSTANTANEOUS PEAK FLOW			4790	Jun 1	13100	Jun 19 1949
INSTANTANEOUS PEAK STAGE			8.30	Jun 1	11.45	Jun 19 1949
INSTANTANEOUS LOW FLOW			185	Feb 14	63	Jan 21 1935
ANNUAL RUNOFF (AC-FT)	943600		534700		670800	
10 PERCENT EXCEEDS	3710		2200		2420	
50 PERCENT EXCEEDS	640		374		404	
90 PERCENT EXCEEDS	260		251		210	

e-Estimated

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¹/4SW¹/4 sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi², approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,104.71 ft above sea level. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 16-21, 25-28, Dec. 2 to Feb. 6, Feb. 10, 12-16, 23-25, Mar. 1, 10, and Mar. 28. Records good except for estimated daily discharges, which are poor. Cherry Creek ditch exports water upstream from station for irrigation of about 2,000 acres in Cherry Creek drainage.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	9.0	8.0	5.0	6.0	29	48	242	32	9.9	7.8
2	11	12	9.0	8.0	5.0	6.0	29	47	227	35	9.1	7.7
3	11	11	9.0	8.0	6.0	6.5	30	50	224	32	8.8	10
4	10	11	8.5	8.0	7.0	6.9	31	52	217	29	8.6	8.3
5	9.9	11	9.0	6.5	7.5	7.2	30	70	196	27	8.5	8.0
6	9.7	11	9.0	6.0	7.0	7.2	30	108	172	25	8.0	10
7	11	11	9.0	6.0	7.1	7.3	32	129	146	23	8.0	12
8	11	10	8.5	6.5	8.8	7.4	32	123	127	21	8.1	12
9	11	10	9.0	6.5	6.9	7.2	34	127	119	20	8.2	12
10	11	10	9.0	6.5	7.0	7.0	33	105	111	19	9.4	12
11	11	11	9.0	6.0	6.1	7.0	31	98	102	18	8.2	11
12	12	12	9.0	6.0	6.0	7.6	33	125	92	17	7.8	14
13	12	11	8.5	6.0	5.5	8.5	41	152	87	16	7.6	13
14	12	11	8.0	6.0	5.5	9.7	50	173	81	15	8.0	13
15	13	10	9.0	6.0	5.5	11	48	216	70	15	10	16
16	13	9.0	9.0	5.5	5.5	12	55	227	61	14	9.4	17
17	15	9.0	7.0	5.5	5.8	14	90	242	54	13	8.7	17
18	14	9.0	7.5	5.5	6.1	16	106	228	49	13	8.4	17
19	13	9.0	8.0	6.0	5.9	18	115	222	49	13	10	16
20	13	9.0	7.0	6.0	6.2	25	116	189	53	13	9.4	16
21	13	9.0	7.0	6.0	5.6	26	109	178	52	13	8.7	15
22	13	9.0	7.0	6.0	5.7	28	125	201	56	12	8.1	15
23	13	9.8	7.5	6.0	5.5	30	135	220	42	11	7.5	14
24	13	10	7.0	6.0	5.5	30	124	201	35	11	7.4	14
25	14	8.0	7.0	6.0	5.5	30	105	181	31	11	7.6	13
26	14	8.0	7.5	6.0	5.8	30	88	150	27	11	7.3	12
27	14	8.5	8.0	6.0	5.8	30	73	135	24	12	7.1	12
28	14	9.0	8.0	6.0	5.9	28	64	156	24	11	7.2	12
29	14	9.2	7.0	5.5	---	28	57	208	26	10	7.0	11
30	13	9.0	7.0	5.5	---	28	48	252	28	10	7.1	13
31	13	---	7.5	5.0	---	28	---	252	---	10	7.3	---
TOTAL	382.6	298.5	251.5	192.5	170.7	513.5	1923	4865	2824	532	256.4	380.8
MEAN	12.3	9.95	8.11	6.21	6.10	16.6	64.1	157	94.1	17.2	8.27	12.7
MAX	15	12	9.0	8.0	8.8	30	135	252	242	35	10	17
MIN	9.7	8.0	7.0	5.0	5.0	6.0	29	47	24	10	7.0	7.7
AC-FT	759	592	499	382	339	1020	3810	9650	5600	1060	509	755

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)

	MEAN	15.3	10.6	8.25	7.03	7.39	14.8	83.5	174	134	38.1	23.4	20.2
MAX	148	54.3	20.4	15.0	18.0	50.7	203	384	421	154	75.4	124	124
(WY)	1942	1942	1987	1926	1971	1989	1924	1941	1980	1957	1957	1927	1927
MIN	3.27	3.11	2.94	2.65	3.06	3.83	8.40	19.8	15.6	8.80	6.58	3.73	3.73
(WY)	1957	1938	1938	1938	1938	1990	1977	1977	1934	1939	1939	1956	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1918 - 1994

ANNUAL TOTAL	24345.8	12590.5	
ANNUAL MEAN	66.7	34.5	44.7
HIGHEST ANNUAL MEAN			90.5
LOWEST ANNUAL MEAN			9.94
HIGHEST DAILY MEAN	541	May 27	a ²⁵² May 30
LOWEST DAILY MEAN	4.0	Feb 15	b ^{5.0} Jan 31
ANNUAL SEVEN-DAY MINIMUM	4.3	Feb 12	c ^{5.4} Jan 27
INSTANTANEOUS PEAK FLOW			d ²⁹⁹ May 31
INSTANTANEOUS PEAK STAGE			e ^{3.42} May 31
ANNUAL RUNOFF (AC-FT)	48290	24970	32400
10 PERCENT EXCEEDS	205	115	127
50 PERCENT EXCEEDS	15	11	13
90 PERCENT EXCEEDS	5.8	6.0	5.1

a-Also occurred May 31.

b-Also occurred Feb 1-2.

c-Present datum, from rating curve extended above 620 ft³/s, on basis of slope-area measurement of peak flow.

d-Maximum gage height, 3.45 ft, Feb 13, backwater from ice.

e-Maximum gage height, 5.13 ft, Sep 6, 1970.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW¹/₄SE¹/₄ 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 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934 (M), 1936 (M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,975.15 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Estimated daily discharges: Nov. 25-29, Dec. 13-28, Dec. 30 to Jan. 4, Jan. 7-23, Jan. 30 to Feb. 3, and Feb. 13-14. Records good except for estimated daily discharges, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	12	20	18	12	33	17	35	67	12	3.2	3.8
2	9.2	12	19	18	12	30	16	34	53	12	2.8	5.3
3	9.0	12	18	16	14	34	15	32	54	15	2.8	10
4	8.9	13	20	16	16	49	12	31	72	14	2.6	5.7
5	9.0	12	20	18	14	70	12	31	63	12	2.2	3.4
6	9.6	13	22	17	14	67	11	37	59	10	3.2	3.6
7	12	13	23	16	14	53	10	49	56	8.5	3.8	4.5
8	12	13	19	16	15	61	10	58	64	7.6	3.8	5.1
9	12	13	19	16	14	50	15	71	53	6.9	3.9	5.3
10	11	13	18	16	15	38	18	64	60	6.0	3.9	4.6
11	11	15	18	16	15	36	16	66	55	5.5	4.7	5.4
12	13	23	20	16	15	37	15	73	58	4.8	3.5	45
13	12	25	18	16	14	34	27	68	54	4.3	2.2	14
14	11	26	20	16	16	36	34	60	50	4.0	2.7	8.1
15	11	26	20	16	16	36	28	67	47	2.9	3.8	6.7
16	11	24	20	16	15	34	23	70	46	3.4	4.0	8.3
17	14	24	18	16	16	35	21	85	43	4.7	4.4	9.9
18	16	23	20	14	30	35	26	82	44	4.7	5.0	10
19	15	23	20	14	27	33	32	74	44	4.9	4.9	9.8
20	13	21	22	14	19	55	40	76	46	5.1	3.9	7.9
21	12	21	20	14	18	74	54	72	40	9.5	3.6	6.9
22	12	23	18	14	18	44	60	63	52	6.0	3.6	5.0
23	12	21	20	14	18	35	57	73	35	5.1	3.5	4.0
24	12	21	18	14	18	30	57	53	22	3.2	3.8	4.8
25	12	18	18	14	18	27	58	50	23	3.0	4.1	5.0
26	12	18	18	14	22	27	60	64	22	2.9	3.8	5.1
27	12	18	20	14	30	25	51	54	20	3.2	3.4	4.7
28	12	20	20	14	31	22	43	43	18	4.9	3.5	5.6
29	12	20	20	14	---	21	38	56	18	3.8	3.3	5.0
30	12	21	20	14	---	20	39	71	15	3.2	3.6	8.9
31	12	---	20	12	---	19	---	67	---	3.7	4.1	---
TOTAL	361.1	557	606	473	496	1200	915	1829	1353	196.8	111.6	231.4
MEAN	11.6	18.6	19.5	15.3	17.7	38.7	30.5	59.0	45.1	6.35	3.60	7.71
MAX	16	26	23	18	31	74	60	85	72	15	5.0	45
MIN	8.9	12	18	12	12	19	10	31	15	2.9	2.2	3.4
AC-FT	716	1100	1200	938	984	2380	1810	3630	2680	390	221	459

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	14.0	11.9	12.1	11.6	16.9	35.7	109	112	66.8	20.1	11.9	11.4
MAX	260	99.2	53.9	38.3	53.9	130	363	506	306	99.4	65.1	126	
(WY)	1942	1942	1987	1942	1924	1993	1980	1941	1957	1957	1957	1927	
MIN	.097	.98	1.24	.80	2.96	.63	3.06	5.32	1.94	.019	.006	.000	
(WY)	1935	1940	1978	1930	1977	1977	1977	1977	1924	1922	1922	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1921 - 1994

ANNUAL TOTAL	27569.9	8329.9	
ANNUAL MEAN	75.5	22.8	36.1
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			4.44
HIGHEST DAILY MEAN	432	May 22	1120
LOWEST DAILY MEAN	3.5	Aug 19	.00
ANNUAL SEVEN-DAY MINIMUM	6.2	Aug 19	.00
INSTANTANEOUS PEAK FLOW			4750
INSTANTANEOUS PEAK STAGE		5.63	11.36
ANNUAL RUNOFF (AC-FT)	54680	16520	26160
10 PERCENT EXCEEDS	256	56	86
50 PERCENT EXCEEDS	20	16	12
90 PERCENT EXCEEDS	11	4.0	1.6

a-Also occurred Aug 13.

b-No flow at times in many years.

c-Present datum, from rating curve extended above 750 ft³/s, on basis of slope-area measurement of peak flow.

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--Streamflow records, October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972, October 1983 to September 1986. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR CO-83-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Estimated daily discharges: Oct. 1-14, Nov. 27 to Dec. 14, Dec. 20-22, 24-25, Jan. 2, 5, 7, Jan. 12 to Mar. 2, Mar. 8-13, June 29 to Sept. 12, and Sept. 30. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station. One diversion upstream from station for irrigation of about 100 acres downstream from station. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	25	15	9.0	130	26	89	175	.80	.00	.00
2	20	28	25	15	10	150	29	94	183	.70	.08	.00
3	20	28	23	15	11	170	34	99	137	.70	.00	.00
4	20	26	21	14	12	197	39	102	122	.60	.00	.00
5	26	25	18	15	13	195	43	92	113	.60	.00	.00
6	40	25	18	15	13	135	42	110	101	.60	.00	.00
7	48	22	18	15	14	148	35	136	86	.50	.00	.00
8	45	21	19	13	16	140	33	142	66	.30	.00	.00
9	40	22	20	14	20	180	34	135	50	.20	.00	.00
10	37	23	20	15	25	140	42	126	36	.10	.00	.00
11	40	24	20	14	20	120	45	92	29	.02	.00	.00
12	40	37	21	14	17	120	51	91	24	.00	.00	.08
13	37	40	23	14	13	110	63	130	15	.00	.00	3.4
14	33	38	24	14	13	109	75	146	12	.00	.00	15
15	30	40	25	14	14	93	80	210	8.9	.00	.00	17
16	27	34	25	14	17	58	76	255	6.3	.00	.00	17
17	35	30	20	14	25	55	90	280	4.6	.00	.00	11
18	51	28	18	13	70	54	105	249	3.5	.00	.00	10
19	44	28	18	13	120	49	114	229	3.5	.00	.00	11
20	34	27	17	13	150	62	115	198	3.2	.00	.00	12
21	29	22	15	13	60	173	114	165	8.0	.00	.00	18
22	28	25	14	13	45	83	111	150	6.9	.00	.00	24
23	28	28	13	13	38	62	133	140	7.2	.00	.00	20
24	28	28	14	14	35	54	143	146	9.4	.00	.00	16
25	27	27	14	15	35	48	129	148	6.5	.00	.00	13
26	27	18	13	17	60	43	117	215	4.2	.00	.00	11
27	28	20	18	17	100	40	109	153	2.4	.00	.00	11
28	30	23	19	17	150	35	103	124	1.7	.00	.00	10
29	28	25	21	16	---	29	93	123	1.0	.00	.00	8.6
30	28	25	18	15	---	27	98	146	.90	.00	.00	15
31	27	---	15	12	---	26	---	164	---	.00	.00	---
TOTAL	994	812	592	445	1125.0	3035	2321	4679	1227.2	5.12	0.08	243.08
MEAN	32.1	27.1	19.1	14.4	40.2	97.9	77.4	151	40.9	.17	.003	8.10
MAX	51	40	25	17	150	197	143	280	183	.80	.08	24
MIN	19	18	13	12	9.0	26	26	89	.90	.00	.00	.00
AC-FT	1970	1610	1170	883	2230	6020	4600	9280	2430	10	.2	482

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	26.6	19.6	14.4	13.5	25.8	58.6	129	180	84.4	28.9	29.0	26.5
MAX	459	113	45.5	45.6	92.1	198	330	642	395	185	364	137	137
(WY)	1942	1987	1942	1942	1993	1993	1980	1922	1957	1921	1921	1970	1970
MIN	.11	1.00	.39	.31	7.24	5.26	.15	.000	.000	.000	.000	.000	.000
(WY)	1978	1935	1960	1960	1977	1977	1977	1959	1951	1939	1922	1922	1922

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1921 - 1994
ANNUAL TOTAL	38610.10	15478.48	
ANNUAL MEAN	106	42.4	52.2
HIGHEST ANNUAL MEAN			138
LOWEST ANNUAL MEAN			4.28
HIGHEST DAILY MEAN	644	May 17	3050
LOWEST DAILY MEAN	.44	Jul 31	.00
ANNUAL SEVEN-DAY MINIMUM	1.1	Jul 26	.00
INSTANTANEOUS PEAK FLOW		388	5300
INSTANTANEOUS PEAK STAGE		3.28	7.30
ANNUAL RUNOFF (AC-FT)	76580	30700	37840
10 PERCENT EXCEEDS	312	131	146
50 PERCENT EXCEEDS	35	21	16
90 PERCENT EXCEEDS	12	.00	.10

a-No flow at times in most years.

b-present site and datum, from rating curve extended above 200 ft³/s, on basis of slope-area measurement of peak flow.

c-Maximum gage height, 8.50 ft, Sep 6, 1970.

09371010 SAN JUAN RIVER AT FOUR CORNERS, CO

LOCATION.--Lat 37°00'20", long 109°02'00", SE¹/4NE¹/4 sec.21, T.32 N., R.20 W., Montezuma County, Hydrologic Unit 14080201, on left bank 1,300 ft upstream from bridge on U.S. Highway 160, 0.1 mi north of New Mexico-Colorado State line, 1.0 mi east of Four Corners Monument, 3.0 mi downstream from Mancos River, and at mile 187.2.

DRAINAGE AREA.--14,600 mi², approximately.

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above sea level, from topographic map.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Flow partly regulated by Navajo Reservoir (09355100).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	678	913	1190	e1110	836	1230	656	1390	8510	4930	366	337
2	690	900	1180	e1120	e850	1280	637	1300	8500	4740	335	499
3	671	883	1160	e1120	e870	1240	640	1410	8680	4640	289	840
4	658	902	1140	1130	908	1240	650	2220	8730	4560	294	1890
5	673	1100	1120	1140	956	1220	657	2620	9090	4490	316	1640
6	681	1090	1120	1100	953	1140	697	3070	9010	4330	330	1370
7	764	1060	1130	1110	923	1100	651	4050	8590	4030	432	993
8	1050	1040	1130	1090	912	1040	610	4660	8180	3540	547	828
9	1050	1120	1130	1100	921	1030	617	4650	8010	3010	566	791
10	1050	1120	1120	1110	886	960	760	4730	7920	2780	523	736
11	1020	1140	1130	1110	860	881	782	4570	7860	2780	459	683
12	1000	1510	1160	1100	850	854	743	4820	7790	2200	461	659
13	1120	1510	1150	1100	842	851	752	5260	7330	1970	665	986
14	1070	1450	1140	1120	822	830	731	5820	7240	2090	537	1460
15	1120	1460	1150	1090	795	829	688	5920	7230	1630	706	2410
16	1080	1380	1160	1080	755	808	700	6350	7090	1470	1330	2350
17	922	1340	1130	1080	757	805	718	6410	6890	1410	1060	1530
18	1070	1320	1100	1070	763	809	721	6680	6760	1430	858	1130
19	1040	1260	1110	1050	847	833	806	6670	6730	1430	693	1160
20	973	1250	1110	1060	964	863	1070	6550	6770	1400	725	1110
21	952	1250	1100	1060	854	971	1210	6570	6560	1160	588	1030
22	930	1260	1110	1060	805	977	1240	6310	6580	1130	538	1010
23	943	1260	1130	1110	768	890	1370	6300	6820	1060	523	1070
24	920	1280	e1110	1140	757	868	1670	6660	6430	951	494	952
25	902	1250	e1100	1120	810	848	1750	6900	6000	895	455	863
26	881	1190	e1110	870	780	873	1810	7260	5810	929	e430	813
27	911	1160	e1120	894	807	867	1750	6450	5590	844	e420	754
28	972	1240	e1130	913	994	852	1540	6260	5330	677	e410	733
29	910	1230	e1120	879	---	855	1450	6570	5200	585	e400	752
30	885	1190	e1110	866	---	835	1440	6920	5140	534	399	954
31	915	---	e1100	843	---	697	---	7560	---	410	393	---
TOTAL	28501	36058	35000	32745	23845	29376	29516	162910	216370	68035	16542	32333
MEAN	919	1202	1129	1056	852	948	984	5255	7212	2195	534	1078
MAX	1120	1510	1190	1140	994	1280	1810	7560	9090	4930	1330	2410
MIN	658	883	1100	843	755	697	610	1300	5140	410	289	337
AC-FT	56530	71520	69420	64950	47300	58270	58540	323100	429200	134900	32810	64130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1994, BY WATER YEAR (WY)

	1294	1455	1513	1629	1748	2235	3276	4801	5217	2470	1400	1361
MEAN	1294	1455	1513	1629	1748	2235	3276	4801	5217	2470	1400	1361
MAX	2959	3732	3466	3300	3365	5454	7893	10220	10370	6846	3016	3243
(WY)	1987	1987	1987	1987	1987	1993	1979	1979	1979	1979	1986	1986
MIN	634	838	799	760	739	707	613	1030	1236	743	259	467
(WY)	1978	1980	1990	1990	1990	1990	1990	1981	1989	1989	1978	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1978 - 1994
ANNUAL TOTAL	1134705	711231	
ANNUAL MEAN	3109	1949	2366
HIGHEST ANNUAL MEAN			4180
LOWEST ANNUAL MEAN			991
HIGHEST DAILY MEAN	10300	9090	16400
LOWEST DAILY MEAN	548	289	110
ANNUAL SEVEN-DAY MINIMUM	579	334	126
INSTANTANEOUS PEAK FLOW		9480	16900
INSTANTANEOUS PEAK STAGE		4.80	a6.25
INSTANTANEOUS LOW FLOW		282	110
ANNUAL RUNOFF (AC-FT)	2251000	1411000	1714000
10 PERCENT EXCEEDS	7140	6370	5640
50 PERCENT EXCEEDS	1360	1100	1550
90 PERCENT EXCEEDS	851	657	722

a-Maximum gage height, 14.43 ft, Dec. 12, 1978, backwater from ice.
e-Estimated

LOCATION.--Lat 37°18'46", long 108°39'38", in SW¹/4SW¹/4 sec.6, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 1 mi upstream from mouth and 4.5 mi southwest of Cortez.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,765 ft above sea level, from topographic map. Prior to Aug. 25, 1993, gage at present site and datum.

REMARKS.--Estimated daily discharges: Water year 1993, Aug. 1-24. Water year 1994, Nov. 28-29, Dec. 2-10, 17, 19, 21, 24-28, 30, Jan. 2-3, 5-12, 15, 17, 19-25, Jan. 31 to Feb. 2, and Feb. 8-19. Records good except for period Sept. 14 to Oct. 28, 1993, which are poor, and estimated daily discharges for water year 1994, which are poor. Some small diversions upstream from station for irrigation. Most of flow is from diversion of water from Dolores River through Dolores Project and Montezuma Valley Irrigation Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

[illegible]

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.8	3.5	2.4	1.7	3.2	2.5	8.4	14	10	17	12
2	13	7.8	3.5	2.5	1.5	2.7	2.6	6.5	14	12	17	13
3	13	6.6	3.3	2.5	1.5	2.6	2.5	5.9	9.9	10	15	16
4	12	6.3	3.1	2.5	1.4	2.6	2.5	5.6	6.9	11	15	10
5	13	6.0	3.3	2.3	1.5	2.6	2.5	5.0	6.5	10	15	10
6	13	5.0	3.4	2.1	1.6	2.6	2.3	4.8	7.1	10	15	9.2
7	20	5.1	3.5	2.2	1.5	2.7	2.5	5.3	8.3	9.1	13	9.8
8	29	5.0	3.5	2.3	1.7	3.9	2.4	9.4	14	10	14	10
9	25	4.9	3.5	2.3	2.3	3.0	5.1	11	14	12	17	11
10	19	5.1	3.7	2.2	3.3	2.5	9.3	11	15	11	17	11
11	19	6.9	3.8	2.2	2.4	2.5	6.8	15	15	12	16	11
12	20	18	4.5	2.2	2.4	2.8	3.7	12	16	10	16	10
13	19	13	4.2	2.2	2.0	2.7	3.5	13	10	9.6	13	13
14	18	10	5.2	2.3	1.6	2.6	3.1	15	9.8	9.8	14	16
15	17	8.1	6.7	2.4	1.5	2.5	3.1	15	12	11	18	15
16	16	6.3	3.1	2.4	1.7	2.6	2.9	14	7.8	13	17	13
17	19	5.3	3.3	2.4	1.8	2.6	3.4	13	11	9.6	14	12
18	31	4.9	3.3	2.3	2.1	2.6	5.2	13	12	9.8	18	12
19	17	4.6	3.4	2.2	2.8	2.6	4.8	15	7.5	11	17	13
20	15	3.8	3.5	2.3	3.3	5.6	6.5	15	7.9	11	18	12
21	16	3.8	3.5	2.3	3.3	4.9	6.3	13	8.3	15	17	12
22	16	4.5	3.4	2.4	3.2	3.0	7.4	12	9.2	16	16	10
23	15	4.7	3.1	2.6	2.8	2.8	9.4	13	8.4	14	14	10
24	17	4.1	3.3	2.8	2.8	2.7	9.2	19	6.4	16	13	9.9
25	20	3.5	3.3	3.0	3.0	2.7	6.4	27	5.8	17	15	9.9
26	20	3.1	3.2	2.8	3.3	2.7	7.1	21	11	17	15	10
27	22	2.8	3.3	2.8	3.3	2.5	10	16	12	16	14	10
28	22	3.2	3.1	2.8	3.6	2.3	12	12	14	14	14	9.7
29	15	3.5	2.5	2.7	---	2.4	12	13	14	15	14	9.2
30	11	3.6	2.3	2.6	---	2.4	11	16	8.1	14	15	13
31	9.7	---	2.4	2.1	---	2.5	---	15	---	15	14	---
TOTAL	542.7	178.3	108.7	75.1	64.9	88.4	168.0	389.9	315.9	380.9	477	342.7
MEAN	17.5	5.94	3.51	2.42	2.32	2.85	5.60	12.6	10.5	12.3	15.4	11.4
MAX	31	18	6.7	3.0	3.6	5.6	12	27	16	17	18	16
MIN	9.7	2.8	2.3	2.1	1.4	2.3	2.3	4.8	5.8	9.1	13	9.2
AC-FT	1080	354	216	149	129	175	333	773	627	756	946	680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

MEAN	9.70	4.14	3.97	2.69	3.91	4.73	4.14	10.3	14.5	16.0	16.8	13.5
MAX	17.5	5.94	6.00	3.47	7.99	10.3	5.60	13.1	18.1	18.0	21.5	17.6
(WY)	1994	1994	1985	1985	1983	1983	1994	1982	1985	1986	1983	1986
MIN	6.17	2.72	2.31	1.61	2.32	2.85	3.12	7.48	10.5	12.3	12.1	10.8
(WY)	1986	1982	1982	1982	1994	1994	1984	1986	1994	1994	1993	1993

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1982 - 1994

ANNUAL TOTAL	3132.5	
ANNUAL MEAN	8.58	8.83
HIGHEST ANNUAL MEAN		9.47
LOWEST ANNUAL MEAN		8.31
HIGHEST DAILY MEAN	31	Oct 18
LOWEST DAILY MEAN	1.4	Feb 4
ANNUAL SEVEN-DAY MINIMUM	1.5	Feb 1
INSTANTANEOUS PEAK FLOW	52	May 24
INSTANTANEOUS PEAK STAGE	c 2.45	May 24
ANNUAL RUNOFF (AC-FT)	6210	6400
10 PERCENT EXCEEDS	16	17
50 PERCENT EXCEEDS	7.9	6.7
90 PERCENT EXCEEDS	2.4	2.4

a-Also occurred Feb 14, 1982.

b-From rating curve extended above 36 ft³/s, on basis of slope-area measurement of peak flow.

c-Maximum gage height, 3.18 ft, Feb 8, backwater from ice.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1993 to current year.

WATER TEMPERATURES: September 1993 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1993.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Interruptions in the daily record were due to malfunctions of the instrument. Daily water temperature data are fair. Daily specific conductance data are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,920 microsiemens, Mar. 20, 1994 (may have been higher during period of missing record Nov. 24 to Feb. 24, 1994); minimum, 1,220 microsiemens, July 16, 1994.

WATER TEMPERATURE: Maximum, 24.9°C, June 25, 1994; minimum, 0.0°C, during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 6,920 microsiemens, Mar. 20 (may have been higher during period of missing record Nov. 24 to Feb. 24); minimum recorded, 1,220 microsiemens, July 16.

WATER TEMPERATURE: Maximum, 24.9°C, June 25; minimum, 0.0°C, during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
AUG 25...	1240	13	1990	8.0	18.0	1000	240	100	100	1
SEP 03...	1010	8.5	2410	8.1	14.5	1300	300	140	130	2

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
AUG 25...	3.6	223	950	18	0.4	11	1560	2.12	55.1
SEP 03...	4.2	234	1200	26	0.5	12	1950	2.66	44.8

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
MEAN VALUES

[illegible][illegible]

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV										
02...	1335	7.9	2780	8.2	5.5	--	1600	340	190	150
DEC										
15...	1345	11	3110	8.1	0.0	--	1700	360	200	190
FEB										
24...	1530	3.4	5380	8.2	3.0	--	2700	440	390	540
MAR										
04...	1410	2.5	5280	8.1	7.0	--	2600	420	370	500
23...	0950	2.9	5250	8.2	6.0	10.9	2600	400	380	530
APR										
19...	1400	4.1	3870	8.3	16.0	--	1900	350	250	310
JUN										
03...	1230	9.9	1910	8.1	18.5	--	1200	270	130	130
10...	1100	15	1920	8.1	16.0	--	940	220	94	88
17...	0940	10	2110	8.3	15.0	--	1100	260	120	130
JUL										
07...	0740	7.9	1990	8.4	15.5	7.6	960	220	100	110
22...	1130	14	1730	8.2	19.0	--	910	210	94	85
AUG										
02...	1410	15	1760	8.2	23.0	--	910	210	93	85
30...	1445	15	1740	8.2	21.0	--	890	210	89	77
SEP										
06...	1400	9.0	2050	8.2	18.5	--	1000	230	110	120

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV										
02...	2	3.9	240	1400	39	0.5	9.7	2280	3.10	48.6
DEC										
15...	2	3.7	278	1700	37	0.5	12	2670	3.63	82.2
FEB										
24...	5	8.5	376	3100	98	0.6	11	4810	6.55	44.2
MAR										
04...	4	7.0	330	2800	85	0.5	8.1	4390	5.97	29.6
23...	5	7.9	356	3100	92	0.6	8.2	4810	6.54	37.8
APR										
19...	3	5.6	240	2200	56	0.4	7.1	3320	4.52	37.1
JUN										
03...	2	4.5	266	1000	24	0.4	11	1730	2.35	46.2
10...	1	3.9	249	870	17	0.4	11	1450	1.98	58.9
17...	2	4.0	252	960	21	0.4	9.8	1660	2.25	44.7
JUL										
07...	2	4.1	218	940	19	0.4	9.7	1550	2.11	33.0
22...	1	4.6	224	800	18	0.3	11	1360	1.85	51.3
AUG										
02...	1	4.0	226	780	18	0.3	11	1340	1.82	54.1
30...	1	4.4	221	810	18	0.3	--	1340	1.83	54.4
SEP										
06...	2	5.2	235	960	23	0.4	13	1600	2.18	38.9

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2380	2750	---	---	---	4720	5030	2850	1920	1830	1760	1850
2	2090	2810	---	---	---	4900	5050	2950	1870	1770	1720	1810
3	2230	3040	---	---	---	5060	5070	3100	1970	1910	1700	2050
4	2300	3190	---	---	---	5170	5050	3110	2150	1860	1660	2080
5	2350	3200	---	---	---	5230	5100	3370	2240	1880	1620	1930
6	2430	3370	---	---	---	5200	5160	3430	2160	1870	1580	1950
7	2550	3460	---	---	---	5200	4990	3320	2190	1880	1690	2020
8	1870	3490	---	---	---	5650	4950	2680	1950	1890	1650	1920
9	1760	3490	---	---	---	5510	5360	2520	1970	1640	1660	1930
10	2040	3460	---	---	---	5360	5840	2610	1950	1580	1660	1900
11	2090	3550	---	---	---	5330	4810	2240	1940	1510	1620	1860
12	2340	3810	---	---	---	5240	4580	2460	1890	1640	1590	2000
13	2240	3060	---	---	---	5430	4490	2300	1950	1650	1670	1880
14	2270	2940	---	---	---	5390	4840	2150	2000	1530	1850	1780
15	2270	2850	---	---	---	5320	4390	2060	1860	1320	1800	1870
16	2460	2890	---	---	---	5240	4490	2070	2020	1250	1790	1850
17	2890	2960	---	---	---	5230	4280	2130	1970	1360	1760	1880
18	2450	3040	---	---	---	5220	3460	2070	1980	1440	1740	1850
19	2610	3100	---	---	---	5180	3460	1970	2220	1800	1700	1880
20	2740	3170	---	---	---	6010	3210	1910	2170	1980	1750	1990
21	2530	3210	---	---	---	5490	3210	2070	2200	1860	1730	1970
22	2530	3180	---	---	---	5330	3100	2220	2110	1730	1730	2010
23	2670	3180	---	---	---	5320	2910	2090	2120	1750	1750	2030
24	2400	---	---	---	---	5260	2830	1990	2230	1700	1730	2040
25	2110	---	---	---	5010	5140	2830	2220	2360	1630	1730	2010
26	2120	---	---	---	4810	5000	3050	2150	2020	1610	1720	1980
27	2100	---	---	---	4660	5220	2950	2150	2020	1630	1720	1970
28	1770	---	---	---	4910	5240	2910	2140	1850	1560	1760	1930
29	2020	---	---	---	---	4840	2930	1990	1630	1440	1630	1970
30	2160	---	---	---	---	4930	2990	1860	1810	1650	1670	2040
31	2400	---	---	---	---	5090	---	1860	---	1740	1710	---
MONTH	2300	---	---	---	---	5240	4110	2390	2020	1670	1700	1940

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	8.9	7.0	3.9	1.7	.6	1.0	.0	.4	.0	6.5	1.5
2	14.0	9.0	6.8	3.3	1.2	.1	.8	.4	.4	.0	7.0	.0
3	14.1	9.1	6.4	2.7	.9	.3	1.1	.0	.7	.0	7.4	1.7
4	14.7	9.2	6.7	2.8	.4	.0	1.3	.3	1.0	.6	7.8	2.1
5	15.3	9.9	5.2	2.6	.4	.0	1.3	.0	1.4	.7	7.4	2.6
6	14.3	11.3	4.2	.9	.4	.0	1.0	.3	1.4	.0	8.6	3.1
7	12.7	11.5	4.4	.8	.4	.0	.5	.3	1.4	.5	8.4	2.9
8	13.1	10.2	4.2	.0	.4	.0	.5	.0	1.0	.0	8.2	5.6
9	13.8	11.5	4.3	.0	.4	.0	.5	.0	.5	.2	7.7	3.0
10	14.0	10.9	4.3	.0	.4	.0	.6	.0	.7	.0	7.2	2.0
11	12.3	9.8	5.0	2.9	1.0	.0	.6	.0	1.6	.4	7.1	3.1
12	13.4	10.7	3.9	3.0	1.3	.8	.8	.2	2.0	.0	6.0	3.6
13	12.2	9.7	4.5	3.8	.8	.3	1.1	.0	1.3	.0	8.8	2.2
14	12.8	9.6	5.5	3.9	.4	.0	.8	.0	2.1	.2	9.7	2.6
15	12.5	9.2	5.5	2.9	.7	.3	.7	.0	2.6	.0	10.0	3.9
16	11.6	9.7	4.9	2.1	1.0	.3	.9	.2	2.3	.0	10.2	4.4
17	10.8	9.5	4.9	1.6	.4	.0	.7	.0	2.8	.0	9.9	5.6
18	10.8	8.6	4.4	1.3	.4	.3	.9	.0	2.9	1.0	8.1	4.4
19	10.7	7.5	4.1	2.0	.4	.3	.5	.0	2.2	.6	10.7	6.0
20	10.6	7.2	2.8	.4	.4	.0	.4	.0	4.0	.0	9.8	6.4
21	10.0	6.4	2.8	.0	.4	.0	.4	.0	3.6	1.7	10.8	3.6
22	10.5	6.8	4.6	2.2	.3	.0	.4	.0	2.8	.4	10.4	4.9
23	10.6	6.8	7.4	4.5	.3	.0	.4	.0	2.4	.0	10.9	5.5
24	10.3	6.9	5.3	.6	.3	.0	1.3	.0	3.4	.0	8.8	4.7
25	10.1	7.1	.6	.0	.3	.0	1.2	.0	5.0	.0	9.2	4.6
26	9.3	7.3	.4	.0	.2	.0	1.3	.8	6.2	.9	9.0	5.0
27	8.3	5.5	.3	.0	.3	.0	1.6	1.0	5.3	1.9	7.4	3.0
28	7.7	5.5	.3	.0	.6	.3	1.9	.0	7.0	3.2	7.6	.1
29	8.2	5.9	.4	.0	.8	.1	2.0	.0	---	---	9.3	2.3
30	5.9	3.1	.8	.0	.5	.0	1.8	.4	---	---	9.3	2.0
31	6.0	2.0	---	---	.9	.2	.4	.0	---	---	10.4	2.3
MONTH	15.3	2.0	7.4	.0	1.7	.0	2.0	.0	7.0	.0	10.9	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	3.5	14.5	8.7	20.2	13.3	23.3	17.9	24.6	19.4	21.0	16.9
2	11.0	5.4	16.6	8.9	21.3	14.4	22.3	18.4	23.8	18.8	21.3	16.7
3	12.6	3.9	15.6	9.4	22.2	15.1	22.5	17.6	22.9	17.8	20.2	17.6
4	10.5	5.6	19.2	8.6	22.2	14.2	22.1	16.6	24.3	18.6	21.3	16.0
5	9.0	3.6	19.6	10.8	21.7	13.4	22.2	15.8	24.2	18.7	21.0	15.4
6	10.3	3.0	19.8	10.6	21.0	13.4	22.0	16.5	24.1	18.7	20.8	14.7
7	9.2	6.8	17.8	9.7	21.1	13.3	21.5	15.1	23.4	18.0	21.0	15.8
8	8.8	3.8	17.5	9.3	20.1	13.9	21.3	14.5	22.0	19.3	20.2	14.4
9	8.1	6.1	14.3	11.7	20.3	14.1	21.5	14.8	21.5	18.9	20.3	15.0
10	6.9	4.1	13.7	9.3	21.0	14.8	21.6	15.1	22.9	18.4	19.9	14.1
11	9.5	4.1	15.5	10.7	21.5	15.5	21.2	16.1	22.2	19.1	21.3	16.1
12	13.0	3.5	18.4	11.9	21.9	16.0	21.7	15.0	23.0	18.5	20.1	16.5
13	13.8	4.0	15.8	12.1	22.1	15.6	20.5	15.6	23.8	19.2	18.1	15.9
14	13.4	5.9	18.2	11.5	22.0	15.6	20.8	15.8	22.3	18.9	18.3	14.6
15	15.0	6.6	16.9	12.2	20.8	15.0	22.5	17.2	22.8	18.2	17.8	12.5
16	16.2	6.1	18.5	12.1	21.9	14.3	21.7	15.7	22.8	18.2	17.9	11.9
17	15.9	7.7	18.2	11.9	21.1	14.6	21.7	16.0	22.9	18.3	18.2	13.0
18	18.2	9.1	18.4	11.6	21.8	16.8	22.0	18.2	22.4	18.8	17.3	14.4
19	16.8	11.6	18.2	11.7	23.4	17.7	23.1	18.1	22.3	19.4	19.0	14.2
20	18.0	11.6	17.4	10.9	22.6	17.7	22.1	18.0	21.4	18.3	18.3	14.9
21	18.2	10.6	18.1	10.2	24.1	17.4	22.7	18.1	21.8	18.1	18.8	13.4
22	17.8	12.8	19.4	10.8	23.3	18.7	22.5	18.1	21.5	17.9	17.6	12.3
23	17.2	12.4	19.7	14.4	24.3	16.6	23.6	17.9	21.9	17.2	17.5	11.1
24	14.0	11.2	19.3	14.4	24.7	16.3	23.9	18.9	21.2	18.2	17.7	10.8
25	12.1	8.3	15.5	12.7	24.9	15.7	23.7	19.5	21.3	17.6	17.8	10.7
26	12.1	7.3	14.6	10.8	24.2	17.2	22.7	18.5	22.2	17.3	17.2	10.7
27	10.1	7.4	18.8	11.9	23.0	17.7	23.3	18.3	21.6	18.4	16.8	10.1
28	11.5	6.6	20.4	14.1	23.3	17.8	23.7	18.6	21.8	18.2	17.2	10.2
29	10.5	7.1	21.0	13.6	22.5	17.6	23.7	19.1	21.3	17.0	15.4	10.6
30	14.1	5.9	21.1	14.8	24.6	17.0	23.6	19.2	21.6	17.6	15.7	10.6
31	---	---	20.2	15.7	---	---	23.8	18.7	21.1	17.2	---	---
MONTH	18.2	3.0	21.1	8.6	24.9	13.3	23.9	14.5	24.6	17.0	21.3	10.1

LOCATION.--Lat 37°19'36", long 108°42'00", in NE1/4NE1/4 sec.3, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on left bank adjacent to abandoned gravel pit 1.5 mi downstream from Mud Creek, 1.9 mi upstream from Trail Canyon and 5.5 mi south of Cortez.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,690 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Water year 1993, Aug. 1 to Sept. 22. Water year 1994, Nov. 27-28, 30, Dec. 2-11, 13-15, Dec. 18 to Jan. 26, Jan. 30 to Feb. 3, Feb. 5, and Feb. 14. Records good except for estimated daily discharges, which are poor. A few small diversions upstream from station. Most of flow comes from diversions through the Dolores Project and Montezuma Valley Irrigation Company (water imported from Dolores River Basin).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 9, 1927 at location 1.5 mi upstream was determined to be 5,560 ft³/s, gage height, 5.72 ft, site and datum then in use. February 20, 1993, 890 ft³/s, gage height, 7.57 ft, present datum, on basis of slope-area measurement at site 1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

[illegible]

09371520 MCELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	74	43	37	20	137	29	47	70	57	89	80
2	119	71	41	37	23	103	29	42	73	68	84	93
3	118	65	39	36	25	89	30	37	58	68	73	151
4	117	62	35	36	30	73	29	34	52	62	67	139
5	115	59	28	36	30	62	27	33	53	59	71	113
6	123	56	30	32	31	56	27	33	56	54	90	100
7	193	56	30	30	36	51	32	29	51	52	95	100
8	185	54	31	31	82	67	32	33	51	51	95	94
9	169	55	32	33	137	70	47	38	54	62	106	89
10	160	56	32	32	46	47	80	44	57	63	115	87
11	152	64	33	31	44	44	82	43	58	67	117	99
12	175	124	37	31	34	43	53	47	64	72	121	119
13	155	108	45	30	25	40	40	47	66	75	117	137
14	148	101	47	30	29	38	38	52	58	75	147	200
15	142	88	49	31	32	37	31	49	55	75	122	144
16	104	76	32	32	36	34	25	46	57	81	93	120
17	142	57	39	29	53	33	21	35	54	81	85	113
18	183	53	37	28	251	33	18	54	53	93	100	111
19	107	51	35	28	153	33	18	65	55	111	101	110
20	91	46	36	28	65	69	17	67	57	69	105	107
21	98	45	37	29	49	87	16	64	58	84	111	104
22	95	47	37	29	43	54	18	63	66	91	94	98
23	80	49	38	31	36	43	23	62	61	96	85	93
24	88	47	36	33	32	38	34	70	57	115	79	93
25	95	36	39	36	39	37	33	110	56	126	81	92
26	106	44	39	39	97	36	34	131	60	120	86	88
27	110	44	38	37	141	33	43	114	60	112	83	84
28	113	46	39	34	131	30	50	91	73	111	86	82
29	108	47	36	31	---	31	51	83	74	112	87	88
30	98	46	32	27	---	29	57	90	53	105	90	117
31	77	---	36	23	---	28	---	81	---	88	84	---
TOTAL	3878	1827	1138	987	1750	1605	1064	1834	1770	2555	2959	3245
MEAN	125	60.9	36.7	31.8	62.5	51.8	35.5	59.2	59.0	82.4	95.5	108
MAX	193	124	49	39	251	137	82	131	74	126	147	200
MIN	77	36	28	23	20	28	16	29	51	51	67	80
AC-FT	7690	3620	2260	1960	3470	3180	2110	3640	3510	5070	5870	6440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	125	60.9	36.7	31.8	62.5	51.8	35.5	59.2	59.0	82.4	103	107
MAX	125	60.9	36.7	31.8	62.5	51.8	35.5	59.2	59.0	82.4	111	108
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1993	1994
MIN	125	60.9	36.7	31.8	62.5	51.8	35.5	59.2	59.0	82.4	95.5	105
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1993

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	24612	
ANNUAL MEAN	67.4	
HIGHEST DAILY MEAN	251	Feb 18
LOWEST DAILY MEAN	16	Apr 21
ANNUAL SEVEN-DAY MINIMUM	19	Apr 17
INSTANTANEOUS PEAK FLOW	324	Feb 19
INSTANTANEOUS PEAK STAGE	4.45	Feb 19
ANNUAL RUNOFF (AC-FT)	48820	
10 PERCENT EXCEEDS	117	
50 PERCENT EXCEEDS	57	
90 PERCENT EXCEEDS	30	

09371520 MCELMO CREEK ABOVE TRAIL CANYON NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1990 to current year.

WATER TEMPERATURES: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1990.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Daily water temperature data are good. Daily specific conductance data are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,750 microsiemens, Feb. 13, 1994; minimum, 1,030 microsiemens, May 25, 1992.

WATER TEMPERATURE: Maximum, 26.0°C, July 1, 1994; minimum, 0.0°C during winter months each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,750 microsiemens, Feb. 13; minimum, 1,150 microsiemens, Aug. 14.

WATER TEMPERATURE: Maximum, 26.0°C, July 1; minimum, 0.0°C on many days Nov. to Feb.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV										
02...	1225	70	2130	8.2	5.5	--	1200	270	120	89
DEC										
15...	1225	49	3200	8.1	0.0	--	1800	380	200	190
FEB										
24...	1250	19	3330	8.2	2.5	--	1700	350	210	220
MAR										
04...	1325	69	2520	8.0	7.0	--	1300	270	150	150
23...	0830	38	3210	8.0	6.0	10.2	1800	340	220	220
APR										
19...	1300	20	3200	8.4	18.0	--	1600	330	200	220
JUN										
03...	1045	59	1570	8.2	17.5	--	780	180	80	72
10...	1000	56	1640	8.6	15.5	--	790	180	83	78
17...	0910	53	1580	8.4	15.0	--	780	180	80	72
JUL										
07...	0905	45	1420	8.6	15.5	8.3	710	170	70	57
20...	1050	69	1510	8.3	19.5	--	790	190	77	62
AUG										
02...	1250	84	1310	8.3	22.0	--	670	160	65	51
30...	1425	98	1380	8.3	21.0	--	730	180	68	51
SEP										
06...	1340	103	1460	8.3	19.0	--	740	180	71	52

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV										
02...	1	3.7	220	1000	20	0.5	10	1650	2.24	311
DEC										
15...	2	4.2	297	1700	37	0.5	13	2700	3.68	358
FEB										
24...	2	8.1	313	1800	45	0.4	12	2830	3.85	145
MAR										
04...	2	6.5	227	1300	28	0.4	8.8	2050	2.79	382
23...	2	6.3	265	1800	45	0.4	9.3	2810	3.82	289
APR										
19...	2	5.6	210	1700	43	0.4	5.3	2630	3.58	141
JUN										
03...	1	4.0	219	690	16	0.4	11	1180	1.61	189
10...	1	4.2	177	710	15	0.3	11	1190	1.62	180
17...	1	4.1	231	670	15	0.4	11	1170	1.59	168
JUL										
07...	0.9	3.6	222	600	13	0.3	10	1060	1.44	129
20...	1	4.8	198	630	15	0.3	11	1110	1.51	207
AUG										
02...	0.9	4.1	219	530	12	0.3	12	966	1.31	219
30...	0.8	4.2	222	560	13	0.3	14	1020	1.39	271
SEP										
06...	0.8	4.7	227	600	14	0.3	13	1070	1.46	298

09371520 MCELMO CREEK ABOVE TRAIL CANYON NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	1980	2920	3150	3430	1830	3240	2550	1540	1470	1280	1420
2	1460	2020	2930	3120	3490	1840	3230	2470	1540	1420	1340	1390
3	1440	2070	2970	3090	3400	2000	3230	2520	1560	1420	1360	1460
4	1430	2120	2860	3090	3280	2310	3240	2650	1600	1430	1400	1490
5	1430	2160	2890	3070	3140	2630	3230	2600	1630	1350	1400	1450
6	1460	2200	3070	3060	3110	2800	3230	2480	1630	1400	1370	1440
7	1620	2250	3080	3250	3140	2840	3230	2560	1610	1420	1390	1460
8	1620	2280	3060	3290	2980	2830	3060	2430	1630	1430	1300	1510
9	1440	2270	2960	3290	2660	2930	3060	2270	1630	1450	1230	1520
10	1370	2270	2970	3250	3010	2950	3220	2210	1600	1450	1260	1530
11	1350	2280	2990	3260	3050	3040	3330	2140	1570	1480	1310	1440
12	1490	2560	2980	3250	3050	3040	3320	2080	1540	1460	1250	1410
13	1570	2530	3000	3190	3010	3100	3270	2040	1470	1460	1210	1390
14	1510	2550	3110	3170	3110	3100	3170	1910	1470	1450	1250	1430
15	1520	2560	3080	3170	3140	3090	3110	1880	1530	1460	1400	1450
16	1770	2500	3000	3170	2740	3090	3210	1880	1540	1430	1430	1440
17	1960	2650	3050	3210	2960	3160	3260	2020	1570	1470	1430	1460
18	2030	2850	3150	3170	1730	3190	3160	1930	1550	1420	1430	1470
19	2030	2900	3110	3160	1530	3190	3120	1600	1590	1500	1320	1490
20	2040	2930	3140	3150	2030	3140	3190	1510	1590	1480	1270	1490
21	1890	2950	3250	3140	2460	3290	3220	1540	1570	1450	1220	1560
22	1820	2980	3360	3110	2660	3230	3160	1580	1510	1400	1350	1570
23	1950	2960	3280	3090	3060	3290	2920	1570	1490	1380	1420	1570
24	1930	2960	3280	3010	3250	3280	2520	1540	1510	1320	1410	1560
25	1770	3020	3260	3000	3250	3250	2380	1430	1470	1280	1410	1540
26	1660	3140	3240	3010	2340	3250	2570	1680	1500	1310	1390	1550
27	1610	3140	3180	3030	1870	3260	2560	1570	1500	1270	1370	1580
28	1570	3100	3050	3110	1910	3270	2560	1540	1520	1220	1400	1640
29	1590	3020	3070	3140	---	3240	2570	1520	1480	1210	1410	1640
30	1610	2970	3150	3190	---	3230	2660	1420	1440	1190	1410	1560
31	1800	---	3160	3270	---	3230	---	1430	---	1280	1420	---
MEAN	1650	2610	3080	3150	2810	2970	3040	1950	1550	1390	1350	1500

09371520 MCELMO CREEK ABOVE TRAIL CANYON NEAR CORTEZ, CO--Continued
 TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.4	10.4	7.2	4.3	1.8	.2	.3	.1	.4	.1	5.6	1.7
2	14.4	10.3	6.8	4.2	.9	.2	.3	.1	.4	.1	6.8	1.8
3	14.7	10.6	6.4	3.2	.6	.1	.3	.1	.3	.1	7.5	2.5
4	14.8	10.7	6.9	3.5	.3	.1	.3	.1	.3	.2	8.4	3.3
5	15.3	11.2	5.6	3.2	.3	.1	.3	.1	.3	.1	8.3	3.8
6	14.6	12.5	4.5	1.5	.3	.2	.3	.2	.3	.2	9.5	4.7
7	13.6	12.0	4.8	1.5	.3	.1	.3	.1	.3	.2	9.6	4.1
8	12.9	10.4	4.4	1.2	.3	.1	.3	.1	.3	.2	9.4	6.4
9	13.6	11.5	4.4	1.2	.3	.1	.3	.1	.6	.0	8.6	4.2
10	14.3	11.3	4.4	1.3	.3	.1	.3	.1	1.3	.1	8.5	2.9
11	12.7	10.1	5.2	3.4	.3	.1	.3	.1	1.5	.2	8.8	3.8
12	13.7	11.2	4.3	3.4	1.1	.2	.3	.1	2.2	.1	8.8	4.5
13	12.5	10.0	4.5	3.9	.3	.1	.3	.1	1.7	.1	10.7	3.5
14	13.1	10.2	5.3	3.9	.3	.1	.3	.1	2.1	.1	11.7	4.5
15	12.9	10.0	5.2	3.0	.3	.1	.3	.1	2.3	.1	11.8	5.0
16	11.8	10.3	4.8	2.3	.3	.2	.3	.1	2.1	.2	12.3	5.7
17	11.2	9.9	5.1	1.7	.4	.1	.3	.1	4.6	.4	12.3	6.8
18	10.9	8.8	4.6	1.5	.3	.1	.3	.1	1.4	.4	9.0	5.5
19	10.8	7.7	4.4	2.0	.3	.2	.3	.1	1.4	.3	12.8	7.3
20	10.8	7.7	3.0	.3	.3	.1	.3	.1	3.5	.2	10.6	7.9
21	10.2	6.9	2.6	.3	.4	.1	.3	.1	3.7	1.7	11.0	5.5
22	10.6	7.5	4.6	2.2	.3	.1	.3	.1	3.6	.4	11.9	6.2
23	10.9	7.7	7.4	4.6	.3	.2	.3	.1	4.4	.2	12.2	6.1
24	10.6	7.3	5.0	.5	.3	.1	.3	.2	4.6	.2	10.3	6.4
25	10.2	7.4	.5	.2	.3	.1	.3	.1	6.7	.3	11.8	6.4
26	9.3	7.6	.4	.2	.3	.1	.4	.2	5.7	1.3	12.0	6.0
27	8.6	6.0	.4	.1	.3	.2	.4	.2	4.2	1.2	9.3	3.9
28	7.8	5.8	.3	.1	.3	.1	.5	.2	6.5	2.8	10.1	1.5
29	8.3	5.9	.3	.1	.3	.1	1.3	.2	---	---	11.8	3.2
30	6.0	3.5	.6	.2	.3	.1	1.5	.2	---	---	11.7	3.2
31	5.8	2.6	---	---	.3	.1	.4	.1	---	---	13.2	3.8
MONTH	15.3	2.6	7.4	.1	1.8	.1	1.5	.1	6.7	.0	13.2	1.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.6	5.3	15.8	9.2	21.4	12.8	26.0	18.5	25.1	19.5	21.5	16.9
2	14.5	7.3	17.2	9.9	22.0	14.8	24.1	18.7	23.8	18.6	22.1	16.8
3	15.1	6.8	17.0	10.6	23.2	15.3	23.3	17.6	23.8	17.8	19.8	17.6
4	14.6	7.8	20.0	10.0	22.8	15.1	23.6	16.4	24.9	18.0	21.2	16.9
5	12.2	7.1	20.3	12.1	22.3	14.3	23.9	15.9	24.9	18.9	21.0	16.3
6	12.7	4.3	21.1	12.0	21.5	14.3	23.5	16.2	24.7	18.6	20.7	15.5
7	11.3	7.7	19.6	11.3	21.8	13.9	22.8	15.0	23.8	18.0	21.3	16.4
8	10.2	5.1	19.3	9.6	21.9	13.7	23.6	14.7	22.7	19.5	20.5	15.3
9	8.5	6.4	15.0	12.2	22.2	13.7	24.1	15.1	22.2	18.8	20.5	15.6
10	6.7	4.3	15.1	9.8	22.8	14.4	23.9	16.1	23.6	18.4	20.0	14.8
11	10.7	5.4	17.5	10.7	23.6	15.2	24.5	17.0	22.8	18.9	21.1	16.4
12	14.0	5.5	19.4	12.3	23.0	15.8	23.4	16.1	24.2	18.5	19.8	16.8
13	15.7	6.7	17.2	12.5	22.8	16.0	22.2	16.2	24.9	19.1	18.2	16.1
14	15.9	8.2	19.9	11.4	22.7	15.9	23.2	16.6	22.2	15.3	17.4	14.6
15	17.4	8.4	18.5	12.2	22.6	14.7	24.6	17.7	23.9	18.0	16.8	12.9
16	18.6	8.3	20.3	11.9	22.5	14.6	23.8	16.2	23.9	18.0	17.3	12.4
17	17.7	9.6	20.4	12.2	22.8	14.7	22.9	16.0	24.7	18.2	17.3	13.4
18	19.6	10.5	19.8	12.0	22.8	16.9	23.7	17.8	23.7	19.0	16.8	14.7
19	18.7	12.8	19.1	12.3	23.3	18.4	24.2	17.8	23.0	19.4	18.6	14.6
20	19.1	12.2	18.5	11.3	24.3	18.3	23.8	18.2	21.6	18.2	17.9	15.2
21	20.8	11.5	19.0	10.7	24.5	18.1	24.7	17.9	22.7	18.0	18.1	14.0
22	19.2	13.5	20.0	11.8	23.5	18.9	24.1	18.1	22.9	17.7	16.9	13.0
23	18.5	12.5	19.3	14.9	24.7	16.9	24.6	18.2	22.7	17.0	16.6	11.5
24	15.0	11.4	19.9	15.0	24.6	17.1	25.2	18.8	21.9	18.0	16.5	11.4
25	13.2	8.8	16.8	12.9	24.7	17.0	24.7	19.8	22.9	17.3	16.6	11.4
26	12.6	7.7	15.0	11.2	24.5	16.9	23.9	18.8	23.0	17.3	16.3	11.4
27	11.0	7.4	18.6	12.7	24.6	17.5	24.6	18.5	22.6	17.9	16.2	10.7
28	11.5	6.8	19.9	14.8	25.2	17.3	24.7	18.6	22.6	18.2	16.4	10.9
29	11.1	7.4	21.5	14.6	23.9	17.7	24.6	18.8	22.0	16.9	14.7	11.3
30	12.9	6.1	21.4	14.9	25.3	17.7	24.5	19.5	22.4	17.5	15.0	13.3
31	---	---	20.7	15.8	---	---	24.6	18.9	21.5	17.2	---	---
MONTH	20.8	4.3	21.5	9.2	25.3	12.8	26.0	14.7	25.1	15.3	22.1	10.7

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¹/₄ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, March 1951 to current year. Water-quality data available, November 1977 to September 1981, and August 1987 to current year.

REVISED RECORDS.--WSP 1925: 1951-52 (M), 1957 (M). WRD CO-1972: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,890 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 4-12, 15-20, 30, Jan. 6, 13-14, 18-24, and Feb. 2-4. Records good except for those above 200 ft³/s, which are fair, and estimated daily discharges, which are poor. Diversions for irrigation of about 1,780 acres upstream from station. One diversion upstream from station for irrigation of about 60 acres downstream from station. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	89	46	34	18	162	27	47	59	23	68	67
2	86	84	41	35	20	115	27	43	50	22	67	75
3	90	77	40	33	22	98	27	35	50	27	60	124
4	94	72	36	34	25	72	27	28	41	29	53	158
5	92	71	32	35	28	60	26	21	41	35	52	124
6	87	67	34	30	27	55	23	18	45	31	51	105
7	196	67	35	28	29	52	24	16	45	27	55	92
8	223	66	35	28	36	50	26	13	38	23	53	93
9	188	65	37	31	58	72	28	14	37	18	62	90
10	172	66	37	31	42	56	70	25	39	31	73	84
11	163	79	37	29	44	44	72	29	41	33	70	91
12	177	136	40	29	35	43	57	28	41	27	73	122
13	189	125	44	28	28	40	37	25	52	24	70	134
14	166	109	36	28	27	38	32	27	42	24	90	205
15	157	96	30	29	30	36	28	30	33	24	95	168
16	138	84	28	30	33	36	25	32	33	28	87	124
17	126	67	28	28	37	34	16	22	30	26	75	118
18	224	59	28	26	201	34	14	21	31	26	74	118
19	155	55	30	26	238	33	12	36	38	44	83	117
20	118	52	30	26	73	40	11	34	34	51	94	110
21	112	49	30	27	57	81	9.0	33	38	54	108	99
22	117	51	33	27	47	65	8.0	33	42	64	100	84
23	104	52	38	27	39	48	10	31	43	59	81	81
24	97	53	33	30	34	40	14	38	36	70	69	82
25	104	44	37	31	37	37	17	81	34	86	69	82
26	114	35	37	37	69	36	18	120	35	85	70	73
27	119	43	35	35	153	34	32	99	29	72	73	71
28	122	44	37	34	117	32	43	83	28	67	70	65
29	122	47	37	33	---	29	48	71	31	69	70	73
30	116	44	30	31	---	29	50	70	29	75	72	116
31	106	---	34	22	---	28	---	68	---	64	72	---
TOTAL	4158	2048	1085	932	1604	1629	858.0	1271	1165	1338	2259	3145
MEAN	134	68.3	35.0	30.1	57.3	52.5	28.6	41.0	38.8	43.2	72.9	105
MAX	224	136	46	37	238	162	72	120	59	86	108	205
MIN	84	35	28	22	18	28	8.0	13	28	18	51	65
AC-FT	8250	4060	2150	1850	3180	3230	1700	2520	2310	2650	4480	6240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	56.0	49.5	39.2	33.1	50.0	59.6	42.3	47.9	54.2	50.7	61.6	56.0
MAX	161	122	95.4	68.4	192	197	148	108	105	132	160	226	
(WY)	1973	1988	1966	1969	1993	1973	1973	1992	1969	1957	1967	1986	
MIN	1.84	14.0	13.5	16.1	17.9	15.7	2.23	6.79	2.60	1.19	2.69	.43	
(WY)	1957	1957	1978	1978	1964	1951	1977	1977	1977	1951	1972	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1951 - 1994

ANNUAL TOTAL	32333					21492.0							
ANNUAL MEAN	88.6					58.9				50.5			
HIGHEST ANNUAL MEAN										94.6		1973	
LOWEST ANNUAL MEAN										16.2		1977	
HIGHEST DAILY MEAN	1160	Feb 20				238	Feb 19			1200	Aug 7	1967	
LOWEST DAILY MEAN	a 28	Dec 16				8.0	Apr 22			b .08	Sep 9	1977	
ANNUAL SEVEN-DAY MINIMUM	29	Dec 15				11	Apr 18			c .14	Sep 21	1956	
INSTANTANEOUS PEAK FLOW						370	Sep 12			c 3040	Aug 7	1967	
INSTANTANEOUS PEAK STAGE						4.60	Sep 12			d, e .758	Aug 7	1967	
INSTANTANEOUS LOW FLOW										.08	Sep 9	1977	
ANNUAL RUNOFF (AC-FT)	64130					42630				36570			
10 PERCENT EXCEEDS	157					117				95			
50 PERCENT EXCEEDS	71					43				37			
90 PERCENT EXCEEDS	37					26				12			

a-Also occurred Dec 17-18.

b-Also occurred Sep 10, 1977.

c-From rating curve extended above 2100 ft³/s.

d-From floodmark in gage well.

e-Maximum gage height, 8.13 ft, Sep 6, 1970.

SAN JUAN RIVER BASIN

09372000 MCELMO CREEK NEAR COLORADO-UTAH STATE LINE CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1981, August 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
NOV										
01...	1420	87	2120	8.2	9.5	1100	250	120	98	1
DEC										
13...	1240	47	3020	8.1	3.0	1600	330	190	190	2
FEB										
23...	1445	42	3080	8.4	6.0	1600	310	190	200	2
MAR										
04...	1215	73	2130	8.1	9.0	1000	220	120	120	2
APR										
21...	1220	7.6	3350	--	18.5	1700	330	210	240	3
JUN										
03...	0840	52	1880	8.2	17.0	910	200	100	98	1
10...	0830	42	2080	8.7	15.5	1200	240	140	120	2
17...	0805	40	2020	8.3	14.0	1100	250	120	110	1
JUL										
20...	0850	56	1920	8.2	19.0	980	210	110	100	1
AUG										
02...	1150	73	1660	8.3	21.0	850	190	90	84	1
30...	1235	76	1730	8.2	22.5	910	220	88	75	1
SEP										
06...	1235	104	1760	8.2	19.5	870	200	91	81	1

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV									
01...	3.8	236	1000	23	0.5	11	1650	2.24	387
DEC									
13...	4.3	278	1600	38	0.4	13	2530	3.44	321
FEB									
23...	8.6	299	1600	42	0.4	12	2540	3.46	288
MAR									
04...	6.1	170	1000	23	0.4	9.4	1600	2.18	316
APR									
21...	7.0	262	1800	47	0.4	7.4	2800	3.81	57.4
JUN									
03...	4.4	266	840	19	0.4	12	1430	1.95	203
10...	5.0	265	950	22	0.4	12	1650	2.24	187
17...	5.2	279	920	20	0.4	12	1600	2.18	173
JUL									
20...	6.3	259	850	22	0.4	12	1470	1.99	222
AUG									
02...	4.6	242	710	17	0.3	13	1250	1.71	247
30...	4.3	239	760	19	0.4	14	1320	1.80	272
SEP									
06...	5.6	249	760	21	0.4	14	1320	1.80	371

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records provided by Colorado Division of Water Resources. The locations and diversions of 8 selected diversions are given in the following list.

TO PLATTE RIVER BASIN

09010000 Grand River Ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¹/₄ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.

REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09010000	0	0	0	0	0	0	0	3,860	10,220	2,680	898	210

Water year 1994, 17,870

09013000 Alva B. Adams Tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¹/₄ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09013000	14,610	13,550	27,770	25,840	19,090	12,940	2,410	11,670	14,970	32,070	30,210	28,090

Water year 1994, 233,200

09021500 Berthoud Pass Ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09021500	19	0	0	0	0	0	0	0	540	211	85	19

Water year 1994, 874

09050590 Harold D. Roberts Tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¹/₄SW¹/₄ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09050590	2,350	3,250	4,760	4,760	4,650	5,680	5,570	2,380	11,080	7,360	11,130	10,860

Water year 1994, 73,820

TO ARKANSAS RIVER BASIN

REVISIONS (WATER YEARS) .--WDR CO-86-1, WDR CO-86-2: 1984, 1985.

[illegible][illegible]

Diversions	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09077160	137	149	143	141	145	150	520	19,930	31,910	1,710	84	24
Water year 1994, 55,040												

Diversions	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09077500	3.3	0	0	0	0	2.5	58	1,320	2,320	336	39	26
Water year 1994, 4,100												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN		TO ARKANSAS RIVER BASIN		TO RIO GRANDE BASIN	
09012000	Eureka Ditch	09061500	Columbine Ditch	09118200	Tarbell Ditch
09022500	Moffat Water Tunnel	09062000	Ewing Ditch	09121000	Tabor Ditch
09046000	Boreas Pass Ditch	09062500	Wurtz Ditch	09341000	Treasure Pass Ditch
09047300	Vidler Tunnel	09073000	Twin Lakes Tunnel	09247000	Don LaFont Ditches
		09115000	Larkspur Ditch		1&2
				09348000	Williams Creek
					Squaw Pass Ditch
				09351000	Pine River
					Weminuche Pass
					Ditch
				09351500	Weminuche Pass
					Ditch

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and discharge at crest-stage stations; and the third is a table containing discharge measurements made at miscellaneous sites for both low flow and high flow are given in a fourth table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1994

Station no	Station name	Location	Drainage area (mi ²)	Period of record	Date	Discharge (ft ³ /s)
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	1965-94	a	19

*Also a crest-stage partial-record station.

a-Not determined.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height ft	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

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 water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations

			Water year 1994 maximum			Period of record maximum		
Station name and number	Location and drainage area	Period of record	Date	Gage height ft	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
PINEY RIVER BASIN								
*Moniger Creek near Minturn, CO (09058900)	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn. Drain- age area is 0.76 mi ² .	1965-94	a	1.90	19	5/21/89	2.05	29
COLORADO RIVER BASIN								
Sweetwater Creek at mouth near Dot- sero, CO (09061450)	Lat 39°43'20", long, 107°02'22", in NW ¹ /4NE ¹ /4 sec.9, T.4 S., R.86 W., Eagle County, 5.3 mi north of Dotsero. Drainage area is 105 mi ² .	1979-94	a	9.61	437	7/12/76	18.60	7,390
Mamm Creek near Silt, CO (09091100)	Lat 39°43'54", long 107°42'48", in NW ¹ /4NW ¹ /4 sec.18, T.6 S. R.92 W., Garfield County, 3.3 mi southeast of Silt. Drainage area is 63.3 mi ²	1979-94	a	11.59	245	6/06/84	11.92	430
GUNNISON RIVER BASIN								
Dry Creek near Olathe, CO (09149450)	Lat 39°33'19", long 108°02'43", SW ¹ /4NE ¹ /4 sec.36, T.50 N., R.11 W., Montrose County, 4.9 mi southwest of Olathe. Drainage area is 102 mi ² .	1979-94	a	1.10	121	7/27/82	5.50	1,040
SAN JUAN RIVER BASIN								
Junction Creek near Durango CO (09361400)	Lat 37°20'04", long 107°54'35", sec.36, T.36N., R.10 W., La Plata County, on left bank 4.5 mi upstream from mouth and 4.5 mi northwest of Durango. Drainage area is 26.3 mi ² .	1959-65, 1973, 1979-94	5-31-94	2.91	176	^a 1980	3.64	600

* Also a low-flow partial-record station.
a-Not determined.

LOCATION.--Lat 37°55'46", long 107°41'20", Ouray County, Hydrologic Unit 14020006, 0.8 mi southwest of Ironton, and 1.2 mi north of Red Mountain No. 2 (elevation 12,219 ft).

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 10,020 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good.

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.1	-1.0	4.2	-6.0	.7	-11.3	4.9	-15.7	-9.8	-26.3	2.8	-13.3
2	15.8	-1.4	.7	-13.3	2.5	-12.5	-2.4	-14.1	1.1	-19.7	9.5	-10.1
3	16.9	-.4	6.4	-8.6	-3.5	-15.7	-1.7	-12.1	-.7	-13.3	8.8	-7.1
4	17.3	-.7	2.1	-4.9	4.6	-14.9	5.3	-11.7	-4.9	-12.9	8.5	-7.9
5	16.5	.4	-4.6	-16.6	1.4	-14.1	2.1	-10.9	-3.5	-17.9	7.8	-7.9
6	14.3	1.4	3.5	-17.9	-.7	-9.4	-8.6	-14.5	.7	-18.3	5.3	-6.0
7	4.9	-.7	2.1	-9.8	3.5	-14.5	-.7	-22.6	-3.5	-8.6	4.9	-6.0
8	8.1	-2.4	3.5	-10.5	6.7	-10.1	3.9	-16.6	-2.4	-8.3	3.2	-8.6
9	7.8	-1.0	5.7	-10.9	1.1	-10.1	-3.8	-17.0	-.7	-14.1	.0	-16.2
10	7.8	-3.1	7.8	-7.1	8.1	-10.9	-1.4	-19.7	2.5	-14.1	5.7	-14.5
11	10.2	-3.8	2.5	-6.4	7.8	-5.7	.4	-16.6	-3.8	-13.3	5.7	-8.6
12	6.0	-1.4	-.3	-9.4	-.3	-9.8	.4	-18.8	-7.1	-21.1	4.6	-7.9
13	10.2	-4.2	-2.4	-9.0	-1.4	-18.3	.7	-16.2	3.2	-20.2	6.7	-10.9
14	8.8	-1.7	-3.1	-13.3	4.6	-13.3	6.0	-13.3	4.2	-13.7	9.5	-7.5
15	7.8	-1.7	1.4	-14.9	-4.9	-15.3	6.4	-11.7	7.4	-13.3	12.8	-7.5
16	6.0	-2.1	3.2	-15.7	-7.5	-17.4	-3.1	-17.9	8.1	-10.1	12.1	-4.9
17	4.2	-3.5	5.7	-9.4	-2.4	-20.7	2.8	-17.0	.7	-3.5	8.1	-4.2
18	3.5	-6.4	3.5	-10.9	1.4	-15.3	5.7	-12.9	-2.4	-13.3	8.1	-4.9
19	4.9	-8.6	.7	-17.0	-5.7	-13.7	6.0	-11.7	-6.4	-14.1	6.4	-2.1
20	5.7	-6.8	8.1	-13.7	-1.0	-22.6	10.2	-12.5	-2.4	-18.8	3.9	-10.9
21	11.0	-6.0	9.2	-12.9	-.7	-18.8	10.2	-10.1	-4.6	-11.7	8.5	-12.5
22	11.7	-2.4	2.1	-4.9	-4.9	-24.1	6.4	-11.7	-7.1	-16.2	4.6	-3.5
23	10.6	-3.1	2.8	-4.2	-11.7	-23.1	6.7	-9.0	-5.7	-21.1	.7	-6.8
24	12.4	-3.8	-4.2	-21.6	-5.3	-23.1	2.5	-10.5	2.8	-15.7	-.3	-5.7
25	9.9	-4.2	-16.2	-25.7	7.1	-14.1	.7	-11.7	6.0	-9.0	2.5	-7.9
26	-1.0	-9.0	-7.5	-25.2	7.1	-9.0	-6.8	-10.9	6.7	-8.6	1.8	-10.1
27	5.7	-10.9	.4	-18.8	-1.0	-8.3	-3.5	-12.1	2.1	-6.4	-7.9	-20.2
28	7.1	-7.1	7.4	-12.9	3.2	-16.6	-3.1	-17.4	-2.8	-12.9	2.8	-20.2
29	-4.2	-15.7	5.7	-9.0	1.4	-17.0	-4.9	-18.8	---	---	3.9	-14.5
30	1.4	-18.3	2.8	-8.6	4.6	-14.9	-10.1	-25.2	---	---	5.3	-15.7
31	9.5	-9.4	---	---	-1.4	-16.2	-12.9	-28.0	---	---	9.5	-10.1
MONTH	17.3	-18.3	9.2	-25.7	8.1	-24.1	10.2	-28.0	8.1	-26.3	12.8	-20.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.7	-6.0	4.6	-4.9	17.7	2.1	22.9	8.8	17.3	6.4	17.3	4.6
2	4.9	-6.0	7.1	-3.8	18.5	.7	18.5	8.1	18.9	3.9	19.3	5.3
3	8.1	-8.6	6.4	-3.1	19.7	3.5	20.1	4.9	20.9	5.7	11.3	3.5
4	6.0	-7.1	14.3	-4.2								

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

375852107455200 GOVERNOR BASIN METEOROLOGICAL STATION NEAR TELLURIDE, CO

LOCATION.--Lat 37°58'52", long 107°45'52", Ouray County, Hydrologic Unit 14020006, 0.4 mi east of Stony Mountain (elevation 12,698 ft), and 4.5 mi north of Telluride.

PERIOD OF RECORD.--October 7, 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 11,150 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good. Minimum air-temperature values for Nov. 20 and 21 could not be determined because of missed satellite transmissions. No data for air temperature and rainfall Nov. 24 to June 2, because of dead battery.

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	12.1	3.5	.7	-8.3	---	---	---	---	---	---	---	---
2	11.3	.7	-2.4	-14.1	---	---	---	---	---	---	---	---
3	13.1	2.5	3.2	-7.9	---	---	---	---	---	---	---	---
4	14.3	2.5	-1.7	-7.9	---	---	---	---	---	---	---	---
5	11.0	3.2	-7.9	-16.2	---	---	---	---	---	---	---	---
6	9.9	2.8	-.3	-17.0	---	---	---	---	---	---	---	---
7	2.8	-2.1	.0	-8.6	---	---	---	---	---	---	---	---
8	4.9	-3.8	-.7	-9.4	---	---	---	---	---	---	---	---
9	2.8	-1.4	1.4	-9.8	---	---	---	---	---	---	---	---
10	4.6	-2.4	4.9	-3.5	---	---	---	---	---	---	---	---
11	7.4	-2.4	.4	-7.5	---	---	---	---	---	---	---	---
12	4.6	-3.5	-3.1	-10.9	---	---	---	---	---	---	---	---
13	5.3	-4.2	-4.2	-9.8	---	---	---	---	---	---	---	---
14	4.9	-1.4	-5.3	-13.3	---	---	---	---	---	---	---	---
15	4.2	-1.0	-3.5	-13.7	---	---	---	---	---	---	---	---
16	1.8	-3.5	-3.5	-14.5	---	---	---	---	---	---	---	---
17	1.1	-4.6	.4	-7.9	---	---	---	---	---	---	---	---
18	-.7	-7.9	-1.0	-9.4	---	---	---	---	---	---	---	---
19	1.8	-8.3	-3.8	-14.9	---	---	---	---	---	---	---	---
20	2.1	-7.5	.4	---	---	---	---	---	---	---	---	---
21	7.1	-4.6	2.8	---	---	---	---	---	---	---	---	---
22	7.8	-2.1	-.3	-5.7	---	---	---	---	---	---	---	---
23	6.4	-3.1	-2.1	-6.4	---	---	---	---	---	---	---	---
24	7.4	-2.8	---	---	---	---	---	---	---	---	---	---
25	6.0	-3.5	---	---	---	---	---	---	---	---	---	---
26	-1.7	-10.5	---	---	---	---	---	---	---	---	---	---
27	2.1	-10.9	---	---	---	---	---	---	---	---	---	---
28	1.1	-6.0	---	---	---	---	---	---	---	---	---	---
29	-5.3	-16.2	---	---	---	---	---	---	---	---	---	---
30	-1.4	-17.9	---	---	---	---	---	---	---	---	---	---
31	8.1	-7.1	---	---	---	---	---	---	---	---	---	---
MONTH	14.3	-17.9	---	---	---	---	---	---	---	---	---	---
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	---	---	---	---	18.5	9.5	14.3	6.4	11.3	3.5
2	---	---	---	---	---	---	14.6	6.7	15.0	4.9	14.6	4.9
3	---	---	---	---	15.0	4.6	16.5	5.7	18.1	6.4	8.1	3.9
4	---	---	---	---	13.9	4.2	16.9	4.6	19.7	8.5	11.0	2.8
5	---	---	---	---	15.4	3.9	16.9	4.9	17.7	8.5	13.9	2.8
6	---	---	---	---	13.9	4.6	15.8	4.6	16.9	8.5	13.5	4.6
7	---	---	---	---	12.4	2.5	11.7	-1.7	18.5	8.1	12.4	2.8
8	---	---	---	---	12.4	2.8	16.1	2.5	16.9	8.1	15.8	3.5
9	---	---	---	---	13.5	1.8	17.3	5.7	11.3	6.4	13.9	6.0
10	---	---	---	---	14.6	5.7	17.7	8.1	14.6	5.7	13.9	4.2
11	---	---	---	---	15.8	6.7	16.9	7.8	14.6	7.8	12.8	1.8
12	---	---	---	---	16.9	6.7	16.9	7.4	14.3	6.7	11.3	1.8
13	---	---	---	---	15.8	6.4	16.9	6.7	14.3	7.8	9.2	2.5
14	---	---	---	---	16.5	7.8	14.6	6.4	13.5	6.4	6.0	.0
15	---	---	---	---	16.5	.1	16.5	6.0	15.4	4.2	7.1	-4.2
16	---	---	---	---	16.5	7.8	18.5	6.7	18.1	6.4	10.2	1.1
17	---	---	---	---	17.7	4.9	19.3	7.4	18.5	8.8	9.2	1.8
18	---	---	---	---	16.1	6.0	15.4	7.1	16.9	8.8	9.5	2.1
19	---	---	---	---	13.1	4.9	14.3	5.7	14.3	6.4	10.6	1.8
20	---	---	---	---	13.1	4.6	15.4	5.7	11.7	4.2	7.4	.4
21	---	---	---	---	12.4	5.7	18.1	6.4	12.4	6.4	8.5	1.4
22	---	---	---	---	11.0	5.3	16.5	6.4	15.4	6.0	9.2	-1.0
23	---	---	---	---	16.1	4.2	16.1	7.4	16.9	5.7	12.1	.4
24	---	---	---	---	18.9	8.5	16.9	7.8	13.9	7.4	11.3	1.4
25	---	---	---	---	20.5	8.8	18.5	7.8	15.0	7.1	12.4	2.5
26	---	---	---	---	21.3	9.9	19.3	8.1	17.3	6.4	12.4	1.1
27	---	---	---	---	19.7	8.1	19.3	8.1	16.1	7.4	13.9	2.1
28	---	---	---	---	19.3	7.8	17.3	8.8	13.9	6.0	15.4	4.2
29	---	---	---	---	18.5	9.2	16.5	7.8	13.5	4.2	12.8	4.6
30	---	---	---	---	18.9	8.8	18.5	7.8	14.6	3.9	5.7	.0
31	---	---	---	---	---	---	17.3	8.5	11.7	3.9	---	---
MONTH	---	---	---	---	---	---	19.3	-1.7	19.7	3.9	15.8	-4.2

375852107455200 GOVERNOR BASIN METEOROLOGICAL STATION NEAR TELLURIDE, CO--Continued

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	---	---	---	---	---	---	---	.0	.7	.4
2	.0	.0	---	---	---	---	---	---	---	.0	.0	.1
3	.0	.0	---	---	---	---	---	---	.0	.0	.0	.8
4	.0	.0	---	---	---	---	---	---	.0	.0	.0	.0
5	.0	.0	---	---	---	---	---	---	.0	.0	.1	.0
6	.0	.0	---	---	---	---	---	---	.0	.0	.0	.0
7	.4	.0	---	---	---	---	---	---	.0	.0	.0	.0
8	.3	.0	---	---	---	---	---	---	.0	.0	.0	.0
9	.4	.0	---	---	---	---	---	---	.0	.0	.6	.0
10	.2	.0	---	---	---	---	---	---	.0	.0	.0	.0
11	.1	.5	---	---	---	---	---	---	.0	.0	.5	.6
12	.2	.4	---	---	---	---	---	---	.0	.0	.1	.4
13	.0	.1	---	---	---	---	---	---	.0	.0	.1	.6
14	.0	.2	---	---	---	---	---	---	.0	.0	.8	.2
15	.0	.0	---	---	---	---	---	---	.0	.0	.0	.0
16	.2	.0	---	---	---	---	---	---	.0	.0	.0	.0
17	.3	.0	---	---	---	---	---	---	.0	.0	.0	.1
18	.0	.1	---	---	---	---	---	---	.2	.0	.0	.1
19	.0	.0	---	---	---	---	---	---	.3	.4	.5	.1
20	.0	.0	---	---	---	---	---	---	.0	.0	.3	.8
21	.0	.0	---	---	---	---	---	---	.4	.0	.3	.0
22	.0	.4	---	---	---	---	---	---	.2	.0	.0	.0
23	.0	.1	---	---	---	---	---	---	.0	.0	.0	.0
24	.0	---	---	---	---	---	---	---	.0	.0	.0	.0
25	.0	---	---	---	---	---	---	---	.0	.0	.0	.0
26	.1	---	---	---	---	---	---	---	.0	.0	.0	.0
27	.0	---	---	---	---	---	---	---	.0	.0	.1	.0
28	.0	---	---	---	---	---	---	---	.0	.0	.3	.0
29	.6	---	---	---	---	---	---	---	.0	.0	.2	.0
30	.0	---	---	---	---	---	---	---	.0	.0	.0	1.1
31	.0	---	---	---	---	---	---	---	---	.2	.0	---
TOTAL	2.8	---	---	---	---	---	---	---	---	0.6	4.6	5.3

380102107402200 OURAY METEOROLOGICAL STATION AT OURAY, CO

LOCATION.--Lat 38°01'02", long 107°40'22", in SW¹/₄ sec.31, T.43 N, R.7 W., Ouray County, Hydrologic Unit 14020006, 0.4 mi southwest of post office in Ouray.

PERIOD OF RECORD.--December 6, 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,960 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good. No data for air temperature and rainfall Dec. 17 to Mar. 3, because of dead battery.

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.1	6.7	6.7	-1.7	3.5	-5.3	---	---	---	---	---	---
2	19.3	6.7	3.5	-6.4	2.8	-9.0	---	---	---	---	---	---
3	20.9	7.8	9.5	-3.1	-3.8	-10.9	---	---	---	---	---	---
4	21.7	7.8	5.7	-3.5	4.6	-7.1	---	---	---	---	10.6	-1.4
5	20.1	9.5	-1.4	-9.0	1.8	-7.9	---	---	---	---	9.9	-.3
6	18.9	6.7	6.0	-9.8	3.9	-3.5	---	---	---	---	7.1	-.7
7	7.1	2.5	6.4	-4.9	3.9	-7.1	---	---	---	---	9.5	-1.0
8	13.1	1.1	7.1	-3.5	10.6	1.4	---	---	---	---	5.3	-4.2
9	13.5	1.8	8.5	-4.2	5.7	-2.4	---	---	---	---	2.8	-9.4
10	12.1	.4	11.7	-1.4	6.4	-3.1	---	---	---	---	6.7	-6.8
11	15.4	2.1	8.8	-1.4	11.7	-2.4	---	---	---	---	6.4	-1.0
12	9.9	4.2	3.2	-3.8	6.4	-5.7	---	---	---	---	7.4	-2.1
13	12.4	1.8	-.3	-4.9	-3.1	-11.3	---	---	---	---	8.8	-4.6
14	14.6	4.6	-1.7	-7.9	4.2	-10.1	---	---	---	---	12.4	-1.0
15	12.8	3.5	2.1	-9.8	2.8	-9.0	---	---	---	---	13.5	.0
16	9.5	.7	2.5	-7.5	-4.2	-10.9	---	---	---	---	16.9	4.9
17	4.9	.7	3.9	-6.0	---	---	---	---	---	---	12.4	2.8
18	7.4	-.7	5.7	-3.8	---	---	---	---	---	---	13.1	2.1
19	8.1	-3.1	-1.4	-11.3	---	---	---	---	---	---	9.9	-.7
20	8.5	-1.0	3.9	-9.8	---	---	---	---	---	---	3.5	-3.5
21	13.9	.0	6.4	-5.3	---	---	---	---	---	---	11.3	-5.7
22	13.9	2.8	7.4	-.3	---	---	---	---	---	---	9.2	2.8
23	13.5	2.1	7.1	-5.3	---	---	---	---	---	---	4.9	-3.8
24	14.6	.4	-5.3	-14.9	---	---	---	---	---	---	3.5	-2.8
25	12.1	2.1	-13.7	-17.9	---	---	---	---	---	---	6.4	-1.7
26	4.2	-1.4	-6.4	-16.6	---	---	---	---	---	---	4.2	-5.3
27	8.1	-6.4	2.8	-10.5	---	---	---	---	---	---	-3.8	-11.3
28	9.5	-1.7	5.7	-9.4	---	---	---	---	---	---	6.0	-11.3
29	-.7	-8.6	6.4	-3.1	---	---	---	---	---	---	6.0	-5.3
30	4.6	-11.7	6.0	-1.7	---	---	---	---	---	---	8.8	-9.0
31	11.3	-2.4	---	---	---	---	---	---	---	---	12.1	-2.4
MONTH	21.7	-11.7	11.7	-17.9	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.8	-.3	5.7	.0	23.3	6.4	27.8	17.7	23.8	12.4	19.7	9.9
2	7.1	-2.1	11.7	.4	22.5	7.4	24.6	16.1	25.1	9.9	23.8	9.9
3	13.5	-1.7	11.3	2.8	24.2	12.1	25.5	15.0	27.3	13.5	15.0	9.2
4	9.2	-1.4	17.7	2.5	23.8	12.1	25.5	12.8	29.2	15.8	21.3	7.4
5	1.1	-6.4	19.3	9.9	25.1	10.6	26.0	14.3	25.5	14.3	22.5	9.2
6	7.4	-7.5	20.1	7.4	22.9	12.8	24.6	12.8	28.7	16.5	22.9	10.6
7	4.2	-1.4	16.5	7.8	22.5	9.9	20.5	4.9	27.3	15.8	21.3	8.8
8	4.9	-3.8	16.9	1.1	21.3	8.1	24.2	8.8	23.8	12.8	24.2	9.2
9	5.3	-1.0	12.4	3.9	22.9	7.4	27.3	13.1	20.5	11.7	22.9	13.1
10	5.7	-2.1	15.4	.0	23.3	8.8	26.4	15.4	23.8	9.5	24.2	12.1
11	.0	-3.1	19.7	3.9	23.3	11.3	27.8	14.6	23.3	13.5	18.9	8.8
12	9.5	-4.6	16.9	6.0	26.4	14.3	24.2	12.4	22.9	12.8	18.1	8.8
13	13.9	.0	11.3	3.9	25.1	14.3	24.2	14.3	23.3	13.1	16.1	8.5
14	12.1	2.8	17.3	3.9	26.0	15.8	25.5	14.6	22.1	12.1	15.8	4.9
15	13.5	-1.4	16.9	6.7	25.1	15.8	24.2	15.0	25.1	9.9	13.9	2.1
16	19.7	1.4	20.5	10.2	25.5	15.0	28.2	15.0	27.3	13.1	18.5	3.2
17	19.3	5.3	19.7	8.5	26.4	12.8	28.2	13.9	27.8	15.8	15.8	9.2
18	18.9	6.0	19.3	7.4	23.8	14.3	22.9	16.1	25.5	16.5	17.7	8.5
19	16.1	8.5	19.7	8.8	21.3	11.0	23.8	11.7	22.9	12.1	16.5	6.4
20	17.3	6.4	15.0	4.6	22.5	9.2	23.3	11.7	21.3	9.2	14.6	6.4
21	19.7	5.7	19.7	2.1	20.5	11.7	26.4	11.3	20.1	10.6	16.9	5.7
22	15.8	7.8	21.3	8.8	17.7	9.2	26.9	14.6	26.0	12.8	15.0	3.5
23	13.9	6.4	19.3	10.6	25.5	8.8	24.6	15.4	26.4	12.4	18.1	3.9
24	11.0	1.8	18.9	9.2	27.8	12.8	24.6	14.6	21.7	14.6	19.3	6.4
25	3.5	-2.4	15.0	3.9	29.7	15.4	26.9	13.9	24.2	13.9	20.5	8.1
26	3.5	-3.1	16.5	1.4	30.1	15.8	27.8	14.3	27.3	14.6	20.5	6.7
27	1.8	-3.8	17.3	4.6	28.2	15.4	27.3	15.8	25.5	15.8	22.1	7.1
28	7.1	-4.2	20.1	6.7	28.2	15.0	27.3	17.7	20.5	12.1	23.3	9.5
29	2.1	-1.7	22.1	5.3	27.3	14.6	26.0	15.8	23.3	10.6	18.5	10.2
30	9.9	-1.4	25.1	9.9	27.8	14.6	29.2	16.9	22.9	11.0	13.5	6.4
31	---	---	24.2	10.6	---	---	24.6	13.9	18.1	9.9	---	---
MONTH	19.7	-7.5	25.1	.0	30.1	6.4	29.2	4.9	29.2	9.2	24.2	2.1

380102107402200 OURAY METEOROLOGICAL STATION AT OURAY, CO--Continued

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	.0	---	---	---	.2	.2	.0	.0	.1	.2
2	.0	.0	.3	---	---	---	.1	.1	.0	.0	.0	.0
3	.0	.0	.0	---	---	---	.0	.0	.0	.0	.0	.4
4	.0	.0	.0	---	---	.0	.1	.0	.0	.0	.0	.0
5	.0	.0	.0	---	---	.0	.6	.0	.0	.0	.1	.0
6	.0	.0	.0	---	---	.0	.0	.0	.0	.0	.0	.0
7	.4	.0	.0	---	---	.0	.2	.0	.0	.0	.0	.0
8	.3	.0	.0	---	---	.1	.1	.0	.0	.0	.0	.0
9	.3	.0	.0	---	---	.0	.1	.3	.0	.0	.2	.0
10	.2	.0	.0	---	---	.0	.1	.0	.0	.0	.0	.0
11	.0	.5	.0	---	---	.0	.2	.0	.0	.0	.0	.3
12	.1	.1	.4	---	---	.0	.0	.0	.0	.0	.0	.2
13	.0	.1	.1	---	---	.0	.0	.3	.0	.0	.1	.3
14	.0	.4	.0	---	---	.0	.0	.0	.0	.0	.2	.1
15	.0	.0	.0	---	---	.0	.0	.0	.0	.0	.0	.0
16	.2	.0	.1	---	---	.0	.0	.0	.0	.0	.0	.0
17	.2	.0	---	---	---	.0	.0	.0	.0	.0	.0	.0
18	.0	.0	---	---	---	.0	.0	.0	.0	.0	.0	.0
19	.0	.1	---	---	---	.1	.0	.0	.2	.2	.2	.1
20	.0	.0	---	---	---	.5	.0	.0	.1	.3	.2	.5
21	.0	.0	---	---	---	.0	.0	.0	.2	.0	.1	.0
22	.0	.1	---	---	---	.0	.1	.0	.2	.0	.0	.0
23	.0	.0	---	---	---	.1	.0	.0	.0	.0	.0	.0
24	.0	.2	---	---	---	.1	.1	.0	.0	.0	.0	.0
25	.0	.0	---	---	---	.2	.3	.2	.0	.0	.0	.0
26	.0	.0	---	---	---	.1	.1	.1	.0	.0	.0	.0
27	.0	.0	---	---	---	.0	.2	.0	.0	.0	.0	.0
28	.1	.0	---	---	---	.0	.0	.2	.0	.0	.3	.0
29	.1	.0	---	---	---	.0	.3	.0	.0	.0	.0	.0
30	.0	.0	---	---	---	.0	.0	.0	.0	.0	.0	.9
31	.0	---	---	---	---	.0	---	.0	---	.0	.0	---
TOTAL	1.9	1.5	---	---	---	---	2.8	1.4	0.7	0.5	1.5	3.0

LOCATION.--Lat 38°02'51", long 107°51'30", Ouray County, Hydrologic Unit 14020006, 5.2 mi north of Mears Peak (elevation 13,496 ft).

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 9,260 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office.
Daily record for air temperature is good. Daily record for accumulated rainfall is good.

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.7	- .3	5.3	-4.2	2.1	-12.1	3.9	-15.3	-7.9	-25.7	1.8	-10.9
2	16.5	-1.4	2.1	-11.7	2.1	-13.3	- .7	-12.9	2.1	-22.1	7.1	-12.1
3	18.5	-1.4	8.5	-7.9	-3.1	-15.7	1.4	-10.5	-1.7	-16.2	9.5	-9.0
4	18.1	- .3	3.2	-3.8	2.5	-14.5	5.7	-10.9	-4.9	-17.9	9.5	-7.5
5	15.8	.0	-3.8	-13.3	.4	-14.1	3.2	-9.4	-2.8	-16.6	9.9	-6.8
6	16.1	2.8	4.9	-16.6	.7	-9.8	-9.4	-15.3	-2.1	-17.4	3.9	-4.9
7	5.7	.0	3.5	-9.8	1.1	-14.9	-4.6	-21.6	- .3	-3.8	5.7	-6.0
8	6.4	- .3	4.6	-9.4	6.7	-1.7	2.1	-14.9	.0	-6.0	4.2	-7.1
9	8.1	.0	6.0	-10.5	3.5	-6.8	-2.4	-16.2	- .7	-13.7	2.8	-12.9
10	9.5	-2.8	9.9	-8.3	6.0	-8.6	-4.2	-19.3	2.1	-14.1	5.3	-14.9
11	13.1	-2.8	6.0	-4.9	5.7	-9.0	1.4	-19.3	-1.4	-11.3	7.4	-4.9
12	7.8	-1.7	2.8	-7.5	1.8	-8.3	-3.1	-19.3	-6.4	-19.7	4.9	-7.1
13	9.9	-2.8	-2.4	-9.0	-3.1	-15.3	1.1	-15.7	2.1	-19.7	6.7	-10.5
14	10.6	1.1	-3.1	-12.5	2.5	-15.3	3.9	-14.1	4.6	-14.9	10.6	-7.1
15	9.2	.0	1.1	-14.5	-5.3	-14.1	5.3	-14.1	7.1	-15.7	12.1	-6.0
16	4.6	-1.4	2.5	-14.5	-7.5	-17.9	-1.7	-16.2	6.0	-7.5	13.5	-5.3
17	1.8	-2.8	2.5	-12.9	-3.8	-19.7	3.2	-16.6	3.9	-1.4	8.8	-3.8
18	2.5	-3.8	1.1	-10.1	- .3	-17.0	8.1	-12.5	-1.4	-9.0	9.5	-4.9
19	4.9	-7.5	-1.7	-16.2	-3.8	-12.9	7.4	-11.3	-5.3	-10.9	7.4	- .3
20	6.7	-5.3	5.3	-15.3	-2.8	-21.6	8.1	-12.1	-2.8	-17.0	1.1	-7.9
21	11.7	-5.7	6.4	-13.7	1.1	-17.4	8.1	-11.7	-3.8	-9.4	8.8	-9.4
22	11.3	-3.8	4.9	-2.4	-1.4	-23.1	4.9	-13.3	-3.5	-13.3	7.8	- .7
23	10.2	-3.5	2.5	-2.1	-10.1	-21.1	7.4	-13.3	-4.2	-21.6	2.8	-6.8
24	12.8	-4.9	-2.1	-20.7	-1.4	-21.1	2.8	-9.8	5.3	-10.9	2.1	-4.9
25	9.9	-3.1	-14.1	-23.1	2.5	-14.5	3.5	-10.1	8.1	-8.3	3.2	-3.5
26	1.1	-6.8	-6.0	-22.6	4.6	-11.7	-3.5	-9.0	8.8	-6.4	2.8	-7.9
27	6.0	-10.1	2.8	-17.9	.4	-6.8	-4.9	-11.3	2.8	-4.2	-6.4	-16.2
28	6.4	-6.4	3.9	-14.9	-1.7	-10.1	-4.9	-16.2	-1.7	-10.9	4.2	-15.7
29	-2.4	-13.7	4.9	-9.4	1.1	-16.2	-6.0	-18.8	- - -	- - -	5.7	-10.9
30	1.8	-17.0	3.2	-9.4	5.3	-16.2	-12.1	-22.1	- - -	- - -	6.4	-16.2
31	10.2	-9.0	- - -	- - -	1.1	-15.3	-12.9	-27.4	- - -	- - -	9.2	-10.9
MONTH	18.5	-17.0	9.9	-23.1	6.7	-23.1	8.1	-27.4	8.8	-25.7	13.5	-16.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.8	-3.1	2.8	-1.7	19.3	- .3	24.6	10.6	18.9	7.4	17.3	4.9
2	3.9	-5.7	7.8	-2.4	19.3	.7	20.9	8.1	20.5	5.3	20.1	6.0
3	10.2	-7.5	7.8	-2.8	21.7	2.8	22.5	7.4	22.5	6.7	12.1	3.9
4	4.6	-4.6										

380251107513000 WEST FORK DALLAS CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0	.2	.4
2	.0	.0	.4	.0	.0	.0	.0	.1	.0	.0	.0	.1
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6
4	.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	.0	.0
5	.0	.0	.0	.3	.0	.0	.6	.0	.0	.0	.0	.0
6	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0
7	.4	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
8	.3	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.0
9	.2	.0	.0	.0	.1	.0	.1	.3	.0	.0	.1	.0
10	.2	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
11	.1	.9	.0	.0	.3	.0	.1	.0	.0	.0	.0	.5
12	.1	.3	2.3	.0	.2	.0	.0	.0	.0	.0	.0	.4
13	.0	.2	.0	.0	.0	.0	.0	.3	.0	.0	.3	.6
14	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2
15	.0	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0	.0
16	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
18	.1	.1	.0	.0	.4	.0	.0	.0	.2	.0	.0	.2
19	.0	.1	.4	.0	.0	.1	.0	.0	.1	.6	.2	.2
20	.0	.0	.1	.0	.1	.3	.0	.0	.3	.1	.2	.7
21	.0	.0	.0	.0	.2	.0	.0	.0	.3	.0	.0	.0
22	.0	.1	.1	.0	.3	.0	.2	.0	.2	.1	.0	.0
23	.0	.0	.2	.0	.3	.2	.1	.0	.0	.1	.0	.0
24	.0	.1	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
25	.0	.0	.0	.2	.0	.2	.3	.5	.0	.0	.0	.0
26	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
27	.0	.0	.2	.2	.0	.0	.6	.0	.0	.0	.0	.0
28	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.1	.0
29	.1	.0	.0	.1	---	.0	.5	.0	.0	.0	.0	.0
30	.0	.0	.0	.1	---	.0	.0	.0	.0	.0	.3	1.4
31	.0	---	.0	.0	---	.0	---	.1	---	.0	.0	---
TOTAL	2.2	2.2	4.0	1.0	2.8	1.2	3.8	1.8	1.1	0.9	1.6	5.4

WTR YR 1994 TOTAL 28.0

380324107444500 WHITEHOUSE CREEK METEOROLOGICAL STATION NEAR OURAY, CO

LOCATION.--Lat 38°03'24", long 107°44'45", in NW¹/4NW¹/4 sec.21, T.44 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 3.0 mi north of Whitehouse Mountain (elevation 13,470 ft), and 4.7 mi northwest of Ouray.

PERIOD OF RECORD.--October 7, 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 9,480 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature and accumulated rainfall is fair. No data for air temperature and rainfall Oct. 5 to June 16, because the satellite transmitter failed.

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.7	1.8	---	---	---	---	---	---	---	---	---	---
2	17.3	1.1	---	---	---	---	---	---	---	---	---	---
3	18.9	2.5	---	---	---	---	---	---	---	---	---	---
4	20.1	2.5	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	23.8	13.1	16.9	8.8	16.5	6.0
2	---	---	---	---	---	---	19.7	9.9	20.1	6.4	20.9	6.7
3	---	---	---	---	---	---	23.3	8.5	22.9	8.5	12.8	5.7
4	---	---	---	---	---	---	21.7	8.5	25.5	9.2	17.7	4.2
5	---	---	---	---	---	---	20.9	8.5	22.9	9.9	18.9	4.6
6	---	---	---	---	---	---	20.5	7.1	23.3	10.6	18.9	5.3
7	---	---	---	---	---	---	16.1	1.1	23.8	9.5	17.3	5.3
8	---	---	---	---	---	---	20.1	3.5	21.7	9.9	20.9	4.6
9	---	---	---	---	---	---	23.3	6.4	15.0	8.8	20.9	7.8
10	---	---	---	---	---	---	23.8	9.5	18.5	7.1	20.9	6.7
11	---	---	---	---	---	---	22.1	9.2	19.3	8.8	15.0	7.1
12	---	---	---	---	---	---	20.1	7.8	17.7	7.4	14.6	6.7
13	---	---	---	---	---	---	20.9	7.4	19.3	9.2	14.6	5.7
14	---	---	---	---	---	---	20.1	7.4	20.1	8.8	13.1	1.8
15	---	---	---	---	---	---	19.7	8.5	21.7	6.4	11.0	-1.4
16	---	---	---	---	---	---	23.8	8.5	23.3	8.5	15.8	-.3
17	---	---	---	---	22.5	6.4	25.1	8.5	23.8	10.6	13.9	3.2
18	---	---	---	---	18.5	8.5	19.7	9.5	20.9	11.3	14.3	4.6
19	---	---	---	---	16.9	6.4	18.9	7.1	19.7	8.8	15.0	2.8
20	---	---	---	---	16.9	5.7	19.7	5.7	15.8	6.4	10.6	3.5
21	---	---	---	---	16.5	6.4	22.9	6.7	18.1	6.7	13.5	2.8
22	---	---	---	---	16.9	7.1	23.3	8.5	22.1	7.4	13.5	.4
23	---	---	---	---	20.1	5.7	20.1	9.2	21.7	7.4	17.3	.4
24	---	---	---	---	24.6	8.5	20.9	9.2	17.7	8.8	16.5	1.8
25	---	---	---	---	26.4	9.5	22.1	8.5	19.7	8.5	18.5	2.5
26	---	---	---	---	25.1	10.2	23.3	9.2	24.6	8.5	17.7	2.1
27	---	---	---	---	24.6	11.7	22.9	9.5	20.1	8.8	20.1	2.5
28	---	---	---	---	23.3	9.2	21.7	10.2	16.9	8.5	20.5	3.9
29	---	---	---	---	23.8	10.2	21.7	9.2	20.5	6.7	16.1	5.7
30	---	---	---	---	25.1	9.5	24.2	9.5	19.3	6.7	11.7	3.2
31	---	---	---	---	---	---	20.5	10.6	16.5	5.7	---	---
MONTH	---	---	---	---	---	---	25.1	1.1	25.5	5.7	20.9	-1.4

380324107444500 WHITEHOUSE CREEK METEOROLOGICAL STATION NEAR OURAY, CO--Continued

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	---	---	---	---	---	---	---	---	.0	.6	.2
2	.0	---	---	---	---	---	---	---	---	.0	.0	.0
3	.0	---	---	---	---	---	---	---	---	.0	.0	.6
4	.0	---	---	---	---	---	---	---	---	.0	.0	.0
5	---	---	---	---	---	---	---	---	---	.0	.0	.0
6	---	---	---	---	---	---	---	---	---	.0	.0	.0
7	---	---	---	---	---	---	---	---	---	.0	.0	.0
8	---	---	---	---	---	---	---	---	---	.0	.0	.0
9	---	---	---	---	---	---	---	---	---	.0	.2	.0
10	---	---	---	---	---	---	---	---	---	.0	.0	.0
11	---	---	---	---	---	---	---	---	---	.0	.2	.3
12	---	---	---	---	---	---	---	---	---	.0	.0	.2
13	---	---	---	---	---	---	---	---	---	.0	.3	.2
14	---	---	---	---	---	---	---	---	---	.0	.2	.1
15	---	---	---	---	---	---	---	---	---	.0	.0	.0
16	---	---	---	---	---	---	---	---	---	.0	.0	.0
17	---	---	---	---	---	---	---	---	.0	.0	.0	.0
18	---	---	---	---	---	---	---	---	.1	.3	.0	.0
19	---	---	---	---	---	---	---	---	1.0	.2	.2	.0
20	---	---	---	---	---	---	---	---	.0	.0	.2	.4
21	---	---	---	---	---	---	---	---	.5	.0	.0	.0
22	---	---	---	---	---	---	---	---	.1	.0	.0	.0
23	---	---	---	---	---	---	---	---	.0	.0	.0	.0
24	---	---	---	---	---	---	---	---	.0	.0	.0	.0
25	---	---	---	---	---	---	---	---	.0	.0	.0	.0
26	---	---	---	---	---	---	---	---	.0	.0	.0	.0
27	---	---	---	---	---	---	---	---	.0	.0	.0	.0
28	---	---	---	---	---	---	---	---	.0	.1	.2	.0
29	---	---	---	---	---	---	---	---	.0	.0	.0	.0
30	---	---	---	---	---	---	---	---	1.9	.0	.1	1.1
31	---	---	---	---	---	---	---	---	---	.1	.0	---
TOTAL	---	---	---	---	---	---	---	---	---	0.7	2.2	3.1

LOCATION.--Lat 38°04'36", long 107°41'15", in SE¹/4NW¹/4 sec.12, T.44 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 4 mi north of Ouray, and 8.6 mi east of Black Lake.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 8,080 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good.

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.9	8.8	6.7	-2.1	2.1	-4.2	5.7	-6.8	-8.6	-18.3	4.6	-4.9
2	19.3	7.4	3.9	-7.1	4.2	-9.4	.0	-5.3	-2.1	-14.9	7.8	-3.1
3	21.3	8.8	10.6	-2.1	-3.5	-10.9	3.5	-3.5	.4	-8.3	10.2	-.3
4	21.3	10.2	6.4	-2.4	7.1	-6.4	9.2	-2.4	-2.8	-6.0	11.0	.7
5	19.7	11.3	-1.0	-8.3	.7	-6.0	6.4	-6.4	-2.1	-9.8	10.2	1.1
6	20.5	6.4	4.2	-10.5	4.6	-4.2	-6.0	-10.1	.0	-9.8	7.8	1.1
7	7.4	2.8	6.4	-3.8	4.2	-6.0	-2.4	-14.1	3.2	-1.4	9.2	.4
8	13.5	1.1	6.7	-2.4	9.9	2.8	5.7	-7.1	2.5	-3.5	6.4	-4.9
9	12.8	1.8	8.1	-2.8	5.3	-1.0	-1.0	-9.4	.0	-8.3	3.2	-8.3
10	11.7	.0	12.1	.4	5.7	-2.4	-2.8	-12.1	5.3	-6.4	7.1	-4.6
11	15.8	3.9	11.7	-2.8	9.5	.0	1.8	-9.8	1.4	-9.4	8.8	-.7
12	9.9	3.5	4.2	-4.9	5.7	-6.0	-2.4	-10.5	-7.1	-13.3	8.8	-1.7
13	12.1	2.5	.4	-4.9	-4.2	-11.7	3.5	-7.5	2.8	-12.9	9.5	-3.5
14	15.0	4.9	-.7	-6.8	4.9	-9.0	3.2	-6.0	4.9	-5.7	13.1	.7
15	13.5	2.5	1.8	-8.6	2.8	-9.4	5.7	-3.8	7.1	-5.3	13.5	1.8
16	9.2	1.1	2.5	-6.8	-4.2	-12.1	-.3	-7.5	8.8	.0	16.5	4.6
17	5.3	.0	4.9	-4.6	-3.8	-12.9	3.5	-7.9	8.5	1.1	12.1	3.9
18	7.8	-1.4	5.7	-4.6	.4	-9.4	8.8	-3.5	2.5	-5.3	11.7	2.8
19	7.4	-2.8	-1.0	-9.8	-2.4	-9.4	9.2	-.7	-2.1	-8.3	11.7	1.1
20	8.1	-1.0	3.2	-7.9	-1.4	-15.7	7.8	-.7	8.6	-10.5	4.9	-1.4
21	13.9	.4	6.7	-4.6	.4	-11.7	8.1	-1.4	-1.0	-7.1	12.8	-2.4
22	13.9	3.9	8.8	-.7	-4.9	-16.6	5.7	-2.1	-4.2	-10.1	11.3	1.1
23	13.1	3.2	6.7	-7.1	-1.0	-14.9	10.2	-1.7	-2.8	-14.5	5.7	-3.8
24	14.3	2.1	-7.1	-14.1	.0	-16.2	6.7	.0	6.7	-7.5	4.9	-3.5
25	12.4	3.2	-12.9	-17.0	8.5	-7.5	6.0	-4.6	9.2	-.7	7.1	-2.1
26	5.3	-1.7	-6.0	-16.6	9.2	-1.7	-2.8	-6.4	9.5	.0	7.3	-5.7
27	8.5	-5.7	3.9	-9.0	2.5	-3.8	-2.1	-7.5	4.9	-2.4	-4.0	-10.1
28	11.0	-1.7	4.9	-6.8	2.1	-6.0	-2.4	-10.5	.7	-4.9	6.0	-9.0
29	.0	-9.0	7.4	-1.0	.0	-9.4	-4.2	-11.3	---	---	7.2	-4.6
30	4.6	-12.1	7.8	-2.8	3.9	-7.1	-8.3	-14.5	---	---	8.5	-8.3
31	10.6	-1.4	---	---	2.5	-6.4	-11.7	-19.7	---	---	12.4	-1.7
MONTH	21.3	-12.1	12.1	-17.0	9.9	-16.6	10.2	-19.7	9.5	-18.3	16.5	-10.1
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	-.7	7.1	-.3	24.2	7.4	29.7	18.5	23.3	12.1	19.7	10.6
2	7.4	-2.8	11.7	.4	23.3	8.5	26.4	15.0	26.4	11.3	25.1	12.8
3	14.6	.4	11.7	4.2	26.0	12.4	26.9	13.5	28.2	14.6	16.9	9.2
4	8.5	-1.4	18.9	4.6	24.2	12.4	27.8	15.0	29.2	16.5	22.1	9.2

380436107411500 PORTLAND METEOROLOGICAL STATION, NEAR OURAY, CO--Continued

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0	.1	.2
2	.0	.0	.2	.0	.0	.0	.1	.1	.0	.0	.0	.0
3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.4
4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
5	.0	.0	.0	.0	.1	.0	.5	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.4	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
9	.2	.0	.0	.1	.2	.0	.1	.3	.0	.0	.3	.0
10	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
11	.0	.6	.0	.0	.2	.0	.2	.0	.0	.0	.1	.2
12	.2	.0	.4	.0	.1	.0	.0	.0	.0	.0	.0	.1
13	.0	.1	.1	.0	.0	.0	.0	.2	.0	.0	.0	.1
14	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18	.1	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
19	.0	.1	.4	.0	.1	.1	.0	.0	.1	.2	.2	.0
20	.0	.0	.1	.0	.1	.2	.0	.0	.0	.0	.1	.3
21	.0	.0	.0	.0	.3	.3	.0	.0	.2	.0	.0	.0
22	.0	.0	.1	.0	.4	.0	.1	.0	.0	.0	.0	.0
23	.0	.0	.2	.0	.1	.1	.0	.0	.0	.2	.0	.0
24	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
25	.0	.0	.0	.1	.0	.1	.5	.3	.0	.0	.1	.0
26	.0	.0	.0	.4	.0	.5	.0	.0	.0	.0	.0	.0
27	.0	.0	.1	.2	.0	.0	.2	.0	.0	.0	.0	.0
28	.0	.0	.1	.0	.2	.0	.0	.1	.0	.0	.2	.0
29	.1	.0	.0	.1	---	.0	.3	.0	.0	.0	.0	.0
30	.0	.0	.0	.1	---	.0	.0	.0	.0	.0	.0	.8
31	.0	---	.0	.1	---	.0	---	.0	---	.5	.0	---
TOTAL	1.9	1.5	1.9	1.1	2.4	1.3	2.6	1.3	0.3	0.9	1.2	2.1

WTR YR 1994 TOTAL 18.5

LOCATION.--Lat 38°09'16", long 107°45'22", in SW¹/₄NW¹/₄ sec.16, T.45 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 0.2 mi north of post office in Ridgway, and 0.3 mi north of State Highway 62.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,000 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office.
Daily record for air temperature is good. Daily record for accumulated rainfall is good.

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	-4.2	9.2	-5.3	4.2	-9.4	1.4	-19.3	-6.0	-29.8	6.7	-6.0
2	20.9	-3.8	5.7	-10.5	4.2	-11.7	2.8	-13.7	-3.1	-28.6	9.9	-9.0
3	2.5	-3.5	11.0	-9.8	-1.4	-14.1	6.4	-12.1	1.4	-17.9	13.1	-8.3
4	23.8	-2.8	8.8	-8.6	8.8	-16.2	4.9	-12.9	-.3	-7.5	13.5	-6.8
5	22.5	-2.4	.7	-12.1	3.2	-11.3	7.4	-3.1	.4	-21.6	11.3	-5.7
6	19.7	3.9	6.0	-14.9	6.7	-11.7	-2.8	-11.7	.4	-23.1	9.5	-4.2
7	9.9	3.9	8.1	-13.3	6.0	-11.7	-1.0	-19.3	5.3	-11.3	11.3	-6.0
8	14.3	3.5	9.2	-12.9	11.3	-8.3	4.2	-17.9	4.6	-2.1	7.1	-3.5
9	14.6	1.8	9.9	-14.5	7.1	-7.1	-.3	-14.1	3.2	-12.1	6.4	-7.1
10	13.1	-1.0	12.8	-11.3	7.4	-9.0	.0	-17.9	7.8	-14.9	9.2	-10.5
11	18.1	-4.6	9.5	-4.2	9.9	-9.0	2.8	-18.8	4.6	-7.5	9.9	-5.3
12	11.7	3.5	3.9	-6.8	4.6	-4.2	.4	-19.3	-3.8	-24.7	10.6	-4.6
13	13.9	-1.0	2.1	-7.5	-2.1	-20.7	3.5	-15.3	6.0	-28.6	11.7	-7.1
14	16.5	2.8	1.8	-3.1	3.5	-21.1	4.9	-16.2	6.4	-21.1	15.8	-6.0
15	15.4	.0	2.8	-15.3	1.4	-14.1	4.2	-16.2	9.2	-22.1	16.5	-6.8
16	11.7	1.8	3.9	-15.3	-2.1	-13.3	1.8	-15.7	9.2	-14.9	17.3	-6.0
17	8.5	.0	7.4	-15.3	-1.7	-21.6	4.2	-17.0	8.5	-6.0	13.5	-3.8
18	9.2	-2.8	6.0	-10.9	1.4	-17.9	8.1	-15.3	6.3	-3.8	15.0	-5.7
19	9.5	-3.5	1.1	-14.1	-1.4	-11.7	10.2	-16.2	-.7	-7.1	14.3	3.0
20	9.9	-4.6	3.9	-16.6	-4.9	-24.1	8.8	-16.2	1.8	-14.1	7.1	-3.8
21	15.4	-7.9	7.1	-15.3	-1.0	-25.7	9.2	-14.9	.7	-7.9	13.9	-6.8
22	16.5	-5.3	9.5	-3.8	-4.6	-22.6	8.1	-15.7	-1.4	-10.1	14.6	-5.3
23	15.0	-4.9	9.9	-4.9	-7.1	-26.3	9.9	-15.3	1.4	-18.3	7.1	-1.4
24	16.1	-6.8	-4.9	-26.9	-1.7	-29.8	8.1	-8.6	6.7	-15.7	7.1	-2.1
25	14.3	-5.7	-9.8	-27.4	1.1	-23.1	7.4	-11.3	11.0	-9.0	9.5	-.3
26	7.4	-7.1	-4.2	-27.4	6.0	-20.2	-1.4	-4.2	9.2	-9.8	7.1	-3.5
27	9.9	-10.5	1.4	-23.6	3.2	-6.8	.0	-9.0	6.7	-2.4	-1.7	-11.7
28	12.1	-8.3	6.4	-18.8	.4	-6.4	1.4	-12.5	3.5	-5.3	8.1	-12.1
29	2.5	-9.4	8.1	-9.4	1.8	-18.8	-2.1	-17.9	---	---	7.4	-9.0
30	6.4	-14.5	8.8	-10.1	3.2	-22.6	-7.1	-21.1	---	---	10.2	-12.1
31	12.8	-12.5	---	---	-.3	-17.9	-9.0	-25.7	---	---	14.6	-11.3
MONTH	23.8	-14.5	12.8	-27.4	11.3	-29.8	10.2	-25.7	11.0	-29.8	17.3	-12.1
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.4	-6.4	8.8	-1.0	24.6	.0	30.1	11.3	25.1	11.0	21.3	6.0
2	8.5	-3.5	13.5	-.3	25.1	.7	26.9	12.1	27.3	7.4	26.0	4.9
3	15.8	-6.4	13.1	-1.4	28.2	2.8	28.7	7.8	28.7	8.1	18.1	8.1
4	11.3											

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

381422107453000 RIDGWAY RESERVOIR METEOROLOGICAL STATION NEAR RIDGWAY, CO

LOCATION.--Lat 38°14'22", long 107°45'30", in NE¹/4SE¹/4 sec.17, T.46 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 6.3 mi north of Ridgway, and 6.7 mi south of Colona.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 6,710 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good. Missing data for air temperature was caused by missed satellite transmissions, maximum and minimum values could not be determined.

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.2	3.5	10.2	-3.1	5.3	-6.4	1.4	-11.3	-5.3	-22.6	7.1	-3.5
2	20.9	3.5	6.7	-8.3	6.0	-9.0	4.9	-8.6	-2.1	-23.1	10.2	-5.3
3	22.9	1.8	11.7	-5.7	1.8	-10.1	4.2	-6.8	-1.4	-14.5	13.5	-4.6
4	25.5	3.9	9.9	-4.6	10.2	-12.5	6.4	-7.1	-1.0	-7.9	14.3	-3.5
5	23.3	4.9	2.5	-9.4	3.5	-7.9	8.8	-2.4	---	---	15.0	-2.1
6	21.3	8.1	6.0	-11.7	7.8	-7.9	-1.4	-10.1	-.7	-14.9	9.5	-2.1
7	11.0	5.3	8.8	-9.0	8.5	-7.9	-.7	-15.3	5.7	-8.3	13.1	-2.8
8	14.3	4.6	9.5	-8.3	13.9	-.7	2.8	-12.5	4.9	-1.7	7.1	-2.8
9	9.5	2.1	9.9	-7.5	7.8	-3.8	.0	-9.4	5.3	-9.4	6.4	-6.8
10	12.8	1.4	11.7	-5.7	8.5	-4.9	1.1	-13.3	9.2	-8.6	11.0	-7.5
11	17.7	-1.0	10.6	-1.0	10.6	-4.9	2.1	-14.5	5.3	-7.1	11.0	-2.1
12	11.3	5.7	5.3	-3.8	5.3	-3.5	1.1	-14.5	-2.4	-19.3	12.8	-3.1
13	14.6	1.8	2.8	-5.3	3.5	-13.3	3.5	-11.7	3.2	-23.6	12.4	-4.6
14	17.7	5.7	4.2	-2.1	3.2	-14.5	5.3	-12.1	5.3	-15.3	16.1	-2.4
15	15.8	3.9	4.9	-9.4	2.8	-9.0	6.7	-10.9	6.7	-16.2	17.3	-2.8
16	11.7	4.2	4.9	-10.1	-.7	-9.4	1.8	-10.1	9.9	-9.0	18.5	-1.0
17	8.1	2.5	6.4	-10.1	-1.4	-14.9	6.0	-11.3	9.2	-1.7	15.0	1.1
18	9.5	-.3	9.2	-6.4	.7	-13.3	8.5	-8.6	4.9	-4.9	16.5	-.7
19	9.9	-.7	1.4	-9.8	-2.1	-8.3	12.1	-7.9	.0	-5.7	15.4	4.6
20	10.2	-1.4	5.7	-12.1	-1.4	-15.7	9.2	-9.0	4.2	-7.1	6.4	-1.4
21	14.6	-3.8	9.2	-10.5	-1.7	-17.0	9.9	-8.3	---	---	14.6	-4.6
22	14.6	-.7	10.2	-.3	-.3	-17.0	8.8	-10.5	.4	-7.1	13.9	-2.8
23	15.0	-.3	---	---	-5.7	-18.8	9.5	-8.3	.0	-15.7	6.7	-1.4
24	16.1	-1.7	-4.6	-17.9	1.4	-21.1	10.2	-3.8	8.8	-11.7	7.4	-1.0
25	14.6	-1.0	-6.0	-19.7	3.5	-16.2	9.2	-7.1	12.8	-3.5	10.2	-.3
26	7.8	-4.2	-1.0	-19.7	2.5	-14.5	-1.7	-3.5	12.8	-4.6	8.1	-3.5
27	10.2	-7.1	4.2	-17.4	2.5	-4.2	-.7	-7.1	8.1	-1.0	-.7	-10.5
28	12.4	-4.2	8.1	-12.9	3.2	-4.2	2.5	-8.6	3.9	-3.1	9.5	-9.4
29	2.5	-8.3	7.8	-3.8	4.6	-13.3	-.3	-13.7	---	---	8.1	-6.0
30	6.0	-11.7	11.7	-5.3	.7	-16.6	-7.5	-16.6	---	---	10.6	-9.4
31	---	---	---	---	3.5	-11.7	-7.9	-20.2	---	---	15.0	-6.4
MONTH	---	---	---	---	13.9	-21.1	12.1	-20.2	---	---	18.5	-10.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.8	-2.1	10.2	.7	24.6	5.7	31.6	17.3	---	---	---	---
2	8.8	.0	13.9	1.8	25.5	5.7	26.4	17.3	---	---	---	---
3	16.1	-2.1	---	---	28.7	7.4	29.7	11.7	29.7	10.6	---	---
4	11.7	-1.0	21.7	.4	26.4	9.9	---	---	31.1	11.7	---	---
5	6.4	-2.8	22.9	4.2	27.3	6.7	28.7	11.3	27.3	11.0	---	---
6	10.2	-5.7	22.9	4.6	26.9	7.8	26.9	9.2	---	---	---	---
7	8.8	.4	20.1	2.8	24.6	6.0	21.7	4.6	---	---	---	---
8	8.1	-1.4	20.1	.0	24.2	5.3	26.9	6.7	---	---	---	---
9	10.6	.4	13.9	5.3	25.5	4.2	29.7	9.9	21.7	13.1	---	---
10	7.1	-2.1	18.1	2.1	26.0	5.7	30.6	11.0	---	---	---	---
11	3.5	-2.4	22.1	4.9	26.9	7.4	---	---	27.8	13.9	24.2	12.4
12	13.1	-5.3	18.9	7.4	28.7	8.1	---	---	26.4	11.3	---	---
13	17.3	.4	15.8	4.9	27.3	11.7	---	---	---	---	---	---
14	16.1	1.1	20.5	3.9	29.2	9.5	26.9	8.1	---	---	---	---
15	15.8	-3.1	19.7	4.6	29.2	8.8	---	---	---	---	---	---
16	22.9	-1.0	23.3	6.0	28.7	8.1	---	---	---	---	---	---
17	21.7	2.8	22.5	6.4	29.2	8.1	31.1	10.2	31.1	12.4	20.1	6.7
18	21.3	4.6	23.3	2.1	28.7	11.0	26.4	13.9	---	---	20.9	9.5
19	18.9	6.4	22.1	3.9	24.6	12.4	---	---	---	---	21.7	6.4
20	18.9	4.6	18.1	2.5	26.9	9.5	---	---	---	---	18.5	7.8
21	23.3	.0	22.1	.0	23.8	10.2	---	---	---	---	19.7	7.4
22	18.5	2.8	24.2	2.8	21.7	12.1	29.2	11.7	---	---	17.7	2.8
23	18.9	5.3	21.3	8.1	28.7	8.5	---	---	---	---	21.7	.7
24	15.4	3.2	21.7	6.0	31.6	11.3	---	---	---	---	22.5	2.8
25	7.8	.0	18.9	5.7	32.6	11.0	---	---	---	---	23.3	3.9
26	7.8	-.3	19.3	3.2	33.2	11.3	---	---	---	---	23.3	3.5
27	6.7	-1.4	19.3	4.9	32.1	14.3	---	---	---	---	24.6	3.9
28	8.5	-2.8	22.5	9.2	31.1	14.3	---	---	---	---	27.3	4.6
29	4.9	.0	25.1	6.0	31.1	13.9	---	---	26.0	9.2	20.9	6.0
30	10.6	.7	27.8	6.0	31.1	12.8	31.1	13.5	---	---	15.8	7.8
31	---	---	26.0	8.5	---	---	29.7	15.8	---	---	---	---
MONTH	23.3	-5.7	---	---	33.2	4.2	---	---	---	---	---	---

381422107453000 RIDGWAY RESERVOIR METEOROLOGICAL STATION, NEAR RIDGWAY, CO--Continued

	RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994											
1	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.3	
2	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	
4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.2	
5	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0	.0	
6	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	
7	.2	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	
8	.2	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	
9	.2	.0	.0	.0	.0	.0	.1	.3	.0	.2	.0	
10	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	
11	.0	.6	.0	.0	.2	.0	.2	.0	.0	.0	.1	
12	.2	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	
13	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	
14	.0	.4	.0	.0	.0	.0	.0	.0	.0	.1	.1	
15	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
16	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
17	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
18	.2	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	
19	.0	.0	.1	.0	.0	.1	.0	.0	.0	.1	.1	
20	.0	.0	.0	.0	.0	.2	.0	.0	.0	.1	.3	
21	.0	.0	.0	.0	.1	.0	.7	.0	.5	.0	.0	
22	.0	.0	.1	.0	.1	.0	.0	.0	.2	.0	.0	
23	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	
24	.0	.1	.0	.0	.0	.0	.1	.0	.0	.1	.0	
25	.0	.0	.0	.1	.0	.1	.1	.3	.0	.0	.0	
26	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	.0	
27	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	
28	.0	.0	.0	.0	.0	.0	.0	.1	.0	.3	.0	
29	.1	.0	.0	.1	---	.0	.1	.0	.0	.0	.0	
30	.0	.0	.0	.0	---	.0	.0	.0	.0	.0	.4	
31	.0	---	.0	.0	---	.0	---	.0	---	.1	---	
TOTAL	1.8	1.2	0.7	0.6	1.1	0.5	2.3	1.1	0.8	0.3	1.0	2.5
WTR YR 1994	TOTAL 13.9											

COLORADO RIVER TOTAL DISSOLVED SOLIDS INVESTIGATION

A series of water-quality samples and discharge measurements were collected from June 30 to September 30, 1994, to study Total Dissolved Solids (TDS), in the Grand Valley. The study reach is 0.62 mi in length, and extends from the gaging station, 09095500, Colorado River near Cameo, CO, to gaging station, 09163500, Colorado River near Colorado-Utah State Line. The study was conducted during the irrigation season. Samples for (TDS) collected at gaging stations 09095500, Colorado River near Cameo, CO, 09106150, Colorado River below Grand Valley Diversion, near Palisade, CO, and 09163500, Colorado River near Colorado-Utah State Line, are published elsewhere in this report.

390622108205400 COLORADO RIVER AT PALISADE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°06'22", long 108°20'54", in NW1/4NW1/4 sec.10, T.11 S., R.2 E., Mesa County, Hydrologic Unit 14010005, at state highway 6 bridge 0.25 mi east of Palisade.

DRAINAGE AREA.--8,740 mi².

PERIOD OF RECORD.--June to September 1994.

REMARKS.--No previous water-quality data at this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUN										
30...	1215	1760	887	--	--	--	--	--	--	--
JUL										
05...	1530	1510	774	22.5	--	--	--	--	--	--
14...	1400	761	876	24.5	--	--	--	--	--	--
19...	1100	681	958	22.5	230	64	17	110	3	3.7
26...	1100	714	928	22.0	--	--	--	--	--	--
AUG										
03...	0930	679	971	20.5	--	--	--	--	--	--
09...	0930	637	964	20.5	--	--	--	--	--	--
16...	0930	615	939	20.5	220	61	17	100	3	3.5
25...	1015	590	996	20.0	--	--	--	--	--	--
30...	1030	718	994	19.5	--	--	--	--	--	--
SEP										
06...	1130	689	966	18.0	230	65	16	96	3	3.8
13...	1010	582	1060	18.5	--	--	--	--	--	--
20...	1240	538	1030	18.0	--	--	--	--	--	--
27...	1040	435	1030	13.5	--	--	--	--	--	--

DATE	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
JUN									
30...	--	--	--	--	--	542	--	--	--
JUL									
05...	--	--	--	--	--	455	--	--	--
14...	--	--	--	--	--	511	--	--	--
19...	151	110	130	0.30	9.4	550	535	0.75	1010
26...	--	--	--	--	--	534	--	--	--
AUG									
03...	--	--	--	--	--	549	--	--	--
09...	--	--	--	--	--	542	--	--	--
16...	142	110	140	0.40	11	510	528	0.69	847
25...	--	--	--	--	--	587	--	--	--
30...	--	--	--	--	--	566	--	--	--
SEP									
06...	152	120	130	0.30	12	499	534	0.68	928
13...	--	--	--	--	--	616	--	--	--
20...	--	--	--	--	--	591	--	--	--
27...	--	--	--	--	--	568	--	--	--

COLORADO RIVER TOTAL DISSOLVED SOLIDS INVESTIGATION--Continued

390318108273200 COLORADO RIVER AT 32 ROAD NEAR CLIFTON, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°03'18", long 108°27'32", in NE1/4SE1/4 sec.22, T.1 S., R.1 E., Mesa County, Hydrologic Unit 14010005, at road 32 bridge 2.0 mi south of Clifton

DRAINAGE AREA.--8,790 mi².

PERIOD OF RECORD.--June 1994 to September 1994.

REMARKS.--No previous water-quality data at this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUN 30...	1030	1930	771	20.5	--	--	--	--	--	--
JUL 06...	1500	1300	833	23.0	--	--	--	--	--	--
14...	0915	800	1010	20.0	--	--	--	--	--	--
19...	1400	685	1110	26.0	290	81	22	120	3	3.6
27...	0930	683	1060	22.5	--	--	--	--	--	--
AUG 02...	1000	608	1140	22.0	--	--	--	--	--	--
10...	0930	646	1110	20.0	--	--	--	--	--	--
16...	1130	700	1100	23.0	280	80	20	110	3	3.8
24...	1210	677	1190	21.0	--	--	--	--	--	--
31...	1245	728	1150	21.5	--	--	--	--	--	--
SEP 06...	1430	856	1100	21.0	280	81	19	110	3	3.6
14...	1120	691	1220	18.5	--	--	--	--	--	--
21...	1040	793	1210	17.5	--	--	--	--	--	--
28...	1330	603	1220	17.5	--	--	--	--	--	--

DATE	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
JUN 30...	--	--	--	--	--	431	--	--	--
JUL 06...	--	--	--	--	--	503	--	--	--
14...	--	--	--	--	--	606	--	--	--
19...	142	180	140	0.30	8.6	638	641	0.87	1180
27...	--	--	--	--	--	626	--	--	--
AUG 02...	--	--	--	--	--	676	--	--	--
10...	--	--	--	--	--	638	--	--	--
16...	136	180	140	0.50	9.3	636	625	0.86	1200
24...	--	--	--	--	--	704	--	--	--
31...	--	--	--	--	--	678	--	--	--
SEP 06...	144	180	150	0.30	11	698	641	0.95	1610
14...	--	--	--	--	--	708	--	--	--
21...	--	--	--	--	--	706	--	--	--
28...	--	--	--	--	--	746	--	--	--

COLORADO RIVER TOTAL DISSOLVED SOLIDS INVESTIGATION--Continued

09106500 COLORADO RIVER AT GRAND JUNCTION, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 39°02'46", long 108°34'03", in NE1/4SW1/4 sec.23, T.1 S., R.1 W., Mesa County, Hydrologic Unit 14010005, at state highway 50 bridge 25 mi. upstream of confluence with the Gunnison River.

DRAINAGE AREA.--8,855 mi².

PERIOD OF RECORD.--July 1994 to September 1994.

REMARKS.--No previous water-quality data at this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL										
01...	1015	1990	806	21.0	--	--	--	--	--	--
07...	1400	1040	905	21.0	--	--	--	--	--	--
13...	1300	1020	1050	23.0	--	--	--	--	--	--
20...	0900	734	1200	20.0	330	91	26	120	3	3.7
27...	1430	808	1130	27.0	--	--	--	--	--	--
AUG										
01...	1430	737	1210	24.5	--	--	--	--	--	--
10...	1135	879	1190	21.5	--	--	--	--	--	--
18...	1015	794	1230	22.5	350	96	26	120	3	3.8
24...	1015	881	1290	19.5	--	--	--	--	--	--
31...	1445	873	1220	22.5	--	--	--	--	--	--
SEP										
08...	0845	945	1260	17.0	350	97	25	120	3	3.6
14...	1400	1180	1320	20.0	--	--	--	--	--	--
21...	1300	890	1270	19.0	--	--	--	--	--	--
28...	1520	721	1310	18.0	--	--	--	--	--	--

DATE	ALKA- LINEITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS AC-FT)	SOLIDS, DIS- SOLVED (TONS DAY)
JUL									
01...	--	--	--	--	--	478	--	--	--
07...	--	--	--	--	--	542	--	--	--
13...	--	--	--	--	--	640	--	--	--
20...	151	220	150	0.40	7.9	714	710	0.97	1420
27...	--	--	--	--	--	684	--	--	--
AUG									
01...	--	--	--	--	--	760	--	--	--
10...	--	--	--	--	--	724	--	--	--
18...	144	240	150	0.40	8.5	749	731	1.02	1610
24...	--	--	--	--	--	808	--	--	--
31...	--	--	--	--	--	740	--	--	--
SEP									
08...	149	230	160	0.40	9.2	761	735	1.03	1940
14...	--	--	--	--	--	814	--	--	--
21...	--	--	--	--	--	768	--	--	--
28...	--	--	--	--	--	794	--	--	--

COLORADO RIVER TOTAL DISSOLVED SOLIDS INVESTIGATION--Continued

390521108373300 COLORADO RIVER AT REDLANDS PARKWAY NEAR GRAND JUNCTION, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°05'21", long 108°37'33", in NE1/4SW1/4 sec.15, T.1 S., R.1 W., Mesa County, Hydrologic Unit 14010005, at Redlands Parkway bridge, 1.0 mi west of Grand Junction, 1.25 mi downstream of confluence with the Gunnison River.

DRAINAGE AREA.--16,886 mi².

PERIOD OF RECORD.--July to September 1994.

REMARKS.--No previous water-quality data at this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 20...	1200	2120	1130	23.0	370	100	30	76	2	3.4
AUG 17...	1345	2060	1190	23.5	440	120	34	91	2	4.1
SEP 07...	1435	2670	1450	20.0	430	120	31	85	2	3.4

DATE	TIME	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
JUL 20...	147	310	57	0.40	11	728	676	0.99	4170	
AUG 17...	157	350	73	0.20	13	810	779	1.10	4510	
SEP 07...	159	340	71	0.50	14	809	760	1.10	5830	

COLORADO RIVER TOTAL DISSOLVED SOLIDS INVESTIGATION--Continued

09153000 COLORADO RIVER NEAR FRUITA, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°08'58", long 108°44'20", in NE1/4SW1/4 sec.23, T.1 N., R.2 W., Mesa County, Hydrologic Unit 14010005, at State Highway 340 bridge, 1.2 mi south of Fruita.

DRAINAGE AREA.--17,046 mi².

PERIOD OF RECORD.--July to September 1994.

REMARKS.--No previous water-quality data at this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 20...	1530	3100	1100	24.0	410	110	32	87	2	3.6
AUG 17...	1130	2400	1250	24.0	450	120	36	93	2	4.1
SEP 07...	1245	2940	1210	19.5	440	120	33	87	2	3.5

DATE	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
JUL 20...	148	320	69	0.40	9.9	740	721	1.01	6190
AUG 17...	162	380	74	0.40	13	858	818	1.17	5560
SEP 07...	163	360	67	0.50	14	839	783	1.14	6660

MISCELLANEOUS STATION ANALYSES

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09010500 COLORADO RIVER BELOW BAKER GULCH, NR GRAND LAKE, CO (LAT 40 19 33N LONG 105 51 22w)									
NOV 1993					MAY 1994				
16...	1325	14	78	0.0	12...	1324	217	51	7.5
JAN 1994					JUN				
06...	1505	9.9	78	0.0	29...	1105	79	58	9.5
FEB					AUG				
25...	1255	5.9	80	0.0	10...	1110	17	75	15.0
MAR									
31...	1215	8.7	79	0.0					
09019500 COLORADO RIVER NEAR GRANBY, CO (LAT 40 07 15N LONG 105 54 00W)									
OCT 1993					JUN 1994				
01...	1200	22	76	8.5	29...	1410	79	69	12.5
APR 1994					AUG				
21...	1310	34	79	9.5	10...	1450	42	66	17.5
MAY									
31...	1045	69	73	9.0					
09024000 FRASER RIVER AT WINTER PARK, CO (LAT 39 54 00N LONG 105 46 34W)									
OCT 1993					APR 1994				
07...	1620	17	88	4.5	12...	1355	6.4	177	5.0
NOV					MAY				
17...	1240	9.0	98	0.0	25...	1350	24	69	7.0
JAN 1994					JUN				
05...	1100	6.0	121	0.5	27...	1520	43	58	11.5
FEB					AUG				
23...	1420	6.8	129	0.5	08...	1505	14	84	12.0
09025000 VASQUEZ CREEK AT WINTER PARK, CO (LAT 39 55 13N LONG 105 47 05W)									
NOV 1993					MAY 1994				
16...	1640	3.0	51	0.0	25...	1700	15	42	8.5
JAN 1994					JUN				
05...	1330	6.8	51	0.0	30...	1130	9.0	38	11.5
FEB					AUG				
24...	0945	6.7	54	0.0	11...	1040	19	42	10.5
APR									
08...	1228	7.1	56	0.0					
09025400 ELK CREEK NEAR FRASER, CO (LAT 39 55 09N LONG 105 49 31W)									
NOV 1993					MAY 1994				
18...	1220	0.41	62	0.0	27...	1454	2.7	44	10.5
JAN 1994					JUN				
07...	1235	0.26	66	0.0	28...	0905	2.6	45	9.0
MAR					AUG				
01...	1150	0.24	68	0.0	11...	1340	0.47	53	14.0
APR									
08...	1518	0.48	67	2.0					
09026500 ST. LOUIS CREEK NEAR FRASER, CO (LAT 39 54 36N LONG 105 52 40W)									
NOV 1993					MAY 1994				
18...	1035	6.8	93	0.0	26...	1046	39	65	4.0
JAN 1994					JUN				
05...	1640	6.8	--	0.0	30...	0935	17	70	7.0
FEB					AUG				
24...	1620	6.4	95	0.0	09...	1050	13	77	9.0
APR									
15...	1704	7.9	91	0.5					
09032000 RANCH CREEK NEAR FRASER, CO (LAT 39 57 00N LONG 105 45 54W)									
OCT 1993					APR 1994				
07...	1350	8.4	48	4.5	12...	1635	2.0	58	1.0
NOV					MAY				
18...	1430	3.4	50	0.0	26...	1805	30	36	7.5
JAN 1994					JUN				
07...	1036	2.3	53	0.0	28...	1230	4.2	42	10.0
FEB					AUG				
24...	1250	2.0	57	0.0	09...	1305	3.2	47	10.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09032100 CABIN CREEK NEAR FRASER, CO (LAT 39 59 09N LONG 105 44 40W)									
OCT 1993					APR 1994				
07...	1130	2.8	47	3.0	01...	1232	1.3	47	0.0
NOV					20...	1335	5.1	37	0.5
17...	1535	2.1	49	0.0	MAY				
DEC					20...	1628	19	24	6.5
30...	1240	1.4	47	0.0	26...	1405	1.6	28	7.5
FEB 1994					JUN				
15...	1230	0.94	47	0.0	28...	1520	9.8	36	12.5
					AUG				
					09...	1700	2.4	47	12.5
09034250 COLORADO RIVER AT WINDY GAP, NEAR GRANBY, CO (LAT 40 06 30N LONG 106 00 13W)									
OCT 1993					MAY 1994				
06...	0815	98	141	8.0	03...	1441	262	129	7.0
NOV					JUN				
23...	1555	93	145	0.5	14...	0920	300	122	12.5
DEC					JUL				
29...	0830	80	133	0.0	22...	0857	186	139	15.5
FEB 1994					AUG				
10...	0915	82	126	0.0	16...	1425	102	125	21.0
MAR					SEP				
24...	0845	137	149	1.0	13...	1450	75	135	17.0
09034900 BOBTAIL CREEK NEAR JONES PASS, CO (LAT 39 45 37N LONG 105 54 21W)									
OCT 1993					APR 1994				
14...	1410	3.1	64	3.0	21...	1400	2.7	59	0.0
NOV					MAY				
15...	1510	1.5	63	0.0	26...	1210	36	36	3.0
JAN 1994					JUL				
20...	1145	0.72	68	0.0	19...	1325	8.0	51	11.5
MAR					SEP				
01...	1130	0.70	73	0.0	13...	1855	15	60	8.0
09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO (LAT 39 46 44N LONG 105 55 40W)									
OCT 1993					APR 1994				
14...	1145	9.4	68	2.0	21...	1342	8.3	61	0.0
NOV					MAY				
15...	1255	5.5	64	0.0	26...	1240	85	36	3.5
JAN 1994					JUL				
20...	1247	3.5	69	0.0	19...	1050	20	53	7.5
MAR					SEP				
01...	1135	3.4	71	0.0	13...	1720	12	63	8.5
09035700 WILLIAMS FORK ABOVE DARLING CREEK, NR LEAL, CO (LAT 39 47 22N LONG 106 01 18W)									
OCT 1993					JUN 1994				
04...	1200	16	64	6.5	02...	0900	230	35	3.0
DEC					21...	0900	174	40	6.0
01...	1100	11	67	0.0	JUL				
FEB 1994					26...	0900	32	59	9.5
01...	1330	8.1	26	0.0	SEP				
MAR					07...	0830	19	68	7.0
15...	1215	8.5	72	0.0					
MAY									
03...	1130	17	63	3.5					
09035800 DARLING CREEK NEAR LEAL, CO (LAT 39 48 17N LONG 106 01 11W)									
OCT 1993					JUN 1994				
05...	1100	4.9	76	2.5	02...	1215	38	42	4.0
NOV					21...	1000	20	53	6.0
30...	1345	3.0	76	0.5	JUL				
FEB 1994					26...	1130	5.1	76	9.0
01...	1045	1.9	82	0.0	SEP				
MAR					07...	1100	3.2	83	6.5
15...	1045	2.3	84	0.5					
MAY									
03...	1315	3.3	77	1.5					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO (LAT 39 47 44N LONG 106 01 49W)									
OCT 1993					MAY 1994				
05...	0830	13	84	3.5	03...	0930	12	87	1.5
DEC					12...	1330	59	62	5.5
01...	1400	9.8	88	0.0	JUN				
JAN 1994					02...	1330	171	48	5.5
31...	1400	6.0	94	0.0	21...	1200	113	52	7.0
MAR					JUL				
14...	1600	8.2	93	0.5	26...	1330	23	80	12.5
31...	1000	5.4	98	0.0	SEP				
					07...	1400	14	88	9.5
09036000 WILLIAMS FORK NEAR LEAL, CO (LAT 39 49 53N LONG 106 03 15W)									
OCT 1993					JUN 1994				
06...	0845	41	80	3.5	02...	1600	500	47	7.5
NOV					21...	1415	343	48	9.0
30...	1030	30	82	0.5	JUL				
FEB 1994					26...	1500	64	74	15.5
01...	1330	23	87	0.0	SEP				
MAR					07...	1500	41	83	12.5
15...	0900	20	89	1.0					
MAY									
03...	1515	48	79	4.5					
09037500 WILLIAMS FORK NEAR PARSHALL, CO (LAT 40 00 01N LONG 106 10 45W)									
NOV 1993					MAY 1994				
16...	1050	26	104	0.0	27...	1235	283	54	8.0
JAN 1994					JUN				
06...	1030	32	100	0.0	29...	1640	52	78	16.5
MAR					AUG				
02...	1440	32	101	0.5	10...	1730	21	133	21.0
APR									
13...	1125	35	105	4.5					
09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO (LAT 40 02 07N LONG 106 12 17W)									
NOV 1993					JUN 1994				
23...	1205	104	92	5.0	14...	1035	28	98	6.5
DEC					JUL				
29...	1225	109	94	2.5	21...	0918	170	96	7.5
FEB 1994					AUG				
10...	1010	117	101	2.5	16...	0939	111	95	8.0
MAR					SEP				
24...	1105	112	106	2.5	14...	1340	246	94	9.0
MAY									
05...	1545	116	97	6.0					
09041000 MUDDY CREEK NEAR KREMMLING, CO (LAT 40 17 37N LONG 106 28 59W)									
OCT 1993					JUN 1994				
07...	1420	3.9	282	9.0	15...	1322	23	373	18.0
NOV					JUL				
23...	1015	11	291	0.0	20...	1340	7.9	444	22.0
MAR 1994					AUG				
23...	1035	16	327	0.0	15...	1540	4.7	249	26.0
APR					SEP				
28...	1525	146	186	3.0	13...	0910	2.3	291	12.0
MAY									
04...	1445	133	216	8.0					
13...	1115	432	89	4.0					
19...	1630	325	68	8.5					
26...	1030	239	93	7.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09046490 BLUE RIVER AT BLUE RIVER, CO (LAT 39 27 21N LONG 106 01 52W)									
OCT 1993					MAY 1994				
19...	1500	17	151	5.5	20...	1345	87	150	8.5
DEC					JUN				
06...	1000	8.3	185	1.0	16...	1130	49	142	13.0
JAN 1994					JUL				
19...	1000	6.0	177	0.5	26...	0945	36	130	14.0
MAR					SEP				
10...	1015	3.5	181	1.0	07...	1000	32	136	12.5
APR									
15...	1000	6.0	183	1.0					
09046600 BLUE RIVER NEAR DILLON, CO (LAT 39 32 55N LONG 106 02 19W)									
OCT 1993					MAY 1994				
29...	1400	39	156	6.0	20...	1600	257	133	8.5
DEC					JUN				
07...	1245	35	161	4.0	16...	0950	208	118	9.0
JAN 1994					JUL				
19...	1230	26	166	4.0	28...	1020	72	144	11.0
MAR					SEP				
03...	1520	21	174	8.0	08...	0940	64	154	9.5
APR									
12...	1430	27	185	8.0					
09047500 SNAKE RIVER NEAR MONTEZUMA, CO (LAT 39 36 20N LONG 105 56 33W)									
OCT 1993					MAY 1994				
18...	1200	29	114	3.0	18...	0920	185	77	2.0
DEC					JUN				
07...	1100	17	124	0.5	14...	1240	181	71	8.0
JAN 1994					JUL				
21...	1500	11	144	0.5	28...	0820	41	107	8.5
MAR					SEP				
03...	1010	8.9	142	0.5	06...	0800	33	120	6.0
APR									
18...	1200	16	144	2.0					
09047700 KEYSTONE GULCH NEAR DILLON, CO (LAT 39 35 40N LONG 105 58 19W)									
OCT 1993					MAY 1994				
18...	1430	5.1	84	2.0	18...	1110	14	68	2.5
DEC					JUN				
08...	1330	3.4	91	0.5	14...	1450	9.4	72	11.0
JAN 1994					JUL				
18...	1430	2.7	84	0.0	25...	1220	3.5	86	11.5
MAR					SEP				
04...	1200	2.3	81	0.0	06...	1020	2.6	90	5.5
APR									
18...	1555	3.6	87	4.0					
09050100 TENMILE CREEK BL NORTH TENMILE C, AT FRISCO, CO (LAT 39 34 37N LONG 106 06 33W)									
OCT 1993					MAY 1994				
22...	1140	32	680	2.0	18...	1350	348	463	8.5
DEC					JUN				
07...	1530	35	918	0.5	17...	1050	235	326	7.0
JAN 1994					JUL				
19...	1515	35	1120	0.0	25...	1500	41	412	14.5
MAR					SEP				
10...	1315	27	900	0.5	08...	1130	37	470	7.0
APR									
14...	1700	31	1310	3.5					
09050700 BLUE RIVER BELOW DILLON, CO (LAT 39 37 32N LONG 106 03 57W)									
OCT 1993					MAY 1994				
22...	1330	100	233	6.5	18...	1440	101	304	4.5
DEC					JUN				
08...	1220	--	245	4.5	17...	1345	463	222	12.0
JAN 1994					JUL				
18...	1500	E76	275	3.5	28...	1230	104	256	5.5
MAR					SEP				
10...	1330	--	302	3.5	08...	1200	--	245	5.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09051050 STRAIGHT CR BLW LASKEY GULCH NR DILLON, CO (LAT 39 38 23N LONG 106 02 23W)									
OCT 1993					MAY 1994				
22...	1000	7.8	153	0.5	18...	1700	32	116	8.0
DEC					JUN				
08...	0930	4.5	139	0.5	17...	1000	37	77	5.5
JAN 1994					JUL				
18...	1100	3.5	140	0.5	25...	1010	8.4	114	9.5
MAR					SEP				
04...	0940	4.3	322	0.0	06...	1210	6.8	128	8.0
APR									
14...	1430	4.7	288	1.0					
09052000 ROCK CREEK NEAR DILLON, CO (LAT 39 43 23N LONG 106 07 41W)									
OCT 1993					MAY 1994				
22...	0900	7.1	60	0.5	04...	1500	11	59	4.0
DEC					12...	1630	52	35	4.5
15...	0845	5.6	16	0.0	31...	1130	73	27	6.0
FEB 1994					JUN				
15...	1500	4.1	72	0.0	21...	1600	50	28	9.0
MAR					JUL				
29...	1330	4.0	73	0.0	25...	1300	19	39	12.0
					SEP				
					06...	1230	14	52	8.5
09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO (LAT 39 43 41N LONG 106 10 22W)									
OCT 1993					MAY 1994				
22...	1100	4.7	51	1.0	04...	1045	6.9	47	1.0
DEC					13...	0930	39	34	1.0
15...	1400	2.4	55	0.5	31...	1400	60	29	6.0
FEB 1994					JUN				
16...	1000	1.6	67	0.5	23...	1100	61	26	7.0
MAR					JUL				
28...	1500	2.0	70	0.0	25...	1500	16	34	14.5
					SEP				
					06...	1415	11	45	10.5
09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO (LAT 39 45 47N LONG 106 11 31W)									
OCT 1993					APR 1994				
13...	1115	9.3	41	4.0	20...	0920	17	66	0.0
DEC					JUL				
07...	1145	4.1	64	0.0	15...	1740	26	30	14.0
FEB 1994					SEP				
03...	1155	2.4	68	0.0	08...	0830	14	40	8.0
MAR									
15...	1635	2.5	76	0.0					
09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO (LAT 39 47 57N LONG 106 16 04W)									
OCT 1993					MAY 1994				
06...	1130	5.4	25	11.0	05...	0900	10	34	3.5
21...	1330	7.2	26	8.0	11...	1600	54	32	5.0
DEC					JUN				
16...	1200	2.4	31	1.5	03...	1115	118	27	7.0
FEB 1994					JUL				
17...	1045	2.0	35	1.0	27...	0830	39	21	13.5
APR					SEP				
08...	1215	3.2	38	2.5	08...	0900	22	25	13.0
09055300 CATARACT CREEK NEAR KREMMLING, CO (LAT 39 50 07N LONG 106 18 57W)									
OCT 1993					JUN 1994				
28...	0900	2.5	39	4.5	03...	0900	101	25	9.5
DEC					20...	1645	44	25	14.0
14...	1300	1.3	48	2.0	JUL				
FEB 1994					27...	1100	7.7	33	17.5
17...	1300	0.90	58	2.0	SEP				
APR					06...	1630	6.3	38	17.5
08...	0930	2.2	61	1.5					
MAY									
05...	1115	12	50	5.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO (LAT 39 52 49N LONG 106 20 00W)									
OCT 1993					MAY 1994				
28...	1130	339	172	10.0	04...	1300	209	220	4.5
DEC					31...	1630	109	215	6.0
14...	1000	335	176	3.0	JUN				
FEB 1994					20...	1430	66	203	8.0
15...	1230	361	192	3.0	JUL				
MAR					27...	1230	557	196	9.0
31...	1400	278	230	3.0	SEP				
APR					08...	1200	460	201	12.5
17...	1315	287	234	3.0					
09057520 BLUE RIVER BEL SPRUCE CR NR KREMMLING, CO (LAT 39 57 49N LONG 106 21 35W)									
OCT 1993					FEB 1994				
19...	1400	327	173	11.5	02...	1045	356	187	0.0
DEC									
02...	0945	334	170	3.0					
09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO (LAT 39 42 29N LONG 106 25 38W)									
OCT 1993					APR 1994				
06...	1440	2.9	47	9.5	12...	1425	2.9	74	0.5
NOV					MAY				
16...	1340	6.9	53	0.0	26...	1340	99	32	8.0
JAN 1994					JUL				
06...	1015	3.8	67	0.0	12...	1510	9.3	39	17.0
FEB					AUG				
24...	1100	1.9	70	0.0	24...	1550	3.9	50	16.0
09058610 DICKSON CREEK NEAR VAIL, CO (LAT 39 42 14N LONG 106 27 25W)									
OCT 1993					MAY 1994				
06...	1015	1.8	370	8.0	26...	0920	8.1	266	6.5
NOV					JUL				
16...	0915	1.4	372	0.0	14...	1130	2.0	364	14.0
FEB 1994					AUG				
24...	0920	1.7	370	0.0	25...	1120	1.2	373	14.0
APR									
13...	1450	1.2	387	0.5					
09058700 FREEMAN CREEK NEAR MINTURN, CO (LAT 39 41 55N LONG 106 26 41W)									
OCT 1993					MAY 1994				
06...	1135	0.23	233	6.5	26...	1025	4.3	143	7.5
NOV					JUL				
16...	1205	0.27	--	0.0	14...	1230	0.29	230	12.5
APR 1994					AUG				
13...	1245	0.04	257	0.0	25...	1215	0.09	243	13.0
09058800 EAST MEADOW CREEK NEAR MINTURN CO (LAT 39 43 54N LONG 106 25 36W)									
OCT 1993					JUL 1994				
06...	1315	1.0	63	4.0	12...	1345	1.6	55	9.0
APR 1994					AUG				
13...	0945	0.83	80	0.0	24...	1430	0.98	66	9.0
MAY									
26...	1210	16	44	2.5					
09060770 ROCK CREEK AT MCCOY, CO (LAT 39 54 44N LONG 106 43 30W)									
OCT 1993					MAY 1994				
05...	1348	10	488	12.0	05...	1131	119	279	9.0
NOV					11...	1504	159	172	12.0
16...	0925	15	392	0.0	JUN				
JAN 1994					07...	1135	16	319	14.0
12...	1000	11	375	0.0	JUL				
MAR					06...	1123	3.1	566	16.5
02...	0930	19	356	0.5	AUG				
APR					09...	1120	4.4	571	15.5
12...	0913	18	433	0.5					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09063000 EAGLE RIVER AT RED CLIFF, CO (LAT 39 30 34N LONG 106 22 00W)									
OCT 1993					MAY 1994				
05...	1645	12	248	9.0	25...	1630	142	144	10.0
NOV					JUL				
17...	1630	23	228	0.0	12...	0920	23	217	8.5
JAN 1994					AUG				
04...	1650	12	229	0.0	18...	1600	13	232	15.0
FEB					SEP				
24...	1600	11	229	0.0	07...	1110	12	245	9.0
APR									
14...	1440	12	226	4.5					
09063200 WEARYMAN CREEK NEAR RED CLIFF, CO (LAT 39 31 14N LONG 106 19 06W)									
OCT 1993					APR 1994				
05...	1350	3.6	284	3.5	14...	1150	1.5	295	0.5
06...	--	--	--	--	MAY				
06...	0833	--	--	--	25...	1355	18	223	5.5
NOV					JUL				
17...	1430	2.1	285	0.0	12...	1110	8.3	256	6.5
JAN 1994					AUG				
05...	0915	2.0	288	0.0	18...	1410	3.4	285	8.0
FEB									
23...	1500	1.6	257	0.0					
09063400 TURKEY CREEK NEAR RED CLIFF, CO (LAT 39 31 32N LONG 106 20 08W)									
OCT 1993					APR 1994				
05...	1550	6.4	282	5.0	14...	1030	3.4	287	0.5
NOV					26...	1600	14	251	2.5
17...	1520	5.0	282	0.0	29...	0910	11	258	1.0
JAN 1994					MAY				
05...	1005	3.5	288	0.0	25...	1605	68	190	6.0
FEB					JUL				
23...	1545	3.3	295	0.0	12...	1010	16	246	6.5
					AUG				
					18...	1505	6.7	280	10.5
09063900 MISSOURI CREEK NEAR GOLD PARK, CO (LAT 39 23 25N LONG 106 28 10W)									
OCT 1993					APR 1994				
05...	1005	2.8	32	2.5	28...	1105	6.1	28	0.0
NOV					MAY				
17...	1025	2.1	34	0.0	25...	1005	14	25	2.0
JAN 1994					JUL				
04...	1120	0.81	39	0.0	11...	1630	10	22	12.0
FEB					AUG				
23...	1000	0.74	36	0.0	18...	1025	3.9	29	11.0
09064000 HOMESTAKE CREEK AT GOLD PARK, CO (LAT 39 24 20N LONG 106 25 58W)									
OCT 1993					APR 1994				
05...	1045	12	36	3.5	28...	1240	28	34	1.0
NOV					MAY				
17...	1145	14	35	0.0	25...	1120	46	28	3.5
JAN 1994					JUL				
04...	1235	7.4	37	0.0	11...	1730	38	25	13.0
FEB					AUG				
23...	1230	6.4	36	0.0	18...	1130	13	34	11.0
09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO (LAT 39 28 24N LONG 106 22 02W)									
OCT 1993					APR 1994				
05...	1220	13	39	8.0	28...	1525	59	36	5.5
NOV					MAY				
17...	1315	12	38	0.0	25...	1230	89	31	7.5
JAN 1994					JUL				
04...	1350	9.6	39	0.0	12...	0750	43	31	9.0
FEB					AUG				
23...	1405	7.3	40	0.0	18...	1300	17	40	12.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09064600 EAGLE RIVER NEAR MINTURN, CO (LAT 39 33 14N LONG 106 24 07W)									
OCT 1993					MAY 1994				
06...	0905	37	186	5.0	17...	1710	464	90	3.5
NOV					JUN				
15...	1525	45	190	0.0	08...	0925	374	117	5.5
JAN 1994					JUL				
11...	1520	23	752	2.0	07...	0842	126	120	8.5
MAR					AUG				
02...	1555	24	485	0.5	08...	1227	46	162	13.0
APR									
12...	1536	31	247	6.5					
09065100 CROSS CREEK NEAR MINTURN, CO (LAT 39 34 05N LONG 106 24 45W)									
OCT 1993					MAY 1994				
05...	1510	9.2	56	9.5	17...	1013	180	27	3.0
NOV					JUN				
16...	1355	6.3	60	0.0	08...	0955	235	22	5.0
JAN 1994					JUL				
05...	1240	4.3	66	0.0	07...	--	--	--	--
MAR					07...	1044	52	29	8.5
03...	0920	2.7	76	0.0	AUG				
APR					08...	1334	--	--	--
12...	1338	4.6	76	3.0	08...	1403	18	37	14.0
09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO (LAT 39 37 40N LONG 106 16 24W)									
OCT 1993					APR 1994				
19...	1338	7.9	66	2.0	19...	1150	17	57	1.5
NOV					JUN				
30...	1411	3.7	70	0.5	01...	1500	154	32	7.5
JAN 1994					JUL				
25...	1325	2.7	75	0.0	14...	1040	17	52	8.0
MAR					AUG				
08...	1440	2.9	91	1.5	16...	1422	7.7	63	13.0
09066000 BLACK GORE CREEK NEAR MINTURN, CO (LAT 39 35 47N LONG 106 15 52W)									
OCT 1993					APR 1994				
18...	1314	5.6	284	2.0	19...	1032	8.7	316	2.0
NOV					JUN				
29...	1136	3.3	202	0.0	01...	1151	82	97	7.0
JAN 1994					JUL				
26...	1135	4.4	255	0.0	12...	1049	8.2	159	9.0
MAR					AUG				
08...	1300	3.2	306	1.0	16...	1235	4.1	193	11.0
09066100 BIGHORN CREEK NEAR MINTURN, CO (LAT 39 38 24N LONG 106 17 34W)									
OCT 1993					APR 1994				
19...	1140	2.6	66	1.0	19...	1400	7.1	59	2.5
NOV					JUN				
30...	1303	1.3	69	1.0	02...	1040	55	33	3.5
JAN 1994					JUL				
25...	1200	0.82	76	0.0	14...	1222	5.6	51	9.0
MAR					AUG				
07...	1120	0.72	78	0.5	17...	0855	3.3	62	9.0
09066150 PITKIN CREEK NEAR MINTURN, CO (LAT 39 38 37N LONG 106 18 07W)									
OCT 1993					APR 1994				
18...	1504	4.6	70	2.5	19...	1515	7.2	81	4.0
NOV					JUN				
30...	1132	2.0	86	0.5	02...	1200	43	39	5.0
JAN 1994					JUL				
25...	1038	1.3	94	0.0	14...	1340	7.3	66	9.0
MAR					AUG				
07...	1235	1.5	97	1.5	17...	0955	3.9	82	7.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09066200 BOOTH CREEK NEAR MINTURN, CO (LAT 39 39 02N LONG 106 19 16W)									
OCT 1993					APR 1994				
19...	1539	3.8	92	3.0	20...	0917	11	91	2.0
DEC					JUN				
01...	1140	1.4	120	1.0	01...	1625	92	37	6.5
JAN 1994					JUL				
27...	0950	0.94	139	0.0	15...	0919	3.5	96	7.5
MAR					AUG				
07...	1331	1.0	143	3.0	17...	1133	1.5	131	11.5
09066300 MIDDLE CREEK NEAR MINTURN, CO (LAT 39 38 50N LONG 106 22 48W)									
OCT 1993					APR 1994				
20...	1345	1.1	220	3.5	20...	1050	2.3	215	2.5
NOV					JUN				
30...	0950	0.63	228	0.0	02...	1410	32	100	6.5
JAN 1994					JUL				
25...	1431	0.40	238	0.5	12...	1301	2.5	182	9.5
MAR					AUG				
09...	0920	0.31	247	0.0	17...	1250	0.81	228	12.5
09066310 GORE CREEK, LOWER STATION, AT VAIL, CO (LAT 39 38 28N LONG 106 23 37W)									
OCT 1993					APR 1994				
20...	1100	32	254	3.5	20...	1315	66	202	6.5
DEC					JUN				
01...	1022	17	318	1.0	03...	1130	572	90	6.0
JAN 1994					JUL				
27...	1135	13	367	0.0	15...	1100	53	196	9.0
MAR					AUG				
09...	1050	11	397	1.0	17...	1430	21	277	17.5
09066400 RED SANDSTONE CREEK NEAR MINTURN, CO (LAT 39 40 58N LONG 106 24 03W)									
OCT 1993					MAY 1994				
06...	1625	1.6	100	6.0	26...	1455	42	53	5.0
NOV					JUL				
19...	1530	2.9	93	0.0	14...	1325	3.1	96	9.5
JAN 1994					AUG				
06...	1140	1.3	95	0.0	25...	1350	1.7	110	9.0
FEB									
24...	1220	1.3	97	0.5					
09066980 LAKE CREEK NEAR EDWARDS, CO (LAT 39 38 51N LONG 106 36 31W)									
OCT 1993					MAY 1994				
04...	1600	25	433	10.5	18...	0930	214	165	4.0
NOV					24...	1640	136	215	8.5
16...	1615	26	410	1.0	JUL				
JAN 1994					13...	1440	40	356	14.5
03...	1620	14	462	1.5	AUG				
FEB					19...	0850	19	457	12.5
22...	1500	10	489	2.0					
APR									
15...	0745	13	480	3.5					
09067000 BEAVER CREEK AT AVON, CO (LAT 39 37 47N LONG 106 31 20W)									
OCT 1993					MAY 1994				
04...	1630	3.7	301	10.0	17...	1456	38	156	8.5
NOV					JUN				
16...	1515	5.7	334	0.0	07...	1632	52	79	9.5
JAN 1994					JUL				
05...	1520	3.3	351	0.5	06...	1517	13	133	13.0
MAR					AUG				
03...	1110	2.2	387	0.5	08...	1501	4.8	239	14.5
APR									
13...	0830	2.8	451	1.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09070000 EAGLE RIVER BELOW GYPSUM, CO (LAT 39 38 58N LONG 106 57 11W)									
OCT 1993					MAY 1994				
04...	1435	224	930	13.5	16...	1552	1370	232	10.5
NOV					JUN				
02...	1600	282	794	4.5	06...	1605	1980	186	11.5
JAN 1994					JUL				
11...	1305	180	914	0.5	05...	1534	542	466	18.5
MAR					AUG				
01...	1502	165	989	5.0	10...	0936	185	867	15.0
APR									
11...	1353	200	920	7.5					
09070500 COLORADO RIVER NEAR DOTSERO, CO (LAT 39 38 40N LONG 107 04 40W)									
OCT 1993					JUN 1994				
04...	1105	1110	567	12.0	06...	1210	3820	216	12.0
NOV					JUL				
15...	1125	1130	502	4.0	05...	1200	1310	456	17.5
MAR 1994					05...	1220	--	--	--
01...	1140	1100	458	1.5	AUG				
APR					10...	1020	1390	482	16.0
13...	1030	978	530	6.5					
MAY									
16...	1200	3890	243	10.0					
09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO (LAT 39 43 04N LONG 107 18 51W)									
OCT 1993					JUN 1994				
07...	1220	2.2	248	6.5	27...	1900	4.9	251	15.5
MAY 1994					AUG				
23...	1105	100	199	1.0	16...	1205	1.4	260	16.5
09073300 ROARING FORK RIVER AB DIFFICULT C NR ASPEN, CO (LAT 39 08 28N LONG 106 46 25W)									
OCT 1993					MAY 1994				
06...	0745	22	72	6.0	17...	1420	121	42	7.0
NOV					JUN				
18...	0940	14	--	1.0	28...	1545	72	44	12.5
JAN 1994					AUG				
12...	0915	16	82	0.0	17...	1040	39	73	12.0
MAR					SEP				
02...	1235	11	83	1.5	22...	1115	34	81	6.5
31...	1115	18	85	2.5					
09073400 ROARING FORK RIVER NEAR ASPEN, CO (LAT 39 10 48N LONG 106 48 05W)									
OCT 1993					APR 1994				
05...	1410	39	81	9.0	26...	1315	78	69	4.5
NOV					MAY				
18...	1105	39	80	0.5	17...	1650	227	46	9.5
JAN 1994					JUN				
12...	1200	34	95	0.0	28...	1640	112	49	13.5
MAR					AUG				
02...	1400	24	93	4.0	17...	1240	51	79	14.0
09074000 HUNTER CREEK NEAR ASPEN, CO (LAT 39 12 21N LONG 106 47 49W)									
OCT 1993					APR 1994				
05...	1200	8.7	70	7.5	26...	1520	58	40	4.0
NOV					MAY				
18...	1255	9.8	62	0.0	17...	1210	112	32	5.5
JAN 1994					JUN				
12...	1300	5.6	74	0.0	29...	0750	48	40	9.0
MAR					AUG				
02...	1555	5.6	74	0.5	17...	1310	12	65	17.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09074800 CASTLE CREEK ABOVE ASPEN, CO (LAT 39 05 15N LONG 106 48 42W)									
OCT 1993					MAY 1994				
05...	0755	23	356	3.5	16...	1715	73	305	8.5
NOV					JUN				
18...	1440	16	375	2.0	29...	0925	103	215	5.5
JAN 1994					AUG				
11...	1500	20	414	0.0	17...	1445	31	317	13.5
MAR									
03...	1010	9.3	429	1.0					
31...	0900	7.2	438	0.5					
09075700 MAROON CREEK ABOVE ASPEN, CO (LAT 39 07 25N LONG 106 54 17W)									
OCT 1993					MAY 1994				
05...	0950	53	539	5.5	17...	0850	84	468	4.0
JAN 1994					JUN				
11...	1300	24	700	0.0	29...	1125	205	258	8.0
MAR					AUG				
30...	1230	17	817	4.0	17...	1610	52	465	11.0
09080400 FRYINGPAN RIVER NEAR RUEDI, CO (LAT 39 21 56N LONG 106 49 30W)									
OCT 1993					APR 1994				
04...	1315	167	164	9.5	12...	1115	184	273	3.5
NOV					MAY				
18...	1030	62	203	7.0	18...	0905	218	252	4.0
JAN 1994					JUN				
07...	1040	125	231	3.5	29...	1405	103	231	7.0
FEB					AUG				
25...	1000	181	253	4.0	17...	1825	206	220	6.5
09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO (LAT 39 13 56N LONG 107 13 36W)									
OCT 1993					APR 1994				
06...	1115	111	529	10.0	27...	1505	323	358	4.5
NOV					MAY				
18...	1300	85	642	3.0	18...	1230	899	215	7.0
JAN 1994					JUN				
07...	1320	67	734	2.5	29...	1615	494	226	15.5
FEB					AUG				
25...	1255	49	808	7.5	19...	1335	120	446	14.0
09086000 WEST ELK CREEK NEAR NEW CASTLE, CO (LAT 39 39 59N LONG 107 37 35W)									
OCT 1993					MAY 1994				
07...	0910	2.1	747	10.5	12...	0913	1.7	708	8.0
NOV					JUN				
17...	0945	1.5	758	0.5	09...	1509	0.94	813	14.0
JAN 1994					28...	1051	0.95	820	14.5
13...	1015	0.82	750	0.0	AUG				
FEB					11...	0905	0.77	785	16.0
25...	1100	0.94	847	2.0					
APR									
07...	1046	0.93	865	2.5					
09086470 MAIN ELK CREEK NEAR NEW CASTLE, CO (LAT 39 40 41N LONG 107 34 21W)									
OCT 1993					MAY 1994				
07...	1030	18	346	9.0	12...	1015	333	314	5.5
NOV					JUN				
17...	1110	11	366	2.5	09...	1355	108	276	9.5
JAN 1994					28...	1223	45	315	11.0
13...	1155	10	355	2.0	AUG				
FEB					11...	1019	19	351	12.0
25...	1425	10	378	4.5					
APR									
07...	1234	11	369	2.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09086970 EAST ELK CREEK AB BOILER CREEK NR NEW CASTLE, CO (LAT 39 40 05N LONG 107 31 28W)									
OCT 1993					MAY 1994				
07...	1235	11	263	8.0	12...	1320	87	200	6.0
NOV					JUN				
17...	1300	7.8	266	2.0	09...	1210	91	201	6.5
JAN 1994					28...	1410	28	241	11.5
14...	1035	4.6	261	1.0	AUG				
MAR					11...	1205	9.9	273	12.5
04...	1145	4.6	271	2.5					
APR									
07...	1425	7.0	274	1.0					
09089500 WEST DIVIDE CREEK NEAR RAVEN, CO (LAT 39 19 52N LONG 107 34 46W)									
OCT 1993					MAY 1994				
19...	1320	6.7	405	4.5	13...	1205	172	180	6.0
NOV					24...	1205	142	180	9.0
19...	1157	3.8	470	0.0	JUN				
JAN 1994					30...	1405	12	250	20.0
18...	1245	3.4	491	0.0	AUG				
MAR					01...	1110	0.53	465	18.5
02...	1055	4.1	473	0.0	11...	--	--	--	--
APR									
01...	1041	4.2	412	13.5					
09093700 COLORADO RIVER NEAR DE BEQUE, CO (LAT 39 21 45N LONG 108 09 07W)									
OCT 1993					APR 1994				
20...	1335	2560	923	11.0	21...	1100	3310	709	13.5
DEC					MAY				
02...	1425	2110	960	3.0	26...	0925	6790	415	11.5
MAR 1994					AUG				
09...	1230	2030	959	6.0	04...	1100	2010	935	21.0
09107000 TAYLOR RIVER AT TAYLOR PARK, CO (LAT 38 50 59N LONG 106 34 21W)									
OCT 1993					MAY 1994				
05...	1040	58	119	5.0	24...	1305	327	71	4.5
NOV					JUN				
16...	1050	31	121	0.0	23...	1530	262	86	13.5
DEC					JUL				
21...	1100	45	120	0.0	28...	1340	60	118	15.0
FEB 1994					SEP				
24...	1105	36	122	0.0	13...	1040	53	115	10.5
APR									
19...	1020	74	98	2.5					
09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO (LAT 38 49 06N LONG 106 36 31W)									
OCT 1993					MAY 1994				
05...	1245	284	93	11.0	24...	1445	197	94	4.0
NOV					JUN				
16...	1235	102	98	4.5	23...	1325	428	91	7.0
DEC					JUL				
21...	1310	108	100	3.0	28...	1210	299	82	8.0
MAR 1994					SEP				
16...	1115	96	105	3.5	13...	1230	228	88	11.5
APR									
19...	1210	95	112	4.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09111500 SLATE RIVER NEAR CRESTED BUTTE, CO (LAT 38 51 56N LONG 106 58 02W)									
OCT 1993					APR 1994				
14...	1115	54	143	5.0	20...	1000	155	138	1.0
NOV					MAY				
16...	1515	48	160	0.5	25...	1115	633	80	7.0
DEC					JUN				
20...	1440	23	204	0.5	22...	0945	343	81	7.0
JAN 1994					JUL				
18...	1445	16	158	0.0	26...	1130	41	140	14.0
FEB					SEP				
23...	1050	10	236	0.0	15...	1035	21	150	9.5
MAR									
15...	0930	34	268	1.0					
09113100 CASTLE CREEK ABOVE MOUTH NEAR BALDWIN, CO (LAT 38 46 09N LONG 107 05 02W)									
OCT 1993					MAY 1994				
06...	1000	9.5	86	5.0	26...	1240	77	60	9.0
NOV					JUN				
18...	1030	7.3	94	0.0	21...	1215	71	45	10.0
JAN 1994					JUL				
20...	1010	5.9	97	0.0	27...	1230	15	66	14.5
APR					SEP				
20...	1430	18	94	2.0	14...	1520	10	82	11.5
09114500 GUNNISON RIVER NEAR GUNNISON, CO (LAT 38 32 31N LONG 106 56 57W)									
OCT 1993					MAY 1994				
07...	1000	475	211	9.5	26...	1605	1720	176	12.0
NOV					JUN				
18...	1355	314	235	0.5	21...	1500	1580	202	14.0
JAN 1994					JUL				
21...	1055	197	220	0.0	27...	0935	557	217	11.5
MAR					SEP				
17...	1025	276	229	3.5	16...	1045	376	217	10.0
APR									
20...	1400	606	170	8.5					
09115500 TOMICHI CREEK AT SARGENT'S, CO (LAT 38 23 42N LONG 106 25 19W)									
OCT 1993					MAY 1994				
04...	1630	31	179	13.0	23...	1640	208	104	10.5
NOV					JUN				
15...	1600	43	171	0.0	21...	0920	106	141	12.0
JAN 1994					JUL				
20...	1605	26	155	0.0	25...	1340	29	174	20.0
MAR					SEP				
16...	1625	38	170	0.5	14...	1005	33	174	10.5
APR									
19...	1300	55	144	5.5					
09118450 COCHETOPA CREEK BELOW ROCK CREEK NR PARLIN, CO (LAT 38 20 08N LONG 106 46 18W)									
OCT 1993					MAY 1994				
04...	1405	24	227	10.0	23...	1415	24	276	11.5
NOV					JUN				
15...	1400	2.4	241	0.0	20...	1450	33	321	18.5
JAN 1994					JUL				
20...	1400	19	239	0.0	25...	1600	26	311	20.5
MAR					SEP				
16...	1440	57	246	0.5	14...	1240	33	230	10.5
APR									
19...	1430	39	190	8.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09119000 TOMICHI CREEK AT GUNNISON, CO (LAT 38 31 18N LONG 106 56 25W)									
OCT 1993					MAY 1994				
06...	1555	77	287	12.5	27...	0905	286	290	11.5
NOV					JUN				
18...	1525	97	286	0.0	24...	0855	136	369	14.5
DEC					JUL				
21...	1540	66	272	0.0	27...	1455	79	347	22.0
MAR 1994					SEP				
14...	1540	136	267	1.5	16...	0855	74	333	10.0
APR									
19...	0945	160	253	7.0					
09124500 LAKE FORK AT GATEVIEW, CO (LAT 38 17 56N LONG 107 13 46W)									
OCT 1993					MAY 1994				
07...	1245	82	170	9.5	27...	1210	599	117	10.5
NOV					JUN				
19...	1020	56	189	0.0	24...	1225	663	92	13.5
FEB 1994					JUL				
22...	1435	47	182	0.0	29...	0935	108	148	15.0
APR					SEP				
18...	1650	85	171	12.0	12...	1420	102	167	17.5
09126000 CIMARRON RIVER NEAR CIMARRON, CO (LAT 38 15 45N LONG 107 32 39W)									
OCT 1993					MAY 1994				
14...	1500	31	130	10.0	27...	1100	368	104	6.5
NOV					JUN				
17...	1035	18	150	0.0	03...	1310	536	93	10.0
JAN 1994					17...	1140	277	85	10.5
04...	1105	13	147	1.0	JUL				
MAR					12...	1515	150	87	8.5
08...	1430	12	136	3.5	SEP				
APR					13...	1430	56	148	14.5
18...	1400	19	133	7.0					
09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO (LAT 38 31 45N LONG 107 38 54W)									
OCT 1993					APR 1994				
14...	1300	644	182	12.0	26...	1120	512	221	5.5
NOV					MAY				
17...	1500	--	194	7.5	24...	1450	3390	183	8.0
JAN 1994					JUL				
04...	1525	1560	185	5.5	12...	1210	903	203	11.0
FEB					AUG				
24...	1500	545	207	3.0	01...	1400	306	205	11.0
MAR					SEP				
28...	1410	601	236	5.0	13...	0956	796	196	11.0
09128500 SMITH FORK NEAR CRAWFORD, CO (LAT 38 43 40N LONG 107 30 22W)									
OCT 1993					MAY 1994				
07...	1250	13	168	10.5	13...	1130	277	88	6.0
NOV					JUN				
29...	1440	9.4	--	0.0	08...	1100	91	96	8.0
JAN 1994					JUL				
07...	1025	6.7	198	0.0	20...	0945	7.7	160	14.0
MAR					21...	1345	7.0	185	21.5
04...	1225	15	187	2.0	SEP				
APR					16...	0835	5.7	168	8.5
22...	1130	187	105	6.0	22...	1330	7.0	156	8.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO (LAT 38 55 33N LONG 107 26 01W)									
OCT 1993					MAY 1994				
07...	0815	253	190	11.5	12...	1515	2250	124	9.0
NOV					JUN				
23...	1250	136	174	2.5	07...	1240	1230	84	11.0
JAN 1994					JUL				
11...	1345	53	257	0.0	13...	1350	248	141	15.5
MAR					SEP				
02...	1250	96	223	0.0	15...	1310	123	--	15.5
24...	1130	238	185	4.0					
APR									
28...	1225	859	155	5.0					
09134000 MINNESOTA CREEK NEAR PAONIA, CO (LAT 38 52 13N LONG 107 30 06W)									
OCT 1993					JUN 1994				
07...	1025	7.6	523	10.5	07...	1435	70	192	13.0
NOV					JUL				
23...	1440	8.2	769	1.0	13...	1700	21	208	15.0
JAN 1994					19...	0930	19	199	14.5
13...	1225	2.7	622	0.5	19...	1650	22	213	15.0
MAR					SEP				
02...	1425	3.9	891	3.0	15...	1535	4.8	389	15.0
APR					29...	1520	3.2	374	10.5
28...	1420	19	519	6.0					
MAY									
12...	1130	56	283	7.5					
09143000 SURFACE CREEK NEAR CEDAREGE, CO (LAT 38 59 05N LONG 107 51 13W)									
OCT 1993					MAY 1994				
08...	0845	35	82	6.0	13...	1425	104	98	4.0
NOV					JUN				
23...	1145	6.3	126	0.0	08...	1530	106	71	13.0
JAN 1994					JUL				
12...	1255	3.7	139	1.5	14...	1655	64	67	16.0
MAR					SEP				
03...	1240	5.3	133	0.5	16...	1230	27	78	9.5
29...	1415	6.8	131	2.0					
APR									
29...	1440	23	121	2.5					
09143500 SURFACE CREEK AT CEDAREGE, CO (LAT 38 54 06N LONG 107 55 14W)									
OCT 1993					APR 1994				
08...	1025	32	93	8.0	26...	1355	42	131	3.5
NOV					JUN				
19...	1130	3.5	213	1.0	09...	1030	61	81	8.5
JAN 1994					JUL				
12...	1450	4.1	180	0.0	15...	1315	32	80	15.5
MAR					SEP				
03...	1430	8.7	156	4.5	16...	1355	29	85	12.0
24...	1415	10	180	6.0					
09144250 GUNNISON RIVER AT DELTA, CO (LAT 38 45 01N LONG 108 04 06W)									
OCT 1993					APR 1994				
12...	1300	1230	924	13.0	29...	1230	1420	644	8.5
NOV					MAY				
23...	1340	1660	605	7.0	24...	1040	5110	394	10.5
JAN 1994					JUL				
13...	1200	1690	419	1.5	18...	1540	903	708	18.5
14...	0930	1500	439	0.5	AUG				
FEB					01...	1650	375	1190	22.0
03...	1445	1020	595	0.0	SEP				
09...	1425	717	782	4.5	12...	1415	887	1130	9.5
MAR									
01...	1235	812	1030	5.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO (LAT 38 11 02N LONG 107 44 43W)									
OCT 1993					APR 1994				
15...	0950	92	727	8.0	21...	1200	182	457	8.5
NOV					MAY				
16...	1200	67	918	4.5	26...	1340	328	321	12.0
JAN 1994					JUN				
05...	1240	50	859	5.5	06...	1500	569	316	13.0
FEB					JUL				
23...	1215	42	899	4.5	14...	1120	152	708	13.0
MAR					SEP				
22...	1415	65	824	11.5	14...	1130	178	520	11.0
09147000 DALLAS CREEK NEAR RIDGWAY, CO (LAT 38 10 40N LONG 107 45 28W)									
OCT 1993					APR 1994				
15...	0835	18	641	6.0	21...	1000	54	418	6.0
NOV					MAY				
16...	1015	16	758	0.0	26...	1130	5.7	725	13.0
JAN 1994					JUN				
05...	1110	18	690	0.0	06...	1248	33	509	14.0
FEB					JUL				
23...	1015	12	632	3.0	14...	0948	30	931	12.0
MAR					SEP				
22...	1440	21	680	9.5	14...	1000	48	457	9.0
09147025 UNCOMPAHGRE RIVER BELOW RIDGWAY RESERVOIR, CO (LAT 38 14 17N LONG 107 45 31W)									
OCT 1993					APR 1994				
15...	1315	80	510	13.0	21...	1245	271	651	5.0
NOV					JUN				
18...	1400	76	590	9.0	16...	1140	371	582	7.5
JAN 1994					JUL				
06...	1155	74	625	4.0	22...	0855	285	388	10.5
FEB					SEP				
23...	1545	75	675	3.0	14...	1230	116	466	13.0
09147500 UNCOMPAHGRE RIVER AT COLONA, CO (LAT 38 19 53N LONG 107 46 44W)									
OCT 1993					APR 1994				
14...	1720	106	572	14.0	21...	1610	369	541	10.5
NOV					MAY				
16...	1400	106	656	9.0	26...	1550	538	527	10.0
JAN 1994					JUL				
05...	1435	88	664	6.0	11...	1530	240	481	13.0
FEB					SEP				
24...	1000	81	692	0.0	14...	1630	100	518	16.5
MAR									
22...	1200	127	649	7.5					
09153290 REED WASH NEAR MACK, CO (LAT 39 12 41N LONG 108 48 11W)									
OCT 1993					MAY 1994				
21...	1500	91	1500	11.0	05...	1200	44	1630	15.5
DEC					JUL				
02...	0830	9.0	4510	2.0	08...	1000	78	1690	16.5
JAN 1994					AUG				
14...	1140	4.1	4840	2.5	17...	1335	57	2180	21.5
MAR									
04...	1200	3.6	4730	8.0					
09165000 DOLORES RIVER BELOW RICO, CO (LAT 37 38 20N LONG 108 03 35W)									
OCT 1993					JUN 1994				
06...	1015	26	459	7.0	01...	0950	827	113	3.0
06...	1045	26	459	7.0	08...	1540	502	129	11.0
NOV					21...	1015	279	162	8.0
17...	1100	14	420	0.0	JUL				
APR 1994					28...	1100	39	379	13.0
27...	1450	120	273	1.5	AUG				
MAY					26...	1310	27	392	16.5
11...	1345	201	224	7.5					
23...	2020	615	127	5.5					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09166500 DOLORES RIVER AT DOLORES, CO (LAT 37 28 21N LONG 108 29 49W)									
OCT 1993					JUN 1994				
06...	1215	60	419	13.0	01...	0740	2590	123	5.5
NOV					24...	1140	500	201	15.5
17...	1245	37	396	0.0	JUL				
MAR 1994					28...	1200	139	314	19.5
22...	1145	203	375	4.5	SEP				
MAY					20...	1400	142	311	17.0
09...	1410	1420	185	6.0					
24...	0815	1970	137	5.5					
09166950 LOST CANYON CREEK NEAR DOLORES, CO. (LAT 37 26 45N LONG 108 28 03W)									
FEB 1994					JUN 1994				
23...	1120	1.0	248	0.0	01...	1145	38	91	11.5
MAR					24...	1300	0.18	788	24.5
22...	1015	40	134	1.5	JUL				
MAY					28...	1500	0.50	415	25.5
09...	1410	196	55	6.0					
24...	0950	55	72	9.0					
09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO (LAT 38 02 05N LONG 108 07 15W)									
OCT 1993					MAY 1994				
06...	0845	80	431	7.5	11...	1130	308	343	8.0
NOV					23...	1420	574	241	8.0
17...	0855	53	476	0.0	JUN				
MAR 1994					08...	1110	868	190	7.0
10...	1020	62	429	1.0	23...	1630	649	202	15.0
APR					JUL				
27...	1240	226	358	5.0	26...	1455	149	336	18.0
					AUG				
					26...	1000	85	385	13.5
09177000 SAN MIGUEL RIVER AT URAVAN, CO (LAT 38 21 26N LONG 108 42 44W)									
OCT 1993					MAY 1994				
05...	1530	46	1690	16.5	11...	0930	757	390	9.5
NOV					23...	1200	871	358	14.0
16...	1630	90	918	5.5	JUN				
MAR 1994					23...	1400	773	315	19.0
10...	0810	93	1210	2.5	JUL				
APR					27...	1425	59	1120	26.5
27...	1030	748	381	6.0	AUG				
					18...	0815	23	1630	22.0
09237450 YAMPA RIVER ABOVE STAGECOACH RESERVIOR, CO (LAT 40 16 09N LONG 106 52 49W)									
OCT 1993					APR 1994				
04...	1445	34	432	13.5	05...	1010	53	564	2.5
NOV					21...	1220	98	454	10.5
17...	1245	41	460	0.0	JUN				
FEB 1994					07...	1035	40	521	15.0
23...	0945	26	412	0.0	JUL				
MAR					05...	1550	47	528	22.0
11...	0945	41	476	0.0	21...	0825	55	507	12.0
21...	1435	61	598	8.0	AUG				
					03...	1225	49	464	19.0
					30...	1310	44	484	17.5
09237500 YAMPA RIVER BELOW STAGECOACH RESERVOIR, CO (LAT 40 17 15N LONG 106 49 33W)									
OCT 1993					MAY 1994				
04...	1545	80	402	12.5	20...	0850	51	455	7.0
NOV					JUN				
17...	1135	74	442	5.0	07...	0940	42	437	13.5
DEC					JUL				
07...	1345	78	448	3.5	05...	1440	44	436	17.5
FEB 1994					AUG				
11...	1110	72	452	3.5	03...	1130	53	434	18.0
MAR					30...	1125	49	429	19.5
11...	1050	74	451	3.5					
APR									
05...	1120	56	465	3.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09238705 LONG LAKE INLET NEAR BUFFALO PASS, CO (LAT 40 28 25N LONG 106 40 46W)									
OCT 1993					JUL 1994				
04...	0905	0.09	48	1.0	05...	0910	0.50	31	8.5
NOV					19...	1625	0.06	36	16.0
09...	1225	0.09	35	0.0	AUG				
FEB 1994					04...	1155	0.05	44	11.0
17...	0900	0.03	52	0.5	18...	1040	0.04	49	8.5
MAY					SEP				
23...	1350	9.1	18	0.0	06...	0855	0.03	48	4.0
09238710 FISH CREEK TRIBUTARY BELOW LONG LAKE, NEAR BUFFALO PASS, CO (LAT 40 28 36N LONG 106 41 13W)									
OCT 1993					MAY 1994				
04...	0745	0.04	20	5.5	23...	1410	1.1	18	0.0
NOV					JUL				
09...	1255	0.01	23	0.0	05...	0840	0.10	18	15.0
09238750 MIDDLE FORK FISH CREEK NEAR BUFFALO PASS, CO (LAT 40 29 54N LONG 106 41 30W)									
OCT 1993					JUL 1994				
04...	1105	0.32	37	4.5	05...	1115	0.70	26	11.5
NOV					20...	1050	0.21	33	12.0
09...	1145	0.53	28	0.0	AUG				
FEB 1994					04...	0910	0.15	37	10.5
17...	1220	0.35	35	0.0	18...	1255	0.11	38	12.5
MAY					SEP				
23...	1236	19	14	0.5	06...	1035	0.10	40	7.5
09238770 GRANITE CREEK NEAR BUFFALO PASS, CO (LAT 40 29 35N LONG 106 41 31W)									
OCT 1993					JUL 1994				
04...	1030	0.68	42	5.5	05...	1045	3.3	26	11.0
NOV					20...	1000	1.2	35	12.0
09...	1205	1.1	20	0.0	AUG				
FEB 1994					04...	0940	0.66	41	11.5
17...	1210	0.60	43	0.0	18...	1230	0.60	43	12.5
MAY					SEP				
23...	1255	30	14	1.0	06...	1005	0.50	44	8.5
09238800 MIDDLE FORK FISH CREEK TRIBUTARY BELOW FISH CREEK RESERVOIR, CO (LAT 40 29 50N LONG 106 41 54W)									
MAY 1994					JUL 1994				
23...	1153	128	13	0.0	05...	1153	0.27	16	17.5
09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO (LAT 40 28 30N LONG 106 47 11W)									
OCT 1993					MAY 1994				
04...	1315	4.6	27	8.0	20...	1035	246	18	4.0
DEC					JUL				
07...	1145	10	28	0.5	05...	1305	14	25	14.5
FEB 1994					AUG				
16...	1355	5.7	32	0.0	03...	1005	1.9	36	15.5
APR					30...	0845	0.50	40	12.0
13...	1045	15	38	1.5					
09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO (LAT 40 29 01N LONG 106 49 54W)									
OCT 1993					MAY 1994				
05...	1050	106	306	14.0	18...	1040	1980	57	8.0
NOV					JUN				
17...	1025	158	289	0.0	07...	0730	869	50	10.0
DEC					JUL				
07...	1050	102	280	0.0	06...	0745	101	170	16.0
JAN 1994					AUG				
24...	0830	99	306	0.0	03...	0820	73	207	17.5
FEB					30...	0740	65	270	14.5
16...	1235	95	318	0.5					
APR									
05...	1320	204	272	5.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09243700 MIDDLE CREEK NEAR OAK CREEK, CO (LAT 40 23 08N LONG 106 59 33W)									
NOV 1993					MAY 1994				
18...	1055	0.49	1010	0.0	18...	1340	1.9	631	20.5
DEC					JUN				
08...	0835	0.52	897	0.0	09...	0800	1.2	705	8.0
FEB 1994					JUL				
14...	1040	0.72	892	0.0	06...	1150	0.54	625	21.0
MAR					AUG				
08...	1210	1.7	820	0.0	05...	0910	2.1	464	17.0
APR									
06...	1105	1.8	781	5.0					
09243800 FOIDEL CREEK NEAR OAK CREEK, CO (LAT 40 20 45N LONG 107 05 04W)									
OCT 1993					APR 1994				
05...	0900	0.57	3270	5.5	06...	0950	1.4	2340	4.0
NOV					JUN				
18...	0940	0.82	3210	0.0	09...	0900	1.1	3010	12.5
DEC					JUL				
08...	1000	1.0	3230	0.0	06...	1315	0.46	3080	24.0
FEB 1994					AUG				
14...	1320	0.71	3260	0.0	05...	1005	0.28	3270	17.0
MAR					30...	1435	0.26	3270	21.0
08...	0910	1.1	3010	0.0					
09253000 LITTLE SNAKE RIVER NEAR SLATER, CO (LAT 40 59 58N LONG 107 08 34W)									
OCT 1993					APR 1994				
14...	1240	87	139	5.0	29...	1120	353	95	5.0
DEC					JUN				
09...	1100	41	173	0.0	30...	1159	63	135	14.0
FEB 1994					AUG				
23...	1410	28	182	0.0	17...	1155	16	186	21.0
MAR					SEP				
31...	1242	80	211	7.5	28...	1123	14	213	9.5
09255000 SLATER FORK NEAR SLATER, CO (LAT 40 58 54N LONG 107 22 58W)									
OCT 1993					MAY 1994				
14...	1045	32	214	6.5	20...	1401	272	78	10.5
DEC					JUN				
09...	1310	22	237	0.0	30...	1456	5.6	294	23.5
FEB 1994					AUG				
23...	1142	22	243	0.0	17...	1044	0.93	300	20.0
MAR					SEP				
31...	1450	9.9	265	8.5	28...	0955	7.1	257	10.5
APR									
29...	0910	110	160	4.0					
09260000 LITTLE SNAKE RIVER NEAR LILY, CO (LAT 40 32 50N LONG 108 25 25W)									
OCT 1993					JUN 1994				
12...	1041	248	717	8.5	22...	1310	105	626	27.5
NOV					28...	1330	52	759	26.5
01...	1025	157	557	3.0	JUL				
FEB 1994					13...	1356	1.6	810	29.0
22...	1244	85	540	0.0	22...	1233	1.0	918	30.0
MAR					AUG				
28...	1242	387	606	5.0	03...	1503	121	2240	27.5
APR					SEP				
26...	1057	2070	177	9.0	19...	1300	25	1190	19.5
MAY									
10...	1425	1760	163	13.0					
21...	1205	1790	146	17.0					
24...	1340	1270	166	21.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09260050 YAMPA RIVER AT DEERLODGE PARK, CO (LAT 40 27 02N LONG 108 31 20W)									
OCT 1993					JUL 1994				
26...	1041	688	465	5.5	13...	1140	186	459	22.0
FEB 1994					22...	1000	114	533	20.5
25...	1246	460	597	1.0	28...	1100	111	--	23.0
MAR					AUG				
28...	0940	1150	645	4.0	03...	1301	74	604	27.5
MAY					SEP				
02...	1315	2770	284	8.5	12...	1200	46	879	18.5
10...	1240	5500	185	11.5	19...	1140	83	962	18.0
24...	1038	5650	122	15.0					
JUN									
28...	0930	693	273	23.0					
09303000 NORTH FORK WHITE RIVER AT BUFORD, CO (LAT 39 59 15N LONG 107 36 50W)									
OCT 1993					MAY 1994				
06...	1415	192	321	9.0	19...	1525	506	193	11.5
NOV					JUN				
16...	1315	171	338	0.5	08...	1510	359	238	14.5
DEC					JUL				
09...	1135	174	329	1.0	01...	1045	179	326	13.5
FEB 1994					AUG				
15...	1100	153	351	0.0	01...	1425	156	345	18.0
MAR					SEP				
09...	1225	134	370	2.5	02...	1345	149	360	15.0
APR									
12...	1145	140	366	4.5					
09303300 SOUTH FORK WHITE RIVER AT BUDGES RESORT, CO (LAT 39 50 36N LONG 107 20 03W)									
OCT 1993					JUN 1994				
07...	1100	60	149	5.0	28...	0915	62	156	7.5
MAY 1994					AUG				
23...	1215	249	138	5.5	16...	0945	42	155	7.0
09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO (LAT 39 51 51N LONG 107 32 00W)									
OCT 1993					APR 1994				
06...	1220	77	205	7.5	19...	1200	100	194	7.5
NOV					MAY				
16...	1040	57	208	0.5	19...	1300	575	188	7.5
DEC					JUL				
10...	1140	77	197	1.0	01...	0745	145	211	9.5
FEB 1994					AUG				
07...	1055	72	191	0.5	01...	1235	81	206	15.0
MAR					SEP				
10...	1020	69	197	0.0	02...	1030	92	199	10.0
09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO (LAT 39 58 28N LONG 107 37 29W)									
OCT 1993					MAY 1994				
06...	1330	104	248	10.0	19...	1435	747	213	9.5
NOV					25...	0735	652	213	5.0
16...	1200	63	321	0.0	JUN				
DEC					08...	1350	444	214	12.0
09...	1045	83	268	0.5	JUL				
FEB 1994					01...	0940	140	306	13.0
15...	1010	83	285	0.0	AUG				
MAR					01...	1340	99	302	19.5
09...	1110	40	307	0.5	SEP				
APR					02...	1210	110	311	15.0
12...	1035	90	281	4.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO (LAT 40 00 18N LONG 107 49 29W)									
OCT 1993					MAY 1994				
05...	1604	237	400	11.5	22...	1520	1070	253	12.5
NOV					JUN				
22...	1207	367	378	1.5	15...	1116	234	376	13.5
FEB 1994					JUL				
14...	1445	269	417	1.0	21...	0925	122	456	14.0
MAR					AUG				
21...	1250	298	412	6.5	04...	1415	33	478	22.5
APR					SEP				
18...	1047	461	344	7.5	22...	1316	96	466	13.5
09304500 WHITE RIVER NEAR MEEKER, CO (LAT 40 02 01N LONG 107 51 42W)									
OCT 1993					APR 1994				
29...	1425	423	466	3.5	18...	0820	488	379	7.5
NOV					MAY				
22...	1236	404	449	2.5	25...	1312	986	284	13.0
DEC					JUL				
30...	0945	283	494	0.0	29...	1720	264	460	21.5
FEB 1994					AUG				
14...	1325	286	490	1.0	29...	1421	137	639	19.5
MAR					SEP				
14...	1026	341	499	5.5	30...	1240	229	589	11.5
09304800 WHITE RIVER BELOW MEEKER, CO (LAT 40 00 48N LONG 108 05 33W)									
OCT 1993					MAY 1994				
04...	1610	378	574	13.5	20...	1110	1170	295	11.5
NOV					26...	1100	996	352	12.0
18...	1500	400	502	1.0	JUN				
19...	1115	398	565	2.0	08...	1200	799	460	14.0
JAN 1994					JUL				
14...	1135	359	490	0.0	06...	1130	264	705	17.5
FEB					AUG				
24...	1545	--	615	0.0	09...	1349	<189	795	19.5
MAR									
01...	1645	396	609	6.0					
30...	1645	327	525	8.5					
09339900 EF SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRGS, CO (LAT 37 23 23N LONG 106 50 26W)									
OCT 1993					JUN 1994				
14...	1235	35	137	7.5	02...	1905	561	76	11.5
APR 1994					10...	1050	371	78	7.5
10...	1155	40	127	3.0	JUL				
MAY					13...	1205	42	120	15.5
09...	1130	285	97	6.5	SEP				
20...	1730	538	82	9.0	28...	1450	25	146	16.0
09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO (LAT 37 15 58N LONG 107 00 37W)									
OCT 1993					MAY 1994				
14...	1030	155	134	7.5	21...	1045	1880	65	4.0
DEC					JUN				
15...	1045	51	170	0.5	03...	0755	2180	54	4.5
MAR 1994					JUL				
02...	1025	66	178	0.5	13...	1005	125	152	14.5
APR					SEP				
11...	1440	178	165	7.0	28...	1025	101	148	9.0
22...	1030	1190	87	4.5					
09346000 NAVAJO RIVER AT EDITH, CO (LAT 37 00 10N LONG 106 54 25W)									
OCT 1993					JUN 1994				
14...	1500	67	215	10.0	02...	1405	168	117	13.0
APR 1994					10...	0755	490	95	5.0
11...	1140	82	351	3.5	JUL				
MAY					13...	1345	87	210	19.5
09...	1350	138	189	8.0	SEP				
					28...	1230	46	259	12.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
09346400 SAN JUAN RIVER NEAR CARRACAS, CO (LAT 37 00 49N LONG 107 18 42W)									
OCT 1993					JUN 1994				
22...	1040	272	264	7.5	03...	1340	2960	83	10.5
MAR 1994					AUG				
16...	1320	1060	416	5.0	03...	0940	212	254	20.0
APR					SEP				
13...	1430	804	421	10.5	30...	--	--	--	--
MAY					30...	1015	176	273	14.0
23...	1020	2670	93	8.5					
09349800 PIEDRA RIVER NEAR ARBOLES, CO (LAT 37 05 18N LONG 107 23 50W)									
OCT 1993					JUN 1994				
22...	1225	137	346	8.5	03...	1035	1610	102	9.5
MAR 1994					AUG				
02...	1415	113	441	8.0	03...	1215	101	367	21.5
APR					SEP				
13...	1145	629	272	7.5	30...	1125	103	319	14.0
MAY									
23...	1250	1400	119	11.0					
09354500 LOS PINOS RIVER AT LA BOCA, CO (LAT 37 00 34N LONG 107 35 56W)									
OCT 1993					JUN 1994				
25...	1010	187	177	7.5	13...	0930	285	167	19.0
MAR 1994					AUG				
03...	1125	159	219	4.5	03...	1335	196	224	22.5
MAY									
04...	1035	126	230	10.5					
09355000 SPRING CREEK AT LA BOCA, CO (LAT 37 00 40N LONG 107 35 47W)									
OCT 1993					JUN 1994				
25...	1150	7.8	902	7.5	13...	1110	70	285	17.0
MAR 1994					AUG				
03...	1345	13	495	4.5	03...	1420	85	272	23.5
MAY									
04...	1230	31	329	15.0					
09358000 ANIMAS RIVER AT SILVERTON, CO (LAT 37 48 40N LONG 107 39 32W)									
OCT 1993									
22...	1350	41	338	7.0					
09358550 CEMENT CREEK AT SILVERTON, CO (LAT 37 49 11N LONG 107 39 47W)									
OCT 1993					SEP 1994				
22...	1245	16	1150	6.0	29...	1700	--	--	--
09361500 ANIMAS RIVER AT DURANGO, CO (LAT 37 16 45N LONG 107 52 47W)									
OCT 1993					MAY 1994				
28...	1055	254	557	6.5	18...	1540	2970	171	7.5
NOV					JUN				
29...	1505	212	636	4.0	01...	1050	4440	129	6.5
MAR 1994					27...	1500	1520	236	16.0
30...	1105	241	587	7.0					
APR									
28...	1455	744	344	6.5					
09371000 MANCOS RIVER NEAR TOWAOC, CO (LAT 37 01 39N LONG 108 44 27W)									
OCT 1993					MAY 1994				
14...	1140	31	1510	12.0	31...	1200	131	478	18.0
MAR 1994					SEP				
02...	1515	146	1310	6.5	20...	1130	11	1840	18.5
APR									
21...	1450	109	553	18.0					

INDEX

	Page		Page
Access to WATSTORE DATA.....	21	Colorado River,	
Accuracy of the records, explanation of.....	17-18	near De Beque.....	186,398
Acre-foot, definition of.....	22	near Dotsero.....	165,396
Alva B. Adams tunnel at east portal, near		near Granby.....	64,387
Estes Park, diversion by.....	46,361	near Kremmling, surface-water record.....	128
water-quality record.....	47-48	water-quality record.....	129-130
Andenosine triphosphate, definition of.....	22	Colorado River basin, crest-stage partial	
Algae, definition of.....	22	record stations in.....	365
Algal-growth potential, definition of.....	22	surface-water records in.....	45
Animas River at Durango.....	340,408	Colorado River total dissolved solids	
below Silverton, surface-water record.....	337	investigation.....	382-386
water-quality record.....	338-339	Contents, definition of.....	23
near Cedar Hill, NM.....	342	Control, definition of.....	23
Annual 7-day minimum, definition of.....	23	Control structure, definition of.....	23
August P. Gumlick tunnel, diversion by.....	92	Corral Gulch near Rangely,	
Aquifer, definition of.....	22	surface-water record.....	313
Arrangement of records.....	18	water-quality record.....	314-315
Artesian, definition of.....	22	Cooperation.....	4
Artificial substrate, definition of.....	26	Crest-stage partial-record stations.....	365
Ash mass, definition of.....	22	Cross Creek near Minturn.....	148,394
		Crystal River above Avalanche Creek, near	
		Redstone.....	178,397
		Cubic foot per second, definition of.....	23
		Cubic foot per second per square mile,	
		definition of.....	23
Bacteria, definition of.....	22		
Beaver Creek (tributary to Eagle River) at		Dallas Creek near Ridgway.....	227,402
Avon.....	158,395	Darling Creek near Leal.....	90,388
Bed load, definition of.....	26	Data collection and computation,	
Bed load discharge, definition of.....	26	explanation of.....	14
Bed material, definition of.....	22	Data presentation, ground-water quality.....	21
Bemrose-Hoosier diversion near Hoosier Pass.....	111	Data presentation, records of surface-water	
Berthoud Pass ditch at Berthoud Pass,		quality.....	20
diversion by.....	361	Data presentation, stage and water discharge....	14-17
Bighorn Creek near Minturn.....	151,394	Data table of daily mean values.....	16
Biochemical oxygen demand (BOD), definition of..	22	Definition of terms.....	22-28
Biomass, definition of.....	22	Diatoms, definition of.....	25
Black Creek below Black Lake, near Dillon.....	121,391	Dickson Creek near Vail.....	132,392
Black Gore Creek near Minturn.....	150,394	Dillon Reservoir at Dillon, contents of.....	125
Blue-green algae, definition of.....	25	Discharge at partial-record stations and	
Blue River at Blue River.....	113,390	miscellaneous sites.....	364-365
near Dillon.....	114,390	Discharge, definition of.....	23
basin, surface-water records in.....	110	Discharge measurements made at low-flow	
below Dillon.....	118,390	partial-record stations.....	364
below Green Mountain Reservoir.....	126,392	Discontinued continuous surface water-quality	
below Spruce Creek near Kremmling.....	127,392	stations.....	39-41
Bobtail Creek near Jones Pass.....	87,388	Discontinued surface-water discharge or	
Booth Creek near Minturn.....	153,395	stage-only stations.....	31-38
Bottom material, explanation of.....	22	Dissolved, definition of.....	23
Boulder Creek at upper station, near Dillon.....	121,391	Dissolved-solids concentration, definition of...	23
Busk-Ivanhoe Tunnel, diversion by.....	362	Divide Creek basin, surface-water records in....	185
		Dolores River basin, surface-water	
		records in.....	244
Cabin Creek near Fraser.....	80,388	Dolores River, at Bedrock,	
Castle Creek above Aspen.....	173,397	surface-water record.....	247
above mouth near Baldwin.....	209,399	water-quality record.....	248-250
Cataract Creek near Kremmling.....	128,391	at Dolores.....	245,403
Cells/volume, definition of.....	22	below Rico.....	244,402
Cfs-day, definition of.....	23	near Bedrock, surface-water record.....	252
Charles H. Boustead Tunnel, diversion by.....	362	water-quality record.....	253-255
Chemical oxygen demand (COD), definition of....	23	Douglas Creek at Rangely, water-quality	
Chemical quality of streamflow.....	10	record.....	320-321
Chlorophyll, definition of.....	23	Downstream order system.....	12
Cimarron River near Cimarron.....	216,400	Drainage area, definition of.....	23
Classification of records, explanation of.....	18	Drainage basin, definition of.....	23
Cochetopa Creek below Rock Creek, near Parlin...	212,399	Dry mass, definition of.....	22
Color Unit, definition of.....	23		
Colorado River above Glenwood Springs, water-			
quality record.....	167-169		
at Hot Sulphur Springs, surface-water			
record.....	83		
water-quality record.....	84-86	Eagle River at Avon.....	159-160
at Windy Gap, near Granby.....	82,388	at Gypsum, water-quality record.....	161-163
below Baker Gulch, near Grand Lake.....	45,387	at Red Cliff.....	141,393
below Glenwood Springs.....	181	below Gypsum.....	164,396
below Grand Valley Diversion near		near Minturn.....	147,394
Palisade.....	197-199	Eagle River basin, surface-water records in....	154
near Cameo, surface-water record.....	187	East Elk Creek above Boiler Creek near,	
water-quality record.....	188-192	New Castle.....	184,398
near CO-UT State line, surface-water		East Fork San Juan River, above Sand Creek,	
record.....	238	near Pagosa Springs.....	322,407
water-quality record.....	239-243	East Meadow Creek near Minturn.....	134,392

	Page		Page
East River at Almont, surface-water record.....	207	Identifying estimated daily discharge,	
water-quality record.....	208	explanation of.....	17
East River below Cement Creek near Crested		Instantaneous discharge, definition of.....	23
Butte.....	206,409	Introduction.....	1
Elk Creek basin (tributary to Colorado River)			
surface-water records in.....	182		
Elk Creek (tributary to Fraser River)		Keystone Gulch near Dillon.....	116,390
near Fraser.....	74,387		
Elk River near Milner, surface-water record.....	266		
water-quality record.....	267-268	Laboratory measurements, explanation of.....	19
Elkhead Creek near Elkhead.....	273-274	Lakes and reservoirs:	
Explanation of the records.....	12-17	Dillon Reservoir.....	125
		Green Mountain Reservoir.....	125
		Lake Granby.....	56
Fecal coliform bacteria, definition of.....	22	Lemon Reservoir.....	341
Fecal streptococcal bacteria, definition of.....	22	Paonia Reservoir.....	219
Fish Creek at upper station near Steamboat		Ridgway Reservoir.....	228
Springs.....	264,404	Ruedi Reservoir.....	176
Tributary below Long Lake, near		Shadow Mountain Lake.....	49-52
Buffalo Pass.....	261,404	Silver Jack Reservoir.....	215
Foidel Creek, at mouth, near Oak Creek.....	271-272	Taylor Park Reservoir.....	201
near Oak Creek.....	270,405	Vallecito Reservoir.....	334
Fraser River at Tabernash, water-quality record.	77-78	Williams Fork Reservoir.....	94
at upper station, near Winter Park.....	66-67	Willow Creek Reservoir.....	65
at Winter Park.....	70,387	Lake Creek near Edwards.....	157,395
Fraser River basin, surface-water records in....	66	Lake Fork at Gateview.....	214,400
Fraser River below Buck Creek at Winter Park,		Lake Granby near Granby, contents of.....	56
water-quality record.....	68-69	water-quality record.....	57-63
below Crooked Creek at Tabernash,		Lake Granby Inflow from Windy Gap Tunnel	
water-quality record.....	81	water-quality record.....	55
below St. Louis Creek at Fraser,		Land-surface datum, definition of.....	24
water-quality record.....	76-78	La Plata River, at Colorado-New Mexico	
below Vasquez Creek, at Winter Park,		State line.....	344
water-quality record.....	72-73	at Hesperus.....	343
Freeman Creek near Minturn.....	133,392	Latitude-longitude system, explanation of.....	13
Fryingpan River near Ruedi.....	177,397	Lemon Reservoir near Durango, contents of.....	341
near Thomasville.....	175	Leroux Creek at Hotchkiss, surface-water	
		record.....	222
Gage height, definition of.....	23	Little Navajo River below Little Oso Diversion	
Gaging station, definition of.....	23	Dam, near Chromo.....	327
Gore Creek, at lower station, at Vail.....	155,395	Little Snake River, below Baggs, WY, water-	
at upper station, near Minturn.....	149,394	quality record.....	286
Granby Pump Canal near Grand Lake, water-		near Dixon, WY.....	285
quality record.....	53-54	near Lily.....	288-289,405
Grand Lake Outlet basin, surface-water		near Slater.....	283,405
records in.....	46	Long Lake Inlet near Buffalo Pass.....	260,404
Grand River ditch at La Poudre Pass,		Los Pinos River, at La Boca.....	335,408
diversion by.....	361	Lost Canyon Creek near Dolores.....	246,403
Granite Creek near Buffalo Pass.....	263,404	Low-flow partial-record stations, discharge	
Green algae, definition of.....	25	measurements at.....	364
Green Mountain Reservoir near Kremmling,			
contents of.....	125	Main Elk Creek near Newcastle.....	183,397
Green River basin, surface-water		Mancos River near Towaoc.....	345,408
records in.....	258	Map of Colorado showing locations of,	
Grizzly Creek near Glenwood Springs.....	166,396	crest-stage partial-record stations.....	3
Gunnison River, at Delta.....	225,401	Map of Colorado showing locations of lakes,	
below Gunnison tunnel.....	217,400	surface-water and surface-water-quality	
near Grand Junction, surface-water record...	232	stations.....	2
water-quality record.....	233-236	Maroon Creek above Aspen.....	174,397
near Gunnison.....	210,399	McCullough-Spruce-Crystal diversion near	
Gunnison River basin, crest-stage partial-		Hoosier Pass.....	112
record stations in.....	365	McElmo Creek above Trail Canyon near Cortez,	
surface-water records in.....	200	surface-water record.....	354-355
Gunnison Tunnel, diversion by.....	217	water-quality record.....	356-358
		near Colorado-Utah State line	
		surface-water record.....	359
		water-quality record.....	360
Hardness, definition of.....	23	Mean concentration, definition of.....	26
Harold D. Roberts tunnel at Grant,		Mean discharge, definition of.....	23
diversion by.....	361	Measuring point, definition of.....	24
Homestake Creek, at Gold Park.....	145,393	Metamorphic stage, definition of.....	24
near Red Cliff.....	146,393	Meteorological data at miscellaneous sites.....	366-381
Homestake tunnel near Gold Park, diversion by...	362	Methylene blue active substances,	
Hoosier Pass tunnel at east portal, at Hoosier		definition of.....	24
Pass, diversion by.....	362	Micrograms per gram, definition of.....	24
Hunter Creek, near Aspen.....	172,396	Micrograms per liter, definition of.....	24
		Middle Creek near Minturn (Eagle River basin)...	154,395
Hydrologic bench-mark network, explanation of...	12,23	Middle Creek, (Green River basin)	
Hydrologic unit, definition of.....	24	near Oak Creek.....	269,405
		Middle Fork Fish Creek near Buffalo Pass.....	262,404

	Page		Page
Milligrams of carbon, definition of.....	25	Records of stage and water discharge, Surface-water quality, definition of....	18
Milligrams of oxygen, definition of.....	25	explanation of.....	18-20
Milligrams per liter, definition of.....	24	Red Sandstone Creek near Minturn.....	156,395
Minnesota Creek near Paonia.....	221,401	Reed Wash basin, surface-water records in.....	237
Missouri Creek near Gold Park.....	144,393	Reed Wash near Mack.....	237,402
Moniger Creek near Minturn.....	364,365	Recoverable from bottom material, definition of.....	25
Monte Cristo diversion near Hoosier Pass.....	110	Remarks codes.....	20
Mud Creek at Highway 32, surface-water record... water-quality record.....	347-348 349-353	Reservoirs in Blue River basin.....	125
Muddy Creek above Antelope Creek near Kremmling, surface-water record.....	97	Return period, definition of.....	25
water-quality record.....	98-102	Ridgway Reservoir near Ridgway, contents of.....	228
at Kremmling, surface-water record.....	103	Rio Blanco below Blanco diversion dam, near Pagosa Springs.....	324
water-quality record.....	104-109	Roaring Fork River, above Difficult Creek, near Aspen.....	170,396
basin, surface-water records in.....	96	at Glenwood Springs.....	179-180
Muddy Creek near Kremmling.....	96,389	near Aspen.....	171,396
National Geodetic Vertical Datum of 1929, definition of.....	24	Roaring Fork River basin, surface-water records in.....	170
National stream-quality accounting network, (NASQAN) explanation of.....	12,24	Rock Creek at Crater (tributary to Colorado River), surface-water record.....	137
National trends network, explanation of.....	24	water-quality record.....	138-139
Natural substrate, definition of.....	26	at McCoy.....	140,392
Navajo River, at Banded Peak Ranch, near Chromo.....	325	basin, surface-water records in.....	137
at Edith.....	328,407	near Dillon.....	120,391
below Oso Diversion Dam.....	326	Ruedi Reservoir near Basalt, contents of.....	176
North Fork Gunnison River near Somerset.....	220,401	Runoff in inches, definition of.....	26
North Fork White River at Buford.....	292,406	San Juan River basin, crest-stage partial records in.....	365
Onsite measurements and sample collection.....	18-19	surface-water records in.....	322
Organic mass, definition of.....	22	San Juan River at Four Corners.....	346
Organism, definition of.....	24	at Pagosa Springs.....	323,407
Organism count/area, definition of.....	24	near Carracas.....	329,408
Organism count/volume, definition of.....	24	San Miguel River, at Uravan.....	257,403
Other records available.....	17-18	near Placerville.....	256,403
Overview of Hydrologic Conditions.....	5-11	Sand Wash near Sunbeam, water-quality record....	287
Paonia Reservoir, near Bardine, contents of.....	219	St. Louis Creek near Fraser.....	75,387
Parameter code, definition of.....	24	Sediment, definition of.....	19,26
Partial-record station, definition of.....	24	Selected references.....	29-30
Particle-size, classification.....	24-25	7-day 10-year low flow, definition of.....	26
Particle size, definition of.....	24	Shadow Mountain Lake near Grand Lake, contents of.....	49
Percent composition, definition of.....	25	water-quality record.....	50-52
Periphyton, definition of.....	25	Silver Jack Reservoir near Cimarron, contents of.....	215
Pesticide, definition of.....	25	Slate Creek at upper station, near Dillon.....	122,391
Phytoplankton, definition of.....	25	Slate River near Crested Butte.....	205,399
Piceance Creek, at White River, surface-water record.....	310	Slater Fork near Slater.....	284,405
water-quality record.....	311-312	Smith Fork, near Crawford.....	218,400
below Rio Blanco, surface-water record..	299	Snake River near Montezuma.....	115,390
water-quality record.....	300-301	Sodium adsorption ratio, definition of.....	26
below Ryan Gulch, near Rio Blanco, surface-water record.....	306	Solute, definition of.....	26
water-quality record.....	307-309	South Fork White River, at Budge's Resort.....	293,406
Piocrurie, definition of.....	25	at Buford.....	295,406
Piedra River, near Arboles.....	330,408	near Budge's Resort.....	294,406
Piney River basin, crest-stage partial-record stations in.....	365	South Fork Williams Fork near Leal.....	91,389
surface-water records in.....	131	Specific conductance, definition of.....	26
Piney River, below Piney Lake, near Minturn.....	131,392	Special networks and programs.....	12
near State Bridge.....	135-136	Spring Creek at La Boca.....	336,408
Pitkin Creek near Minturn.....	152,394	Stage-discharge relation, definition of.....	26
Plankton, definition of.....	25	Station identification numbers, explanation of.....	12
Plateau Creek basin, surface-water records in..	193	Station manuscript, explanation of.....	15
Plateau Creek near Cameo, surface-water record..	193	Statistics of monthly mean data.....	16
water-quality record.....	194-196	Stewart Gulch above West Fork, near Rio Blanco, water-quality record.....	302-303
Primary productivity, definition of.....	25	Straight Creek below Laskey Gulch, near Dillon.....	119,391
Publications on techniques of water-resource investigations.....	42-44	Streamflow.....	5-9
Radiochemical program, definition of.....	25	Streamflow, definition of.....	26
Ranch Creek near Fraser.....	79,387	Substrate, definition of.....	26
Records of ground-water quality.....	20-21	Summary statistics, explanation of.....	16
Records of stage and water discharge, definition of.....	13	Supplemental water-quality data for gaging stations.....	387-408
explanation of.....	14-17	Surface area, definition of.....	27
		Surface Creek, at Cedaredge.....	224,401
		near Cedaredge.....	223,401
		Surficial bed material, definition of.....	27

	Page		Page
Suspended, definition of.....	27	Water temperature.....	19
Suspended recoverable, definition of.....	27	Water year, definition of.....	28
Suspended sediment, definition of.....	26	Wearyman Creek near Red Cliff.....	142,393
Suspended, sediment concentration, definition of.....	26	WDR, definition of.....	28
Suspended sediment discharge, definition of.....	26	Weighted average, definition of.....	28
Suspended sediment load, definition of.....	26	West Elk Creek near New Castle.....	182,397
Suspended total, definition of.....	27	West Divide Creek near Raven.....	185,398
System for numbering wells, springs, and miscellaneous sites.....	13	West Paradox Creek above Bedrock, water- quality record.....	251
		Wet mass, definition of.....	22
Taxonomy, definition of.....	27	White River, above Coal Creek near Meeker.....	296,407
Taylor Park Reservoir at Taylor Park, contents of.....	201	below Boise Creek near Rangely.....	319
Taylor River, at Almont.....	203-204	below Meeker.....	298,407
Taylor River, at Taylor Park.....	200,398	near Meeker.....	297,407
below Taylor Park Reservoir.....	202,398	Williams Fork (tributary to Colorado River) above Darling Creek, near Leal.....	89,388
Tennile Creek below North Tennile Creek at Frisco.....	117,390	Williams Fork basin, surface-water records in.....	87
Thermograph, definition of.....	27	Williams Fork, below Steelman Creek.....	88,388
Time-weighted average, explanation of.....	27	below Williams Fork Reservoir.....	95,389
Tomichi Creek at Gunnison.....	213,400	near Leal.....	92,389
at Sargents.....	211,399	near Parshall.....	93,389
Tons per acre-foot, explanation of.....	27	Reservoir near Parshall, contents of.....	94
Tons per day, definition of.....	27	Williams Fork River at mouth, near Hamilton, (tributary to Yampa River).....	278
Total coliform bacteria, definition of.....	22	Willow Creek (tributary to Little Snake River) near Rio Blanco, water-quality record.....	304-305
Total, definition of.....	27	Willow Creek basin, surface-water, records in.....	65
Total discharge, definition of.....	27	Willow Creek Reservoir near Granby.....	65
Total, recoverable, definition of.....	27	WSP, definition of.....	28
Total organism count, definition of.....	24		
Total sediment discharge, definition of.....	26	Yampa River, above Stagecoach Reservoir.....	258,403
Total sediment load, definition of.....	26	at Deerlodge Park.....	290-291,406
Transmountain diversions from Colorado River basin in Colorado.....	361-362	at Steamboat Springs.....	265,404
Transmountain diversions no longer published....	363	below Craig, surface-water record.....	275
Tritium network, definition of.....	28	water-quality record.....	276-277
Turkey Creek near Red Cliff.....	143,393	below Stagecoach Reservoir.....	259,403
		near Maybell, surface-water record.....	279
Uncompahgre River, at Colona.....	230,402	water-quality record.....	280-282
at Delta.....	231	Yellow Creek near White River, surface-water record.....	316
below Ridgway Reservoir.....	229,402	water-quality record.....	317-318
near Ridgway.....	226,402	Zooplankton, definition of.....	25
Vallecito Creek near Bayfield, surface-water record.....	331		
water-quality record.....	332,333		
Vallecito Reservoir near Bayfield, contents of..	334		
Vasquez Creek at Winter Park.....	71,387		

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-4}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-3}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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